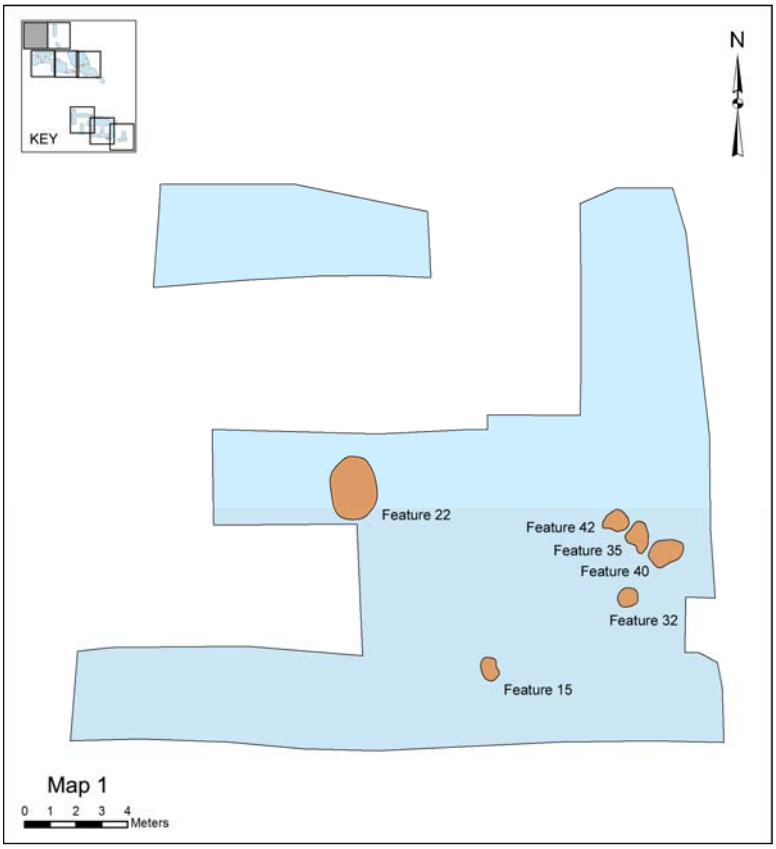
Appendix B

MAPS, ILLUSTRATIONS, AND DESCRIPTIONS OF ARCHAEOLOGICAL FEATURES AT THE ASHE FERRY SITE

MAPS LOCATING ARCHAEOLOGICAL FEATURES


KEY
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Feature 42
Feature 35
Feature 40
Feature 32
Feature 15
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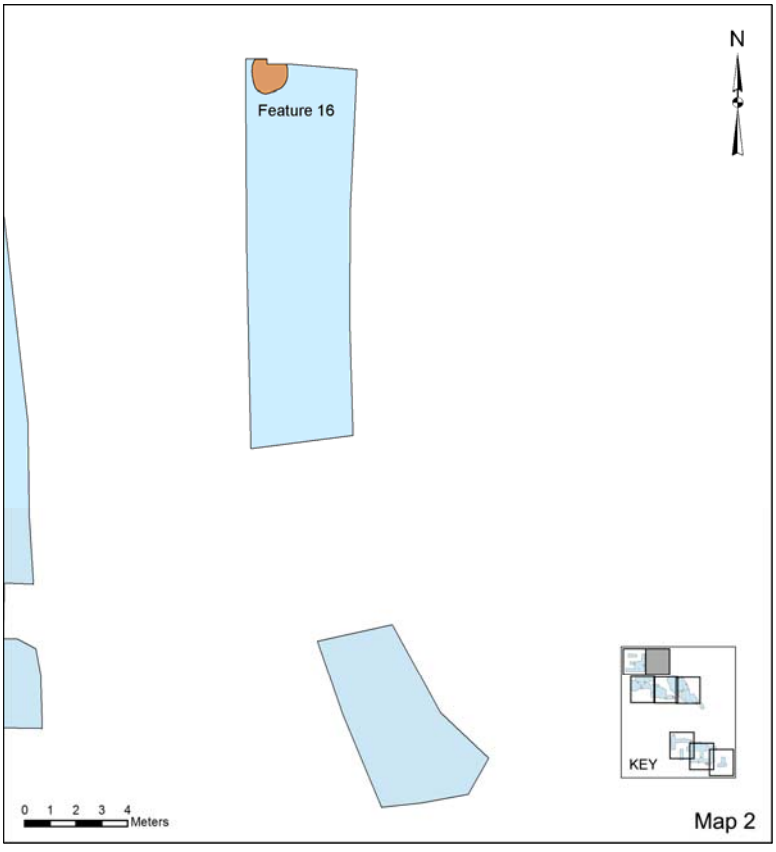
Meters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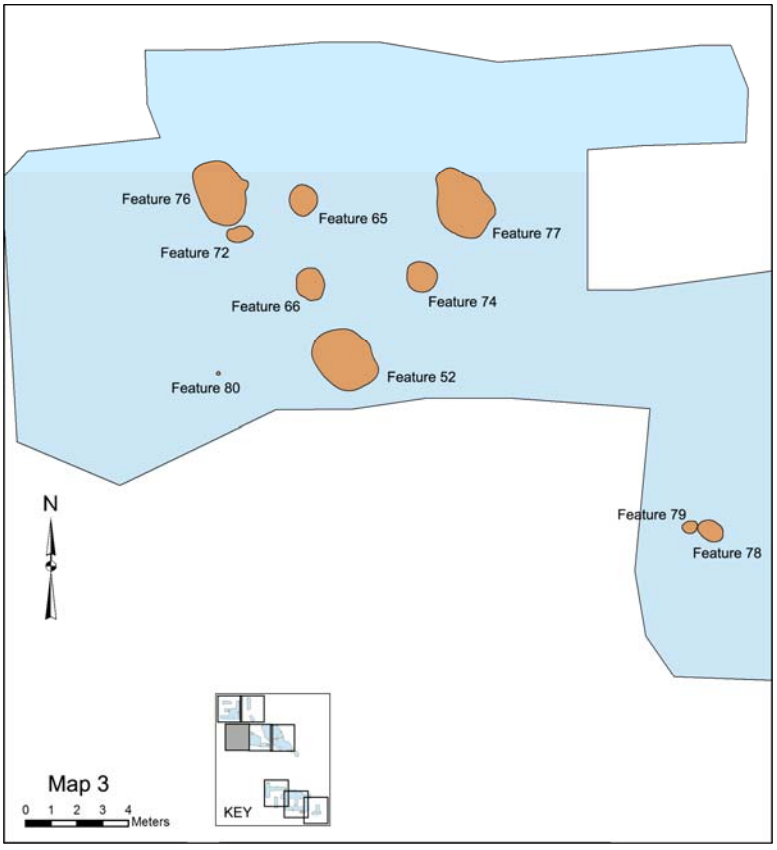
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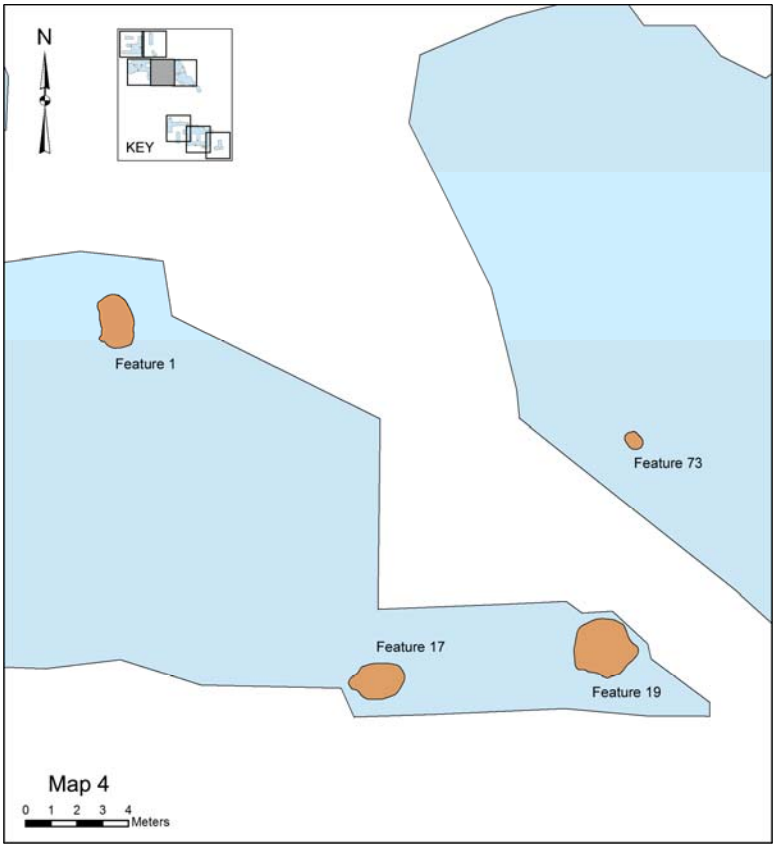
Meters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Feature 17
Feature 19
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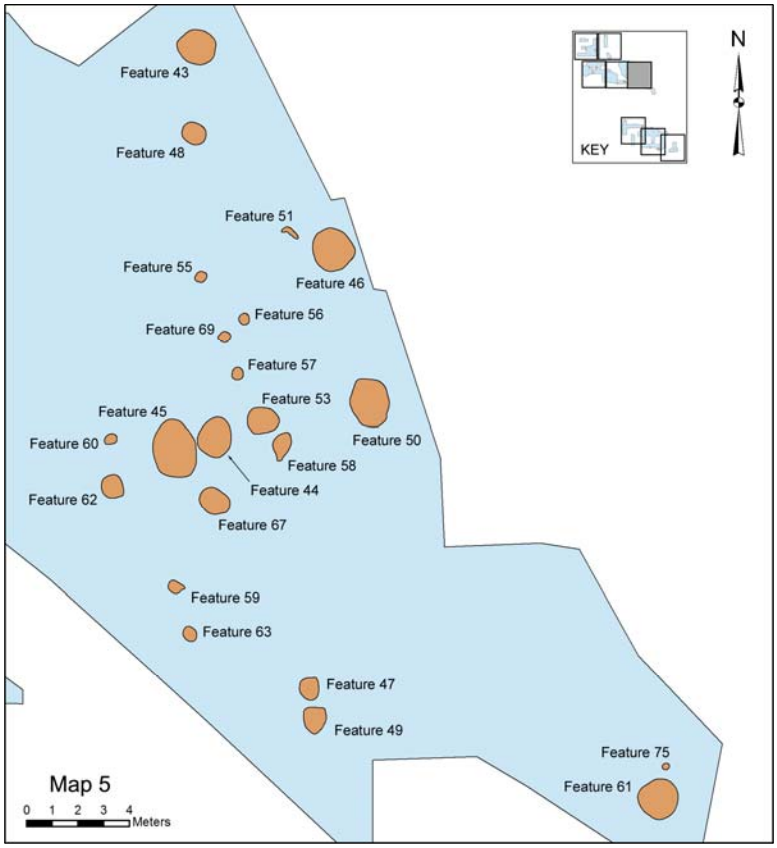
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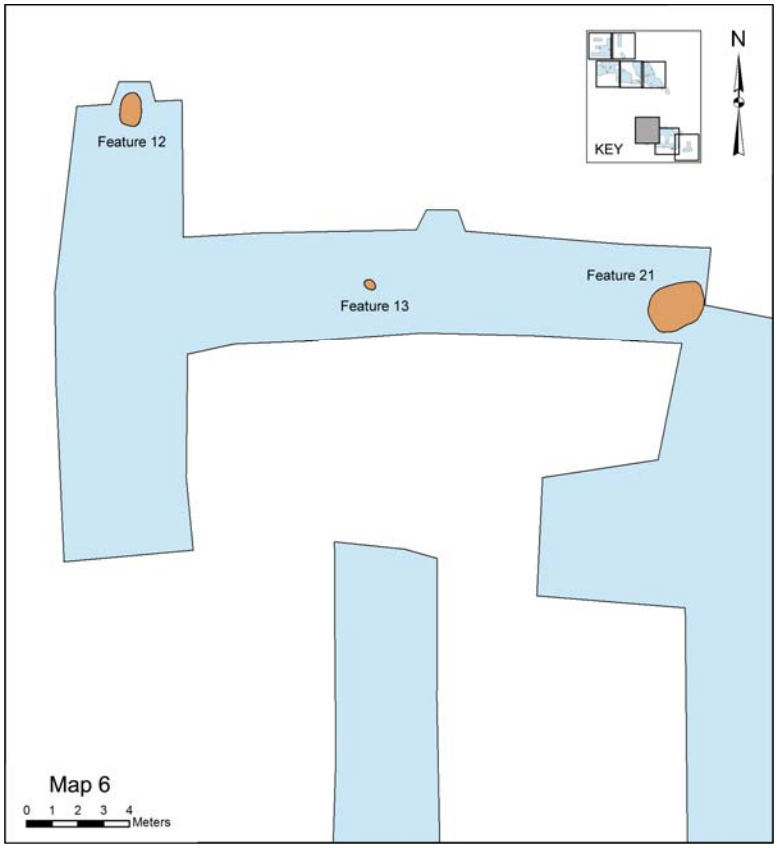
Meters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Feature 21
Feature 13
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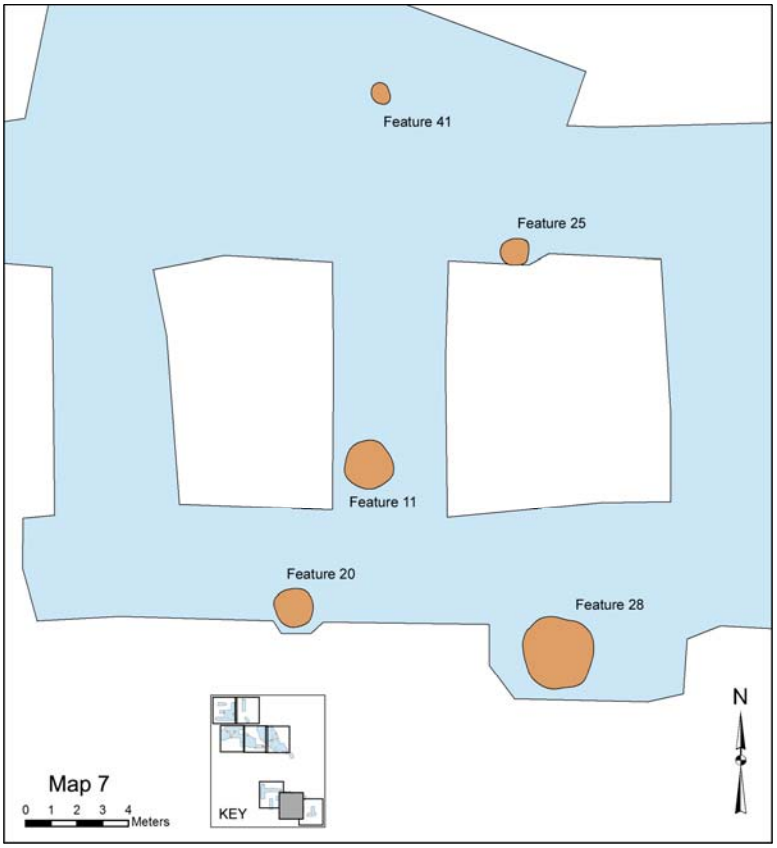
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Feature 25
Feature 11
Feature 20
Feature 28
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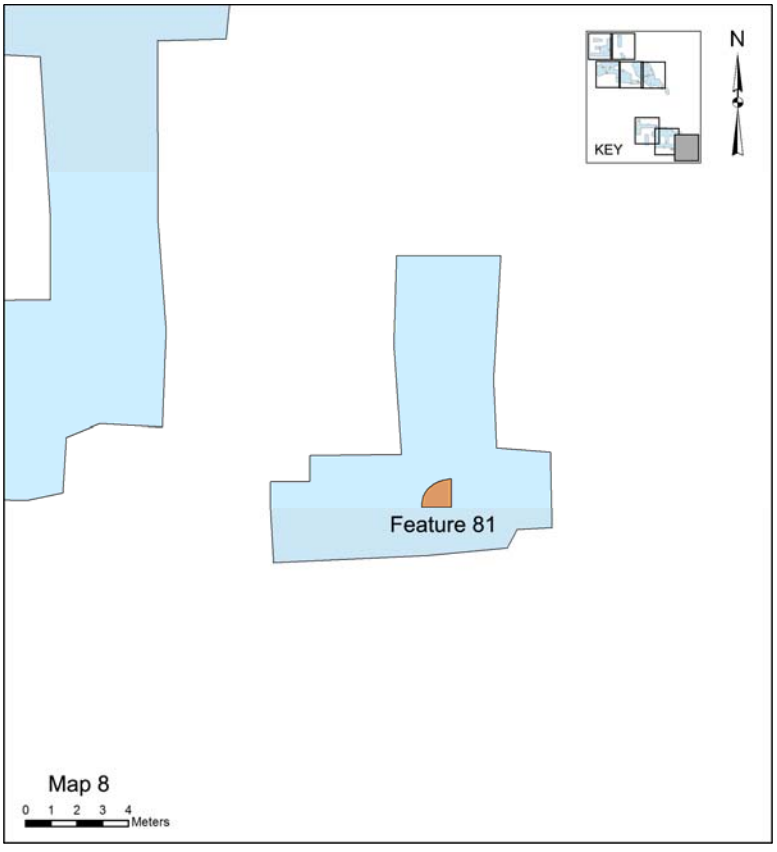
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Meters

DESCRIPTIONS OF ARCHAEOLOGICAL FEATURES AT THE ASHE FERRY SITE (38YK533)

Mary Elizabeth Fitts

Feature 1 (center @ 845.30R875.30) (Figure B.1)

This shallow oval basin measured 210 cm north to south and 130 cm east to west. Feature 1 was initially identified as a cluster of Woodstock Complicated Stamped sherds evident at the base of plowzone. These sherds were mapped *in situ* prior to excavation of the underlying basin, which revealed a single thin (9cm) zone of brown (7.5YR4/3) silty sand over an irregular feature base. Feature contents included 126 potsherds, 35 flakes, and four pieces of fire-cracked rock. The ceramic sherds constitute a major portion of a Woodstock Complicated Stamped jar, a constituent ware of the Ashe Ferry phase.

Feature 11 (centered @ 758.60R928.56) (Figure B.2)

This circular pit feature measured approximately 180 cm in diameter and 60 cm deep (below base of plowzone). Two zones of fill were visible in plan; Zone A consisted of a uniform brown (10YR5/3) silty sand that rested on top of Zone B, a light yellowish brown (10YR6/4) silty sand mottled with brown (10YR5/3) silty sand. Zone A had a maximum thickness of 25 cm and contained two fragments of calcined bone, 27 potsherds, five pieces of daub, one projectile point fragment, 12 flakes, and seven fire-cracked rocks.

The removal of Zone B, which was on average 30 cm thick, revealed a concentration of Ashe Ferry series potsherds and rocks in yellowish brown (10YR5/4) silty sand that contained dense charcoal inclusions. These materials were mapped *in situ* and designated Zone C. In the south half of Feature 11 Zone C was waterscreened along with Zone B. Together they yielded 67 potsherds, two pieces of daub, one triangular projectile point, one projectile point fragment, 51 flakes, and 15 fire-cracked rocks. In the north half of the feature Zones B and C were excavated separately. Zone B contained 39 potsherds, one triangular projectile point, three projectile point fragments, one biface, nine flakes, and 16 fire-cracked rocks. Zone C, of which 37 liters were processed as a flotation sample, yielded 33 potsherds, one triangular projectile point, one possible milling stone fragment, eight flakes, and 17 fire-cracked rocks. This zone had a maximum thickness of 12 cm and was deposited on top of sterile sand. Removal of Zone C revealed that Feature 11 had sloping walls and a concave bottom, extending up to 60 cm below the base of the plow zone.

The size and morphology of Feature 11 are consistent with a probable function as a storage pit. Zone C is the initial fill deposited across the bottom of the feature when it was abandoned, while Zone B appears to be fill from post-abandonment wall collapse. This matrix subsided over time and the resulting depression was filled with soil from an overlying deposit (Zone A). Diagnostic artifacts recovered from Feature 11 matrices indicate a probable Late Woodland period Ashe Ferry phase affiliation. AMS assay of charred botanical material from Feature 11 produced an estimated date of date of 1030±30 years B.P. (2σ calibration, cal. A.D. 980 to 1030; calibration curve intercept, cal. A.D. 1030).

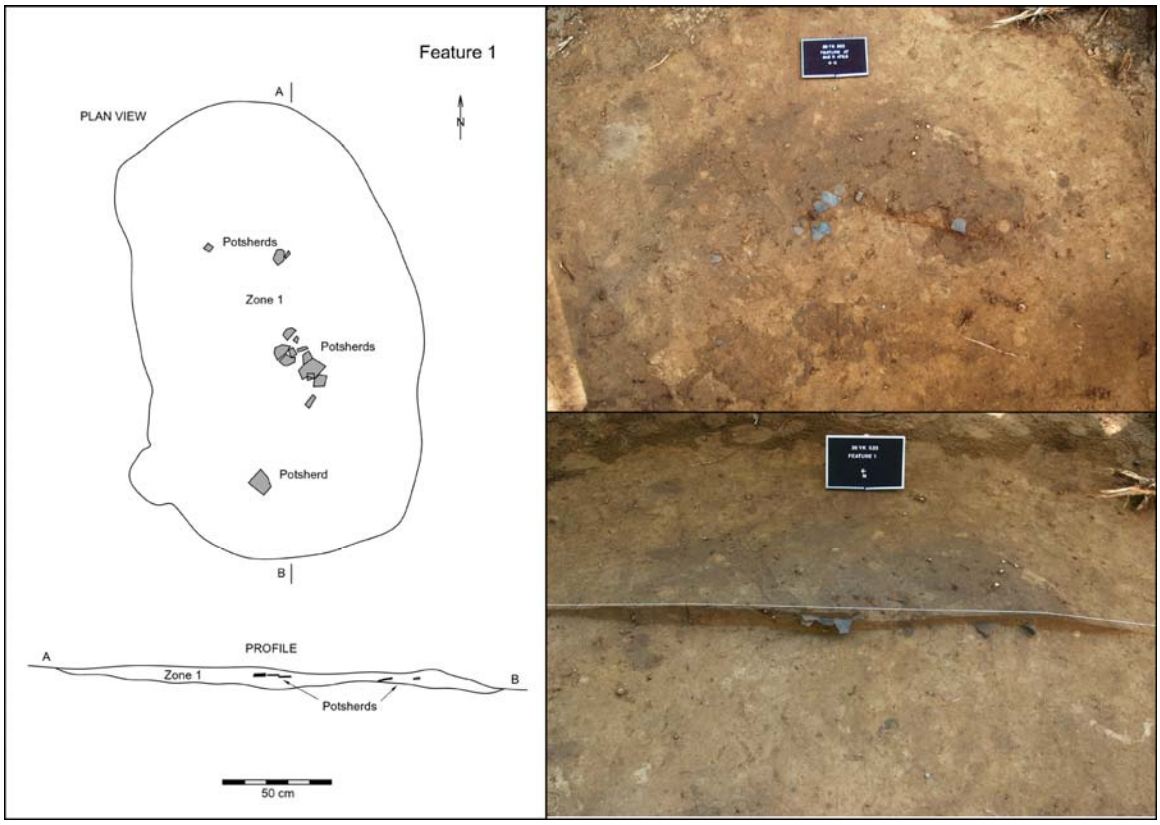

Figure B.1. Feature 1 plan view and profile drawings, and excavation photographs: top of feature showing *in situ* potsherds (top, view to east), and profile with west half excavated (bottom, view to east).

