

ARCHAEOLOGICAL FEATURES

Forty-one features were identified at the site during the various Phase II and Phase III excavations (Table 5). These include a variety of prehistoric and historic features, as well as noncultural soil anomalies that were assigned feature numbers during excavation. In many cases, the field identification and interpretation of prehistoric features was quite difficult, because of the character of the soils. The nine historic human burials identified at the site are reported in a separate study (LeeDecker et al. 1995). Figure 6 (end pocket) illustrates the distribution of features throughout the site.

A. PREHISTORIC FEATURES

The prehistoric features include a group of 11 informal cooking/heating areas represented by charcoal concentrations (Features 2, 8, 12, 17, 18, 19, 20, 23, 24, 25, and 26), three clusters of tools that represent either tool caches or activity areas (Features 21, 22, and 33), and one cooking/heating area represented by a scatter of fire-cracked rock (FCR), charcoal, and discolored soil (Feature 31).

Informal cooking/heating areas (Features 2, 8, 12, 17, 18, 19, 20, 23, 24, 25, and 26) were the most numerous prehistoric feature type at the site, and they were visible only as areas of charcoal flecking within slightly discolored soil. These features may represent cooking or heating areas such as hearths or fire-pits. They typically appeared in the subsoil (Stratum B) and were distinguished primarily by the presence of charcoal rather than soil color differences. The boundaries of the features were often somewhat indistinct, and the soils within the features were not readily distinguishable from the surrounding matrix in terms of reddening or compaction. The 11 features in this class have mean length, width, and depth measurements of 57x39x17 cm (Table 6). Figure 7 illustrates the long-axis profiles for these features. Their plan view and distribution within the site is shown on Figure 6.

Feature 31, located in the South Excavation Block (Excavation Unit 52) was the only cooking/heating area that included a significant amount of fire-cracked

rock. This feature extended over an area measuring approximately 50x77 cm, and included a total of 355 gm of fire-cracked rock. Within the feature, the fire-cracked rock was loosely scattered, and the feature soil exhibited a slightly reddish cast. A few charcoal flecks were also recovered from the Feature 31 matrix, as were a number of chert, jasper, and quartzite flakes. Spatial analysis (see Chapter VII) indicated that refuse deposits associated with the Early Archaic occupation of the site were concentrated in the area adjacent to Feature 31; therefore, Feature 31 is interpreted as a probable Early Archaic hearth area.

Three features were represented by tool clusters indicating activity areas or tool caches. Feature 21 (Plate 3), located in Unit 48, contained a cobble chopper, a bifacial hoe blade, and a small cluster of fire-cracked rock (315 gm). This assortment of tools and debris appears to represent a small processing area. Blood residue tests were undertaken for the chopper, the hoe blade, and the largest piece of associated fire-cracked rock, but none of the three items tested positive. Refuse deposits associated with the Paleoindian and Early Archaic occupations were concentrated adjacent to this feature; therefore, it is probably associated with the Paleoindian or Early Archaic use of the site.

Feature 22, located in the South Excavation Block (Unit 42), included a mano and metate lying side by side (Plate 4). The mano or hammerstone was made of quartzite and it exhibited evidence of mano and anvil use. The metate was a large slab of igneous/metamorphic rock with a shallow, concave abrading surface. The tool cluster represented an obvious plant processing station, and the tools were submitted to an outside laboratory for identification of pollen remains. The metate contained sufficient residue to permit a 100-grain pollen count, and various arboreal (oak, beech, hickory, walnut black locust, and pine) and nonarboreal taxa (goosefoot/amaranth, ragweed, meadow rue, pink family, plantain, grasses, ground cherry, and sedge) were identified. Pollen identified on the metate were dominated by arboreal species, and many of the nonarboreal taxa identified are indicators of disturbed ground. Analysis suggested that goosefoot/amaranth might represent plant foods processed or consumed at

