EXCAVATIONS AT 44NB180 AND 44NB174:  
AN EARLY, ENGLISH COLONIAL PLANTATION AND PREHISTORIC SHELL MIDDEN IN NORTHUMBERLAND COUNTY, VIRGINIA

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From late April 1989 through January 1990, the Virginia Department of Historic Resources conducted salvage excavations on two archaeological sites in Northumberland County, near Heathsville, which were threatened by residential development. Of primary importance was an early colonial, rural settlement site, 44NB180, given the appellation "Corbin's Rest." The site is situated on Newman's Neck, tract of land on the south shore of the Potomac River lying between a cove and a tidal estuarine inlet. The Corbin's Rest site—almost certainly—is the first home of one Robert Newman who settled the property between 1651 and 1657.

The archaeological evidence at Corbin's Rest indicates extensive activity at the site from the beginning of the third quarter of the 17th century to the second quarter of the 18th century. Although the integrity of the plowzone distribution had been compromised by prior construction landscaping, a large sample of diverse subsurface remains was recorded. The spectacular array of domestic and agricultural architectural remains investigated includes eight structures, clearly the majority of the principle plantation buildings: a large, heavily repaired and altered manor house; a large kitchen; a large servants quarter; a small quarter or tenant's house; a large roofed cellar; an extensive barn complex showing three phases of development; and two small outbuildings. Analysis of the remains suggests several building episodes through time. The cultural landscape created by the layout of domestic structures, barns, other outbuildings, and fencelines displays a hint of bilaterally symmetrical design modified through organic growth. Artifacts recovered from the fill of several pit features in the yard compound provide information on the different use of space across the site.

In addition to the historic site, a large, stratified, prehistoric shell midden (44NB174) located on the north shore of Presley Creek was tested. Although the number of diagnostic artifacts recovered per sample unit was small, a temporal framework spanning the terminal Archaic and Early Woodland periods could be established for occupation of the site. Outside of the area of controlled testing, Mockley ceramics dating from the Middle Woodland period were observed. Activity levels denoted by lenses of finely crushed shell within the midden indicate repeated use of the site through time.
During the earliest occupations, refuse was dumped into a shallow ravine. As the ravine was filled, a larger sheet midden developed. Preliminary inspection of oyster shell growth rings suggests the main deposit was made either during the dead of winter or before seasonal spring warming significantly raised water temperatures. The results of both the test excavations at 44NB174 and surface collections conducted on several additional midden sites in the immediate vicinity should complement the results of previous survey and excavations in the Northern Neck in adding to our understanding local subsistence systems from ca. 500 B.C. to A.D. 1400.
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Special thanks is also extended to Stephen Potter, senior archaeologist with the National Park Service, National Capital Region. Potter initially identified the sites, was a major advocate for their preservation or excavation, and was a valuable and enthusiastic consultant to the project.

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The Virginia Department of Transportation provided use of their heavy earth-moving equipment to strip, backfill, and regrade site 44NB180. Charles Ambrose expertly operated the grade-all used in stripping the site. Care Hendley of the Northern Neck Electric Company kindly loaned a cherry picker on two occasions for overall photographs of 44NB180, and once he dragged a grade-all out of a muddy quagmire for us.

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BACKGROUND

Discovery of the Sites

Sites 44NB174 and 44NB180 were identified in the late 1970s by Stephen Potter, then a graduate student at the University of North Carolina, Chapel Hill conducting an extensive archaeological investigation of Northumberland County. The results of these investigations were reported by Potter in his doctoral dissertation, *An Analysis of Chicacoan Settlement Patterns* (1982). (Sites 44NB174 and 44NB180 are not discussed in the report, since they lay outside of Potter's specific sampling area). In 1976, Potter had identified three sites in the immediate vicinity of Newman's Neck: Blue Fish Beach (44NB147), situated along the shore of the Potomac River between Presley Creek and Corbin's Pond, and sites 44NB145 and 44NB146, located near the head of a cove on Presley Creek. Sites 44NB174 and 44NB180 were recorded when Potter returned to the Blue Fish Beach site in 1978 to conduct test excavations. Several other sites within the vicinity were also recorded at this time.

Site 44NB174 is one of a number of prehistoric sites identified by Potter during April 1978 along a cove on Presley Creek. The site was situated in a slight depression between the elevated positions of 44NB173 to the immediate west and 44NB130 to the immediate east. Preliminary cursory observations suggested an oyster shell midden approximately 20' east-west by 32' north-south. The site was highly visible due to erosion along the shoreline which had exposed a large quantity of oyster shell still in situ within the profile of the embankment. Oyster had also slumped onto the beach below the embankment and was visible at low tide. In addition to the shell, Potter noted the presence of several non-diagnostic projectile points and bifaces and a large quantity of lithic workshop debris including quartz, quartzite, and chert materials. Returning to the site 1986 with Henry Miller, Potter was able to date the midden deposit to the late Early Woodland period based on the finds of a Calvert projectile point (Stephenson et al.1963:143-144) and several sherds of Accokeek Cord-marked pottery (Stephenson et al. 1963:96-100). In additional to these finds, a large quartzite boulder mortar was collected from the eroding face of the midden. As Potter (personal communication) has noted, such items, though frequently observed, are rarely found in situ.
Site 44NB180 was identified by Potter in May 1978. Inspection of a discrete tract of land to the north of a branch of Corbin's Pond and east of a farm access road revealed a large grey-black discoloration of soil in a newly planted corn field. Further examination confirmed the stain was of cultural origin as it was replete with oyster shell and other subsistence refuse, architectural debris, and domestic artifacts. The midden, contrasted against a surrounding matrix of natural light silt loams, formed a doughnut-shaped pattern approximately 150' in diameter. The locations of two subsurface features within the bounds of the midden were indicated by tight, elliptical clusters of fresh feature fill brought to the surface by recent plowing. It was also learned that a local school teacher had been collecting the site.

Henry Miller, an archaeologist affiliated with the St. Mary's City Commission in Maryland, visited 44NB180 on the invitation of Potter and, on occasion, participated both in surface collections and as an expert consultant in the identification of historic artifacts and faunal materials recovered. Based on ceramics ranging from North Devon sgraffito slipwares to white salt-glazed stonewares, Potter suggested 44NB180 was occupied primarily during the period ca. 1650-1750. He also noted that a small area of the site contained 19th century debris from a nearby farmstead.

Preservation History

At the time Stephen Potter's survey work was conducted, both 44NB174 and 44NB180 were owned by Mrs. Emeline Hall, a resident of Heathsville, Virginia. Potter contacted Mrs. Hall to communicate the importance of the archaeological resources on her land, and to discuss the need to preserve the sites. Preservation of the landscape as a whole through designation as an archaeological district was suggested. Potter received what he understood to be assurance from the owner that the resources would be protected and that he would be notified in advance if the land was to be sold, or if any alterations to the sites which would potentially affect their integrity were planned.

Regardless of these understandings, the property was discretely sold and was eventually purchased by the Potomac Real Estate Investment Trust (PREIT). Sites 44NB180 and 44NB174 were scheduled for immediate residential development.
development as a portion of Potomac Bay Estates affiliated with Northern Neck Properties.

The ever vigilant Stephen Potter, once apprised of the threatened status of the property, immediately contacted the Virginia Department of Historic Resources (VDHR) to urge that salvage excavations be conducted prior to development. The VDHR concurred with Potter on the significance of the property.

David Hazzard, director of the threatened sites program, contacted the developer to discuss the possibility of salvage excavations on 44NB180. Site 44NB174 was chosen for testing from among a string of prehistoric sites located along Presley Creek. The developer proved receptive to permitting investigations on both properties. In discussions with Ron Shilvok, senior development representative for PREIT, it was established that, fortunately, neither the house lot containing the colonial occupation at 44NB180 nor the lot containing 44NB174 had been sold, and time was available for archaeological investigations on each property prior to its development. Several lots in the immediate vicinity of 44NB174 had already been purchased.

On April 10, 1989, the VDHR and PREIT concluded a letter of agreement regarding archaeological investigations at 44NB180 and 44NB174 allowing salvage operations to begin in earnest. Under provisions of the agreement, the VDHR was granted permission to retain the artifacts recovered in excavations for analysis, treatment, and storage, while the collections would remain the property of PREIT. The agreement also provided that the VDHR restore the properties after excavation to their original condition. This involved backfilling both sites, and regrading 44NB180 and planting it in rye and fescue. The VDHR also agreed that the schedule of its excavations would not provide a hindrance to the development of Potomac Bay Estates. The reader is reminded that the developer, using only private funds for a project which required no federal permits, was under no legal obligation under current cultural resources management legislation to conduct or allow archaeological investigations. Further, the archaeological investigation required that the schedule of contracted improvements to the property be altered slightly by the developer. The VDHR strove to keep these inconveniences to a minimum, and the project was conducted in a spirit of goodwill between archaeologists and developer.
EXCAVATIONS AT 44NB180

Archaeological Context and Significance

The results of excavations at 44NB180 and an assessment of the site's significance within a regional context can only be suggested in this brief document. The primary value of the work is the expansion of the archaeological data base for the Northern Neck region where few cultural resources of any type or period have been excavated. In Northumberland County in particular, no early historic settlement sites had been excavated prior to work at 44NB180. The site, thus, provided a rare opportunity to gain insight into cultural adaptation within the English colony of Virginia during an important time of development in the Northern Neck beginning with initial frontier settlement and extending into the more socially and economically stable period of the 18th century.

Excavations at 44NB180 indicated the site was occupied ca. 1650-1750. Most scholars agree that a truly American, regional folk culture had begun to emerge within the colonial settlements of the circum-Chesapeake region by the beginning of this period. Our understanding of this tradition and its development has been enhanced by the recent contributions of social historians as presented, for example, in volumes edited by Tate and Ammerman (1978) and Carr, Morgan, and Russo (1988). In the last twenty years, a dramatic increase also in the volume of archaeological research focused on this period has provided a tangible body of evidence to supplement the documentary record, which often reflects an inherent bias. Recent archaeological research suggests that prior to ca. 1650 the culture of the American colonies was dominated by transported English traditions reflecting essentially late Medieval, agrarian yeoman lifeways (Deetz 1977:36-37). The architecture of the period demonstrates the survival of an active knowledge of late Medieval, traditional wood-framed vernacular traditions (Carson et al. 1981:135-196).

Colonial settlement in Virginia first expanded into the Northern Neck at a time critical for understanding the evolution of a regional, Chesapeake culture from more traditional, English lifeways. Preliminary historical research suggests that 44NB180 was first occupied between 1651 and 1657 by Robert and Elizabeth Newman. Other early English inhabitants of Northumberland County included Colonel Mottrom, Captain John Haynie, Samuel
Nicholls, Angell Corbell, Daniel Holland, and William Presley. These individuals lived within what may be described as a rural community united through collective economic and social behavior which apparently—often extended all the way back to England, and which was strengthened by bonds created through the taming of the Northumberland landscape and the struggle for economic survival during a period of seriously declining tobacco prices. The impact of this community extends into contemporary society. Within Northumberland County today, not only are the names of these early English settlers attached to the landscape (e.g. "Newman's Neck", "Presley Creek", "Corbin's" or "Corbell's Pond"), but many of these names can be found in the current county telephone directory. In an area proud of its past, a uniquely rich written and oral tradition survives. Avocational historians abound as an apparent matter of course, since they are true Tidewater Virginians (participating in ritual ancestor worship).

The natural environment of the Chesapeake region and the agricultural focus of 17th century colonial settlement there helped create communities uniquely different from those in New England (Walsh 1988). Settlements within the Chesapeake region were strung out along the shorelines of the major rivers and estuaries as these locations were easily accessible by riverine transportation and contained the most fertile, arable lands. The results of Potter's (1982) archaeological survey of Northumberland County demonstrate that protohistoric and contact period Native American societies and early English immigrants favored similar locations for settlement, although little evidence for direct conflict between the English settlers and local Indians can be found in the historic record. The environmental setting of 44NB180 satisfies virtually all of the requirements Potter has listed for the selection of a werowance's village within the estuarine Coastal Plain:

(1) location on the broad necklands of the first and second terraces; (2) location adjacent to a cove, embayment or the mouth of a tributary of a major estuary; (3) proximity to freshwater springs; (4) location in areas where significantly high percentages (relative to the subregion as a whole) of soil associations were concentrated which contained Matapake, Mattapex, Woodstown, State, Wickham, or Tetotum as the major soil type; and (5) situated within 4 or 5 km. of marshlands. (Potter 1982:371)
While 44NB180 may be typical of early English settlements in terms of its physical setting, its location within Northumberland County is important because it allows us to compare settlement here with developments elsewhere within the Northern Neck as well as within the lower James and York river basins of Virginia. Comparison with the archeological record of the Tidewater section of Maryland should also prove informative. Saint Marie's City, capital of the Catholic colony of Maryland, has been the subject of a focused, multi-disciplinary archaeological research effort since the early 1970s (e.g. Miller and Stone 1983, 1986). Site 44NB180 lies only eight miles as the crow flies from Saint Marie's City. Comparison of certain artifacts classes, such as ceramics and smoking pipes, between the two locations should allow review of the trade networks that operated along the Potomac River and provide a measure for assessing how political boundaries affected the accessibility and distribution of marketed goods. The faunal remains recovered from 44NB180, most of which were obtained through systematic sampling, should prove to be an important collection for understanding changes in dietary behavior through time within the colonial Chesapeake as documented by Miller (1988:176-199). Further comparison of the material culture of the Northern Neck and Maryland may suggest the existence of sub-regional folk traditions within the Chesapeake.

Another site which provides an interesting comparison to 44NB180 is Clifts Plantation, located in Westmoreland County in the Northern Neck. Neiman's (1980) archaeological investigation of the Clifts site was exemplary. Analysis of the archaeological remains through various techniques permitted identification of three phases of plantation building and expansion. By using information from the Clifts site in the field, at least two and probably three phases of development were able to be documented at 44NB180. Not satisfied with merely documenting the physical growth of the plantation, however, Nieman (1978) also interpreted changes in architecture and other behavioral patterns at Clifts within a social context, suggesting the primary impetus for these changes was a reduction in the number of white indentured servants over time, accompanied by an increase in the number of Afro-American slaves. Morgan (1975) has discussed the course and consequences of these developments within the Virginia colony as a whole.

Several other archaeological investigations in the Northern Neck have provided comparative data which may prove important in understanding 44NB180.
A productive local pottery industry run by one Morgan Jones has been excavated and studied, and offers a readily traceable marketing index (Kelso and Chappell 1974; Miller 1981). The plantation complex architecture and material culture at George Washington's Birthplace National Monument in Westmoreland County has also been studied (Barka 1978). The chief components at this site overlap only the later occupation period at 44NB180, however. An early example of earthfast architecture ascribed to an individual of low socio-economic class has been documented at the Hallowes site in Westmoreland County (Buchanan and Heite 1971:38-48; Buchanan 1976). At the higher end of the socio-economic scale, the Corotoman site, a sophisticated, early 18th century plantation complex owned by Robert "King" Carter in nearby Lancaster County, has been investigated by Hudgins (1981).

While these few sites provide some insight into English colonial life within the Northern Neck region, very little comparable archaeological data has been acquired from Northumberland County itself. Potter (1982) has provided important information on site locations and settlement patterns from his excellent survey of Northumberland County, but little comprehensive excavation has been conducted in the county. The few published materials which exist include various reports by Mitchell (1978) on Nominy Plantation and Dalton's (1974) original report and Potter's (1977) reanalysis of the Owings site. The Owings site should prove significant for comparative purposes in relation to 44NB180 since the ceramic assemblage, dominated by Colono wares, suggests it was occupied ca. 1675-1750 by Afro-American slaves (Dalton 1974:168) or acculturated Native Americans (Potter 1977:172, 1982:106-107).
In contrast to the rather sparse amount of archaeological data available from Northumberland County, the county has a rich documentary record dating from ca. 1645-1648 when the county was first formed. Only the most rudimentary outline of the early phases of the history of occupation at 44NB180 is presented here. However, a more detailed and extensive history of the site is provided by Martha McCartney. The brief sketch provided below was prepared from information related to the author by both Ms. McCartney and two members of the Northumberland County Historical Society, Carolyn Jett and Isabel Gough.

The Northern Neck is comprised of the lands lying between the Rappahannock and Potomac Rivers bounded by the Chesapeake Bay on the east and the falls of the two drainages on the west. Because the Northern Neck was some distance away from the nucleus of English settlement in Virginia, the area was settled later and retained a somewhat longer frontier phase than areas closer to Jamestown within the lower James and York river drainages. By the time the experimental phase of colonization in Virginia was over, and the mortality rate had declined and population had begun to rise significantly, much of the best land in the lower Tidewater had been patented. As a result, a new influx of immigration led to rampant land speculation in the remote areas below the Potomac (Morgan 1975:219). Robinson (1957:66-72) has noted that separate provisions for land grants in the Northern Neck date from the English Civil War. Charles II awarded seven faithful cavaliers who had remained loyal to the Stuart regime portions of the Virginia Tidewater which had not already been patented by 1649, although political upheaval in England forestalled immediate installation of a proprietary charter in real terms. Because land in Northumberland County, for example, had already been seated since 1645, resistance to the proprietors and a series of legal squabbles over royal prerogatives and those of the Virginia Governor and Council ensued. The situation was ameliorated by 1690 when land patents were entered separately, and the proprietor's land policy finally functioned in a relatively fair and orderly fashion.

The first English settler in Northumberland County, John Mottrom, settled along the Coan River after buying the land from Machywap, werowance of
the Cekacawon (Cralle 1964:2). Potter (1976:40) has suggested that this peaceful relationship served as a model for later settlement, and, in contrast to many colonized areas in the South, encouraged a general atmosphere of goodwill between local Native American groups and the first wave of English settlers. Northumberland County was officially formed in 1648, although patents for the area date from as early as 1645. By 1653, there were already 450 tithables in the county (Morgan 1975:412). Among these early settlers was Robert Newman, who patented land which comprises the site 44NB180, nicknamed "Corbin's Rest". To this day the neck of land settled by Newman, lying between Corbin Pond and Presley Creek and bounded to the north by the Potomac, is called "Newman's Neck". Current historical research indicates that 44NB180 is almost certainly Robert Newman's original plantation seat.

On March 25, 1651 Sir William Berkeley is recorded to have granted Robert Newman " ___and fifty acres" of land (although the third digit is partially illegible in the original document, the best interpretation is 850 acres). The land was granted to Newman for his transportation of eleven persons to the colony (Fleet 1961:380). Copies of documents contributed by Mrs. A. F. Keach of Wichita, Kansas (provided by McCartney) provide pertinent, though cryptic, information on the early settlement of Newman's Neck. On January 30, 1655 Newman sold a parcel presumably from his original patent to Daniel Holland, and on November 20, 1655 Newman assigned part of his parcel to Captain Haynie. The latter transaction may have been a gift, a payment on debts, or an acknowledgement of tenant status with rent towards land ownership. The documentary evidence makes it clear that land was sold to Samuel Nicholls and Angell Corbell on the same date as the "assignment" to Haynie. Angell Corbell has probably lent her name to Corbin's Pond with the name apparently corrupted into "Corbin" over time (personal communication Isabel Gough). As the name has been identified with a highly pertinent landmark, we must assume that this parcel did not include the principal plantation seat of the original Newman holding, since evidence presented below indicates otherwise.

Apparently Captain Haynie, a man of military experience, brought another group of nineteen persons to join the settlement. Notably among these was Elizabeth Newman, who arrived on January 30 1650. Since this date precedes the date of Newman's patent, a cooperative venture of sorts seems likely, or it may be that Haynie pressed his patent sooner and the patent dates may not
record the order of arrival from England. Since Haynie had already received 950 acres for this transportation from Governor Berkeley bearing a patent date of January 30, 1650, it cannot be certain what Robert Newman's and Captain Haynie's exact relationship was when Haynie was assigned land, but it seems that the relationship was sympathetic. Above all, it is clear that Col. Hottrom, William Presley, Captain Haynie and Robert Newman had not only a sympathetic relationship, but that cooperative efforts were made. Their families also eventually became interconnected through marriage in an area of limited population.

Regardless of the intricacies of the relationships expressed above, when Robert Newman died in 1657 he was in debt to the tune of 1814 pounds of tobacco. A copy of Newman's will, dated January 2, 1655, was provided to the VDHR by Carolyn Jett. Despite some damage, the majority of the original document has survived and is legible. The will indicates that, at his death, Newman made his nephew William Presley sole executor of his estate. His widow, Elizabeth, received "full half" of his free estate to dispose of as she saw fit. The document also contains other significant information. Not only does it list the Newman possessions in exhaustive detail all the way down to the name of the milk cow, but it provides a then current evaluation of those items.

Court records indicate that on May 21, 1658 William Presley and John Haynie sold to Daniel Holland a parcel of land where the Newmans had been seated, to include all houses and edifices. This transaction indicates that Newman lost the principal plantation building complex at his death in payment for his debts, but we cannot be certain if elderly Elizabeth Newman was removed from the premises. Holland, as has been noted above, had already purchased a parcel from Newman and appears to have taken the heart out of the holding with the latter purchase. Therefore, it is at least possible that Holland had attempted to back Robert Newman through loans during his lifetime. When Elizabeth Newman died in 1659 she was approximately eighty-four years old and apparently still holding a remnant of the original grant which she directed to Peter Presley and Martha and Elizabeth Haynie along with her worldly goods.

With the purchase of Newman's plantation seat by Daniel Holland, the history of ownership of 44NB180 becomes unclear, and this is best followed in
the companion report now in preparation by McCartney. Nonetheless, through archaeological evidence it is clear that the site was active well into the first half of the 18th century. McCartney (personal communication) has suggested that the site may have been run by tenants with a local, but absentee, owner obtaining rents on the property. Archaeological evidence demonstrates that the dramatic development of the site during the second half of the 17th century is problematic when compared with the implications of the historical record. Decline in development of the property is evident only at the end of the first quarter of the 18th century. By the second quarter of the 18th century the plantation house and many of the edifices had outlived their usefulness despite substantial repairs and, having suffered from neglect, where finally allowed to fall into total ruin. This episode probably corresponds with a complete turnover in land ownership coupled significantly with important cultural changes displaying a need for building with permanence. The decline of Newman's wealth may be testimony to the fall of tobacco prices and the increasing cost of hired or slave labor (Morgan 1975:135).
Physical Setting

The project area is located within the northeastern section of Virginia's "Northern Neck", a peninsula of land lying between the tidal portions of the Potomac and the Rappahannock Rivers. The site itself rests on a gentle rise about 12' above sea level on the Potomac River terrace approximately one hundred feet inland northward from Corbin's Pond, and nine hundred feet south of the current shores of the Potomac River. The main components of the site were located along and just to the south of where the terrace is essentially broad and flat. Below this, the terrace declines at approximately 0.7' per 50' to the northern embankment of the pond where the decline becomes steep. Today, the remnant of the terrace ridge is barely perceptible due to years of plowing.

The Potomac River is about ten miles wide in the immediate vicinity of 44NB180. The site lies south of Point Lookout and Piney Point and the mouth of the St. Mary's River on the opposite Maryland shore. On the Virginia side, the site is just under five miles north of Heathsville and is situated between Presley and Bridgeman creeks. Within a now partially backfilled ravine approximately 100' to the southwest of the main residence at 44NB180 lies an active spring head producing clean cool water which drains into Corbin's Pond. The spring was, no doubt, a prime attraction to settlement in a region where freshwater creeks feed into brackish tidal estuaries near immediate coastal areas. The primary soils at 44NB180 are Sassafras sandy loams and Matapea silt loams. Areas characterized by Matapea silt loams were favored settlement locations for Native American peoples in Northumberland County during the Late Woodland and Contact periods when horticulture was practiced (Potter 1982:371).

Several features of the landscape at 44NB180 and in the immediate vicinity provide clues to colonial period development of the property outside the limits of the excavation area and to the later history of the site and its environs. Approximately 250' to the southeast of the site, on the border of Corbin's Pond, lies a swale. This feature runs just inside of and parallel to the edge of the mixed deciduous forest which forms the eastern boundary of the cultivated field containing the excavation area at 44NB180. The swale likely was an early road. It is unnaturally straight as it approaches the shore of...
Corbin's Pond and resembles a natural ravine modified with hand tools to make a partially sunken roadbed. At the terminus of the road at the pond's edge is a dead white pine tree whose trunk is over 4' in diameter. The swale, or road is particularly interesting since it parallels the barn complex on the east side of the plantation building complex identified in excavations at 44NB180. Though Corbin's Pond is presently isolated from the Potomac River by a relatively stable bar, in the 17th century, and before considerable embankment erosion, the pond may have been directly accessible via a shallower or other shallow draft boat to Potomac River traffic. The reader may note that soil embankment erosion on the Virginia side of the Potomac River is considerable. Erwin Bray (personal communication), a resident of Northumberland County who used to live in the immediate vicinity of 44NB180, suggests 100' of shoreline has been lost since 1945. It is likely that this level of erosion has isolated Corbin's Pond from direct tidal interaction with the Potomac.

Sometime after the plantation complex at 44NB180 fell into disuse, the area was allowed to return to fallow fields which were soon covered by a first growth forest probably dominated by slash pine and cedar trees. The evidence for this is abundant, as the molds of numerous conifer tap roots were located throughout the site area, some of which intruded on 17th century features.

The artifact collection recovered at 44NB180 includes items dating from the 19th and early 20th centuries. The 19th century material probably relates to portions of the Bray estate. Five hundred feet northwest of 44NB180, construction activity has indicated the presence of a poorly understood sheet midden and brick debris. Little activity occurred directly within the excavation area at 44NB180 during the 19th century, however. Less than 3% of the artifacts recovered in surface collections date from this period, and no 19th century features were identified in subsurface excavations.

Artifacts dating from the first half of the 20th century were recovered in the vicinity of 44NB180 from refuse deposits accumulated in ravines to the south and southwest of the site. The many canning jars discarded reflect the agricultural orientation of the local area. Some later artifacts may derive from a farmhouse situated on the opposite side of Route 636. Periwinkle (Vinca minor) is well established in the wooded area south of 44NB180, especially south-southeast of the spring head. The majority of the second growth forest here dates from the second quarter or so of the 20th century, as
tangled barbed wire fences and old, overshadowed cedars were observed among mature new hardwood growth and scattered older shade trees. Although no subsurface testing was made in this area, the remains of a household graveyard (as suggested by the periwinkle) and possibly earlier 19th century structures may be present. The north side of the spring head, where "coolers" or other improvements relating directly to the 17th and early 18th century occupation of 44NB180 might be expected, has been buried by redeposited soil and a tangle of brush to a depth of 6'-8'. The current eruption of spring water emerges from the southern side of this fill deposit.

Northumberland County is situated within the Atlantic Coastal Plain which is comprised of geological deposits built up by marine flooding during periods of higher sea level (Dietrich 1970:97). The geological deposits are generally unconsolidated marine and estuarine sediments consisting of gravels, sands, silts and clays (Calver 1963). Excavation below the plowzone at 44NB180 revealed a subsoil with such variability in thickness and consistency that the sterile soils surrounding cultural deposits were rarely the same. The extremely variable nature of the culturally sterile soils at the site made it difficult to teach archeological excavation to inexperienced crew members or volunteers, since generalizations about which soils not to enter in order to reveal the configuration of cultural deposits could not be made. The variable nature of the soils also affected the visual impact of record photographs made during the excavations. Soil seen along the sidewalls of features or in the background is rarely homogenous. Instead, several strata of non-cultural soils can usually be seen, and these are often truncated irregularly along both horizontal and vertical planes.

One particularly difficult geological strata consisted of loam stained deep dark brown with a golden hue by iron oxide deposits and not organic matter. Except to experienced excavators having encountered this at the site and worked with it, the sterile geological staining seemed identical to certain cultural deposits generally at the lower or sidewall boundaries of features. These factors made the project director disinclined to accept short term volunteer help unless direct supervision was possible. Acceptance of inexperienced volunteers, some of whom might never excavate again, would also have slowed what progress was being made at the site. Only a very small crew was assigned to the project, and only a few of these individuals had
sufficient experience to supervise others. Some sites make better teaching vehicles than others.

With some variation across the site, the soils were easily saturated and often unworkable for days following a rain even if the surface of subsoil was drained. When thoroughly dry, a previously saturated area would, on occasion, achieve a surface resistant to determined shovel and trowel. Further difficulties ensued when silt loams and other geological soils which were plastic or blocky and, thus, resistant to screening were encountered. Depending on location at the site, the subsoil would cling to the black plastic.
Preliminary Testing

The VDHR initiated preliminary testing at 44NB180 in late April of 1989 with David Hazzard and Keith Egloff supervising the project and Brad Brown assisting. A detailed surface inspection was immediately begun with the aim of establishing the boundaries the site midden and relocating the position of the main residence. Several shovel test holes were then dug to establish the depth and consistency of plowzone and other disturbed soils prior to stripping the site of this overburden. It was observed that the plowzone had been topped and somewhat shifted by the developers in order to build up an artificial grade to the southwest of the site and obtain topsoil fill. This activity had created a late modern disturbance level superimposed over a slightly reduced plowzone. Following Potter's suggestion that the position of a large, floored domestic structure was indicated by an area within the bounds of the midden which exhibited a relatively low artifact density, VDHR staff was rapidly able to locate the remains of the original manor house during the first day of stripping with a grade-all. Other machine cuts near concentrations of brick debris to the northeast of the manor house revealed the location of a brick clamp. An additional series of cuts revealed portions of a yard compound spanning the previous test trenches.

Testing at 44NB180 continued over the next few weeks under the supervision of Brad Brown. Rainy weather during this period prevented further stripping and slowed testing, but many features which had been exposed previously were able to be mapped. A small field crew was eventually assembled, and Charles Hodges joined the project as site director on May 17.

Excavations at 44NB180 continued through early November 1989. The initial focus of the investigation was the excavation of features comprising the manor house. Once this area was understood, an additional area of the site was stripped and the newly exposed features mapped and excavated. In general, this pattern was repeated throughout the course of the project. By the end of July, over two hundred features had been recorded following extensive stripping of the yard compound to the east and south of the manor house. By the beginning of November, the number of features recorded had been increased to a total 274, among which eight structures were represented. The
sampling system employed in the excavations determined whether features were fully excavated, partially excavated, or drawn and described only.
Excavation Methods

The following is a brief description of methods and techniques used in the excavations at 44NB180 and includes some discussion of why certain approaches were taken. The primary aims of the project were to delineate the spatial structure of the site and to recover structural and artifact data which would shed light on other types of cultural behavior. The sampling strategy was designed so that sufficient data was obtained to provide reliable information about cultural behavior specific to 44NB180. Systematic controls governing the collection of the data permit comparison of 44NB180 with other sites excavated in the circum-Chesapeake study region.

Because the project deadline and crew size changed considerably during the term of the excavations the sampling strategy was not inflexible, but rather expedient and realistic. Reasonable professional standards were maintained at all times. This process was not without difficulty as only two of the seven crew members who worked at 44NB180 during the course of the project had any worthwhile practical experience in colonial archaeology. This problem was compounded by the fact that for more than a month, only one staff member (either Brown or Hodges) was present at the site on a daily basis. For a little less than two months, only two individuals were directly involved in the excavations (either Hodges and Francisca or Hodges and Squayres). Further, each member of the crew trained at the site from late May to early July departed by mid July for various personal reasons. The situation was a fairly simple and all too familiar national pattern of trying to run a field school during a Phase III in a desperate salvage context. The crews are to be commended for their rapid mastery of a cram course in soil stain archaeology.

Creative solutions were sought to ease some of the problems caused by the small size of the crew. Archaeologists from several programs within the state volunteered their time at the site, and several organizations loaned their own employees to assist in the excavations.