Feature 12 (center @ 785.63R894.87) (Figure B.3)

Feature 12 was a cluster of rocks that extended approximately 120 cm north to south and 60 cm east to west. The rocks visible at the base of the plow zone were mapped in place before the feature was excavated. Excavators removed 5 to 10 cm of dark yellowish brown (10YR3/4) silty sand mottled with yellowish brown (10YR5/4) silty sand around the rock cluster, but no evidence of a pit was detected in the profile or below the rocks. In addition to 68 fire-cracked rocks, this feature yielded three fragments of calcined bone, 16 potsherds, one core, and 14 flakes. This plow-disturbed cluster of fire-cracked rocks probably represents the remains of a cooking or heating facility; the absence of ash or charcoal is attributed to extreme leaching of organic materials through the loose sandy matrix. Ceramic sherds recovered from Feature 12 are referable to the Late Woodland period Ashe Ferry series.

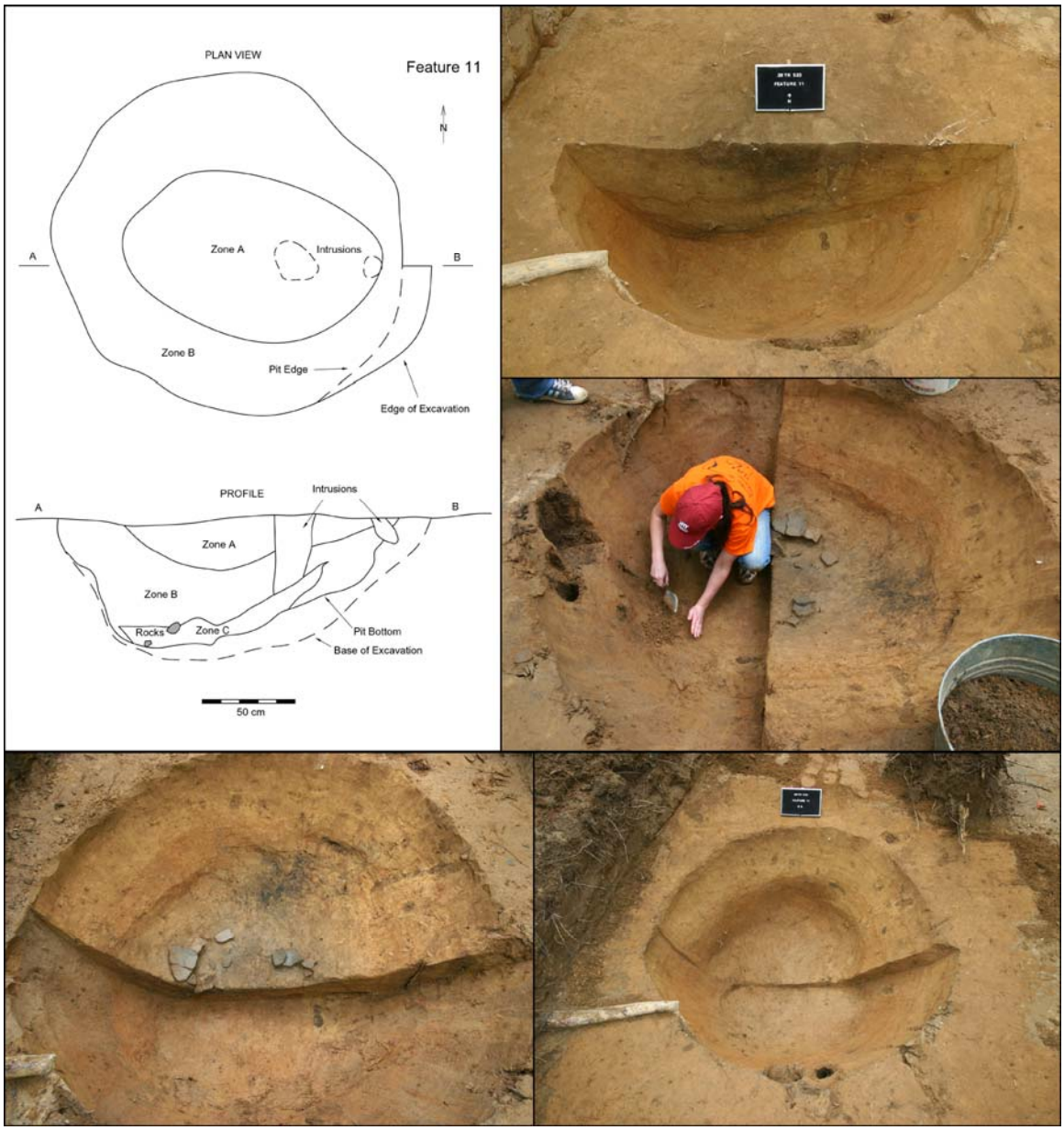

Figure B.2. Feature 11 plan view and profile drawings (top left), and excavation photographs: fill profile with south half excavated (top right, view to north), cleaning for photograph (middle right, view to west), in situ potsherds resting on top of Zone C (bottom left, view to north), and excavated feature (bottom right, view to north).

Feature 13 (center @ 778.73R904.14) (Figure B.4)

This feature was also a cluster of rocks, but unlike Feature 12 was not scattered by historic period plowing. Feature 13 was oval in plan view, measuring 50 cm by 35 cm and oriented with its longer axis running northwest to southeast. No evidence of a pit was detected in plan view or profile, but soil from between the rocks and approximately 5 cm below them was waterscreened. This dark yellowish brown (10YR3/4) silty sand

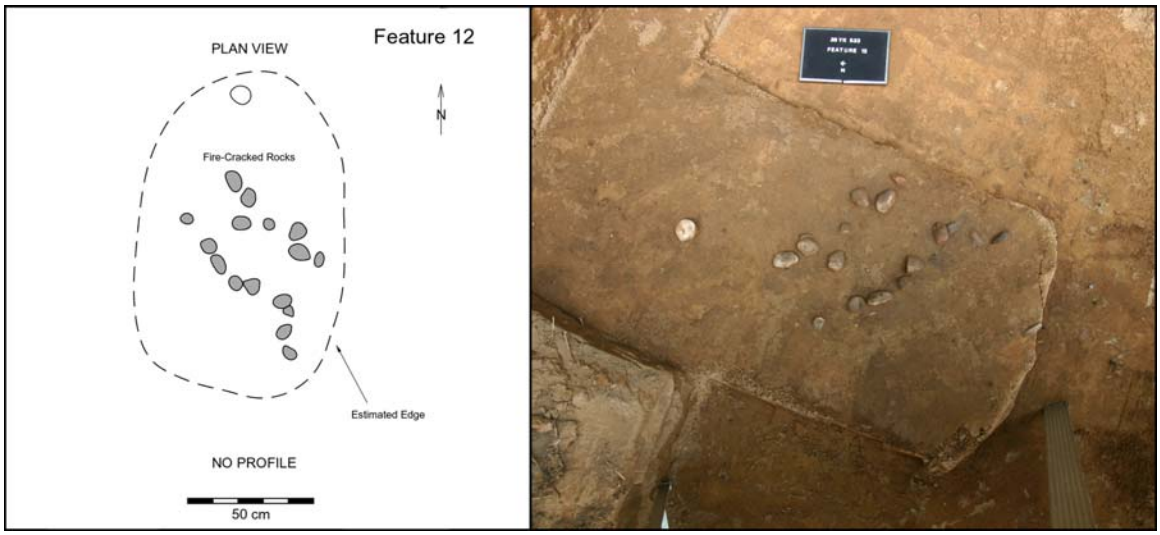

Figure B.3. Feature 12 plan view drawing and photograph at base of plow zone (view to east).

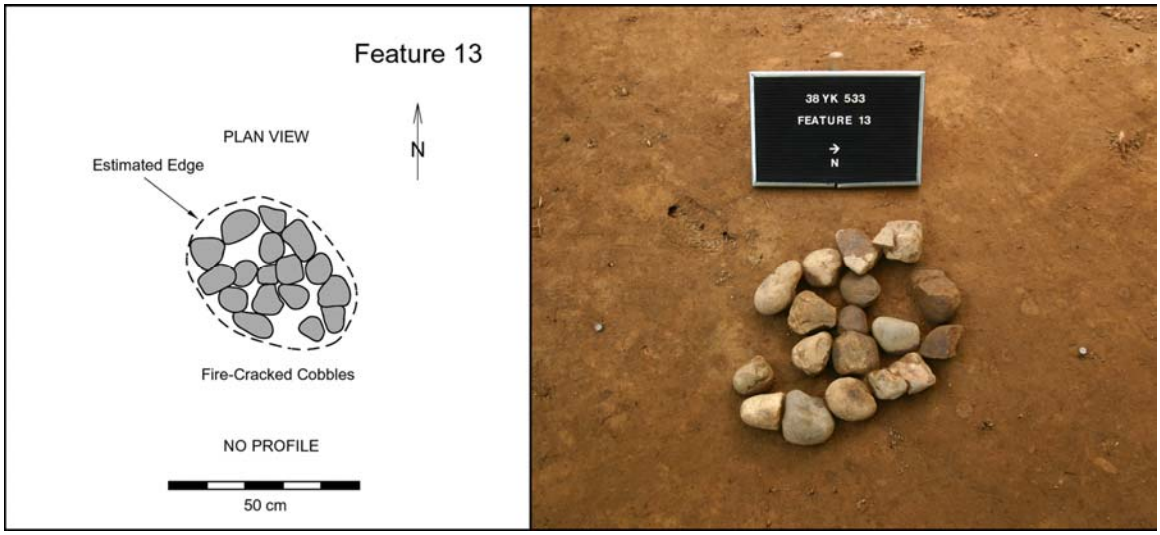

Figure B.4. Feature 13 plan view drawing and photograph at base of plow zone (view to west).

yielded one projectile point fragment and six flakes in addition to 25 fire-cracked rocks. The density of lithic material in the vicinity of Feature 13 was observed to be greater than average, although there were not many pieces of debitage mixed in with the rocks themselves. This cluster of fire-cracked or fire reddened stones appears to be the *in situ* remains of a heating or cooking facility in which stones were used for heat retention. As was the case for Feature 12, the absence of ash or charcoal in Feature 13 is likely the result of excessive leaching through the sandy matrix.

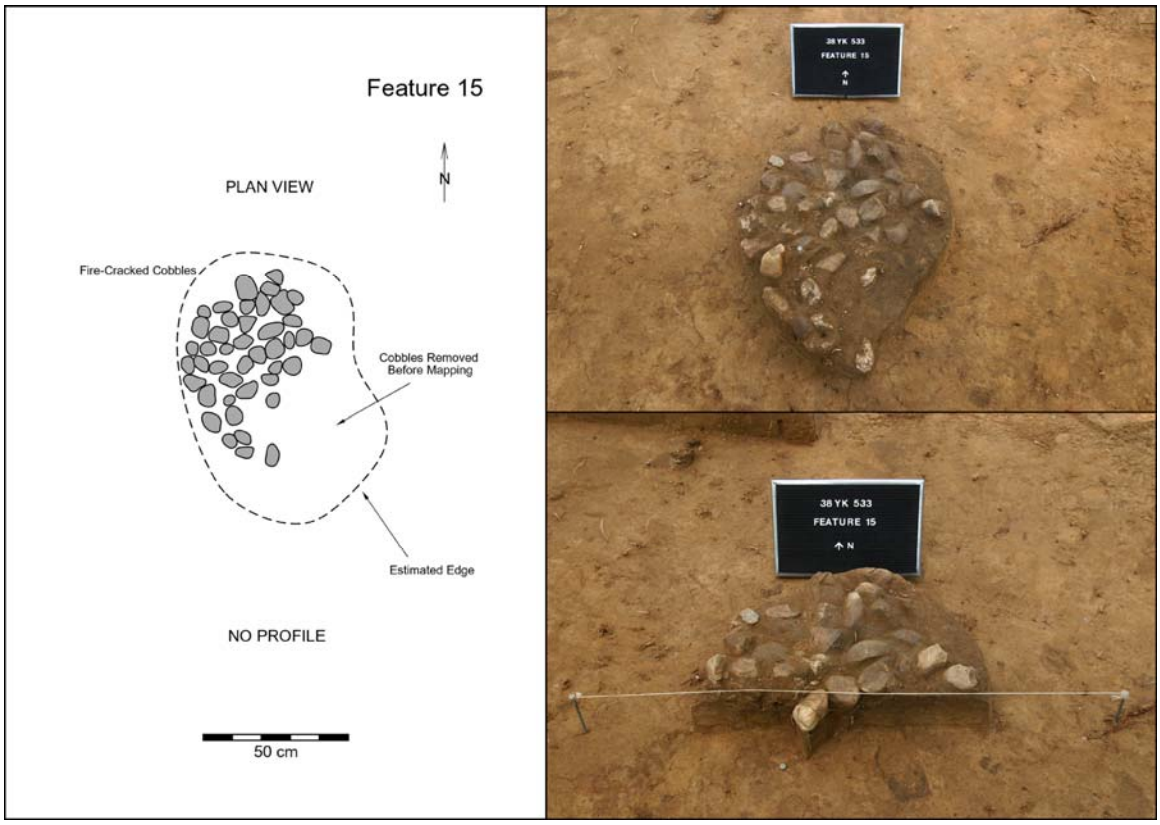

Figure B.5. Feature 15 plan view drawing and excavation photographs: cluster of fire-cracked rocks on soil pedestal at base of plow zone (top, view to north) and fire-cracked rock cluster with south half excavated (bottom, view to north).

Feature 15 (center @ 867.11R852.11) (Figure B.5)

This oval rock cluster measured approximately 90 cm north to south and 65 cm east to west. Excavation revealed that the outer edges of the pile were one rock thick, while a "cone" two to three rocks deep was present in the center of the feature. A total of 79 fire-cracked rocks were collected from Feature 15. The soil around the rocks was dark yellowish brown (10YR3/4) silty sand with charcoal flecks; this matrix contained four potsherds and six flakes. Beneath this layer was dark yellowish brown (10YR4/4 to 4/6) silty sand. One potsherd and three flakes were present in the soil collected from below the rock cluster. This well-organized concentration of fire-cracked rocks likely represents the *in situ* remains of a rock hearth facility for cooking or heating. Associated artifacts indicate a probable Late Woodland period temporal affiliation.

Feature 16 (center @ 889.59R870.02) (Figure B.6)

This shallow ovoid basin measured approximately 135 to 140 cm in diameter and 10 cm in depth (below plowzone). A test unit exposed the northeastern portion of Feature 16, while the northwestern edge of the feature extended into the northern wall of the trench and was not excavated. Two zones of fill were visible at the base of the plow

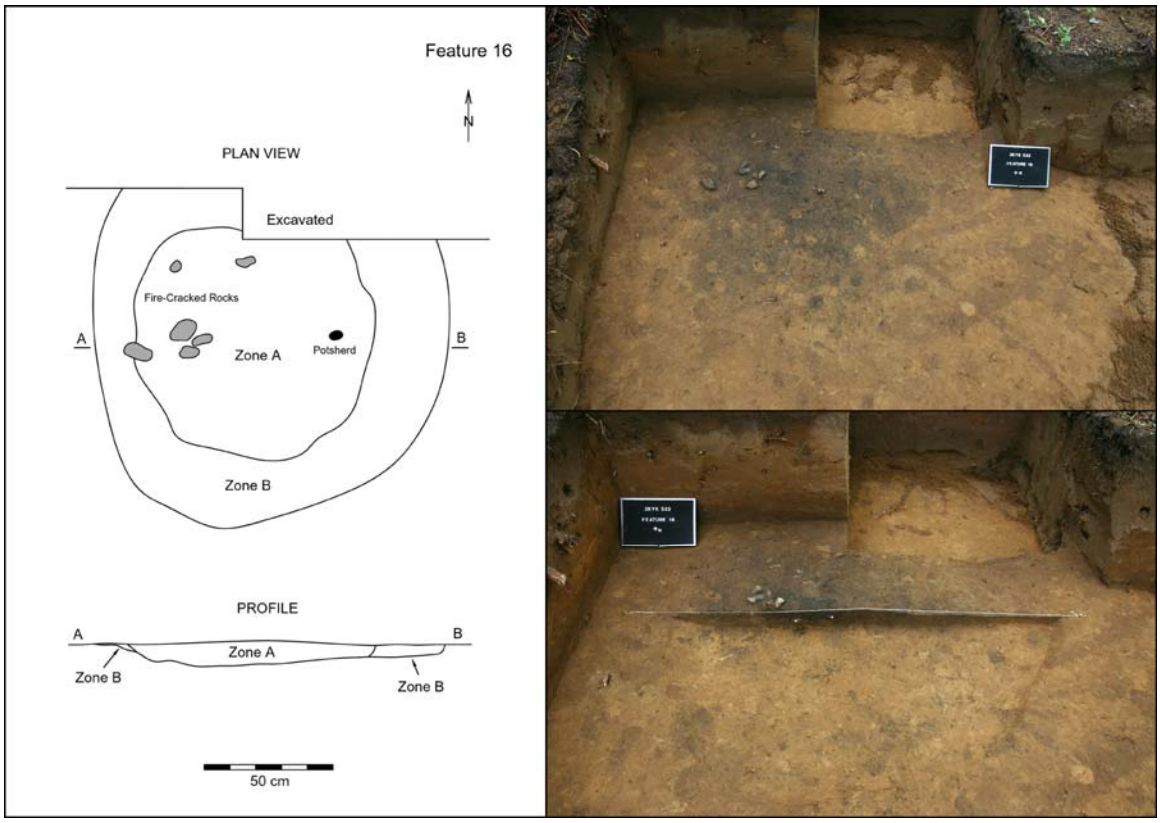

Figure B.6. Feature 16 plan view and profile drawings, and excavation photographs: top of feature (top, view to north) and fill profile with south half excavated (bottom, view to north).

zone. Zone A, the uppermost layer of soil, was dark brown (10YR3/3) loamy sand. This zone was surrounded by Zone B, which consisted of dark yellowish brown (10YR3/4) silty sand. Excavation of Feature 16 revealed that Zone B was present at the edges of the feature, but did not extend all the way beneath Zone A. The maximum thickness of the basin below the plow zone was 10 cm, and the bottom was undulating and irregular.

Flotation samples totaling 15.5 and 16 liters were collected from Zones A and B, respectively. Zone A contained most of the artifacts collected from Feature 16, including seven fragments of calcined bone, 13 pieces of daub, 16 flakes, and six potsherds. Ninety-two fire-cracked rocks were also present in Zone A. Zone B contained seven fire-cracked rocks, one calcined bone fragment, three pieces of daub, six flakes, and one potsherd.

Feature 16 may represent the remains of a hearth or cooking facility that was largely cleaned out subsequent to use. The basin contained numerous fire-cracked rocks, but unlike more formal rock hearths, these revealed no obvious organization or structure. Diagnostic ceramic sherds rcovered from Feature 16 matrices are referable to Late Woodland period site occupations.

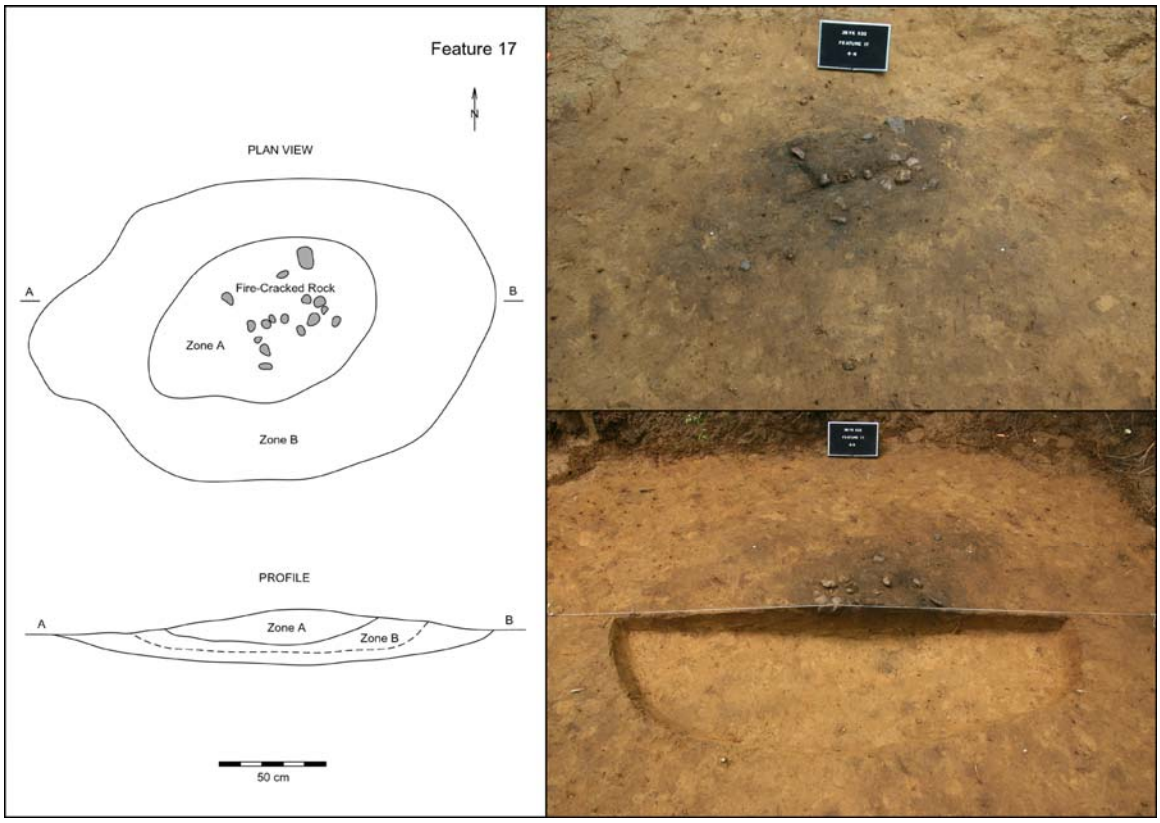

Figure B.7. Feature 17 plan view and profile drawings, and excavation photographs: top of feature (top, view to north) and fill profile with north half excavated (bottom, view to south).

Feature 17 (center @ 831.22R885.50) (Figure B.7)

This oval rock cluster measured approximately 100 cm by 75 cm and was oriented east to west. Zone A, the matrix around the rocks, consisted of dark brown (10YR3/3) silty sand with charcoal flecks. This soil rested on top of a patch of dark yellowish brown (10YR3/6) silty sand that was excavated as Zone B and measured 190 cm long by 150 cm wide. The boundary between Zone B and the surrounding subsoil was diffuse. Zone A had a maximum thickness of 15 cm, while Zone B averaged 5 cm thick and had a maximum thickness of 10 cm.

A total of 60 fire-cracked rocks were present in Feature 17, 46 of which were clustered in Zone A. Few artifacts were recovered from the surrounding soil. Zone A yielded one triangular projectile point, four pieces of daub, three potsherds, and seven flakes, while another four pieces of daub, two potsherds, and 12 flakes were collected from Zone B. These associated materials connote a probable Late Woodland period temporal affiliation. Flotation samples from Feature 17 totaled 33 liters from Zone A and eight liters from Zone B.