TABLE 5: LIST OF FEATURES, SITE 7S-F-68

FEATURE	UNIT	DESCRIPTION/COMMENTS
1	3, 4	Dog burial
2	9, 10	Charcoal concentration; C14 date of 1140 ± 60 years BP
3	8	Irregular organic stain; tree disturbance
4	13	Modern geological boring
5	15, 18, 23	Historic human burial
6	16	Irregular organic stain; tree disturbance
7	23	Soil disturbance; looter's trench or automobile tire rut
8	18	Irregular organic stain with charcoal flecking
9	23, 34	Historic human burial
10	35	Tree or rodent disturbance
11	35	Historic post hole
12	35	Irregular organic stain with charcoal flecking
13	35	Tree or rodent disturbance
14	35	Rodent disturbance
15	34, 58	Historic human burial
16	28	Historic posthole/post mold
17	25, 26	Irregular stain with charcoal flecks; C14 date of 1020 ± 70 years BP
18	28	Oval soil stain with charcoal flecks
19	38	Irregular soil stain with charcoal; C14 date of 2460 ± 130 years BP
20	47	Irregular organic stain with charcoal; C14 date of 310 ± 80 years BP
21	48	Prehistoric activity area/tool cache with cobble chopper and hoe
22	42	Prehistoric activity area/tool cache; anvil/mano and metate; probable Early Archaic activity area
23	21	Circular, basin-shaped stain with charcoal flecks
24	49, 57	Soil stain with charcoal flecks; C14 date of 2640 ± 110 years BP
25	45	Irregular organic stain with charcoal flecks
26	29	Irregular organic stain with charcoal flecks
27	53	Organic stains with charcoal flecks; tree roots
28	39	Charred root fragments
29	50, 56	Historic human burial
30	50	Historic human burial
31	52	Scatter of fire-cracked rock and charcoal flecks in slightly reddened soil; probable Early Archaic hearth
32	56	Soil disturbance; Phase I shovel test
33	41	Large argillite biface associated with argillite debitage
34	58	Looter's trench or utility line trench
35	*	Dog burial
36	*	Historic human burial
37	*	Dog burial
38	*	Historic human burial
39	*	Historic human burial
40	*	Historic human burial
41	*	Historic posthole

*: Feature identified during topsoil stripping operations

the site, but it did not occur in a high frequency. It was concluded that little if any of the pollen represented material associated with the site's prehistoric use (Kelso 1992). Blood residue tests were undertaken for the mano and the metate, but neither item tested positive. Because of its spatial association

with Early Archaic refuse deposits, Feature 22 has been assigned to the site's Early Archaic component.

Feature 33, a small lithic workshop area located in the South Excavation Block (Unit 41), was represented by a large, early-stage argillite biface and four

TABLE 6: METRIC DATA FOR PREHISTORIC CHARCOAL FEATURES

FEATURE NO.	LENGTH	WIDTH	DEPTH
2	60	*	9
8	54	30	9
12	50	*	10
17	62	*	20
18	23	20	12
19	70	62	27
20	44	44	25
23	34	34	22
24	80	40	20
25	40	*	21
26	107	45	14
MEAN	57	39	17
MINIMUM	23	20	9
MAXIMUM	107	45	27

* no observation, because feature extended outside excavation unit or block.

All measurements given in centimeters.

argillite flakes. The largest piece of debitage associated with the feature was submitted for blood residue testing, but it did not test positive. The cultural origin of this feature is uncertain: Its spatial provenience suggests association with the site's Early Archaic component; however, argillite appears to have been used most frequently during the Late Archaic/Early Woodland period.

The majority of the prehistoric features are of uncertain age, and none included culturally diagnostic projectile artifacts. The cooking/heating features typically contained charcoal flecks, which in a few cases occurred in sufficient amounts to allow radiocarbon age dating. The five features (Features 2, 17, 19, 20, and 24) that did contain sufficient charcoal to permit radiocarbon dating (see Table 5) provided dates ranging from the Early Woodland through the European Contact periods. Based on lithic raw material, some of the features may be tentatively assigned a temporal position because certain raw materials are associated with a specific period of site occupation (see Chapter VII). Feature 21, which included two large quartzite tools, may be associated with the site's Early Archaic component, because of the association of quartzite with Kirk Stemmed points. Likewise, Feature 33, which consisted of a cluster of argillite debitage and an early-stage biface, may be associated with the site's Late Archaic component, because argillite was used only for Late Archaic projectile point types.

Soil samples were taken from each feature for flotation processing, but the flotation samples contained very little analytically significant botanical material

(i.e., charred native species). However, three of the features contained charred sumpweed (*Iva annua*), an indigenous annual seed plant which played an important role in the transformation from hunting and gathering of wild plants to cultivation in eastern North America. Sumpweed was present in feature contexts dating to 2460 ± 130 years BP (Feature 19), 1020 ± 70 years BP (Feature 19), and 310 ± 80 years BP (Feature 20). The importance of sumpweed in North American aboriginal subsistence is discussed more fully in Chapter VIII. Other botanical material associated with the prehistoric features includes Sumac (*Rhus spp.*) from Feature 18 and Woodbine or Virginia Creeper (*Parthenocissus quinquefolia*) from Feature 23.