The primary methods of testing were in part determined by the condition of the site before archaeology began. The construction company had manipulated the surface of the site in order to partially fill in a ravine near the spring head and obtain rich topsoil for landscaping, and by regrading
the portions from which the dirt had been borrowed. While disturbances up to 0.4' in depth were randomly distributed across the property, in some areas the soil had been disturbed to a depth of 3.0'+. Blue stone gravel from the Blue Ridge was observed sprinkled across the surface of the property. Since the integrity of surface and plowzone deposits had clearly been compromised, no controlled surface collection or plowzone sampling was conducted at the sites.

Initial testing at 44NB180 followed Potter's recommendation to begin in the barren area of the site midden where it was suggested a floored substantial building had been placed, shielding this area from artifact disposal. Additional areas were stripped periodical from April to September. The areas opened included not only those with high densities of artifacts, where buildings and activity areas might be expected. Areas of the site with a relatively low artifact densities were also deliberately selected to reveal portions of the yard compound. Once the general layout of the principle plantation complex buildings became apparent, rather than just expose isolated buildings, linear bars of overburden were removed to record samples of the spaces that linked the structures.

Complete stripping of the site was out of the question since the project area was some distance from the nearest VDOT station and their equipment was tightly scheduled for other uses. Contracted use of the grade-all was also expensive in the context of the project budget. Further, the stripping that was done presented problems since no dump truck was available to remove spoils from the area. Use of the grade-all meant that spoils were constantly dumped in the immediate vicinity of the test trenches based on the length of the extension bar. In some instances spoils were moved up to three times over a four month period in situations where the desired effect was needed on the first occasion and where building and fence complexes were strongly anticipated.

Regardless of these problems, the use of the grade-all was expedient, and reference to the site master plan will demonstrate that the large excavation area opened made possible the identification of a broad range of subsurface features associated with the plantation complex. The negative space exposed in test trenches--those areas barren of features— is also considered important in understanding the spatial structure of the complex. On the recommendation of David Hazard, stripping of new areas was never
initiated until all previous surfaces exposed were mapped and understood, if not excavated.

When during removal of the site overburden a building complex or other large feature was identified by virtue of the size of individual post molds or the spatial configuration of a group of post holes and molds, efforts were made to insure that the entire unit was exposed and the structures were not aborted at interior bay intervals. When a line of large post holes and molds was observed, stripping proceeded to no less than twelve or fifteen feet beyond the recorded wall facades so that distances beyond the maximum normal English earthfast bay intervals were tested. A right angle was triangulated off these walls and testing proceeded with such economy that given minimal machine time all elements of the structure were revealed regardless of known finds or preconceived notions of interpretation or anticipated size.

During and after stripping "gang schnitthing" or "shovel shaving" was employed to reveal the details of subsurface cultural deposits intrusive to sterile subsoil. Flagged nails or stiff wire mounted survey flags were implanted in all suspected features identified by soil coloration, texture, content, and boundary definition. In the later phases of excavation red flags denoted probable features and pink flags recorded possible features. Provenience numbers were written on the flags with a magic marker. This practice allowed easy and permanent feature identification without recourse to the master plan--an aid when volunteers were present. Trowelling provided details of soil staining for final mapping which was done by 10' X 10' or 20' X 20' units.

Because the majority of crew members were inexperienced at reading soil stains, 50-100% percent of decisions made in defining soil stains for mapping in plan or profile either made or field checked by the author. All crew members participated in some form of mapping or drawing and were encouraged to define what they observed and further amendment was frequently unnecessary as the excavation progressed.

Although early mapping was based on reference points used for triangulation in opportunistic locations, problems in map reconciliation were avoided by the layout of a formal grid and by switching from the use of English architect's scale to the engineer's scale. The engineer's scale,
graduated in increments of tenths of feet, was more suitable for use with 10 X 10 grid paper. The grid was set up using a coordinate system since this was considered an easily understanding system which would allow the grid to be extended indefinitely. The grid was normally extended through triangulation and sloping areas were spotted in with horizontal tapes by the compensation of a plumb bob. A transit or theodolite was present at the site only on occasion. The first reading in grid coordinates is always north and the second west: for example, "150N/100W" means one hundred and fifty feet north and one hundred feet west. The ON/OW datum was an imaginary point in practical terms beyond the southeast limits of the site. Squares are named by the coordinate in the northwest, or upper left hand corner of the map, just as a person would begin reading a page in a book with north at the top of the page. All features recorded and mapped within these arbitrary divisions are specified by either 10X10' or 20'X20' squares.

The crews were provided with a feature form developed by the site director (see Appendix__) which could be filled out as an EU form ("Excavation Unit" i.e. not pertaining to a specific feature). The forms was designed to be sympathetic or self explanatory to individuals with minimum previous experience who were excavating at a salvage site with certain inherent momentum. Because of these conditions, field notes were also often dictated to crew members by the author. The process worked well, and crew members learned the types of information needed very rapidly. The categories on the forms were standard except that two large sections were devoted to listing rapidly exact methods of artifact recovery and sampling and recording techniques used.

Each individual feature was assigned a separate provenience number comprised of an arabic numeral, with subdivisions in the feature indicated by the addition of capital letters assigned in alphabetical order. Buildings and other large or complicated macro-features received Structure numbers and short identifying titles which are independent of individual feature numbers. Because of the vagaries of stripping schedules, independent numbering allowed freedom to provenience regardless of whether or not the feature was part of a larger unit. The reader should note that since many features are post molds and holes, that the provenience number for the hole would be, for example, Feature 36, and the mold found in the hole would be assigned the number 36-A. If a hole was entered several times for repair and/or replacement, the numbers
were broken up according to the clarity of the information (i.e. the separation of fill deposits). When unclear, conservative sub-designations were employed. If excavation subsequently contradicted the original interpretation, the original provenience numbers were kept to preserve the integrity of collections made and the information was corrected on the feature forms. Since a "last number used" system was employed as numbers were dispensed, occasional obsolete provenience means that, for example some root disturbances with relatively clear boundaries have feature numbers.

Since the author considers it hazardous to use a number of different forms with a largely inexperienced crew, the only other form used at 44NB180 was a provenience inventory. This form (see Appendix _) lists in numerical order each feature assigned a provenience number and provides the square number and a minimal amount of information describing the feature.

All excavated features were described and drawn in plan and profile. Plans of buildings were drawn at the scale 1":2' and were later photographically reduced for placement on the 1":4' scale master plan. The 1":4' scale was found to be an awkward scale for recording critical details of buildings in plan and it was not feasible to draw items in plan twice by hand. Other features were added directly to the master plan on a case by case system depending on the need for detail. All excavated features which were bisected were drawn at the 1":1' scale, so that small details could be recorded with ease. It was also easy for the crew to use this scale on the 10 x 10 grid graph paper. Notes on features were recorded on the drawings so that they were directly associated with the details described, a process aided by larger map scales.

Photographs which documented the site were made with 35 mm cameras using Plus Pan 125 black and white negative and Kodachrome 64 color slide film. A menu board of the cheapest class was used to identify subjects on film rolls. The use of a menu board was not employed on large features such as buildings or sections of the yard compound since these could never be confused. Photographic ranging scales and a north arrow indicating magnetic, not grid, north were used as a standard control for record photographs. In order to bring out the natural color of the feature fill and natural soils, whenever possible, the units were sprayed gently with water from a portable sprayer or via use of a garden hose attached to the water pump. Although it was not
possible to photograph every detail of every feature excavated, care was taken to photo-document features critical to the overall and detailed interpretation of the site. The camera was treated as a dispassionate third party to record any features or groups of features, with or without controversial interpretation, so that interpretation could be subject to further study and possible reassessment in the future. Whenever possible, buildings or large overall sections of the yard compound were photographed before and after excavation so that observers not present could see the unembellished points of departure which preceded excavation.

The artifact sampling strategy was kept as simple and straightforward as possible in order to provide the necessary momentum to salvage the site against the project deadline. A portable water screen system employing a Homelite "Waterbug" pump was able to draw water out of Corbin's Pond and deliver it to an uphill destination for distances often in excess of 300' to a double screen system with 1/4" mesh hardware cloth on the upper level and 1/16" mesh hardware cloth on the lower level. The screening component was built by Tony Opperman and the use of the pump was employed on the creative initiative of Keith Egloff.

The water screen was used to sample 100 percent of two artifact-rich features within Structure 1, and process percentage samples of two other important features as well as other miscellaneous cultural deposits. Samples were often taken to see what kinds of information we were losing to the salvage schedule. Surface collections were also made throughout the excavation to enhance the study sample and provide some control over use of the area use despite the surface and plowzone disturbances discussed above.

The standard artifact sampling technique was hand screening through 1/4" mesh hardware cloth. If a feature was excavated, it normally was screened as a matter of course. If, as in the case of massive post holes, a reliable sample had already been obtained after only 50% of the fill was screened, this was so noted on feature forms. Near the end of the project standard procedure became, by necessity, the bisection of a post hole with the discarding of one half of the fill and avoidance of the form of the post mold. Throughout the project it was found awkward to bisect post molds and be in full control of the exact origin of the artifacts contained therein (ie. versus hole fill) without carefully removing the post hole fill from one side of the mold. At
that point the feature was drawn and possibly photographed. Then 100% of the mold fill was screened providing a terminus post quem and a sample of the site midden was obtained. This process was not only excellent for teaching fill soil separation, it allowed a much fuller view of the configuration of the post mold as it was apparent in three dimensions, and any debris which may have silted into its upper regions. On a case by case basis, resolution of mold boundaries was arbitraged by conventional halving of the mold should the three dimensional approach prove confusing. Also on a case by case basis it was necessary to withhold artifact separation until a bisection clarified separate cultural fill episodes not otherwise perceivable. When fill sequences were resolved, the other 50% of the post hole fill was screened in an attempt to capture construction dates and a sample of the then current site midden. Therefore, if other structures had received a 100% sample of the post mold and hole fill we are obviously able to compare fill content representing the crude volume percentages. It might be noted that the use of percentage sampling has an inherent error factor, since rarely does a feature have equal or truly symmetrical parts to begin with and often the bisection lines were selected to portray the best angle of resolution of fill sequences, and not volume percentage equilibrium.

Large features at 44NB180 were quartered on a case by case basis based on net size. Medium sized features were also quartered on occasion in order to record fill in arbitrary lines throughout the contents in opposing direction to capture perceived or unperceived spatial information within the feature.

The site and grid was mapped into the landscape with a theodolite, and tied into electrical boxes, and elevations were taken recording both undulations of the terrace and points of origin and depths of various cultural deposits and structural components.
Public relations activities associated with the project were conducted in a manner which met the concerns of both the landowner and the archaeologists, while remaining mindful of the public’s interest in the project. Informal visits to the excavations by the public were discourage for a number of reasons. While the archaeologists had little time available for public interpretation given the salvage nature of the project, a constant stream of visitors also would potentially had interfered with the developer’s activities elsewhere on the property. As excavation proceeded, unescorted visits to the site became increasingly hazardous, especially at 44NB180, where dangerously deep holes were obscured by black plastic. There was also concern for protecting the integrity of the archaeological resource. For example, nearby residents who had been given a tour of 44NB180, returned to the site with metal detectors to entertain their guests on the Fourth of July. This incident, as well as the need to leave the site unattended while work was conducted at 44NB174, led the archaeologists to post a “no trespassing” sign at the site.

Although the project was not initially publicized, word of the excavations spread within the local community. As a result, three interviews were eventually conducted with the press and articles about the project appeared in the Rappahannock Record (September 14, 1989) and the Northern Neck News (September 14, 1989).

The project staff also held an open house for the public on October 16, scheduled to coincide with monthly meeting of the Northumberland County Historical Society. Volunteers from the staff of the Virginia Commonwealth University, Archaeological Research Center assisted in the excavations that day, allowing visitors to see, first hand, the process of field excavation. The project staff conducted guided tours of the excavations, summarizing and interpreting the results. Visitors were also given the opportunity to examine the site maps and to view some of the artifacts recovered which were displayed in a small exhibit constructed for the occasion.
Results of the Excavation

Described below are the major structures, fence systems, and other features investigated during the course of excavations at 44NB180. Ten structures were identified in the excavation area. In addition to the manor house, these include two barns, two servants quarters, a cellar house, and several outbuildings. The individual features comprising each structure are identified and discussed in some detail. Various types of evidence contributing to the interpretation of each structure, including its function and stages of repair or expansion, are also discussed.

Structure 1: The Manor House

The manor house was discovered early during testing of the site and provided a highly visible focus of initial excavations. When it was possible to strip additional areas near the structure, an anticipated addition was recorded. The domestic nature of the structure was identified by the massive size and depth of both post holes and molds; the configuration of the feature layout; the presence of a subsurface feature identified as an interior hold or root cellar containing kitchen and domestic debris; and, finally, the presence of traces of fireboxes. Further, the structure was noted to have been a locus of a doughnut shaped sheet midden with a pattern of lower artifact density in the center, strongly implying but not proving that the building was floored at least during later phases of occupancy, or periodically cleaned out, thus producing considerable refuse clearly emanating from the interior core area. Examination of the surviving sheet midden during the full scale excavation demonstrates that within the greater circular pattern of generalized artifact density a strong pattern of refuse dispersal occurred particularly to the north and northeast of the perceived living unit.

The manor house is located on the western central side of the excavation area due grid north of the spring head. The structure is 102' due west of an extensive barn complex and 8' grid north of a large servants quarter and work house. The dwelling is located along and just to the south of a slight terrace rise on a gentle slope which leads south to the spring head and spring-fed stream valley, and the northern shores of Corbin's Pond, to which the former
Structure 1 The Yeoman Manor House before excavation
is tributary. The building is oriented in such a fashion that the long facades are at right angles to the Potomac River which is not likely to be a coincidence. Although the structures points of origin are situated along a grid north to south slope, it is likely that this is due, in part, to indifferent soil conservation during the later historic and modern period. Nonetheless, the structure may have deliberately been nestled on the south side of the minor, low terrace which would have afforded it some protection against heavy winds emerging from the wide Potomac River to the north.

Features which make up the remains of Structure 1 are F's 4, 32, 33-60, 105, and 107-113. A purview of the detailed plan of the structure (Figure ) shows that the apparent core frame of the principal structure was originally forty feet long grid north-south by twenty feet wide grid east-west, and rested on hole-set posts. Details of post location in F's 36, 37, 48, 49, and 50 may suggest that even the core of the house was subject to important alteration based on subdivisions within the north central bay. On the western central wall facade of the core frame, a series of intrusive features (F's 34 and F's 38) indicate an addition extending at right angles to the west from the north-south bearing wall, including F's 105 and 107-113, which was embellished by a fire box.

Variation in the fill of post holes and molds and their contents indicates the structure was highly valued as an expedient living unit throughout much or all of the site occupancy. In order to keep pace with social and developmental needs the building was repaired and altered rather than replaced. As in the case of the Charles County Courthouse (Carson et al. 1981:195-6), the insubstantial, imperfect nature of the structure led to a need for periodic significant repairs. In the hope of dating phases in the evolution of the structure, over 80% of the post hole fill providing construction dates and 100% of the post mold fill providing destruction dates was sampled by hand screening. Sampling 100% of post hole fill was not possible. For example, in some units, such as F's 48-50, it was not possible to accurately separate units until a bisection had been made. The project schedule also allowed that only an adequate comparative sample be gathered. At minimum, however, at least 50% of the fill from each post hole unit was sampled. A plan drawing, accurate to the nearest 0.05", was made of each feature in order to record the exact position of each post mold and hole.
The characteristics which allow one to discern different phases in the evolution of the manor house and assign individual features to these phases are discussed below. A tentative temporal framework for the evolution of the structure is also presented. All of the interpretive assertions beyond the obvious data are preliminary and are subject to further study beyond the scope of this report. The interpretations are an attempt to stimulate such studies which are, in part, province of architectural historians. It is likely that a multi-disciplinary approach combined with further analysis and comparative research will resolve many of the qualifications that follow.

In attempting to recognize building phases, examination of post mold alignments, size, depth, and preparation treatment and post hole size, axis orientation, and configuration may be informative, especially when the artifact content and consistency of feature fill is also considered. In Structure 1, some differences in post mold alignment and depth are probably insignificant, however, since many post molds in the building are slightly out of square or have migrated below the depth of the original post holes. Throughout the site, and certainly within the manor house, a grey clayey slip was noted below mold bottoms which may indicate some attempts to pack the mold bottoms against slippage. In other cases, post hole fill was built up under mold bottoms to raise certain posts, apparently for the leveling of tie-beam pairs. These small variances may be exaggerated by cultural period structural replacements, and the project staff's inability to re-measure and re-draw the bottoms of every mold as suggested by Morrison (1985:119-134). Nonetheless, it can be generally assumed that an examination of depths of post mold depth and disposition that the structure was built around a framework of individually hole-set posts that extended either to the plates or, before certain post molds sank below their original level, to tie-beam pairs. Theodolite readings were taken at the top and bottom of each post hole after the structure was excavated (the equipment was periodically needed for other VDHR projects). These measurements cannot compensate for detailed post mold measurements as they were excavated, but mathematically anchor the profile drawings. Since many molds migrated, or are problematic due, in part, to the soft sand strata of the Potomac River terrace, a thorough examination of mold depths is beyond the scope of this report.

The core frame of the structure is divided into two 10' wide bays on the north side of the house and two 10' bays on the south side. The second
Bay south of the most northerly bay is divided into a passage bay which probably simultaneously framed the central chimney and the presumably "H shaped" chimney cheeks and double fire box. The distance between the bays when the agreement between the surfaces of the post mold were carefully plotted, by splitting the isolated minor differences in surface mold form, and striking a line in agreement to all molds along the north to south long facades. The wall line isolated drops out certain smaller post molds abutting or otherwise out of square with the main bearing wall, and demonstrates that some of the bays were out of square and of unequal distance. Portions of this data obviously may be a by product of salvage methodology; however, the examination appears generally instructive. The interior gaps between the east-west axes paralleling implied former tie-beams were also struck as a line so that the following measurements could be made (see also figure) (A = Maximum exterior gap between outer edges of tie-beams; B = Interior distance between inner edges of tie-beams):

<table>
<thead>
<tr>
<th>Wall</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>North Bay (corner posts F/S 33-A, 54-A; bay posts 35-A, 51-A)</strong></td>
</tr>
<tr>
<td>A = 11.0' Mean = 10.15'</td>
</tr>
<tr>
<td>B = 9.3'</td>
</tr>
<tr>
<td><strong>North Central Bay as partition (F/S 35-A, 51-A, 36-A, 49-A)</strong></td>
</tr>
<tr>
<td>A = 6.2' Mean = 5.6'</td>
</tr>
<tr>
<td>B = 5.0'</td>
</tr>
<tr>
<td><strong>Passage and Hearth Bay partition (F/S 36-A, 49-A, 37-A, 48-A),</strong></td>
</tr>
<tr>
<td>[east side 0.2' out of square with west]</td>
</tr>
<tr>
<td>A = 4.7' Mean = 4.2'</td>
</tr>
<tr>
<td>B = 3.5'</td>
</tr>
<tr>
<td><strong>North Central Bay disregarding partition (F/S 35-A, 51-A, 37-A, 48-A), [east side 0.2' out of square with west]</strong></td>
</tr>
<tr>
<td>A = 10.1' Mean = 9.6'</td>
</tr>
<tr>
<td>B = 9.1'</td>
</tr>
</tbody>
</table>
Chamber

South Central Bay (F#S 37-A, 48-A, 39-A, 45-A) [tie beam squared, by bay distance, but out of square with long facade line by 1.5 degrees, thus parallelogram]

\[ A = 11.0' \quad \text{Mean} = 10.4' \]
\[ B = 9.8' \]

South Bay (F#S bay posts 39-A, 45-A, corner posts 41-A, 43-A) [tie beam out of square at 92 degrees off west side, 0.4' off by maximum east]

\[ A = 10.0' \quad \text{Mean} = 9.4' \]
\[ B = 8.8' \]

Total length = 39.75'

The information presented above suggests that the bays were constructed one at a time and, possibly, in several separate episodes. Standardized, pre-cut framing elements beyond the scope of tie-beam pairs were probably not employed in the construction. Further, the southeastern section of the house is slightly out of square beginning at the suggested passage and hearth bay and extending from this point bay by bay to the terminus of the core frame. The surface configuration of the post holes indicates that the majority of the post holes have their long axes on a north to south orientation. This is especially true for holes along the east wall facade. Along the west wall facade only three of five bay post pairs have the same trait: F# 35, 36, and 39. Notably, the feature associated with a cross passage and also apparently framing the chimney and fire box has its long axis east to west. Diminutive F# 48 and the heavily repaired elements in what appears to have been a door trench between F# 48 and 49 all have long axes oriented north-south.

Post holes with long axes parallel to the long facade are normally considered to indicate reverse assembly. Tie-beam pairs are added at right angles to the long wall lines as bay posts are added and adjusted (in the case of Structure 1, for bay adjustments north to south) (Carson et al. 1981:150; Morrison 1985:125). Using the post mold placement between the tie-beam pair of bay posts in F#35-A and 51-A, it is evident that the sidewalls along the west hole trenches were used to brace and stabilize the posts as probably an independent pair before attachment to the plate. In all of the bay posts within the core frame the mold is invariably placed up against, or in the immediate vicinity of the western limits of the prepared hole. It seems that
by following post hole size carefully in terms of anticipated percentage of error, post hole size is sensitive to order of placement. On the east wall facade, for instance, holes have less variance north to south. They may have been marked off with a string line or, although less likely, measured in and implanted first without pairing while other builders constructed holes at right angles with built in percentages of error for final placement and anchoring of the paired posts. On the north gable end there is evidence that the northwest corner post, FI 32, was marked off first before the hole was dug. The remnant original hole is more of a tilted square in configuration. On the northeast side, remnant original corner post hole FI 53 anticipates variance in a north-south direction and is according strongly rectangular. Whether or not this is an indication of building from interior bays to exterior bays, perhaps by employing triangulation, it appears obvious that the west side was adjusted to more confidently in a north-south direction than the east side. The same pattern is noted on the southern gable end with the southeast mold (FI 43) strongly oriented north-south and the southwest corner post (FI 41) oriented as more of a square with slightly more variance east-west. In either direction certain width to hole size was a necessity, since the posts were massive and needed to be deeply anchored in the highly variable strata of the Potomac River terrace. As may be obvious, it is quite difficult to dig a deep hole with out digging a wide hole. Consideration of economy of motion when labor is concerned tends to be instructive.

In sum, preliminary comparative analysis of paired and aligned post molds (without detailed survey of mold depths) in both east-west and north-south directions strengthens the argument that single frame units or no more than tie-beam pairs were prefabricated and implanted simultaneously. Leveling for the plate attachment was made via careful cuts per member, or by packing fill below molds. This method of construction tends to strengthen the assertion that the homesteaders adapted the structure to a gently sloping land surface in an organic and expedient way, probably without the benefit of professional carpenters. It does not imply that the structure was somehow lacking in integrity or was grotesquely crude.
Evidence of Repairs and Alterations

By virtue of certain data it is possible to distinguish between post hole and mold traces and certain features which were original to the construction of the dwelling and others which are presumably later in date. These temporal relationships are suggested by four lines of evidence: (1) Many post holes are intruded by disturbances placed during repairs or the construction of additions to the building. At this time architectural debris and domestic sheet midden was incorporated into variable post hole fill with clear boundaries; (2) Certain post holes have no significant evidence of architectural or domestic debris contained within their fill, regardless of whether or not they show evidence of repair or alteration. The fill of these post holes indicates that, theoretically, no substantial surface activity had taken place in the area during the time of their construction; (3) Diagnostic artifacts contained within post mold and hole fill as described above, although low in number, indicate a variable temporal framework above and beyond other indications of the presence or absence of midden debris; and (4) Patterned variation in the size, depth, location, or other treatment of post molds is apparent.

The following post holes or post hole remnants had little or no artifacts within their fill and it is hypothesized that they are original to the initial fabric of the manor house. These features are depicted with angular hatch lines on the plan drawing of the structure (Figure______). The features marked with an asterisk are problematic in that they are above and beyond the minimum requirements of corner and bay posts and often contained only a few artifacts:

West Wall Facade (north to south)

(1) Feature 32, (truncated by Feature 33 and possibly 33B w/ total artifacts 663) and the northwest corner post (total artifacts, 11)

(2) Feature 35, (truncated by F#34 west addition w/ total artifacts, 105) and a bay post at a 10' interval below the northwest corner (total artifacts, 3)

(3) Feature 36, a possible lobby entrance feature relating to a door jam 4' above the next lower bay post (total artifacts, 6)

*(4) Feature 37, a bay post on the west long facade at 20' below F#32, the northwest corner post, and 20' above the southwest
cornerpost, thus the division of the hall from the chamber (total artifacts, 43)

(5) Feature 39, (truncated by F#38 west addition w/ total artifacts 45) and 10' north of the southwest corner post (total artifacts, 0).

*(6) Feature 40, 2.5' to 3' south of bay post F#39, and 6.5' to 7' north of the southwest corner post F#41, the function is problematic (total artifacts, 6)

*(7) Feature 41, (truncated by F#41-B) and the southwest corner post (total artifacts 41 and 41-B combined, 99).

East Wall Facade (north to south)

(1) Feature 53, (truncated by F#54 w/ total artifacts 208) and at right angles to F#32, the northeast corner post (total artifacts, 6)

*(2) Feature 52, at 5' south of the northeast corner post and 5' north of F#51 a bay post 10' south of F#53, (total artifacts, 71) (problematic in nature of interpretation)

(3) Feature 51, a bay post 10' south of the northeast corner post (F#53) and paired with F#35 at right angles (total artifacts, 27)

*(4) Feature 50, a possible door jamb or partition post originally probably paired with F# 49 at 3' to south {artifact total/different sampling strategy}

*(5) Feature 49, a probable entrance feature relating to a door jam 4' above the next lower bay post (F#48), and paired with F#37 at right angles {artifact total/different sampling strategy}

(6) Feature 48, a bay post at 20' south of the northeast corner post, and 20' north of the southeast corner post (F#43), thus marking the line of division between the hall and the chamber and paired with F#37 at right angles {artifact total/different sampling strategy}

*(7) Feature 47, at 3' south of F#48, is problematic (total artifacts, 8)

(8) Feature 46 and F#45 is a bay post at 10' north of the southeast corner post (F#43) (total artifacts F#45 & 46 combined, 15)

*(9) Feature 44, is 4' north of the southeast corner post (F#43) and is problematic, but may relate to hanging partition wall or frame shoring (total artifacts, 44)

(10) Feature 43 is the southeast corner post (total artifacts, 2)
Although it is not possible to account for all of these post holes in a summary method, whether they contain their original molds or not, it is clear that a conventional earthfast structure with four bays divided into 10’ wall gaps is contained in the partially disfigured remains of the paired post holes and molds mentioned above. Compared to the undisturbed portions of post hole fill within corner and bay post holes, those post holes marked with an asterisk appear to have slightly more artifacts in them. Yet these post holes also contain considerably fewer artifacts than the obvious intrusive repair posts, since a heavier site midden had accumulated before substantial repairs were made. The latter post holes which cannot accounted for in terms of the internal central framework of the structure probably pertain to door jambs (F#s 47-A, 48-A, 49-A and 50-A); a lone door post (where presumably the door hinge side was anchored); lone closet braces or "hanging partitions"; simple selected wall bracing (F# 40-A, 44-A, and F#52-A); and scaffolding to brace chimneys or shedded construction lines (F# 36-A and 49-A and B). As can be seen from the list above, some post holes may have served multiple functions.

The following is a list of intrusive features, or those clearly later in date, which are not necessarily informative about alterations pertaining to changes to the fabric of the structure:

(1) F# 33, the first two repairs to the northwest corner post, 33-B, a second repair to the corner post associated with the last mold implanted 33-A (F#33 and 33-B combined total artifacts, 100% sample, 663)

(2) F# 34, intrudes the original bay post F#35, associated with the west back room addition (total artifacts, 66% sample, 105)

(3) F# 38, intrudes original bay post F#39, associated with the west back room addition (total artifacts, 50% sample, 45)

(4) F# 42, king post south gable, contains architectural debris (total artifacts, 50% sample, 86)

(5) F# 55, king post north gable, contains architectural debris (total artifacts, 100% sample, 284)

In summary, these post holes fall into three categories: large bay posts having few artifacts; smaller often unpaired errant post holes having generally but not always more artifacts; and obvious intrusive posts and free
standing posts having large amounts of architectural debris and a large sample of an apparently increased site midden.

The complexity of the manor house remains resulted in efforts to establish the temporal relationships between individual components of the structure. As stressed above, a minimum of 50% of the feature fill in the structure was screened in order to acquire artifacts and other information which would allow us to discern these relationships. Still, dating evidence based on diagnostic artifacts is meager, since few artifacts, much less ones, were present in the fill of the post holes discussed above. Some artifact counts were undoubtedly affected by patterned artifact dispersal within the household sheet midden. Using the northwest corner post as an example, F#32, a remnant of the original post hole, had a total of 11 finds including oyster shell, mortar, bone, and daub. The intrusive repair hole F#33 had a total of 663 finds. In the later addition only three post holes had more than 10 artifacts largely due to the shallow depth of the features. Among the deeper post holes, the pattern is reversed: F#34 had 105 artifacts, F#38 had 45, and F#110 contained 43 artifacts. In sum, screening of post hole fill proved worthwhile. Even though only gross counts were examined here, analysis of the artifact content of post holes, when considered with other types of data, provided important clues to the temporal relationships among features.

Only a few diagnostic artifacts which can be used to date the construction of the manor house were recovered, however. Feature 52 yielded one white ball clay pipe stem with a bore diameter of 8/64" and one with a diameter of 7/64". These are presumably pipes in use during the construction or initial occupation of the manor house. Bore diameters of these sizes were popular between 1620 and 1710. Although this may be statistically offensive, the date might be refined into a percentile bracket between 1640 to 1660. This span includes the initial period of site occupancy-between 1651 and 1657--suggested in the documentary record. Three sherds of coiled earthenware were obtained in F#33, and a sherd of redware was obtained in F#51. These ceramics are not particularly informative except that they indicate the features were filled prior to extensive activity at the site. Using artifact amounts alone to document changes in the structure may be misleading due to specific patterns of artifact dispersal which are no longer in evidence, as noted above. In brief, a pattern of increased artifact dispersal associated with the "hall" entry and exit zones may be predicted.
Unpaired post holes and molds within the Manor House at 44NB180
Construction Phases

The following discussion attempts to document changes in the manor house from an evolutionary perspective. Terms such as "Phase 1" or any subdivision are not meant to represent cultural developments except in terms of construction. The reader will note that Phase 1 is used below as a general term to refer to the construction of those parts of the manor house spanning the four corner posts of the core frame of the structure, including all four bays and the subdivision of the north central bay containing lobby entrance features and a central hearth. Sub-phases denoted by capital letters are purely hypothetical and problematic. The discussion below often relies on the same evidence from an argumentative perspective.

Phase I-A: Hypothesis 1 on the Development of the Core of the Early Manor House as an Initial Single Cell Hall

From a functional standpoint the core of a 17th century plantation house was the hall, which for both rich and poor was the one essential living unit within a dwelling without which cooking and heating could not take place. Because of this convenience, a multitude of other various household activities also took place in the hall. In modern parlance, the hall is analogous to a "country kitchen" and housed activities which might take place today in a kitchen, work room, living room, den, and possibly bedroom. Evidence for this domestic core unit is reviewed below.