Similar in most respects to Feature 16, Feature 17 may also represent the remains of a hearth or cooking facility that was largely cleaned out subsequent to use. Although

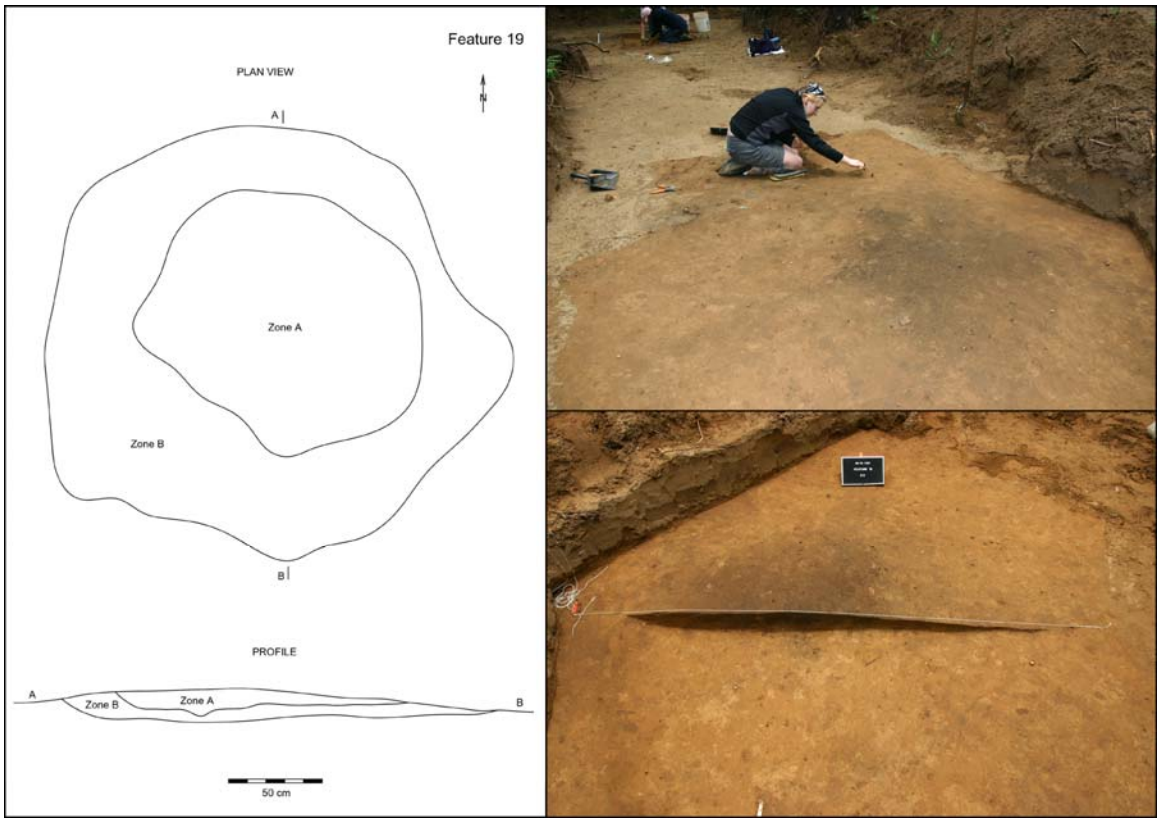

Figure B.8. Feature 19 plan view and profile drawings, and excavation photographs: cleaning the top of feature (top, view to west) and fill profile with south half excavated (bottom, view to north).

the basin contained numerous fire-cracked rocks, these stones exhibited no obvious organization or structure, and were most likely displaced by hearth cleaning.

Feature 19 (center @ 832.71R894.41) (Figure B.8)

Feature 19 was a large, ovoid basin that measured approximately 2.6 meters northwest-southeast and two meters southwest-northeast. Two zones of fill were visible at the base of the plow zone. Zone A was dark yellowish brown (10YR3/3-3/6) silty sand with large charcoal inclusions. Encircling Zone A was dark yellowish brown (10YR4/4) silty sand mottled with brown (7.5YR4/4) and yellowish brown (10YR5/4) silty sand. This layer was designated Zone B. The maximum thickness of Zone A was 12 cm, while Zone B ranged from one to 7.5 cm thick. Excavation of Feature 19 revealed it to have gently sloping walls and a roughly flat bottom.

Fourteen small pieces of daub, eight stone flakes, and two fire-cracked rocks were collected from the surface of Feature 19. Zone A yielded six fragments of calcined bone, 70 small pieces of daub, 27 potsherds, 77 flakes, one core, and seven fire-cracked rocks. Artifact density decreased slightly in Zone B, which contained two pieces of calcined bone, one clay pipe fragment, 33 highly fragmented pieces of daub, 12 potsherds, 51 flakes, and three fire-cracked rocks. Ceramic sherds associated with Feature 19 are referable to the Late Woodland period Ashe Ferry series. Flotation samples from Zones A and B totaled 25 liters and 22.5 liters, respectively.

The high density of daub recovered from Feature 19 (as compared to other contexts at site 38Yk533) indicate the basin received debris from a clay construction; small twig and possible small cane impressions on the daub indicate plastered wickerwork.

Feature 20 (center @ 752.99R925.82) (Figure B.9)

This circular pit feature measured approximately 160 cm in diameter and extended to 58 cm below the base of the plow zone. Feature 20 had sloping walls and a slightly concave bottom. The pit matrix comprises two distinct strata. Zone A had a maximum thickness of 28 cm and consisted of dark yellowish brown (10YR4/4) silty sand with charcoal fragments. Beneath this fill was yellowish brown (10YR5/4) silty sand, designated Zone B.

Zone A, 21.5 liters of which were processed as a flotation sample, contained 18 fragments of animal bone and 22 pieces of calcined bone, 12 pieces of daub, 11 flakes, one polished pebble, 10 pieces of fire-cracked rock, shell fragments, 55 potsherds, and one re-worked stone pipe bowl. Artifact content was lower in Zone B, which yielded 23 potsherds, one piece of daub, one triangular projectile point, 44 flakes, and 16 pieces of fire cracked rock. Two large potsherds were found lying at the bottom and on the west side of the pit at 48 cm and 23 cm below the plow zone, respectively. All of the ceramic artifacts recovered from Feature 20 are attributable to the Late Woodland period Ashe Ferry phase component.

Zone B also yielded human cranial fragments and two mandibular molars (of unknown age and sex) that were not noted *in situ*, but were recovered from waterscreened fill. The incidence of a few relatively well-preserved human skeletal elements in Feature 20 may indicate that these remains had been removed from their primary context prior to being deposited in Zone B. For this reason, Feature 20 is interpreted as a reused storage pit rather than a primary burial.

Evidence of a natural formation process of note was observed during the excavation of Feature 20. A reddish brown, stiff-textured, horizontal alluvial lamella line of fine particles was identified at approximately 30 cm below the old plow zone and continued into the walls of the pit. Clearly this geological feature formed sometime after Feature 20 was excavated and filled.

Feature 21 (center @ 777.80R915.80) (Figure B.10)

Feature 21 was a large cluster of rocks that had an irregular outline and measured roughly 135 cm east-west and 120 cm north-south. Scattered rocks around Feature 21 suggest it was disturbed by plowing, which likely accounts for its irregular outline. Only one course of stones was present, which yielded 341 fire-cracked rocks. The soil beneath

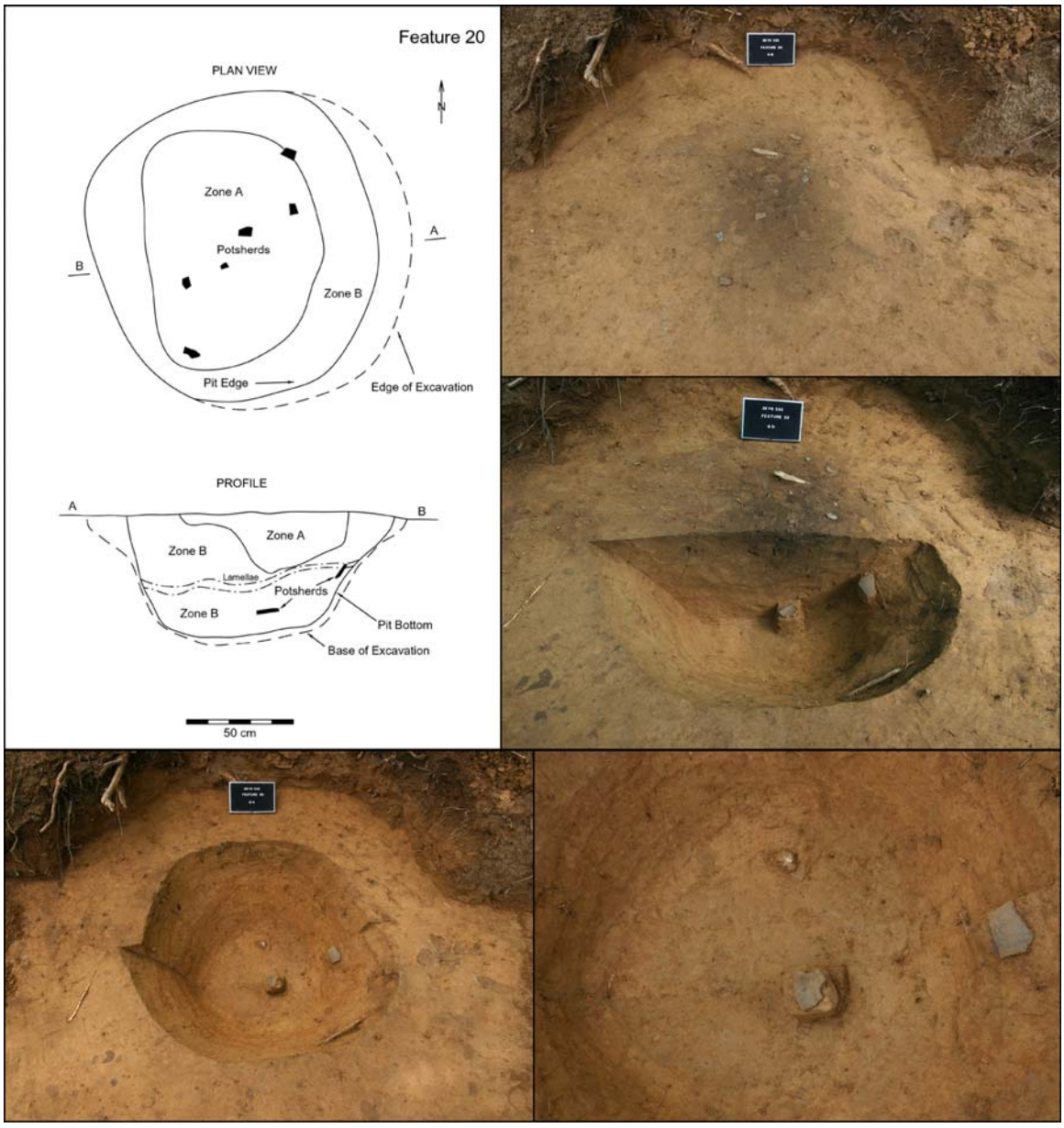

Figure B.9. Feature 20 plan view and profile drawings, and excavation photographs: top of feature (top right, view to south), fill profile with north half excavated (middle right, view to south), excavated feature (bottom left, view to south), and close-up of large potsherds near pit floor (bottom right, view to south).

the rock cluster was slightly darker than the surrounding sterile soil. This single zone of brown (10YR4/3) silty sand with charcoal flecks was 3 to 5 cm thick and contained two conjoining potsherds, 28 flakes, and one piece of daub. The sherds are referable to the Ashe Ferry series, and a Late Woodland period temporal association is probable. As is the case with other relatively thin fire-cracked rock clusters, Feature 21 is interpreted as the remains of a cooking or heating facility in which rocks provided thermal mass.

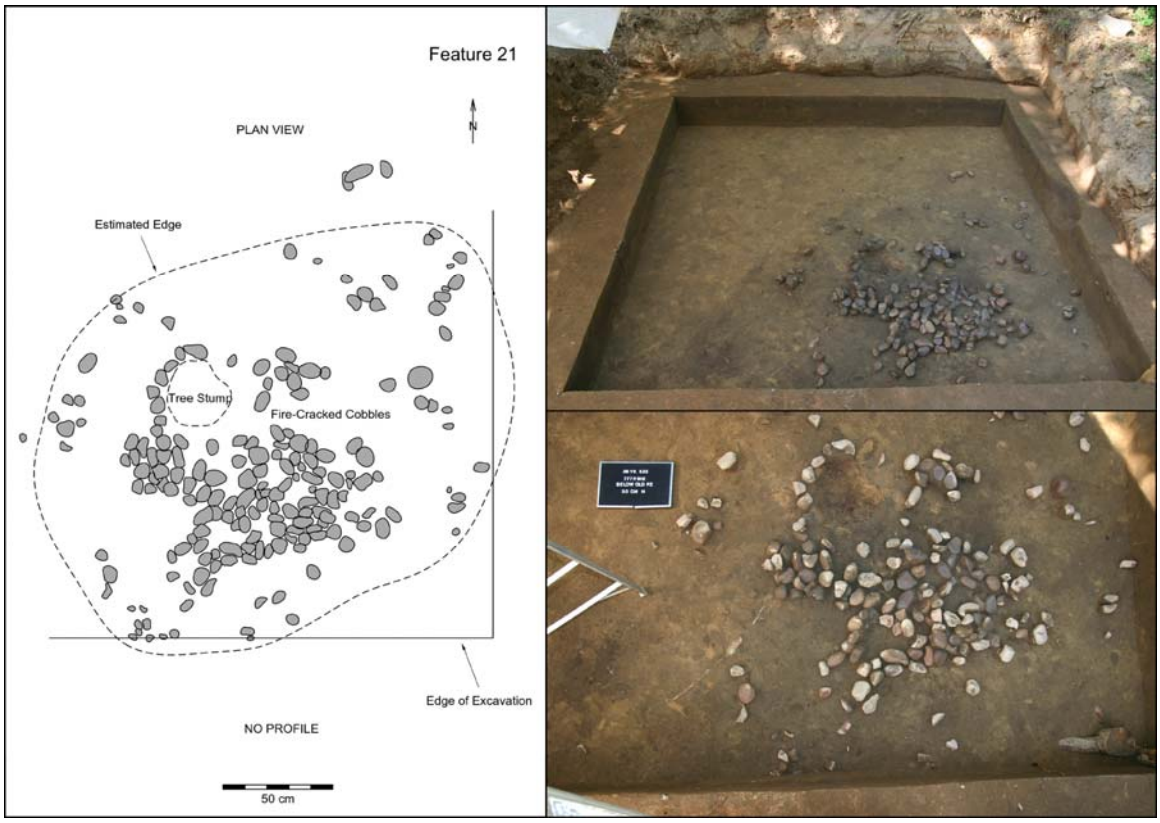

Figure B.10. Feature 21 plan view drawing and excavation photographs: top of feature in Sqs. 777-779R915-917 (top, view to north) and close-up of rock cluster (bottom, view to north).

Feature 22 (center @ 874.00R847.00) (Figure B.11)

This large, shallow, oval basin measured about 220 cm by 170 cm and was oriented north-south. Three layers of fill were visible in plan view at the base of the plow zone. Zone A was present mostly in the southern half of the feature and consisted of very dark brown (10YR2/2) compact silty sand. It had a maximum thickness of 8 cm and contained 25 potsherds, 18 flakes, and 24 fire-cracked rocks. A flotation sample totaling 37.5 liters was collected from Zone A.

Beneath Zone A was dark yellowish brown (10YR3/4) silty sand designated Zone B. Most of this fill was present in the northern portion of Feature 22 and had a maximum thickness of 11 cm. In the southernmost portion of the feature, Zone A extended directly to sterile soil. The contents of Zone B were similar to those from Zone A, consisting of 24 potsherds, 36 flakes, two pieces of daub, and 24 fire-cracked rocks. A 14.5-liter flotation sample was collected from Zone B.

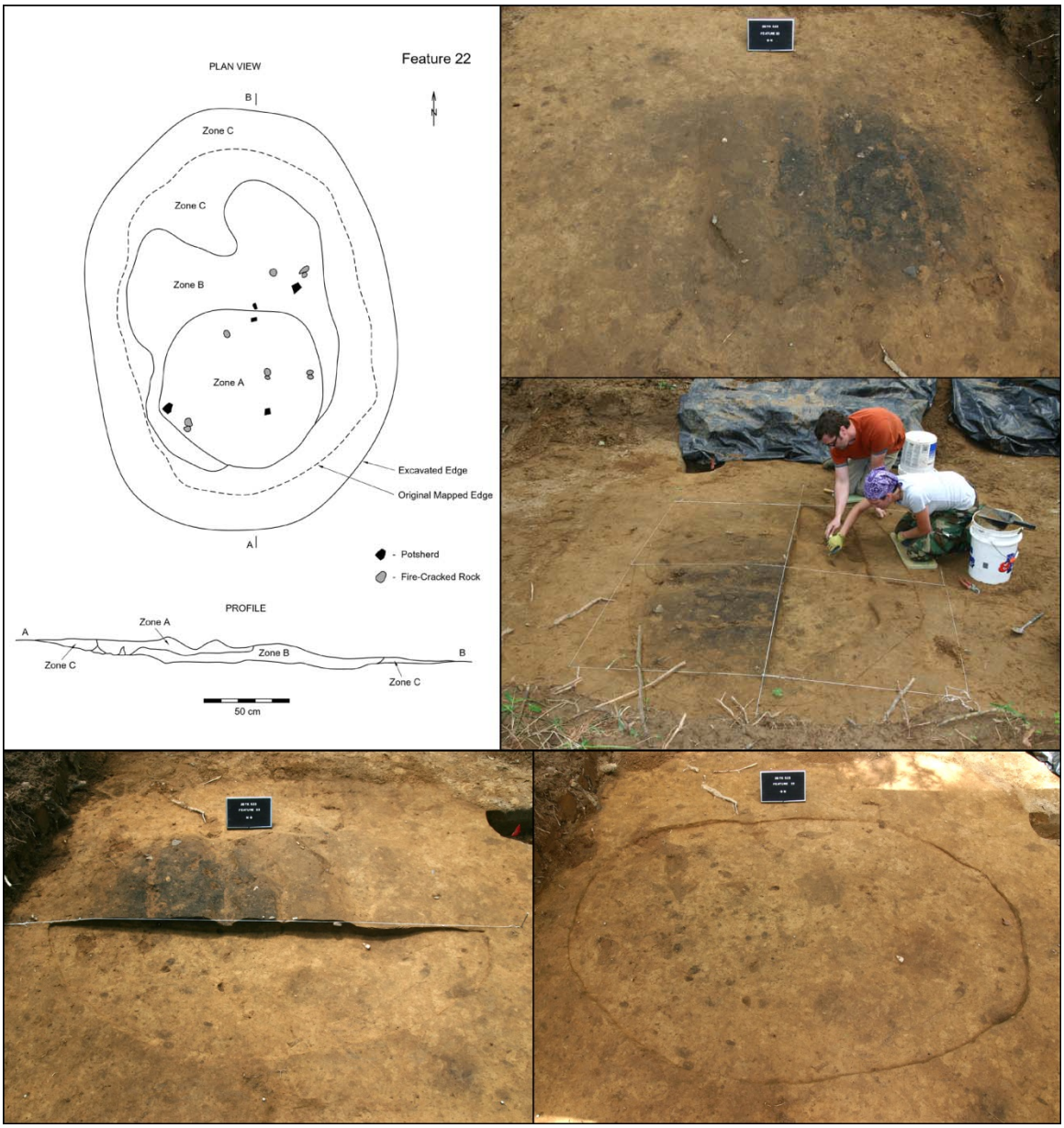

Figure B.11. Feature 22 plan view and profile drawings, and excavation photographs: top of feature (top right, view to east), students excavating the east half (middle right, view to north), fill profile with east half excavated (bottom left, view to west), and excavated feature (bottom right, view to west).

Excavation of Zone C revealed that it was an interface of leaching and bioturbation between the pit base and the sterile soil below. This deposit of dark yellowish brown (10YR4/4) silty sand yielded six potsherds, one piece of daub, nine flakes, and two fire-cracked rocks. Work on Zone C ceased after most of the mottling between the Feature 22 fill and the subsoil was removed, and the final excavated outline of Feature 22 was smaller than originally mapped.

The size and shape of this feature, along with the presence of a moderate amount of fire-cracked rock, may indicate it is the remains of a hearth that was mostly destroyed by plowing. Alternatively, it may have functioned as a workspace that was filled in with

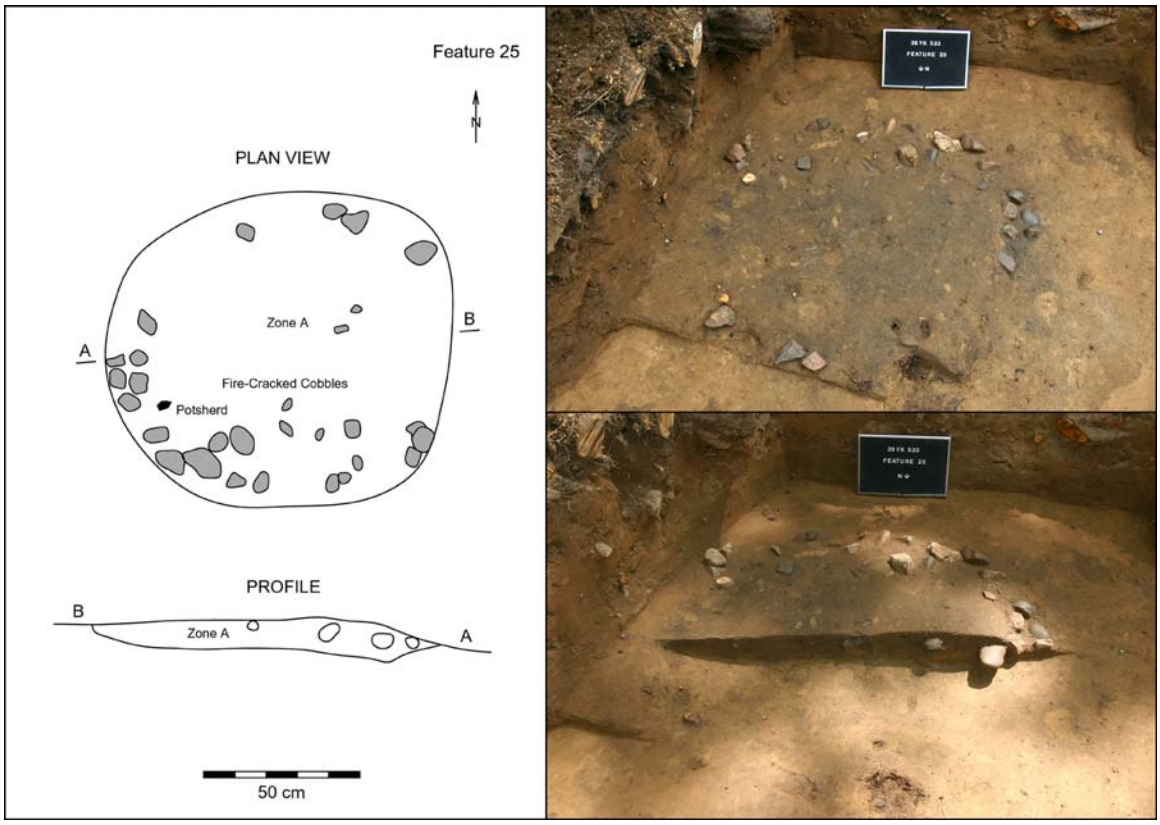

Figure B.12. Feature 25 plan view and profile drawings, and excavation photographs: top of feature (top, view to south) and fill profile with north half excavated (bottom, view to south).

hearth cleanings and other debris when abandoned. Diagnostic artifacts recovered from Feature 22 are referable to the Late Woodland period Ashe Ferry phase site occupation.

Feature 25 (center @ 766.76R934.29)(Figure B.12)

Feature 25 was a circular cluster of 272 fire-cracked rocks that measured approximately 110 cm in diameter. It had well-defined edges with only minor disturbance at its northern end from the backhoe cut in which it was identified. The fire-cracked rocks were surrounded by a matrix of very dark grayish brown (10YR3/4) silty sand mottled with dark yellowish brown (10YR3/4) silty sand that contained charcoal flecks and which yielded one calcined bone fragment, 13 potsherds, and three flakes. This feature appears to represent the remains of a large Late Woodland period heating or cooking facility, with stones displaced by hearth cleaning.

Feature 28 (center @ 751.11R936.01) (Figures A.13 and A.14)

This large pit feature measured roughly 280 cm in diameter and extended 105 cm below the plow zone. Feature 28 was encountered by backhoe trench testing conducted by Legacy Research Associates but was not identified at that time. Plow zone stripping associated with the current investigation re-exposed the Legacy trench and resulted in the identification and mapping of Feature 28, the boundaries of which extended slightly beyond the original backhoe cut. Three zones of fill were visible in plan view, although two of these were so similar in color and texture that they were not distinguished prior to

excavation. Zone A was very dark grayish brown (10YR3/2) silty sand, and Zones B and E were recorded as dark yellowish brown (10YR4/6) silty sand.

