

IV. FINDINGS

A. DOCUMENTARY RESEARCH ON THE DALE SITE

The Dale Site lies on part of a 300-acre tract called Noxon’s Adventure. It was originally patented by Thomas Noxon in 1734 (Table 4). Born in Kingston, New York, Thomas Noxon relocated to New Castle County, Delaware, in 1728, by way of the English colony of Jamaica. In fact, many of his early transactions recorded in Delaware refer to Noxon as a former resident of the island. Noxon remained in Delaware for the rest of his life. During that time he served as deputy surveyor for the Surveyor General, Benjamin Eastburn. He also served for a short time as Justice of the Peace for New Castle County. Although his service to the colony is notable, Thomas Noxon is best known as a merchant and landowner. During the 1730s Noxon acquired numerous tracts of land in St. Georges and Appoquinimink hundreds, including several town lots in Middletown. In 1736 Noxon constructed two gristmills located between Appoquinimink Creek and Sassafras Branch (Scharf 1888). Both mills were extremely profitable, and communities began to develop around them. Over time the area became known as Noxontown.

TABLE 4
DALE SITE CHAIN-OF-TITLE

DATE	GRANTOR	GRANTEE	ACRES	LIBER/FOLIO	NOTES
June 18, 1734	Pennsylvania Proprietor’s Office	Thomas Noxon	300	A6/353*	
1743	Estate of Thomas Noxon	Benjamin Noxon	200	Q2/303	By Thomas Noxon’s Will (missing)
Bef. 1768	Benjamin Noxon	Robert Haughey	18	Q2/303	Deed of the transaction missing
Jan. 15, 1794	Estate of Robert Haughey	Francis Haughey	18	N1/394**	
Sept. 18, 1819	Francis Haughey	Richard Mansfield	20a, 36p.	W3/1	
July 21, 1846	Estate of Richard Mansfield	James Mansfield	20a, 36p.	-	NCC Probate files, George R. Mansfield, 1846-1854
Feb. 17, 1854	James Mansfield	Samuel Dale	20a, 36p.	Q6/24	
1873	Mary Mansfield Samuel Dale, Sr.	Samuel Dale, Jr. William Dale Temperance Shockley	20a	NCC Probates	Will of Samuel Dale
1915	Belle Fitchett Rose Dale William Dale	Elizabeth Armstrong	9	N25/564 N25/567	

* Patent Book from the City and County of Philadelphia

** New Castle County, Will Book

Little is known about how Thomas Noxon used his 300-acre tract along the Road to New Castle (present-day U.S. Route 301). The majority of Noxon’s resources were put into his mills or into his other lands in Appoquinimink Hundred. Neither Thomas Noxon nor his family ever resided on the property, suggesting Noxon’s Adventure was most likely occupied and farmed by tenants.

A survey of the property, conducted in the mid-eighteenth century, does not identify whether tenants were farming the parcel (Figure 9); however, it does show portions of the Reedy Island Cart Road extending north and east through the tract. The eastern extension of the cart road passed just north of the Dale Site, where it connected with the Road to New Castle.

Thomas Noxon died in 1743. At the time of his death, Thomas had only two surviving children, Benjamin Noxon and Sarah (Noxon) Frisby. Benjamin received sole ownership of the Noxon mills and other holdings in Appoquinimink Hundred. The remaining parcels in St. Georges Hundred were divided among both children. In the case of Noxon's Adventure, Benjamin received the lower two hundred acres, Sarah the upper one hundred. The Dale Site was located on a small 20-acre parcel in the far southeastern corner of the land Benjamin inherited.

For over 20 years the lower 200 acres of Noxon's Adventure remained a holding of Benjamin Noxon. During that time he continued to lease the parcel to tenants. In the winter of 2012, archaeologists from Louis Berger excavated a tenancy site just south of the Dale Site. This site was occupied by tenants during the Thomas and Benjamin Noxon's ownership of the parcel. The identity of these tenants is unknown since no records regarding its occupation exist today. The Noxon Tenancy was abandoned by its occupants sometime around 1760.

The actual deed describing Benjamin Noxon's eventual sale of the parcel containing the Dale and Noxon Tenancy sites is lost; however, the deed that recorded the sale of the adjoining parcel sheds some light on the transaction. The deed describes an agreement dated January 13, 1768, between Benjamin Noxon and Samuel Buchard in which Noxon agreed to sell 183 acres of Noxon's Adventure to Buchard. In the description of the metes and bounds, the parcel's eastern boundary lies next to an 18-acre lot that Benjamin Noxon had previously sold to Robert Haughey. Both the Dale and Noxon Tenancy sites sit on those 18 acres.

Robert Haughey was a merchant and, according to the eighteenth-century tax rolls, the largest landowner in New Castle County. He was elected to the Delaware House of Representatives in 1791 and to the State Senate in 1793 (Scharf 1888). The majority of Haughey's holdings were located in St. Georges Hundred with smaller parcels in Pencader and Appoquinimink hundreds. Many of Haughey's lands were leased to tenants while other parcels were managed directly by his estate and farmed by his enslaved population. At the time of his death, in 1794, he owned at least 90 enslaved men and women. The administration accounts after his death do not indicate that Haughey had a tenant on the 18-acre parcel he purchased from Noxon, so it is not known what arrangements were made for that property. The 1797 tax assessment of St. Georges Hundred indicates that the estate of Robert Haughey consisted of 3,039 acres with 13 houses, kitchens, barns, stables, cribs, and granaries spread across his multiple properties. It is possible one of the houses indicated in the tax assessment was on the 18 acres Haughey purchased from Noxon.

In his will Robert Haughey devised one-third of his real estate and \$1,000 to his wife, Christina King. The remaining two-thirds were managed by his brothers/executors, Marimus and James Haughey, until his children, John and Francis, reached the age of majority. Upon turning 21, the two sons were ordered to divide the remaining two-thirds of their father's land and slaves among

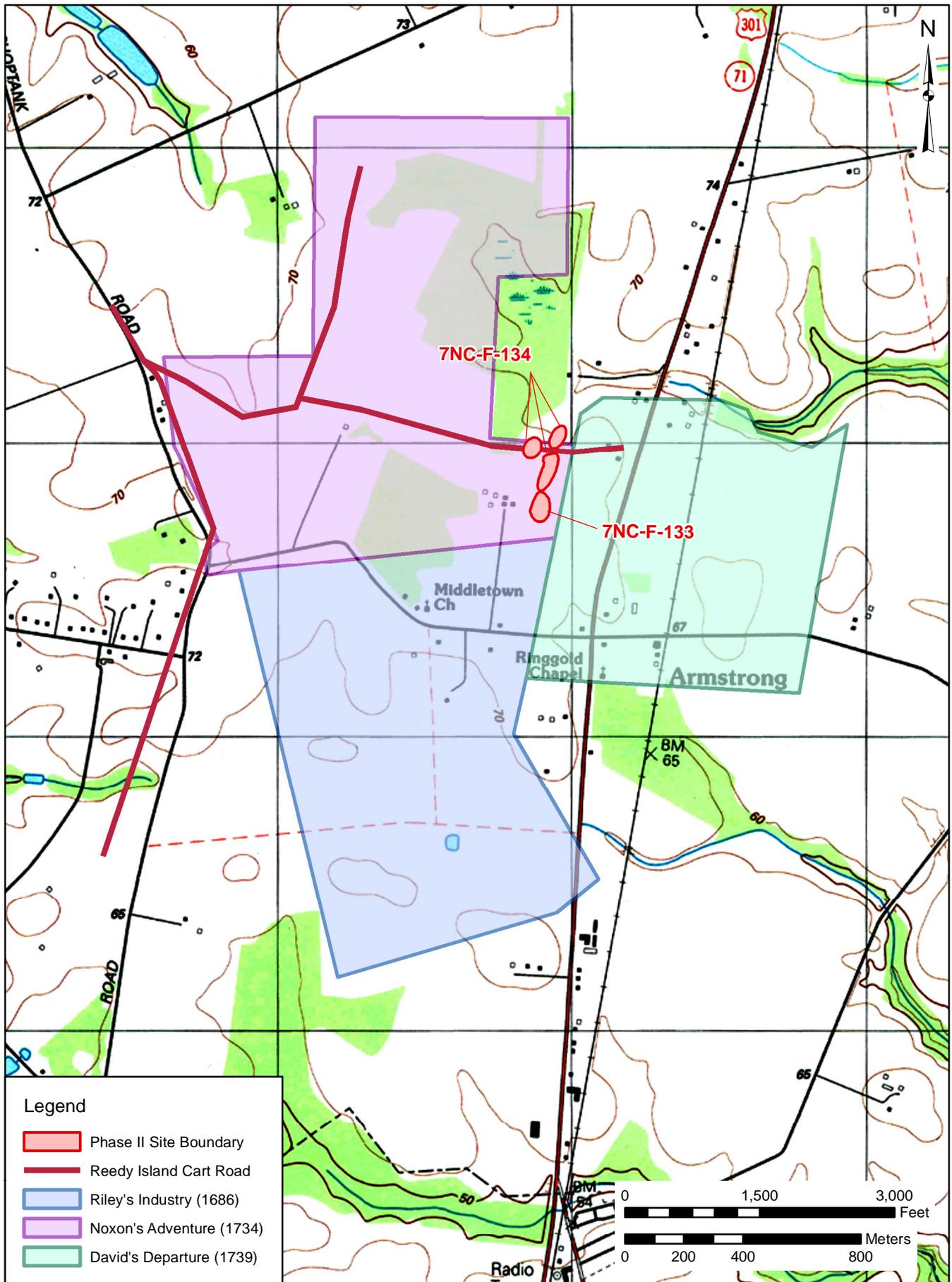


FIGURE 9: Plan of Properties around the Noxon Tenancy, Showing Reedy Island Cart Road *BASE MAP: USGS 1993*

themselves. The small 18-acre parcel containing the Noxon Tenancy was eventually given to Francis Haughey along with another several hundred acres in St. Georges Hundred.

Francis Haughey kept the parcel until 1819, likely leasing the land to tenants or a nearby farmer during that time. In September of that year, he sold the parcel to Richard Mansfield, a planter from St. Georges Hundred. As part of the transaction, the parcel was resurveyed by Robert Crow. At the conclusion of the survey, the parcel was found to contain 20 $\frac{1}{8}$ acres.