Many of the earliest structures on 17th century settlement sites in the Chesapeake region were single cell structures in which the hall by practical necessity was the only one story room, notwithstanding a half story loft. A building contract from Northumberland County dated 1653 begins: "I Thomas Wilford of the County of Northumberland Gent. for a valuable consideration received of Paul Sympson Gent...(agree) when nails and a Carpenter can be had to build him a fifteen foot house Square with a welsh chimney, the house to be floored and lofted with Deale boards, and lined with Riven Boards on the inside..." (Browne et al. 1883:302). From an archaeological perspective, the hall can be identified if evidence of a cooking and heating chimney is present. Frequently a root cellar was situated in the immediate vicinity of
Planter's house reconstructed at St. Mary's City, Md. Such small, one-room structures, raised quickly and covered economically with split oak or chestnut clapboards, were common in the 17th-century Tidewater but have all disappeared. (Colonial Williamsburg Foundation)

Right: Elevation and plan of the Woodward-Jones House (1716), Nansemond County, Va., one of the oldest surviving frame dwellings in the Tidewater South. (Cary Carson)

Fairbanks House (c. 1637; additions, 17th and 18th centuries), Dedham, Mass., the oldest standing structure in English North America. The house, since restored, epitomizes New Englanders' improved standard of living. (SPNEA)

Examples of Early Single Cell Houses by Carson 1986
the hearth, just as the stove and refrigerator are companion features in the modern kitchen.

For a variety of reasons the earliest structures erected at 17th century Chesapeake settlements were nearly always impermanent, if not ephemeral, and were often constructed of unseasoned green wood, as cheaply and rapidly as possible (Neiman 1978, Carson et al. 1981). As time passed the homesteaders had the choice of abandoning such structures, changing their function, or repairing and possibly improving them with additions and other architectural embellishments. Archaeological sites within the 17th century frontier regions should have evidence of one of these scenarios, and remains of an initial hovel consisting of a hall and loft and evidence of a firebox (if it has survived below plowzone), or at least a core element in evolutionary domestic architecture, should be contained within the site limits. Yet, identification such remains is often difficult, in part because of the very nature of the initial and often ephemeral construction.

Within the northern two bays of Structure 1 a root cellar (F4) filled with kitchen midden, domestic, and architectural debris was noted just north of or 1.5' to 5.7' beyond a fire-reddened surface stain (F60). These two features provide the best evidence for the location of the fireplace since the interior root cellar was normally placed directly in front of the firebox. It follows that these two bays can be confidently identified as the hall. Feature 60 suggests that on at least one occasion the hearth produced a tremendous heat, for sterile clay at least one foot below the original surface and immediately below the now destroyed fire box foundations was oxidized to a red color because of the natural iron deposits in the soil.

**Hearth Remnants**

The firebox footprint, or shadow is 2.8' long grid north-south by 2.1 wide grid east-west with a slightly irregular, and having a poorly defined boundary. Stephen Potter (personal communication) noted that prior to disturbances from development construction, a surface concentration of brick rubble occupied the same location. The clayey soils of the hearth footprint were sampled. It was found that the reddened portions had no clear line of origin, nor did the clay have the consistency of prepared daub. The feature may be a remnant of clay puddling (ie. mixed with water only) prepared for the
footing. If so, only chemical testing can disprove that it was not simply burned subsoil. If the clay is actually in situ subsoil, such deep reddening may have been caused by a chimney fire (a constant treat) in which case the effects of an accidental fire would have been exaggerated by the onrush of oxygen up the chimney flue.

No clear evidence of post molds used to frame and support the chimney was located. It is possible that the combined effects of soil erosion and modern deep plowing removed these elements since, normally, at least chimney scaffolding posts are located. Despite these shortcomings, other types of evidence exist which can be used to define the chimney and determine how it was incorporated into the structure.

In detail, the maximum southern portions of the fire stain meet the terminus of the line between Feature 37-A and Feature 48-A at exactly midpoint or 10' which form the limits of the 20' wide second bay from the north. The feature is thus seemingly framed by architectural lines between Feature 37-A and 48-A as well as the pair of posts 8' to the immediate north including feature 36-A and 49-A (see Figure ). These four posts may have provided the outer structural frame for the destroyed remains which probably included a massive firehood and chimney, constructed of a framework of posts, and infilled with wattle and daub, and perhaps pantry(s) occupying the entire 8' by 20' section framed by the outlying heavy frame posts mentioned above. The frame components on the east side are slightly out of square with F#36-A, and F#37-A as molds spanning F#s 48-50 are offset 0.2' to the east of the implied sill line here. Therefore the unit taken as a whole may have been more analogous to a more informal shedded rear addition.

This interpretation would be superficially consistent with similar chimney placement within the oldest surviving frame structure in the Tidewater South, the ca. 1710 Woodward Jones House (Carson 1986:54). Using the Jones House as a construction model of hearth and room layout only, and emphatically not in framing details or methods, the confusing group of post molds occupying the overlapping stains of features 48-50 (see Figure ) may suggest that a loft stairway was located on the east side in addition to the pantry and hearth, at one time, and possibly in excess of later use as an entry feature. The evidence is of course not clear. Samuel Symonds (1865:118-20), a Massachusetts settler writing advice on house building in 1638 suggests gable
chimneys at opposite ends of the dwelling and that,... "You may let the chimneys be all the breadth of the house of the howse, if you think good; the 2 lower dores to be in the middle of the howse, one opposite the other." The two doors are the definition of the cross passage frequently recognized by architectural historians, and increasingly by archaeologists. In the Manor House at 44NB180 the would be cross passage and fire place evidence seemingly mutually exclusive are found together as a double opposing entrance lobby is indicated spanning the chimney cheeks and east and west central sidewalls. The point of interest in Mr. Symonds advice is found best in the reference to the common size of chimney framing spanning entire gables in some instances. These "Welsh chimneys" which Paul Sympson requested as noted above have been documented in early Virginia and Maryland Chesapeake references and by implication were apparently reserved for the more insubstantial structures throughout the region and the colony at large (Carson et al. 1981:146-147,181). Archaeological examples frequently are found with earthfast studs between the corner posts (ibid).

The archaeological evidence of the sequence of holes and molds between F#s 48-50 partially analogous to a door trench suggests that at least two and possibly three significant building episodes are contained therein (see Figure____). Due to the destruction of original fill sequences by subsequent activities the temporal relationship is not entirely clear but a reasonable sequence is possible using the surviving evidence. In brief F#49 predates 48 and 50. Feature 49 probably contained the southeast corner post of the original Phase 1-A structure. Feature 49-B did not appear during surface cleaning since the top of the post was cut off or otherwise removed, further the profile identified horizontally laid squared wooden scraps. According to profile boundaries F#49-A was implanted during the same fill episode. This episode predates both F#50 and 48. Feature 49-B is at the exact line of the most northern extremity of F#60, the hearth remnant. The size and depth of the post hole (3' long grid north to south by 2.6' wide grid east to west and 2.3' deep) and mold is by far the most substantial (0.7' in diameter) and therefore most analogous to that recorded for bay posts and holes. We can assume that F#48-A was implanted immediately afterwards since it was paired with the opposite post of F#36-A, as noted above, deemed an integral portion of the rear shed addition at minimum, and at maximum part of the frame of the entire chimney and rear hall unit. However, excepting F#49-B and F#50-A all the other post molds appear to be part of a door trench and lobby entrance feature and
may be relegated to Phase 1-B. F#50-A may have been paired with F#49-A during Phase 1-A and later pulled and discarded. Its small size suggests use as a door jamb or the definition of a closet or pantry hanging partition post. The post mold was pulled vertically out, but variable fill marbled in concentric circles infilled the empty hole. The former post is perhaps significantly 3' to the north of F#49-B and the maximum north and south extremities of F#50-A and 48-A are at 6'. In all cases molds found in the sequence of molds between F#s 48-50 are in line. This line as may be recalled is 0.2 -0.3' to the east off the implied bearing wall line between F#51-A and F#47-A.

The use of individual door posts employed in the door jamb suggested above and the errant posts throughout the frame, whether pertaining to Phase 1-A or 1-B, which are notably unpaired and thus problematic underscore the strong possibility that no sill was present and that therefore the structure had no raised floor (otherwise the door jambs would be implanted in the interrupted sill). All of the post apparently were carried from ground to plate.

Root Cellar or Early Hearth Footings

The root cellar, F#4, as noted above lies 1.8' to 5.6' to the immediate grid north of F#60. The rectangular feature is 7.3' grid east to west by 3.8' grid north to south. The depth of the deposit averages 0.5 - 0.6' below grade and except near the edges and where a collector apparently raided a small area, the secondary fill deposit contains items such as straight pins, large animal bone, a bone handle suitable for a heavy butchering knife, oyster shell, blue crab shell, chicken or large bird shell, fish ribs and scales, pipe stems, trade beads, coarse and refined ceramics spanning the occupation dates of the site (but weighted at the late end of occupation), and architectural debris including nails, brick bats and crumbs ("bricketage"), burned daub, and shell mortar. 100% of the root cellar fill was water screened. The disposition of the fill in profile, contains more information about how the apparently empty feature silted in than its active use. More thoroughly kitchen refuse debitage was noted only by total percentage in the lower levels. Objects such as an iron (for ironing) and a butcher knife handle underscore the variety of activities which took place near the warmth of the hearth in excess of cooking. Fragments of a delfteacup and sprig molded, blue and manganese decorated Rhenish salt-glazed stoneware drinking mugs are
testimony not just to drinking beverages but social activities during the use of the hall. The fully excavated, feature displayed a flat bottom and relatively steep sidewalls which were well defined except at the southwest corner. A linear series of organic staining like dash lines was observed at 1.7' distant and parallel to the western wall of the pit and thereby spanning at right angles the southern and northern sidewalls. This attribute at the limit of excavation is evidence of a wattle partition line.

In excess of shallow depth, the feature has at the limits of excavation only two attributes that may suggest that its function was originally that of a dry laid brick hearth or a firebox or fire pit. Signs of heavily burned bright red subsoil staining were noted especially on the western side, and traces of small wattles possibly associated with daub were also noted. The implications of these finds are ultimately problematic to the pure "root cellar" association of the feature. As follows the evidence is noted in detail with an eye to extract a possible functional change with temporal implications.

The only evidence of a primary deposit was found 0.55' below grade where a amorphous bright red scorched area had a corona of poorly oxidized blackened subsoil surrounding its immediate limits, this attribute was noted in the northeast quadrant at the interface of the pit limits and sterile subsoil. The more generalized scorching appears to have also been direct including both the sterile floor and portions of the sidewalls and in detail thin lenses of charcoal deposits were noted directly above the reddened areas. Since the charcoal layer was not extensive the pit has to have been cleaned out subsequent to the burning episode since the amount of charcoal present was not sufficient to produce severe scorching as recorded. No artifacts were associated with the scorched subsoil. Neiman (1981:81-82) has recorded a more irregular shaped pit with burned subsoil and charcoal on the interior of a servants quarter against the south gable end as a fire pit. The rude fenestration was not surmounted by a "fire hood" and no evidence of a chimney was found. The pit was vaguely squared in plan but decidedly amorphous compared with the 44NB180 example. Another hearth found nearby was in an irregular "C" shape.

In addition to small irregular and undulating tree roots and signs of mouse holes containing hoarded artifacts, small post mold "tippets" were found
Mathews Manor (c. 1650), Warwick County, Va., a familiar English plan providing an inner room, heated hall, passage and service room. (Cary Carson)

This building form is a good example of an interior chimney and hearth without a second hearth for a chamber side, as the implied cross passage prohibits such use. This example could have easily evolved from a single cell structure on the hall side.

(by Carson 1986)
Detail West Addition of Manor House

Destroyed post holes?

F#107

F#109

F#108

F#110

F#105

F#113

F#34

F#35

F#106

F#36

F#37

F#38

F#39

F#40
along the interior subsurface boundary of the pit walls in what appears to be a broken pattern. Unlike the other disturbances the molds contained charcoal and sometimes evidence of burned daub or clay subsoil within their brown and black brown organic fill. The tippets or mold tips were from vertical wooden sticks and very small at 0.1' to 0.25' in diameter. Most were circular in configuration, but some were triangular confirming man made production (as split wooden "pales"). The majority of the molds were observed along the exact terminus of the hole as the pit walls inclined upwards. Spacing ranges between 0.02' to 1.0' as they were recorded along all walls except where the initial cut was made. The small size may be an indication of the fact that the remains were near the terminus of reduced sharpened stakes. The pock marks are seemingly complimentary in spirit with the traces of a wattle partition within the pit noted above. As root cellars were normally lined with wooden boxing, and/or bricks the latter information may suggest that a wattle line supported the pit walls, or less likely a wattle and daub boundary or firehood once was present here. As in fireplaces, the daub, - a mixture of clay, straw, and if available animal dung was chosen for its fire resistant qualities, and the wattles - a woven series of pliable green wood elements supported the clay so that a cheap and expedient wall could be built up. Neiman (1981:82) suggests that evidence of wattling and burned daub imply a fire hood was present in dealing with meager clues to pit identification at a servants quarter and within the particular circumstances of a complicated series of data. Although direct comparison is inappropriate, the parallel argument is here is not out of context, since folk building styles have much in common. As these same items were present in the root cellar we can attribute the latter (ie. burned daub) to destruction debris conservatively relating to F#60 only, and the former (wattle molds in close association with burned subsoil) to perhaps a temporary firehood, or a low fire proof shield.

The feature is very shallow for a root cellar and is strikingly similar to the robbed out fire box noted in the west addition or back room in F#112. Further with the 0.7' grade drop per 40' noted in the terrace slope it is only 0.3' to 0.4' below the last surviving evidence of the firebox stain noted in F#60 above.

If the evidence of the original function of the root cellar is critically problematic or has been misread or over-emphasized then the fire reddening indicates that a severe fire took place in the house during the
demise of a construction phase or the final abandonment of the structure. A destructive fire may have contributed to scorching on the east side of southeast corner post F#43-A, ash deposits found in F#112, and charcoal found in post molds throughout the structure. Of the latter except in the case of F#43-A charcoal in most molds is not found in concentrations sufficient to merit a catastrophic fire interpretation, and it would seem likely that such a fire would not greatly affect subsurface and probably exterior rotted molds. Also one would expect to observe portions of a primary deposit in the root cellar having food containers etc. still in situ. Further, charring posts was apparently a normal method of forestalling rot. Yet the dwelling house may have been deliberately fired to retrieve architectural hardware after the site was abandoned. Also in the realm of possibility, brazier coals may have been repeatedly dumped in the same location indicating that the wattle traces recovered were indeed plastered in daub, since no such activity would have taken place otherwise. The root cellar may have ceased to function as it was originally intended when the burning occurred, as a large food storage cellar later existed in Structure 6. The artifacts within the root cellar indicate that the secondary fill, as is typical, is contaminated with artifacts from the last period of occupation at the site and was open to receive them. If the root cellar was partially empty or obsolete it would have infilled with these remains as a matter of course. Further, the wattle molds may indicate that the root cellar walls were supported or shored up, at least during one phase of its use with wattling, and these may have nothing to do with a fire hood. It is important to note when considering this matter of how far to take the evidence, that few or no wattle lined root cellars have ever been located and that wattling is a normal part of hearth construction. The implications of these clues are important with regards to later phases of building evolution, since by implication, F#60, the known hearth location may have been more pertinent to changes made during Phase 1-B.

The use of a single cell model employing the Morgan Jones house provides a further parallel explanation to the post mold recorded between the north bay posts on the east wall facade at F#52-A. The post may have braced (from ground to plate) the door hinge side of a entry feature below a doorway as the illustration of the Jones house does. The door has been offset partially along the wall facade because it must compensate for the space contained within the interior by the hearth and pantry, and dodge the central bay post (F#51-A) which carried from ground to plate. In the 44NB180 example F#52-A is unpaired.
and is exactly 5' south of the northeast corner post and 5' north of the next most southerly bay post 10' distant named F#51-A. If 52-A defines an expedient cross passage then no opposite west facade subsurface feature was paired with it. There are no other unaccounted for post molds within the northern two bays which have evidence of early date, as F#34 and F#55 have been identified as later components. As we shall discover, this evidence - when the king posts of F# 342-A and F# 355-A are considered has particularly important bearing on the isolation and identification of the initial stages of house construction. The post hole in F#52 has 71 artifacts in it including the meager dating evidence from one 8/64" and one 7/64" diameter pipe stem.

Phase I-B: Hypothesis 2 on the Early Development of the Core of the Manor House as a Hall and Chamber

The somewhat problematic interpretation of the house as a single cell dwelling 20' by 20' with 400 square feet of useable space has a strong alternative, based in part on the same evidence presented above. A more conservative interpretation suggests the house was built in four bays from the onset and that the rectangle of molds surrounding the hearth in a 8' by 20' configuration including F#36-A, 37-A, 48-A, and 49-A are the physical definition of a double opposing entrance lobby spanning the central hearth and chimney cheeks. The need for accessibility to the hall was an important function in terms of the complicated social needs of the house. The construction had advantages over the typical cross passage where entry into the hall was immediate and privacy therefore a rare commodity. Neiman (1980:31) describes the cross passage function succinctly, "The only reason for its presence was the approval of convenient access for servants to the shared hall as an integral part of an agricultural household." Robert Newman may have had this accessibility of servants in mind when he chose his house form in substantive ways, because with the central hearth and appropriate interior foyer panels some privacy may be retained in the chamber area, unlike the Clifts Manor House. The implication of an initial construction of a hall and chamber (later "parlor") house suggests an entirely different set of conditions from a social aspect, since special and more complicated functional use was built into the core of the house from the onset. To the very poor or often middling or even wealthy immigrant this was a luxury in commodious housing. The chamber was a more functionally sophisticated room, as it had a complicated social use, or socio-technic import (more of a social use than a
Structure 1, Phase 1-B

An argument against organic growth within the original core frame
technological), whereas the hall was technomic i.e. almost totally utilitarian (Deetz 1977:51,57-58,100). In brief the chamber might function vaguely similarly to a modern dining room (as opposed to a kitchen), living room (as opposed to a den and/or work room) and private bedroom for the immediate married couple and family (as opposed to more or less communal sleeping space with non-structural individual private space).

It has already been noted above that one and possibly two door jambs partially integral to the core of the structural frame is presented in molds in F#s 48-50. On the opposite side an entrance feature totally integral to the core construction may have been present spanning F#36-A and F#37-A. Evidence for this is supported by the back room addition later implanted opposite this point along the central west wall facade, and suggesting a continuation of this thoroughfare. In the Phase 1-B construction model the hearth was two sided and "H" shaped and did not totally span the opposite exterior walls. The central chimney flue (noted in F#60) over the double opposite hearths were thereby capable of heating both the implied hall within the two north bays and the chamber including the two southern bays. The chimney cheeks which would be at right angles to the cross passage based on similar English and Irish vernacular examples, and a short entrance partition wall (sheathed perhaps with wattles plastered with daub or clapboards) would normally be installed at right angles to the door jamb. The chimney cheeks and short partition wall provided a lobby entrance that would prevent cold air drafts in winter from penetrating the large interior rooms. Inadvertently a minimum of privacy was attended the chamber occupants as the feature shielded the entry area.

A good and early example of such a construction has been located at 44PG64 at Flowerdew Hundred at the ca.1625 Stone Foundation House (Barka 1976) where both Glassie and Upton (personal communication) have suggested that entrance was made at right angles to the chimney cheeks at least on one side. At 44PG64 the footprint of the partition post survives. Numerous other precedents have also been located at Matthews Manor (Noel Hume 1969:33), and within the Northern Neck, the Hallowes Site (Buchanan and Heite 1971) provides an example more contemporaneous with 44NB180. Unlike 44NB180 the Hallowes Manor House has two large post molds directly opposite the dividing line between the two opposing hearths with its central chimney. Analysis of the difference between the two led largely to the Phase 1-A hypothesis since the benefits of the practical bay gap at Hallowes appears more synthetic in terms
Note synthetic relationship between center hearth, opposite bay posts/dividing upper and lower bays and hall and chamber as integrated unit integral to core frame

The Core Frame of the Hallowes Manor House

adapted from original by Buchanan and Heite 1971
Note: linear expansion of earthfast addition to original sill laid foundation; this addition serving as a kitchen and sleeping loft for servants, was more synthetic than 44NB180, where the construction of Structure 5 served the same purpose with more overt exclusion of servants. Note also backroom, and lobby entrance augmented by partition wall of chimney cheek.

Fig. 7. Structures at Flowerdew Hundred, Prince George County, Virginia. Both date from the earliest settlement of Sir George Yeardley's particular plantation, ca. 1619-30. (Drawing, Shearon Vaughn and Cary Carson.)
of integration of the hearth. The five bay gaps appear regular throughout its 50' by 20' exterior layout, so that the presumed hall side is 30' long and the chamber is 20' long.

Spanning the entire central frame at the 20' by 40' core of the 44NB180 Manor House at either gable end and denoting the ridge line of the roof the king posts, F#s 42-A and 55-A, have evidence of being later additions by virtue of architectural and domestic debris found throughout the fill in quantities significantly greater than those identified as preliminary to site occupancy. The post hole fill in F#42, the southern king post had 82 finds (50% sample and reduced by erosion and plowing), and the northern king post hole had 284 artifacts including the remains of the lower portions of the actual post. For this reason it seems likely that the king posts were added when the building size was doubled to 40' long during Phase 1-B, and the extra stability afforded by pairing the king posts could be appreciated. Further the southern king post in a single cell construction model would compromise the placement of the post supported wattle and daub chimney which occupied the same location at its southern extremity. If Phase 1-A never took place than within Phase 1-B the king posts were probably later than the first corner posts repairs, but may not post date the last repairs to them. The king posts may in fact have been added during Phase 2.

The king posts added certain strength to the gable end as the clamp or girt would be firmly anchored at perhaps the most vulnerable location, and new opportunities for anchoring counter braces could be added against the corner posts in excess of probable or possible bracing of independent bay posts as demonstrated on some of the better framed houses such as that recorded at Cedar Park (Carson et al. 1981:145). The normal tidewater frame employed tie beams which extended beyond the wall lines and the unit was framed in such a fashion that the roof framing was independent of wall framing (ibid:146). Counter braces to corner and bay posts were not typical of "Virginia" houses. The king posts probably were an attempt to strengthen this inherent weakness in frontier architecture and required certain skill and care in carpentry. If Phase 1-A is valid extensive rebuilding of the northern two bays probably took place at this time, further the hearth was adopted from a "C shape" to and "H shape". Good evidence for this assertion exists since both in plan and profile the northwest (F#32,F#33-A,B) and northeast (F#53,54,54-A,B) corner posts were repaired twice and possibly three times while the southwest corner post was
repaired only once (F#41, 41-A, B) and the southeast corner post (F#43-A) was never repaired or replaced. The direct reason for this stabilizing effort cannot be proven but it is entirely possible that the northern two bays were structurally unsound, if not in direct danger of collapsing, perhaps due to storm damage. In anticipation of further difficulties, the southern bays were apparently not considered a full supplement to stabilize the older portions of the house. The terrace slope at the particular location may have been a factor. A possible well documented impetus if its application is only by implication may have been heavy storms recorded in 1666. Logically the storms heavy winds off the wide Potomac would most probably have been most damaging to the northern gable and accordingly the increased repairs there have already been noted.

Phase 2

Clear evidence that the back room or west addition postdated any combination of the convoluted ruminations pertaining to Phase 1-A and B which were deliberately given the same identifying arabic numeral, may be noted in F#38 and F#34 which both are intrusive to bay posts of the northern (F#35) and southern (F#39) half of the structure along the western facade of the core framework of the Manor House. Certain physical remains which include post molds which form a rectangular frame 12' grid north to south by 20' grid east to west form this 240 square foot amendment of the structure.

The southern wall facade is probably the best preserved wall frame and includes F#38-A which is offset to the west of the core frame of the main structure demonstrating that the addition was attached to the exterior of the east bearing wall (as does F#34-A), F#110, 10' to the west at a bay gap and F#108 10' still further to the west and the southwest corner post of the addition. The method of attachment probably indicates that interrupted sills were not present during the time lapse before the architectural join with the main core frame.

The west wall facade begins as corner post F#108-A turns north. Here the implied wall line intrudes F#112 a possible robbed fire box as it proceeds to the next wall member F#107-A, 7' to the north from center to center. This post may have been a scaffolding post for the chimney which was incorporated into the wall frame for stability. At 12.5' from the southwest corner post
Phase 2 Repairs and Alterations to Manor House 44NB180

Blue = Phase 1A/B ca. 1651-1667

Red = Phase 2 ca. 1667 - 1680

Red/Blue = Probable Door Locations
Feature 36-A is considered to be an original component of the main core of the house and may have defined a lobby entrance skirting the chimney cheeks in Phase 1-B interpretations. The 4.2' gap between F#36-A and F#37-A is probably the most likely entrance from the main house to the addition by the same reasoning. As noted above the molds between F#48 and F#50 make up the east facade opposite components of the fundamentally important entry features and chimney framing. Polite entry if extended to servants to the addition or back room from the exterior east of the original Manor House to the addition was made via the Hall or north portion of the main house affording some privacy to the southern chamber. In advance of architectural consultation it is possible that there was no access from the hall to the back room, except through the more private chamber. The argument hinges on room use and the evolution of the plantation complex by the time of the construction of the back room. Entry from the exterior west of the addition may have been between F#107-A and F#105-A where a relatively wide doorway gap of 5' is afforded. This does not mean that the two posts demarcate the actual width of the door jambs, but in terms of stability they would facilitate such for attaching a door hinge.

F#34 has been included as a portion of the addition since it appears paired with F#38 at 20' to the grid south and invades the northern section of the bay posts in an almost an identical way. The feature provides evidence that only a portion of the back room has been preserved from erosion and the plowshare. While carefully searching for opposite post members in an area analogous to the right angle to the west from this post, F#277, a carpenter's stake mold was found. The stake was at exactly 20' north of the existent southwest corner post (F#108-A) and 20.5' from the center of F#34-A. There can be no mistake about the identification of the feature as a (carpenters) stake. It was 0.17' wide north to south by 0.16' and 0.2' deep with a rounded point, the stake had been obviously pulled prior to the abandonment of the site and silted in with mortar, brick crumbs, and plaster. The humble find was employed as a string line for building and the stake was offset by 0.5' to the west in order to allow the string to meet at right angles not the stake, just as every modern carpenter does today.
Despite the fact that no molds were found nearby (either carpenter or addition posts) the evidence may point to fact that the northern wall was set on hole set blocks. Other suggestive evidence of this is also curious, but not satisfying. A purview of the Manor House addition plan reveals that F#110-A is a bay gap at 10' between the southern wall addition corner posts, yet there is no opposite northern pair to this at a right angle to the north. Instead F#113 a carpenter's stake was located. The stake 12.5' north of the center of F#110, 8' due grid east and at a right angle to the eastern edge of the mold in F#105-A, and 12' west of and at a right angle to the center of the mold in F#36-A. Therefore in two instances where large post molds and holes were expected only carpenter stakes were found in provocative locations.

Except for the relatively deep set post holes anchoring the addition against the west wall facade of the main house noted in F#s 38 and 38, all of the post molds and holes located in the addition were much shallower than those of the main house, many were only 0.8' - 0.5' deep. Feature 109 and 107 were almost totally destroyed. The terrace here slopes to the southwest. How much of the slope has altered cannot be certain. It is possible that the present natural slope cannot account for the variable depths entirely. Since the two heavy posts that anchored the addition to the main house only abut against the main house wall line, but were somewhat deeper than the rest of the addition posts a tentative possible building sequence may be observed. The two posts F#34-A and 38-A were deeply buried at 20' apart straddling the lobby entrance feature. Carpenter's stakes and string lines were carefully measured in so that the post holes did not need to be large. Features 34-A and 38-A were set. The new addition posts which had to accommodate and compensate for the greatest gap between the ground level were sunk deepest. Since the modern terrace slopes to the south and west these have survived surface erosion and plowing apparently most often. Alternatively, within the core of the main house the molds closest to the north are the deepest arguing that all posts in the unit were equally shallow and erosional patterns affecting preservation may be highly variable.

The framed hole-set foundations of the back room addition ultimately were essentially structurally independent of the main house, for as noted briefly above no sills, not even interrupted sills were present for mortise joins. The roof was given a ridge line at right angles, and lower than that of
the main house, and the intersection at the rafters was completed by not invading the former main house roof on the west side of the ridge line, and tapering rafter cuts below the extended ridge pole, as the join was "scabbed on to" the existent roof informally.

It seems entirely unlikely that critically placed carpenter's stakes would be sunk below the level of post holes and molds. As is usual it is hard to be dogmatic about clues. If the carpenter's stakes are given more weight than may be entirely appropriate than a shedded addition may have been at right angles to F#36-A. Further, another shed may have been at right angles to the post to the west of the interrupted sill line as noted in F#40-A, and therefore south of the west wall facade of the addition. In the case of F#40 the mold have been offset to the west of the western wall facade of the main core so that like F#34-A and F#38-A the join abutted that frame, suggesting improvements pointing west, if not indicating a post for a door hinge.

Unlike block construction the surviving evidence of the 44NB180 addition demonstrates that what intact structural members that have survived are placed in such a fashion that the molds by and large have been placed as though the foundations were integral to the above ground structure (Carson et al 1981:187). Further the depth of the corner holes except in the case of F#34-A and 38-A at the boundary with the west wall facade of the main structure is relatively homogenous in contrast to obviously blocked structures as in the example of the Van Sweringen Outbuilding (ibid.153-4,187). Construction of the addition may more closely parallel a very similar addition to the Clifts Plantation back room to the Manor House (Neiman 1981:47). If the evidence of the carpenter's stakes are ignored the widths are nearly identical at 13' wide (exterior width) for 44NB180 and 12.5' for the Clifts Manor House. The length of the Northumberland example is 20' versus 15' at Clifts. The excessive length versus width of the 44NB180 example may underscore the presence of lost post molds and holes parallel to F#34-A. Tie beam pairs joined from north to south probably were employed at 10' bay intervals as demonstrated by the surviving central bay post F#110-A along the south wall.

The entrance lobby present at least by Phase 1-B, which in the main house spans F#36-A, paired with F#49-A, and F#37-A paired with F#48-A was extended to the west along parallel lines within the addition or back room. A purview of the site plan for Structure 1 demonstrates this aspect clearly
since conversely F#36-A is at the exact right angle of F#105-A, and F#37-A is exactly at right angles to the reduced remains of F# 107A. This afforded easy entry from the hall or chamber and the room may have been employed as a buttery or extra bedroom. The bedroom suggestion is best supported by the presence of the small offset fire box footings noted in F#112.

Feature 112 was found near the southwestern corner of the addition and protrudes the exterior western wall line by 1.5'. The feature is cleanly squared with well defined and generally steep sidewalls at 3.55' wide grid east to west by 4.5' grid north to south. The depth varies between 0.15 and 0.5' deep, and the floor is slightly deeper in the center, but is otherwise relatively flat. 1,460 artifacts were recovered by a 100% water screen sampling strategy employing quadrants. Among these finds were fish scales, blue crab claws, bone, egg shell, straight pins, lead shot, delft, slip decorated brown stoneware, North Devon gravel tempered earthenwares, combed Staffordshire slipware, 8, 5/64" pipe stems, window glass, brick bats, and crumbs, plaster, and such like other items. The plaster indicates that the west back room was much improved over the daub plastered main house, and generally underscore a kitchen/domestic aspect to the room use. When the feature was first observed by virtue of the kitchen artifacts similar to the root cellar at the main house in F#4 it was thought to be a small storage pit or root cellar and this attribution cannot be ruled out. The location however argues otherwise, since as noted above the western terminus of the pit violates the west wall facade bearing wall. Unless an ingenious and unprecedented root cellar or cooler that had a panel door to the exterior of the house presumably for delivery of food items without entry to the addition has been noted alternative and less exotic explanations will have to be invoked.

The find appears to be a small robbed offset chimney foundation or fire box and probably only served as a warming fire. Since the find functioned as a dry laid footing only small and unpatterned rubble remained. This fact is curious since one may wonder at the virtue of robbing rubble. The crispness of the sidewalls suggest that a well prepared surface had been made perhaps employing useful unmortared whole bricks as well as broken brickbats. When the site was abandoned the feature was robbed and household refuse mixed with architectural destruction debris silted into the empty hole. Portions of the chimney scaffolding were probably attached to F#107-A, 108-A, and 109-A. Of
these only P#109-A is exterior to the implied wall line at the west facade.