The east half of Feature 28 was excavated first, revealing five distinct strata. Zone A exhibited a basin-shaped profile and a maximum thickness of 24 cm. Because complete charred acorns were identified during excavation of Zone A fill, all of the soil from this layer (172 liters) was flotation processed for recovery of botanical remains. In addition to a substantial quantity of carbonized acorns, Zone A yielded 21 potsherds, three pieces of daub, one triangular projectile point, a chipped stone hoe fragment, one stone biface fragment, 52 flakes, and nine fire-cracked rocks.

Excavations beneath Zone A revealed a slightly darker "core" area directly below Zone A, but this coloration did not extend to the walls of the feature, which were difficult to identify. Operating on the assumption that there were no bell-shaped pits in the sandy soils of 38Yk533, the walls were trimmed back, revealing occasional sherds, flakes, and carbonized mast. Although the fill below and to the sides of Zone A was excavated as a single context during the excavation of the east half of Feature 28, investigation of the profile revealed that these deposits were distinct zones associated with different fill episodes. For this reason the layer directly below Zone A was re-designated Zone E, with the fill to the sides of Zone A remaining Zone B.

Zone E contained a large stone with "nutting" depressions visible in plan view prior to excavation, along with 22 potsherds, four pieces of daub, one piece of calcined bone, one chipped hoe fragment, two triangular projectile points, one core, 40 flakes, and four fire-cracked rocks. A 10-liter flotation sample from Zone E was collected from the west side of Feature 28. Materials that can be attributed to Zone B include 81 potsherds, 12 pieces of daub, five pieces of calcined bone, one projectile point fragment, and 79 flakes. Thirty-three of the potsherds found in Zone B were clustered at the southeast edge of the feature from 80 to 90 cm below the plow zone; these appear to represent a discrete disposal event. Materials from the east half of Feature 28 that may have come from either Zone B or Zone E include 92 potsherds, 28 pieces of daub, 11 pieces of animal bone, three triangular projectile points, four projectile point fragments, one biface fragment, one core, 194 flakes, and 21 fire-cracked rocks.

Beneath Zone E was a layer of dark grayish brown (10YR4/2) silty sand with abundant carbonized material. All 70.5 liters of fill from this layer, designated Zone C, were processed by flotation. Excavators collected a bag of carbonized mast from this layer, which also contained five potsherds, seven pieces of daub, 21 flakes, and three fire-cracked rocks. A concentration of artifacts was noted at the bottom of Zone C, about 60 cm below the plow zone, on the west side of the feature. A large rim sherd and a section of an apparent charred wooden shaft with a polished surface and possible transverse cut marks were photographed and mapped in place.

The last layer of fill encountered during excavation was Zone D, which was located below Zones B and C. Zone D was brownish yellow (10YR6/6) sand with charcoal flecks and ranged from 6 to 18 cm thick. Zone D was similar to Zone B in being

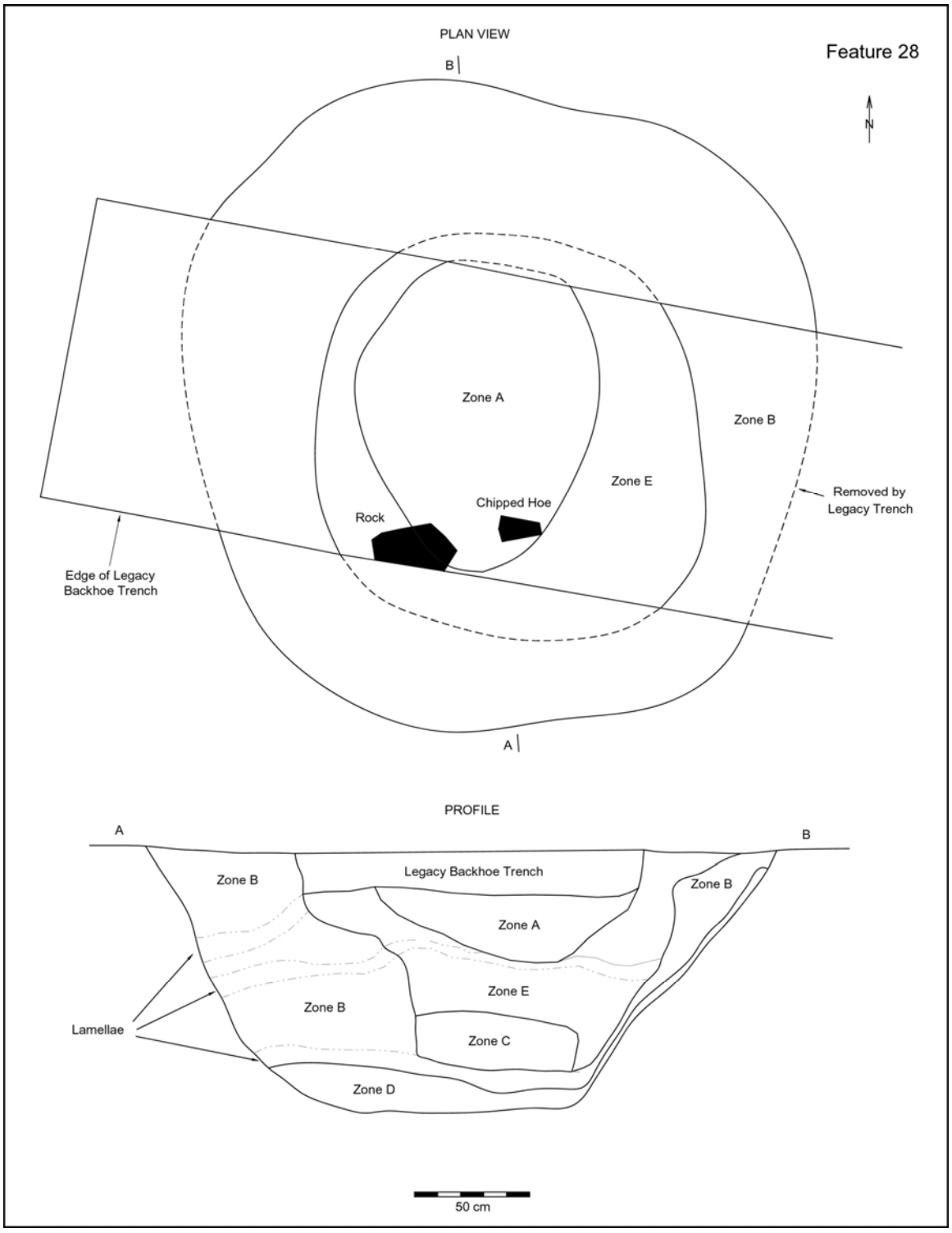

Figure B.13. Feature 28 plan view and profile drawings.

Figure B.14. Feature 28 excavation photographs: top of feature exposed in base of Legacy Research backhoe trench (top left, view to west), fill profile with east half excavated (top right, view to west), pedestaled potsherds in Zone B near the southeast pit edge (bottom left, view to south), and excavated feature (bottom right, view to west).

difficult to distinguish from sterile sand, but yielded fewer artifacts. It contained six potsherds, one triangular projectile point, and 17 flakes.

Feature 28 deposits also exhibited three reddish brown stiff-textured horizontal alluvial lamella lines of fine particles. These geological features, encountered at 20–40 cm, 40–60 cm, and 80–100 cm below the plow zone, cut across different zones of fill and continued into the walls of the pit. Like the lamella line in Feature 20, these wetting fronts clearly formed after the feature was filled.

Artifacts recovered from Feature 28 matrices indicate a Late Woodland period Ashe Ferry phase association for this facility. Radiocarbon samples recovered from Feature 28 produced an AMS date of 900±30 years B.P. (2σ calibration, cal. A.D. 1040 to 1210; calibration curve intercept, cal. A.D. 1160). The size and morphology of Feature 28 are consistent with a primary initial function as a storage pit. Although masses of charred mast (primarily acorns) in the pit matrix may represent disposal events independent of the pit storage functions, these nut remains may also represent unrecovered "over-roasted" residues of roasted mast that had been stored in Feature 28. If this is the case, recovery of more useable stored foods from the pit may have resulted in the mixture of more heavily burned nuts through several pit strata.

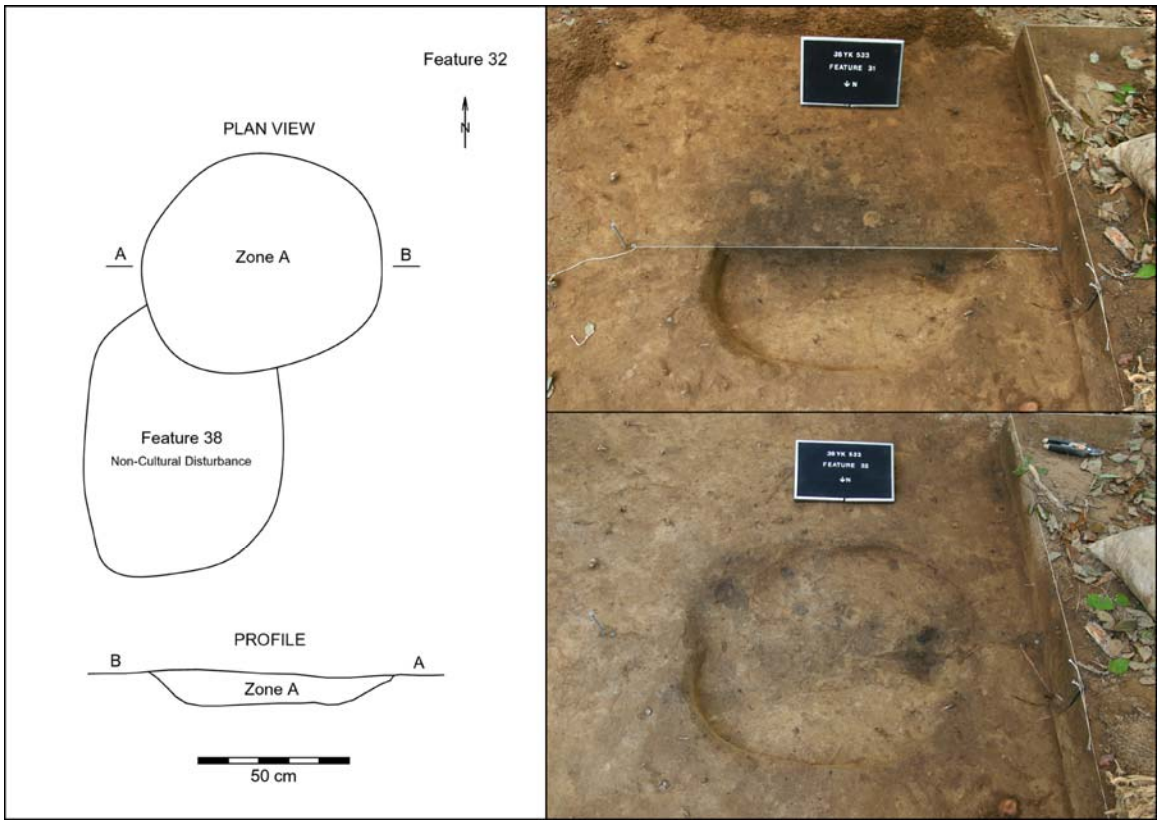

Figure B.15. Feature 32 plan view and profile drawings, and excavation photographs: fill profile with north half excavated (top, view to south) and excavated feature (bottom, view to south).

Feature 32 (center @ point of 869.79R857.57) (Figure B.15)

This circular shallow basin had a maximum depth of 11 cm below the plow zone and a diameter of approximately 72 cm. Feature 32 intruded upon Feature 38. It contained one zone of fill that consisted of very dark grayish brown (10YR3/2) compact silty sand with charcoal flecks. Feature 32 yielded seven Late Woodland period potsherds, eight flakes, and four fire-cracked rocks. Flotation samples totaling 11.5 liters were collected from this feature. The relatively nondescript character of Feature 32 makes its original function difficult to ascertain. Its artifact assemblage and shallow profile reduce the number of possible interpretations, although it is possible that Feature 32 was a severely truncated storage pit or cooking facility of which only the deepest portion remained intact.

Feature 35 (center @ 872.00R857.92) (Figure B.16)

Feature 35 was a refuse-filled depression with an intrusive posthole or small pit. In plan view, the unexcavated outline of this feature was irregular, with maximum dimensions of 133 cm north to south and 93 cm east to west. The fill in this depression, designated Zone A, consisted of dark yellowish brown (10YR4/6) compact silty sand with charcoal inclusions. It contained 22 potsherds, two projectile point fragments, one

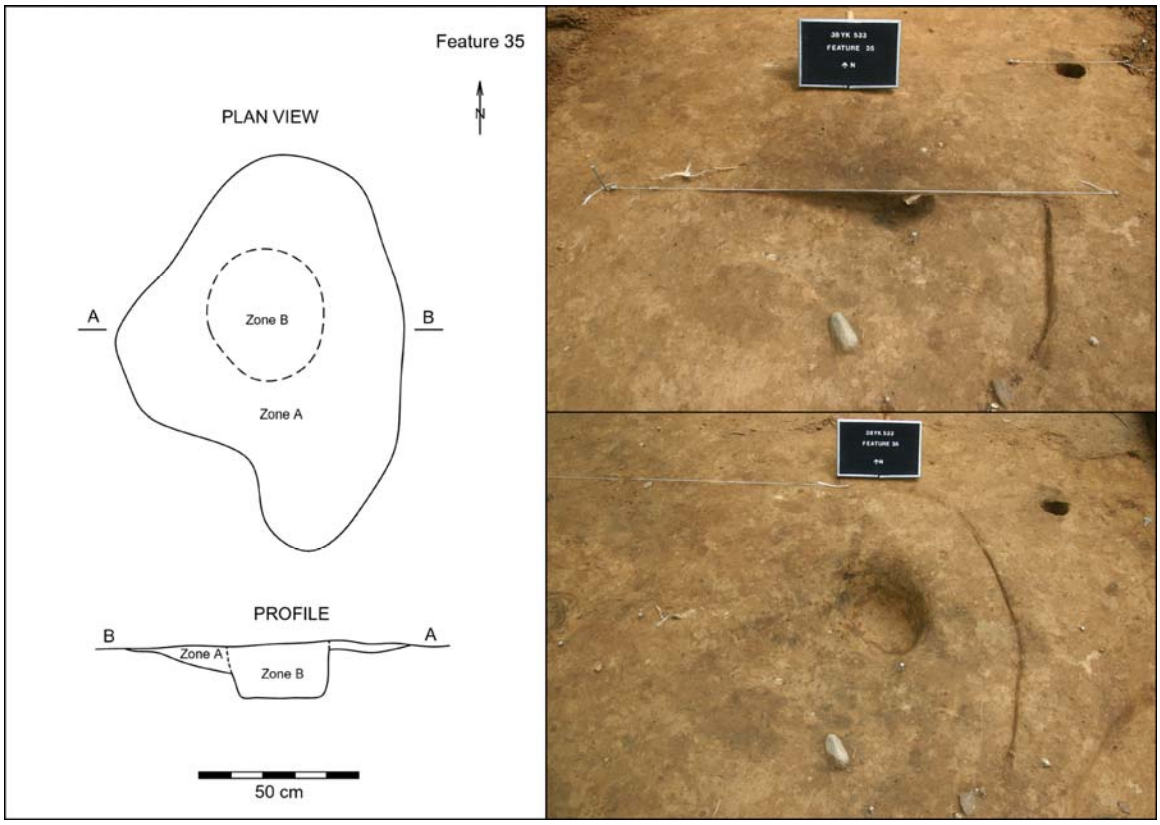

Figure B.16. Feature 35 plan view and profile drawings, and excavation photographs: fill profile with north half excavated (top, view to south) and excavated feature (bottom, view to south).

biface fragment, 47 flakes, one piece of daub, and four fire-cracked rocks. Thirteen liters of Zone A were processed as a flotation sample. Zone A had an uneven, irregular bottom and a maximum thickness of 8 cm. Excavators found two large sherds lying horizontally at the interface between this layer of fill and the soil below.

A concentration of charcoal approximately 30 cm in diameter was encountered about 4 cm below the plow zone. This material, Zone B, was all processed as a 6.5-liter flotation sample. It contained three potsherds, five flakes, and eight pieces of daub. Excavation revealed that Zone B was fill in a small pit or posthole that had straight sides and a relatively flat bottom. Based on photographs of Feature 35, it appears that the top of Zone B was present at the base of the plow zone, but was not distinguished from Zone A in plan view prior to excavation. For this reason, some of Zone B was likely excavated as Zone A. Zone B had a maximum depth of 16 cm below the plow zone.

Feature 35 appears to consist of a refuse-filled depression or truncated feature (Zone A) that was intruded by a small pit or posthole (Zone B). Although shaped like a posthole, Zone B of Feature 35 appears rather shallow for a post 30 cm in diameter, and may instead represent a small pit of unknown function. Ceramic sherds associated with Feature 35 are referable to the Ashe Ferry series, indicating a Late Woodland period temporal affiliation.

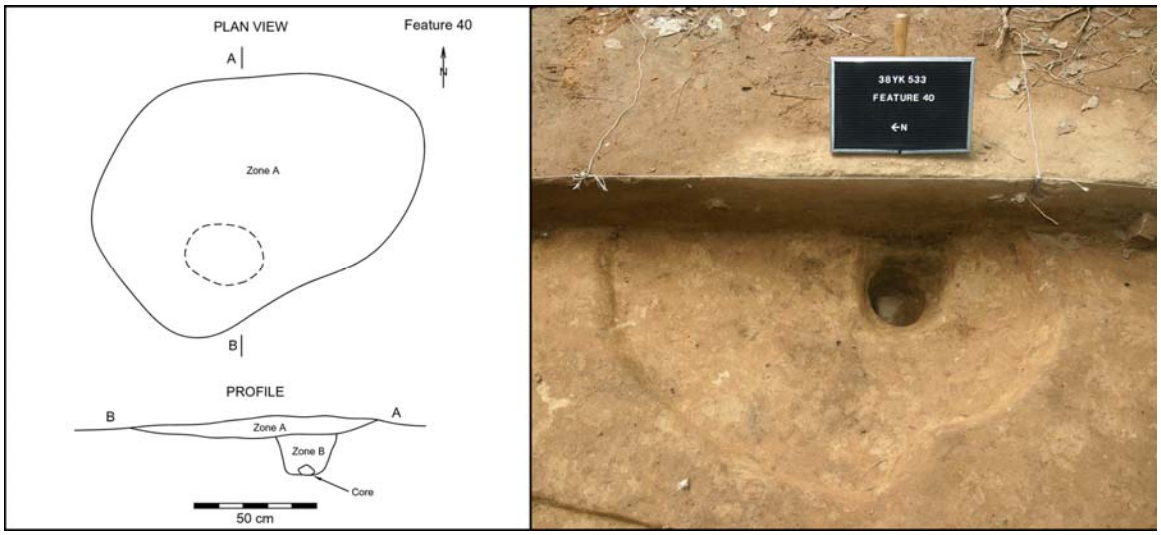

Figure B.17. Feature 40 plan view and profile drawings (left) and photographs of fill profile with west half excavated (right, view to east).

Feature 40 (center @ 871.45R859.05) (Figure B.17)

Feature 40, a shallow basin that capped a posthole or small pit, closely resembled Feature 35 in size and morphology. The unexcavated outline of this feature was oblong in plan view, measured 145 cm by 103 cm, and was oriented with its long axis northeast–southwest. One zone of fill was observed at the base of the plow zone. Designated Zone A, this fill consisted of dark yellowish brown (10YR4/6) compact silty sand with charcoal inclusions. It yielded 43 potsherds, one projectile point fragment, 76 flakes, and nine fire-cracked rocks. A 6.5-liter flotation sample was collected from this zone, which had a relatively flat bottom and maximum thickness of 10 cm.

A concentration of charcoal in the southern portion of the feature was observed during the excavation of Zone A. The presence of brown (7.5YR4/4) silty sand in this location at the bottom of the basin led to the identification of Zone B, a small pit or posthole approximately 28 cm in diameter. All fill removed as Zone B was processed as a 10.5-liter flotation sample. Four potsherds, four pieces of daub, and two flakes were present in this fill. In addition, excavators uncovered a lithic core at the bottom of Zone B, approximately 25 cm below the plow zone. The small pit or posthole that contained this fill had slightly inward sloping walls and a flat bottom.

Diagnostic potsherds recovered from Feature 40 are consistent with the Late Woodland period Ashe Ferry phase occupation at 38Yk533. Feature 40 appears to be a composite facility that began with a small pit or posthole that was filled in with Zone B soils. The larger basin-like portion of Feature 40, which was filled by Zone A, may have been a feature. Alternatively, it may be the base of a severely plow-truncated storage pit or rock cluster of which only the deepest portion remained intact.

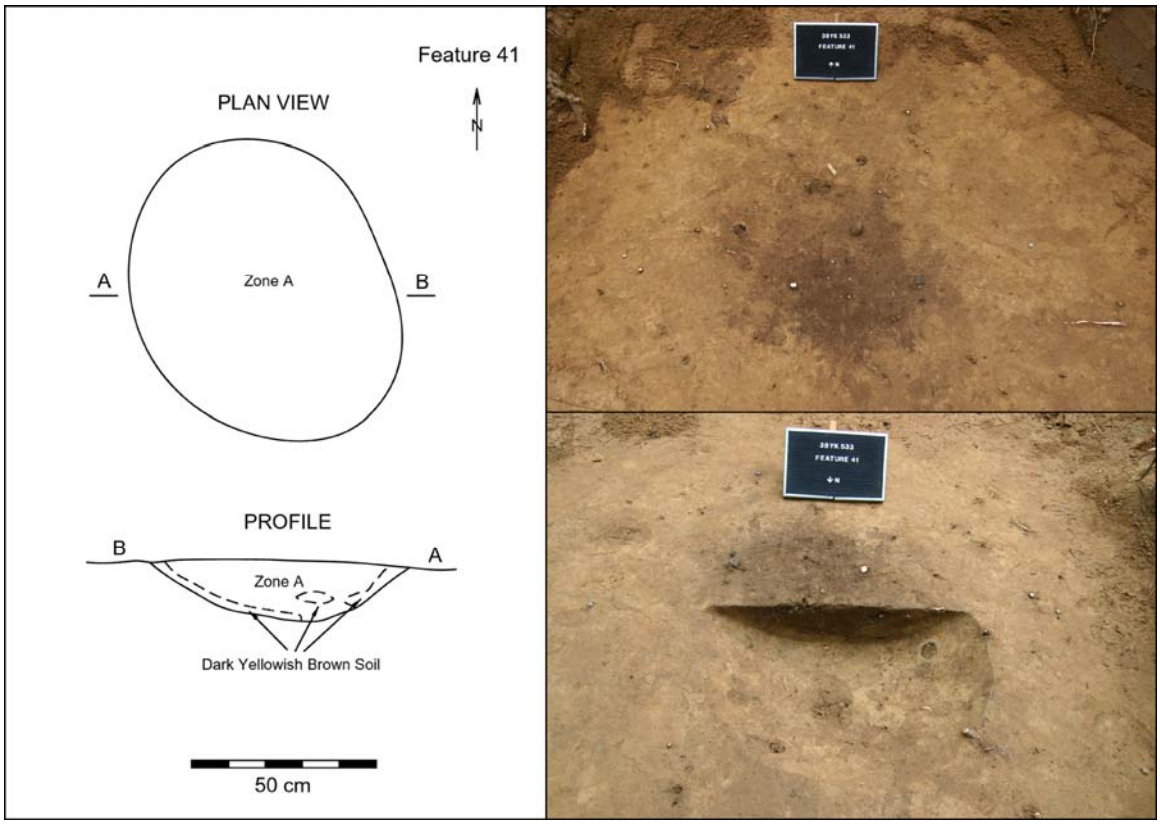

Figure B.18. Feature 41 plan view and profile drawings, and excavation photographs: top of feature (top, view to north) and fill profile with north half excavated (bottom, view to south).

