6. Phase I Investigations East of the River

PREVIOUS WORK IN THE IMMEDIATE vicinity of the project area has included several surveys by the University of Delaware Center for Archæological Research, as well as one present author's earlier work on other proposed alignments of Denney's and Scarborough roads.

A Phase I survey, the first step in any cultural resource investigation, was conducted over the entire corridor during 1989 and 1990 by Edward Heite. The purpose of a Phase I survey is to identify all cultural resources in the project area.

On the DelTech side of the project area, east of the river, test locations are in old-field succession and under the athletic field. Adverse ground cover conditions forced the use of machine stripping, test squares, and shovel test pits, which are less desirable than surface collection of a plowed field, which was employed west of the river.

TESTS AT TRAILER SALES SITE (7K-C-392)

The easternmost end of the project area has been part of the College property since the campus was established. It serves as a rear entrance and utility right-of-way. Until 1990, it was also part of the adjacent trailer sales lot. Near the highway, the lot is mapped as Sassafras, even though it is heavy with clay and poorly drained.

A house is shown on the 1828 plot (FIGURE 8) in the approximate location of the Larry's Homes office. This house, identified as the Boyer residence, would have stood on a slight ridge east of the bay/basin feature known as Simon's Savannah. Since the northbound lane of the modern Route 13 is the original state road, a considerable amount of frontage has been removed from this site to create the modern roadway.

Three trenches were cut through this area with a Gradall, and numbered ER 53, 54, 55. The trenches were located to cross the centerline of the proposed road and to cover most of the soil that is mapped as well-drained (FIGURE 13). The three trenches were reported in the earlier publication (Heite and Blume 1992: 84-87).

The first, and most interesting, cultural remains discovered were two ditches parallel to the modern highway. The only dating evidence for these ditches is a slip-decorated red earthenware bowl found in the uppermost fill of the ditch, immediately under the plowzone. A single basal sherd of a free-blown cylindrical green beverage bottle was found in the spoil nearby, but there were no other early artifacts in the trailer sale area.

The roadside ditches were hand-dug, and were filled with dense silt. In the eastern ditch, distinct layering of sediments was apparent, indicating that water had stood in the ditch. Other features uncovered in the trenching included stump holes, round postmolds, and linear soil discolarations that could have been planting beds.

While the site has shed light on small farm practices during the early nineteenth century, it is so disturbed by more recent land uses that it lacks integrity sufficient to recommend it for the National Register.

Although no sites eligible for the National Register were found in the trailer sales area, its excavation provided insights into agricultural practices. This piece of poorly drained ground had evidently been repeatedly ditched and fertilized, in vain attempts to make it productive. These remains may be typical of poor farmers' impact on their marginal soils, testimony to the hardships they encountered.

ATHLETIC FIELD (7K-C-388)

The DelTech athletic field, a high level tract south of the main campus, was intially identified as a high probability area for both historic and prehistoric sites.