Dating evidence for the addition construction based on post hole fill content is typically slim. In P#38 although 45 artifacts were recovered only a 7/64 pipe stem can be counted as informative. Destruction evidence is abundant and compliment those found in the midden redeposited in P#4 within or near the second quarter of the 18th century.
Introduction to Structures 2 and 3

Located within the eastern half of the site about 100 east of the original manor house, and relatively isolated from all other major buildings except Structure 4 a small tenant house or servants quarter 27' to the south of Structure 3, were two substantial special purpose out buildings. The outbuildings were clearly identified as such by virtue of linear partitions or divisions of space on the interior which were parallel to the long wall facade axes. Structure 2 the northern most of the pair, was constructed first based on circumstantial, architectural, fencing, and meager artifact evidence. The building consisted of three 10' by 18' bays erected in reverse assembly. Within it a large storage pit contained evidence of dairying activity. The unit as a whole has been tentatively identified as a multi-purpose barn and dairy complex. Structure 3 which began as a 9' by 21' and 10' by 21' two bay subsidiary or auxiliary structure to Structure 2, created a ramshackle building line about 52' long, which was out of square and built along a north to south axis paralleling the opposite flanking Manor House, and large servants quarter noted in Structure 5. Structure 3 was later enlarged to a 35' by 21' structure with the addition of a southern gable shed addition and a new 10' by 21' northern bay extension. The addition of the northern bay violates the floor plan of Structure 2, indicating that this expedient structure was unsound and perhaps outmoded, and was either knocked down and/or pulled down by man and natural forces, or temporarily reduced to two bays before the former prevailed. In sum, the pattern implies a progression from a roughly constructed initial multi-purpose structure as noted in Structure 2, to replacement by better built and more specifically functioning structures as in Structure 3. Structure 2 was apparently replaced by a combination of the Structure 3 barn, and Structure 6 covered cellar.

The reader should note that the buildings above are so closely related that at times overlapping discussions are not avoidable under each section heading.
Structure 2: Early Barn or Special Purpose Outbuilding

The large outbuilding lies 106' due grid east of the northwest corner post of the manor house and 10 degrees to the east of its long axis orientation an outbuilding was located grounded in massive hole-set post holes. As indicated by the title of the structure the improvements and layout of the structure are somewhat unusual and many interpretive questions remain unanswered at this writing. The structure was found in an area of very low artifact density and this factor and the general outlay of the structure without evidence of a firebox, burned daub walling, and employing interior improvements along the long axis in the form of a huge pit - all strongly argue for an agricultural or special purpose out-building.

Artifacts present within the site midden in the immediate vicinity include a very light kitchen midden consisting of minor oyster shell and fragmentary and randomly dispersed large animal bone. Besides the occasional pipe stem only a scatter of brick crumbs and occasional brickbats was noted. The latter may pertain mechanically dispersed bricketage from a nearby (to the north) brick clamp (F#276). No organic staining was noted within the intact plowzone balk profiles here that would isolate the area from the soil colors and consistency of the entire eastern half of the site. Features included in Structure 2 are: F# 65, 67, 70, 83-87, 91, and 93.

In detail, the outer frame of the structure is 30' long north to south by 18' wide east to west, making the usable space 540 or so square feet. The core frame consists of eighth hole-set posts forming three bays 10' apart on the long facade by 18' wide. The molds with clear boundaries are large and squared having diameters ranging on average around 0.8' to 0.9' in diameter. Three of the post holes have their long axes at east to west ranges since all of these are along the eastern long facade it seems superficially evident that the posts were erected in preassembled frames of sidewall units. However the long axes may have been affected by the expansion of the pit walls (see below). Since hole size on the west long facade are generally smaller these were implanted first - if the above argument is correct and the opposite side wall was adjusted to the west wall facade using the extra east west width of the east facade holes to correct for widths of the tie beams. This appears as an absurd amount of effort for correction of the reconciliation of building wall facades, since the hole location could readily be measured against the
Structure 2 - Early Multi-functional Barn

Red = Struc. 3
Blue = Bay post holes and molds
Green = Fence posts w/gate

Entry to north gable
pre-existing wall line and once set in at least two of four locations the other holes would need little space for correction. Of the surviving evidence this is only apparent possibly in F#78. In contrast, it can be argued that the characteristic massive post hole size, regardless of individual variables, were erected in reverse construction using tie-beam paired bay posts, as the entire unit a whole appears to have been more loosely constructed than that implied by standard construction. An excellent argument for this is a simple visual comparison between post hole size between Structure 2 and the small holes in Structure 3 where the use of standard assembly is unequivocal. Further, where mold evidence is perceivable in Structure 2 those along the west facade are butted against or directly adjacent to the maximum west extremity of the post holes whereas circumstantial evidence of former post mold location along the holes in the east facade are more centrally located, strongly indicating a need for a percentage of error in hole placement.

The sampling strategy ideal on the structure called for full excavation of the structure with screening at least 50% of the post hole fill for construction dates and 100% of mold fill for destruction dating. However, for a variety of reasons only 1/4 th of the post holes were excavated essentially to obtain profile drawings. And the artifacts recovered were retained from opportunistic though careful trowel sampling only.

Dating evidence for construction consists of a single 8/64ths pipe stem found in the post hole fill of F#65 an internal bay post, and 4 sherds of North Devon Gravel tempered earthenware found in F#67 the southwest corner post hole.

Offset to the eastern side of the long facade of the interior of the structure is a massive pit feature named F#93 which is 20.9' north to south by up to 8' wide east to west. The pit may predate the structure as three of the post molds along the eastern side of the pit intrude into the apparent pit fill. However, the boundary of the post holes as they merge with the pit are not totally clear - as the color, texture, and consistency of both these and the pit on surface grades are almost identical. This unhappy factor is probably due to the "belling out" of the pit's exterior walls (an erosional episode) after the demise of the structure. The lower Potomac terrace sand strata here exposed in subsurface quartering of the pit were especially unstable so that the surface plan at grade of the pit size recorded is
undoubtedly in excess of the original size. Correspondingly this expansion degraded the post hole boundaries of Features 83, 84, and 86 at their western extremities as the cultural fill slumped into the apparently empty or largely empty hole. This evidence is especially clear in the boundary between F84 to the east center of the pit since the eroding pit has spread out towards the east at up to a foot beyond the limits to the immediate south, while the eastern boundary of the post hole is narrower than the west indicating that the two features opened up at their merge.

Feature 93: The Large Linear Pit

This feature was noted occupying almost the entire eastern half of Structure 2 dived down a north-south axis line corresponding roughly with the presumed (as present) ridge line of the roof. The north-south division of the interior of the structure was a key element in the identification of an out building as opposed to a domestic structure since interior divisions of dwellings are always at right angles to the long facades.

Feature 93, a 20.9' by 8.0' (in plan) subsurface deposit was opened up with an exploratory arbitrary quarter in the southwest quadrant calculated by dividing the overall dimensions in half north to south and east to west. Because of the size of the feature and the absence of artifacts on the upper levels the pit was reduced in stages by shovel and spot troweling. It is estimated that 3/4ths of a ton of fill were removed. The east face of this profile was drawn and both profile faces were photographed. No clear evidence of wall support material, organic or otherwise, was found. The pit depth nearest the center was 2.6 to 3' deep and at the southern extremity averaging around 2' deep. The southern walls of the pit were surprisingly steep clearly indicating that some type of walling material was present. Dark organic staining in two places near the southern limits of excavation with well defined boundaries are the only clues to any subsurface framing. One stain is the most suggestive as it measures 0.2' by 0.6' and is oriented vertically 0.3' above the pit floor at a level resembling a remnant occupation level and producing nails and 3 North Devon gravel tempered milk pan rim sherds at 2.0' from the exterior southern edge. Another organic stain perhaps once wood appears to have been shaved at an angle by the arbitrary bisection line, displays a vaguely horizontal disposition and is 0.15' wide and 0.5' long. These meager fragments, perhaps remains of vertical uprights and planking
though they were not anchored in subsoil, in the absence of other information, may weakly suggest that wooden material may have been employed in shoring up the pit walls. However, since these stains could not be followed in plan to establish rational patterning, and other portions of the pit could not be opened, it is entirely possible that the material observed was not in situ, and as fragmentary and truncated, it cannot be proven that the items noted had any bearing on the structure.

The nails and other significant finds were carefully pedestalled for plan mapping against the upper surface view of the pit. However, a series of sudden and strong thunderstorms totally inundated the pit on no less than three occasions, despite large plywood sheets under the plastic. Lack of water control was caused by the method of stripping as the grade all bit low during a minor drought when it hit the softer fill deposit. In the process additional ceramics were lost and the nail pattern if present was destroyed.

As can be seen in the plan drawing of the pit the east wall is straighter and therefore likely to be most representative of the original rectangular construction, test quartering along the western wall indicates wall sloping inward in a curvilinear scour at a near 45 degree angle not counting lower belling caused by inundation of water. The northern section of the pit limit has a relatively straight boundary where the clear edges are only 4' wide. This distance corresponds with cusps in the southern boundary, so, without full excavation, the pit is estimated to have been originally 4' wide east to west by 20' long north to south.

The best evidence of an entry feature into the pit is tenuous without full excavation, but clues may been inadvertently recorded as seen in the vicinity of the northern extremity where gate posts (F#s 89 and 90) already identify trafficking. One clue is noted in F#91 a rectangular stain 2.5' to 5.0' to the north of the northern boundary of the pit. The texture and color isolated the compacted grey brown silt loam mottled with dark brown organic fill as a specific subsurface deposit. The trough like feature by virtue of its position may have been a depression cut into the sterile clay for a sleeper, either for entry during the use of F#93, or in order to aide construction of it as the terrace was reduced. Although the feature was not sectioned it clearly post dates the fence gate as F#90 is intrusive to it. At the northern extremity of F#93, a rectangular soil stain of light brown silt
loam mottled with medium brown fill and rare charcoal flecks suggests that a
rectangular object bordering on the pit was removed and a richer subsoil mix
in filled the hole rapidly allowing isolation of the stain as F93-A. Again by
virtue of its position complimentary to the northern pit boundary and F91.
Also suggesting a ground laid sleeper for entry into the pit, but with a
poorly defined boundary yet still evident against the erosional damage.

Artifacts in the pit were numerically very small throughout the upper
fill deposits demonstrating that the modern pattern of artifact dispersal
observed in the plow zone was accurate and that no substantial sheet midden
was ever present. At the bottom of the pit a series of nails all near the
outer boundary with sterile subsoil or in the immediate vicinity was observed.
As these items were unlikely to have migrated in the fill deposit it is likely
that the nails corroborate that the walls were shored with wooden members.
Important clues to pit function consisted of three sherds of North Devon
gravel tempered ware including rim sherds indicating the vessel form of milk
pans. While these utilitarian vessel forms might be used to obtain tobacco
seed their intended use argues otherwise. The pans were used to separate
lighter butter fat from unprocessed milk, which as it floated up was skimmed
off to make butter, or less likely cheese. These latter items suggest dairying
activities in the pit proper or in the immediate vicinity, as 4 body sherds of
North Devon gravel tempered ware (as may be recalled) were found in the post
hole fill in F67. The vessel form and ware can be fairly ubiquitous on sites
from the second half of the Seventeenth Century, but it was the only ceramic
type recovered and its presence in or near the structure implies certain
activities. Robert Newmans will (Northumberland Co. Records) lists, "1 earthen
dish" shortly before mention of cattle as if the inventory was proceeding
elsewhere from the domicile. The reference probably nonetheless is the
completion of the domestic group. In excess of seven steers and three bulls
(one apparently loaned out for stud at Wirocomoco and another at Cherry
Point), the inventory lists one heiffer, a cow named "Cherry", and another
named "Cloudie". The large pit may have served as a dairy. Accordingly the
surrounding structure was used perhaps to house the much valued milk cows who
were not allowed to range far a field and were probably stalled at night for
protection (from wandering, wolves, or theft especially by Indians), and for
milking, on regular occasions by day. Though the evidence is slim, if the
interpretation has validity the completion of the implied structural function
would include a loft level for hay storage (obtained from lush marsh grass
available nearby). Further, since the pit bisects the structure along its long axis, on the west side opposite the pit side the stalls were probably erected. Judging from the absence of earthfast studs or other members in between the bay posts, the partitions for such, by implication were not substantial and may have been nailed to the bay post at above ground - or at least higher elevations, which would insure damage by modern plowing. The paddocks may have been free standing and informally adjusted as needs presented themselves. Dairies are common features in colonial sites especially after the first half of the 17th century. Dairy, and "meat houses" and "milk houses" have been especially noted at St. Mary's City, and at Middle Plantation (ca.1695-1735) (Carson et. al.1981:164-7,182-7). The de-emphasis of the one crop tobacco mentality seems to be most evident perhaps in the Northern Neck and Maryland especially after tobacco prices fell.

Fortunately, the meager evidence of the structure identification can be supported by other forms of information, which though indirect or circumstantial, should be reviewed, in order to weigh the full measure of the above assertion. A fence was located on the north side of the structure 1 best appreciated on the mater plan, and the gate posts for this improvement are noted on the Structure 2 plan drawing can be observed in Features 88-A, 89-A and 90-A and probably 92 (where from the configuration of the hole former a double mold was possibly pulled out which may indicate a turn or additional gate). The known gate is 4' wide and is clearly centered on the north gable of Structure 2, at 3' north and parallel to it. The post and rail fence runs grid east to west spanning the then current northern boundary of the yard compound at about 14' north of the northwest corner post of the core of the Manor House (F#s 54-A to 129-A). The average gap in the vertical support posts is 8' to 10'. The fence posts were relatively substantial at 0.6' to 0.7' in diameter. It is likely that this fence was cattle proof and intended to enclose minimally the specifically female cattle for milking, and in season with bull, or in brood, or nursing a young calf - in the immediate vicinity of the inner yard compound. Judging from the information available this area was to the north of the inner yard as F#92 may indicate a turn north, and the outer yard by process of elimination was north of the inner yard spanning the emergent building complex and kitchen garden to the south.

Further, the other most likely explanation for the barn like structure would be a tobacco barn, none of which to date on other archaeological sites,
have large subsurface pits and most all of which are not so closely tied in to the immediate domestic yard compound. In general, tobacco barns are found further and further afield from the dwelling for trafficking convenience seemingly as the Seventeenth Century progresses. The pattern suggests that tobacco houses were within or immediately adjacent to large agricultural fields for obvious purposes.

The most indirect information pertaining to building identification may be the most important in terms of the functional economic needs of the plantation. The Newmans settled the Northern Neck when tobacco prices were falling due serious over production. In order to stay in profit margins diversification was needed. A strong indication of investment in cattle raising, dairying, and putting out bulls for stud is inadvertently recorded in the Robert Newman will of 1655. Although Neuman died heavily in debt he was not a one crop farmer. Along with tobacco and corn, cattle was the mainstay of the Virginia economy (Morgan 1975:137-141). Records of probate inventories appraise a cow as having more value than a "House and Plantacion" (Archives of Maryland,4:387,499.) Newman's entire plantation did not receive this dishonor since the total of his plantation at 4,500 pounds of tobacco was worth less than the total price of all his cattle (evaluated at 4,900 pounds of tobacco) by "1 young browne heyfer (at 250 lbs.) with 200 pounds of tobacco change.

Since identification of the structure is by no means certain, floatation and chemical soil samples taken during the excavation, may reveal other critical information. Within the realm of possibility the pit, may have been alternatively some form of special processing feature relating to industry or agriculture such as a tanning pit or saw pit, or another type of embellishment such as a peculiar subterranean storage feature (ground silo, or cistern). A saw pit has some merit since the evidence of pit wall supports is obscure and the total length of 20' is probably the longest plank ever needed to span the gable plates of the widest structures. The ground silo is possible but evidence of this folk feature has not been observed elsewhere. The silo interpretation is complimentary to the use of a cattle barn as would be a more familiar hay loft. The item would run counter to Beverly's claim that Virginia's husbandrymen starved their cattle in the winter (Beverly 1705:291), as this complaint probably referred to stock cattle in open range. The same behavior would provide sheer folly to a milk giving cow in a culture so adopted to milk products (implying dairy cattle) and beef products (stock
cattle in relatively or totally open range) for dietary supplement (Miller 1988). The only other of the miscellaneous suggestions that have support via specific finds would be tanning pit supported weakly by the find of an immature bobcat in F#182 (clearly not butchered) and trade beads F#4 presumably, for trade with Indians for furs and other sundry items. The 1655 Newman will refers to an item of "a peck of beades in a tub".

Later Alterations to and Demise of Structure 2

Cleaning of the structure in preparation for overall photographs revealed evidence that the structure had been repaired a factor most observable on the west wall facade in features 65, 85, and 87. This prospect made the preliminary drawing there obsolete, since to the west of the row of molds additional staining in excess of hole fill was observed. Post molds on the east wall facade were unclear because they had apparently been pulled out subsequent to the demise of the structure so that variant fill silted into the cavities which had obscured boundaries or lighter less organic fill. Mold locations drawn there were based on indications of moisture retaining soil, and what was apparently redeposited top soil of darker organic color and variant texture. These contents provided a small insight to the site midden once present as oyster shell, small bone fragments, brick crumbs and brick bats were noted. No clear boundaries of the molds were observed. The brickbats located within this deposit may have been chunked into the holes in order to adjust former mold locations, or to infill nuisance holes. As noted above, the presence of brick in the area is not suggested to pertain to hearths or brick foundations within Structure 2 as these are the primary artifacts in the amended plowzone in the area emanating from a small brick clamp at Feature 1 to the north.

The southeast corner post (F#67,67-A) and the immediate north bay post (F#65,65-A) was bisected on the theory that if one bay post hole opposite these were excavated whichever of the two post molds had the most comparable depth would indicate some information in the reduced sample about how the frame was erected (ie. standard or reverse assembly). Even this minimum sample was not met due to project deadlines and small crew size. The small amount of data gained in the two bisection was highly informative. The mold diameter between the two were between 0.8' and 0.9' in size. Both posts were cut off square presumably with a saw. Feature 67-A had wavering boundaries which were
parallel and recurved to the west. Feature 65-A had a vertical orientation but the upper portions also bent to the west. Previously perceived patterns of repair entering the molds from the west side were not clearly demonstrated since the repair evidence was physically small and tight with the original mold in Feature 65, and absent altogether in F#67. Repairs to F#65 suggest shovel entry from the east to a depth of 0.6' and to the full depth of the post and entry from the west at a steep angle only 0.275' wider than the post. Entry from opposite sides may suggest that masonry was either not present or under repair at the time of this activity. Further, 0.6' of compacted variable fill topped the remnant of the truncated upper mold, this data may have some bearing on obscured mold forms of F#s 83,84, and 86. The evidence suggests repair, and possibly breaking off the upper post at a rot line to pull it out. More conservatively only the lower mold has retained its integrity while variable fill was deposited into its rotted top through time. The latter pattern has been demonstrated unequivocally at F#s 33-A, and 55-A at the Manor House as midden fill silted in above intact and actual wooden post butts. Evidence in F#67 may indicate that south gable corner posts out of the ground perhaps after the mold bottoms rotted in place (lower portions were still vertical and intact). At that time the empty holes expanded due to erosion primarily due to water entering the features from the west as the modern though altered landscape does today. A more exotic interpretation would suggest the wrenching was caused by violent winds which broke off the post at weakened rot lines at which time the upper fragment was removed by hand.

The wisdom that the south gable posts have been pulled by man regardless of the impetus provided by a storm or otherwise need not rely on the evidence of post hole and mold staining alone. Careful study of the relationship between Structure 2 and Structure 3 which lies to the immediate south has proven fruitful in establishing a temporal relationship between the two, and understanding the demise Structure 2. In brief it has been determined that Structure 2 and 3 stood simultaneously for awhile and that south gable posts in Structure 2 were torn down to make way for another bay as was added to the northern section of Structure 3 (F#66 and F#79). These changes would have violated the southern gable bay of Structure 2 if it were standing. Completion of these repairs necessitated that the original northern corner posts of Structure 3 were repaired or more specifically replaced (F#68/F#94, and F#77). In order for the sequence to have worked Structure 2 would have to have been dismantled or reduced to a square structure 20' north to south by 20' east to
NOTES
1. Below dotted line in mold - ground very loose possibly from post rotted in place.
2. Above dotted line - ground very compact most likely silted in - contain a chunk
3. At bottom of mold there is a lens of a greyish clay
4. Piece of pipe stem only artifact by which to date

KEY
• Brick
- Dark Grey silty loam with light brown motting
- Light brown clay with Dark Grey motting
- Soft Grey Brown loam (ROTTED POST)
- Hard Compact Dark Grey loam - some charcoal flakes
- Change in mold from compact to soft loam
- Heavy orange mottling mixed with dark brown silt loam intruding post mold
- Semi-intact post leaning south
- Dark brown silt loam mottled with orange clay
- Tightly compacted post mold fill
- Loosely compacted post mold fill surrounding wood fragments
west framing F#65 and F#83 as the new south gable corner posts. The evidence of contrasting profiles between F#65, and 67 noted above suggests that for an undetermined length of time Structure 2 was repaired after truncation to the south. Unexcavated post holes and molds of the former and central and northern bays have stronger surface evidence of repair, than the original south gable corner posts (F#67 and F#79). Of the two F#79 has no suggestion of repair whatsoever and has the only clearly defined mold along the east wall facade.

The physical expansion of Structure 3 clarifies the demise of Structure 2 as it is almost certain that eventually standing components were torn down having outlived their function as a multipurpose barn and storage unit. Structure 3 probably replaced the primary barn function listed above and Structure 6 probably replaced the storage aspect suggested to pertain to dairying. Wooden framing materials and architectural hardware from the original Structure 2 were undoubtedly cannibalized for other uses if salvageable, and some wooden components were probably relegated to firewood. This appropriation of wood explains the relatively barren contents of F#93 the large pit feature, in terms of evidence of subterranean wall supports. The total destruction of these materials as recognizable items in the large pit, and the absence of defined mold stains in F#s 83, 84, and 86 along the east wall facade suggest that even as a possible reduced two bay structure, the evidence in sum - strongly indicates that sometime after ca. 1666 the entire building went down. Because of the reduced sample data it cannot be proven that this occurred specifically during the working life of the plantation although this is strongly suggested. One can argue alternatively that when the plantation as such was obsolete and abandoned in a generalized way, the building was pulled down and scavenged.
Structure 3: Specialized Barn

The outbuilding form was amended two and possibly three times based on various evidence discussed below. The initial phase for discussion purposes will be called Phase 3-A, and the later additions are termed accordingly 3-B. Since the changes noted rely extensively on physical evidence the reader should follow the illustrated figures extensively.

This large outbuilding lies 104' due east of the Manor House and is roughly parallel to it. The structure during its early phase was originally 2' to 3' due south of Structure 2, and later was expanded north into that structures former south gable bay area apparently appropriating surface space on a priority level. Poor or more specifically informal planning and organic growth determined that Structure 3 bearing wall lines were 8 degrees out of square to the east with Structure 2 so that mutual growth without substantial rebuilding of one or the other structures was made impossible, in terms of wall alignment.

The sampling strategy on this structure included a 50% sample of all post hole fill for construction dates and a sample of the then present site midden, and 100% of all post mold fill for samples of the destruction dates and any alterations to the complexion of the active life site midden.

The original structure, (see Figure__) called "3-A" for discussion purposes, consisted of a 20' maximum exterior length post to post north to south by a 20' maximum exterior width post to post east to west outbuilding resting on six hole-set posts. At that time the northwest corner post was F#68, the northeast cornerpost was F#77, flanked by the south gable posts corner posts called F#70 and 75. The internal bay posts (F#s 69 and 70) were at midpoint on 10' centers. Surface cleaning revealed that almost all surviving post molds were carefully squared with an adze or pit saw and were about 0.7' by 0.7' in diameter.

As suggested in discussion of Structure 2 the building is a classic example of standard construction assembly in which entire framed sidewall units were prefabricated and assembled on the ground and later tipped up and implanted in carefully prepared holes (Carson et al. 1981:150, Morrison 1985:125-134). Typical hole sizes are 1.9' to 1.6', with the greatest variance
Structure 3
Physical Evidence

Scale Plan Sh#3

- re-deposited soil w/ top soil mullling (clays?)-vegan mullling w/ orange clay, gray, some white sand, and dark brown loam
- dark brown organic fill w/ minor mulling, if at all
- Impervious clay at base, soils replaced w/ original fill if present- worm site midden re-deposited or?
- blush gray clay w/ some leaning
- cultural discontinuities with obvious void, boundary due to washout, settling, sitting in
- be assumed to be disturbance of fill due to melt shifting while intact
in dimensions ranging on the north to south axis. Compare and contrast these hole sizes with Structure 1 where bay gap post hole F#51 dimensions range around 3.5' by 3.1' and Structure 2 where the southwest corner post (F#67) is up to 3.9' by 3.6'. Clearly the builders did not intend to move any more dirt than necessary, as the post position in this method was known prior to hole excavation. Characteristic of this method the sidewalls are more sloped on one side (often stepped) as in the case of Structure 3 post hole profiles that indicate excavation from the east to the west (see Figure ). For extra and planned stability and general practical convenience the molds abut the western extremities of the holes.

Other interior features which probably existed within phase 3-A noted by F#80-C, and F#81. F#80-C is inset 8.3' from the exterior west wall and 1.6' from the exterior north gable bearing wall line. In profile a partially silted in asymmetrical and reduced cusped mold was revealed here, suggesting that a former axe cut post butt was pulled out of the ground apparently but not conclusively previous to replacement by F#80-A. F#81 is a freestanding small post mold and hole 8' from the exterior west wall and 3' above the interior bay post tie-beam pair. In profile F#81-A is tapering with a blunt bottom. The molds and holes appear to be evidence of a linear partition line which spans ultimately F#72-A and 80-A perhaps during construction phase 3-B as the latter two mold are in excess of the maximum length of the phase 3-A building.

By virtue of its nearness to Structure 2 the building may have started as a small work house or storage unit. Artifacts found in post hole fill indicating a sample of previous activity at the onset of the construction are decidedly meager. This is a notorious problem in outbuilding identification throughout plowed sites in the colonial Chesapeake, since apparently little substantial activity had taken place in the area. The artifacts recovered through screening are related to construction materials; nails, daub (probably in detail burned clay from field clearing)), mortar (a small single remnant probably not related to building construction). Domestic artifacts consist of fragments of flint and chert from fire starting and the latter in small nodules perhaps natural to the gravels of the Potomac Terrace, as well as oyster shell (low in number and yet ubiquitous to the site).
In sum, the construction data provides negative information that almost no activity was sustained in the immediate vicinity of the construction area. The negative data suggests that the building was early in the evolution of the yard compound, and yet the phase 3-A building probably post dated the roughly constructed Structure 2 based on architectural and fencing and other circumstantial evidence. By inference an indication that the southern gable of Structure 2 was sealed against trafficking is suggested. The low artifact problem was not enhanced by the small post hole size.

Structure 3-B

During the functional work life of Structure 3 whatever activities took place on the interior — a need to expand building size was evidenced strongly by repairs to the original north gable corner posts and the addition of a new north bay. The change was fairly dramatic (as noted above) in that the Phase 3-A structure expanded into areas originally within portions of the south gable bay of Structure 2 (see Figure——). The two building walls being irreconcilable (since the bearing walls were out of square by 8 degrees), an option to dismantle and physically remove the two corner posts (F#67, and F#83) and apparently truncate the false plates between these and also F#s 84 and 85 was undertaken. It is thus clear, that Structure 2 was either in bad state of disrepair (if not literally structurally unsound), or at least functionally obsolete against the more solidly framed Structure 3-A when the decision was made.

The only two post holes and molds in Structure 3 which have evidence of repair standout against the otherwise repetitious pattern of small post holes with western aligned molds, they are notably F#77 and F#94 and 68. The molds were the original north gable corner posts during Phase 3-A. As such they should have been sheltered from the north from heavy winds emerging from the wide Potomac to the north, by Structure 2 only 2'-3' north. The evidence of repair of these post merits discussion since it would seem unnecessary to replace them in order to add on a new north bay. Hypothetical and unprovable indirect evidence which is nevertheless well documented and somehow arguably compelling suggests that the "Great Wind" of 1666 may have affected negatively both Structures 2 and 3 (as has been noted), these impacts would rationally be most dramatic on the river side of the structures. Alternative reasons for the repairs to the above posts may lie in architectural frame
Struct 2 ca. 1651-7

Struct 3 - A

Suggested Original St. #3
ca. 1651-7/1666+ Struct 3-A
Structure 3 as found
ca. 1666 = Struc. 3-B
coupling detailing of which the author has only vague understanding, and is not archaeologically recoverable. Since the structure was loosely framed with in all likelihood with earthfast posts spanning post holes to plates - the central bay posts and south gable corner post were probably sufficient to maintain the integrity of the structure while the north gable posts were removed and replaced. Since many of the joints were wooden and "one way" joints which had to be assembled in certain order (which conserved heavy metal spikes and other architectural hardware) - replacement may have been easier than scabbing on vital components parts based on a complicated series of measurements. The fully replaced posts demonstrate complimentary evidence that Structure 3-A was carefully constructed, and accordingly so it would seem would be the addition. This behavior was probably a physical demonstration of conscious awareness of serious flaws in the loose "Virginia" framing employed in Structure 2. As follows below Feature 77 contains archaeological clues to the impetus for repair and replacement.

Feature 77 displays an almost absurdly long repair trench at 5.8' east to west which totally eradicated all evidence of the original hole and all or almost all of the original mold. The bulbous projection down below the repair hole fill may be the only evidence of the remnant of the original mold that slipped down (pulling the plate down) into the soft white sand strata of the Potomac Terrace indicated at the limit of excavation. The lower staining also contained evidence of deliberate clay packing to prevent such activity, as has been noted elsewhere. If the archaeological evidence of the bulb of staining below the variable upper (new post) mold fill has been read properly then the profile of F#77 demonstrates why the post had to be replaced since the entire wall line was strained by the variance in depth of the posts. Why the repair trench surpasses the mold by 1.3' is will become evident below. Uncertain is the extra depth to the post, which may rationally indicate that the post height was reconciled at the join with the plate, and clamps or girt and the extra depth was an anticipated need in the soft sand for stability when the water table was saturated.

The shear size of the repair trench in F#77 and the east to west orientation led to extra testing to the east of the structure in initial and in vain attempts to record other structural evidence tied into Structure 3's known confines. Once the complexion of building phases at Structure 3 were digested, it appears almost certain that the extra length of the repair trench
Profile of Repair Hole and Mold (F#94, 94A) to F#68.
(Profile Faces South)

- Party proceed wind lane

- Orange + Tan clayey sand
- Matted + medium brown
- Post mold, noted in place (?)
- Post mold, noted in place
- Medium brown formerly

- Intramural repair hole
- Color seen in 68" upper tan
- East edge post mold
- Loose cracking sandy loam
- Will disperse 94% location may be 68A remnant

- Lense at typical post
- Hole fill due to collapse
- Or construct line over noted location for 68A
- Then draw not line original post mold
- This line will guide to west where battered line may show border
- "any hole"

- Blue grey sandy clay
- "any?" - geology?

Note: this repair post is one of three noted along the present
southern north gable - struct 2 - all three have
enlarged holes - i.e. F#86 - 94; F#86; F#77
this suggests the struct#2 was still standing
when struct 3 was constructed with the demise
of Struct 2 - the rear gable post were repaired and
F#66; 82; 79 (New north gable) and F#71, 73; 77 were
added. - South Gable shed this presumably strictly
in south building as in both tracker charcoaled to read.
was not due to brazenly oafish and insensitive hole digging oriented to huge percentages of error for frame assembly - in marked contrast with every other post hole within the structure. Instead the lengthened repair trench allowed space for firmly set blocks on either side of the old post which "up-braced" the clamp or girt and terminal east facade plate while the repairs were made. This may suggest that the new tie-beam was made deliberately long and later sawed off (with regards to the east side of the trench). Further with regards to the west side of the trench it is suggested that the 3-A structure had no floor. Also it is clear that the post formerly occupying F#77 was repaired first, that is specifically before F#68-A was repaired by F#94-A.

