9. NATHAN WILLIAMS TOFT SITE

THE NATHAN WILLIAMS SITE (K-6454, 7K-C-389) was identified during Phase I studies for the current project (Heite and Blume 1992:54-55). In that survey, the entire field was walked from the driveway to the property line. The only artifacts were found on a knoll by the road that is the highest point in the field. Surface materials (90-23-03) were deposited at the Island Field Museum.

The property was identified in an 1838 document as roughly eleven acres with a house, "late" in the tenure of Nathan Williams, free Negro. A house is shown in this approximate location on the Beers *Atlas* map of 1867, and again in surveys dated 1881 and 1882. In a deed of 1884, an adjacent property was identified as lying near a property still identified as the Nathan Williams lot.

Given the insubstantial construction of many tenant houses, it is possible that Nathan Williams' house was actually replaced by the one represented on later maps. Since today's McKee Road is considerably wider than the 1881 road, there was also a high probability that the house site had been destroyed by road widening over the past century.

The Phase II objective was to define the limits of the site, and to determine if any buried features might still exist.

RESEARCH DESIGN CONSIDERATIONS

Low-status sites seldom contain buried features. High-status sites, on the other hand, are usually defined by their subsurface features and large collections of artifacts. Hand-digging small Phase II tests to discover buried features in low-status sites would be futile, because the chances of hitting a feature in a small test are low, even in the midst of the toft.

Existence of subsurface features is the generally accepted proxy measure for archæological integrity, a prerequisite for determination of eligibility. However, surface-only sites might possess integrity.

Controlled surface collection using large squares, such as ten meters, is less than desirable in a low-status site, because these sites are small and yield scant artifacts. We used a modified controlled technique, in which a flag was dropped and plotted wherever clusters of artifacts were observed. This subjective approach is more fine-grained than counting yield from large surface squares when trying to define the shape of aa small known site. The results yielded far better definition than could have been provided by recording surface finds in large squares. The next level of definition would have been piece-plotting and cataloguing of each artifact, which is inappropriate at the Phase II level.

Soil chemistry, normally a fall-back technique at the Phase II level, was used after it became apparent that traditional field observation techniques would not suffice to define site boundaries. Soil chemistry is more satisfactory when the site is being fully surveyed, along both axes. In this case, project conditions dictated a traverse, rather than a grid.

It would have been better to isolate features *at this level of survey* by sampling the topsoil across the site, then stripping a wide area with a Gradall. Had we found substantial buried features, we would have satisfied the Phase II requirements, as specified in the state management plan. However, the site was planted in corn just as the project began, so that minimizing crop disturbance became a major consideration.

FIELDWORK NARRATIVE

To avoid massive crop disturbance, it was decided to make a cut parallel to the road, on the edge of the field.

On May 6, 1992, a Gradall cut was opened along the edge of the known site. Since the site was already planted in corn, the trench was confined to the margin of the field. This trench, 77.5 meters long, was opened with a smooth blade roughly five feet wide (1.65 meters). Several features were observed and recorded.

One feature, 3A, consisted of a tight pattern of crescent-shaped divots cut out of the clay subsoil. Observers were unanimous in interpreting this feature as marks made by the tip of a round shovel, striking the hard clay subsoil in a vain attempt to dig a hole, probably during the summer, when central Delaware clay soils are impenetrable.

Other features, 3B through 3F, were clustered at the highest point on the site, between 38 and 60 meters from the zero point on the trench. The first, 3B, was a linear soil mark, filled with powdery gray soil and extending a few centimeters below the plowzone.

Next to 3B was a complex feature, consisting of a posthole, 3C, with two intrusions, one heavily organic and the other sterile. These were interpreted as a planting and the backfilled hole from digging out the plant.

Square postmolds were observed in this same area, suggesting that this place was the focus of intense activity at some time in the past.

At the far end of the ridge was a large, amorphous, feature, 3F, containing badly decomposed bone fragments and dark organic soil. These features, in the aggregate, are typical of features found on a toft.