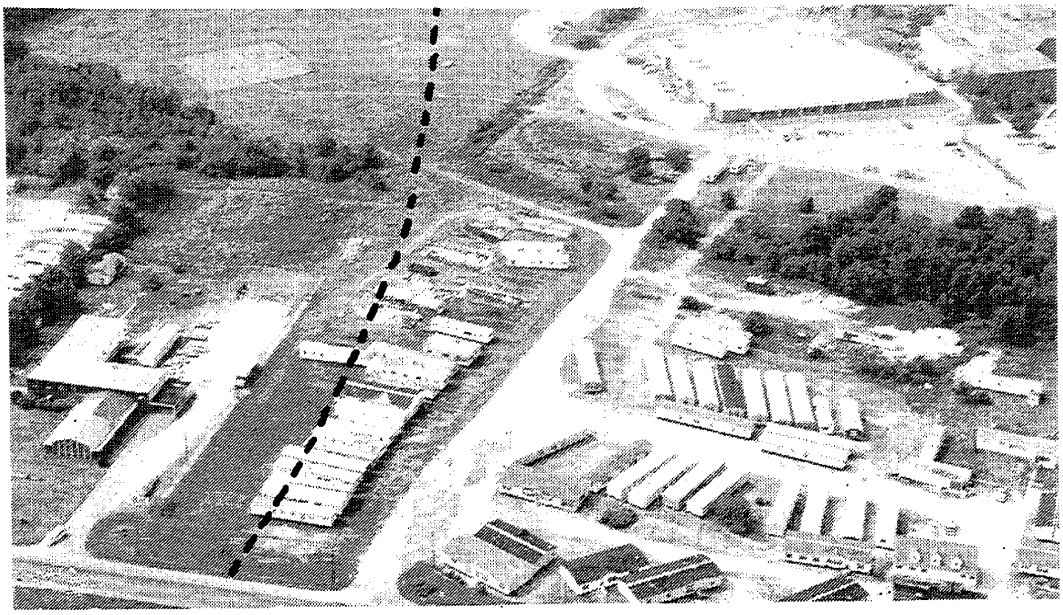

Plate 2
Project area from the air, looking west
Trailer sales in foreground, August 1990.
The trailers in the center of the picture stand in the area that was later trenched.

Three hand-dug three-foot test pits were opened in this vicinity, on well-drained ground. All soils were sifted through quarter-inch hardware cloth.

The presence of a large number of historic-period artifacts in the topsoil led to the conclusion that this field might have been close to a house site. The soil, mapped as Sassafras, contains considerable clay, causing it to be hard in dry weather and sticky when wet. The largest feature was a relatively recent agricultural drainage or sanitary plumbing pipeline (FIGURE 12).

Machine-dug trenches 57 and 58 revealed very few features. Notable among the features in the athletic field were several perfectly round or perfectly square holes, evidently planting holes. Toward the west, where the soil contains more clay, there was an appreciable amount of charcoal in the fill, indicating that this material might have been intentionally applied as a soil modifier.

No features on the site that would qualify the athletic field for the National Register.

WHITE MARSH BRANCH (7K-C-390)

Near the mouth of White Marsh Branch is part of the DelTech campus that is undergoing old-field succession (FIGURE 14). This spur of well-drained sandy Sassafras soil is a low ridge, surrounded on all sides by ditches or poorly-drained soil.

Well-drained soil at the confluence of two streams is generally regarded as a likely site for prehistoric activity. No historic structures are known to have existed here.

Three tests, all three feet square and numbered 1, 2, and 4, were sunk into the hill, the first two near the proposed centerline and the third 125 feet away.