In contrast to F#77 replacement of the post originally contained in F#68-A was sober and discrete - employing minimal effort, since the weight of the plate and tie-beam was secured temporarily secured by blocks and the replaced post in F#77-A. A small trench 1.5'(F#94) entered the hole from the west and descended abruptly at a steep angle just large enough to replace the post(F#94-A). The complexion of the repair is similar to that in Structure 2's F#65 yet the entrance trench is demonstrably more clear. A discontinuity was noted in both the repair hole fill and the post mold fill. One interpretation would suggest a block repair, or replacement of only the upper portion of the lower post which was sawed away above a presumable rot line. Other comparative suggests a familiar pattern that the upper fill of the "mold" is in reality site midden infilling the repaired post after the building and site were abandoned. Unfortunately the evidence is not clear due to heavy leaching which has blended the texture break.

With the implanting of F#s 66 and 79 for a new north gable and post replacements observed in F#77 and F#94 the core structural frame was lengthened by 10' for a total length of 30' or 600 square feet. The final core of Structure 3-B was thus 60 square feet larger than Structure 2.

Other changes to the form of Structure 3 during the 3-B phase included a shedded addition off the south gable bearing wall spanning F#s 71 and 74 at 5' to the south. The hole and mold size in these is smaller at 0.5' to 0.6' and the butts of both molds taper to asymmetrical cusps indicating axe cutting or casual reverse saw cuts as the accommodation to the main core height was made above ground. Both molds are carefully placed in the extreme southeast and southwest corners of their holes for extra stability, perhaps also indicating
that the entire new south gable bearing wall was prefabricated and measured in. The shedded addition appears soundly constructed and well planned and was the final expansion of the north to south long facade at 35' long, expanding the total usable space to 700 square feet. The completed unit is superficially strikingly similar in overall form only to a barn erected at the Clifts Plantation (Neiman 1978:3106, 1980:105-109) if the western shedding is ignored. In detail the Clifts barn is variant at 20' by 15.1' and thus more comparable in size to 44NB180 3-A phase barn. The Clifts barn possesses six hole-set reverse assembled posts set with bay gaps of 10'. Neiman tentatively identifies the variant western additions as open work sheds, although these may be stalls for animals, or extra storage units as preserved in modern hole-set barns. The similar use of a southern shed addition is supported by a shallow wall ditch - variant in construction, yet similar in ultimate form.

The shed addition can be safely placed in the arbitrary but functional phase 3-B evolution of the structure by virtue of F#s 73 and 82 which frame in both the shed addition and the new north gable addition. These two king posts or scaffolding posts were noted at exactly midpoint or 10' from the expanded corner posts, with F#73 between the shed posts (F#s 71 and 74) and F#82 along the new north gable bearing wall between F#s 66 and 79. A line spanning F#73 and F#82 would define the probable ridge line that existed on the roof which bisected the structure on a north south axis alignment. In detail, the king posts are very shallow and only the very bottom of the possibly tapering posts have survived the plow, grading, initial cleaning, and final recleaning. With regards to preservation the slight terrace elevation preserved F#82 well enough for both plan and formal profile drawing. Although not thoroughly reliable due to reduction, the recorded mold was well defined and substantial at 1.25' in diameter. However the above ground width may have been reduced by dressing via side-ax or adze. The mold butt was sawed flat over the flat bottomed hole which terminated at 0.2' below surface grade. Feature #73 on the opposite south side left a foot print recorded in July in plan with a small square hole size of 1.1' north to south and by 0.75' east to west, with a darker organic stain of a mold only 0.4' in diameter. By September the stain was almost gone and dissipated at 0.15' below surface. The variance in mold and hole size between the two king posts is problematic due to preservation.
Why posts possibly supporting the ridge line of the roof were so shallowly implanted bears some explanation. The evidence of the orientation of the hole in F#82 on a north-south axis may weakly suggest that the king posts were implanted subsequent to north and south bay extensions as an final strengthening embellishment, similarly to Structure 1. The pair of posts probably post dated the south gable shed addition or certainly must have been implanted simultaneously during that specific construction phase as F#71, 73, and 74 are aligned. The "king posts" may have not been true king posts reaching to the ridge line but instead may have only extended to the "clamp" or girt as a scaffold like up brace, and therefore requiring less depth. It is possible that the posts aided transport of hay or other items to the strengthened loft level.

The Clifts barn had apparent king posts (Neiman 1980:106, Figure 30), but in general most barns whether identified as "tobacco houses" (or not) did not receive this embellishment during the latter half of the 17th century based on a review of current published archaeological data. One early prototype Virginia Company folk barn (or warehouse) dating from the first half of the 17th century has been found at Site C at Martin's Hundred. Here three massive posts define the ridge line of the roof while the sidewalls are defined by small closely set earthfast studs or "punches" (Noel Hume 1979:153-4, Carson et al 1981:193). Another even cruder structure at 44PG64 on Flowerdew Hundred Plantation interpreted by the College of William and Mary as an "animal enclosure" or "temporary barn" is defined architecturally almost entirely by hole set ridge poles which may have been forked "cratchets" perhaps surmounted by old canvas sail tenting or nailed long angular clapboards, and surrounded by ditch set pales which define the entrance and suggested limits of the exterior sidewalls. Similar rudimentary structures are recorded in the words of contemporary writers, for instance the first church at Jamestown as explained by John Smith in 1608 was "an old rotten tent, for we had few better...til we built a homely thing like a barne, set upon Cratchets.."(Arber and Bradley 1910 2:957). The evolution from tent to ridge posts was no doubt simple and expedient since both are constructed on the principal of the "A frame" a hallmark in European building traditions. In sum, the thrust of the evidence suggests that posts defining roof ridge lines whether true king posts or not is an early manifestation of English folk building, still preserved at times in some "pole barns" being constructed today.
Before leaving the discussion of the physical manifestations of Structure 3-B evidence of the oblique line of molds within the west interior of the structure should be considered. During the discussion of 3-A it was postulated that F#s 80-C and 81 were traces of an interior partition probably not tied into the core frame of the structure, based on their placement within the original floor space of the original structure. During the 3-B additions F#72 and with an extension trench F#80-A were implanted, since by the same reasoning they are contained within the interior of the expanded structure. The only contextual evidence besides physical placement for the partition which might isolate building episodes is contained within F#80, where north of the northern most mold (80-A) charcoal concentrations at variance with other fill suggests that 80-A was an amendment. Further the upward cusp of subsoil spanning the two cone shaped depressions (containing the evidence of a probably pulled 80-C mold and a 80-A mold that rotted in place or certainly retained integrity as an identifiable infilled mold) —is at the line of the former north gable wall line demonstrated during 3-A.

The unit as a whole spanning F#72-A at 1.5' to the north of the south gable bearing wall and F#80-A at 8' south of the north gable wall may have been a paling ditch anchored by the surviving molds of deliberately greater depth. Regardless of the method of infilling between recorded posts be they ditch set wattled or otherwise the appearance is that of an informal partition line, as the line is out of square with the west long wall facade with F#71 at 7' distant and F#80-A at 8' distant. The subdivision of space in the unit appears similar to animal stalls in a barn, but work areas, or indications of interior supports for tobacco spears may also be reflected. Without doubt the linear division parallel to the long axis of the structure just as the subterranean pit of F#93 in Structure 2 underscores the service unit function of Structure 3.

Dating evidence or additional clues to functional use of Structure 3-A was not offered in post mold fill deposits during the construction of 3-B. Indeed even the destruction debris which on occasion permeated post mold fill is meager. F#71-A contained slight kitchen midden fill including a single oyster shell and 4 fish scales. F#77 a post mold capable of dating the 3-B alterations had no artifacts, and its mold contained four fragmentary nail,
fragmentary and a single whole oyster shell, a fragment of large animal bone, and a scrap of unidentified iron.

Working from the total evidence it appears that functional evidence of Structure 3 will have to rely primarily on architectural manifestations and other indirect evidence. Since the structure seems to have expanded at the expense of Structure 2 the two structures taken together may be seen as a single unit or macro feature, which begins as a roughly constructed multipurpose service building and probably ends as a well constructed unit with a more particular use. The easy answer to building identification in Structure 3 is that it is a barn. The hard answer is what kind of a barn? The easy answer to that question is that it is a tobacco barn. However, with these givens, and in advance of floatation and chemical soil analysis, it is equally possible that the structure is a hay and livestock barn. Much of this argument derives from identification of dairying materials within Structure 2, the provision of proper names to documented milk cows, the specific arrangement of fencing nearby, and the intimacy with the household kitchen garden and service yard. Finally the interior partition within Structure 3 is striking similar to animal paddocks associated with stables for shoeing and controlling horses — or controlling milk cows. The addition of the king posts seems to emphasize a need for stabilization of a loft level. The king and partition posts might be equally useful in laying up tobacco on spears.
Structure 4: Servants Quarter or Tenants House

Situated on the eastern half of the site and 27' south of the southeast shedded corner post of Structure 3 a small earthfast structure containing two interior pits replete with domestic refuse was located during exploratory trenching opposite Structure 6 sixty feet due east. The find was the last substantial structure located during salvage excavations at 44NB180 and was made in response to the line of buildings expressed in Structure 2 and 3 flanking the household domestic units noted in Structures 1 and 5. In an effort to test what appeared to be an emergent pattern of building the angle for the exploratory trench was requested to be placed opposite the entrance feature of Structure 6, a cellar house to the south central portion of the yard compound discovered the same day. The machine operator (who had 45 minutes left to aide the project) was requested to begin doubling the width of the test trench when the eastern progression of that trench met Structure 2 and 3 at right angles.

The house is informally aligned with Structure 3 in such a fashion that the east long facade of Structure 3 is vaguely complimentary to the west gable of Structure 4. In detail the structure is aligned with no building, and out of all the structures (even down to small outbuilding) it demonstrates the most out of square alignment to the whole. It is also the only substantial structure with identifiable gable ends turned towards the house.

The structure was found in an area where a barely perceptible perk in the aerial site midden was located including slightly increased oyster midden, pipe stems, Native American ceramics and other domestic refuse contemporaneous with the main occupation. The overburden was shallow here, due apparently to extensive soil erosion. The structure was found along a field border and shallow plowing to avoid tree root systems immediately north and east of a second growth forest appears to have taken place. The subsoil horizon below the overburden was irregular and the gradall had to maneuver very carefully to dodge trees and simultaneously remove the overburden.

The sampling strategy included screening 50% of the post holes and 100% of the post molds, as well as flotation samples of F#243 and F#244. The structure and all numbered units in the area were fully excavated or tested for possible cultural origin.
The core frame of the unit consists of six or possibly eight hole-set posts of which one, F#232, is problematic due to strongly variant post hole absence, and F#238 is suggested to be an embellishment. The exterior width of the structure is 12' grid northeast to southwest by 23.1' grid northwest to southeast. The original frame consisted of one large 12' by 14' cell occupying the central and western portions of the structure defined by F#233-A, 236-A, 241-A, and 240-C, and a east bay extension 8' by 12' enclosing the hearth and two root cellars. Including problematic later additions the structure is divided into two 8' bays measured between the interiors of the post gaps on the east side and a 6' bay at the western end. In detail the bay gaps measured from center to center of each post is 5.9', 8.1', and 8.1'. The actual post hole size and long axis orientation is sufficiently diverse to suggest that the structure was assembled in parts, and later embellished. Bay measurements for the central and east gable bay were made against the interior width of the last corner or bay post and tie beam pair implanted - seemingly progressing away from the opposite gable. Although it is not entirely clear, in this cursory study, - which direction the progression went, measurements suggest that the west gable bay was the initiation of this pattern since the round figure of the 6' wide bay unit measures from the exterior gable wall to the interior of the central bay post limits.

All four of the corner post molds including F#s 233-A, 236-A, 242-A, and 246-A are remarkably similar in size and squared configuration, at 0.4' to 0.5' in diameter. This aspect is best appreciated when a review of the building plan is made (see Figure ____), for in contrast considerable variation is displayed in the others. Examination of the surviving posts at Cedar Park Maryland have shown that posts were frequently left in the round below ground and squared above ground (Carson et. al.1981:145,Figure 4). The structure seems to have employed, at minimum, wood that was variously treated in terms of below ground surface preparation. Feature 240-C at the southeast corner of the east gable bay may have been similar in size to the corner posts, but it could only be separated from 240-A at the limit of excavation. Other variation is noted by virtue of repairs made to F#238 and perhaps F#40 and the various depths of the surviving evidence as the subsoil horizon rises and falls. The problem is in recognizing temporal separation of that which was part of the and adjustments pertaining to stabilii of the original posts, heart verses sap wood which often leaves variant and suggestive soil separations, that which suggest repair and thus intrusive re-entry to the original post
holes, and that indicating variant fill due to natural decay and collapse of the structure augmented or not by opportunistic architectural scavenging after the demise of the settlement. In general the molds appear to have rotted in place with only upper portions rotted enough to silt in with dark organic fill preserving their shape well. The nature of the staining in the immediate vicinity is also well preserved enough to merit interpretation.

The west gable corner posts were implanted against the maximum northwest and maximum southwest corners of what appears to be well planned holes. The east gable corner posts were not so carefully placed and a percentage of error to the south and west seems to be anticipated in F#246. In advance of detailed examination of post mold depths, the structure appear to have been erected by measuring in one post at a time in places, and using reverse assembly of tie-beam pairs throughout the remainder. In terms of bays, the east and west gables and the bay pair spanning F#241-A and 240-C suggest tie-beam pairs, all probable parts original to the core frame.

It appears almost certain, that the bay spanning F#232 and 238-A was measured in and erected separately, if indeed it was a bay. Further it is unlikely that either post was part of the initial fabric of the structure. The latter assertion hinges on the structure being ground to plate construction. There is no substantial larger post hole surrounding F#232 and were it not for the integrity of the mold one might question how it got there except through maul driving or pilot hole excavation. The configuration of the staining around it would be more familiar on a prehistoric site, or if the post had been wrenched out of the ground (yet the mold is intact). The post (F#238-A) opposite it straddles the interior and exterior wall line, as a single post, apparently tilted to the east, or sawed or otherwise reduced at a terminus containing oblique angles. The excavation trench approaches the mold from an area parallel to the wall line, and has a more predictable north to south projection also. The hole appears to have been modified twice so that the mold located was probably not original, of this we cannot be certain. A poorly defined intrusive trench F#238-B with increased oyster midden appears to have entered the hole from the north but the line of origin may have been muddled with the projection of the hole on the east side. Since the boundary of F#238-B is poorly defined the entire hole of F#238 is likely to be a later alteration. The east to west and northern hole configuration suggests that no
sill not even an interrupted sill was present when the post was added or repaired.

The best clues to an entrance feature are tied in with the problematic F#238 described above and within the original hole of the core bay post of F#240. The maximum southern extension of the rounded mold (in F#238-A) parallels F#240-B a mold abutting F#240-C. Feature 240-B contained colono ware, white delft, brick fragments, burned wood and charcoal, oyster shell, etc. indicating that portions of the occupation midden were incorporated into the disturbance fill to the original hole which contained a single oyster shell. Together the two southern extensions, in excess of the width of the southern long wall facade line suggest some type of an amendment to the frame for an entry feature. Perhaps in terms of surviving evidence as a reinforced door sill, is suggested or alternatively a small shed scabbed on to house frame. As no further molds were located south of the structure (note limits of excavation) the latter seems thoroughly unlikely.

Instead highly complimentary evidence lies to the north and below F#232. As string of small isolated molds was located within the structure, including F#230,231, and 275. The molds were opened with a jaundiced eye except for F#230 which was brimming with so many small oyster shells that we were afraid of tearing our plastic sheeting. F#230 subdivided into A and B consists of a close set pair of pulled molds that was backfilled with site midden so dense that the soil was almost black and brimming with brackish or shallow water oyster shells, land snails, and charcoal. "A" was profiled at 0.5' in diameter and 0.75 deep with a blunt almost straight bottom. The feature may have been Middle or Late Woodland Indian in origin (the entire sample was saved for floatation). If related to the historic occupation, which based on overall evidence is more likely than not, the feature suggests the structure never had a floor. F#s 275, and 231 may also be prehistoric, however they had entirely different fill (medium to light brown loam with flecks of charcoal) and are distinguished by being exactly in line with the eastern boundary of the tie-beam or architectural line which by all indications joined F#232 to F#238-A. F#231 is exactly 2.5' due south of F#232, and F#275 is 4.8' to 5.0'. The information is not or cannot be totally binding unless other examples are excavated. On the negative side of the argument a Mockley Cord marked sherd was located in the post hole fill in F#241. Additionally the fill of the molds in F#231, and 275 was slightly lighter than all the other molds present, and
this may suggest that since they predate the historic occupation the former
darker organic fill has been more reduced by soil acids and oxidation. If a
fortuitous trace of a prehistoric structure has been found the location is
uncanny. Further no other clearly defined free standing small molds were found
within the limits of excavation in the area (except those listed above).
Additionally it is entirely possible that the occupants of the structure were
Indian servants, Afro-Americans, or possibly Irish and all of these cultural
group displayed cultural traits that included a through knowledge of the
employment of maul driven or piloted implanted posts without the benefit of a
shovel, as architectural devices. The manner of embellishment would not be for
that matter unfamiliar to the yeoman English.

If historic molds have been located, the line of molds between F232 to
F#275 and F#238 define one of two architectural manifestations, an interior
partition subdividing the large cell between the west gable and bay posts F#s
240-C and 241-A, creating a cross passage and/or defining a welsh chimney
occupying possibly the entire west gable bay. The latter assertion borrows some
credence from F#235 which is exactly at midpoint between the west gable corner
posts or at 6' down a 12' line spanning F#236-A and F#233-A. The location is
of course similar to that of a king post such as is clearly displayed on
Structure 1, and 3-B. If king posts were employed the opposite of the pair on
the east gable has been plowed away which would not be terribly surprising
given the shallow depth of northeast corner post F#242-A. As a single unpaired
manifestation based on surviving evidence it may be argued that the unit
serves as a brace to the girt or clamp or is simply a centered support or
scaffolding for a post and wattle chimney.

Interior partitions with certain Ulster Irish folk houses suggest that
the interior partition noted above may have subdivided the room with a post
and wattle wall defining a private area frequently defined as an informal
bedroom for adult occupants of the house while older children and other
occupants were relegated to an upstairs half story sleeping loft. Other
structures indicate a more byre-like use. The post spanning and exterior to
the south wall line in F#238-A and F#240-B appear complimentary to the cross
passage interpretation and a gap in the posts above F#238-A may well have been
the gap for entry to the "sleeping quarters" or byre. If the smaller molds are
prehistoric, then F#238 and F#240 still probably define the cross passage
area.
The location of two subsurface storage pits in F243 and F244 suggest that the fireplace was not at the west gable, but at the east gable. The almost straight east sidewall of the large centrally located pit in F243 probably underscores the fact that it was situated immediately to the front of a dry laid hearth or shallow firepit. The larger pit clearly functioned as a root cellar since it contained kitchen midden debris and household refuse, and as such—is traditionally located, as numerous archaeological examples attest. The smaller shallower pit in F244, which was almost entirely sheared away by plowing and stripping, contained fill identical in texture and content to F243, was an additional storage pit, and as such was probably was situated to the immediate north of the hearth. Between the two root cellar pits and the east gable the hearth and/or fire pit although virtually destroyed is framed by other evidence on all sides but the south. Given the overall complexion of the folk house it is entirely possible that no formal chimney was built but instead above a firehood smoke escaped through piercing at the peak of the roof line just below the ridge line of the east gable. A similar construction has been noted by Neiman (1978:3104) at a 18' by 24' servants quarter at the Clifts plantation. In the Clifts example the fire pit and root cellars were not found together. The Neuman's Neck example is more similar to a miniature and more informal version of an English yeoman's cottage, such as found at Moysonec at 44NK37 (Hodges 1975, Carson et.al.1981:192), and at "Flowerdew Town", 44PG66 (Carson et. al. 1981:195), both of which date from the third and forth quarter of the seventeenth century. At Moysonec an obvious root cellar is situated in front of a post supported wattle and daub end chimney. At Flowerdew Town the clear and deep root cellar is situated directly in front a massive "C shaped" gable chimney on brick foundations.

Feature 243 was 6.3' long by 4.27' wide and had an average depth of 0.75'. The sidewalls were heavily dished and an inner six sided, or hexagonal form to the edges appears on the inside of the erosional slump suggesting that the original unit was 5- long and about 3.5' wide with a flat floor(see figure____). The sidewalls nearest the eastern limits and against the presumed hearth were markedly steeper as the straight line of the plan view suggests. As noted above the fill in F#s 243 and 244 was identical and within the entire site no other staining quite resembled this except that in the two subsurface pits at F#4, and portions of F#112 within Structure 1, the Manor House. The peculiar nature of the fill suggests a mixture of redeposited site midden.
Excavation:
- Middens 1-2 ft thick, clayey silt, with orange sand, clay, and silt. The clay contains some large, orange, and coarse particles.
- Top of fill removed; it appears that the fill is well mixed and has no visible stratification.
- The fill consists primarily of sand, silt, and clay, with some organic material.
- The fill is well compacted, with no visible disturbance or disturbance marks.
mixed with debris from degraded daub(?) presumably from a weathering standing chimney. The medium to dark brown silt loam was mottled with orange sandy clay and tan/grey heavy clay. The latter clay a minor ingredient in the mottling was not observed in any of the sterile sidewalls of any of the excavated features throughout the site. Not only was the clay almost certainly not collected at the site but it was of a fine plastic quality most often associated with pottery making. In addition to this a rolled copper bead, a straight pin, colono ware, 11 sherds of North Devon gravel tempered ware, 11 body sherds of slip ware, burned wood, charcoal, fish scales, 43 large and small animal bones roughly butchered, 195 whole or fragmentary oyster shells, and other miscellaneous items certify the structure as a domestic unit, and the pit as a root cellar. A sample of the fill was waterscreened, and a large floatation sample was retained. Original plans called for water screening the entire sample with a float sample set aside, between problems with the pump, deadline and crew size this had to be regrettably aborted. No fire reddening was noted along the pit walls or floor.

**F#244** was of a disfigured oval configuration at 2.1' by 1.5 wide. Although shallow and almost entirely sheared away, the integrity of the fill was unquestionable. **F#244** contained burned animal bone, nails, and a fragment of local earthenware vessel suggested to be of Native American manufacture, and colono pipe. The soil was retained for 50% waterscreening (bisected side) and 50% floatation (intact during bisection).

Dating evidence is more reliable for destruction dating than construction as is typical. The catalogue needs to be refined in this respect for it was not possible to employ vessel form as an aide to dating. The local earthenware sherds include besides Middle Woodland Mockley Ware, a sherd from the post hole fill of **F#242** the northeast corner post and an obvious construction date indicator. The sherd is small with a smoothed surface which barely has evidence of what appears to be simple-stamping or a swiped-over surface treatment. The paste has fine sand most familiar not in Native American wares or Colono vessel wares but rather Colono pipes (personal communication Mary Ellen Hodges). Two other tiny sherds found in the small storage pit of **F#244**, and the post hole of **F#236** are unidentifiable except by having minimal well crushed shell temper. European ceramics found in later cultural deposits include white delft which was in use from 1640 to 1800, and North Devon gravel tempered earthenware which was popular from 1650 to 1775.
More reliable evidence comes from locally made, colono ware molded pipe fragments from F#244 which suggest the structure was active during and perhaps met its decline during the second or third quarter of the Seventeenth Century. The structure seems to be associated with the development of the east side of the plantation and shows some sensitivity to the placement of Structures 2 and 3. The tenant or more likely servant occupants of the structure are likely to have been employed at, or responsible for, in addition to more generalized agricultural activities, the endeavors contrived at the barn complex to the north if spatial patterning is being read properly. The occupants may well be historic Indian servants, or equally Afro-American or less likely white. Certain characteristics in the house construction and artifacts within the structure including a rolled copper bead may underscore the historic Native American occupancy, not to be confused with the prehistoric. However in the frontier "creole" culture of this cultural period it is difficult to be dogmatic about such items.

The structure represents a cultural horizon at the site in that it is clear that it dates from a period of time when servants were no longer sharing the hall of the Manor House and when the Servants Quarter and kitchen noted in Structure 5 was either in decay or no longer sufficient to house all of the servants. Structure 4 may provide evidence of an attempt to separate field laborers from "house servants" or those employed in various activities in the direct service yard, and possessing approved greater intimacy with the owners. The impetus for this is associated by a decline in English immigrant servants and through time, especially after ca. 1680 a dramatic increase of Afro-American laborers (Neiman 1978).
Structure 5: First Servants Quarter/Kitchen

Structure 5 was located to the immediate south of the Manor House during exploratory trenching sensitive to linear building expressions noted elsewhere. The structure's north wall is only 8' south of the south gable of the Manor House yet the two structures are out of square by 3 to 4 degrees in axis alignment and have no agreeing facades, almost as if the owners were trying to prevent a structural union of the two, despite the intimacy of the location.

The assemblage for the structure is small since there were no subsurface features present other than architectural features including only post molds and holes. Nonetheless the post molds contain indications of both kitchen refuse and domestic habitation in marked contrast to other service structures noted in Structure 2 and 3. Further domestic habitation is suggested by probable porch or chimney scaffold posts noted on the west wall facade, and inconclusive though suggestive indications of a massive 5' by 10' firebox on the east wall facade. Even the deep architectural remains have suffered by virtue of their location on an uneven grade dropping off to the south at about - 0.6' per 20'. The machine operator had a difficult time providing an even grade for as the hydraulic pressure exerted downward and lateral pressure across the irregular surface bars of heavy compacted silt loam, and sandy and/or gravely clay - soft white and orange marbled sand of the resilience of beach sand was exposed. In brief, it is obvious that the extreme pressure needed to remove some geological strata, encouraged the blade to slide off of and plunge into others. In all, the machine operator performed outstandingly.

Sampling strategy included a 50% screened recovery of post hole fill and 100% of post mold fill. The structure was fully excavated using all the standard excavation techniques thus implied.

The core frame of the unit consists of eight massive hole set posts divided into three bays with a total size of 20.4' east to west by 20.9' north to south measuring from the mean centers of the posts. The exterior dimensions are suggested to be 21.5' east to west by 21.7' north to south. The bay posts are paired north to south in contrast to the Manor House and the bay gaps are much tighter insuring certain increased stability along the north and south facade, but little structural strength at all is demonstrated along the east.
and west facades, as no posts integral to the core of the structure exist along these 21+ walls. For this reason the structure is strikingly unusual and distinctive, and may have had a shedded roof high on the Manor House side and low to the south. However, it is almost certain that the outlay of the foundations in terms of lateral stability along the east and west walls intended to borrow strength from fireplace and other subsidiary embellishments to the core frame. The bays at a glance appear roughly equal in width, but measurements from center to center of posts demonstrate a west gable bay 6.75' wide, a central bay 7.3' wide, and an east gable bay 6.7' wide.

In advance of detailed analysis of post mold depths, some evidence of methods of construction may be noted. The post holes are large averaging around 3' in length and width show great anticipated errors in coupling reconciliation. Also it must not be forgotten the holes are large because the molds needed to be set especially deep because soft geological sand strata occurs throughout the subsoil level here. The terrace grade drops off considerably here as noted above, and these conditions may have been present to a lesser extent during the historic occupation. Average surviving hole depths along the north facade are 1.2-1.9' below grade while on the south facade ranges between 0.6 are typical not counting repairs which probably significantly are deeper. The most frequent anticipated error is noted north to south on corner posts especially and notably the two interior bay posts on the north facade are wider east to west. This variation along with the variant bay gaps noted above suggests that tie-beam pairs were erected in reverse assembly.

Mold size, configuration, and orientation is also variant perhaps because of the arbitrary levels of plan drawing, and variant rot and infilling episodes. It is obvious that squared stock and at least subsurface rounded stock was used. For instance the mold in bay post #101-A is clearly squared and 0.9' east to west by 1.0' wide north to south, while the dark mold in #97-A is only 0.5 by 0.5 with an outer probable sap wood ring around it. The mold in #98 was probably never squared. All of the mold butts per core bay post appear to have been sawed flat at right angles to the vertical.

Along the east facade at 10.1' from the northwest corner post, and 7.2' from the southeast corner post, a 4.5' east to west by 4.4' north to south addition defined by two smaller post holes and molds in #s 103 and 104.
Structure #5
104-A
(Associated w/F & 103)

A) Pointed posthole (axe cut)
B) Posthole

Structure #6
103-A
(Associated w/F & 104)

Dark silt layer
19.8' square foot amendment to the frame (probably originally 20' square) suggests a small porch or asymmetrically set chimney scaffolding. The molds were slightly squared, and 0.5' in diameter, with abruptly tapering axe cut butts. F#104-A is set at a slight angle east towards the main structure. The feature along the east "gable" may aide identification of a east to west cross passage or trafficking whether or not it pertains to a porch or chimney. The need for a cross passage in a servants quarter may be in question but opposite paired entry features probably were installed. A fragment of daub was recovered in the post mold fill of F#103-A lending but weak credence to a chimney flue since daub was recovered in other molds elsewhere. A porch entry is suggested to be rare for a quarter, although the location may suggest frequent trafficking to the east oriented towards a well trod path to the spring head noted towards the southeast. This possible trafficking was probably curtailed with the later construction of Structure 6 the cellar house. Further, the repairs to the southeast bay posts may arguably suggest another entrance more clearly pointed to the spring. Field notes comparing post mold fill in plan record more evidence of tiny brick crumbs or well fired daub in post holes along the western half of the structure. This encourages identification of hearth associated with F#s 103 and F#104.

Although no other evidence of a fireplace is indicated where clear pertinence to the structure is indicated, along the exterior of the west facade a massive square hole noted in F#226 may be evidence of the true former location of the hearth, or a later installation of such as the structure shifted to more kitchen related functions in excess of quartering servants. The 2.7' by 2.4' hole is centered at a right 5' east of the exterior wall line and 6' south of the northeast corner post. A corresponding measurement off the southeast corner post would make the distance of a paired hole and mold lost to erosion and stripping - at almost exactly 10' apart. The second post would were it still intact would provide for a 5' by 10' timber framed firehood. The larger heating and cooking component would be more in keeping with suggested kitchen activities within the structure although quarters at the companion Clifts site had decidedly minimal hearths, strongly arguing that corporate and/or communal (including the owners immediate family) kitchen use was evolutionary only in early quarters if employed at all. Indeed, the first quarter at the Clifts has but crude improvements for cooking and heating and these were asymmetrically located along a gable end wall as a subsurface pit hearth. The evidence of F#226 is emphatically not conclusive and no clear
surface mold was noted in F#226. The feature had steep sidewalls similarly to a post hole excavated with a straight-bitted spade. Within the fill were lenses of an apparently once tacky black substance related to either pitch or tar that have become thoroughly integrated with post hole fill as sandy concretions as though the material was originally on the surface. The shallow depth of the feature was recorded in an especially soft sanded geological stratum and were it paired with another sister component to the south that features survival would be unlikely.

Two of the posts holes had plan view indications of re-entry for repair noted in the post holes at the southeast corner of the house, F#s 99-B and 100-B. As in the case of Structure #4 (F#239) the repair hole in F#100-B was entered from the interior of the structure or more likely from east side parallel to the exterior wall line. The angle of entry suggests that the structure had no true sills and that it probably had a dirt or rammed clay floor. If sills were present than the probable interrupted sill would have to be blocked up while presumably the original post butt was discarded and a block repair post was inserted. Damage to the original posts may have been encouraged by use of the location as an entry feature oriented during the later use of the structure to the spring head directly south and paths to the later constructed cellar house of Structure 6 to the southeast. This possible scenario strengthens the suggestion that the repairs were to what was in effect a door sill. Daub recovered in the repair hole in F#99-B and numerous post molds suggest the structure was plastered with daub over riven clapboards.