FLAGGED SURFACE COLLECTION

Since surface collection conditions were nearly perfect, the entire field was walked. Each fieldwalker carried a handful of crop flags. Whenever an apparent concentration of artifacts was observed, the observer placed a flag (FIGURE 21).

While these observations were subjective in individual cases, the aggregate observations of three fieldwalkers produced what appears to be a valid pattern of clustering. The heaviest concentration of flags was opposite the features, on the summit of the site; few artifacts were found east of the concentration.

The north end of the Nathan Williams holding, in the field beyond the driveway (ER 189), was walked during the excellent viewing conditions of planting season. No other concentrations that might indicate a house site were identified.

THE SOIL SAMPLES

Soil samples were taken from both the topsoil and the subsoil at one-meter intervals along the Gradall trench. We took 154 samples, along the 77.5-meter cut, which should give excellent definition of any chemical markers. Archæological soil samples in other sites have been taken from a much coarser grid. The samples were then analysed at the University of Delaware soil laboratory.

In other sites, features within tofts have been mapped by their chemical characteristics when samples could be collected on a two-dimensional grid. At the Williams site, only one axis was available for plotting, so the chemical results are represented as a single profile line.

All the samples showed some variation in the vicinity of 38-60 meters, the supposed location of the toft. Some elements were elevated near the driveway, near the beginning point of the traverse.

As expected, the chemistry of the topsoil differed considerably from that of the subsoil, possibly as a result of more recent fertilization, as has been demonstrated elsewhere (Shaffer et al. 1988:133).

Phosphate levels, which indicate concentrations of organic waste (FIGURE 24), were relatively uniform in both subsoil and topsoil samples. Topsoil phosphates were elevated in the driveway area, while subsoil phosphates were depressed in the toft area.

A low, or acid, pH factor is supposed to indicate a high level of organic waste (Custer et al. 1986:91). In this case, pH distributions in topsoil and subsoil were similar, with elevated levels at both the toft and driveway locations (FIGURE 23).

High pH levels at the driveway might indicate accidental discharge of lime at the edge of the field. While it might be tempting to interpret this driveway area as an activity site from the days of Nathan Williams, it is equally likely to be a staging area for recent agricultural spreading, since it lies at the entrance to the farm conveniently in the corner of the field.

At the Thomas Williams site near Glasgow, variations in subsoil pH levels were interpreted as evidence for house locations, while relatively uniform pH distributions in the plowsoil were attributed to modern agricultural practices (Catts and Custer 1990:190). Areas of high pH levels at Smyrna Landing were interpreted as coming from mortar rather than from agricultural liming (De Cunzo, Hoseth, Hodny, Jamison, Catts and Bachman 1992).

Calcium levels, which should reflect the presence of lime, displayed slightly different profiles (FIGURE 23). Calcium in the topsoil exhibited a slight elevation at the driveway area, but the curve was nearly flat over the putative toft. Subsoil calcium, however, showed a bulge at the toft area as well as the driveway area. This difference may be taken to indicate an activity other than recent agricultural field liming.

Overlapping areas with elevated calcium and phosphorous levels at New Windsor, New York, were used to isolate non-feature domestic activity areas (Sopko 1983:29) in a much larger open area with many foci. At the Clocker's Fancy site in Maryland, congruence of these two elements was found at the kitchen area, but calcium alone appeared to define a large yard (Stone, Miller, Morrison and Kutler 1987:29).

Magnesium values at the Wilson-Slack site in New Castle County were similar, and were attributed to building materials (Custer et al. 1986:92).

In the present case, phosphorous was scarce in less-acid areas where calcium and magnesium were more concentrated. Since bricks were scarce, it is certain that a large mass of mortared brick rubble did not

generate this chemical footprint; lime-based plaster or whitewash could be the source, however. Calcium concentrations at the Thomas Williams site near Glasgow were taken as chimney location indicators (Catts and Custer 1990:186).