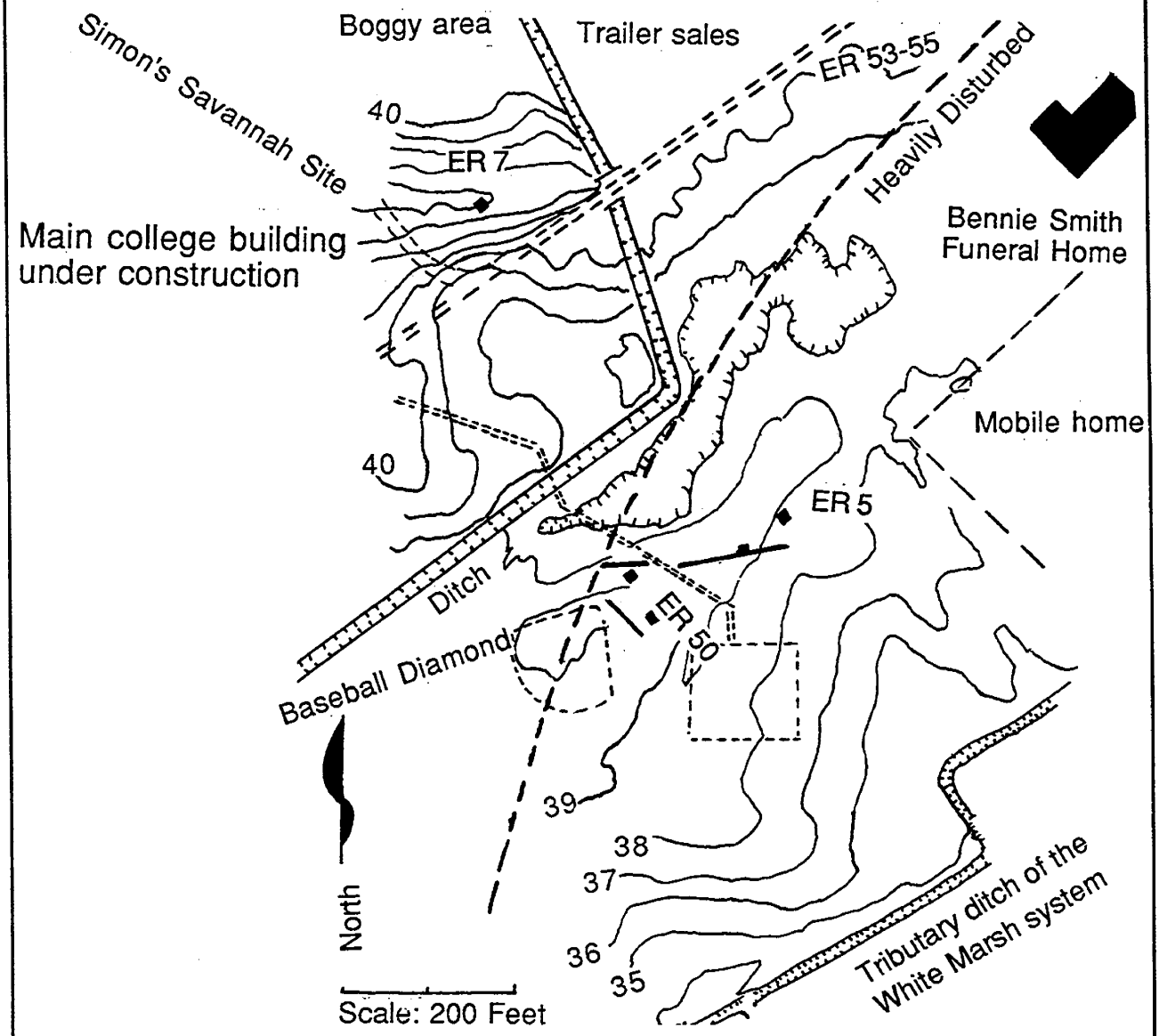

Figure 12

Map of the trailer sales and the athletic field

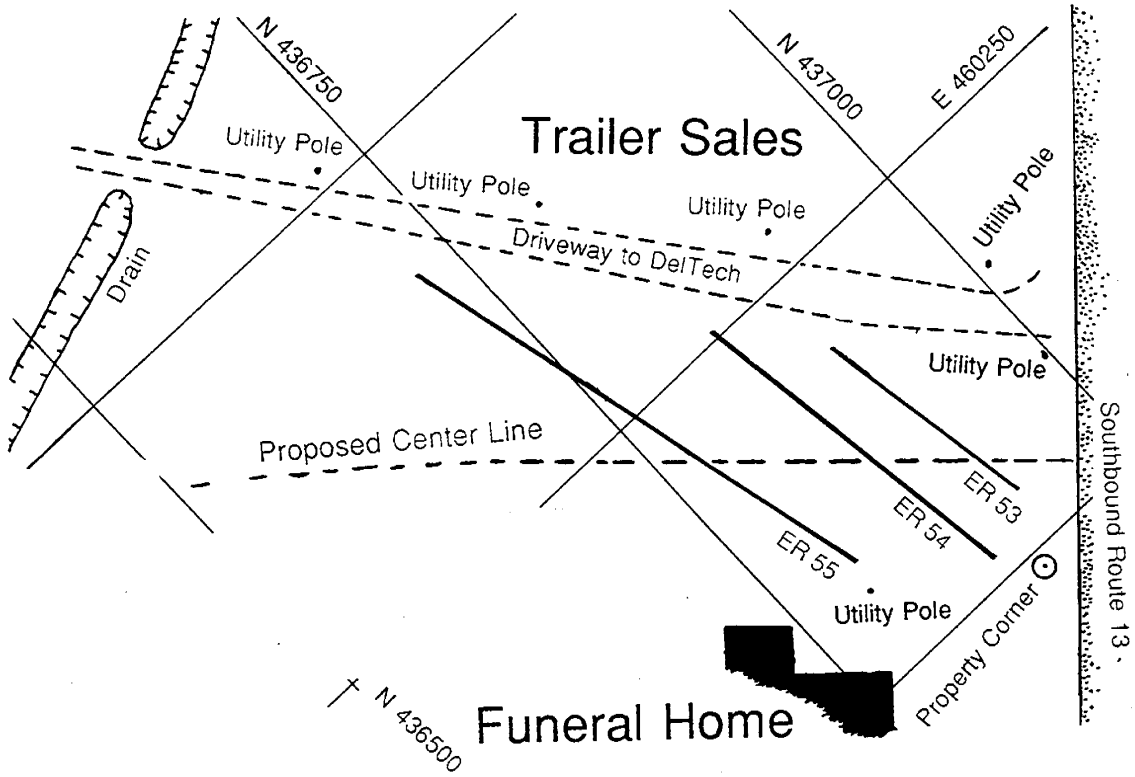

Figure 13

Locations of machine-cut trenches in trailer sales area

In all cases, the soil was a uniform brown sandy loam with few pebbles, the plowzone averaging 9 inches deep over sandy yellow subsoil. Each test was shovelled and the soil was passed through a quarter-inch hardware-cloth sifter.

The small number of prehistoric artifacts found in the three units excavated within this alignment indicate that settlement in this part of the site was not at all intense. Further tests (ER 21-49) delimited the extent of the site to the north and west.

The new road will cross the field between White Marsh Branch and the unnamed ditch that drains the athletic field area. In order to define any concentrations of material that might be found in the field, a line of shovel test pits, ER 21-33, was sunk at intervals of 50 feet across the field.

Near the north end, where a few artifacts were found, some additional tests were sunk (ER 34-40), for a total of twenty units. This testing revealed two ill-defined concentrations of scattered artifacts, both on slight rises in the hill and near the edge of the bluff.

The paucity of prehistoric artifacts suggests that this part of the White Marsh site was not intensively occupied during prehistoric times. Shovel tests provided no evidence of buried elements.

Agricultural features had been identified in the first tests to the south, indicating that this field might contain useful information about the interaction of agricultural activities and the ground.