No diagnostic artifacts were recovered in post hole fill. Destruction debris silted into post molds includes oyster shell debris, straight pins, large animal bone, broken pipe bowl fragments, and (non-differentiated per catalogue) slipped earthenware, and (non-differentiated) glass fragments. The structure was probably erected within the first ten years of occupation or some time between 1651 and 1661 and was in use possibly throughout the occupation. Regrettably it will be difficult to refine occupational dates. It appears that during the second half the seventeenth century the quarters were erected earliest were closest to the main domicile and the function of the quarter overlapped with functional use as a kitchen. Therefore hypothetically Structure 5 was the first quarter constructed on the plantation. Later the
kitchen function probably shifted to Structure 6, the cellar house. Additionally it is probable that the Structure 5 Quarter predated Structure 4.

If the hidden geometry of the outlay of the buildings may be invoked the ad hoc bilateral symmetry at work suggests that the present structure may have been constructed after Structure 2, and before Structure 3. Structure 1, 2, and 5 all seem to have been constructed using huge post holes and tie-beam pair reverse assembly. All of these structures were probably erected during the short tenure of Robert Neuman between 1651 and 1657.
EXTRACTED POST - BROWN SILT CLAY & TAN/SANDY LOAM MIX W/DARK BROWN LOAM
LIGHT SAND MOTTLED W/BRICK FRAGS., CHARCOAL, AND ARTIFACTS

REPAIR HOLE - TAN/SANDY LOAM, BROWN SILT CLAY, W/ LIGHT SAND MOTTLED
BRICK FRAGS, CHARCOAL

POSTHOLE - TAN SANDY LOAM, BROWN SILTY CLAY, AND DARK BROWN LOAM
W/LIGHT SAND MOTTLED.
Provide same key at bottom plan and profile.
Structure 6: Cellar House

This structure was noted in the southwest central portion of the plantation complex as a manifestation of the outgrowth of the building complex associated with Structures 1, the Manor House, Structure 5, the large servants quarter, and Structure 7 an outbuilding. Accordingly the structure shows sensitivity to axis agreement with all of the above structures. The northwest corner of Structure 6 is 4' south of and approximately 34' east of Structure 5.

The building was located during the last day of exploratory stripping of the larger yard compound in reaction to heavy oyster shell deposits located in pulled fence post to the east of Structure 5 suggesting a major avenue of kitchen refuse disposal moving in that direction or to the south. Preliminary exploration of that area had already located F#251 an amorphous depression north of Structure 6 containing coarse wares oriented to food storage. Attempts to define the southern boundary of this feature led to the immediate discovery of a massive dark organic stain of such massive proportions that it was difficult to find "negative space" i.e. sterile subsoil in order to observe the limits of the stain. Initially it was thought that the cuts were revealing a silted in ravine replete with domestic refuse.

The subsurface deposit revealed was 36.5' wide east to west by about 37' north to south as F#247 (see Figure__). Centered on the west facade was an appendage 10' long east to west by 8.5' wide north to south of a suggested bulkhead entrance deemed F#248-B. No clear surface boundary was noted between F#247 and F#248-B. Opposite to the west of F#248-B a separate large subsurface deposit suggesting a well was noted in F#248-A.

Sampling strategy for the large cellar called for an exploratory quarter of the structure to be taken to subsoil. Three wheel barrow loads of this fill was waterscreened as spot samples of what was lost to the shovel for screening was unfortunately out of the question due to crew size and very direct time pressure. All artifacts observed during shoveling and test trowelling were however retained, excepting oyster shell which was so ubiquitous that shovelling was made difficult. It was not found feasible to linger on stratigraphic layers when reducing the quarter since all reliance was placed on a clear understanding of the revealed profile faces on the east and south
F#247, 248-A, B
Structure 6 before Excavation
balk. Here the project anticipated careful 2' by 2' column samples to be carefully denoted and fully waterscreened. These were to be supported with appropriate floatation samples. The ideal of the sampling strategy as pertaining to column samples and floatation samples was proven impossible to act on, as no crew was present after profile and record photographs were made of the initial quarter. Spot soil samples of various fill contents were retained in compensation for this.

The selected northwest quarter was chosen so that a bisection of the presumed bulkhead trench could be tied directly into the complimentary south boundary of the cellar quarter so complimentary fill episodes could be directly reconciled. Later the same bisection line of the bulkhead and south boundary of the quarter was extended across to the well. That extension line was found to be offset to the north of the actual center of the suggested upper well box.

The Cellar

The surface manifestations of the essentially squared structure demonstrated more irregular sidewalls at the deposit boundary along the north side where because of the natural grade falling off to the south to the spring fed stream valley and Corbin's Pond - predictably more erosion had taken place. Some areas along the south facade demonstrated potential traces of a robbers trench limited to an 8' long by 0.75' trace of increased sandy subsoil ingredients in contrast to the dark brown organic fill with some greyish light brown silt noted elsewhere throughout the surface of the pit. No mortar or brick rubble was noted in the discontinuity on the surface. However, in the northwestern corner of the surface at subsoil level a poorly defined pattern of increased brick crumbs was observed. The quarter was thus opened with the potential of a robbed foundation line being further suggested, and armed with the knowledge that the suggested bulk head was infilled simultaneously with the main cellar by secondary fill transported primarily by erosional forces.

As is typical of secondary fill deposits in deep features successive fill deposits tended to lense out in concentric relation to later more centrally located deposits.
Stratigraphy of the Cellar

The northwest quarter was set in by dividing the maximum length and width of the cellar by two and triangulating in a reference point providing a 10.5' east profile face and a 11.6' south face including stepped attachment of the bulkhead. The layers, listed in order from last to first deposited, are briefly described below (see Figures ).

B Layer, Redeposited Geological and Occupational Fill Mixture: The last deposit to have entered the pit consisted of a grey to light brown fill layer of dish shape which lenses out at 1.75' from the north limit of the pit and 1.9' from the west boundary of the subsurface remains of the bulkhead. The lower limits of this level were irregular and up to 1.75' deep below grade in central portions of the east profile face. Portions of the fill have built up into a small berm also along the east face suggesting heavy storm rains. The fill contents have decreased top soil contents and increased silty but thoroughly integrated subsoil fill. The layer contains oyster shell and brick fragments as well as samples of the kitchen midden from the surrounding vicinity. Also in the fill were 7/64ths" and 8/64ths" pipe stems, wine bottle glass, and North Devon gravel tempered earthenware.

A Layer, Predominant Fill Layer, Redeposited Occupational Fill: Directly underneath the B layer was a much darker organic fill consisting primarily of redeposited topsoil, and having a greater abundance of artifacts. The A layer is the primary fill deposit and is most informative about midden materials on the surface in the immediate vicinity of the cellar house during the active use of the site. These properties are underscored by not only increased top soil ingredients and artifacts but by virtue of the fact the interior lower portions of the layer extend to directly above the occupational floor and the original limits of excavation during the historic occupation. On the east balk the layer begins at within 0.6' of the north limits of the feature and descends at a 45 - 60 degree angle to the pit floor. On the west terminus it fully occupies the first 1.9' of the western limits of the bulkhead descends down the full extent of the bulkhead steps and spills over sand wash berms to the pit floor.

The maximum depth of the deposit is where it descends the bulkhead steps at 1.65' thick. The interior width and configuration of the deposit is
remarkably flat at typical depths of 0.8' to 0.9', as the fill spread out across the vacant space. Although a few wash lenses were noted the fill content for the most part is homogenous. The fill contained all of the items listed in "B" above. Additionally pipe stems from 9/64ths" to 5/64ths" were noted. Gastropod shells, Morgan Jones pottery, Jackfield earthenware, slip dipped white salt glazed stoneware, Buckley earthenware, red earthenware, colono ware, case and rounded bottle glass, glass goblet fragments, fish scales, large animal bone including pig and cattle items, straight pins, and numerous other items suggest an occupation terminating around the middle of the eighteenth century, but technically potentially extending into the third quarter of that century. Pipe bowl forms (in cursory review) include primarily Noel Hume's (1976:302-306) evolutionary simplified 12-19 bowl forms. The presence of 5/64ths" pipe stems in less numbers than 6/64th" suggests that the occupation terminated around ca. 1740-1750.

**C Layer, Remnant Builders Trench:** This represents what is suggested to be the remnant of the partially degraded builders trench noted near the north terminus of the east profile face. The southern edge has slumped over what may be the remains of a shadowy ground sill called "E". The straight north boundary of the stains configuration provides the strongest evidence of attribution. The content of this layer consists of heavy clay packing with a minimum of oyster shell. The clay is foreign to the geological clay observed at the limits of excavation so that it is entirely possible that the clay was deliberately selected from deep clays obtained from the well excavation to the west of the cellar. The material appears to have been used as a rudimentary tabby like wall packing. The mixture appears to have been prepared on ground surfaces that contained a household midden since a minority of oyster shell was noted here. The peculiar subsurface depression of F#251 to the immediate north may have been this location where mixing occurred.

**D Layer, Limit Historic Excavation:** As indicated in the subtitle it is not entirely clear what this level represents. The layer was found near the limit of excavation and consisted of mottled heavy and sandy clays with tan to whitish, orange, and red hues mottled with dark brown to black organic loam. The depth was at 0.1 to 0.2' thick at 1.5' to 1.7' below grade. Most of the artifacts recovered in this level were located during final cleaning for record photography. The layer was not entered deliberately until all other layers had been removed. Trowel tested cat holes against the east and south
profile located sterile clay with no organic staining below this thin and slightly uneven layer. Apprised of this fact the whole layer was very carefully trowelled in an attempt to locate any traces of patterning left by wooden sleepers or dry laid bricks set directly over subsoil. These traces frequently are only observable by shallow silted in impressions at the intersection with subsoil. Typically only a large overview allows pattern recognition. The test was negative for structural patterning except for haphazard criss-cross scars probably caused by picks, spades, or broad hoes during the initial excavation. The few artifacts recovered included kitchen refuse, white salt glazed stoneware, coil prepared colono ware, one sherd of which may have been painted black in a line across the rim (Mary Ellen N. Hodges, personal communication).

Construction Details

At the bottom of the pit along the northern and western sidewalls a dark organic stain was observed and pedestal. Near the eastern terminus this stain was streaked with linear traces of surviving wood (corresponding to apparently straight grained heart wood). The dark organic stain was most apparent as a texture break, and was not easily followed since artifacts and fill debris had taken up the space left by the suggested sill as the wood rotted and shrank. The surviving thickness of the organic mold has been reduced to 0.3’ to 0.5’ thick. Where the entire builders trench and all fill was taken to sterile subsoil in a test trench 2’ wide (including the maximum north 2’ of the east profile and the last maximum east 2’ of the north profile') linear organic mold streaks could be observed as the "foot print" of the roughly hewn sill.

The boundary of this organic texture brake staining towards the interior of the excavated pit floor on the west side of the D Layer contained tiny burned daub fragments or brick crumbs peppered with wall plaster fragments. On the interior north side charcoal and a dark organic fill deposit separate the interior edge from the D Layer. This edging may denote a shallow trench to insert the ground sill. Although the appearance of the whole is similar to what may be expected in a robers trench that interpretive scenario makes little sense. It is not necessary to excavate a robers trench in a basement unless the footings a set deeper into a builder’s trench. Secondly although brick and mortar were found in the A Level the size and quantity of the whole
argues that brick and mortar were a minor ingredient emergent from elsewhere - possibly from a chimney fall integral to the above ground wall facades of the present structure, or from beyond the feature. No large quantity of discarded broken brickbats and or lines of mortar rubble were noted.

The organic mold of the former wood was followed very carefully and it was possible to record a 1' wide by 7' long sill member on the north edge, to the northwest corner terminus - and follow the right angle along the inner west wall of a 0.6' wide by 7.4' second smaller member. At the intersection of the two in the inner northwest corner the lengths were omitted since it was not possible to determine which sill member filled the corner. At the point of intersection an 0.8 wide corner post in the vertical was observed. This piece had been reduced by an over zealous volunteer during the open house, so the thickness of the piece is not known. The vertical member was set against the maximum west and east limits of the builders trench.

The sidewalls of the cellar were not only founded on large wooden beams but the vertical corner post suggests the entire sidewalls were clad in substantial wood. The wider north facade sill is no coincidence as this side was the most vulnerable to erosional forces.

An excellent precedent for this type of walling has been recorded by Ann Markell (personal communication) at a site of comparable date at 44PG92 on Flowerdew Hundred Plantation. Here flood inundation preserved some of the lower posts of a cellar so well that actual wooden members abounded in situ, and even interior partition walls survived partially intact. Where the actual wooden members broke down chemically and dissipated to organic molds reduced wooden linear streaks could be followed punctuating a earthen organic mold just as noted at 44NB180.

The Bulkhead Entrance, Feature 248-B: Fill sequences have already been noted in direct relation to fill episodes throughout the cellar. The feature was numbered before clear separation with the well F#248-A was apparent. The bulkhead was set into a builders trench, and all things considered is in a remarkable state of preservation. The surviving interior stain of the bulkhead had been sheared asymmetrically by erosion, plowing, and stripping so that more of the stain survives on the north side. Portions of this fact may also be due to cultural reasons, as the bulkhead is extremely intimate with the
well unit to the immediate west. The wooden mold of the stair rail or lintel has survived intact on both sides so it is possible to say with confidence that the rails were 0.2' to 0.25' thick and on the north side the angular length down the rail to the west sill was 5.6' (a distance measured as if the two points were horizontal). The terminus of the rail on the maximum west end expands to a 0.8' square vertically set mold which has a clipped lower southeast side. The latter may suggest that two posts have been maul driven into a right angle relationship for stability. The total length of the north rail and rail anchor to the west sill is 6.2'. The latter mold(s) obviously anchored the bulkhead firmly on ground level. The opposite southern pair of this has been eroded into the slumped and therefore expanded well shaft. The center step of three recorded provides the most reliable information on step width at 1.0' wide. The upper and lower steps have been affected by erosion. The steps were almost certainly of wood also - as the mold of the wooden rails testify. No clear wooden molds were observed within the bulkhead step area, as this was a primary avenue of water transported fill into the cellar.

The profile of the bulkhead was stepped 1.2' to the north away from the south quarter profile of the cellar, in order to center at midpoint between the bulkhead from grid east to west. The steps in vertical view contain only rounded edges, obviously due to strongly channeled erosion. However, as noted above the center step has been the least affected by erosion as the top was truncated by surface erosion, and the bottom step though traceable has a slumped east border as the floor level of the cellar is approached. The estimated drop or pitch per step is suggested to be 0.5' per each 1' wide step.

The Well, Feature 248-A

Little is known of the well because preliminary testing beyond identification was not possible under the project schedule, and well digging is a dangerous and time consuming proposition. The state owned well digging rig was tied up at salvage excavations at Yorktown during this late and terminal period of excavation at Newmans Neck. For this reason the well was covered with plywood and plastic when the of the site was backfilled, in hopes of further funding.
The surface manifestations of the well are recorded in detail in direct relation to the bulkhead and cellar of F#247. The apparent main deposit consists of a dark brown organic stain 5.7' grid north to south by 7.3' east to west. The central deposit F#248-A and 248-C is relatively straight on the north side and C shaped on the south. The north side is amended by a fill slump (F#248-D) which includes more sandy tan and orange silt loam and clay ingredients which slipped to the south after, presumably the well box collapsed, and the hollow of the shaft filled in. A clear darker organic seam line surrounds the south side of the well shaft, and this line extends almost to the north wall and halfway up the east side.

Below the central deposit of the well, a peculiar trench deemed F#249 at 5.3' long north to south by 5.3' to (at the southern terminus) 2.5' wide grid east to west and containing medium to light brown silt loam mottled heavily with tan to whitish sand and minor orange, grey, and red clay mottling. This portion of the well may be a drain, trough, or a construction or repair trench directly associated with the well as the northern boundary of trench widens and merges with the observed central shaft.

The well was tested with accelerated shovel and trowel reduction on the north side of the same profile line that defined the south side of the northwest quadrant of F#247. This line was offset to the north of the center of the well shaft. Samples of the well shaft fill were recorded suggesting large quantities of large mammal bone and continuing down at 1.5' below grade large quantities of kitchen midden, oyster shell, and coarse and refined ceramic were obtained using volunteer skilled labor. The northern side wall tapered down rapidly and obliquely to the south. Approximately 4' of the shaft were tested and the artifact count remained high despite apparent slump sequences.

Pipe stems bore diameters demonstrated a numerical majority of 8/64ths" and 7/64ths" although 6/64ths" and 5/64ths" were also located in reduced numbers. In and among the fill were object more domestic than kitchen related such as straight pins, and personal items such as a jews harp. Ceramics included yellow combed Staffordshire slipware, North Devon gravel tempered earthenware, Buckley ware, redwares, salt glazed stonewares, an fragments of a magnificent North Devon sgraffito slipware charger. The contents suggest material from a household dump, or midden - spanning the period of the
historic occupation of the site. Therefore it is tentatively suggested that Structure 6 was adopted to the well and not vice versa.

Summary Discussion

The well, bulkhead, and cellar all appear to have been rapidly back filled by redeposited water borne site midden with some subsoil ingredients partially due to wall slumping. The well has not been sufficiently tested to properly compare the assemblages but there is some indication through the bulk of pipe stem bore diameters that the well was abandoned before the cellar, or more likely predated it. It is possible that if further sampling was made in the well the diagnostic bias would level out and it would be determined that the minor dating differences were more apparent than real.

Cellar Houses, "covered cellars", "roofed cellars" and "pit houses" are familiar finds throughout the 17th century. Many found in or near homes of the social elite are lined with brick floors, or beautiful and well constructed tile floors. In many cases the archaeologists who have located them are at somewhat of a loss to describe what components and functions existed or took place above them. There are too many precedents for these finds to list in this document. The Newman's Neck example probably functioned similarly to a large dairy and cool storage house and it is possible that an upper floor a kitchen was installed with the servant cooks employing a half story loft above this as sleeping quarters.

The cellar, bulkhead, and well, give every impression of being one large macro feature carefully planned to contribute to the whole. The final creation of this unit shows a quality of premeditated planning not displayed elsewhere at the site. The growth appears more rational than organic. The selection of the well close enough to the living units to be generally useful to all and yet at the top of the stairs of the bulkhead above the cellar, is a major contrast in behavior to for instance the out square Structure 2 and 3. The builders shrewdly took advantage of the north to south terrace fall to get closer to the water table, perhaps hoping to tap into the cool clear spring water noted and formerly used to the southwest. It is likely that the swamp like environment near the spring and its mosquitos became an ultimate nuisance. By installing the cellar south of the low order terrace rise the pit would be easier to construct because of increased white to tan iron oxide.
stained sand strata was noted here by servants and owners who had noted such previously while excavating deep post holes, on numerous occasions. They apparently shifted the liability of one (towards post stability) to labor saving rational deductions of relative ease in another.

It is likely that the cellar house was the last significant building constructed at Newman's Neck. The construction date is suggested to be sometime between 1680 and 1710. By then the majority of laborers were probably Afro-American, the Structure 2 dairy was probably non-functional and Structure 5 could probably not house all the servants. The present structure absorbed the storage components at Structure 2, and absolved the Hall in the Manor House of any community cooking responsibilities. If cooking took place in the middle to late span of Structure 5 that structure probably resorted back to a dormitory style living space.
Structure 7: Minor Outbuilding

Located directly grid east of Structure 5 was a small outbuilding. The building is complimentary to the wall facades expressed in the Manor House with the north facade of Structure 7 at an exact right angle to the east wall facade of Structure 1. The building consists of four hole-set posts: F#s 220, 221, 228, and 255. The exterior dimensions of the building are 8.8' north-south by 10.3' east-west. Rounded and partially squared molds were noted on the surface, and a slight midden deposit of oyster shell had silted into the surface of what may be pulled posts.

The four heavy posts which made up the foundations of the earthfast outbuilding appear to have been assembled with some care. The east-west dimensions of the two west facade posts (F# 221 and 228) are only 1.5' to 1.8' on their east-west axis. Yet the two eastern facade posts (F#s 220 and 255) are 2.4' to 2.5' on an east-west axis. This suggests that the building was assembled with a certain ammount of care using apparently pre-assembled tie-beam pairs in reverse assembly.

A trace of wattle posts or maul driven "pales" to the immediate west spanning what otherwise appears to be a post and rail fence has been incorporated into the north facade of the structure and was thus merged with Fence System 3, a late definition of the inner yard compound. At 1.8' (F# 222) and 6.6'(F# 223) due grid west form the northwest cornerpost two maul driven post molds were noted spanning the gap between F# 221 and F# 224. F# 224 is a substantial post hole with an unclear mold reduced by stripping and erosion and 8' down the same line. The north facade of the structure is also tied into the same fence (Fence System 3) in an easterly direction.

The structure probably functioned as a smoke house or store house, unless in a third alternative interpretation, poultry were given access to the kitchen garden to the immediate north. Door entry is almost certainly on the north side. The building construction may imply the structure was intended to house valued food items and not chickens. No burned clay or charcoal was noted in post mold or hole fill, nor were there signs of rebuilding--all normal clues to smoke house identification.

The feature was mapped and photographed.
Out building

Structure #7
Shepard Smokehouse

F#222
F#221

F#220-A (inside)

F#220

F#228-A (inside)

F#228
Structure #8

1" = 4 ft

Notes:

F#257 mold, 6 x 5 oval, w/ steel
F#258 45 diam, circular mold
F#259 6 x 4.5 oval, mold, oystery shell in mold
F#260 B, mold, 6 x 6 mold, 25 diam, 6 x 6 mold

A - on east side, 4.5 diam, circular, 4 x 6 diam
F#261 mold, 4 x 5 oval
F#262 A - circular mold, 4 diam, 6 diam, 4 diam
F#263 mold, circular, 3.5 diam
F#264 - 26, fill, hole 6 x 2, round, circular, 4.5 diam

Post at right
(blue)
angles Phase I
Second stage
(red) w/ repairs?
also right angles

draft by flood light
Structure 8: Minor Outbuilding

At exactly 49' from the southeast corner post of Structure 1-B, due grid east from the south gable wall, is the west facade of an informal and unusual hole-set outbuilding. The structure noted within grid unit 110N/130W consists of six transverse paired hole-set post molds surrounded by two vaguely aligned post holes and molds within paired post molds that are in the same post hole but are not paired. The paired molds make a structure exactly 6' wide north-south by 10' east-west. The structure is constructed in such a fashion that the shorter sidewalls contain the two parallel rows of molds in agreement. The northwest corner post, F# 257-A, is ovular and 0.6'-0.5' in plan. The northeast corner post, F# 261-A, is also oval and measures 0.4' by 0.5'. The line of division of the second paired posts is at 3.2' to 3.6+' from the north where F# 258-A and F# 262-B are paired. F# 262 has a second post mold (262-A) at 2.3' from the northeast corner post and aligned with the east bearing wall. The configuration of F# 262 displays an "L shape" as though a repair has been made entering the interior sidewall to install post mold "A". However, no fill separation was displayed within the post hole of F# 262. The southern wall spans F# 259-A and F# 263-A.

Within the structure, F# 262 was noted to the immediate east of the southwest corner post. The hole here contained two molds one of which consisted of a rectangular plank F# 262-A 0.25' wide and 0.6' long which may have been driven into the hole with a maul to shore a nearby hole-set post (F# 259-A or 260-A). The structure may have been further stabilized or shifted to the east by a post to the south of the east wall line noted in F# 264-A. The mold forms a line of agreement with other posts on the east facade noted in F# 262 and 261. If F# 263 is dropped out, the line would be 7.0' long. This line of agreement pulls F# 257-A and F# 260-B into alignment if the right angle is shifted in that accordance, which places F# 272-A as a southeast corner post.

The only artifacts observed on the surface were oyster shell in the mold of F#259-A, and in F#262-A a fragment of large mammal bone.

The structure is difficult to interpret because of its ambiguity created by informal changes and repairs emanating from the squared core posts. Experimentation with a triangle demonstrates two probable phases of alteration.
(see Figure____) are possible which are both complimentary to the original interpretation noted above except that the hypothetical second repair reverses the position of the short bay gap to the center paired posts. The absence of significant site midden in post hole fill may suggest the structure is early as fence posts to the immediate west of it have significantly more oyster shell midden infilling the former posts.

Like Structure 7, the structure in its original form was tied into a fence system for economy of space and expedient utility. The northwest corner post of Structure 8 (F# 257-A) and the northeast cornerpost (F#261-A) are in fact the first two fence posts turning to the east from the southern wing of the Fence 2 System. More specifically, the southern terminus of that fence is F# 212. From that point it is 9.5 to 10' due east to F# 257-A and across the north facade another 10' to F# 261-A. Somewhere in the cluster of post molds within or near Structure 8 the east continuation of Fence System 2 is lost. Predicted linkup with the complimentary axis orientation of the southern facade of Structure 3-B was not substantiated.

The feature was mapped and photographed, but not excavated due to salvage imperatives.
Structure 9: The Well (see also above where the well is discussed as part of the Structure 6 macro-feature)

Limited sampling at the well was oriented towards clarifying the function of the pit and obtaining samples or artifacts for dating the feature. Based on tenative interpretations of the surface manifestations of staining within and near the well, it is suggested to have had a wooden box-framed housing at ground level. The formation of the darker deposit (F# 248-A) has a surviving right angle on the north and eastern side suggesting an excavation of a well cap at about 10' by 10'. In all likelihood, molds and other staining pertaining to the in situ portions of the predictably smaller above-ground well housing, once containing a small four post earthfast roofed "well housing" structure and supporting a windlass, have been eroded into and muddled with the surface stain recorded. Squared post molds at two feet to the west of the exterior central stain (F# 253) and 4' to the southeast (F# 252) may be portions of the west facade of the well house. If so, the larger portions of the more northerly sections of F# 248-A are due to serious wall slumping clearly demonstrated in sampling of F# 248-D. Despite the evidence of the two post molds, based on the orientation of the bulkhead it is more likely that the two posts (having no hole staining) are remnants of Fence System 3 southeast turn below F# 224 and spanning F#s 227 and 226. The two post molds are thus predicted to be shallow remnants of more typical mold and hole combinations or remnants or maul driven pales associated with earlier fencing from the initial construction of the well. As noted above, the well may have predated F# 247 the Cellar House.
Brick Clamp, Feature 276

In grid unit 260N/90W about 100' north-northwest of Structure 2, and in a test trench well-isolated from all other yard compound features and edifices, concentrations of brick debris isolated only the burned subsoil footprint of a former brick clamp. The surface midden in the area showed no signs of any artifact type other than brick.

The footprint of the suggested clamp is evidenced by burned bright red subsoil that could be observed clearly, yet in detail had a poorly defined edge against subsoil due to differential heat. The form of the unit consists of larger stain possessing vaguely defined right angles on the north end at 4.5' wide and maintaining the bulk of this width for 7.8' south. Near the southern terminus the larger portion of the stain is reduced to a small shouldered appendage 2' long north-south by 3' wide east-west. The projection emerges near the eastern implied edge of the larger stain, and has a slightly irregular shape larger on the west side. This area is suggested to be the plow-damaged remnant of the original flue.

The small size of the remnant clamp may be artificial. The absence of large masonry works at 44 NB180 suggest that the clamp was never large, however, since it would have been employed for the production of only small quantities of brick used to line hearths and other sundry improvements. Since few 17th century artifacts were present in the immediate area of the hearth, the feature may not pertain to the occupation of Newmans Neck.
44MB/8O
1" = 4'
CH, MENF
Nov. 1989

\[ \times \begin{array}{c}
/260N \\
90W \\
FN-276 = concentration at fire reddened subsoil
\end{array} \]

\[ \times \begin{array}{c}
/240N \\
90W \\
Note: probable small brick clamp as immediate area surrounded w/ brick crumbs, small size suggests small folk clamp to obtain hearth bricks other, it may pertain to other uses
\end{array} \]

possible flue FN-276-A
Fencing in the Service Yard

The various networks of fencing and smaller subsurface features that punctuate spaces between major structures and outbuildings provide a broader spatial context for understanding both purely physical changes within the yard and changes in the mental concepts of the evolution of spatial definition. The information on the larger structures would be compromised without knowledge of their presence, and in many instances the fencing evidence literally provides fundamental substantive contributions to identification of building phases otherwise absent. Although somewhat alien to the modern mind, there was no concept of permanency in fencing displayed at 44NB180. The quality of relative ease of movement and construction combined with general cheapness makes fencing an often more sensitive tool for understanding changes in spatial utility than might otherwise be lost.

As is generally well known, ultimately early planters under economic stress found it cheaper and less labor intensive to fence in their food (and market) crops and fence out domestic animals who ranged in marginal areas of huge acreage often in open range. In the last twenty years much attention has been focused on the importance of these ubiquitous archaeological finds (eg. Kelso and Most 1989, Noel Hume 1979, Patrick 1983). Although much work has addressed 18th eighteenth century fencing and landscape phenomena, this research provides a context for understanding the essentially late Medieval folk fencing displayed on earlier sites, many styles of which were still in use by the 19th century. Neiman (1981) was able to follow fencing during each of four occupational phases at the Cliffs Site spanning 1670 to 1730. Study of the Country's House Yards at Saint Maries City (Miller et al. 1986:25-34) through careful excavation and systematic spatial analysis has suggested that the yard can be plotted down to ten year intervals. In several of the periods the fences were static, so it is obvious that fencing is also sensitive not just to change but to status.

Salvage excavations at 44NB180 are regrettably largely reliant on carefully recorded and plotted surface information since full excavation of these finds was physically impossible. Selected tests were made whenever possible. Limited amounts of skilled labor, and a conscious policy planned in advance to excavate these sensitive features shortly before final overall and aerial photographs in lieu of acres of plastic was a project goal. This ideal
suffered because time deliberately allotted for excavation of these features was negatively affected by the discovery of the extremely important structures (4 and 6) late in the season. Despite these problems, continuous additions to the master plan recorded in feature number gaps throughout the text below has been an ultimately fruitful device, and firm contexts and intelligible interpretations where the plow has not been thoroughly destructive are possible.

Fence Network 1, Paling Ditch

The term paling ditch, ditch-set or slot fence all suggest fencing in which a trench or some depth is excavated and within it are set vertically erected wooden stakes, or "pales" which may have been anything from scrap riven or pit sawed wood, to split rails, or sharpened green saplings. The strength of the fence was in the close set line of continuous wood, exactly like a palisade line but usually on a smaller scale and with lower above ground height. Occasionally the fences were strengthened with woven wattles, deep set posts which anchored the fence often in damaged areas. In combination with heavier posts, at times presumed horizontal runners were nailed to the pales for lateral stability. It was then a short step to the ideal of more sophisticated post and rail fencing. Ditch set fencing relatively easy to construct and its informal nature lent itself to frontier utility where field clearing endeavors might be married to fence construction in practical and expedient ways requiring no more hardware than a shovel and an ax.

This discontinuous feature was noted to the north and northeast of the yard compound. The manifestations of the feature as it is understood imply heavy damage caused by plowing and erosion making the configuration of the feature discontinuous except along its eastern definition. The feature was originally set at a line corresponding to the east wall facade of the Phase 1 House running north. Two parallel definitions of the emergence of the ditch were noted here in Feature 6, and 8.