Potassium, sometimes attributed to deposits of wood ash, showed a depressed level in both the topsoil and the subsoil in the putative toft area, but was elevated in the topsoil near the driveway. Correlation between pH and potassium, observed at the Wilson-Slack site, was not observed (Custer et al. 1986:93). Manganese levels were elevated in the presumed toft area, strongly in the subsoil and mildly in the plowsoil (FIGURE 25).

The general picture that emerges from the chemical analysis is a toft area in the vicinity of the observed features between 38 and 60 meters from the driveway, with another feature near the driveway entrance that is not fully understood. Because the driveway is historically part of the Williams lot, it should be included in any investigation of the toft.

A driveway near this location appears as early as the Beers *Atlas* survey of 1867, connecting the earlier toft to the road now known as College Road. Without considerable archæological examination outside the project area, it would be impossible to determine if the driveway has been moved substantially since McKee Road was built.

THE ARTIFACTS

Surface-collected artifacts from the site may help provide date and status information. Artifacts that might date from the Nathan Williams period included a piece of white saltglaze stoneware and the base of a free-blown beverage bottle, both of which are clearly eighteenth-century. A pharmaceutical bottle base appears to be the earliest object in the collection, resembling specimens as early as the late seventeenth century.

Early artifacts may represent an early occupation, on which a later occupation was superimposed, or a long period of reuse of old utensils by poor people. Most of the material from the site is later and more diverse, reflecting inhabitants' access to markets after the middle of the nineteenth century, and their use of such mass-market goods as printed white earthenware.

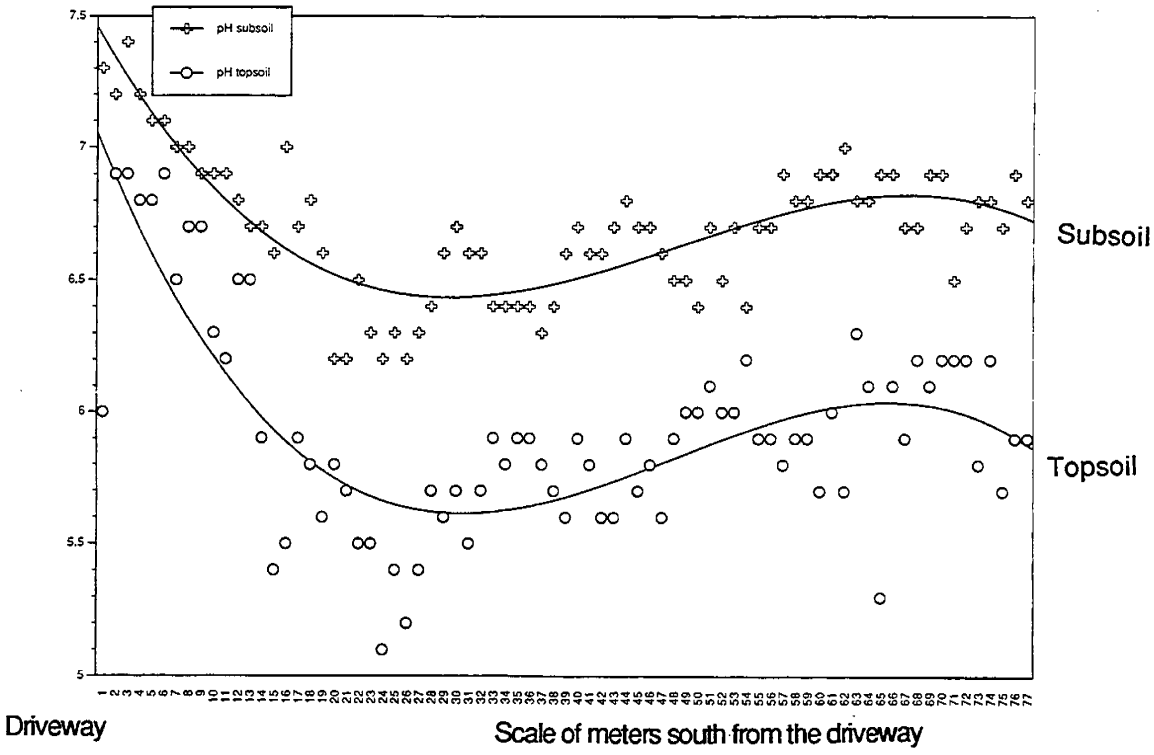
Existence of buried features, the test of integrity, was confirmed, and boundaries were established. Since this property type is quite rare, its significance is undeniable.