Mansfield made his home at Achmester, the house he built on land he also purchased in 1819 along present-day Marl Pit Road (Figure 10). Located only 0.7 mile away, the 20-acre parcel he purchased from Haughey almost certainly served as an extension of his home farm.

A meticulous record keeper and progressive farmer, Richard Mansfield maintained detailed accounts of his various enterprises, business dealings, and agricultural activities. One volume of his account books, dating to between 1826 and 1844, survives and is on file at the Delaware Public Archives (Mansfield 1826-1844). The book includes the names, activities, and wages of all those involved in planting and harvesting of the fields at Mansfield’s Achmester. Most of the men who worked for Mansfield were free African-Americans. The account book therefore gives us a rare glimpse into the small but growing free African-American cross-roads community that later became Armstrong Corner (Table 5).

TABLE 5
PARTIAL LIST OF FREE AFRICAN-AMERICANS
EMPLOYED AT RICHARD MANSFIELD’S ACHMESTER

Benjamin Davis	William Piner	Moses Whiny
Henry Emory	Ann Piner	Mary Ann Whiny
Anthony Trippit	Ann Piner (daughter)	Thomas Whiny (son)
James Golden	Benjamin Cooper	Abraham Evans
Hannah Golden	Aaron Archy	Dinah Evans
Ann Golden (daughter)	Henry White	Thomas Biddle
Lewis Jones	John Bayard	Clem Whiny

According to the account book, Mansfield almost exclusively hired free African-Americans residing nearby to work in his agricultural fields. A few white tradesmen are also named in the account book, but those men were typically employed at Achmester as carpenters or foremen. The majority of Mansfield’s field hands were daily employees. They were paid a set daily wage that often changed from season to season. Others employed at Achmester, both free black and white, entered into term contracts with Richard Mansfield. The contracts lasted between six months and a year and were often renewed each year. Those who entered into contracts with Mansfield were provided a monthly stipend as well as washing and mending services. Contractual workers at Achmester were also given two days off during harvest time.

During Richard Mansfield’s tenure at Achmester, the majority of his household staff were free African-Americans. Mansfield owned only one enslaved person during that time. The details of the purchase are described in his account book:



FIGURE 10: Richard Mansfield's Achmester

SOURCE: Ames 1983

“6 December 1830. Purchased of Charles Foster, Administrator of Thomas Fountain a black boy named David for seventeen years for which I gave him Five Hundred Dollars”

1830

+ 17

1847 David will be free

(Mansfield 1826-1844)

The reason for Mansfield’s purchase of David is not explained in his account book. Mansfield never owned any enslaved people prior to the purchase nor did he purchase anyone else after acquiring David. By all available accounts, Mansfield was not a proponent of slavery. Rather than use slave labor, Mansfield instead chose to hire local free black laborers, paying them a set wage for a full day’s work. The purchase of David is somewhat perplexing. Perhaps he wanted to help a neighbor honor the promise that David would be freed after an agreed term.

Tax assessments from the period as well as Mansfield’s diligent record-keeping help to identify one resident of the Dale Site. The tax assessment for St. Georges Hundred in 1822 listed Richard Mansfield as owning the 400-acre Achmester as well as an additional 18 acres, which must have been his parcel of Noxon’s Adventure. In addition to the acreage, Mansfield was assessed for two dwelling houses and a barn. One of the dwelling houses and the barn was certainly Mansfield’s newly built Achmester. The other must have been a tenancy, most likely at the Dale Site.

From 1826 until the first part of 1830, there is no mention in the account book of any tenants in the second house. In March 1830 Richard Mansfield made a notation in his account book:

“Monday March 1... Lewis Jones Commenced with me at \$7 per month from this time until the New year – he finds his own washing & mending. A am also to furnish him with a house & garden and allow him two days in Harvest but no[t] for wood.”

(Mansfield 1826-1844)

Lewis Jones, an African-American laborer, had worked for Richard Mansfield raking and cutting clover during the 1829 planting season. In 1830 Jones entered into an agreement to work for Mansfield again during the 1830 season. Rather than be paid the daily wage like the one he received in 1829, this new agreement secured him a monthly wage as well as housing at Mansfield’s tenant house.

Jones was enumerated in the 1830 census as residing near Richard Mansfield. In that year he is mistakenly recorded as Lewis Johns by the census taker. Lewis Jones’s household in 1830 included himself, a man between the age of 36 and 55; his wife (age 24 to 36); a teenage son; and two sons under the age of 10. Richard Mansfield’s account book from that period records a Sarah Jones working alongside Lewis on several occasions, suggesting that Sarah may have been

his wife. Unlike the monthly wage Lewis earned, Sarah Jones was paid for only the days she worked.

Lewis and Sarah Jones remained tenants of Richard Mansfield until the end of 1831. During their last field season Lewis Jones was promoted as one of Mansfield's field supervisors, overseeing the work of two to five other laborers. Sarah Jones did not appear in the account books more than once that year, suggesting that she was mostly occupied caring for the family's two young sons and tending to the cultivation of their own garden. In 1832 the Jones family left Achmester, and in March of that year Richard Mansfield found a new tenant:

“Tuesday March 13th. James Golden /Col. Man/ commenced working for me for the season for which I am to give him six dollars a month and a house and garden he to furnish his own washing and mending. I am to board him”
(Mansfield 1826-1844)

The account book indicates that James Golden remained Mansfield's tenant on Noxon's Adventure for four years. During that time James, along with his wife, Hannah, and their daughter, Ann, worked the fields at Achmester. The Golden family and numerous other field hands spent those years liming the clover and grain fields in the spring and harvesting the various crops in the fall. The Golden family left the tenancy and the employ of Richard Mansfield by the spring of 1837. After that time it is unclear whether Mansfield leased the tenant farm again. There is no other mention in the account book of a similar arrangement between Mansfield and another field hand after the Golden family left. In addition, the tax assessment for St. Georges Hundred lists only one dwelling on Mansfield's properties in 1837, suggesting that the former tenant house may have been abandoned.

Richard Mansfield died at Achmester in 1846. The estate remained in probate until 1854, at which time Achmester and the holdings at Noxon's Adventure went to Richard's son, James Mansfield. On February 17, 1854, James Mansfield sold the 20-acre parcel at Noxon's Adventure to Samuel Dale.

Born in 1791, Samuel Dale was an African-American resident of New Castle County for many years prior to purchasing his 20 acres at Armstrong Corner. Prior to 1854, Samuel Dale's legal status in New Castle County appeared to have been in question. Samuel Dale first appeared as a free inhabitant of St. Georges Hundred during the 1810 Census. The 1810 Census did not indicate where the free black inhabitants lived in the Hundred; however, in 1820 Dale and his family are listed as residing in a community of other free African-Americans near present-day Armstrong Corner. At that time Dale was certainly a tenant and was likely employed as a day laborer or farm hand for one of the nearby large farms in the area.

The next time Samuel Dale and his family appeared in the public record was in the 1840 Census, which lists him still a free resident of Armstrong Corner, adjacent to Benjamin Armstrong on the northwest side of the cross-roads community. By 1850 Samuel Dale had relocated with his family to Pencader Hundred. In that year he was enumerated as a free man and farmer living

with his wife, Rachel, and their five children: William (18), Temperance (15), Sally Ann (4), Samuel (2), and Martha (2).

The question concerning Dale's legal status arose after the discovery of a manumission dated January 16, 1854:

Know all men by these presents that I, Nicholas Patterson of the City of Wilmington, New Castle County and the State of Delaware (minister of the gospel) from motives of benevolence and humanity, have manumitted and hereby do manumit and set free from Slavery my negro man Samuel Dale of St. Georges Hundred in the county and State aforesaid. The said Samuel Dale having been the slave of James Haughey, late of St. Georges Hundred aforesaid, dec. who by his will gave the said "Samuel Dale" (among other things) to his children and the survivor of them, the only survivor of whom is Mrs. Eliza Patterson, formerly Eliza Haughey, and now wife of the said Nicholas Patterson. And I do hereby give, grant, and claim of in and to the estate and property which he may hereafter acquire or obtain, and of in and to his person, labour, and derive. So that he is and shall hereafter be adjudged to be absolutely free from Slavery.

(New Castle County, Deed Book P-6/13)

The manumission states that Samuel Dale was originally a slave of James Haughey, the brother of Robert Haughey and uncle to Francis Haughey, the former owners of the property containing the Dale Site from 1768 until his death in 1794. James Haughey died in 1815. According to his will, the real estate and property, including his slaves, were to be divided evenly among his four children: Charles, Henrietta, Sarah, and Elizabeth (Eliza). According to the manumission, Eliza Haughey was the last surviving heir of her father's estate and as such inherited the remainder of his property, which included Samuel Dale. Samuel Dale was claiming to be free for over 50 years while legally considered the property of the Haughey family, based on this manumission document.

How could Samuel Dale be free in the census but enslaved according to the New Castle County property records? It is entirely likely that Samuel Dale had been freed from his bondage by the Haughey family before 1810. From that time until 1854, Samuel Dale lived like any other free man, collecting wages, renting property, and settling where he pleased in New Castle County. In 1854 Samuel Dale wanted to purchase property. He must have encountered questions about his legal status and been asked to prove that he was, in fact, a free man. Either his former master had never enrolled a manumission at the court house, or the record had been lost. As a result Samuel had to locate the family of his former owner, Eliza and Nicholas Patterson, to receive in writing the declaration that he informally received all those years ago. Nicholas Patterson, a Presbyterian minister in Wilmington, fulfilled the request.

A review of other manumission records in New Castle County shows that Samuel was the last of Dale family to receive his freedom from the heirs of James Haughey. In 1843 Nicholas and Eliza Patterson, as well as Sarah Haughey, filed manumissions with the New Castle County Court for four other Dale family members: Margaret, Lydia, James, and Deborah (New Castle County, Deed Book L5/99-101). Such a mass manumission would have certainly included Samuel, and

his absence in the documents suggests the Haughey family already considered him free from servitude.

After proving to the court's satisfaction that he was free, Samuel Dale purchased the 20-acre parcel from James Mansfield in 1854 (Figure 11) and the Dales returned to Armstrong Corner. The family then established a working farm on their property. According to the 1860 Agricultural Census of St Georges Hundred, the Dale family had improved all 20 acres. Their livestock included four horses, three milk cows, and three pigs. The Dales had harvested 50 bushels of wheat, 100 bushels of both Indian corn and oats, and 60 bushels of potatoes. In addition to the harvest, the family also produced 50 pounds of butter from the three milk cows. In all, the Dale farm was valued at \$600 in 1860.