Feature 41 (center @ 772.91R929.14)(Figure B.18)

Feature 41 was an ovoid basin that measured approximately 84 cm by 65 cm and was oriented with its long axis northwest to southeast. This feature contained a single zone of dark brown (10YR3/4) sandy loam with small bits of charcoal, bone, and burned clay or daub. A few centimeters of dark yellowish brown (10YR4/6) silty sand were present at the interface between the feature fill and the surrounding sterile soil. The bone and daub content of this feature was greater than most others at 38Yk533, but ceramic and lithic artifacts were less frequent. Ten flakes, one fire-cracked rock, and 11 potsherds were present in Feature 41. One of these sherds and a deer scapula were found lying on the bottom of the feature. Twelve liters of fill from this feature were processed as a flotation sample. The excavated profile of Feature 41 was basin-shaped, with a maximum depth of 17 cm below the plow zone. Given its size and shape, Feature 41 was likely a truncated storage pit. Plain and burnished plain potsherds recovered from Feature 41 are classified as Mississippian Plain/Burnished Plain types and Feature 41 is attributed to the latter portion of the Early Brown phase occupations at 38Yk533. An AMS assay of carbonized plant remains from Feature 41 yielded a radiocarbon date of 630±30 years B.P. (2σ calibration, cal. A.D. 1280 to 1400; calibration curve intercepts, cal. A.D. 1300, 1360, 1380).

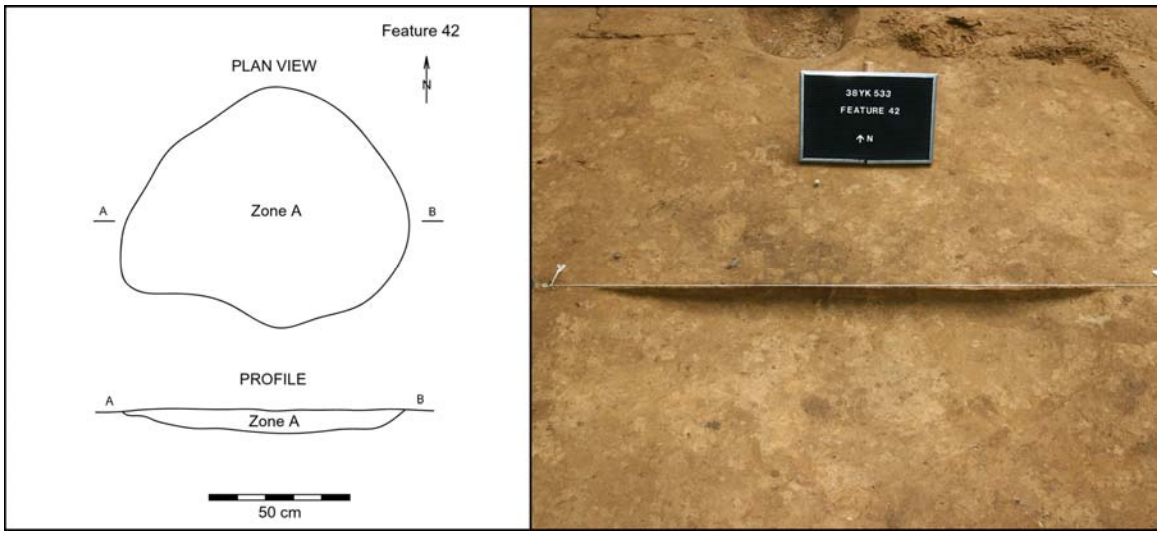

Figure B.19. Feature 42 plan view drawing and excavation photograph of fill profile with south half excavated (view to north).

Feature 42 center @ 872.74R857.09) (Figure B.19)

Feature 42 was an irregular, shallow basin that extended approximately 80 cm north to south and 100 cm east to west. Feature 42 contained a single, 8cm-thick zone of dark yellowish brown (10YR5/4) compact silty sand with charcoal flecks. Twelve liters of this fill was collected as a flotation sample. Feature 42 yielded four Late Woodland period Ashe Ferry series potsherds, 12 flakes, and one fire-cracked rock. The walls of this basin were gently sloping and its floor relatively flat. The relatively nondescript character of Feature 42 makes its original function difficult to ascertain. Its limited artifact assemblage and shallow profile reduce the number of possible interpretations, although it is possible that Feature 42 was a severely truncated storage or processing pit.

Feature 43 (center @ 855.5R905.0) (Figure B.20)

This probable storage pit was apparently repurposed as a grave, then the depression created by the subsidence of grave fill was subsequently filled with refuse. The pit measured 165 cm from east to west and 145 cm north to south. Two zones of fill were visible on the surface of the pit exposed at the base of the plowzone: an inner "core" of very dark grayish brown (10YR3/2) silty sand surrounded by dark yellowish brown (10YR4/4) silty sand. These fills were designated Zones A and B, respectively.

Feature 43 was initially interpreted as a possible storage pit, and the south half was excavated in May 2010. The identification of human bone at the base of Zone B led to the identification of this feature as a grave containing human remains, and excavation was suspended to allow for tribal and agency consultation to determine proper treatment and disposition. In November 2010, the remainder of Feature 43 was excavated, and the burial was exhumed as a soil block and reburied at a location designated for that purpose.

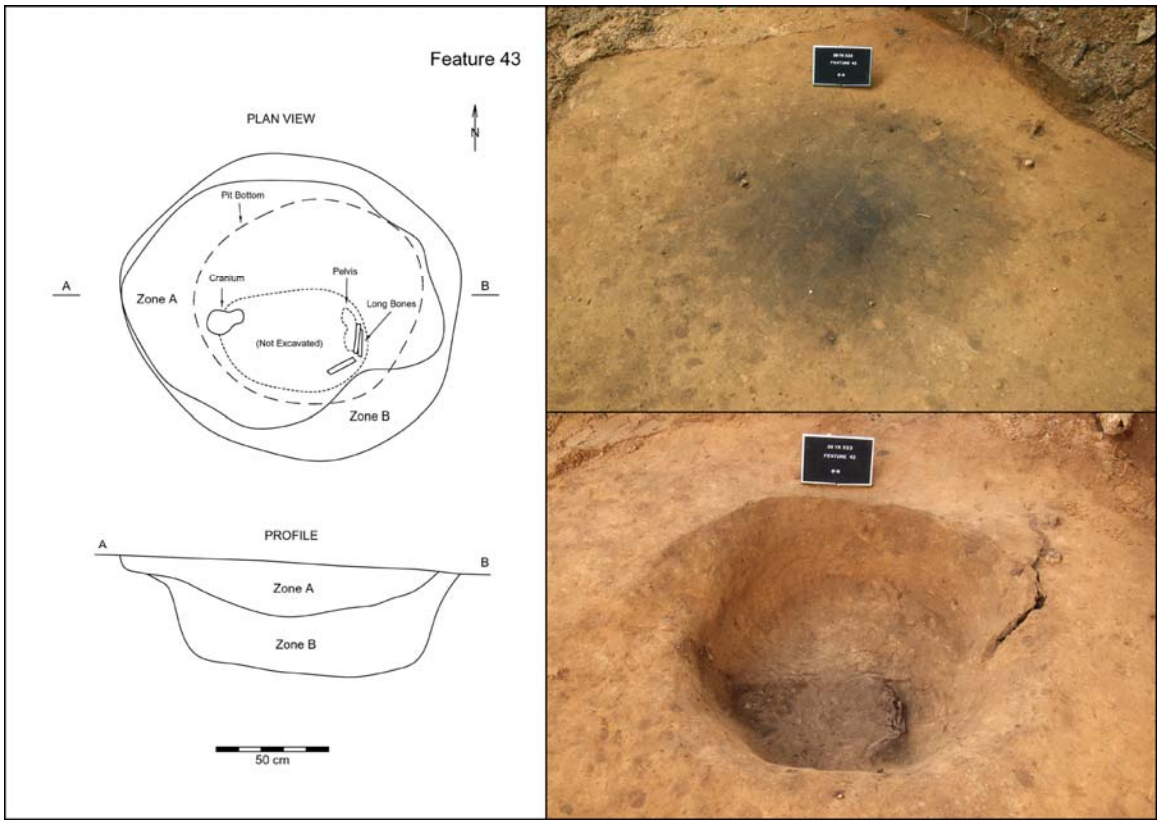

Figure B.20. Feature 43 plan view and profile drawings, and excavation photographs: top of feature (top, view to north) and following excavation of Zones A and B but before exhumation (bottom, view to north).

Prior to exhumation, a field analysis of the exposed human remains was performed by bioarchaeologist Dale Hutchinson, Research Laboratories of Archaeology, University of North Carolina at Chapel Hill. His observations are as follows: "The burial in Feature 43 was an individual flexed on its right side. The individual was a young adult (probably 20–30) of unknown sex, with age based on the presence of a slightly worn third molar. The skeletal elements present included a fragmentary cranium, left mandibular permanent molars 1–3, and left maxillary permanent molars 1–3, the neck and distal condyle of a femur, and several other unidentifiable long bones" (see Appendix C).

Zone A had a maximum thickness of 35 cm and was found to contain 14 potsherds, four fragments of calcined bone, four triangular projectile points, one projectile point fragment, 62 flakes, and four fire-cracked rocks. A 7.5-liter flotation sample was collected from this zone. A patch of very dark grayish brown (10YR3/2) silty sand mottled with dark brown (7.5YR3/4) silty sand was noted in the southern portion of Zone A at 30 cm below the plow zone. This possible burned soil did not extend into the profile and was designated Zone 1A. It had a maximum thickness of 10 cm and contained two potsherds and four flakes. Zone A appears to have filled a void created by the subsidence of Zone B, presumably following the decay and collapse of the human remains and other organic materials originally deposited at the base of the Feature 42 pit. Zone 1A appears to represent a burning event on the post-subsidence surface of Zone B prior to the deposition of Zone A.

Zone B was approximately 25 cm thick and yielded 39 potsherds, one possible clay pipe fragment, 16 pieces of daub, 11 pieces of calcined bone, two triangular projectile points, two projectile point fragments, 150 flakes, and five pieces of fire-cracked rock. The teeth and mandible of a dog, nine potsherds, and 11 flakes were found at the same depth as the human skeletal material, and the dog in particular may represent a deliberate inclusion associated with the burial. Zone B represents the initial fill soil deposited in the Feature 43 grave pit to cover the burial. Diagnostic artifacts associated with Zone B are referable to the Ashe Ferry phase site occupation.

Earlier, more deeply buried archaeological components at 38Yk533 are attested by recovery of one potsherd, one Late Archaic Savannah River projectile point, and four flakes from sand underneath the base of the feature during the removal and relocation of the burial from Feature 43.

Feature 44 (center @ 840.28R905.83) (Figure B.21)

Feature 44 was a shallow, ovoid basin that measured approximately 80 cm north to south and 65 cm east to west. A pine tree growing in the northeast corner of the feature restricted the extent of excavation. Feature 44 contained two zones of fill, one of which was visible in plan view. Zone A consisted of dark yellowish brown (10YR4/4) silty sand mottled with dark brown (10YR3/3) silty sand. It contained 11 potsherds, 11 fragments of animal bone (of which two were calcined), one core, 27 flakes, and two fire-cracked rocks. Fourteen and a half liters of this fill were processed as flotation samples. Zone A had a flat, slightly irregular bottom and a maximum thickness of 12 cm.

Beneath Zone A was a layer of dark yellowish brown (10YR4/4) silty sand that contained another 11 potsherds, two pieces of daub, four fragments of calcined bone, one pentagonal projectile point, 34 flakes, and seven fire-cracked rocks. This fill, designated Zone B, dipped slightly in the center of the feature but otherwise had a relatively flat bottom. It had a maximum thickness of 8 cm. The flotation samples from Zone B totaled 15 liters. Zone B may be a separate fill that was deposited prior to Zone A.

Neither the pit matrix, content, nor morphology provided any clue to the original use of Feature 44, and it is classified as a shallow pit facility of undetermined function. Associated Late Woodland period Ashe Ferry series potsherds indicate filling during or after the primary Late Woodland period site occupation.

Feature 45 (center @ 839.60R904.26) (Figure B.22)

Feature 45 represents a large basin, mapped and excavated as Zone B, with an intrusive grave pit and human burial that was designated Zone A. Overall, the larger ovoid basin (Zone B) measured 227 cm by 168 cm with its long axis oriented north–south. Zone A, representing the intrusive oval burial pit in the south half of the feature, measured 117 cm by 78 cm with its long axis oriented northwest–southeast.

Both zones of fill were visible on the surface of Feature 45. Zone A was an 8 cm thick stratum of dark grayish brown (10YR3/2) loose silty sand, and Zone B was a 6 cm thick stratum of dark yellowish brown (10YR4/4) silty sand. Zones A and B in the north half of Feature 45 were excavated first. During removal of Zone A fill in May 2010, the fragmented remains of a human mandible were identified near the fill profile. These were left *in situ* while the remaining Zone A and Zone B fill in the north half was excavated. At this point, excavations were suspended pending tribal and agency consul-

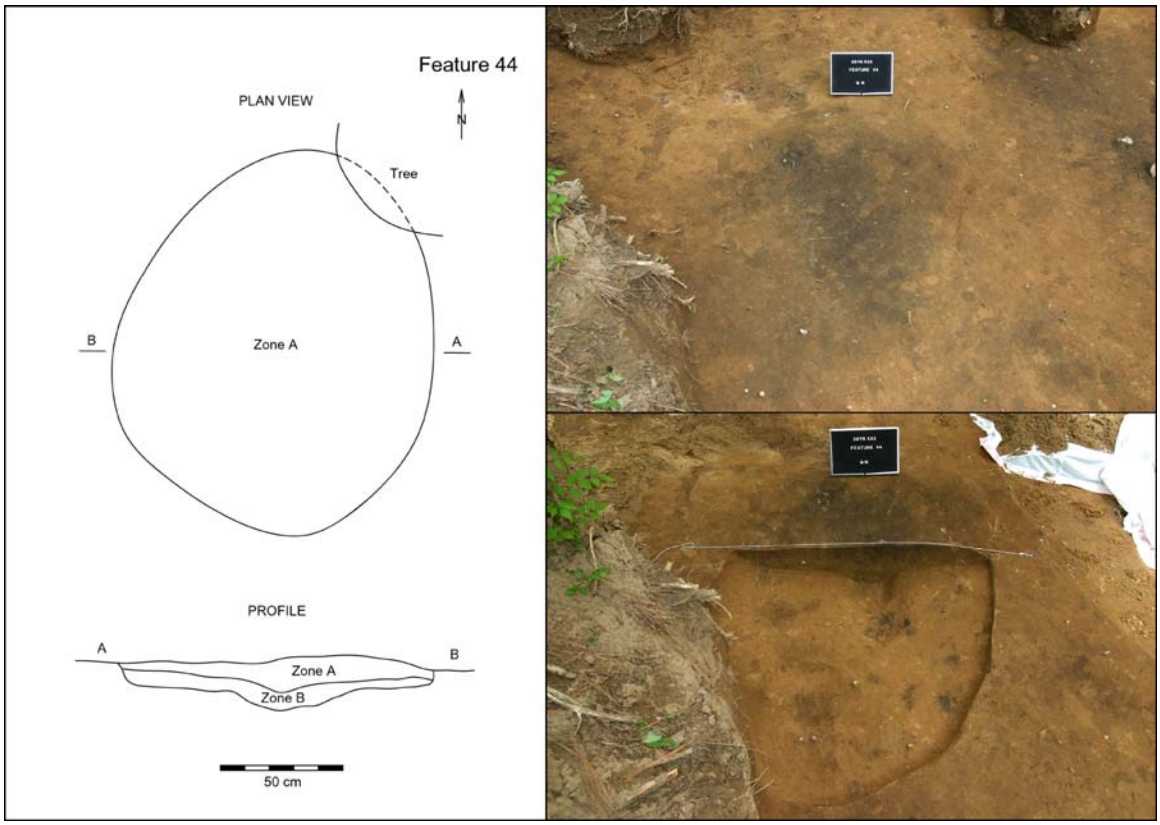

Figure B.21. Feature 44 plan view and profile drawings, and excavation photographs: top of feature (top, view to south) and fill profile with north half excavated (bottom, view to south).

tation to determine procedures for treatment and disposition of the remains. As was also the case for human remains identified in Features 43 and 62, remains associated with Feature 45 were ultimately removed *en bloc* and reburied with their matrix in a protected location.

Prior to exhumation, a field analysis of the exposed human remains was performed by Dale Hutchinson. His observations are as follows: "The burial in Feature 45 was that of a gracile male adult, with no further age estimation possible. The adult age was based on the presence of erupted third molars. The sex estimate was based on cranial features that were more male than female in robusticity. The individual was buried in a flexed position on their left side. The burial included a small bundle that included a pipe, antler, and worked bone fragments. Skeletal elements present included a cranium, mandible, and the diaphyses of the right and left clavicles, humerii, ulnae, femora, and tibiae. The right radius diaphysis was present, and likely the left was present although not apparent. The dentition included two worn maxillary molars, one maxillary or mandibular molar, one mandibular molar root, and broken premolar, probably mandibular. I assume these were likely from the right side of the dentition, although all were too fragmentary to ascertain side, and the teeth appeared to have been slightly disturbed prior to excavation, probably through root, rodent, or earth settling activity. Two skeletal measurements (estimated in both cases) were taken: maximum length of the cranium (180 mm) and maximum length of the right femur (480 mm). The femur mea-

Figure B.22. Feature 45 plan view and profile drawings, and excavation photographs: top of feature (top right, view to south), troweling feature for photography (middle right, view to southwest), fill profile with north half excavated (bottom left, view to south), and cluster of objects (stone platform pipe, deer antler, and worked bone) associated with the burial (bottom right, view to south).

surment yields a stature estimate of 67.3–72.9 inches (5.6–6.0 feet) using the formulae utilized by Fordisc 2.0 (Ousley and Jantz 1996)" (see Appendix C).

Associated grave goods, which were relocated with the remains, include what appeared to be a small bundle with a chlorite schist monitor-type platform pipe, a deer antler tine, and a fragment of worked and polished bone. Materials not associated with the grave include 37 potsherds, two pieces of animal bone, one projectile point fragment, 14 flakes, and nine fire-cracked rocks from Zone A, and nine potsherds, seven fragments

of daub, 19 flakes, and 12 fire-cracked rocks from Zone B. All of the materials observed or recovered from Feature 45 are consistent with a Late Woodland period temporal association for these facilities.

Feature 46 (center point @ 847.48R910.50) (Figure B.23)

Feature 46 was a large, basin-shaped depression approximately 165 cm in diameter, cut by three plow scars that extended below the general base of plowzone. In plan view Feature 46 displayed two different zones of fill. Zone A was roughly 100 cm in diameter and consisted of very dark brown (10YR2/2) silty sand. Zone B surrounded Zone A and was brownish yellow (10YR6/6) sand. The upper 10 cm of Feature 46 was excavated separately from the rest of the feature due to its disturbed character. Sixty-eight potsherds, nine pieces of daub, four fragments of calcined bone, three triangular projectile points, one Savannah River projectile point, 76 flakes, and 72 fire-cracked rocks were present in this fill. Most of these materials probably derived from Zone A.

The undisturbed portion of Zone A had a maximum thickness of 15 cm and yielded six potsherds, six pieces of daub, 17 fragments of calcined bone, three triangular projectile points, two projectile point fragments, one hammerstone, 66 flakes, and 69 fire-cracked rocks. It is interesting that there is a clear discrepancy between the upper (disturbed) and lower portions of Zone A with regard to potsherd frequency. Other artifact categories are similar, including a relatively high amount of fire-cracked rock, but 68 potsherds were found in the upper portion of Zone A while only six sherds came from the lower portion. An 8.5-liter flotation sample was collected from Zone A.

The interface between Zones A and B was relatively flat, with a possible root or rodent disturbance in the center of the feature. Zone B averaged from 8 to 10 cm thick and contained two potsherds, eight pieces of daub, five calcined bone fragments, 29 flakes, and 32 fire-cracked rocks. Like the interface between Zones A and B, the base of Feature 46 was relatively flat, with very gently sloping sides.

The original function of this large, basin-shaped facility could not be determined from feature size, morphology or artifact content. Most of the associated artifacts are attributable to the Late Woodland period Ashe Ferry phase site component, but the plow disturbed surface of Feature 46 yielded a number of Late Mississippian period sherds. Radiocarbon dated materials from Zone B yielded a date of 1000±30 years B.P. (2σ calibration, cal. A.D. 990 to 1140, 1100 to 1120, 1140 to 1150; calibration curve intercept cal. A.D. 1020), consistent with incidence of Ashe Ferry series wares. It appears that the plow disturbed surface of Feature 46 included a thin Early Brown phase deposit that overlay Ashe Ferry phase deposits.

Feature 47 (center @ 830.51R909.47) (Figure B.24)

This oval rock cluster measured 87 cm by 75 cm and was oriented with its long axis running north–south. The rocks visible at the base of the plow zone were mapped in place before the feature was excavated. Scattered rocks observed beyond the main rock concentration are likely the result of plow disturbance. In addition to 125 fire-cracked rocks, this feature yielded one animal bone fragment, six potsherds, and 10 flakes. Five to ten centimeters of brown (10YR4/3) loamy sand were removed from beneath the rocks, and 10 liters of this material were processed as a flotation sample. No pit or basin

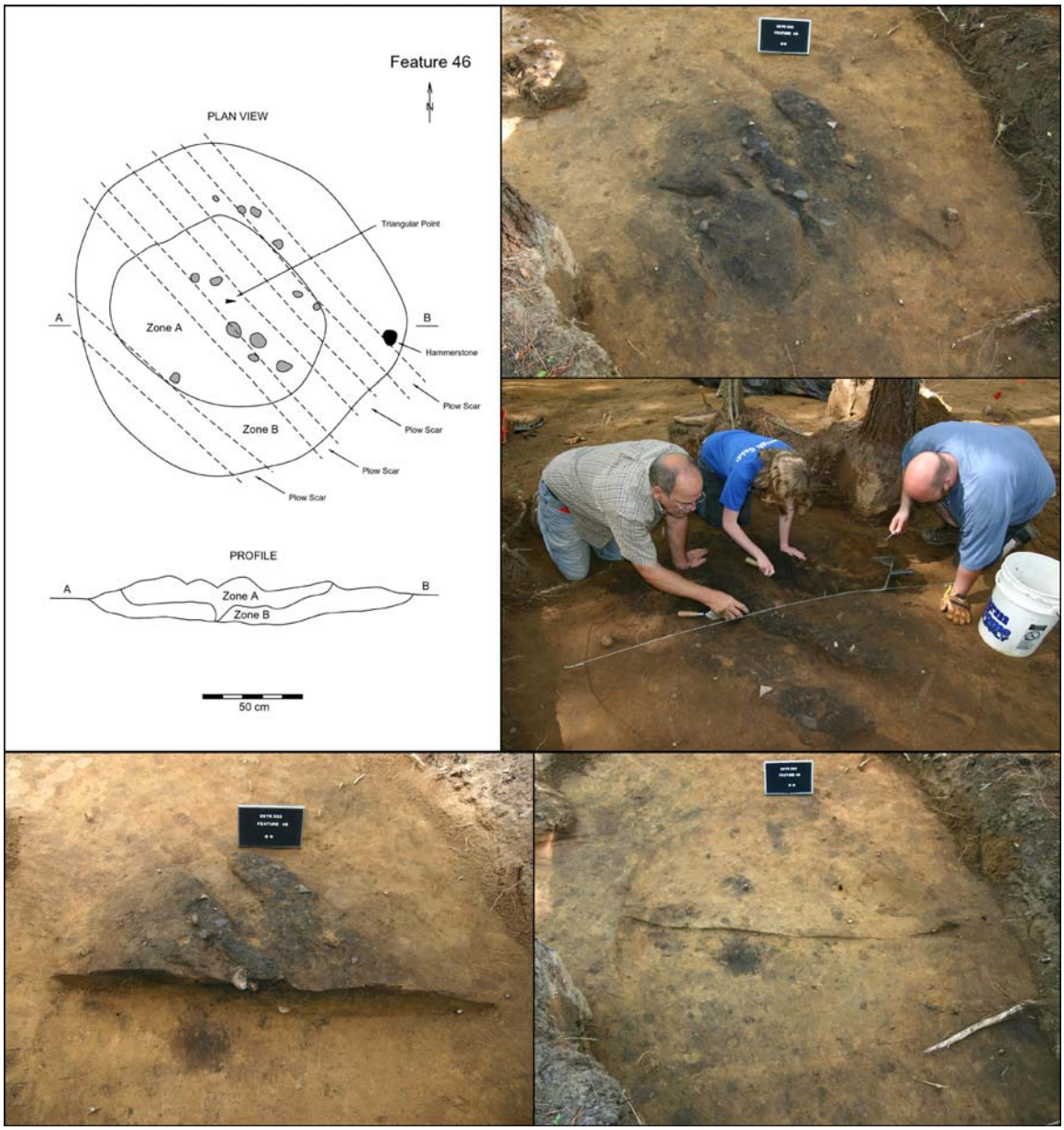

Figure B.23. Feature 46 plan view and profile drawings, and excavation photographs: top of feature (top right, view to north), excavating the south half of Feature 46 (middle right, view to south), fill profile with south half excavated (bottom left, view to north), and excavated feature (bottom right, view to north).

margins were defined. Feature 47 appears to have been the remains of a probably Late Woodland period rock-filled hearth that was scattered by plowing. Like other similar facilities documented at 38Yk533, this hearth appears to have had a single tier of river cobbles installed to create thermal mass, over which fires could be burned to heat the cobbles, allowing subsequent cooking or heating over stones without exposing food or other materials to direct flame.