Plate 18
Trench and soil sample bags,
laid out for collection, looking south

Plate 19
Shovel shaving the trench

Figure 23

Nathan Williams Site, 7K-C-389, pH and calcium



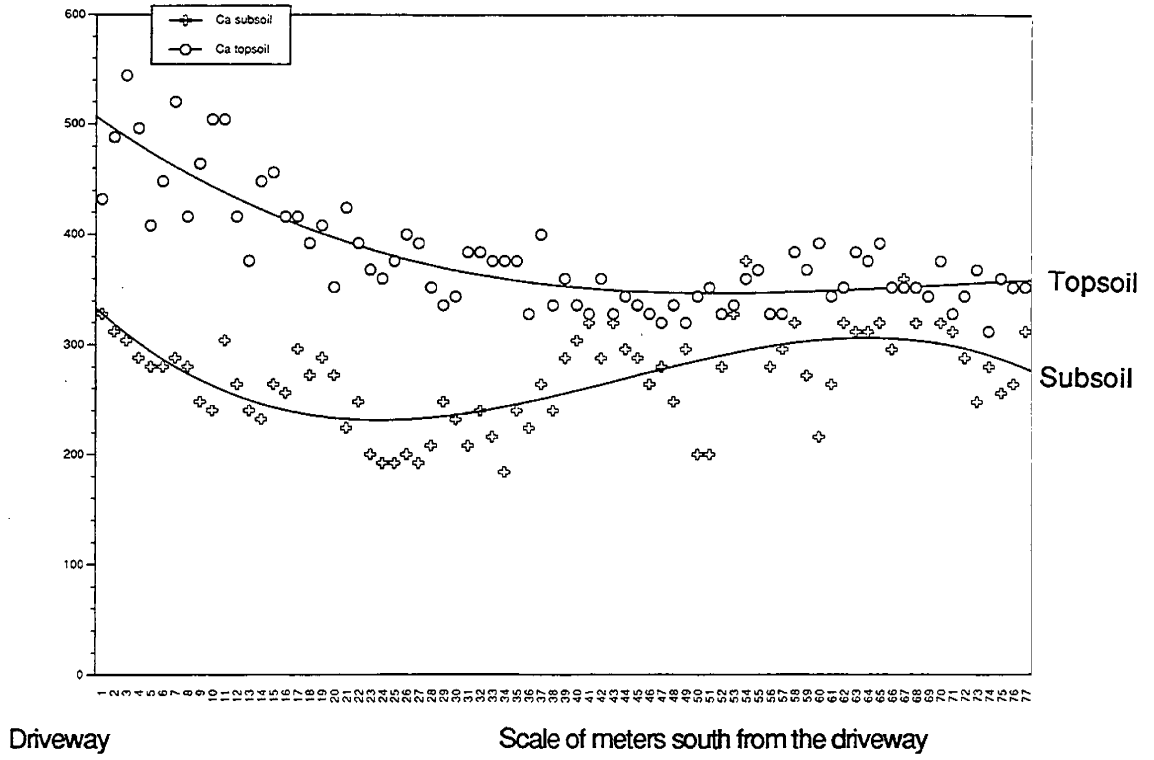
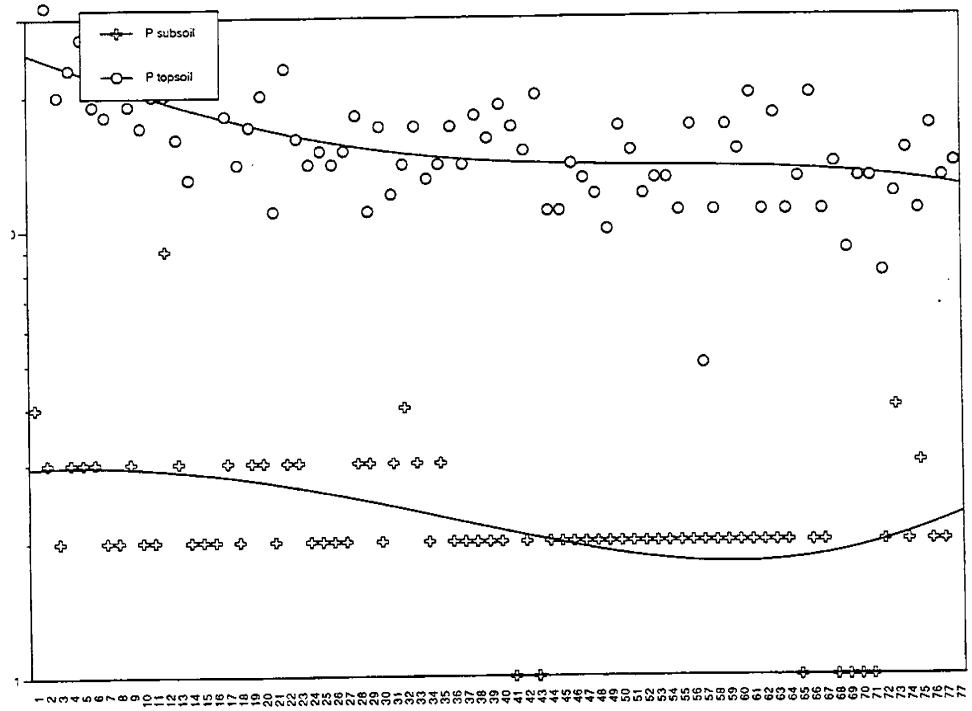