By 1870 the 79-year old Samuel Dale had given control of the farm to his eldest son, William. William and his wife, Mary, lived at the farm with the aging patriarch along with their four children: Alice (11), William (8), Samuel (3), and Benjamin (2). In addition to William and his family, the farm was also the home to the elder Dale's youngest surviving child, Samuel, Jr., who was employed on the farm as a laborer.

According to the 1870 agricultural census, the Dale family farm was valued at \$1,500. They continued to grow corn, wheat, oats, and potatoes on the farm. The family also maintained four horses, two pigs, and one non-milking cow. They were also assessed for 100 pounds of butter, although the census indicated the Dale family no longer had any milk cows on the farm.

In addition to farming, Samuel Dale seems to have played a part in establishing two separate Methodist Episcopal churches in Red Lion and St. Georges Hundred. While living in Pencader Hundred from around 1840 until 1852, Samuel Dale was one of seven trustees who purchased a quarter-acre lot from Ashur Clayton of Red Lion Hundred with the intention of "erecting a house or place of worship for the use of colored members of the Methodist Episcopal Church in the United States of America" (New Castle County, Deed Book O6/296). The property was located in Red Lion Hundred, along Porter Lane and adjacent to the border with Pencador Hundred. No other records regarding this fledgling congregation could be found, but it appears Samuel Dale left his position as a trustee after his move back to St. Georges Hundred.

In 1869 Samuel Dale purchased another lot for the purpose of establishing a church for the African-American members of the Methodist Episcopal Church in Middletown. On June 10, 1869, Samuel Dale purchased a 3,700 square-foot lot on the east side of New Street in the northeast quadrant of Middletown. The lot, purchased from Joshua B. Fenimore, was adjacent to the lands of John Alston as well as the "school lot for coloured peoples" (New Castle County, Deed Book Y8/457). Since the state did not yet support education for African-Americans, this school must have been one of those funded by religious groups. In December of the same year, Samuel Dale sold the lot to the board of trustees of the Methodist Episcopal Church in Middletown. The trustees included Samuel Dale, his son, William Dale, Lewis Green, Levi Anderson, Joseph Monts, Thomas H. Gold, John Henry Douglas, and Henry Jones (New Castle County, Deed Book D9/67). The church he helped to establish became known as Dale's Methodist Episcopal Church and was situated in the African-American portion of Middletown, a community known as Daletown (Works Progress Administration [WPA] 1940) (Figure 12).

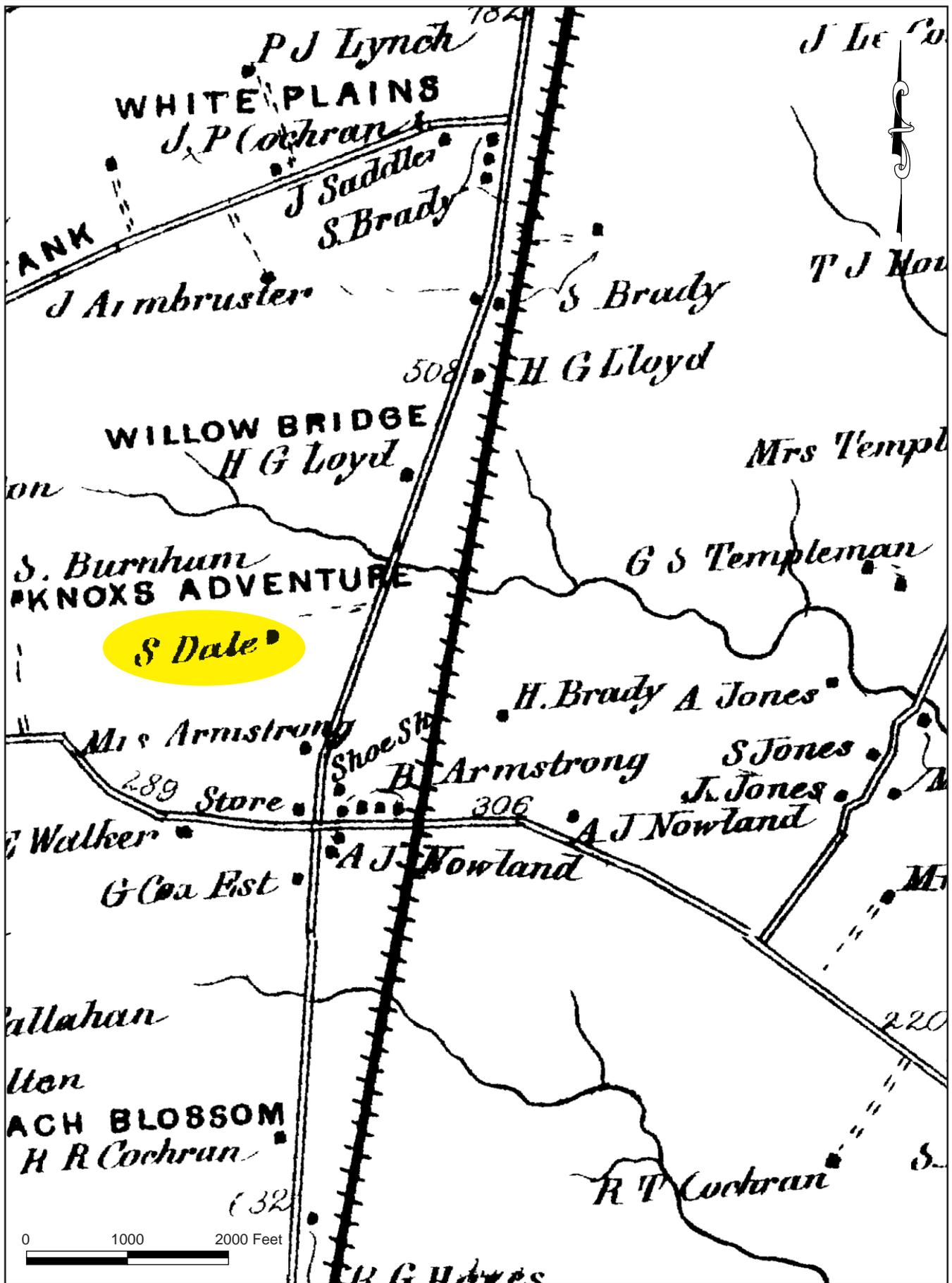


FIGURE 11: Dale Property in 1868

SOURCE: Beers 1868

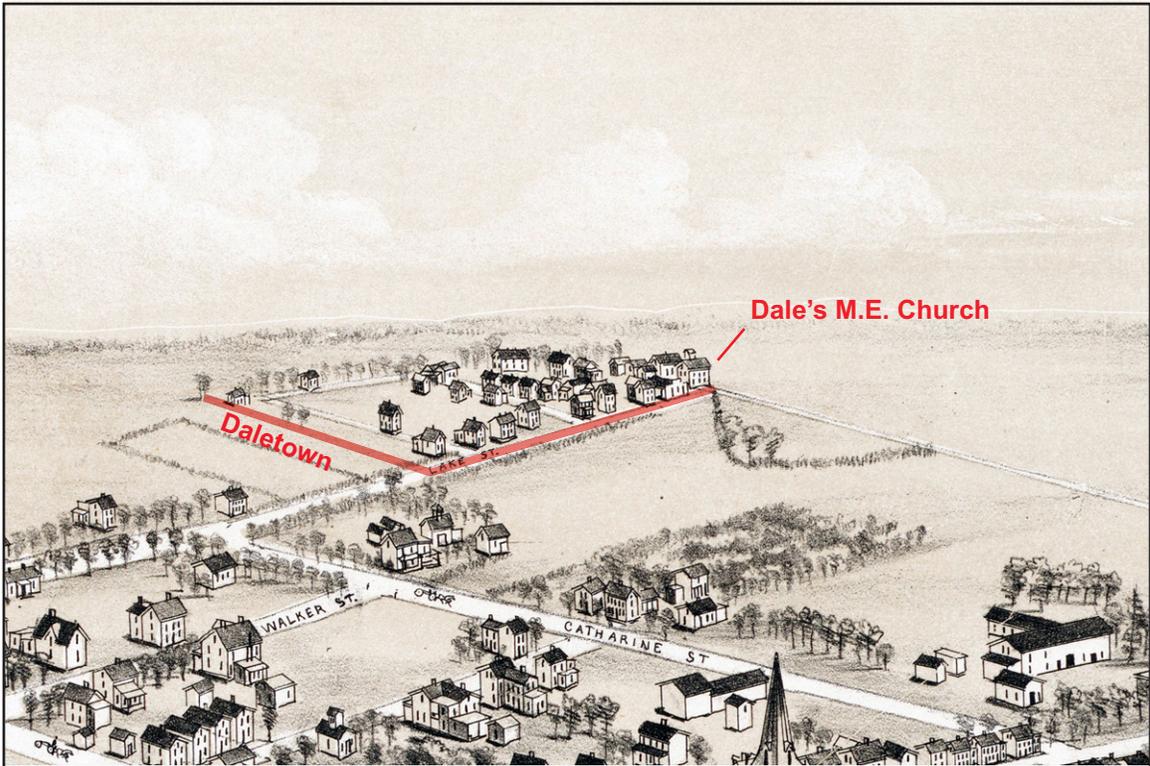


FIGURE 12: Dale's Methodist Episcopal Church in Middletown in 1885

SOURCE: Bailey 1885

Services were held in a one-story frame structure on New Street until 1894, when the congregation relocated to a new church on the corner of North Catherine and East Lake streets (WPA 1940) (Figure 13). Samuel Dale served as the minister of the congregation until his death in 1873 (Zebley 1947).

After his death the 20-acre farm was divided evenly among his three surviving children: Samuel Dale, Jr., William Dale, and Temperance Shockley (later Green). Samuel Dale's will specified how the farm would be divided. The northern third of the farm, adjacent to the farm of H.G. Lloyd, was given to Samuel Dale, Jr. and included "the house, fences, and improvements thereon." William Dale received the middle third of the farm, also with the "house, fences and improvements thereon." This third probably included the old main house, where William had been living with his family since Samuel Dale, Sr. retired from farming in 1870. The bottom third of the Dale farm was allotted to Temperance, with no mention of any improvements. Dale thus left nearly 7 acres of land to each of his children, and houses to two of them.