Of the two traces Feature 6 is exactly in line with the east facade of the Manor House, and emerges at 2.5' north of it. The feature was sampled by a 2' long exploratory cut in the center of its length, which was taken to subsoil. There, clear evidence of the various sizes of wood were noted some of which overlapped sideways. Mold size ran from 0.4 to 0.1' in diameter and
since often only the tapered tips have survived the plow the smaller sizes may be misleading. The ditch here has been reduced to a depth of 0.2 to 0.35' and mold tips penetrate beyond the limit of the trench for up to 0.2', indicating occasional maul pounding as an additional anchor. The molds of largest width were apparently selected for deep implantation through percussion. F#7A (mold) and 7-B ditch trace just to the north of F#6 demonstrates the break up of the ditch line as the feature progresses north. Most molds observed were asymmetrically truncated or cone shaped indicating cutting with an axe, hatchet, or hand bill. The molds were dark brown against the fill deposit consisting of redeposited light brown silt loam with minimal dark brown mottling. Kitchen midden and charcoal emanating from Structure 1 were found in the post molds indicating that they were pulled out at a later time.

Mold tips were not observed in Feature 8. This feature is, from center to center only 2' east of the southern emergence of F#7 and forks to the west by a foot to the north. The two features are which have identical fill are reminiscent in configuration to the "Y shaped" emergence of an informal and expedient bastion at the Clifts Site (Neiman 1981:72-76). Unfortunately the ditch staining in both F#6 and 8 have been truncated by years of plowing. An arc of molds spanning F#12,13,17 (tested), 18 (tested) and 16 suggest traces of the outer east rim of a bastion. But without the critical linkage of the construction ditch mold tips to the immediate north, northeast and northwest are so numerous that any patterning without full excavation would be purely arbitrary.

Feature 6 breaks off to the north into a series of molds without the ditch and after 7-A,B, and C its total distance of 7.5' is in question. A ruler placed along the actual line of the molds suggest that 14' to 16.5' to the north F#128 may represent a trace of the same manifestation. As the low order terrace climbs all evidence of even a suggestion of the ditch has been destroyed.

At 6' north of the northeast corner post of Structure 1 (F#54-A) evidence the discontinuous paling ditch line turns towards the grid east is suggested. Here, although the evidence is compromised once again by plowing F#117 at 10' due grid east of F#7, and F#270 at 23' from F#7 suggest that intrusive post holes and somewhat larger posts strengthening the length of the fence as periodic anchors (analogous in design to bay posts between hole-set
studs) were sunk into ditch excavations which link F#7 to F#166 at exactly 40' to the east. These isolated posts merge this section of Fence System 1 with portions of Fence System 2. Therefore the suggested link is probably through attempts to strengthen the paling ditch with hole-set posts and probably horizontal rails spanning them. Feature 154, is clearly intrusive to the western terminus of the major clear surviving manifestation of Fence System 1 called F#166-A to the immediate east. Superficially appearing as a large organically filled pit (because the post was pulled and the hole was deliberately backfilled) F#154-A, thus, provides a temporal separation of the two fence lines at a cross shaped intersection of portions Fence System 2's north to south oriented southern wing with the original east west span of Fence System 1.

Feature 166-A is a readily obvious section of the often illusive paling ditch's overall configuration. A ruler centered on its east to west progression spans F#270 and 117 towards the west. The continuation of this line suggests that portions of F#6 may have been shifted south to frame a path and gate, possibly spanning the gap between F#6 and F#8, since the southern limits of F#6 and F#6 are out of line to the south of the east to west orientation of F#166-A. This problem may alternatively be due to alterations for a bastion which as in the path interpretation demonstrates a linkup with the Manor House. Clearly due to plow damage the linkage between F#6 and F#166-A is problematic.

From the beginning of F#166-A, the east west line Fence 1 is relatively easy to follow without qualification. The ditch here averages about 1' wide and few molds beyond F#166-C were noted on the surface, presumably because the pales were later taken down. At 37' to the east the clear progression is lost to a gleyed organic stain (F#196-B) which appears amorphous throughout the immediate vicinity and has poorly defined boundaries which often denied definition. A gate may have been installed here, in which case the gleyed deposit represents a mud puddle sufficiently deep (to have survived the plow) to suggest the area doubled as a cattle path or hog wallow. Beyond the problematic gleyed area suggesting heavy and deep trafficking (and proving ultimately nothing); the only tentative merit a gate interpretation has is suggested by a dramatic 90 degree angle turn to the south and F#166-B. After a 4.5' gap where F#166-A arcs slightly south, F#166-B picks up again and continues as a readily recognizable paling ditch for 14' of a north to south
The stainteminarates at the southern balk of the test trench and was not observed in a carefully trowelled more southerly trench cut 24.5' to 30' to the south.

Except for the sample cut and surface of F#7, and the surface of F#6, both hypothetically a portion of the same fence system, no artifacts were observed in the trench fill surface exposure. F#7 contained a catfish spine, and two fragments of large bird bone. The undiagnostic midden debris noted in F#6, and 7 are almost certainly portions of the immediate hall/Manor House aerial kitchen midden, and are suspected to be early portions thereof.

The absence of surface midden deposits in any quantity at all in the exposed sections of F#166 argue that this was the earliest fence system installed at the site. No other surviving paling ditch traces were located on the site. Within the more generalized pattern of fencing on 17th century sites paling ditches or slot fences appear to be the predominant fencing technology. Notably at Wolstenholme Town (Noel Hume 1979), Nansemond Town (Luccketti n.d.) and most recently at 44HT55 (Edwards et al. 1989:92-6), they were thoroughly ubiquitous and most can be safely placed in the first quarter and second quarter of the 17th century. The primary substantial dwelling house at 44HT55 has "slot fences" that emerge directly from the corners of that structure in no less than two and possibly three places. Yet at the Clifts site ditch-set fences were most prevalent yard enclosures during the later occupations spanning the late 17th and into the first quarter of the 18th century (Neiman 1981:93). At the Clifts site the use of paling ditches may have coincided with field clearing activities.

The fence defined a broad generalized yard compound, fragments of which suggest an emphasis of, or an orientation to the east and anchored directly against the initial Phase 1 Manor House. Notably the barn complex expressed in Structures 2 and 3 is not included in what appears to be an initial simultaneous outer and inner yard definition. The problematic trace spanning F# 7 to F# 128 suggests the outer yard was thought of as being to the north from a hypothetical standpoint. The right angle of F# 166-B is an early expression of the current definition of the inner service yard, and probably contained an animal proof kitchen garden.
Fence System 2, Post and Rail Outer and Inner Yard

Some time before or directly after the construction of Structure 2 a post and rail fence was implanted which employed an obvious gate opposite the north gable of that structure. Portions of this fence line also intrude sections of the earlier paling ditch noted in F#154 and F#166-A above. The Fence 2 network demarcates an expansion of the size of the outer yard and shows an intensification of the definition of the inner yard through a southern wing. The fence is expressed in series of small post holes and molds representing former hole-set vertical and independent posts aligned east to west. The fence is 26.5' north of the northwest corner post of the Phase 1 Manor House, and 3.5' north of the north gable of the barn like Structure 2. Individual post holes and molds were numbered independently and include from the west terminus to the east, feature numbers: 129, 135, 138, 137, 144, 186, 184, 183, 180, 179, 202, 203, 268, 269, 89, 90, 88 and possibly 92.

Along the west end of the fence especially, and continuing along the east except to the east of F#202 the fill throughout the post holes was so dark that it was difficult to separate the holes from the molds. To the east where the low terrace rise begins to fall off gently - or certainly the plow zone hit deeper, molds 0.7' by 0.8' and ranging down to 0.45' were noted. Post mold configurations suggest that most molds demonstrated slightly squared configurations as though a side axe or adze was employed to informally prepare the wood, as these molds were most evident in or near gates and along the east side a bias may be reflected. Post hole size was small in comparison to mold size, and judging from the configuration of the holes i.e. typically straight sided with rounded corners - the holes were excavated with a long straight bladed or slightly lipped spade.

Post hole F#144 along the western side where darker more homogenous fill was noted was sectioned. Here it was observed that the post had been pulled out previous to infilling. Yet at the limit of excavation a triangular mold from split or axe cut former post was noted penetrating subsoil to 0.18' below the limit of the 0.8' post hole. Therefore it is obvious that at least the western section of the fence was torn down and when the posts were pulled out vertically heavily organic topsoil inundated the empty holes. If animals were present (on the north side), it is likely that the holes were manually backfilled. Further, the sample above suggests that many of the smaller molds
observed along the fence line against recognizable post hole fill are possibly near their terminus as the mold tips observed do not reflect actual post size but rather tapered axe reduction.

A large gate or former turn south in the fence line is tentatively suggested between F#s 180 and 202 where a substantial gap of 18.5 feet was observed. This gap defines the location were obviously pulled posts (including and to the west of F#180) span the line to the post holes with observable molds (including and to the east of F#202). A series of small molds 8' to the west of F#180, and beginning with F#179 and turning grid south to F#178 and 177 for a south distance of 4.5' are of uncertain utility, except in the case of F#179. F#179 is 10.5' from F#202 and as noted 8' from F#180 it may thus have been a mold employed to stop a double gate, or more likely a gate employed on one side only. The line expressed to the south of F#179 may be a former turn in the "pulled post mold line" emanating from the west which breaks up into patterns south of F#177 which cannot be interpreted, and which through speculation only can be construed to have linked these posts with F#165 and F#175 in a direct line further south, with a large number of post molds now largely plowed away.

Other less tentative suggestions of plow damaged fencing may be observed to the south of F#183 where a possible pulled and organically backfilled series of posts form a broken pattern paralleling with the southern central east wall of Fence 3 but never joining it as, the present fence almost certainly predated it. The surviving elements in this group may be observed in the informal line of molds from F#183 southward to F#152(squared) at 10' south, 154(intrusive to Fence 1) at 20' south, F#159(large pit with a squared configuration and a clipped northwest corner)at 25' south and forming a gate with F#154 5' to the north,191(large pit infilled with organic deposit) at 10' south of south gatepost 159, 193(clear post hole and mold) at 11' south of 191, 210(large squared hole with clear mold) at 10 south of F#193, and possible small gate post paired with F#212, F#212(clear hole fill and mold) at 3.5' south of F#210 a small gate post paired with F#210. This fence may turn west to incorporate F#257 and F#261 of the north gable of crude Structure 8. As can be observed on the master plan. The lower southern portions of the suggested fence system become more clear as they progress south just as the main Fence 2 system becomes more clear to the east. The implication is once again double and interesting. Apparently to the north of F#193 the fence was
dismantled and backfilled with a heavy topsoil fill as was the case in F#144 noted above. At the southern terminus clearly surviving molds and obvious molds predominate possibly because by the time the fence was torn down the bottoms of the posts had rotted to ground level, and once reduced by plowing and erosion intact and formerly silted in upper levels have been sheared away.

A second small gate may tentatively be suggested to have spanned F#144 and F#186 along the central western end of the fence line. Here two arcs of features possibly define a cattle proof "cattle guard". If the two larger pit features of F#138(untested) and F#145(tested) are dropped out of mental view, an arc of small post molds starting at the south with the squared mold of F#186 turns to the northeast spanning F#s; 187 (vaguely squared), 146(rounded) 143(rectangular), 139(squared) and 140(elliptical/oval). On the west side, south of sectioned F#144 an opposite improvement may be observed in F#142 (vaguely rectangular with rounded corners) and arcing to the northwest (beyond F#144) F#s 137(triangular) and F#136(squared). As may be noted above this interpretation relies on man made mold configurations and pattern recognition in part, and is therefore suspect - lacking full excavation.

The only totally obvious gate posts span F#89 and 90. The relationship to Structure 2 is also discussed as the reader may recall in that section. The gate represented appears to be oriented specifically for entry to the west side of the linear partition along the long wall facade of Structure 2, at a the north gable. Since F#90 is intrusive to F#91 an untested depression complimentary in orientation to the hypothetical entrance to the large linear pit of F#93 the gate probably was added after the construction of Structure 2. F#88 at 12' to the east of the east gate post(F#90-A) is the last confirmed section of Fence 2. Although F#92 is centered at 10' to the north of F#88 and would thus make a 90 degree turn in the fence to the north no post molds were located within the feature. The rectangular configuration of F#92 would be typical of a post hole that originally had a double mold to accommodate a link of two fences or make a turn in one.
Fence System 3, Post and Rail Inner Service Yard, Kitchen Garden, and Path to Well and Structure 6

Under this general heading a well defined fence line beginning to the immediate west of the northeast corner post of the Manor House and framing a 40' by 42' area to the east of the Phase 1 Manor House an enclosing about 1,680 square feet of yard is noted. The southwestern terminus of the fence stops before an intersection with the east wall facade of Structure 5 and from there the fence turns southeast to define a path to the well and cellar house improvements noted in Structure 6. Although the pattern of fencing here is backed by clear surviving evidence the fence appears to have certain variation within its definition, due to repairs, area specific adaptations and gates. In general the fence is a strongly evident homogenous unit.

The following features are portions of the "FS-3" (ie. Fencing System - 3) network as it is understood reading from the northeast corner post of the Manor House(F54-A) clockwise to the east, south, and west: F#s 54 -C, 1, 266, 267, 272 (disturbed), 190, 192, 208, 209 (?), 211, 213, 214, 214-B,216 (double post at southeast corner), 256, 217, 220 (northeast corner post Structure 7), F#221 (northwest corner post Structure 7), 222 (driven post), 223 (driven post), 224 (corner before oblique turn south) 227, and 226.

The feature can be directly tied into the last repairs to the northwest corner post of the Manor House (ca.1680+/-5) by virtue of the clue of a post mold (F#54-C) apparently representing a driven stake (or even a string line anchor) which was intrusive to the intrusive repair hole F#54. From that progression at exactly 2.0' center to center F#1 represents the west side of a 5' wide gate post paired with F#266. The gate provided entry from the Manor House (lobby entrance F#s 47-50) to the outer yard compound. Beyond the gate the next gap is 10' to F#267, at 11' a tree root system is dodged(?) thus extra 1', to F#272, and at another 10' the terminus of the north, east to west progression is achieved at F#190. Along the east wall the gaps become more informal possibly suggesting a temporary merge with the south wing of FS-2. The alternate posts between FS-2 and FS-3 may suggest a snake fence here, if so the informal nature of the whole is underscored. A small elliptical mold (F#209) has been inserted between F#s 208 and 211. The peculiar angular shape of F#211 at 4' to the south of this suggests an informal gate or repair probably existed here. A more obvious gate with less problematic posts spans
Fencing System #3 Exclusionary Inner Yard Definition
F214 and the corner post F216-A at a four foot gap. F216 had the characteristic double posts and angular "L shape" often observed configuration noted at corners of informal fences. A third mold in excess of "A and B" most probably originally occupied the northern lobe of the hole. A poorly ghost stain demonstrated that it had been pulled and silted in perhaps during prior gate repairs when the gate hinge was attached to the F216 side. F214 may have also been strengthened with a more shallowly set and possibly maul driven stake (F214-B) noted at 1' to the immediate north.

F214 was sectioned and had some oyster shell in the mold and hole. The mold was 0.45' wide and 0.5' deep with a slightly rounded bottom, and within the organic fill fish scales, typical of the Newman's Neck kitchen midden, and nails perhaps related to nail anchoring portions of the gate were collected.

Molds in the southeastern and southern portions of the fence appear to have been pulled out and are frequently choked with oyster shell. The kitchen midden is so strong to the immediate east Structure 5, that in sectioned F227 along the oblique three post southeast recurve at an approximate 70 degree angle in the fence the entire former mold gives the impression that someone literally rammed as many shells as possible into the empty mold. This of course is not true, what is suggested - is that a path lined in oyster shell led from Structure 1 and 5 directly to the well head and the bulkhead of Structure 6. The point of axis for the abrupt turn is F224 which is from mold center to center exactly 10' due grid west from the northeast corner post of Structure 5 (F98-A).

The feature may have had, in excess of posts and rails, a series of pales which may be noted at the direct intersection of the fence F54-C with Structure 1 and by traces of presumably maul driven stakes noted in F222 and 223. Feature 54-C is intrusive to the repair hole at the northeast corner post of Structure 1 as noted above and was sectioned at 0.3 wide and 0.9' deep with a tapering point. F223 was sectioned with a jaundiced eye and proved to be a mold with integrity at 0.3' wide and 0.25 deep. The configuration of the tip was tapered from axe or hatchet reduction and the point appears to have been blunted by the percussion of placement. These molds and perhaps F214-B were probably reinforcements to the fence line added later or at awkward joins such as linkage to a clapboard wall (F54-C).
This fencing system partially replaced sections of the earlier Fencing System 2 especially along the east and north where the two progressions are relatively parallel. Although the two systems may have remained parallel it is altogether unlikely that this situation lasted long. Possibly portions of the F-2 system were cannibalized for completion of F-3. Clear evidence that the new definition of the inner yard expressed in F-3 superceded F-2 is apparent in pulled post molds of the F-2 system in areas directly parallel to F-3. For instance the post mold just to the south of the northeast corner post of F-3 where the east to west progression turns south F-2 post F#191 has been pulled and backfilled with topsoil. The fact that substantial portions of the expression of F-2 were also pulled to the north lends weight to parallel sections.

Further the F-3 system appears later since it appears to be more sensitive to improvements in the form of structural additions noted in Structure 5 and 6 to the south suggested to have been added to the plantation around ca. 1680. Indeed, the probable impetus of the new definition of the inner yard so clearly and specifically aligned with the Manor House was the introduction of large numbers of servants to the plantation. As only one possible poorly defined feature in the area defined to the east of the Manor House within the fence was noted after thorough inspection the subsurface culturally barren quality recommends that the area was reserved as a kitchen garden apparently throughout all phases of occupation.

Post and Wattle Enclosure, F# 271- A to 271-T

A small post and wattle wall was observed 35' due grid north of the north gable of Structure 1. Only the southern, eastern and traces of the western walls of the enclosure survived below the plowzone. The individual molds which displayed circular, oval, squared and elliptical configurations were clearly implanted during the historic occupation of the site. The enclosure was approximately 14' wide grid northwest to southeast, by at least 14' long. Mold of squared shape and elliptical shape noted in A and B along the northeast terminus were selected for excavation. A was 0.4' wide and only 0.25 deep with a flat bottom, B an apparent section of quartered scrap wood 0.35 wide, and of elliptical form tapered to an abrupt point at 0.45 below grade. The utility of the small enclosure is uncertain. A refuse pit (F#61) is set off to the southwest side of its path, and it is not certain if the
features are contemporaneous, it is obviously likely that they are not. The structure may have enclosed smaller animals such as chickens or geese probably in temporary quarters. However it is also possible that the wattle line was intended to keep animals out as the wattle line enclosed F#61 noted below under "Pit Features". In brief F#61 is of unclear utility but may have been a free standing root cellar, or borrow pit. The wattle line if contemporaneous would encourage the former identification of F#61.
Pit Features

"Pit features" as the unsatisfying term is used here defines a series of often somewhat problematic subsurface features whose contents may have nothing to do with the original installation of the "pit". Pit features were recorded especially to the north and northeast of the Manor House demonstrating that this area was deemed an appropriate disposal area and generalized activity area. Several of these features were sampled during the early and late excavations from an exploratory perspective since in many cases no particular quantities of artifacts were noted on the surface, yet they were infilled with dark brown to almost black organic fill displaying no post mold or hole fill separation. Fruther, all or major portions of the boundaries of the features were well defined unlike obvious tree and rodent disturbances.

The surface manifestations of the smaller ones resembled known backfilled post holes from obsolete fencing improvements. With regards to this, site midden and quantities of heavily organic fill were redeposited into many widened post molds indicating kitchen refuse deposited as a generalized sheet midden in the same area, in excess of pits excavated specifically for refuse disposal. Pits of medium to small size at about 1.5' to 2.5' in diameter and not known to be portions of obsolete fencing as was the case of pulled post F#144 often remained problematic even after testing because only a minimum of artifacts were obtained indicating that these may have been one of several of several forms of behavior including; (1) small borrow pits for clay or fill dirt needed elsewhere, (2) planting features pertaining to garden improvements, or (3) pits meant to dispose of undesirable organic substances. Hypothetically the latter may include one or more of the following behavioral activities including disposal of; gutted fish or animal ventrals not offered to carnivorous or omniverous pets or hogs who were at large in bottom lands, objectionably smelly or rotted foodstuffs (not fit even for animals and perhaps for this reason deliberately kept away from them) or other more undesirable organic refuse including fecal matter for some reason not relegated to stored manure heaps for later use as fertilizer.
**F#61: Refuse Pit**

Feature 61 was located to the north of the Manor House at 42' north of the the king post F#55, in grid unit (20' by 20') 200N/190W. The direct northerly orientation suggested that this feature and F#62 and 63 were portions of a major activity area. Excavation revealed that F#62 was of questionable origin but that F# 63 was a small borrow pit. The primary feature in the group was F#61 had surface deposits suggesting that a refuse pit or free standing hold or root cellar had been located. Accordingly it was quartered and when substantiated, the quarter was turned into a bisection. The feature was 6.5' by 4.5' wide with a poorly defined northern boundary. Excavation revealed a total depth of 1.45' and four fill episodes. The primary deposit consisted of a dish shaped dark organic lense filled with oyster shell and fragments of large animal bone called "A". The deposit is situated over layer of diminished artifacts called "B" with increase tan silt loam with charcoal and some mottling of brown loam. The total depth of the primary deposit was variant from 0.5 to 1.05' deep. The "A" fill contained white salt-glazed stoneware, Staffordshire slipped and combed earthenware, straight pins, and other domestic debris suggesting a post ca.1725 domestic and kitchen refuse disposal episode. Fill below the dish shaped organic deposit had charcoal and disrupted geological soils. The pit may have originally been a larger borrow pit as the secondary deposit limits of excavation are greatly in excess of the primary refuse deposit, indicating that the pit was partially infilled when the refuse deposit was added. However, as noted above if the feature was contemporaneous with F#271 then it is also possible that the feature represents a free standing root cellar or hold. An opportunistic leap from borrow pit to root cellar seems possible. The later trash dump may indicate the feature had fallen into disuse by the end of the first quarter of the eighteenth century.

**Feature 63: Borrow Pit(?)**

Six feet northeast of F#61 in grid unit 190N/180W a second smaller problematic pit was tested. The feature was open with the suggestion that a large post hole from a relatively substantial structure had been located. Centered organic fill noted on the surface was surrounded by a fill deposit including redeposited and organically mottled subsoil. The feature was 2.3' wide by 2.4' and was of vaguely squared configuration as if excavated with a
flat bitted shovel. The depth was 0.8' with a relatively flat bottom disturbed to the northeast by a small later tree stain. The feature contained only two nails and a 6/64ths" pipe stem. The feature, thus was probably a small borrow or organic refuse pit dating roughly from the same time period as F#61.

Feature 145

Feature 145 was a dark organic stain 2.3' in diameter in grid unit 180N/160W. The feature had no observable mold and an uneven bottom as if it were excavated casually from west to east. The pit was 0.65 deep' on the east side and 0.4' on the east. A 50% screened sample revealed only a small number of artifacts including 1 oyster shell, two pipe bowl fragments (white ball clay), three brick crumbs, four large animal bone fragments, and five nail fragments. Other unwanted organic debris may have been deposited with this fill.

Feature 182: Immature Bobcat (*Lynx rufus*) Burial

Surface bone exposed by grading in grid unit 170N/150W, led to an excavation of a small organic pit thought to contain good faunal evidence of kitchen midden. The surface or the pit displayed a rounded configuration at 1.0' in diameter. The pit contained a fully articulated immature Bobcat (personal communication Anthony Opperman). The orientation of the skeleton suggests that the person discarding the corpse arranged the corpse in a circular position so that the lower appendages were opposite the cranium and the spinal column was bowed back to correspond with the curvature of the pit at the limit of historic excavation. The bones were in poor condition as the animal as indicated was immature. The discarded animal was a victim of trapping or a failed pet. The former interpretation would, of course, suggest that the animal was skinned and the carcass - as not eaten was discarded to prevent fouling the air. As a pet, bobcats are notoriously poor choices which of course was an attribute perhaps initially lost on some colonist with an experimental attitude and a big heart.
Depressions

Under this broad heading are included known cultural manifestations and problematic staining in excess of geological strata, and tree falls or other natural phenomena. In many instances the project was unable to sample the contents of the noted and numbered surface manifestations as intrusive to subsoil. Therefore much of what is described below is tentatively interpreted, with an eye to describe the full measure of the contents of the site.

Feature 57, 57-A

This feature was noted to the immediate east of the massive and frequently rebuilt door trench (F’s 47 to 50) on the central east wall facade of Structure 1, the Manor House. The stain consists of a large arc of redeposited geological strata 6.3’ grid east to west to the east limits of F 49 and 8.9’ grid north to south. The whole unit has many of the superficial attributes of a massive tree fall. Yet concentrations of charcoal and bright red brick, daub, or natural clay were noted. All of these attributes are possible in a tree fall if for instance there is a forest fire or field clearing fire. The feature may however have a tentative association with an exterior porch similar to exterior porch entry features noted opposite lobby entrances of some seventeenth century vernacular houses. The “feature” was drawn and photographed, but has been removed from plan drawings of the manor house as the questionable feature was not clearly cultural and therefore not tested with subsurface examination.

Feature 251: Probable Footprint of Former Dairy

Located 5’ to 12.5’ north of the northern surface boundary Feature 247 (Cellar House) was a 15.3’ east to west by 8.5’ amorphous stain consisting of extremely well compacted light to medium grey brown silt loam replete with artifacts. Random brickbats, concentrations of brick rubble, charcoal, and ashy deposits, and areas of heavy clay mottling were noted especially on the west side of the feature. Attempts to define the feature were not successful except in terms of depth in the center. The outer edges contracted from the time of the surface drawing to sample completion. The feature was drawn as intrusive to sterile subsoil and the surface artifacts were collected. A formal bisection line was installed dividing the feature on its north south
Plan of F#251 Before Excavation

Probable remnant Early Dairy
axis. The bisection indicated that the feature dissipated at 0.2' to 0.35' below surface grade. A silted in depression or drain or small ravine emmanates from the southeast corner of the larger central stain and progresses to a merge with the northern boundary of Structure 6 the Cellar House(F# 247).

Artifacts contained within the fill include 12 sherds of North Devon Plain earthenware butter pot fragments, a boar's tusk, oyster shell, various pipe bowl fragments, and other miscellaneous finds.

When the total evidence is weighed, in all, it is obvious that the depression suggests that a dairy or smoke house occupied this heavily damaged location as the terrace slopes tp the south. The evidence is of course contradictory as to which of the two is suggested. In both cases a subsurface excavation of varient depths would have been employed for virtually opposite functions. A shallow lined fire pit for the smoke house as suggested by the unsatisfying evidence of a boar tusk, charcoal concentrations, brick rubble and brickbats could be invoked but the size of the depression is beyond the scope of a smoke house. A small dairy would include an excavated depression to house a probable brick floor in a wall to wall lining and the evidence of the butter pot would go along with this interpretation. The upper portions of both structures would have been made of flammable wood. The shear size of the depression strongly suggests that a small dairy occupied the spot. In the evolution of the yard compound it is perhaps significantly just 4' north of the Cellar House which probably out moded it sometime during ca. 1675 to 1690.

Feature 265-A and B

This feature if it can be called such is located within 20' by 20' grid units 120N/150W and 120W/130W. The linear feature consists of grey to light brown well compacted fill silt loam, which emerges from the southeast corner posts of Fencing System 3 as noted in F# 216. The varient trench like stain begins at the intersection with this feature and continues for a distance of 18.5 feet to the southeast with an irregular width averging around 1.5'. At the terminus of this progression a bar of 10' extends to the northeast. The sectioned depth of the feature was 0.1 to 0.3'. The stain appears to be the botton of a drainage ditch oriented towards directing water away from the fenceline, F#251, and Structure 6. Cultural attribution is made with caution
as no artifacts were recovered, and the stain although readily isolated from the sterile subsoil present may be an eccentric turn of an natural A2 soil strata.

Features 196 and 197

These features noted at the corner of Fencing System 1 where the east west orientation of F#166-A turns to the south and becomes F#166-B. The stains in detail consists of heavily gleyed dark brown organic soil mixed in a grey to light brown silt loam. The ingredients that make up the matrix appear throughly integrated although swirled lines of fine silt were also present. Troweling to define limits for drawing was difficult although this activity demonstrated that the deposit was clearly not related to a tree fall or any geological strata observed elsewhere at the site. The totality of the deposits are disconnected concentrations which intrude and destroy the remnant of the corner of the paling ditch here as though large animals trafficed here. Although no formal ped analysis could be undertaken due to time constraints it is likely that a series of deep mud puddles, a small pond or hog wallow of minor depth may have occupied this area after the demise of the paling ditch. This tentative assertion may have influenced an option to switch from the paling fence of Fence System 1 to the more stable post and rail fence of Fence System 2 noted only 17' to the north and enclosing Structure 2 a suggested cattle/dairy barn.
Summary Discussion

In the section above the principle data obtained from excavations at 44NB180 was inventoried and reviewed with an interpretative bias in order to provide a readable narrative of otherwise isolated and encyclopedic information. In each section the critical information pertinent to identifying the form and function of the remains was presented in a thematic discussion addressing the age of the remains and their relationship to other functional units. The following discussion attempts to provide both a summary of the data and inferences of patterned behavior providing a temporal framework for the evolution of the plantation complex as a functioning whole. The reader should note that the following discussion cannot be placed in a proper context with the historical record, because, at this writing, the sum total of historical information at the disposal of the author consists of a xerox of the Robert Newman will of 1655(7) supplied by Carolyn Jett of the Northumberland County Historical Society, an unreferenced extracted flier of one Mrs. A. F. Keach of Wichita, Kansas supplied by Martha McCartney, and other personal communications from McCartney. Therefore, the following discussion will rely almost totally on the archaeological manifestations of the historic site.

Notes on the Artifact Assemblage

A total of 15,909 artifacts were collected between April and November of 1989 from both surface and subsurface deposits at 44NB180. This total does not include important surface collections made by Steve Potter and his crew on May 17, 1978, and Steve Potter and Henry Miller primarily on April 11, 1987, as the cataloguing of these materials has not been funded. The existing catalogue has been itemized on a low scale of ceramic ware identification pending further research. The ceramic assemblage is small, and was obtained primarily from four features, notably: F#-4 and F# 112, subsurface deposits within the Structure 1 Manor House; F# 247, fill deposits within the Cellar House of Structure 6; and F# 248-A, fill deposits within the partially tested well. Each of these contexts is comprised of secondary deposits of site midden and generalized destruction debris which contain artifacts spanning the occupation of the site, or from ca. 1650 to ca. 1740 ±10.
The terminus post quem for the site is somewhat problematic since the site was subject to low order activity after the primary occupation. The ceramic collections are dominated by utilitarian coarse hollow wares including North Devon plain and gravel tempered wares indicative of the period ca. 1650-1775; some suggested Morgan Jones wares indicative of ca. 1661-1680 (Miller 1983:100); and redwares often with black lead glazes. Rhenish brown stonewares of the "Bellarmine" type were utilized between ca. 1650 and 1700 as beverage containers at the site. British brown salt-glazed stoneware mugs from the Fulham are noted at the site and became popular after 1690. An increase after ca. 1705 in the use of refined wares for drinking vessels as noted by Neiman (1980:38) at the Cliffs Site appears to be in effect at 44NB180, although it is not possible to be emphatic about when within the production span of each diagnostic ware this took place. Fragments of a Westerwald sprig molded and blue and manganese decorated salt-glazed stoneware drinking jug silted into the root cellar of F#4 was purchased some time after ca.1650-60. Staffordshire combed slipwares noted in the collections became popular after ca. 1670. Fragments of a once magnificent North Devon Sgraffito slipware charger obtained in the upper well shaft of F# 248-A indicate purchase after 1650 and before 1710 (Noel Hume 1970:104-5). Blue and white tin-enamedeled earthenware obtained at the site and other painted "Delft" wares are not informative for dating.