Figure 24

Nathan Williams Site, phosphorous and potassium



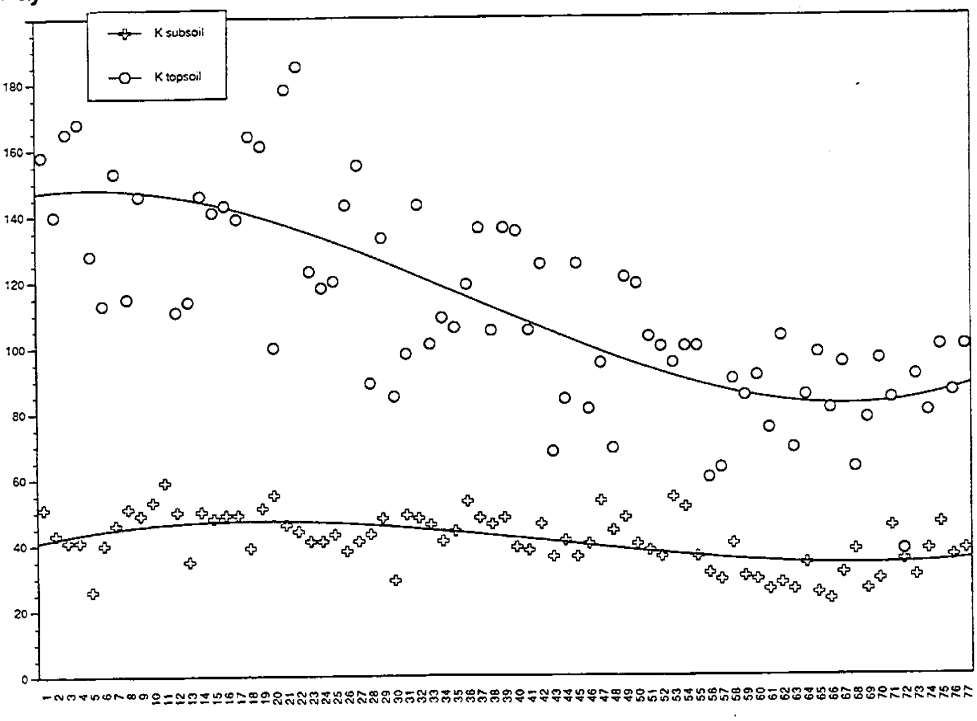
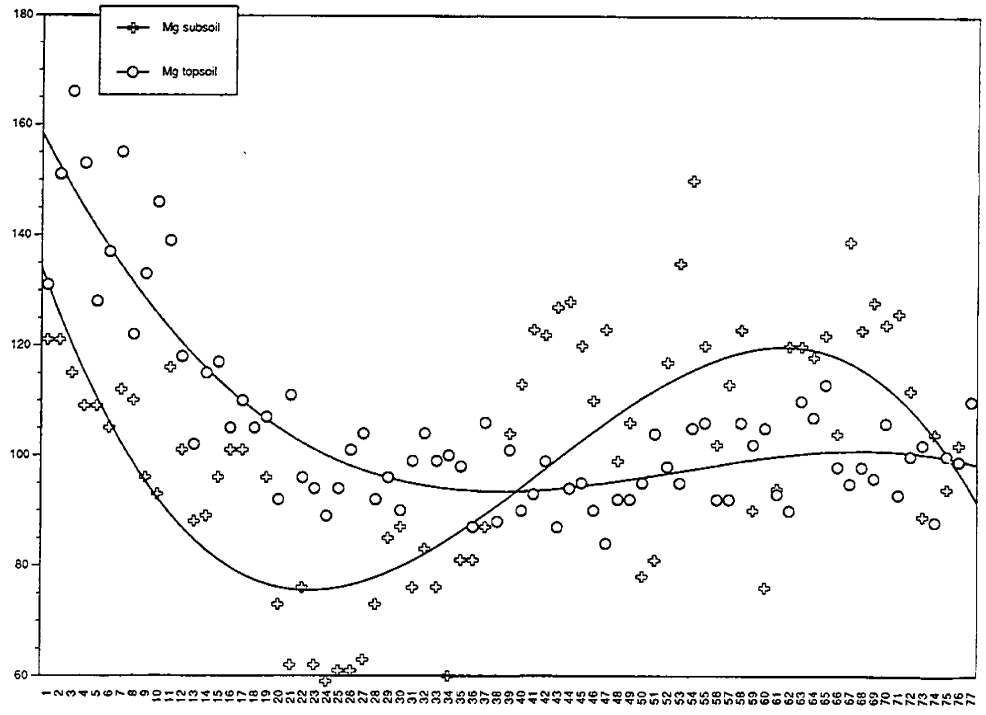