Samuel Dale, Jr. died in 1882 without children. William Dale and Temperance Green then revisited the division of their deceased father's property. Based on the metes and bounds of later deeds for the property, it appears that Temperance inherited the center 9 acres of her father's farm. The rest, including the main house, was retained by William Dale (Figure 14). That parcel remained in the Dale family until 1915. That year it was sold to Elizabeth Armstrong by William Dale's son, William Jr., and his wife, Rose. Today, the parcel is still a holding of the Armstrong family. The further history of Temperance's share is obscure, but it seems that the house lot within the hedgerow (see Figure 3) was part of her property.

B. GEOPHYSICAL SURVEY AT THE DALE SITE

Geophysical survey of the Dale Site was carried out by Dr. Timothy Horsley. Complete coverage of the site was obtained using a high-resolution magnetometer. A detailed description of the methods and findings is provided in Dr. Horsley's technical report (Appendix A). An interpretive map of the geophysical findings is shown in Figure 15 and summarized in Table 6.

The most significant finding of the magnetometer study was that although the western and northeastern artifact concentrations were accompanied by strong magnetic signatures, likely representing brick and metal, no such signal was identified in the southeastern concentration. This makes it highly unlikely that a building stood in this location. Other discoveries included several "pit-like anomalies," one of which turned out to be the Locus 1 well (No. 2 on Figure 15), and a concentration of small anomalies that proved to be nails (No. 6 on Figure 15), likely the remains of a frame outbuilding.

C. ARCHAEOLOGICAL FIELDWORK AT THE DALE SITE

1. *Test Unit Excavations*

The Phase I surface collection at the Dale Site revealed three separate artifact concentrations, and it was thought that these might represent three houses (see Figure 3). The western concentration, here designated Locus 1, was by far the densest of the three, and this was thought likely to be the



FIGURE 13: Dale's AME Church after Relocation

SOURCE: WPA 1940



FIGURE 14: William Dale's Home on the 1881 Hopkins Map

SOURCE: Hopkins 1881

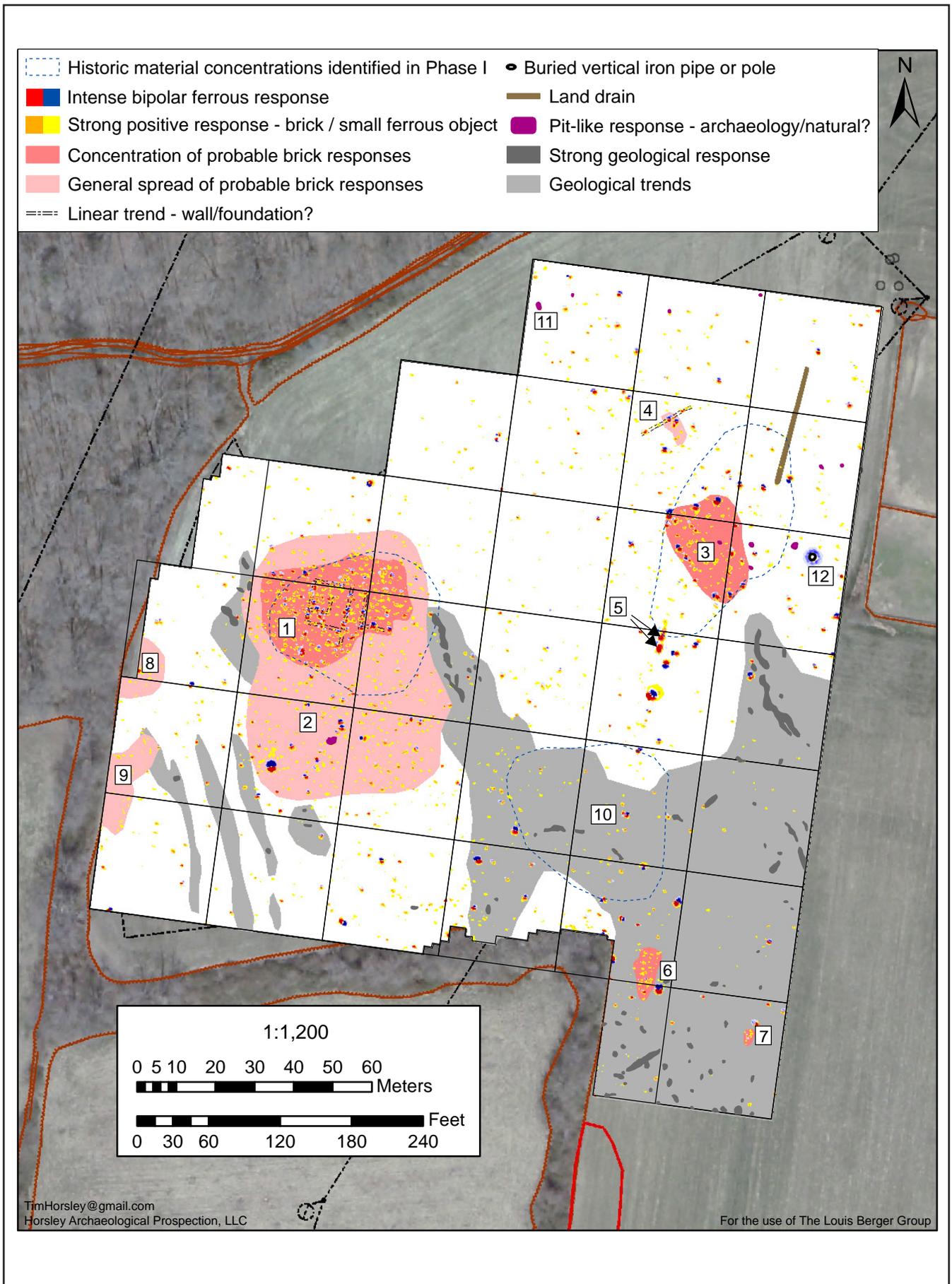


FIGURE 15: Interpreted Magnetometer Map of the Dale Site

SOURCE: Horsley 2011

TABLE 6

MAGNETOMETER ANOMALIES AT THE DALE SITE

NUMBER	HORSLEY DESCRIPTION	FIELD RESULT
1	Concentration of intense (ferrous) and strong (probable brick) anomalies. Within this are slight suggestions of linear trends that may reflect wall/foundation alignments, but these are rather tentative.	Concentration of brick and artifacts in the core of Locus 1. No foundations identified.
2	Around and extending south of [1] is a broader scatter of strong discrete anomalies that may represent a larger area of historical activity. This might represent a yard or area with increased density of buried features: one "pit-like anomaly" may indeed be a localized area of burning.	Artifact density indicates that this area is part of Locus 1; the large pit-like anomaly proved to be a small well.
3	A second concentration of ferrous and probable brick responses, less dense than [1] and smaller than the area identified in the Phase I survey. Likely represents the site of another structure, but there is no clear evidence of wall alignments.	Concentration of brick and artifacts in the core of Locus 2.
4	North of [3] is a localized scatter of ferrous/brick anomalies that may represent a small ancillary building. Many anomalies appear to be aligned over around 12m and may indicate a wall/foundation, although this is not certain from the data.	Linear trend in this area appears to be part of the old driveway, still visible in 1937. Artifacts found here may represent trash disposal in a ditch along the drive, or a small outbuilding.
5	Close to [3] is a group of quite strong positive anomalies that are not obviously ferrous in origin. Could be caused by magnetic enhancement through burning and as such might indicate features related to a high-temperature industrial process (e.g., hearths or a kiln). Or they may be caused by buried iron such as loops of barbed wire.	Part of a fence still standing in 1937.
6	A smaller concentration of anomalies that could be a brick scatter, possibly indicating a former structure.	Concentration of nails, probably small outbuilding.
7	A very condensed area of ferrous/brick anomalies - structural?	Not investigated.
8, 9	Two areas of increased magnetic noise, possibly brick scatters. These lie at the edge of the field and may therefore be caused by clearance of construction material in [1] and [2], but may instead indicate the former locations of additional structures at these locations.	Not investigated.
10	No geophysical evidence of any significant features in this area identified during the Phase I. No concentrations of iron or brick responses were detected, suggesting that this was not the site of a structure. If buried features are present, they have no magnetic contrast and are therefore undetectable with this method. The Phase I finds more likely indicate a spread of domestic trash rather than subsurface features.	This Phase I artifact concentration proved to be very low density, associated with a house site in the unplowed area to the south.
11	One of a handful of pit-like anomalies distributed throughout the survey area. It is possible that some of these are actually caused by iron objects that happen to be aligned exactly with the Earth's magnetic field or perhaps naturally magnetic rocks. However, their form and character suggests that they are cut features filled with magnetically enhanced material such as topsoil or perhaps burnt soils. If anthropogenic in origin, it is not possible to state whether they are historic or prehistoric.	Not investigated.
12	Buried iron pipe (e.g., a well), or the base of a vertical pole.	Not investigated.

original Dale House. The other two concentrations might, it was thought, represent the houses of Samuel Dale's descendants, among whom the property was divided.

The original plan for the site included 50 test units, divided among the three artifact concentrations. After the magnetometer study (above) and the testing of the Noxon's Tenant Site (7NC-F-133), the plan was altered. The southeastern locus, always the thinnest of the three and lacking any magnetic signature such as one would expect at a nineteenth-century house, seemed more likely to be a scatter of domestic artifacts related to a house in what had been the northern part of the Noxon's Tenant Site. So the southeastern artifact concentration was combined with the possible nineteenth-century residence that had been in the Noxon's Tenant Site to form Locus 3 (Figure 16). The northeastern artifact concentration became Locus 2.

2. *Locus 1*

Locus 1 was in the northwestern part of the site, and it measured about 200x160 feet. Significant concentrations of nineteenth-century artifacts were encountered in Locus 1, along with a fair amount of brick. This locus appears to be the location of a house dating to the 1830 to 1900 period. In all, 26 test units were excavated in this locus. Twenty-one were placed on the grid at 30-foot intervals, and five were used to investigate magnetic anomalies. An area of high magnetic response in the northern part of the site proved to be a concentration of brick and nails, almost certainly the remains of a house; however, neither foundations nor clear builder's trenches were found in any of the test units.