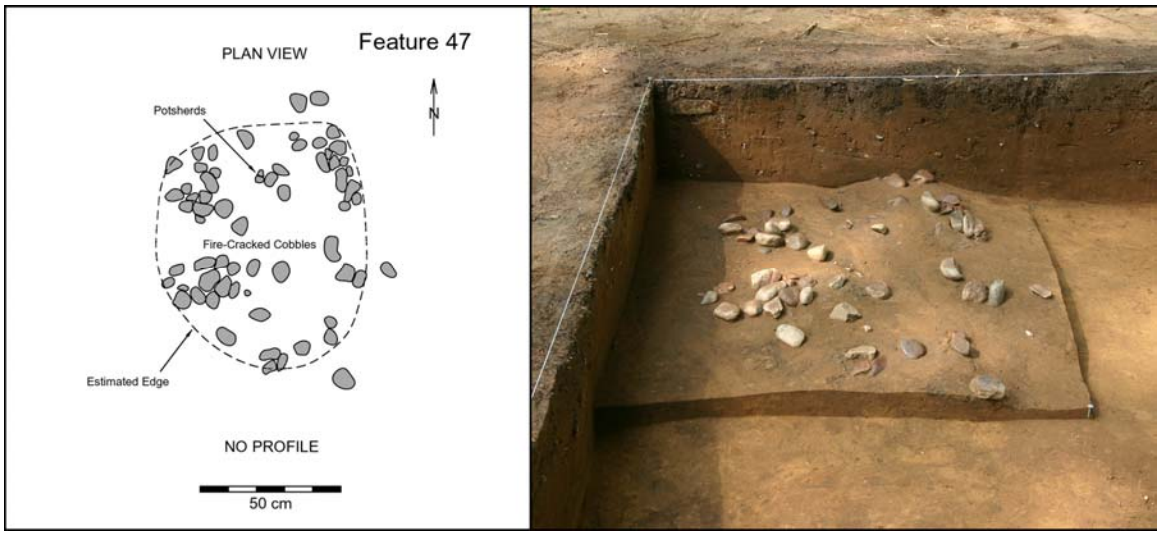

Figure B.24. Feature 47 plan view drawing and photograph of the feature prior to excavation (view to north).

Feature 48 (center @ 852.12R905.03) (Figure B.25)

Feature 48 was an ovoid pit with relatively vertical walls and a flat bottom that measured 100 cm by 87 cm and was oriented northwest–southeast. Two zones of fill were visible in plan view. Zone A was a 55 cm-wide patch of very dark grayish brown (10YR3/2) silty sand with charcoal flecks and pockets of yellowish brown (10YR5/4) silty sand. This stratum was cone-shaped in profile and had a maximum thickness of 33 cm. Excavation of Zone A recovered 22 potsherds, three fragments of animal bone, 15 flakes, and five fire-cracked rocks. A concentration of potsherds was present at the base of Zone A. Flotation samples totaling 14.5 liters were collected from Zone A.

Zone B, the basal stratum, consisted of dark brown (10YR3/3) loose sand. Zone B contained 70 potsherds, eight pieces of daub, 13 animal bone fragments, two triangular projectile points, one hammerstone, 58 flakes, and 18 fire-cracked rocks. Many of these potsherds and fire-cracked rocks were situated at the base of Feature 48, approximately 50 cm below the plow zone. Seventeen liters of Zone B were collected for flotation.

The size and morphology of Feature 48 indicate a probable initial function as a storage or processing pit. The incidence of two distinct zones of fill, each underlain by concentrations of debris, indicates two different staged episodes of deposition, with the probable subsidence of the Zone B matrix in the interim. Artifact inclusions in Feature 40 indicate association with the Late Woodland period Ashe Ferry phase site component. AMS assay of charred plant remains from Feature 48 yielded an estimate of 910±30 years B.P. (2σ calibration, cal. A.D. 1030 to 1210; calibration curve intercept cal. A.D. 1160).

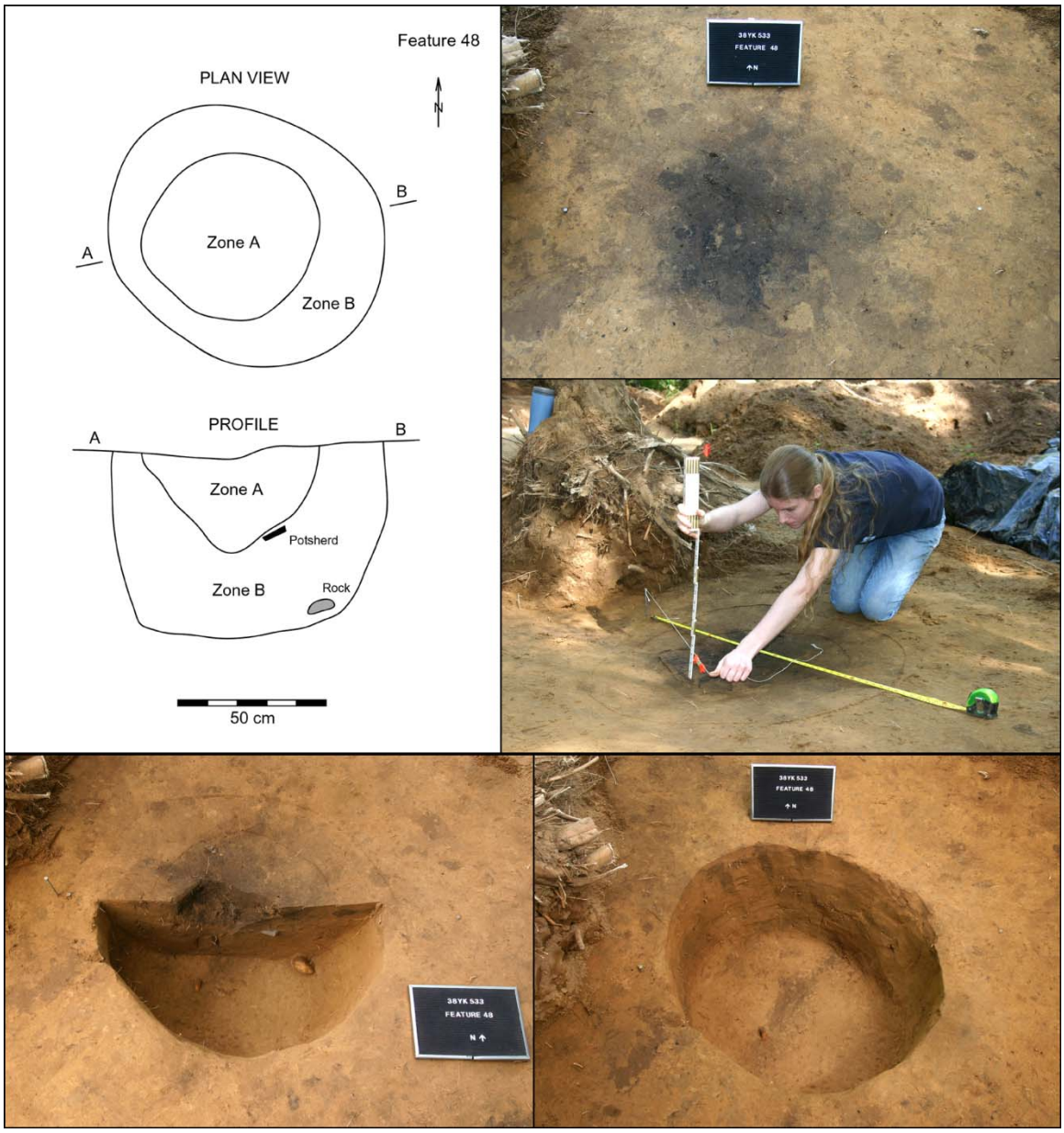

Figure B.25. Feature 48 plan view and profile drawings, and excavation photographs: top of feature (top right, view to north), mapping fill zones at top of feature (middle right, view to northwest), fill profile with south half excavated (bottom left, view to north), and excavated feature (bottom right, view to north).

Feature 49 (center @ 829.35R909.63) (Figure B.26)

Feature 49 was a small pit within a shallow basin that measured about 105 cm north to south and 90 cm east to west. Two zones were visible in plan view. Zone A, the matrix of the small central pit, consisted of very dark grayish brown (10 YR 3/2) sand that was mottled with dark yellowish brown (10 YR 3/4) sand and contained charcoal inclusions. Zone B, the matrix of the basin that surrounded Zone A, was dark yellowish brown (10 YR 3/6) sand. The base of Zone B was indistinct, with considerable leaching

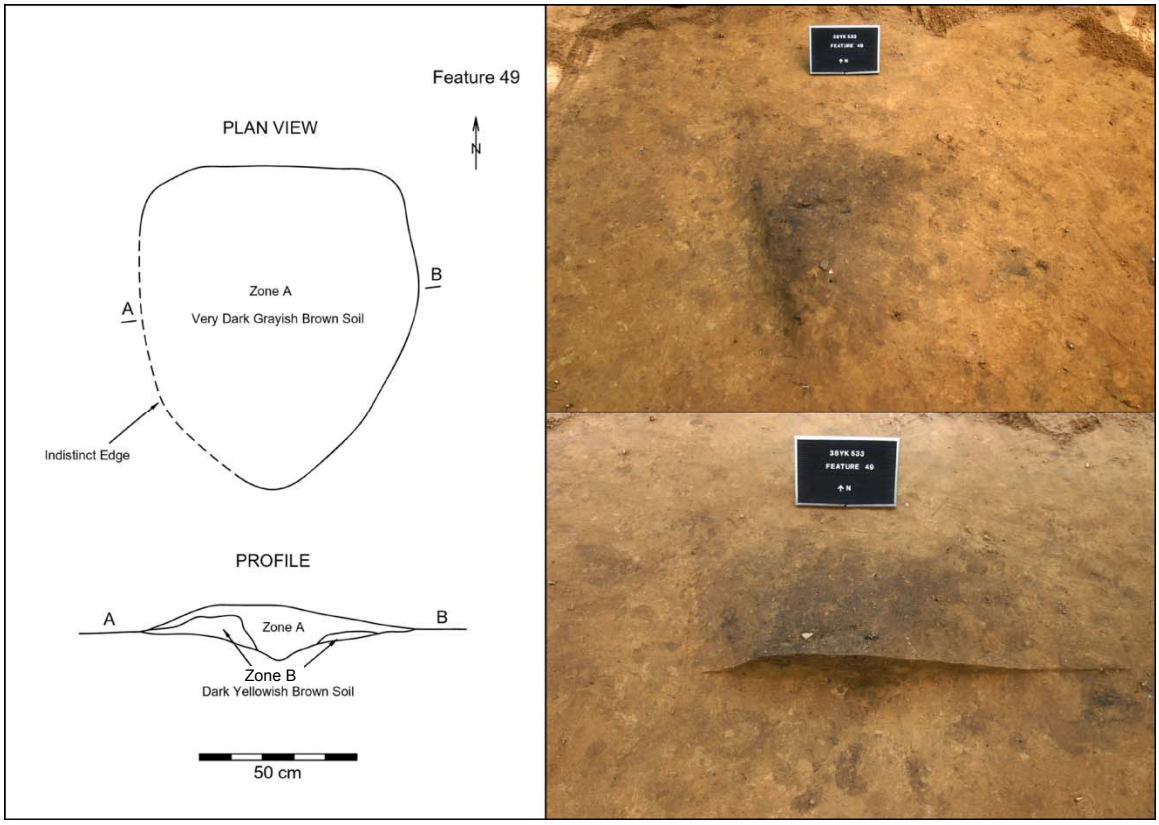

Figure B.26. Feature 49 plan view and profile drawings, and excavation photographs: top of feature (top right, view to north) and fill profile with south half excavated (bottom right, view to north).

of organic matter into the surrounding coarse sand. These contexts were excavated together and yielded seven potsherds, seven fragments of animal bone, 47 flakes, and three fire-cracked rocks. The potsherds are attributable to the Late Woodland period site occupation.

Zone A appears to have been a small pit 30 cm in diameter with sloping walls that extended 10 cm below the base of the plow zone. Zone B may represent either a shallow basin or truncated feature that was intruded by this small pit, or, more likely, may have been the product of leaching from Zone A into the soil below.

Feature 50 (center @ 841.58R911.87) (Figure B.27)

Feature 50 was defined as an oval basin intruded by two small pits. The basin (Zone D) was about 200 cm long and 150 cm wide and oriented north to south. The intrusive pits (designated Zones A and B) were approximately 50 cm and 30 cm in diameter. They were surrounded by a peanut-shaped patch of soil that measured 130 cm by 70 cm and was oriented northwest to southeast. This was designated Zone C, and the remainder of soil in the basin was designated Zone D. A very persistent small animal continued to re-dig its burrow during the investigation of Feature 50, disturbing Zones B, C, and D.

Zone A, the smaller pit, was delineated by large, vertically oriented potsherds lying at the interface between Zones A and C. Excavation of Zone A revealed these were two large sections of a simple-stamped Ashe Ferry series jar, with the largest on the east

side of the pit measuring about 25 cm by 15 cm. Quartz cobbles were also found lying at the bottom of the pit, which was basin-shaped and had a maximum thickness of 17 cm. All 18 liters of Zone A were processed by flotation. This fill consisted of very dark grayish brown (10 YR 3/2) silty sand with charcoal inclusions, and yielded 41 potsherds, 24 fragments of calcined bone, one triangular projectile point, 22 flakes, and four fire-cracked rocks.

The second small pit (Zone B) evinced inward-sloping walls and a concave bottom at 19 cm below the base of plowzone. Removal of this deposit, which consisted of very dark grayish brown (10 YR 3/2) silty sand, revealed three fire-cracked rocks and a simple stamped potsherd lying on a dense charcoal deposit at the bottom of the pit. Other content included two potsherds and 8 flakes. All 15.5 liters of Zone B were processed by flotation.

The soil surrounding the two pits was dark yellowish brown (10 YR 4/4) silty sand with a few charcoal inclusions. Zone C did not extend below Zones A and B and had a maximum thickness of 12 cm. Flotation samples totaling 22.5 liters were collected from this fill, which contained 11 potsherds, 16 flakes, and two fire-cracked rocks.

Excavation of Zone D recovered seven potsherds, five animal bone fragments (one calcined), two pieces of daub, one projectile point fragment, 20 flakes, and seven fire-cracked rocks. A 13.5-liter flotation sample was collected from Zone D. The yellowish brown (10 YR 5/4) sand Zone D matrix was difficult to distinguish from the surrounding undisturbed soil, and excavation was stopped at approximately 25 cm below the plow zone.

Because Zone D did not evince clear margins, it is uncertain whether this deposit represents an intentionally excavated basin or simply staining of the surrounding matrix by leaching of organic matter from Zones A, B, and C. Zone C clearly intrudes Zone D and Zones A and B obviously intrude Zone C. The close proximity of Zones A and B, together with their similarity in size and shape, and inclusions of primary deposits, may indicate the coeval use of these pits, presumably for cooking or food processing (as indicated by vessel sections in Zone A and *in situ* charcoal at the bottom of Zone B). Materials associated with Feature 50 indicate use during the Late Woodland period Ashe Ferry phase occupation. AMS assay of associated charcoal yielded an estimate of 1000±30 years B.P. (2σ calibration, cal. A.D. 990 to 1040; cal. 1100 to 1120); calibration curve intercept cal. A.D. 1020).

Feature 51 (center @ 848.25R908.90) (Figure B.28)

Feature 51 was a rock cluster and probable hearth remnant partially destroyed by plowing. The intact portion of the feature measured 75 cm by 30 cm and was oriented northwest to southeast. The entire deposit was 15 cm thick. The rock cluster itself consisted of 25 fire-cracked rocks and also contained four Late Woodland period potsherds and four flakes. The soil below the rocks was dark yellowish brown (10 YR 3/6) silty sand that contained two potsherds and nine flakes. This probable rock oven/roasting facility lacks associated charcoal, most likely as a function of excessive leaching of organic matter in the coarse sandy site sediments.

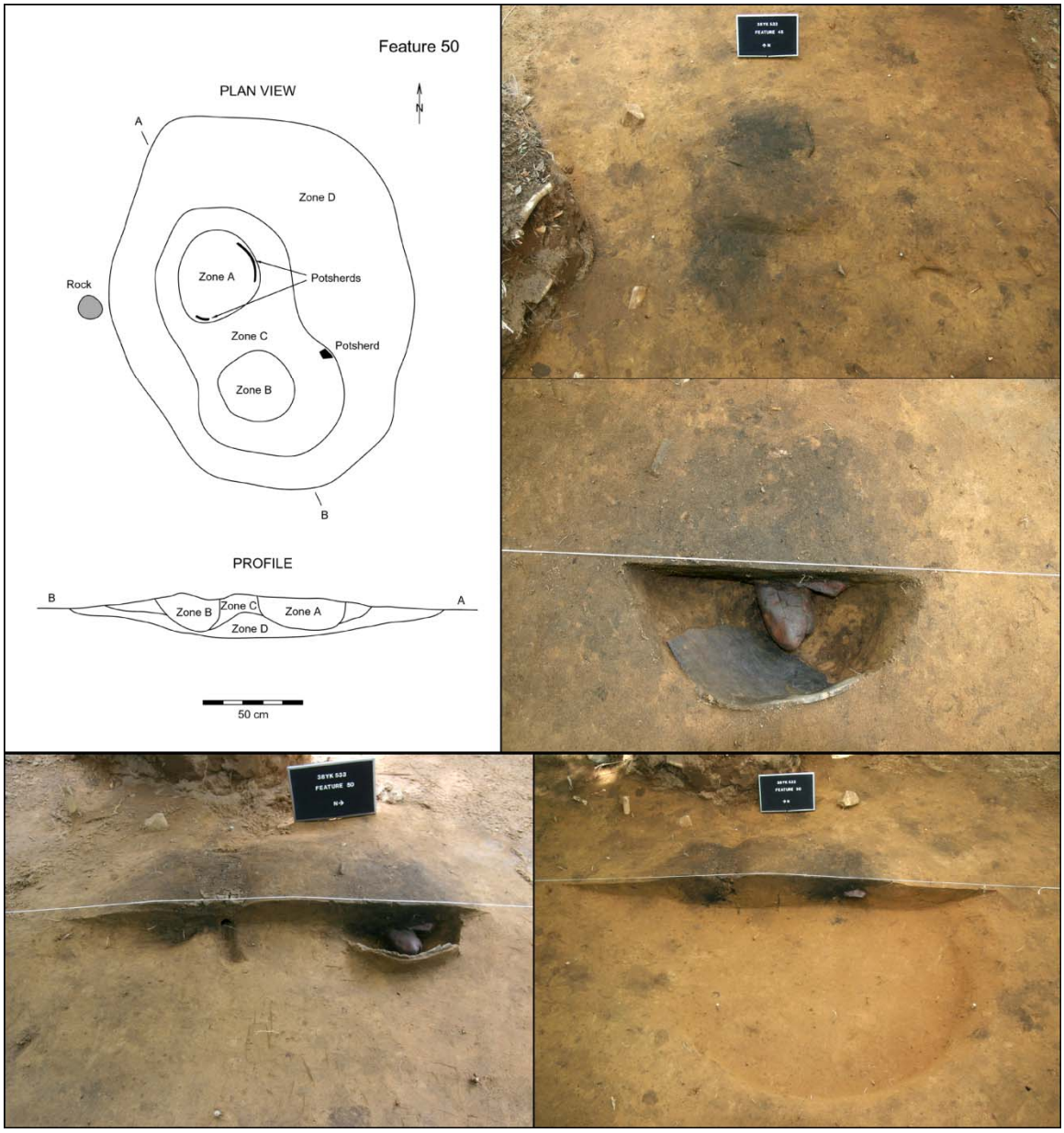

Figure B.27. Feature 50 plan view and profile drawings, and excavation photographs: top of feature (top right, view to north), intrusive pit (designated Zone A) containing large vessel section with northeast half excavated (middle right, view to southwest), fill profile before removing Zone A potsherds with northeast half excavated (bottom left, view to southwest), and fill profile with northeast half fully excavated (bottom right, view to southwest).

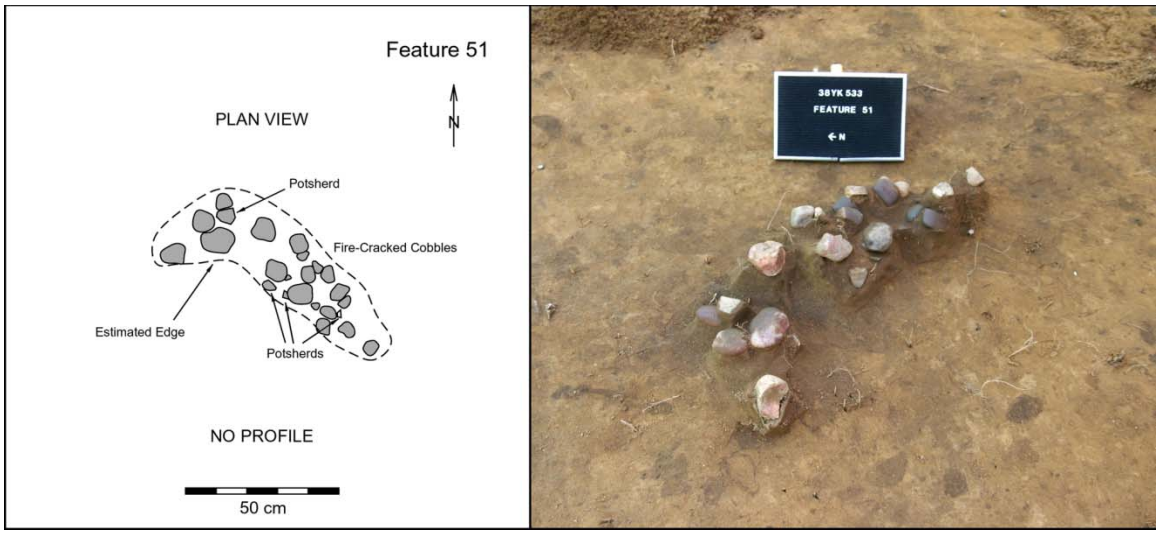

Figure B.28. Feature 51 plan view drawing and photograph of the feature prior to excavation (view to east).