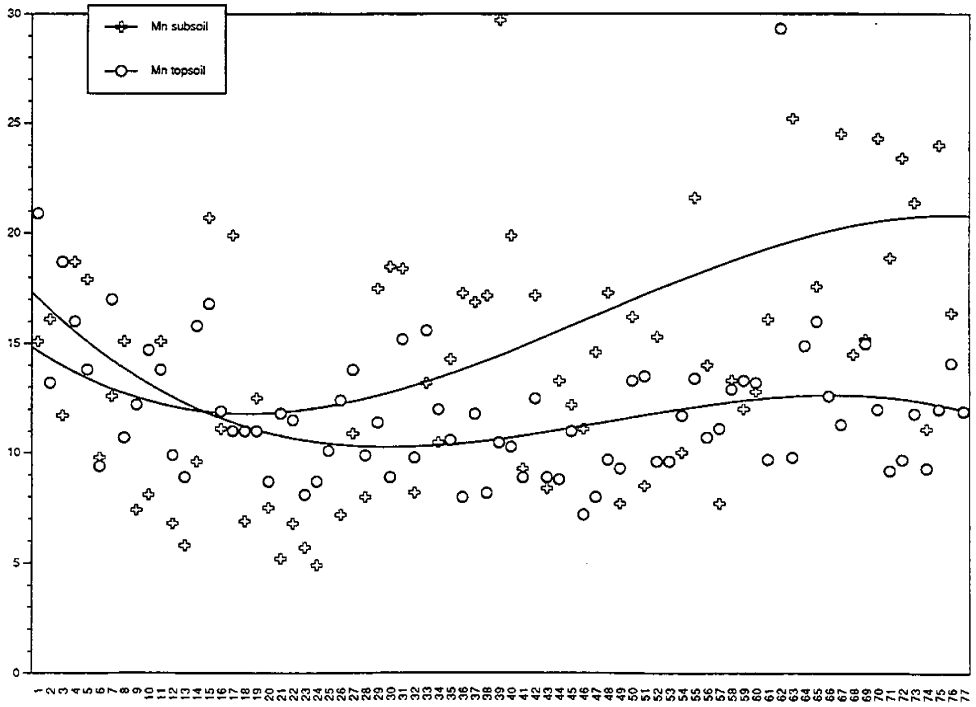
Figure 25

Nathan Williams Site manganese and magnesium



Driveway

Scale of meters south from the driveway



Driveway

Scale of meters south from the driveway

Quantitative and qualitative contrasts between earlier and later objects may reflect changes in circumstance of the occupants, which will be clearly delineated if buried deposits from different periods are uncovered. For purposes of completing the determination of eligibilty, the tests were sufficient to indicate site boundaries and to demonstrate that the site retains integrity.

Within the eleven acres Nathan Williams occupied, there are two documented occupations. The first was Williams. The second was the DuHamel tenants of circa 1877.

Both time periods are represented in the surface collection, which identified a site centered in the naturally most desirable part of the eleven acres, a slight rise in the field.

The spatial relationship between the two occupations has been established, but temporal continuity is not certain. Only excavation can determine if the site was continuously occupied, or if a later tenant house was built on or near the Williams site.

Some, or all, of the house site[s] could have been destroyed by earlier road building. It appears from the Phase II evidence that a substantial portion of the toft survives in the form of subsurface features in the existing field.

Chemical profiles demonstrate the existence of a domestic area. Chemical results are summarized in appendix 1 and figures 23-25.

Nathan Williams' former property was bisected by McKee Road, so that four houses of the Mosley community were built on it after the swap between Mosley and Denney (FIGURE 10, PAGE 44). It is therefore impossible to know, without excavation, if the Williams toft might extend across the road.

Any disturbance on the west shoulder of McKee Road should be preceded by a test for potential remains of the Williams toft or the original driveway.

EVALUATION OF ELIGIBILITY

As an example of a little-known site type, the Williams toft cannot be underestimated. Its potential value to the archæology of agricultural technology has been compromised by its later inclusion in the Scotten-Ford agricultural activites, which could have obscured earlier evidence.

According to National Register standards, if a site should be found to possess both subsurface integrity and definable boundaries, it would be eligible for listing. The Nathan Williams property meets these requirements.

The western boundary of the surviving site is McKee Road. However, the portion of Nathan Williams' property that fell west of the road should be considered potentially a part of the archæological site.

The eastern boundary of the site, for purposes of the National Register, is the field edge that lies about 250 feet from McKee Road. This field edge is the former Williams property line, as well as the edge of well-drained soil.

A five-acre parcel occupied by one of the owners has been cut largely from the Williams tract. A substantial portion of this tract is cultivated as part of the field that includes the archæological site.

Until other, more substantial, archæological tests are conducted, the Williams toft site can be defined as limited on the northeast by the edge of the woods that formed the original boundary of his tract.

Along the road, the north and south boundaries of the site can be defined by reference to the ridge on which it stands.