A well, designated Feature 4, was discovered south of the main artifact concentration. This feature was identified as a "pit-like anomaly" during the magnetometer study. The well was about 5 feet across at the base of the plowzone, and the bottom of the well appeared to be about 7 feet below ground surface (bgs) (Figures 17 and 18). The upper 1.0 foot of the well fill was removed from one 3x3-foot unit to a depth of 1.0 feet below the bottom of the plowzone, 2.0 feet bgs. Then a shovel test was dug to a depth of 4.0 feet, and a bucket auger was used to reach the bottom of the well, between about 7.0 and 8.0 feet down. The top 1.5 feet of the well fill was similar to the plowzone in soil color and consistency, as well as in the number and type of artifacts. Beneath this plowzone soil was a mix of brownish yellow sand and gray silty clay, containing a few pieces of bottle glass and small fragments of wood. The well filled with water to a depth of about 3.0 feet bgs. At a depth of about 7.0 feet, the brownish yellow sand gave way to a consistent gray sand that contained no cultural material, and this was assumed to mark the bottom of the well.

During the Phase II testing 1,175 artifacts were recovered from Locus 1 (Table 7). The quantity of architectural material, more than 100 nails and 207 pieces of window glass, confirms that a house stood here. No foundations were found, and the amount of brick in the test units (3.4 kilograms, or 7.5 pounds) was not enough to represent even a brick chimney. Most likely the house stood on brick piers and was heated by a stove. The most common type of artifact was glass from bottles and jars. This is usually the case on house sites occupied after the Civil War because glass bottles became so much less expensive and more common after 1850. Glass lid liners for jars show home canning, and other pieces show the Dale family had oil lamps with glass chimneys.

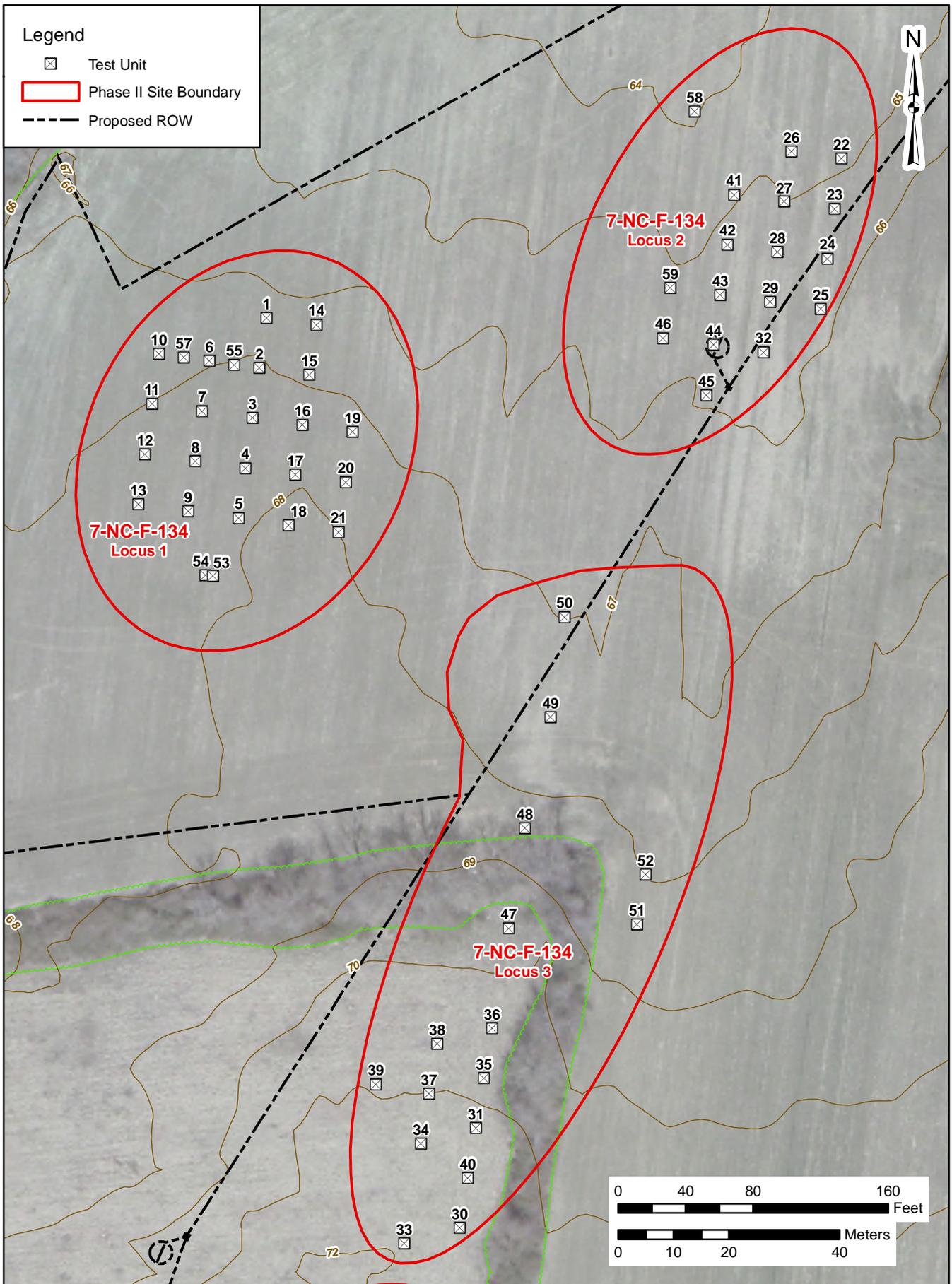


FIGURE 16: Plan of Phase II Test Unit Excavations at the Dale Site

BASE MAP: De/ DOT 2010

Site 7NC-F-134
 Test Units 54 and 53
 North Wall Profile

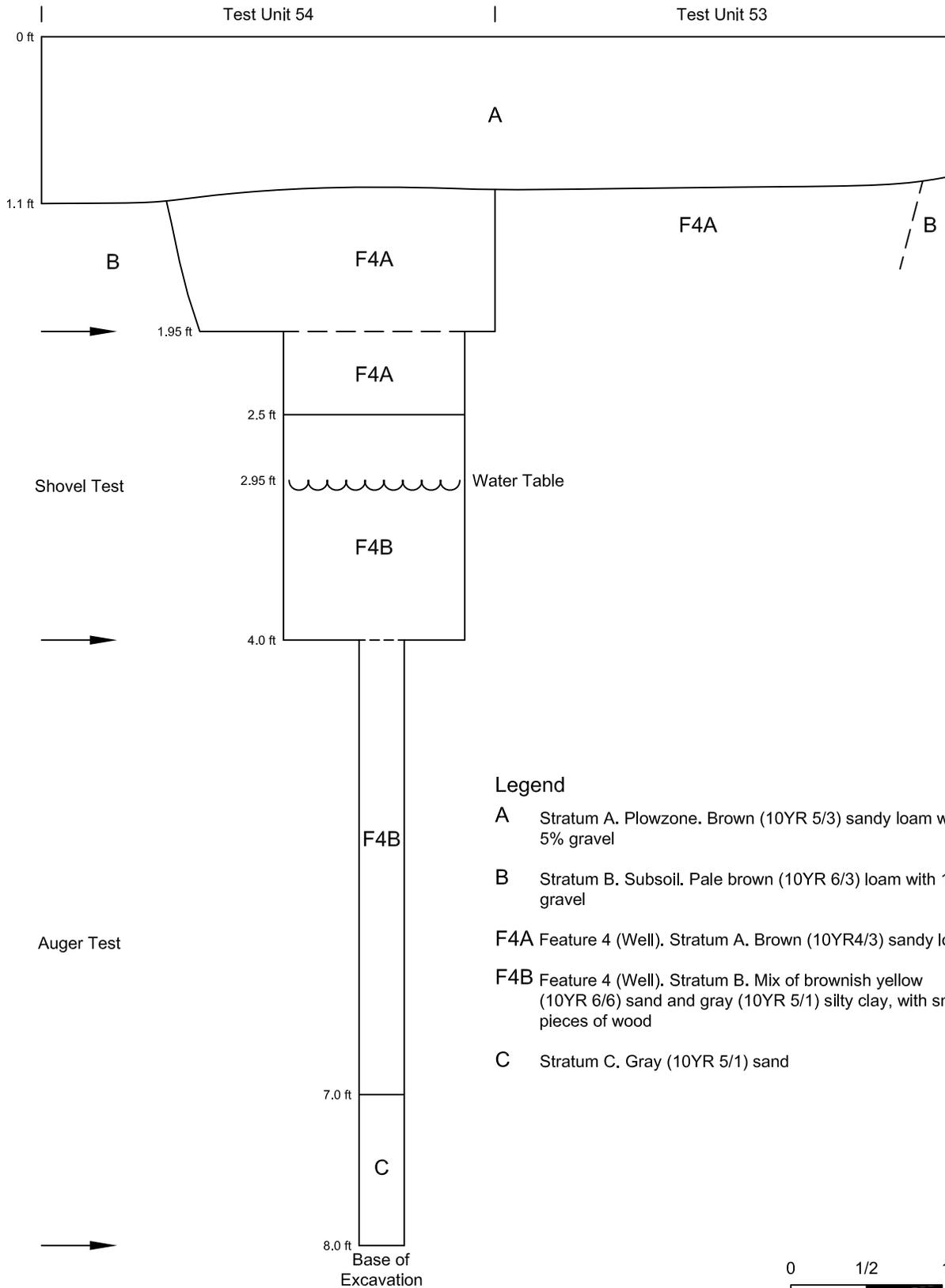


FIGURE 17: Profile of Test Units 53 and 54 and Feature 4 (Well) in Locus 1 of the Dale Site