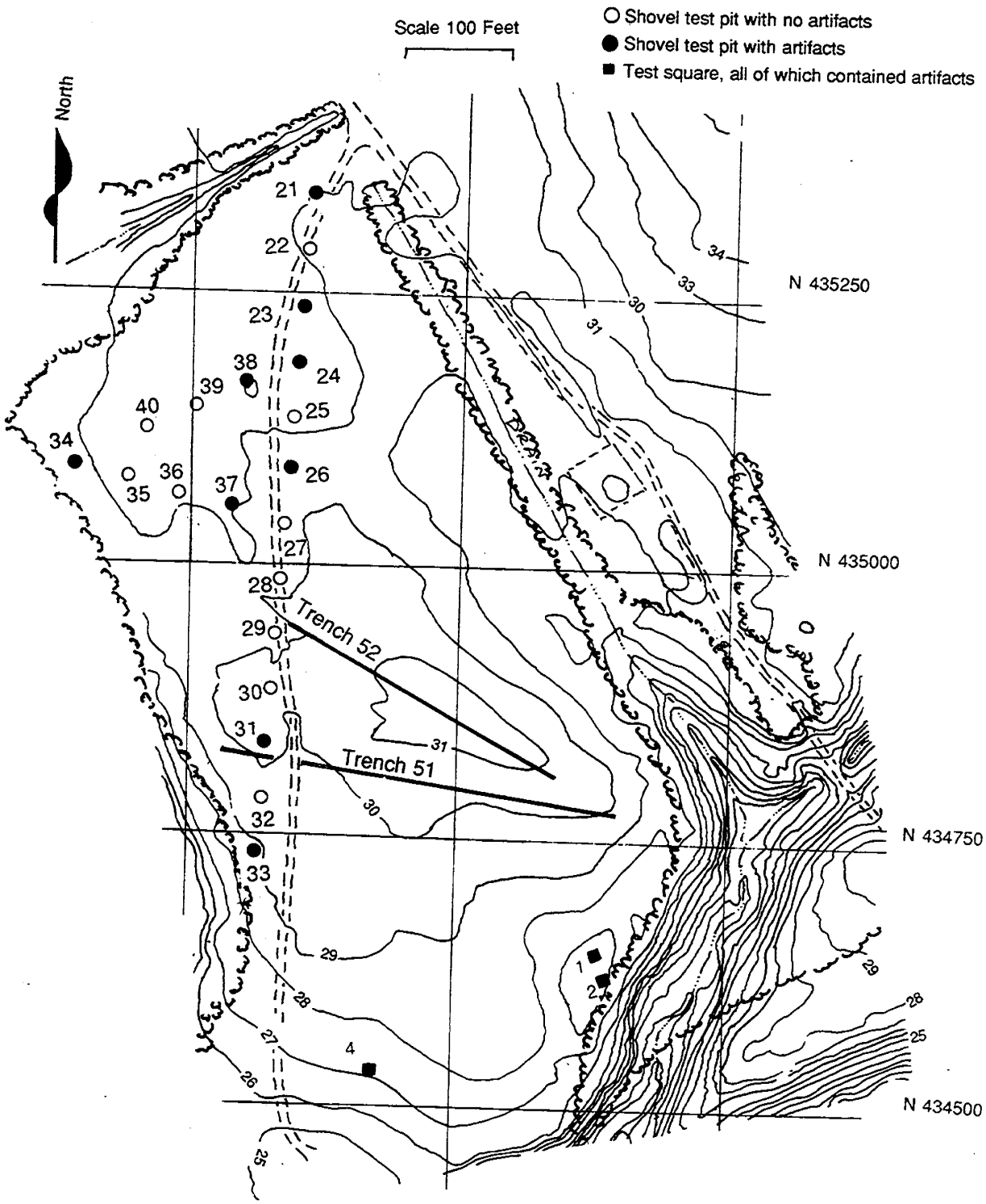

Figure 14
White Marsh Site Overall Plan

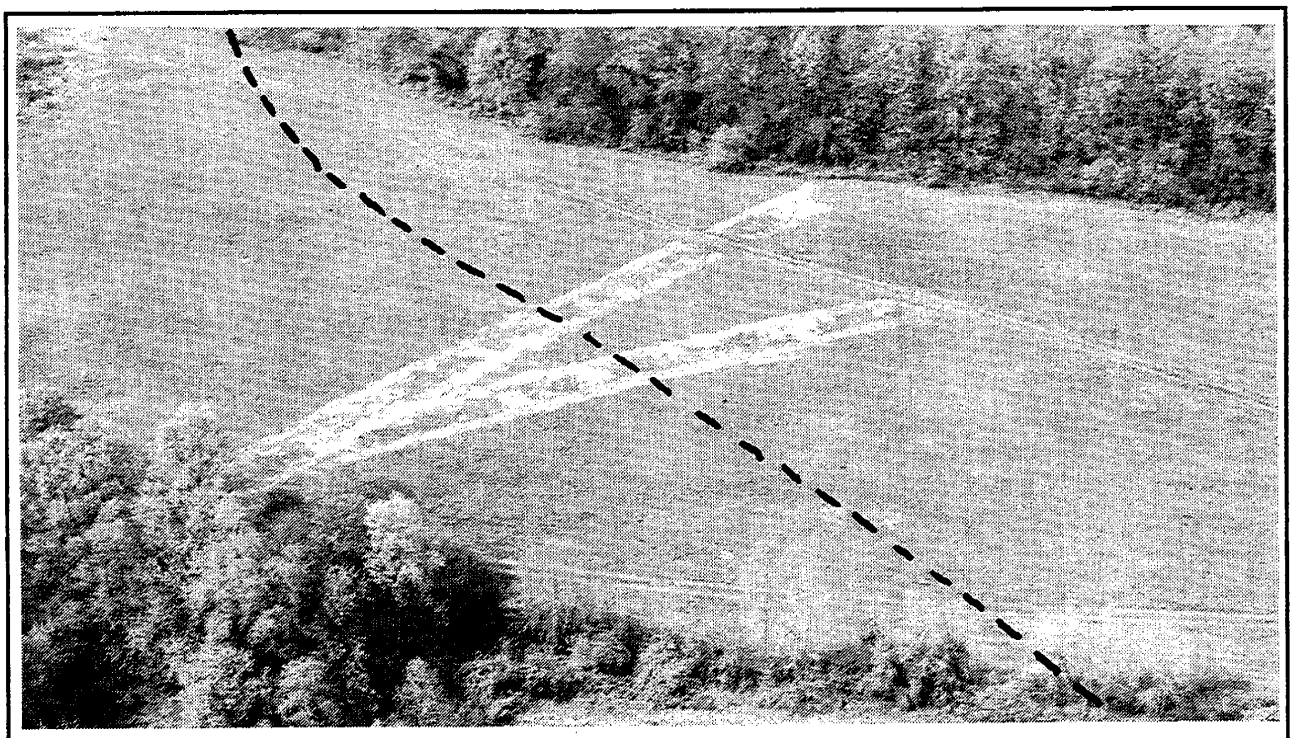

Plate 3
White Marsh site, 7K-C-390, open field part, from the east.
The crop marks are the test trenches, ER 51 and 52.
The dashed line is the proposed center line of the new road.

To investigate possible agricultural features, two machine-cut trenches, ER 51 and 52, were opened on a roughly east-west line across the field at its highest point. Backdirt from the trenches, after being scoured by rain, yielded several more prehistoric artifacts.

Perhaps significantly, no historic period artifacts were found in these trenches through high, sandy, well-drained ground. All the historic period artifacts identified on the field came from shovel test pits (ER 21-40) into the poorly-drained soil near the north end of the field, or the low-lying part near the mouth of the branch. These artifacts consisted of tiny sherds and flecks of brick, indicating a probable origin in domestic trash or compost piles.

Historic-period artifacts at White Marsh were attributed to attempts to improve the poorer soils by manuring. The stark contrast between the historic-period artifact contents of the good and bad soils might guide future researchers in distinguishing between manuring spread and artifacts directly associated with a nearby dwelling.

These tests have exhausted the information potential of these areas, as we currently understand the archæology of agriculture.The three sites east of St. Jones River are not significant in terms of the general criteria for evaluating historic and prehistoric sites, outlined on pages 14 and 15.

In terms of the industrial archæology of agriculture, these areas have yielded information relating to several of the nine areas of interest listed on page 34. In drainage, fields and field systems, and sources of fertility, these investigations provide significant data that will be useful in the long term.

As similar data is collected from crofts throughout Delaware, it may become possible to develop sensitive measures of significance, based on a substantial future data base of thoroughly inventoried agricultural croft sites.