While the prehistoric feature inventory is dominated by cooking/heating features, there is a general lack of the fire-cracked rock that is often associated with prehistoric hearth areas. Located in the Mid-Peninsular Drainage Divide area of the Delmarva Peninsula, the immediate site environment does not contain any readily accessible sources of rock suitable for use in hearths. The local Coastal Plain deposits are comprised virtually entirely of sand, silt, and clay, and there are no stream beds that might contain suitable gravel bar deposits. Apparently, therefore, the scarcity of fire-cracked rock at Site 7S-F-68 reflects the lack of suitable lithic material in the site catchment area.

A variety of aboriginal cooking methods are known from the ethnographic literature, including roasting over dry heat, container boiling, and steaming

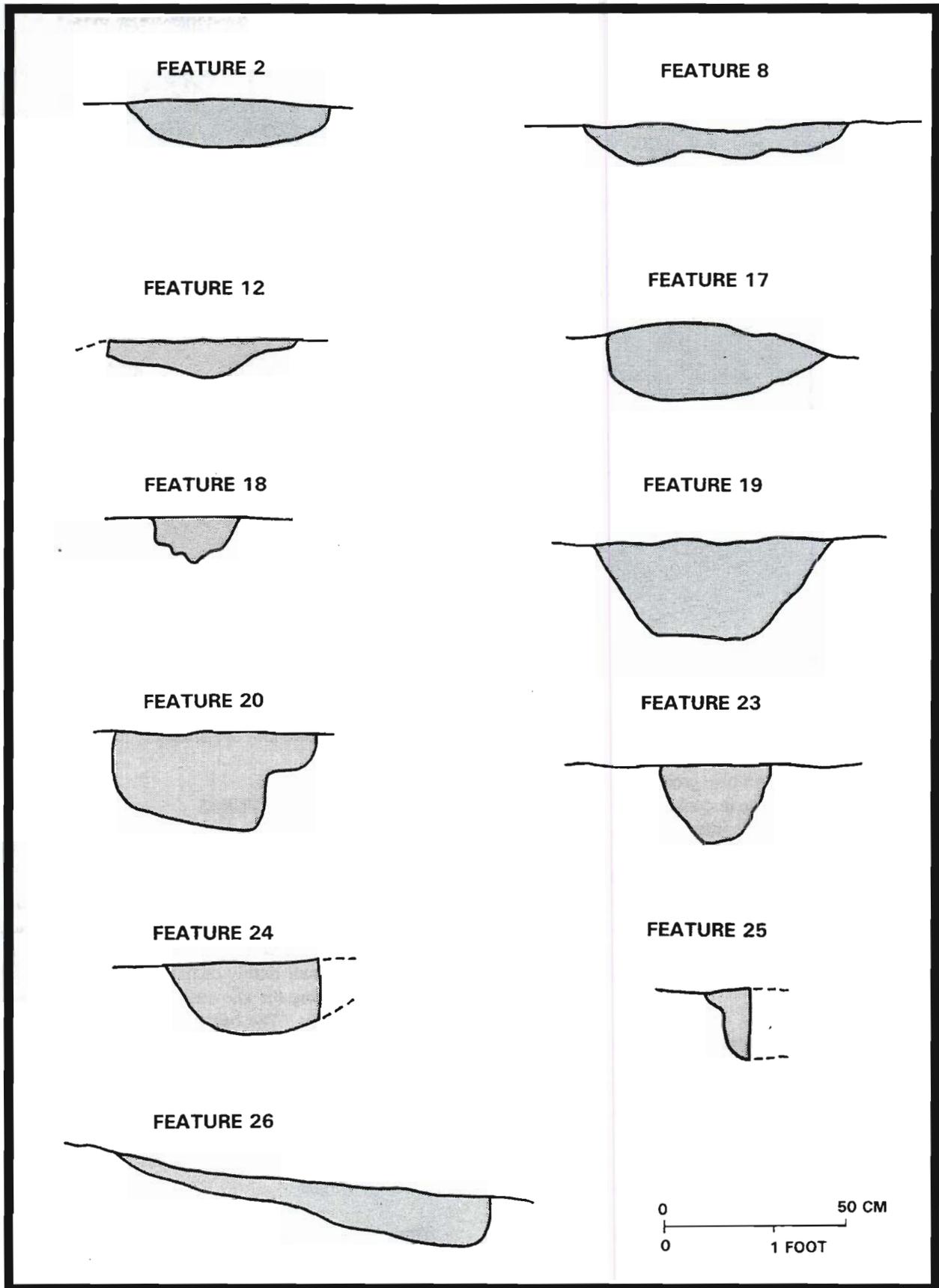


FIGURE 7: Long-Axis Profiles of Informal Cooking/Heating Features

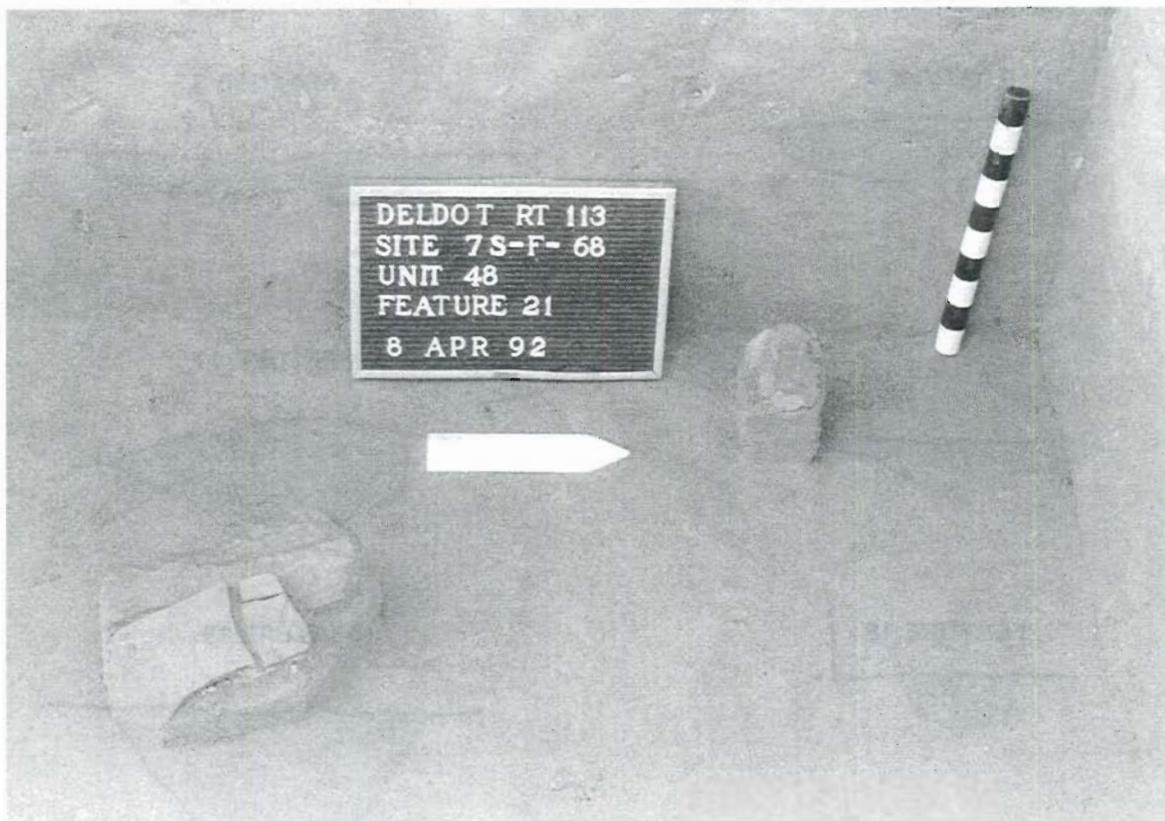


PLATE 3: Feature 21.

(Stewart 1982). None of these methods required the use of pottery, so that all could have been used by Archaic and Paleoindian populations. Throughout the Eastern Woodlands, Archaic groups brought rocks to occupation sites for use in cooking, and a variety of cooking methods may be inferred from excavated archaeological features. For example, at the Longworth-Gick Site in Jefferson County, Kentucky, the Early Archaic (corner-notched points and bifurcate-based point) features included charcoal concentrations, rock-free areas of reddened soil, areas of reddened soil with charcoal, and small fire pits (Collins et al. 1979).