FIGURE 18: Augering in Feature 4 (Well) in Locus 1 of the Dale Site

TABLE 7

HISTORIC ARTIFACTS FROM LOCUS 1 OF THE DALE SITE, PHASE II TESTING

ARTIFACT TYPE/SUBTYPE	COUNT	ARTIFACT TYPE/SUBTYPE	COUNT
<i>Ceramics</i>		<i>Glass</i>	
Creamware, plain (1762-1820)	1	Patent medicine bottle, aqua	1
Creamware, Whieldon (1740-1770)	1	Patent medicine bottle, amethyst	1
Pearlware		Beverage bottle, aqua	2
Plain (1775-1840)	7	Bottle/jar, aqua	260
Embossed (1775-1840)	4	Bottle/jar, clear	52
Handpainted (1775-1820)	1	Bottle/jar, amber	39
Whiteware		Bottle/jar, olive	27
Plain (1820-present)	200	Bottle/jar, amethyst tint (1880-1915)	39
Shell-edge blue (1820-1900)	2	Bottle/jar, green	10
Embossed (1820-present)	3	Bottle/jar, cobalt blue	4
Transfer-print, blue (1820-present)	3	Bottle/jar, milk glass	5
Transfer-print, red (1825-1915)	2	Bottle, blue	1
Transfer-print, flowing colors (1840-1900)	2	Curved vessel, aqua	12
Handpainted (1820-present)	2	Curved vessel, clear	4
Ironstone (1840-present)	3	Curved vessel, milk glass	2
Yellowware (1827-1940)	1	Liquor flaks, brown	1
Yellowware, mocha (1827-1940)	1	Milk glass lid liner (1867-present)	4
Hard-paste porcelain	2	Lamp chimney	9
Soft-paste porcelain	3	Tumbler, ribbed	4
Stoneware		Stemware, clear	1
British brown (1690-1775)	1	Tableware, amethyst tint (1880-1915)	5
Gray-bodied	6	Tableware, clear	8
Gray-bodied with Albany slip (1800-1940)	7	Glass, melted	2
Coarse red earthenware		<i>Architectural</i>	
Black glaze	22	Nail, cut (1790-present)	4
Brown glaze	6	Spike, cut (1830-present)	1
Dark brown to black glaze	6	Nail, unidentified	111
Clear glaze	2	Window glass	207
Brown glaze with dark brown mottling	5	<i>Personal</i>	
Clear glaze with dark brown mottling	4	Chinese coin	1
Unglazed	2	Eyeglass part	1
Buff-bodied earthenware, brown glaze	2	Mirror glass	5
<i>Faunal</i>		Buttons	
Clam	1	Metal	1
Oyster	2	Shell	1
Mussel	1	Small china (1850-present)	1
<i>Other</i>		Glass	4
Utensil handle, copper alloy	1	Stoneware tobacco pipe bowl	1
Wire	1	White clay tobacco pipe bowl	2
Horseshoe	1	White clay tobacco pipe stem	2
Iron hardware	2	Porcelain sherd from a doll or figurine	1
Unidentified Iron	29	Total	1175

The most common type of ceramic at Locus 1 was undecorated whiteware. Of the 216 sherds of whiteware from Locus 1, only 16 were decorated. Undecorated ceramics were very inexpensive, and decorated vessels cost somewhat more. The ceramics at the Dale Site were mostly broken into quite small pieces, so some of the plain sherds may have come from vessels that were decorated somewhere else, such as plates that were decorated around the rim; however, the number of decorated sherds is still very small. The Dales used inexpensive, plain dishes.

Some of the small objects from Locus 1 were quite interesting (Figure 19). Especially intriguing was a Chinese coin found in the well. These coins were widely used as charms or decorations in nineteenth-century America, as they still are. Another telling find is the fragment of an eyeglass lens. Eyeglasses were one of the ways industrialization provided a huge benefit to ordinary people in the nineteenth century, making clear vision affordable for millions. The decorated buttons, very common items from this period, show that people were concerned about how they dressed.

3. *Locus 2*

Locus 2 was the northeastern artifact concentration from the Phase I surface collection. It was the smallest of the three loci, measuring about 160x120 feet. The magnetometer survey showed a concentration of signals in this area, likely brick and nails, and brick was visible on the surface. So a structure may have stood there. Most of the 17 test units excavated produced very low artifact counts. Only four of the units on the initial, 30-foot interval grid produced more than six: Unit 28 (N=10), Unit 29 (N=23), Unit 42 (N=16), and Unit 43 (N=48). These units are adjacent. Unit 43 was at the edge of the original grid, so Unit 59 was excavated 30 feet to the west, and it produced only one artifact. The artifact distribution that defines Locus 2 is therefore quite small, most of the material coming from an area measuring about 75x50 feet. The remaining 12 units in the core of the site produced only 32 artifacts in all. In total, 169 artifacts were recovered from the locus, along with less than half a kilogram (1 pound) of brick.

Test Unit 58 was dug about 40 feet northwest of the Phase I artifact concentration, at a magnetic anomaly identified as a “linear trend.” No feature was identified but the unit did produce 33 artifacts, the second highest total from this locus. Unit 58 may have been adjacent to the driveway that once ran across the property. In fact, the magnetic trend may be related to the driveway, since it runs roughly parallel to it. The artifacts may therefore represent an accumulation of debris along the drive, perhaps in a shallow ditch.

The topography of Locus 2 would not have been well suited for a house. Whereas Locus 1 and Locus 3 are both on high, sandy ground, Locus 2 is low and damp on silty soil. On the other hand the presence of brick and nails suggests that a house may have stood here, despite the poor situation.

The artifacts from Locus 2 are essentially identical to those from Locus 1, except there are not as many of them (Table 8). The most common objects are sherds of plain whiteware and fragments of clear and aqua bottle glass. Nothing in the collection dates to outside the second half of the nineteenth century. This locus was occupied only during the Dale ownership of the tract, between 1854 and 1915. Given the small size of the collection, it might have been occupied only for a decade or two.

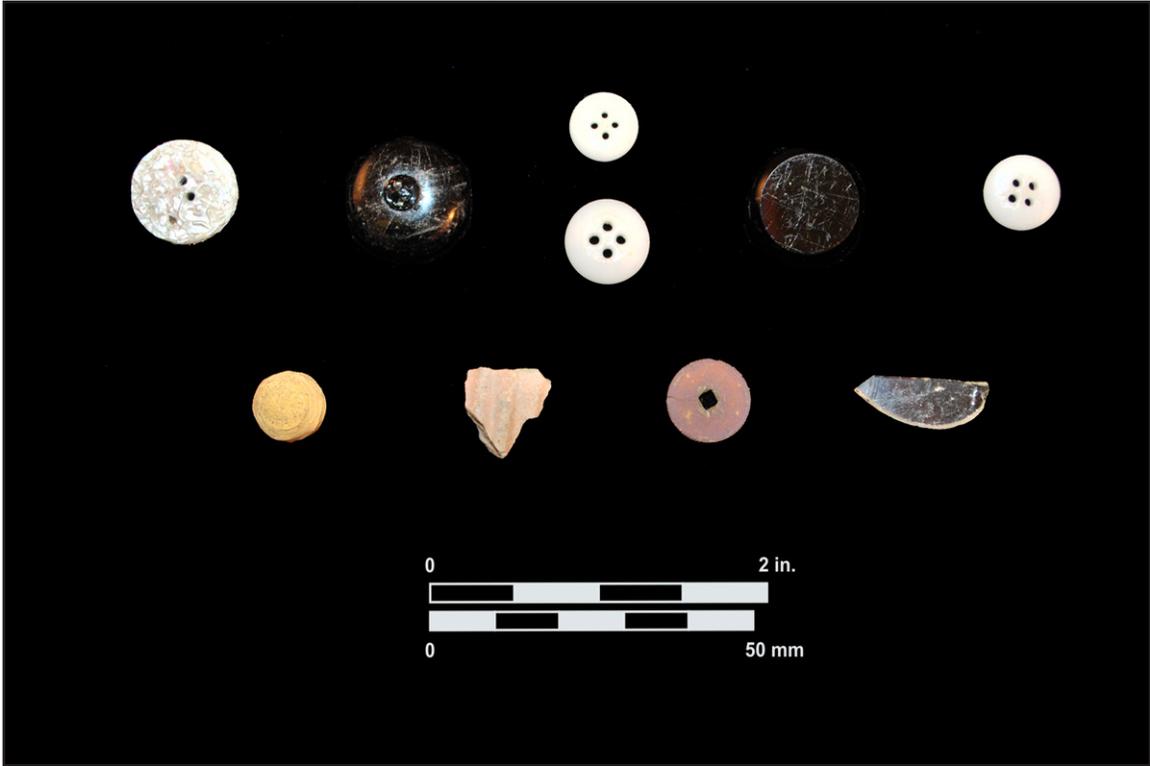


FIGURE 19: Small Finds from the Phase II Testing of the Dale Site

TABLE 8

HISTORIC ARTIFACTS FROM LOCUS 2 OF THE DALE SITE, PHASE II TESTING

ARTIFACT TYPE/SUBTYPE	COUNT	ARTIFACT TYPE/SUBTYPE	COUNT
<i>Ceramics</i>		<i>Glass</i>	
Whiteware		Bottle/jar, aqua	49
Plain (1820-present)	24	Bottle/jar, clear	13
Cut sponge (1830-1900)	2	Bottle/jar, amber	7
Transfer-print, blue (1820-present)	1	Bottle/jar, amethyst (1880-1915)	5
Transfer-print, flowing colors (1840-1900)	2	Curved vessel, aqua	1
Handpainted (1820-present)	2	Curved vessel, clear	3
Embossed (1820-present)	1	Lamp chimney	1
Ironstone (1840-present)	5	Tumbler, ribbed (1880-1915)	2
Yellowware (1827-1940)	2	Tableware, clear	1
Hard-paste porcelain		<i>Architectural</i>	
Stoneware		Nail, unidentified	5
Gray with Albany slip (1800-1940)	2	Window glass	20
Gray with miscellaneous brown slip	1	<i>Other</i>	
Coarse red earthenware		Wire	1
Black glaze	2	Spring	1
Brown glaze	2	Unidentified iron	1
Dark brown to black glaze	2		
Brown glaze with dark brown mottling	3		
Clear glaze with dark brown mottling	1	Total	162

4. *Locus 3*

Locus 3 included two artifact concentrations that were identified at the Phase I level as parts of separate sites: the southeastern concentration of surface artifacts in the plowed field and a concentration of material within the hedgerow that was originally defined as part of the Noxon's Tenant Site. The locus was therefore larger than 1 and 2, measuring 450 feet north-south by 150 feet east-west. Sixteen test units were excavated in this locus.

This locus includes a house site, within the hedgerow, where brick and window glass were found, along with the highest artifact counts in any part of the Dale Site (Tables 9 and 10). The artifacts from this area appear to be the earliest at the site, including pearlware (1775 to 1840) and one sherd of creamware (1762 to 1820). This area of high artifact density was small, measuring only about 100x50 feet. Among the interesting finds were a clay marble and a small sherd of porcelain that may be from a doll; these are the only children's toys found at the Dale Site.