The colono ware recovered from F# 247 is of little use in dating the site, since we know only that this ware may have begun to be manufactured locally ca. 1675. Shell tempered, plain surfaced Native American ceramics have been radiocarbon dated to ca. A.D. 1510-1690 in Northumberland and Westmoreland Counties (Egloff and Potter 1982:113-114; Potter 1982:123). Colono ware was recovered from 44NB180 in only low frequencies. The ware is built with coils and has a paste most similar to that familiar in colono pipes with a well reduced shell temper and a slightly sandy paste. One sherd may have been embellished with banded, painted decoration on the outer edge of the upper surface of the rim. The band has a sharp edge, is of consistent width, and can be distinguished from a blackened carbonized encrustation noted on the lower edge of the lip (Mary Ellen N. Hodges, personal communication).

Reviewing the most informative, diagnostic ceramics indicates that 44NB180 was abandoned during a period of the rising popularity of slip dipped white salt-glazed stonewares (1715+) or white salt-glazed stonewares (1720+)
Jackfield was rarely represented in the collection indicating a 1740+ occupation. These late dates are supported by 48, 5/64ths" white ball clay pipe stems bore diameters and 25, 4/64ths" stems.

Examination of the bore diameters of pipe stems (Harrington 1954:9-13) recovered from 44NB180 also provides some clues for dating the site as well as for assessing changes in the amount of activity at the site through time. The relative frequency of six sizes of pipe bores ranging from 4/64" to 9/64" in diameter is shown in Figure 2. The pipe stem collection is small (only 389 total) and subject to error as Noel Hume (1976:299-302) has warned, yet the collection is all that is present to work with after the mind numbing screening of several tons of fill. The histogram in Figure 2, which includes all pipe stems recovered at 44NB180, nearly forms a classic bell-shaped curve and suggests the peak of activity at the site occurred between 1650 and 1680. This period includes the date of Robert Newman's arrival in Northumberland County and extends into the time when historical research indicates English servant immigration was beginning to wain and (after 1680) Afro-American slave labor was being imported by the wealthier landowners. Thus, developments at site 44NB180 are highly pertinent to understanding the evolution of Chesapeake culture at this time--a topic which has been a focus of recent research. The results of excavation suggest a decline in activity at 44NB180 after ca. 1680. Kulikoff has characterized the period after 1680 as one of great decline in the dominance of small planters whose economic base had collapsed due largely to a serious fall in tobacco prices and an increase in labor costs (1986:37-44). Increasingly, the economic opportunities of former white servants also met with stagnation in social mobility, a factor which is credited with contributing to Bacon's Rebellion of 1676.

McCartney (personal communication) has suggested that at Newmans Neck the plantation was not discontinued after Newman's death, but instead was handled under tenancy possibly with absentee landowners who had one or more primary holdings. Refined luxury wares, glass drinking vessels, and other status indicators spanning the occupation, as well as plastered walls and glass windows added to the Manor House after 1657 and sustained building momentum for a time suggests that high status individuals continued to live at 44NB180. Therefore, it is likely that Daniel Holland and other later owners may have chosen the plantation as their principle seat, or alternatively, that yeoman tenants at least until ca.1680 to 1710 could maintain a suggested high
Histogram of Pipe Stem Bore Diameters

44N8188 (N=389)
Struct #1: Manor House  ■ = 1 Measurable Hole

Construction Phase: 7/64s (1) 5/64s (1)  total (2) 4/64 7/64 (1) 7

Repair Corner Posts: intrusive post holes Phase 1-8 or 2 8/64 7/64 (2) (3) total (5)

Construction by Post & Fill - all posts 100% sample 9/64s 8/64 7/64 7/64 total (8)

Add more posts (intrusive post hole fill) 3/64 + 1/16s total (1)

Construction of West Addition 4/64s total (1)

Destruction by pits F4 Root Cellar (Phase 1-2A hearth?) Hearth / Root Cellar 100% sample

8/64ths (2) 7/64ths (10) 6/64ths (9)  total (23)

#112 Hearth (Root Cellar?)

8/64ths (1) 7/64 (2) 5/64s (2) total (5)
standard of living perhaps through a reciprocal, but often unequal, and highly localized credit network with the newly evolving social elite gentry (Kulikoff 1986:261-313). As Robert Newman's 1655(7) will suggests, the pattern of reciprocal credit in terms of cattle, and later in terms of his entire holdings at his death did not work in his favor. The same pattern of economic failure or stagnation was probably a continued problem throughout the site occupancy based on general historical documentation.

Evolution of the Plantation Complex

Several distinct phases in the evolution of the plantation complex at 44NB180 have been tentatively identified. A discussion of these phases completes the summary of findings at 44NB180.

Phase 1: ca. 1651-1657 +3

Based on a comparison of a number of classes of archaeological data, including building forms, fencing enclosures, and artifacts, it is possible to isolate physical evidence of the preliminary stages of the evolution of the plantation hypothetically associated with the tenure of Robert and Elizabeth Newman. Three structures at the site were comprised of massive post holes--features which imply percentages of errors anticipated in coupling of frame components and constitute archaeological evidence of tie-beam pairs constructed in reverse assembly. These are Structure 1, including perhaps only the Phase 1-A 20' by 20' or Phase 1-B 20' by 40' core of the Manor House; Structure 2, a cattle barn/dairy complex or otherwise multipurpose barn; and Structure 5, a large servants quarter and work or store house. Of these three structures, two significantly have evidence of either substantial repairs or 8/64ths pipe stems in their post holes suggesting early construction dates: the Structure 1 Manor House and the Structure 2 multi-purpose barn. From a hypothetical standpoint, the common trait shared by these two structures besides construction techniques and meager but early construction dating evidence is that both structures served multi-functional uses. Multi-functional use, it is argued, was the only option available to Robert Newman during his brief tenure on the holding. Newman died heavily in debt and it seems reasonable to apply the practical constraint of lack of funds in a frontier model to
Phase 1 Tenure of Robert and Elizabeth Newman ca. 1651 - 1657
buildings which were thereby cheap, expedient, and therefore "make shift" building compromises applied directly to that which was in immediate need only. An equally cheap and expedient tobacco barn may be beyond the limits of excavation to the north, if it has not been confused with the barn of Structure 2 which is highly atypical of known examples.

In its original form, the Manor House may have been a two bay single cell house with a Welsh chimney at the south gable end. The south end of the house also probably contained a partition for pantries and there is evidence of posts supporting a shallow staircase for entry to the half story sleeping loft. This unit functioned theoretically as the evolutionary core of the house before the southern two bays were added. Post holes which may have framed the Welsh chimney are not synthetic with the addition of the southern two bays as they are framed at the Hallowes Site (Buchanan and Heite 1971). Further, an unpaired door post (F#52-A) was added for entry on the east wall facade and the door was attached to a substantial post on its hinge side only as suggested by the model of the form of the Woodward Jones House (Carson 1986:54). A door on the north gable may also have been present.

The single post above (F#52-A) may form an atypical inner room, but the lack of pairing argues otherwise. The evidence of this structural form is admittedly not emphatic or uncontroversial, and is based in part on the same data which conservatively may be muddled by the author almost perversely with improvements more properly associated in the Phase 1-B form. The evidence begs further examination by an architectural historian. The arguments for the Phase 1-A rely on an evolutionary organic growth model suggesting architectural modification inspired more by need than other factors (Deetz 1977:99). Through identification of the hall and errant posts and bay joins and not from perspectives reviewed in Shurtleff's, The Log Cabin Myth: A Study of the Early Dwellings of the English Colonists in North America.

In the Phase 1-B interpretive model, the idea that the house started as a four bay unit 40' long was considered. The author deliberately used the same identifying arabic numeral for noting growth stages of the house. The floor plan may be interpreted as being similar to the Mathews Manor House with F#4 used initially as an early hearth location and with the post molds framing the 4' by 20' to its immediate south the definition of a cross passage. Phase 1-B suggests that the F#60 centered hearth was integral to the core of
the house and that an "H shaped" spanned by posts Fs 36-A, 37-A, 48-A, and 49-A are the definition of lobby entry blocked by the chimney cheeks as the Hallowes site undoubtedly employed (Buchanan and Heite 1971). The architecture was discussed in detail in an attempt to establish a measure of social dimensions not recorded elsewhere which demonstrate in other studies a pattern of shared social bonding of Robert Newman and his servants through common use of the hall (Neiman 1978).

Early fencing noted in the paling ditch of "Fencing System 1" (Fs 7 and 166) and hypothetically associated thus with the Newman tenure was identified by several means. Although hampered by the only limited testing which was conducted, through processes of elimination the temporal assertion seems almost certain for this expedient component. The fence emerged from the northeast corner of the Manor House and proceeded for an undetermined length beyond 8'(Fs6) to 24'(Fs128?). The east to west portions of the fence defined a broad inner yard, for which only clear evidence of the northeast corner exists. Barring losses due to plowing and erosion, the surviving evidence indicates an inner yard probably housing a kitchen garden about 80' east to west and of unknown distance north to south. Other fencing which parallels the traces of the east to west manifestations of the system, and lost post molds within the well defined eastern sections strongly suggest the paling ditch was physically removed during the occupation of the site and yet only in the immediate vicinity of the house was kitchen and household midden incorporated into the fill of recognizable and tested inner molds, in a discrete yet partially destroyed pattern. Many questions remain unanswered about the linkage between the eastern and western manifestations of this spatial network. An important intrusive hole (Fs154) from later enclosures provided a temporal separation. Decreased artifact frequency ranging down to virtually zero artifacts collected from surface inspection of the well-defined eastern sections of Fs 166's 51' span argues that no significant site midden was present when the fence was removed and infilled.

To the south central portions of the site, Structure 8 a small, roughly constructed outbuilding of unknown function, probably was added to the small inventory of buildings also during this occupational phase. The curious arrangement of post holes and small size of the structure suggests that it may have held small livestock. The rectangular form is reminiscent of an animal stall. Perhaps the unit confined a precious breed sow.
The artifact remains of the Phase I assemblage are isolated from the other collections only with great difficulty since most of the artifacts were collected from deposits made associated with the total abandonment of the site and destruction debris. Hypothetically, Phase I materials are dominated by coarse earthenwares and Frechen stonewares of which the majority or around 50% are associated with dairying or food and beverage storage activity (Deetz 1972:26, Brown:55). None were associated with food preparation except through indirect means as, for example, a North Devon Gravel tempered milk pan. A purview of the Robert Newman will written in 1655 and executed in 1657 is highly informative on the bias of the collections. The following items of essential interest to material studies of the site were listed:

1 old chest...1 cupboard & Couch
2 old dubletts & 1 Towell
2 Gunns ___?
4 broken battered pewter Dishes
1 old broken Pewter candlestick
1 iron Pott with a Baylor
2 broken Iron Potts & Pott hookes (,) 1 old
iron skillet Iron Skillett, & 1 old frying Pan
1 old Fryiron, 1 p(air) of Pincers(,) 1 old
cotterells(,) 4 old hooks
1 old broken brasse mortar
2 Iron Pestles & 1 Cutting Knife
4 milk treys ______?, 4 latten (?) pans
1 haire ? ter
2 old splitt (??)reys (,) 3 Payles & 1 old Couto(?)
Sheare & Coulter
Bramble Save $ a Sithe(,) 2 old hoes
2 old Axes & 1 old Trowell
1 Adds
1 old (??)ord Bed(,) 2 old Pillowes and 1 greene Rugge
1 Earthen Dish & Porringer & Salt
1 Smoothening Iron a(nd) a fishing line
with 2 fish hooks
a peck of beades in a Tub
a lame diseased(?) maidfern having one yeare & 1/2 to ___?
1 black Sterre & red bull Stagg
2 black Steeres
2 young Steeres
1 young browne Heyfer
1 Cove named Cherry
1 Cove named Cloudie & her Calfe
1 Steer & a Bull at Wirocomoco
The Plantation & all such Land as M Newman did not dispose of in his lifetime
a Bull att Cherry-poite 2 years old
a _____ of hogs in the woods belonging to the estate
a _ of Stilliards & 4 wedges
1 Old Coper Caldron
After Newman's estate was inventoried it was assessed at 12,494 pounds of tobacco, while he owed bills to his creditors amounting to 19,330 pounds of tobacco. His crop and 7 hogs for 1655 were deducted at an estimated value of 2,864 pounds of tobacco. In 1657 when Robert died Mrs. Newman was allowed "The Bed Curtaines & (?) Wallons, 1 greene Rugge and ye wearing apparel belonging to Mrs. Newman," as these items were not appraised against the final tally of 1657 for her benefit. Her fate as a widow of old age was sympathetic, yet ultimately pathetic, as her age and the debts of her former husband made her unmarrigeable and with little more than sustaining social connections and the clothes on her back and a few decorative trifles of sentimental value.

Robert Newman not only died in debt, but his cattle were evaluated at 450 pounds more than the remainder of his entire estate. Only his heifers "Cherry and Cloudle" were given proper names on the list of animals, so surely they were household milk cows. The historical record of valuable cattle, bulls loaned out to stud, and of precious milk cows is important in terms of identifying functional use of buildings. Milk pan fragments were found in the large 8' by 20' subsurface pit (F#93) in Structure 2. While problematic, the Structure 2 barn-like building probably housed hay, contained a storage cellar, and contained other items such as milk cows which would not be allowed free range by any yeoman Englishman. Newman's household inventory was dominated by iron, copper, and pewter, and not fragile pottery vessels. The archaeological assemblage of 15,909 artifacts contains only a few possible items noted on this list, and then only if retained on the estate. If the "earthen dish" listed in the inventory was recovered it can be suggested that it was North Devon gravel tempered earthenware. The ware is ubiquitous throughout the site, but without study of vessel form is not informative for temporal separation as it was marketed from 1650 to 1775 (Noel Hume 1978:133). A bone butcher knife handle collected in the Manor House root cellar of F#4 may have once gone to a "Cutting knife" and in the same feature "1 Smoothening Iron" was obtained alongside of it. Two beads obtained also from F#4 may have well come from "a ____ of beads in a tub." It is instructive that if Newman's possessions have been identified, they were recovered from the social nucleus of the estate the multi-functional hall of the Manor House. It must be noted that the former items were potentially owned by later occupants as portions of a normal household kit, as few of the items are terribly diagnostic.
Phase 2: ca. 1657-1667

This hypothetical phase of the development of the plantation is on more tenuous grounds than Phase 1 or 3, for it is easier to recognize the earliest and latest activities of a site from an evolutionary perspective. The development of Phase 2 was inspired as an argument based on the historical record and the evidence of organic building episodes and repair patterns noted on several earthfast structures, and obvious changes in the definition of yard space.

When Daniel Holland obtained the heart of the Newman frontier settlement in 1657 historical information known to the author is truncated. Through archaeological evidence it is suggested that he or immediately subsequent landowners modified the yard compound to enclose Structure 2 with a post and rail fence. The paling ditch of Fencing System 1 was possibly briefly repaired (F#117 and F#270) and eventually torn down. The new fence, designated Fencing System 2, expanded and sub-divided the yard compound into an inner and larger outer yard, perhaps reflecting the addition of an increased number of indentured servants. The inner yard was again tied directly to the Manor House again from the northeast corner, but at 40' to the east of its east to west progression it turns south. At F# 154, the northeastern corner, it turns to the south for another 40' to F# 212. From here the fence turns at a right angle to the east and merges with the north gable of Structure 8, a rather rude-looking outbuilding. From there the fence is lost, but before significant plowing and erosion it may have merged with the shed addition of newly constructed Structure 3.

During Phase 2 Structure 3, a building having no dating evidence except in relation to Structure 2, was a 20' by 20' two bay byre attached informally to the rear of and out of square with Structure 2. Both structures formed an organic pattern of growth deliberately expanded on a north to south axis with only a 4' wide gap between the south gable of Structure 2 and the north gable of Structure 3. The resulting building line created a ramshackle-looking building line 52' long and looked a little like a rail road accident as Structure 3 was 8 degree out of square to the east of complimentary walling on Structure 2. By this time Structure 2 was in need of repairs. An outer yard post-and-rail fence spanned the north gable entrance of Structure 2 at 3' distant and a gate was added. The gate allowed entry to Structure 2 on the
Phase 2 Tenure of Daniel Holland per ownership
ca. 1657 - 1667

[Diagram of Phase 2 Tenure with various buildings and labels marked.
western side as the large pit feature F#93 occupied the eastern longitudinal portion of the structure perhaps as a dairy, storage cellar, or tanning pit. From the gate the post-and-rail fence extends 130' east to west and terminates into a balk at 27' north of the Manor House (F#129). A small work area may be defined by the post mold to the north of F#154 and to F#183.

Paralleling the expansion of the Structure 2 to 3 north to south building manifestations on the eastern half of the site, Structure 5 was added to the immediate south of Structure 1. Again, the buildings were out of square, but this time by only 3 or 4 degrees. The gap between the southern gable of the now unquestionable "Phase 1-B" 20' by 40' 4 bay Manor House is about 8' to the north gable of Structure 5. The new building consisted of four unequal bays (ranging between 6.7' and 7.3' per gap) paired north to south making a odd looking structure 21.5' east to west by 21.7' north to south. As the building was equipped with a probable firebox (F#s 103-A and 104-A).

Structure 5 was probably a reflection of an increased number of indentured servants entering the plantation and a manifested desire, within the Manor House, for privacy for the immediate members of the owners family and guests (Neiman 1978,1981). Structure 5 probably doubled as a work house on the ground floor and maintained a barracks or dormitory like sleeping quarters on the upstairs half story loft level.

The evolution of the northern Manor House to an immediately southern and poorly aligned Servants quarter, and the Structure 2 Barn and immediately southern and poorly aligned byre or ancillary work area structure is a striking example of bilateral symmetry and organic growth reflecting immediate needs responded to without a whole lot of planning. The initial expedient structures thrown up by Newman divided and grew almost as if by cell mitosis. One cell was social and domestic, the other was technological and agricultural. Both were service-related. Yet wisdom is exposed in the alignments, since wind from the northerly Potomac would be dissipated by alignment at right angles to the river. With the north gables turned towards the river, Structures 3 and 5 would derive additional protection from Structures 1 and 2 since they were tucked close. Another peculiar similarity between Structures 3 and 5 was that both were square at about 21' by 21' and 20' by 20'.

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Histogram of Pipe Stem Bore Diameters
Well, FB 248-A (sample only, N=23)
A strong difference in building technique between the two structures is indicated. Based on preliminary examination, Structure 3 was erected in standard assembly in carefully prepared small holes. Structure 5 was almost certainly erected in a manner similar to Structure 1 and 2, i.e. in reverse assembly. In the case of Structure 3, one is given the impression the more careful building may have been in anticipation of replacing Structure 2, while in the case of Structure 5, one is given the sense of reaction to pure need. If Structure 5 marked the advent of more servants added to the plantation, then logically this structure predates Structure 3 within the Phase 2 hypothetical scenario of outright organic growth. No diagnostic artifacts were found in the post holes of either Structure 3 or 5. Molds in Structure 5 contained kitchen midden and such items as straight pins indicating domestic use.

Three other structures were probably also constructed during this phase of development: the well (F#248-A); Structures 7, a possible store or smoke house; and F# 251, the remnant of a probable dairy. The pipe stem histogram for the well exhibits two peaks (Figure ). By far the highest peak is for 7/64" bore diameters which were popular ca. 1650-1680. Another peak of smaller size consists of 9/64" bores, popular ca. 1620-1650. The latter is probably a reflection of early midden already accumulated in the area prior to the construction of these features. Alternatively this information may suggest that the three structures listed above may date from the terminus of the Newman occupation.

The arbitrary terminus of Phase 2 is suggested to coincide with a storm bearing heavy rains and strong winds of apparently Category Three hurricane force which occurred on September 6, 1667. According to contemporary accounts, 10,000 buildings went down (Holt 1985:190). Flooding associated with the storm has been observed in the archaeological record at 44PG92, where a cellar was flooded and abandoned (Ann Markell, personal communication), and perhaps at 44HT55 (Edwards et al. 1989:330-331). At 44NB180, the archaeological record suggests that Structure 1 north gable corner posts needed to be replaced following the storm and that Structure 2 was either knocked down or severely damaged. Damage may also have been sustained at Structure 3, for before an addition was made its north gable posts were replaced. Structure 5 sustained no recognizable damage to the core frame of
the northern gable probably because not only was it butted near Structure 1, but it was also inset on a downward slope of the terrace which loses elevation to the south.

Phase 3: 1667-1690

Sometime after 1667, probably coinciding with increasing introductions of first servants and then slaves, a period of building repair and alterations took place at 44NB180. The renewed interest in the plantation and its more complicated social dynamics is reflected elsewhere in a redefinition of the yard compound and with new and more increasingly specialized structures and work areas.

Structure 1 was repaired by replacing the northern corner posts and by the addition of king posts which provided more support for the ridge line of the roof and more formally coupled the four bays of the house to a central frame. This repair partially remedied to the formerly more typical "Virginia House" tendency to frame the roof vaguely independently from the walls on false plates. When the repairs were made, 3 pipe stems with bore diameters of 7/64" and 2 pipe stems with bore diameters of 8/64" were incorporated into the intrusive post holes (F#s 33 and 54). When the king posts were replaced, one pipe stem with a bore diameter of 5/64" was incorporated to the F#55 north king post fill, so it is possible the house was repaired in stages perhaps when storm damaged or worn clapboards were replaced. A back room addition was added to the Manor House on the west side, at which time a meager single pipe stem with a bore diameter of 7/64" was incorporated into virgin post hole fill. The 12' north to south by 20' east to west addition or 20' by 20' addition (note F#34-A) was framed independently of the core structure of the Manor house to save elaborate carpentry costs. The room was plastered (based on plaster debris from F#112) and probably had glass windows supported by lead window canes. The room may have been an extra bedroom and not a buttery, since F#112 is interpreted as a robbed chimney footing. Although it is not certain, the naked or daubed clapboards providing wall sheathing to the original Phase 1 core may also have been done over in new clapboards and wall plaster, as the occasion of replacing the north corner gable posts and adding the king post afforded such opportunity.
Also due to storm damage, probable natural decay, and rough framing, Structure 2 was either completely torn down and cannibalized, or briefly repaired as a two bay structure now ancillary to the better built Structure 3-B. The reduction of Structure 2 to either total demolition by storm and/or man, or only the north two of its original three 10' by 20' bays is well documented as additions to the north gable of Structure 3 invade dramatically original portions of the south gable bay of Structure 2. Structure 3 gained a 10' by 20' bay of its north gable only after the original north corner posts were replaced altogether. The building was also given a 5' by 20' south gable shedded addition possibly incorporated directly into paralleling fencing systems now lost. Possibly representing the same individual's mind at work who contrived the implantation of king posts to Structure 1, Structure 3-B now 35' long received suggested evidence of king posts which strengthened the definition to the ridge line of that structure's roof.

Precipitated by increasingly diverse ethnic groups entering the labor force on the plantation, a more exclusionary and private formal 40' by 42' post and rail inner yard fence was defined to the immediate east of the Structure 1 Manor House. Significantly, the southern boundary of the new "Fencing System 3" inner yard was made exactly parallel to the north end wall of the Structure 5 Servants Quarter. A precipitous bend in the fence (F#s 223, 227, 226) directed servants away from the garden and towards the well (F# 248-A) and Cellar House (F# 247). Additionally, a new store house or smoke house (Structure 7), or a formerly free standing old one, now was tied directly into the fence of the new emphatically defined owner's household kitchen garden and/or inner yard. To discourage pilfering by field hands not well known, the smoke house or store house could then be entered only by members of the tenants or owners immediate family or trusted servants from a north end wall door railed in within the inner yard fence.

The Structure 6 Cellar House was added to resolve several problems. If the obsolete and probably destroyed 8' by 20' subterranean storage pit F#93 in Structure 2 was indeed functioning as a dairy or food storage unit, it was replaced by the cellar house. Further, a smaller more typical dairy-like structure damaged by plowing, erosion, and perhaps the 1667 storm noted in F#251 10' to the immediate north of Structure 6 was no longer sufficient to serve the needs of the plantation.
Histogram of Pipe Stem Bore Diameters
Cellar, FB 247 (sample only, N=68)
Construction of the cellar house cannot be dated firming since the builders trench was infilled with walling. Pipe stems recovered from cellar fill do provide some information for dating the structure, however (Figure ). The majority of pipe stem bores range from 8/64" to 6/64" in diameter. The highest frequency of pipes have bore diameters of 7/64" suggesting construction and peak use of the feature between 1650 and 1680. From an historic standpoint the terminal period is important for it indicate the cellar house was constructed before the depression of tobacco prices and the decline of small planters.

The structure probably served as a kitchen on ground level, a cool house on the cellar level (employing cool water tapped from the well F#248-A), and provided sleeping quarters for servants on the half story loft level. The Structure 5 servants quarter probably had an inadequate cooking hearth judging from surviving evidence of suggested chimney scaffolding noted in F#103-A and 104-A. Evidence for kitchen use at the cellar house is suggested by a minimal number of bricks from a ruined hearth or chimney fall. Clear construction dating of Structure 6 is not evident, but the peak of activity is strongly suggested during the peak of popularity of pipe stems with 7/64" bore diameters, or probably shortly before 1680.

Structure 4, a small lone servants quarter with two atypical interior root cellars south of the Structure 3 barn, may have also been added at this time. In this instance the dating evidence is unclear beyond the third quarter of the 17th century. The structure is the most out of square structure from the main house on the plantation, although it shows vaguely complimentary alignment with the barn complex at Structure 3. In this structure evidence of exploring the options of allowing ethnic servants to build their own quarters with provided materials may be evidenced, making the structure extremely important. Indian servants and/or Afro-American slaves may have occupied the 12' by 23.5' humble and non-corporate structure probably as a family or extended family unit. White occupation obviously cannot be ruled out, however. For instance, white servants may have urged the option to depart from the larger quarter at Structure 5. Spatial ordering of the structure suggests that the adult males of the household may have been directly employed with activities in Structure 3, or perhaps as field labors along the eastern half of the plantation. The physical division of the quarter away from the Manor House and the more corporate servants quarter of
Structure 5 marks a social horizon at the site. The structure may be symbolic of larger landed gentry buying into the property by funding slave labor. The notion of this is a cusp preparing for things to come in the 18th century.

Phase 4: ca. 1680-1740 ±10

Structure 4 noted above marks physical evidence of the fragmentation of corporate servant housing immediately south of the Manor House. Due to unclear dating evidence, Structure 4 may have been on the Phase 4 side of 1680. Indirect and symbolic evidence suggests that high status individuals began buying into the plantation, perhaps initially as creditors. The lack of historical documentation relating to this period is critical to what the archaeological record can say. The precipitous fall in smoking activity at this time (Figure) may be indicative of an emphatically steady decline in the plantation population. Later ceramics are present, perhaps suggesting a small tenant and servant population occupying the plantation as a subsidiary portion of landed gentry whose principal plantation seat laid elsewhere. After the mid-18th century no clear signs of everyday habitation are indicated, and the original plantation seat of Robert and Elizabeth Newman descends into an activity area in the archaeological record of tested units.
EXCAVATIONS AT 44NB174
This preliminary report on salvage excavations at 44NB180 and 44NB174 sponsored by the Virginia Division of Historic Resources suggests great opportunities for further research. Much of the data collected is still in raw unanalyzed form, however, ultimately useless to other scholars who are seeking information for comparative research. Although the information was collected under the less than ideal circumstances of salvage excavation, the goal of the project was to obtain information employing techniques which would capture information that would permit a reliable body of knowledge to emerge, as an act of sincere preservation.

Avenues for further research which will greatly enhance the act of preservation for the benefit of the scholarly community and the interested public are discussed briefly below.

Site 44NB180

A: Recommendations for improving this report and the field data collected:

1) Additional funding is requested to prepare adequate drawings which can be made camera-ready for publication through pen and ink drawings and drafted lettering and captions. As all of the evidence at 44NB180 is essentially derived from recognizable physical remains of cultural behavior, good illustrations are critical to communication. At present, the VDHR has not allotted the time for the author to prepare all of the field drawings so that they will have a professional polish in terms of publication. The present report has many drawings which were meant to be handed over to a draftsperson and are too large for insertion with proper pagination of the draft report. Artifact drawings of selected finds would also enhance the value of the report.

2) To date, the author has not been apprised of the historical research conducted on 44NB180 which is critically to interpreting the archaeological data on a historic site. Scheduling and understandable personal problems have delayed the exchange of this information. In order to complete a fair and reasonable report on the archaeological
findings, however, integration of this material into the interpretive narrative of the final draft is strongly recommended.

3) The funding of the project has not been adequate to produce a report and go over notes and other field data collected so that these items can be respectfully placed as an organized and well integrated unit in an archival file available to other scholars.

B: Suggested avenues for future study:

1) Surface collections made by Steve Potter and Henry Miller between 1978 and 1987 should be reviewed and catalogued in order to obtain a broader perspective of the material manifestations of 44NB180 and 44NB174. As the collections at both sites are relatively small, this would greatly increase the sample size allowing more emphatic statements about site dating and types and classes of artifacts present. Crossmends and other by-products of review may allow a better understanding of surface manifestations of the site prior to alterations by the developers.

2) Laboratory personnel involved in cataloging the ceramic collection were deliberately conservative in their use of formal ware names or names of production center. Most of the artifacts were catalogued by a relatively inexperienced student and the State Curator, conscious of the problem, has labored to improve the value of the inventory. Since the collections are small, it should be relatively easy for someone with a special knowledge of late 17th and early 18th century ceramics to prepare a more informative and interpretive catalog. Only an expert will be capable of observing the full measure of locally produced wares. Vessel forms and vessel counts should also be noted. This type of analysis will enhance studies not only of vessel form, function, and origin as used through time, but may isolate uniquely informative data on local and international trade networks.

3) A large part of the collection consists of kitchen midden. The faunal assemblage, though not large, may be uniquely informative since many of the remains were collected systematically by waterscreening through a relatively fine mesh. Foodways are considered
a key element in understanding the full measure of past human behavior. The collections contain both wild and domestic land species which should be identified and quantified so that their contribution to the diet can be compared to marine derived species which were ubiquitous throughout the site. Interested scholars should be invited to study the collections per contract or otherwise.

4) Floatation samples from several subsurface features including the root cellar in Structure 4 should be processed and the paleoethnobotanical remains analyzed. These remains may provide information on the diet of the inhabitants, the agricultural history of the plantation, and changes in the natural landscape through time.

5) Soil samples taken from numerous features including the large and ultimately unidentified subsurface pit, F#93, in Structure 2 should be chemically analyzed. This type of information may provide clues to the function of certain features and the content of feature fill.

6) Information on the architectural remains at 44NB180 should be submitted for review by architectural historians familiar with the increasing body of knowledge of colonial Chesapeake earthfast structures. The project has captured a diverse range of building types, many of which appear relatively unique or at least variant. As many of the structural remains are invested with information about broader social behavior, as well as local building technology, further study is strongly urged. This research may lead to the recognition of English regional yeoman building styles. Surviving wood from two post molds at the manor house and from the sill of the cellar house should also be identified by an appropriate specialist.

Site 44NB180 appears to be charged with spatial arrangements that are integral to the appreciation of individual structures. In addition to analysis of individual buildings, the thematic patterns underlying the spatial structure of the plantation complex as a whole should be studied. It is suggested that 44NB180 can make a strong contribution to studies on the evolution of the organically structured, late medieval plantation into a more rational and symmetrical form typical of the 18th
century. Site 44NB180 was occupied during a period crucial for understanding this transition.

7) The architectural research discussed requires that raw elevations of post hole depths be analyzed and converted with respect to variation in elevation across the site.

8) If the report is not scheduled for immediate release, a copy of the finds list and a working draft of the report should be forwarded to Ron Shivok and the future disposition of the collections should be discussed.

9) The Northumberland Historical Society has demonstrated tremendous interest in the site. Preliminary historical research has indicated that a rich documentary record exists for Northumberland County. Other information about the county's past is preserved in oral histories. Members of the Society may be interested in contributing to future research on 44NB180. Their assistance could be used in understanding the site within a larger local context. It is suggested that the Society be contacted and members be encouraged to direct their research on the entire community in or near Newman's Neck.
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