Feature 52 (center @ 844.20R855.30) (Figure B.29)

This ovoid pit feature measured 180 cm by and 140 cm and was oriented with its long axis northwest to southeast. It contained two layers of fill visible in plan view. Zone A consisted of brown (10 YR 4/3) compact sandy silt, and Zone B consisted of yellowish brown (10 YR 5/4) silty sand mottled with light yellowish brown (10 YR 6/4) silty sand. Zone A contained 92 potsherds, seven pieces of daub, one piece of fired clay, one fragment of calcined bone, one core, seven triangular projectile points, one projectile point fragment, 98 flakes, and 28 fire-cracked rocks. Nine and a half liters of Zone A were processed as a flotation sample. In profile this zone had even, gently sloping sides and a flat bottom. The flat bottom of Zone A was located approximately 40 cm below base of the plow zone.

Excavators used the presence of charcoal inclusions in Zone B as well as its firm character in comparison to the loose sand below to identify the bottom of Feature 52. Zone B contained 21 potsherds, two triangular projectile points, one projectile point fragment, 40 flakes, and nine fire-cracked rocks. The bottom of Feature 52 had a similar shape to the base of Zone A. The flat bottom of the feature was approximately 48 cm below the base of the plow zone.

The size and morphology of Feature 52 are consistent with its probable function as a storage or processing pit. Although two zones of fill were present, the similarity of these zones in profile suggests they were both part of the same filling event. Diagnostic artifacts recovered from Feature 52 matrices are referable to the Late Woodland period Ashe Ferry phase site component. Carbonized plant remains recovered from Feature 52 produced an AMS date estimate of 970±30 years B.P. (2σ calibration, cal. A.D. 1010 to 1160); calibration curve intercept cal. A.D. 1030).

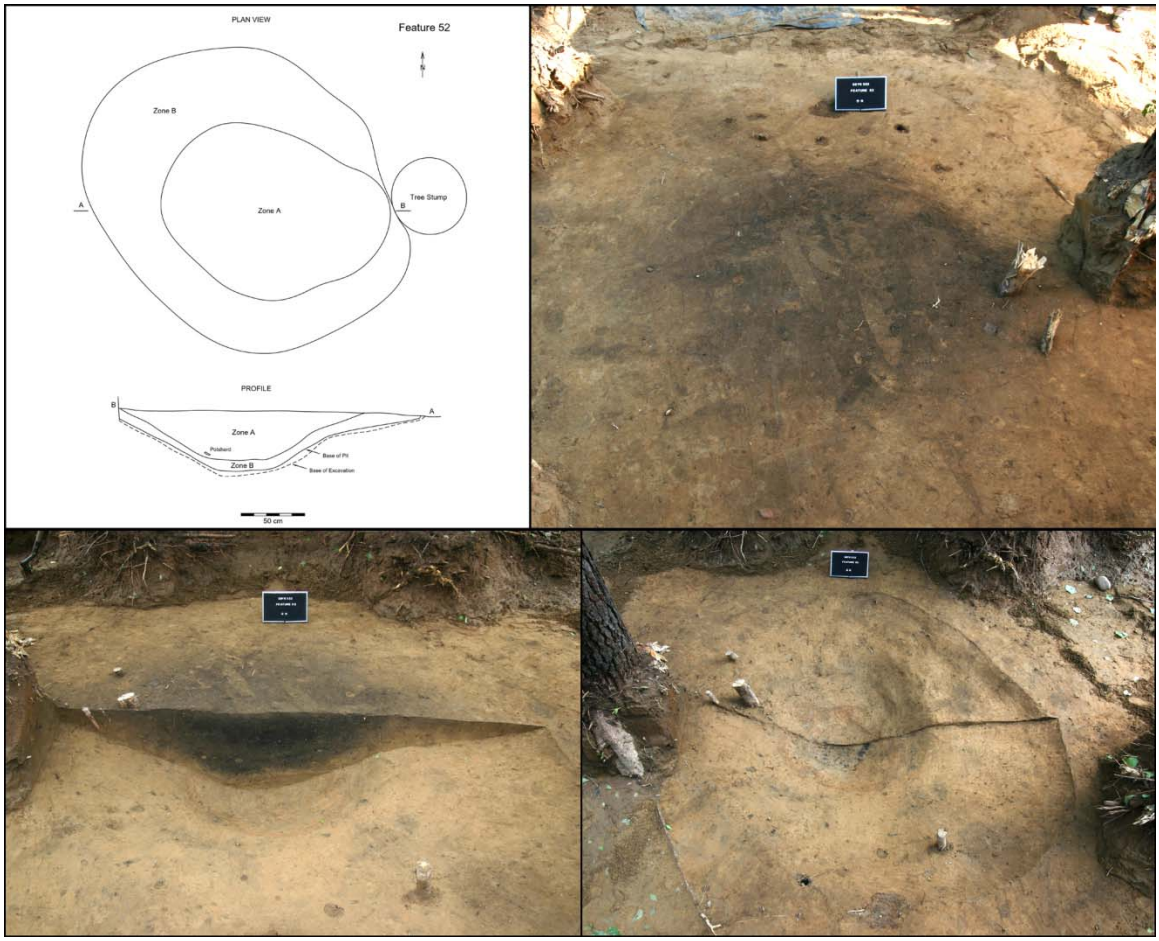

Figure B.29. Feature 52 plan view and profile drawings, and excavation photographs: top of feature (top right, view to north), fill profile with north half excavated (bottom left, view to south), and excavated feature (bottom right, view to south).

Feature 53 (center @ 840.92R907.74) (Figure B.30)

Feature 53 comprised a cluster of rocks that extended approximately 123 cm east to west and 100 cm north to south. The rocks visible at the base of the plow zone were mapped in place before the feature was excavated as a single zone. Five to fifteen centimeters of dark yellowish brown (10 YR 3/4) silty sand were removed with the rock cluster, and 7.5 liters of Zone A were processed as a flotation sample. In addition to 126 fire-cracked rocks, excavation of Zone A recovered two fragments of calcined bone, 23 small potsherds, one triangular projectile point, three projectile point fragments, and 73 flakes. These materials indicate probable association with the Late Woodland period Ashe Ferry component; AMS assay of Feature 53 material produced dates of 1010±40 years B.P. (2σ calibration, cal. A.D. 970 to 1050; cal. 1090 to 1120; cal. 1140 to 1150); calibration curve intercept cal. A.D. 1020) and 920±30 years B.P. (2σ calibration, cal. A.D. 1030 to 1190; cal. 1200 to 1210); calibration curve intercept cal. A.D. 1160).

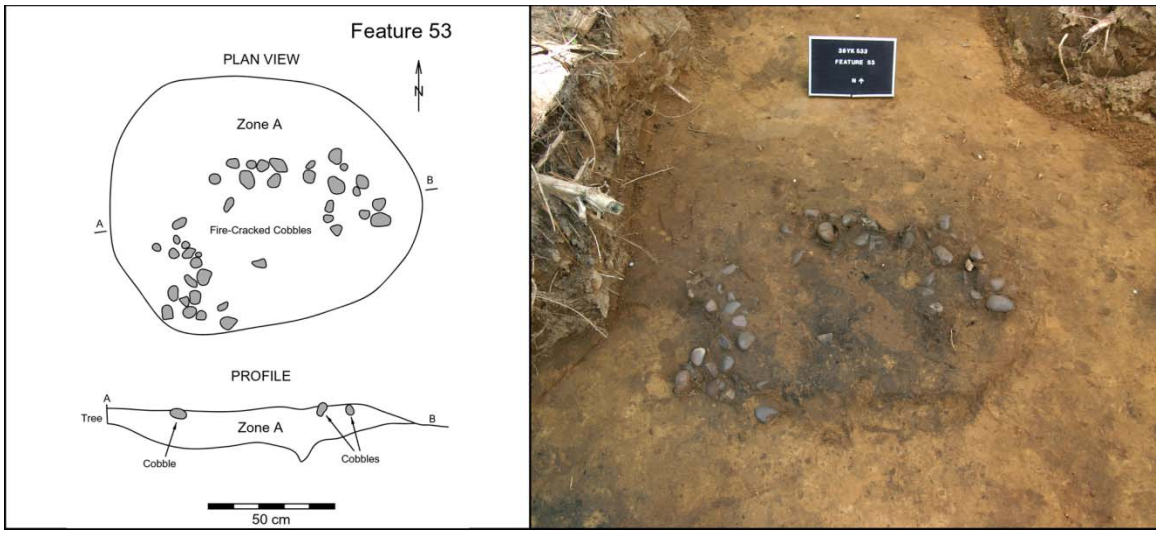

Figure B.30. Feature 53 plan view and profile drawings, and excavation photographs of top of feature (view to north).

Feature 53 is interpreted as the remains of a rock oven cooking facility; high relative frequency of acorn nutshell in the feature matrix indicates probable use in acorn processing. The patchy distribution of fire-cracked rock within Feature 53 is partially attributable to plow truncation, but may also reflect hearth cleaning or retrieval of roasted materials from the facility.

Feature 55 (center @ 846.52R905.32) (Figure B.31)

Feature 55 was a rock cluster that was circular in plan view and measured approximately 50 cm in diameter. Seven fire-cracked rocks and a milling stone fragment were mapped in place before they were removed along with 4 to 6 cm of dark yellowish brown (10 YR 4/4) silty sand. Feature 55 contained one flake in addition to the fire-cracked rocks and milling stone fragment. Neither charcoal nor evidence of a pit was observed below the rock cluster. Nevertheless, Feature 55 probably represents a cooking or heating facility from which all ash or charcoal leached.

Feature 56 (center @ 844.91R907.03) (Figure B.32)

Feature 56 was a small pit or posthole that was 40 cm in diameter at the base of the plow zone. This feature had steeply inward-sloping walls and narrowed to a diameter of approximately 10 cm at 50 cm below the plow zone. It contained a single zone of dark yellowish brown (10 YR 4/4) silty sand that yielded one simple stamped Late Woodland period potsherd, one core, seven flakes, and 15 fire-cracked rocks. The narrow shape and depth distinguish Feature 56 from the other small pits excavated at 38Yk533. For this reason Feature 56 may be a large posthole.

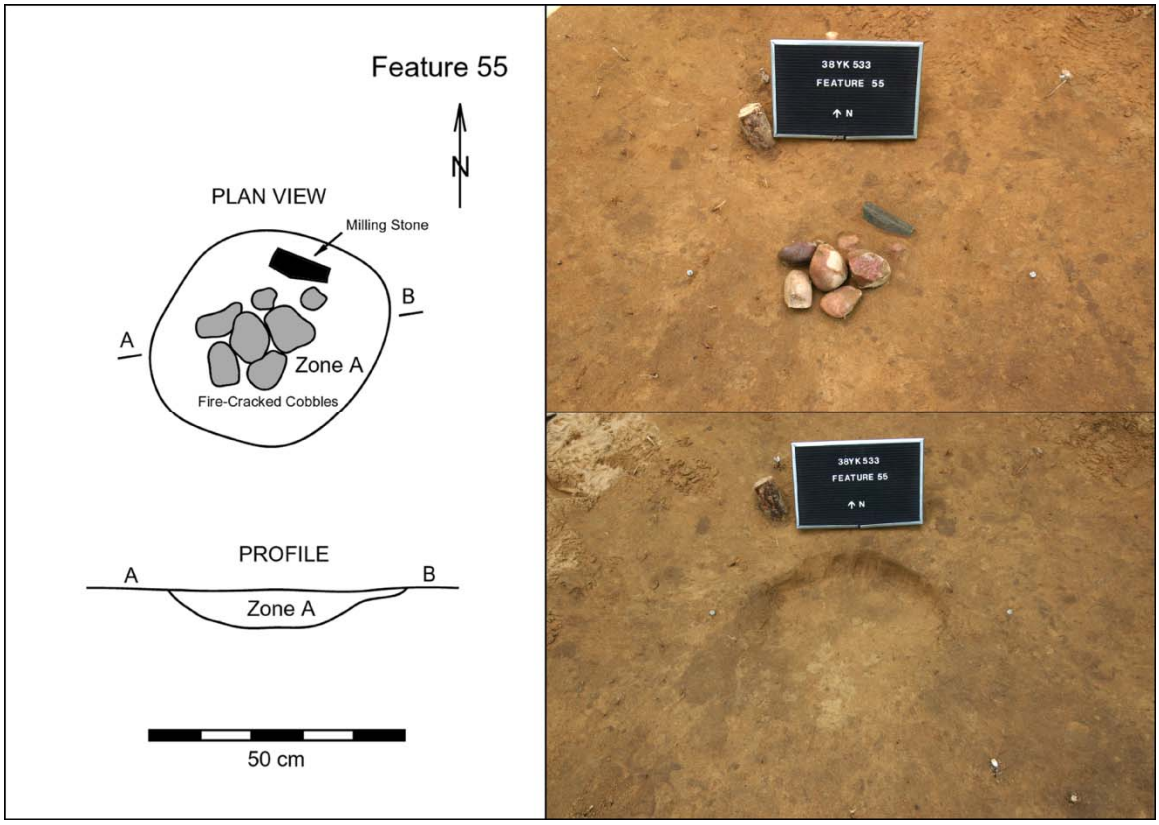

Figure B.31. Feature 55 plan view and profile drawings, and excavation photographs: top of feature (top right, view to north) and excavated feature (bottom right, view to north).

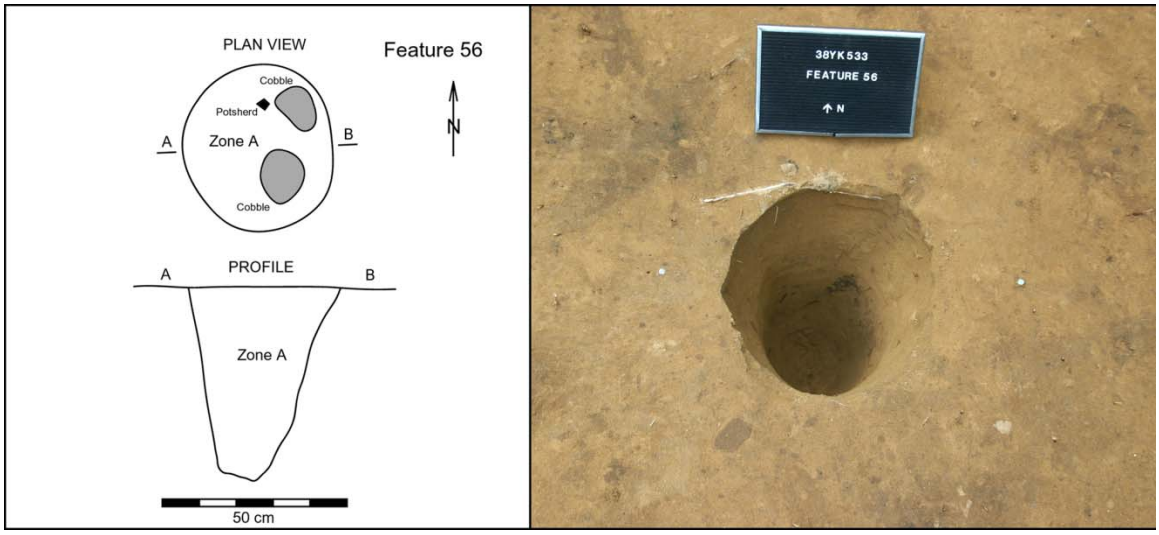

Figure B.32. Feature 56 plan view and profile drawings, and photograph of excavated feature (view to north).

Feature 57 (center @ 842.71R906.73) (Figure B.33)

Feature 57 was a small pit that measured approximately 45 cm in diameter at the base of the plow zone. This feature contained a single zone of dark yellowish brown (10 YR 3/4) silty sand that yielded six potsherds, eight flakes, and 17 fire-cracked rocks. The walls of Feature 57 were relatively straight and inward sloping, and the bottom of the feature was flat, although the darkest part of the fill terminated in a point that may have been created by biotic disturbance. The base of Feature 57 was encountered approximately 35 cm below the plow zone. The size and shape of this feature suggest it served a small-scale storage or processing function, or, possibly, the base of a very large posthole. Associated materials indicate a probable Late Woodland period affiliation.

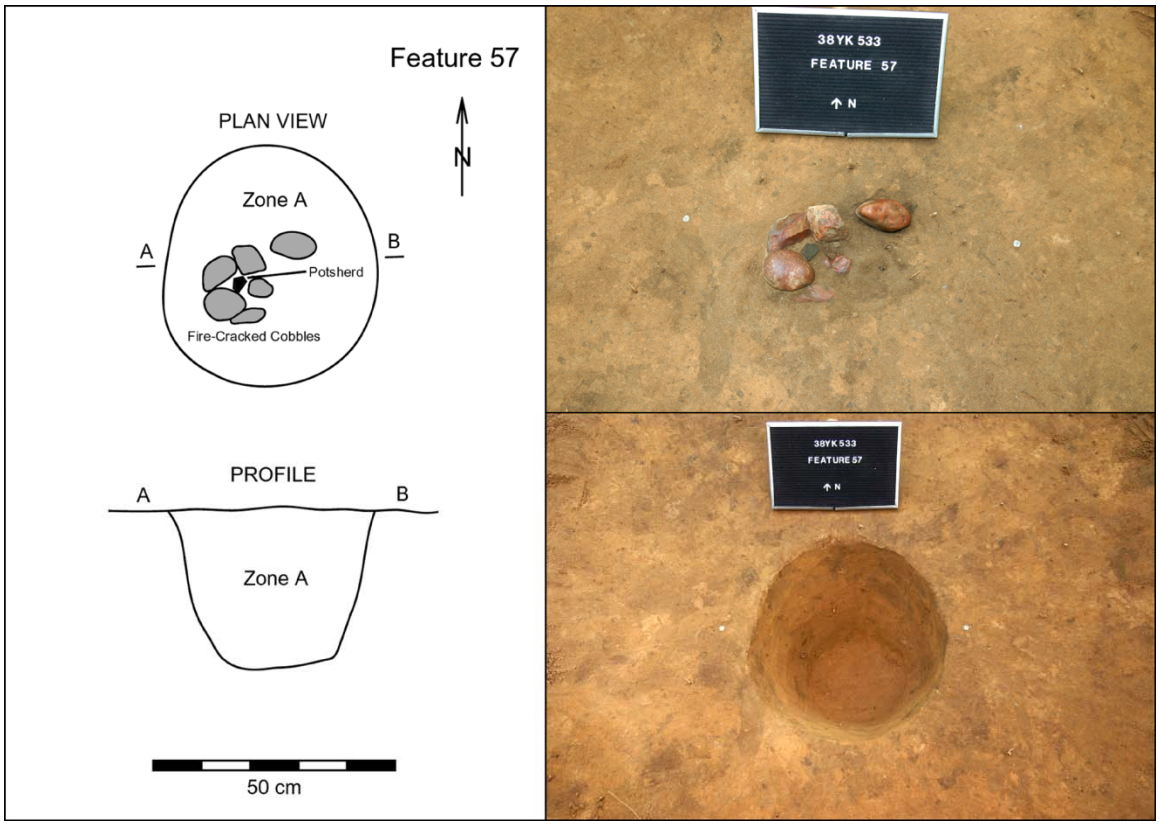

Figure B.33. Feature 57 plan view and profile drawings, and excavation photographs: top of feature (top right, view to north) and excavated feature (bottom right, view to north).

Feature 58 (center @ 840.03R908.49) (Figure B.34)

Feature 58 was a cluster of Deptford check-stamped potsherds distributed across a 70 cm by 20 cm area at the base of plowzone. While it is likely these potsherds were in a pit, no distinction between the soil in which they were found and the surrounding strong brown (7.5 YR 4/6) sand was observed. If these sherds had been contained within a pit, leaching of organic materials probably obliterated any differences in soil color. An oval area approximately 100 cm by 80 cm and 5 cm deep was excavated around the sherds. The sand that surrounded the sherds was waterscreened with the exception of 17 liters that were processed by flotation.

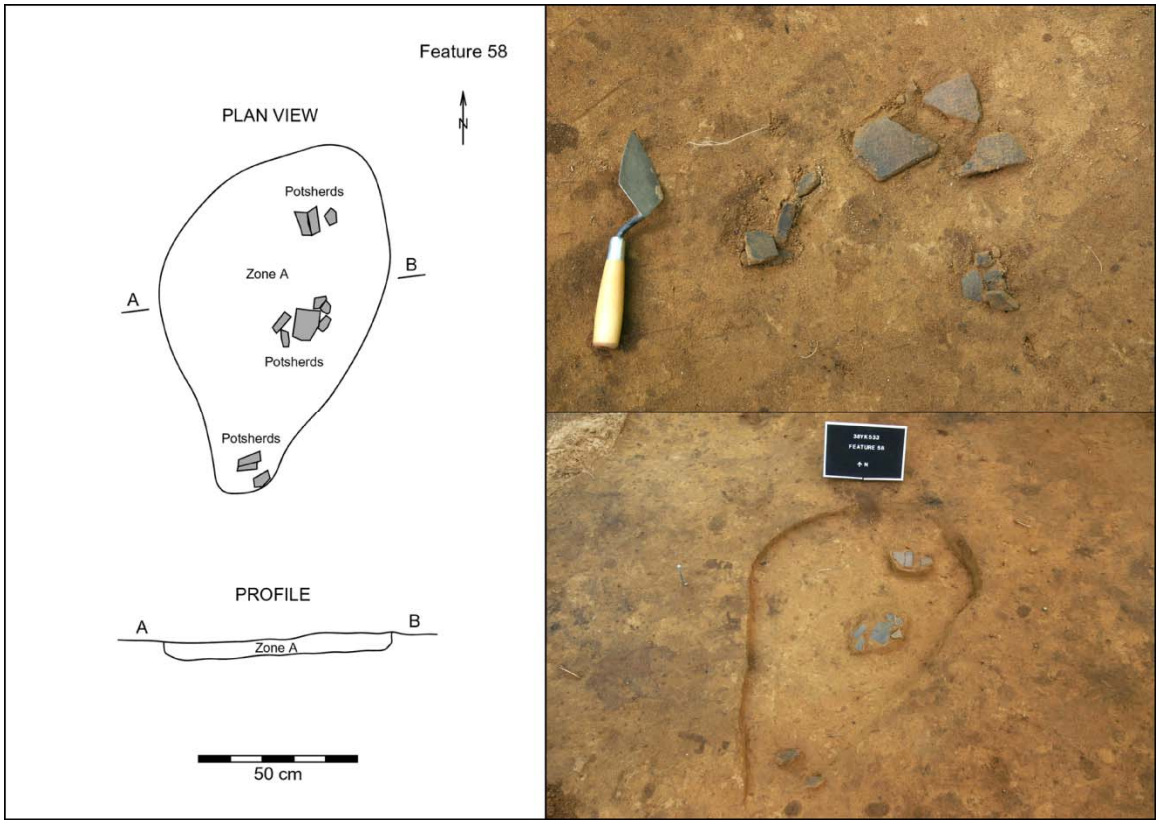

Figure B.34. Feature 58 plan view and profile drawings, and excavation photographs: top of feature with exposed Deptford potsherds (top right, view to north) and excavated feature (bottom right, view to north).

A total of 49 potsherds were collected from Feature 58. They occurred in three clusters up to 30 cm apart but were all lying on the same horizontal plane. The surrounding sand contained three fragments of animal bone, one piece of daub, one flake, and two fire-cracked rocks.

Feature 58 presents clear evidence for limited-scale Early Woodland period activity at 38Yk533. The Deptford check stamped sherds all derive from a single vessel; no similar wares were observed in other contexts at 38Yk533. It is possible that these sherds reflect a single transitory event, perhaps related to the position of 38Yk533 along a transportation route at a ford over the Catawba River.