A line of test units at 60-foot intervals was extended north from that house site across the Phase I artifact concentration. Along most of this line, counts were very low, but the unit in the center of the field concentration produced six artifacts. No brick, window glass, or nails were found in this area, so this seems to be a place where trash was deposited (such as a yard, garden, or pig sty) rather than a building location. A magnetometer anomaly east of the hedgerow was identified as an outbuilding location by the number of nails found there.

TABLE 9

CERAMICS FROM LOCUS 3 OF THE DALE SITE, PHASE II TESTING

ARTIFACT TYPE/SUBTYPE	COUNT	ARTIFACT TYPE/SUBTYPE	COUNT
Midlands mottled (1680-1750)	1	Ironstone (1840-present)	2
Jackfield-type (1740-1850)	7	Yellowware (1827-1940)	2
Creamware, plain (1762-1820)	1	Yellowware, dipped (1827-1940)	1
Pearlware		Hard-paste porcelain	2
Plain (1775-1840)	22	Soft-paste porcelain	3
Shell-edge, blue (1775-1840)	3	Stoneware	
Handpainted (1775-1820)	6	British brown (1690-1775)	1
Dipped (1790-1890)	1	Gray-bodied	3
Transfer-print, line only (1780-1815)	1	Gray with Albany slip (1800-1940)	4
Transfer-print, flowing colors (1775-1840)	4	Red-bodied slipware (1670-1850)	2
Transfer-print, blue (1790-1840)	4	Coarse red earthenware	
Whiteware		Black glaze	14
Plain (1820-present)	134	Brown glaze	15
Shell-edge blue (1820-1900)	4	Dark brown to black glaze	11
Shell-edge green (1820-1900)	2	Clear glaze	4
Sponged (1820-1930)	4	Brown glaze w. dark brown mottling	8
Cut sponge (1830-1900)	1	Clear glaze w. dark brown mottling	2
Transfer-print, blue (1820-present)	16	Olive glaze	1
Transfer-print, green (1825-1915)	1	Imitation Midlands Mottled	1
Transfer-print, flowing colors (1840-1900)	2	Unglazed	5
Handpainted (1820-present)	15	Unidentified redware	8
Dipped (1820-1900)	4	Unidentified ceramic	2
Decal-decorated (1880-present)	1		
Overglaze transfer print, polychrome (1880-1950)	2		
Colored glaze (1820-present)	1	Total	328

Dating the artifact collection from this locus presents problems. It produced the earliest material from the Dale Site, including 41 sherds of pearlware (1775-1840). Some of the later artifact types found at Locus 1, such as lid liners for mason jars (post 1867), were not present. One rough way to date a nineteenth-century house site is to compare the amount of ceramics found to the amount of bottle glass. Because glass bottles became so much less expensive and more common over the course of the century, later sites have a lower ceramic-to-glass ratio. The ratio for both Loci 1 and 2 is about 0.6. For Locus 1, the ratio is 4.0, 328 sherds of ceramic to 82 pieces of bottle glass. Such a high ratio would normally indicate a pre-Civil War occupation. However, Locus 3 also produced some artifacts dating to after 1880: 10 pieces of amethyst-tinted glass (1880-1915), one sherd of whiteware decorated with applied decals (after 1880), and two other sherds with polychrome handpainting on top of the glaze (1880-1950).

Could the site have been occupied from around 1800 to 1840 or so, abandoned, and then re-occupied after 1880? Owner William Mansfield's second frame house disappears from the tax records in 1837, which might mean that the house at Locus 3 had been abandoned. The tax

TABLE 10

NON-CERAMIC HISTORIC ARTIFACTS FROM LOCUS 3 OF THE DALE SITE, PHASE II TESTING

ARTIFACT TYPE/SUBTYPE	COUNT	ARTIFACT TYPE/SUBTYPE	COUNT
<i>Glass</i>		<i>Personal</i>	
Bottle/jar, aqua	37	Clay marble	1
Bottle/jar, clear	15	Collar stud	1
Bottle/jar, amber	3	Lamp parts	2
Bottle/jar, olive	4	Buttons	
Bottle/jar, amethyst tint (1880-1915)	9	Button disk, ceramic	2
Bottle/jar, green	2	Glass	1
Bottle/jar, cobalt blue	1	White clay tobacco pipe stem	1
Bottle/jar, milk glass	1	<i>Architectural</i>	
Bottle/jar, yellow	3	Nail, cut (1790-present)	36
Curved vessel, clear	2	Nail, unidentified	18
Lamp chimney	2	Window glass	113
Tumbler, ribbed	1	<i>Other</i>	
Stemware, amethyst tint (1880-1915)	1	Unidentified iron	12
Tableware, clear	1	Unidentified rubber	1
<i>Faunal</i>		Unidentified	1
Oyster shell	4		
Unidentified bone	2	Total	195

records of New Castle County in this period are notoriously inaccurate, and many buildings that we know were standing, even substantial brick houses, were somehow ignored by the tax agents. It is still tempting to think that this tax record is correct, and that occupation of Locus 3 ceased in 1837. It was then occupied again after 1880, leaving a few later artifacts in the collection.

D. ANALYSIS

1. *Unraveling the History of the Dale Site*

Until 1854 the 20-acre property surrounding the Dale Site belonged to investors who lived elsewhere. Occupation of this property began around 1730. From about 1730 to 1760, the tenant residents lived at the Noxon Tenancy, a small site just south of Locus 3. The artifacts from the Noxon Tenancy suggested that the property had a resident of fairly high status in the mid-1700s. The few stray artifacts of this period found at the Dale Site, such as the single sherd of Midlands Mottled Ware found at Locus 3, probably come from the Noxon Tenancy (Figure 20). Evidence of occupation between 1760 and 1800 is very limited, so the property may have been abandoned for a time. Then around 1800 a new house was built at Locus 3. This was probably the frame house that shows up in William Mansfield's tax assessments, and the one rented in 1830 by Lewis Jones and in 1832 by James Golden. The artifacts suggest a small house. The house had glass windows. A very small amount of brick was recovered, so if it was set on brick piers, they were probably thin and flimsy. Or, the house may have been held up by wooden, ground-set posts. Although some later artifacts were found in Locus 3, it was certainly much less used after about 1850 than it had been before.



FIGURE 20: Early Ceramics from the Phase II Testing of the Dale Site

It is interesting to note that the ceramics from Locus 3, especially the pearlware (1775 to 1840), were of slightly higher quality than the ceramics from Loci 1 and 2. More transfer-printed and handpainted sherds were found, and fewer plain. Since both Lewis Jones and James Golden were hired men on William Mansfield's farm, they were certainly not wealthier or of higher status than Samuel Dale. Perhaps this house had originally been occupied by someone of higher status. It often happened that a house would be built for an owner or a tenant who operated a sizable farm, but then the status of the house's occupants would decline as the house aged. On the other hand the site was part of the same 20-acre property in the early 1800s as later, which was not a large enough tract to support a tenant farmer of means. Most likely, then, the somewhat nicer ceramics in the earlier collection are an artifact of chance happenings beyond our view. Perhaps William Mansfield gave a set of his own old dishes to one of his tenants when he got new ones, or sold them very cheaply.

While the site belonged to Samuel Dale, from 1854 to 1873, the main house was in Locus 1. After the elder Dale died in 1873, the property was divided into three parts. One of the most interesting details about the Dale Site is that it seems to include three separate house sites; could these represent the three homes of the three Dale children? William Dale must have received the main house, Locus 1, with his central third of the property. Samuel Dale received the northern third, along with the house at Locus 2. Temperance Shockley received the southern third, along with Locus 3. The will does not mention a house on her part of the property, and the archaeology also suggests that Locus 3 was not occupied in the 1860s.

In 1882 Samuel Dale, Jr. died without children. His property was divided between William and Temperance. William continued to live at the main house. It seems likely that the house at Locus 2 was abandoned after Samuel Dale's death. If it was only occupied from around the time of Samuel Sr.'s death until Samuel, Jr. died nine years later, that would explain the small number of artifacts found at the site. Perhaps the house was then moved to another location; perhaps it was even moved to Locus 3, accounting for the evidence of renewed occupation at that site in the later 1800s. Since Temperance probably did not live at her father's farm, the later occupants of Locus 3 may have been tenants or relatives of hers.

2. *Life on the Dale Farm*

Archaeology involves a fair amount of luck. People do not live their lives with the intent of leaving a lot for archaeologists to find, and whether the excavation of an old house site produces rich deposits of artifacts or animal bones depends on chance. Some sites are very productive, and others are not. The Dale Site, so far as could be told from the Phase II testing, was not one of the lucky places. No cellar holes were present, or large pits filled with artifacts and animal bones, and the soil in the well was nearly sterile. This absence of a rich archaeological record was one reason why it was decided to continue investigating the African-American community at Armstrong Corners through historical research rather than fully excavate the Dale Site.

The archaeological record of the Dales therefore does not tell us a much about their lives, or the lives of free African-Americans in Delaware in the 1800s. However, excavations at the homes of other African-Americans in the state have produced much more material, and comparing what was found at the Dale Site to these larger collections can provide some insights.

One of these sites is the later occupation at the William Dickson Site (7NC-E-82) just outside Christiana (Catts et al. 1989). Here a small house was built around 1850 and occupied until 1919. This span of occupation matches quite well with the Dale family's occupation of the Dale Site. From 1870 to 1887, the Dickson Site was the home of African-American tenants, David Walmsley and his family. Although the names of the other tenants are not known, they were probably also African-American.

The Walmsley house measured about 20x24 feet, and it rested on very flimsy stone foundations. Had the site been plowed, as the Dale Site was, no trace of this foundation would have survived. Figure 21 shows the house foundation and a reconstruction of what it might have looked like. Samuel Dale's house might have been similar.

The artifacts from the Walmsley occupation of the William Dickson Site included a wide variety of decorated ceramics, such as handpainted teacups, transfer-printed bowls, shell-edged plates, and more. Such artifacts are commonly found at the homes of other African-American tenants (Figure 22). The mostly undecorated ceramics from the Dale Site are actually quite unusual for people of their time and place. There are several possible reasons for this. Perhaps the Dales liked plain white dishes. Perhaps they chose to buy less expensive dishes and spend their household budget in other ways. Or perhaps they preferred a matched set of white dishes to mismatched, decorated pieces. The homes of rural tenants often produce individual decorated dishes, but rarely matched sets. Most likely these mismatched dishes were bought used, at flea markets or estate sales, and they may have been chipped or cracked when they were bought. The Dale's dishes were not brightly colored, but they may have matched better than those of their neighbors.