Binford (1983) has presented ethnographic and excavation data indicating that hearth areas are normally the foci around which a broad range of activities are carried out in campsites. Intrasite spatial analysis (see Chapter VII) indicates that Feature 31, the FCR concentration in the South Excavation Block of Site 7S-F-68, was the focus of activities such as the rehafting of bifaces and the production of lithic tools during the Early Archaic. Interpretation of the charcoal concentrations is more problematic, as they are widely scat-

tered throughout the site; the most straightforward interpretation is that they are informal cooking or heating areas.

B. HISTORIC FEATURES

1. *Human Burials*

Nine human burials (Features 5, 9, 15, 29, 30, 36, 38, 39, and 40) were identified and excavated during the Phase III excavations. The interments are associated with a small family cemetery believed to have been used during the late eighteenth and early nineteenth centuries. The burial features were concentrated in the northern, most elevated portion of the site. DeIDOT authorized preparation of a separate report containing focusing on the cemetery, including description and interpretation of the burials (LeeDecker et al. 1995).

2. *Dog Burials*

Three of the site's features are dog burials (Features 1, 35, and 37), all of which were located in the northern

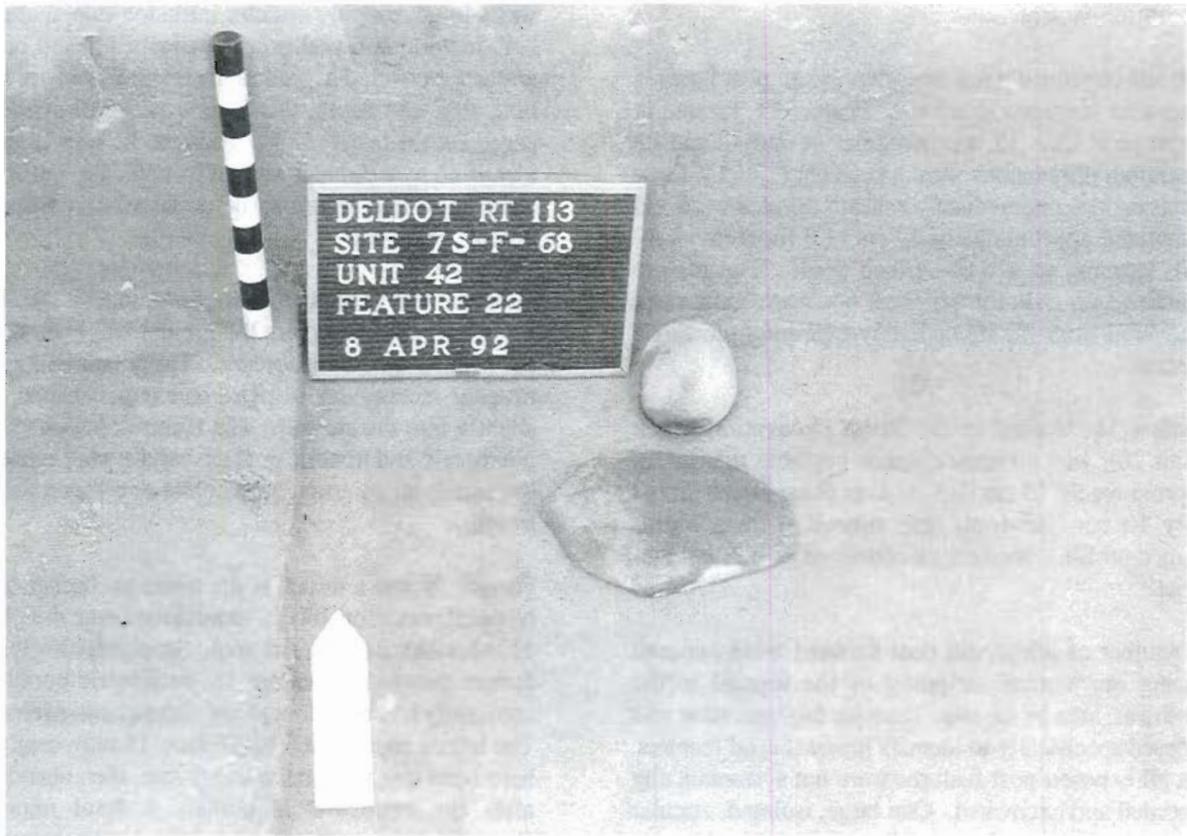


PLATE 4: Feature 22.

area of the site. Feature 1 was identified and excavated during the Phase II excavations. Features 35 and 37 were identified and excavated during the topsoil stripping operations carried out at the conclusion of the manual Phase III excavation program. Based on the condition of the skeletal material, stratigraphic relationships, and associated artifacts, all of the dog burials appear to represent modern use of the site.