Most of the glass found at the Dale Site had been broken by plowing into such small pieces that it was no longer possible to tell what sort of bottle or jar they came from (Figure 23). Two pieces were identified as coming from the sort of bottles that held patent medicines. In the Dickson Site collection at least 32 largely intact patent medicine bottles were found.

The collection from the Walmsley family occupation of the William Dickson Site includes a large number of small finds, things like buttons, toys, and jewelry. Six clay marbles were found, besides several porcelain doll parts and an ice skate runner. The clay marble and possible doll pieces found at the Dale Site are typical of the toys found at rural home sites of all types in Delaware. The many decorated buttons in the collection have parallels in other collections from rural tenancies, and they show a concern for attractive clothing and an ability to dress with a certain amount of style.

One especially interesting part of the collection was the animal bone (Table 11). More than 1,500 fragments of bone were found, a very large collection for such a small site. The bones came from a wide variety of animals. A majority of the meat came from domestic cows, pigs, chickens (listed as "bird" on the inventory), and sheep, but this was supplemented by wild fish and game: catfish, muskrat, squirrel, opossum, and turtle. This pattern has been observed at the homes of other African-American country folks, such as the home of Sidney Stump near Glasgow (Catts and Custer 1990), so fishing and the hunting of small game were common ways of

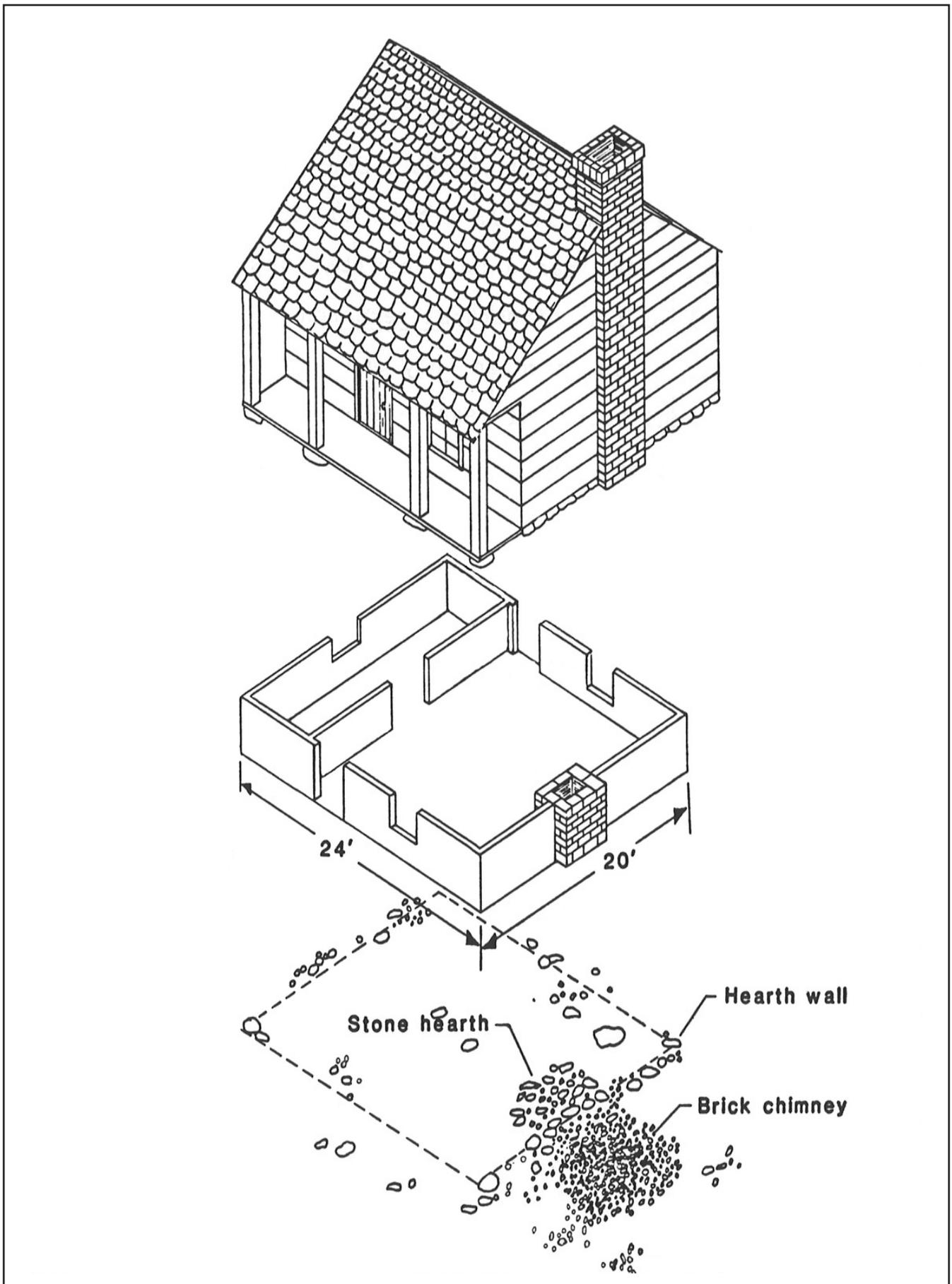


FIGURE 21: Reconstruction of the Dickson II House

SOURCE: Catts, Hodny, and Custer 1989

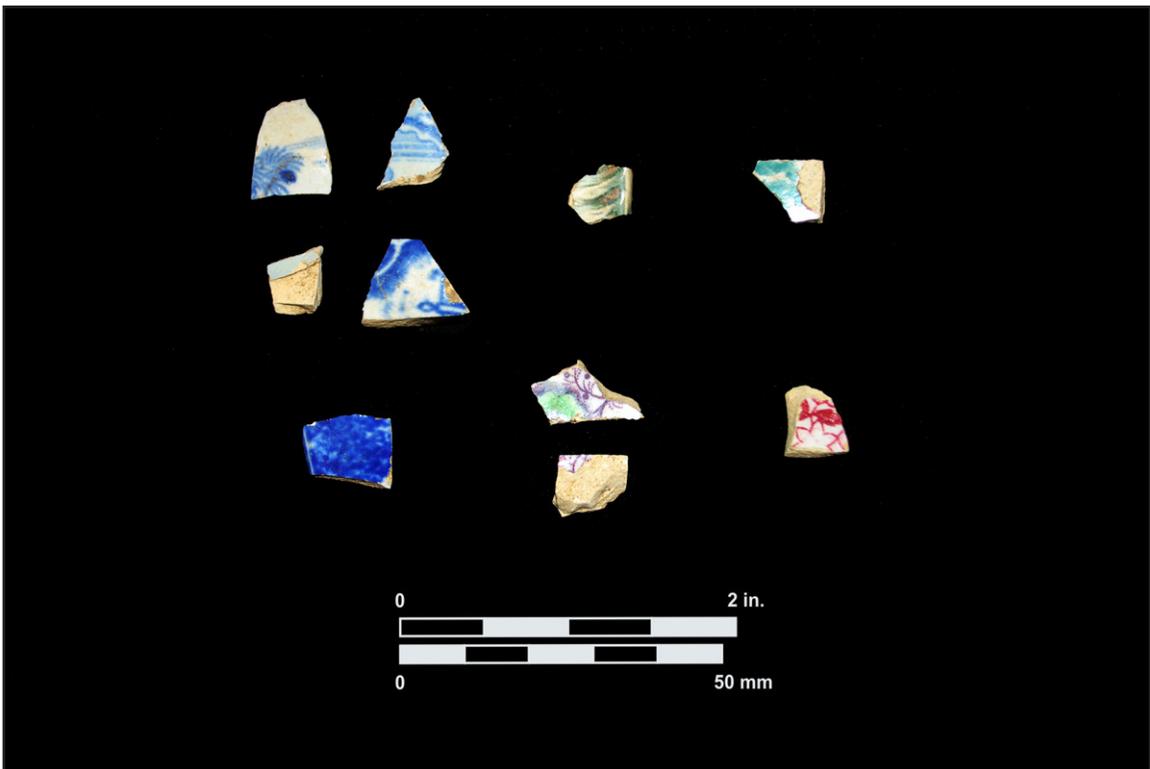


FIGURE 22: Nineteenth-Century Ceramics from the Phase II Testing of the Dale Site



FIGURE 23: Glass from the Phase II Testing of the Dale Site

supplementing the diet. However, not everyone did this, and the bones from some African-American house sites are almost entirely from domesticated animals. The Dickson Site was just a short walk from marshes along the Christina River, which made for easy access to catfish, muskrats, and turtles; people who liked to hunt and fish might have chosen to live at the site for just that reason.

The artifacts from the homes of African-Americans in rural Delaware do not speak of extreme poverty. People like the Dales and Walmsleys had roofs over their heads, glass in their windows, ceramic dishes and meat on their tables, clothes with fancy buttons, and medicine when they were sick. Their children had toys. The church provided a social and spiritual focus to their lives, and their push for education showed that they were determined to better their situation. Their houses were small, most of their possessions inexpensive, but their lives were rich and full.

TABLE 11
ANIMAL BONE FROM THE WALMSLEY OCCUPATION
OF THE WILLIAM DICKSON SITE

SPECIES	NUMBER OF BONE FRAGMENTS	MINIMUM NUMBER OF INDIVIDUALS
Cow	125	2
Pig	159	7
Sheep	42	3
Opossum	10	2
Unidentified Mammal	867	.
Unidentified Bird	147	5
Skunk	5	1
Rabbit	5	2
Rat	12	5
Cat	2	1
Squirrel	2	1
Muskrat	119	13
Deer	1	1
Catfish	73	18
Unidentified Fish	34	.
Box Turtle	12	3
Mud/Musk Turtle	12	7
Painted Turtle	16	4
Musk Turtle	2	1
Snapping Turtle	1	1
Unidentified Turtle	69	2
Turtle Egg Shell	250	.
Unidentified	18	.
Total	1983	

Source: Catts et al. 1989