Feature 1 was initially identified by the recovery of mammalian longbone from a shovel test, and it was fully excavated within Test Units 3 and 4. The Feature 1 burial had been placed in a shallow rectangular shaft that measured approximately 60-70 x 120 cm in plan, with the long axis perpendicular to Route 113. The burial pit fill contained a quartz bifurcate-based projectile point dating to the Early Archaic period, along with a mixture of the shell and gravel paving deposits associated with the automobile repair shop driveway adjacent to the site.

Feature 35 was discovered by mechanical topsoil stripping northwest of the North Excavation Block. The burial pit was oval or kidney-shaped in plan,

with the long axis parallel to Route 113. The feature was initially divided into two areas based on soil color, and it penetrated the western end of Feature 36, an historic human burial. A posthole (not given a separate feature number) also intruded into Features 35 and 36. The Feature 35 burial pit contained the complete skeleton of a domestic dog, with its head at the south end of the pit. Coffin nails and wood fragments present in the Feature 35 fill seem to have originated when the dog burial (Feature 35) penetrated the historic human burial (Feature 36).

Feature 37 was a shallow burial pit that contained the complete skeleton of a domestic dog. It was identified during mechanical topsoil stripping northwest of the North Excavation Block. The burial pit was elongate and irregular and oriented east-west, with a maximum length of 107 cm (3.5 feet) and a maximum width of 25 cm (1.0 foot). The skeleton was oriented with the skull at the east end of the burial pit. The condition of the bone suggested a modern origin for the burial, but there were no artifacts associated with the feature.

3. *Post Features*

The site contained a few historic/modern post features located at scattered locations. Feature 11, located in Excavation Unit 35, was irregular in outline and its maximum dimensions were 44x68 cm (1.4x2.2 feet). It was exposed immediately beneath the plowzone and penetrated approximately 40 cm (1.3 foot) into subsoil, tapering to a well-defined point. The feature contained no cultural material; however, nails were recovered from the immediately overlying plowzone horizon.

Feature 16, located in the North Excavation Block (Unit 28), was a small, circular posthole measuring approximately 15 cm (0.5-foot) in plan. It penetrated only 10 cm (0.3-foot) into subsoil, with a basin-shaped profile. The feature contained no cultural material.

A number of additional post features were exposed during mechanical stripping of the topsoil in the northwest area of the site. Because this operation was focused specifically to identify human burial features, not all exposed post features were not systematically recorded and excavated. One large, isolated, circular post hole, Feature 41, was fully excavated in this area and it was determined to be of historic origin, based on the presence of metal fragments in the fill.

A row of three postholes were identified during excavation of Features 35 (dog burial) and 36 (human burial). The three features were roughly circular in plan and measured 21 cm (0.7 foot) to 30 cm (1.0 foot) in diameter, they were spaced approximately 61 cm (2.0 feet) apart. It is believed that these post features supported a small roadside sign associated with the automobile repair shop.

4. *Modern Disturbances/Soil Intrusions*

Four modern disturbances or intrusions were identified as features. Feature 4, located in Excavation Unit 13,

was a large, roughly circular intrusion that contained both historic and prehistoric artifacts. Based on the artifacts recovered as well as the feature's general location, size, and depth, this feature was identified as a geotechnical test boring. Feature 32 was likewise identified as a circular area of mixed fills, but it was ultimately determined to be a shovel test from the Phase I fieldwork.

Feature 7 was located at the roadside edge of the North Excavation Block, where the ground had been down-cut toward the road shoulder. This disturbance was roughly rectangular in plan, and it penetrated only slightly into the subsoil. The feature contained both prehistoric and historic artifacts, and it may represent tire ruts from an errant automobile or a failed looter's trench.

Feature 34 was a trench at the northeast corner of the North Excavation block, extending from the Route 113 shoulder into the site area. Stratigraphically, this feature penetrated Feature 15, an historic burial that apparently had been looted and subsequently reburied. The trench represented by Feature 15 may originally have been dug to install a utility line, then abandoned after the exposure of human skeletal material. However, there was no utility line within the trench, and it is possible that the trench was excavated by looters.

C. NONCULTURAL FEATURES

A number of soil anomalies were excavated as features but were ultimately determined to be of noncultural origin such as rodent burrows or tree root disturbances. These include Features 3, 6, 10, 13, 14, 27, and 28.