Feature 59 (center @ 834.46R904.37) (Figure B.35)

Feature 59 was a small pit or rock cluster that appeared to have been intruded upon and disturbed by tree roots. The feature was oval-shaped in plan view, and measured 55 cm northwest to southeast and 43 cm northeast to southwest. This pit contained a single zone of dark yellowish brown (10 YR 3/6) loose sand. Patches of dark brown (10 YR 3/3) silty sand were identified approximately 15 cm below of the base of the plow zone in the east and west corners of the feature. Although one potsherd was found in the vicinity of the western stain, the northward-sloping bottom of the feature along with the shapes of the stains in profile are more indicative of biotic disturbance than human activity. The shape of Feature 59 was difficult to determine given the

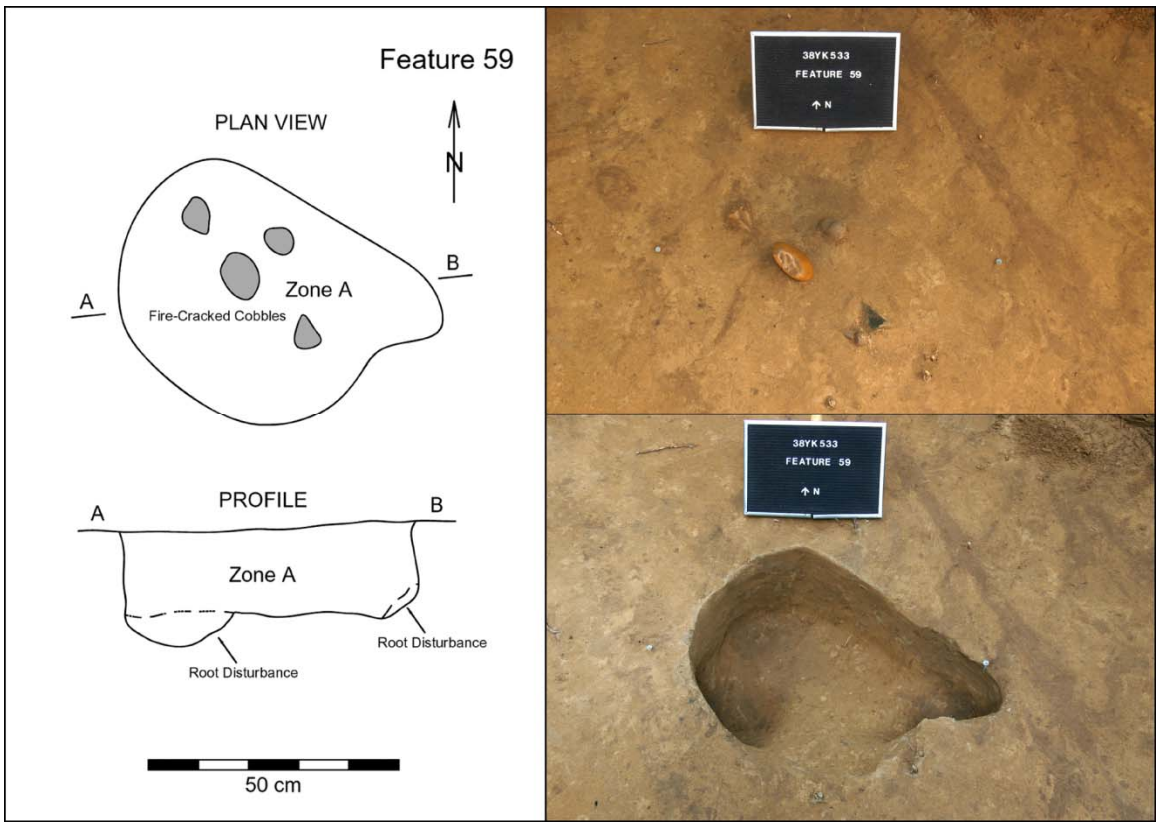

Figure B.35. Feature 59 plan view and profile drawings, and excavation photographs: top of feature (top right, view to north) and excavated feature (bottom right, view to north).

presence of the tree disturbance, but it appears to have had straight sides and a flat bottom. The bottom of the feature was approximately 18 cm below the base of the plow zone.

Artifacts collected from Feature 59 include two simple stamped potsherds, one ground stone celt, one chipped hoe, three flakes, and 11 fire-cracked rocks. These materials indicate a probable Late Woodland period association for this facility.

Feature 60 (center @ 840.27R901.86) (Figure B.36)

This small pit feature was oval in plan view, measuring approximately 50 cm east to west and 40 cm north to south. Feature 60 had inward-sloping walls and a concave bottom, and its fill had a maximum thickness of 40 cm. The pit matrix consisted of a single zone of dark yellowish brown (10 YR 4/4) silty sand. An 8-liter flotation sample was collected.

Feature 60 deposits yielded 12 potsherds, one piece of daub, two fragments of calcined bone, one milling stone, 30 flakes, and two fire-cracked rocks. These materials indicate a probable Late Woodland period Ashe Ferry phase association for this facility.

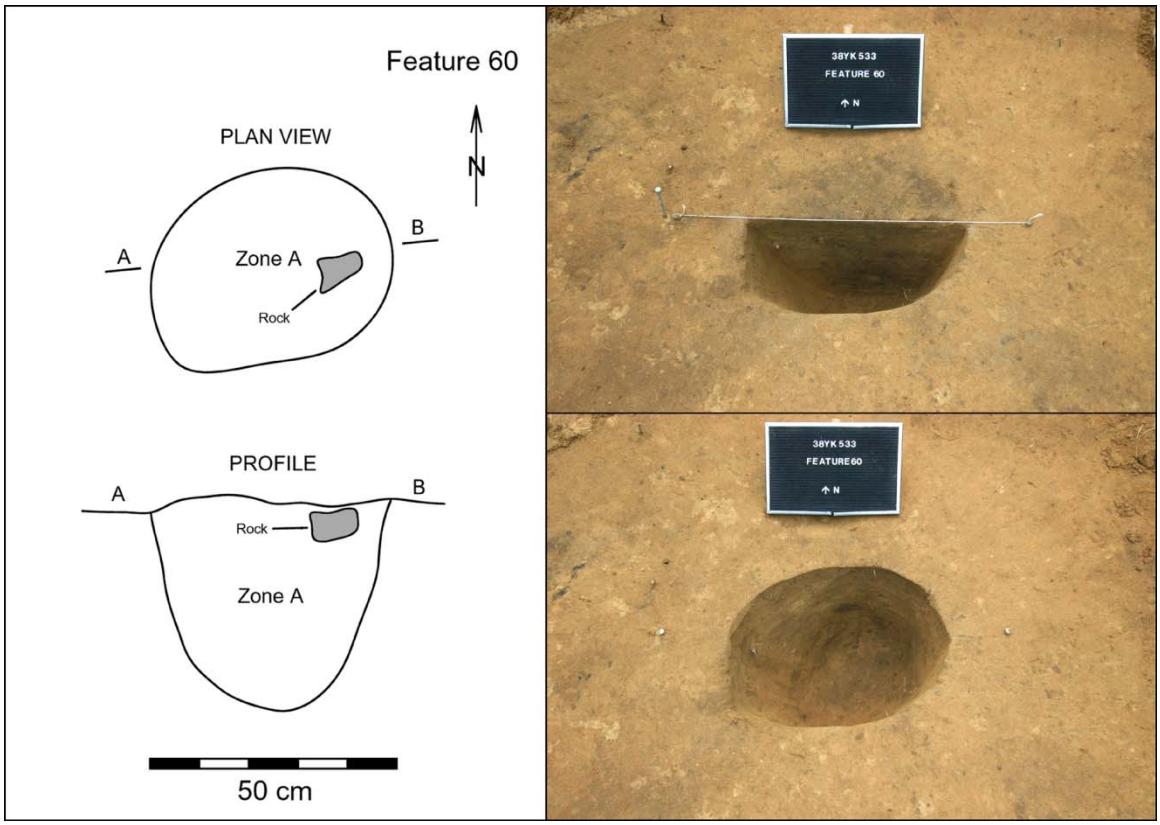

Figure B.36. Feature 60 plan view and profile drawings, and excavation photographs: fill profile with south half excavated (top right, view to north) and excavated feature (bottom right, view to north).

Feature 61 (center @ 826.11R923.00) (Figure B.37)

Feature 61 was a large basin intruded by two postholes, a configuration similar to Feature 50. Two zones of fill were identified in plan view prior to the excavation of Feature 61. An irregularly-shaped patch of dark brown (10 YR 3/3) silty sand measuring approximately 90 cm by 60 cm was designated Zone A. It was surrounded by Zone B, a deposit of dark yellowish brown (10 YR 3/6) silty sand 150 cm in diameter. Two postholes were located in the southern portion of Zone A, but were not identified prior to excavation because they were similar in color and texture to the surrounding matrix. Since the north half of Feature 61 was excavated first, they went undetected until most of Zone A had been removed.

Zone A had gently sloping convex walls and a flat bottom. It contained three potsherds, two pieces of daub, three fragments of animal bone, 18 flakes, and 14 fire-cracked rocks. Some of these materials may have come from the uppermost fill of the postholes in the south half of Feature 61. Zone A had a maximum depth of approximately 15 cm below the plow zone. An 11.5-liter flotation sample was collected from the north half of Zone A. In the south half, two patches of darker soil, representing the tops of the two postholes, were identified and designated Zones A1 and A2.

Zone A1 was approximately 25 cm in diameter at the base of Zone A. It contained very dark brown (10 YR 2/2) silty loam that yielded six potsherds, one fragment of calcined bone, 11 flakes, and one fire-cracked rock. Ten liters of Zone A1 were processed as a flotation sample. This posthole had steeply sloping sides and a relatively flat bottom, and the diameter at the bottom was approximately 10 cm. It extended 35 cm below the base of Zone A, which indicates it had a total depth of 50 cm below the base of the plow zone.

Zone A2 was located 12 cm southwest of Zone A1. It was sub-rectangular in plan view, measuring 23 cm by 20 cm. This posthole contained very dark brown (10 YR 2/2) silty loam and yielded one potsherd, 11 flakes, and five fire-cracked rocks. Six and a half liters of Zone A2 fill were processed as a flotation sample. This posthole was not as deep as Zone A1, extending only 22 cm below the base of Zone A. Its maximum depth can therefore be approximated as 37 cm below the base of the plow zone. Zone A2 had straight walls and a concave bottom in profile.

The final context identified in Feature 61 is Zone B. This zone was present only below the outer edges of Zone A. It yielded five potsherds, two fragments of animal bone (one calcined), seven flakes, and six fire-cracked rocks. A total of 35 liters from Zone B were collected for flotation.

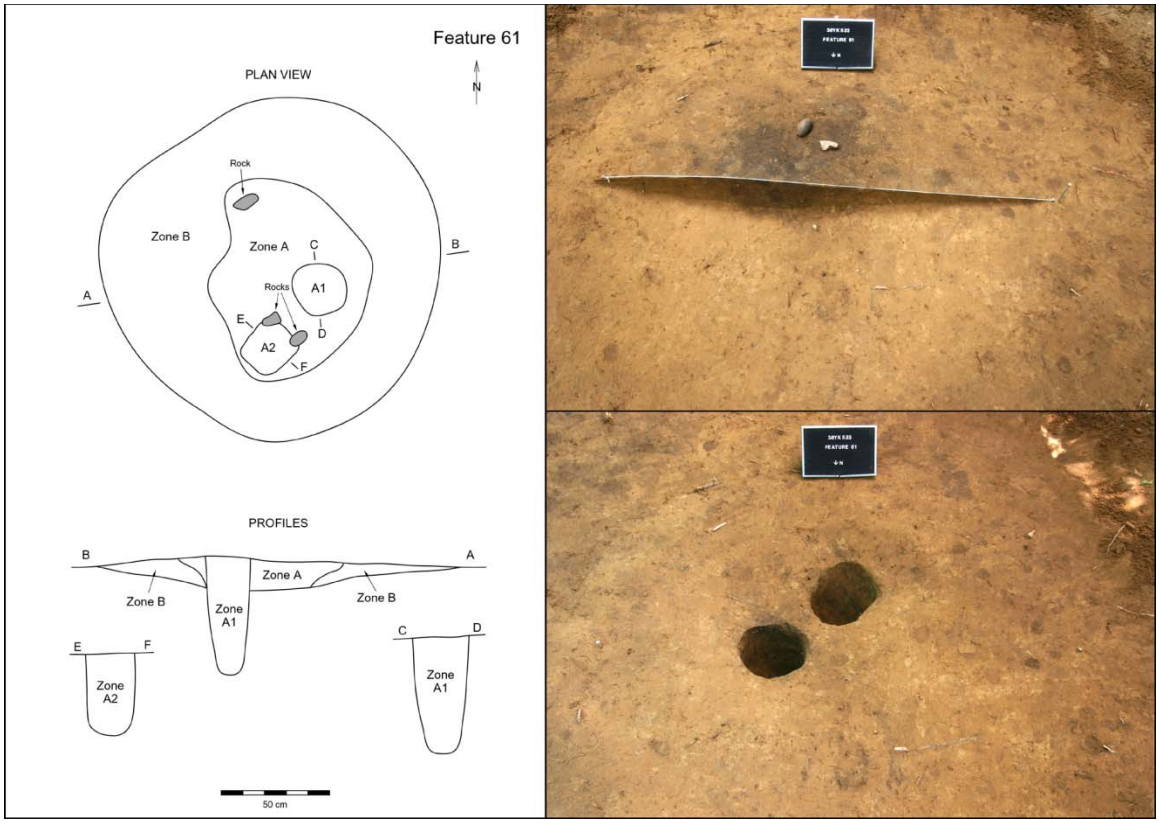

Figure B.37. Feature 61 plan view and profile drawings and excavation photographs: fill profile with north half excavated (top right, view to south) and base of feature with excavated postholes (bottom right, view to south).

Feature 61 appears to have been formed by the insertion of posts through a shallow basin. Another nearby posthole may relate to the same construction, but in the absence of additional postholes, the character of this construction is unclear. Materials associated with Zones A, A1, A2, and B are consistent with a Late Woodland period association.

Feature 62 (center @ 838.35R901.80) (Figure B.38)

Feature 62 was an oval grave pit that contained a human burial. The pit measured 85 cm north to south and 73 cm east to west, with a single zone of dark yellowish brown (10 YR 3/4) silty sand, designated Zone A, visible at the base of the plow zone. Excavators encountered human teeth in the south half of the feature after removing approximately 5 cm of fill, and work on Feature 62 was suspended in order to conduct agency and tribal consultations to determine appropriate treatment and disposition of the human remains. Upon resumption of excavation (for the purpose of relocating the remains en bloc to a secure location), Zone A in the north half was excavated, yielding five potsherds and 12 flakes that were reinterred at the new location. The fill remaining in both halves of the pit was removed as Zone B in order to delineate the extent of the human skeletal remains. This fill was not processed, but was reburied with the relocated remains.

Prior to exhumation, a field analysis of the exposed human remains was performed by Dale Hutchinson. His observations are as follows: "Two subadult individuals were included in Feature 62. The remains consisted of two crania that were located adjacent to each other, at least one mandible, and at least one long bone. The dentition of individual one included deciduous maxillary first and second molars (side unknown) and deciduous mandibular first and second molars (side unknown). While these were clearly in articulated position, neither the mandible nor maxilla was preserved enough for observation. There was also an unerupted maxillary permanent first molar with only the crown developed. All deciduous teeth were largely unworn. The developmental sequence of the teeth allowed an age estimate of 3–4 years of age (Ubelaker 1999). The dentition of individual two included a left deciduous canine, left maxillary first and second molars, and left deciduous mandibular canine, first and second molars. The mandibular and maxillary molars were clearly articulated in fairly well-preserved bone. There was also an unerupted maxillary permanent left first molar with only the crown developed. All deciduous teeth were largely unworn. The developmental sequence of the teeth allowed an age estimate of 3–4 years of age. There was also a very badly preserved long bone, but I could not assess either which individual it might be associated with or what element it might be. The development of the deciduous and permanent teeth indicates these two individuals were of identical or nearly identical ages. No observations were made that would permit assessing whether they were related or not" (see Appendix C).

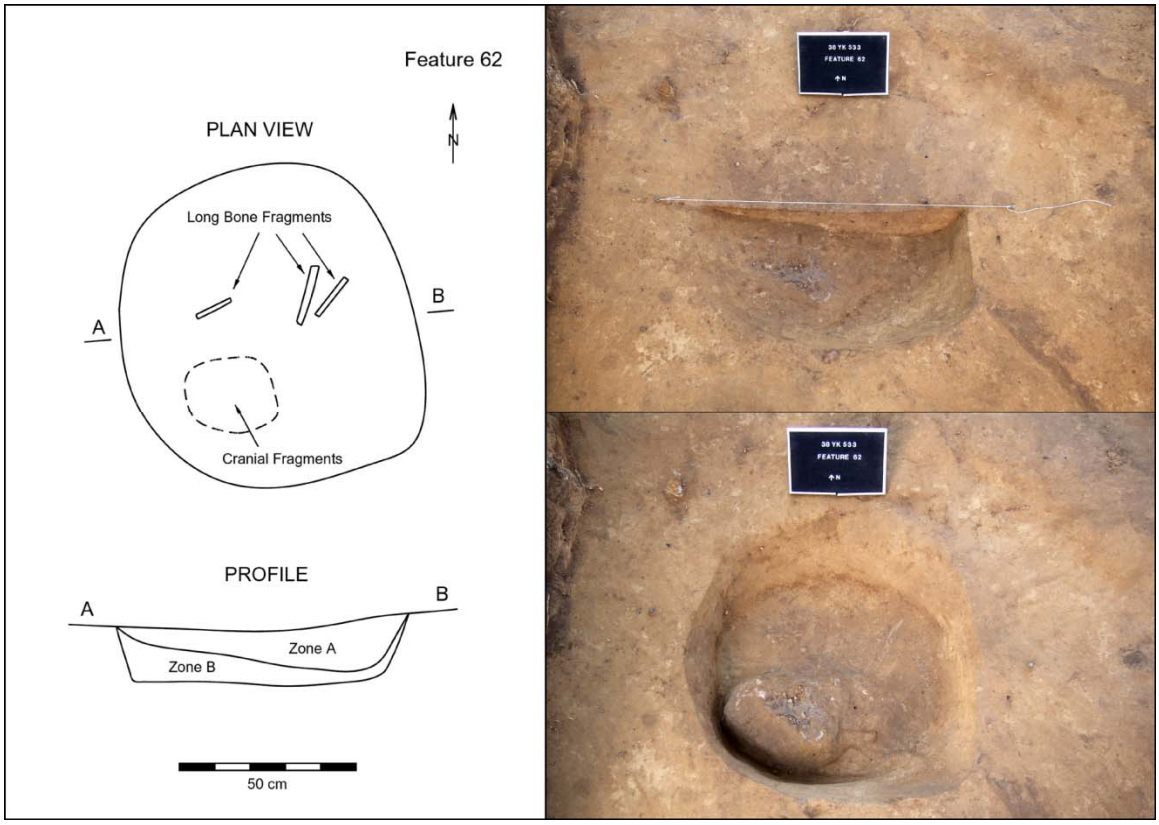

Figure B.38. Feature 62 plan view and profile drawings, and excavation photographs: fill profile with Zone A in south half excavated (top right, view to north) and feature excavated with the burial partially exposed (bottom right, view to north).

Feature 63 (center @ 832.62R904.87) (Figure B.39)

Feature 63 was a small oval pit with straight to steeply sloping walls and a concave bottom that measured approximately 60 cm by 45 cm and was oriented northwest to southeast. It contained a single zone of dark yellowish brown (10 YR 3/4) silty sand mottled with yellowish brown (10 YR 5/4) silty sand. Flotation samples from Feature 63 totaled 23 liters.

Artifacts collected from Feature 63 include nine potsherds, 12 fragments of calcined bone, 30 flakes, and one fire-cracked rock. These materials are consistent with the Late Woodland period Ashe Ferry component that dominates 38Yk533. The function of this small pit feature is undetermined, but it likely served a storage or processing function, or, like Feature 57, may represent the base of a large posthole.

Feature 65 (center @ 850.49R853.84) (Figure B.40)

Feature 65 was an ovoid pit that measured approximately 120 cm by 100 cm and was oriented north to south. Two zones of fill were identified in Feature 65 during excavation. Zone A consisted of brown (10 YR 4/3) sandy silt with occasional flecks of charcoal. A patch of very dark grayish brown (10 YR 3/2) sandy silt about 30 cm in diameter was noted in the southern portion of Zone A, and a cluster of 15 sherds was found in this area in the first 6 cm excavated below the plow zone. This dark patch

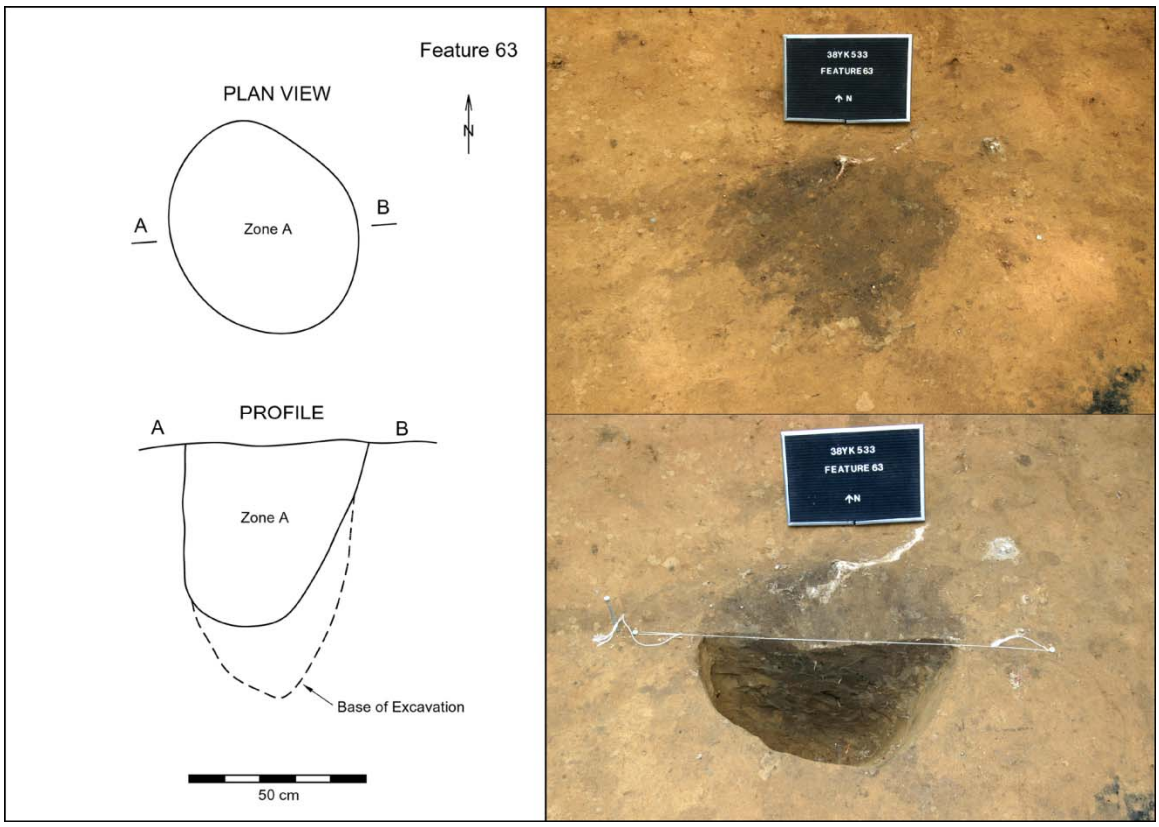

Figure B.39. Feature 63 plan view and profile drawings, and excavation photographs: top of feature (top right, view to north) and fill profile with south half excavated (bottom right, view to north).

of soil is basin-shaped in profile and represents the final filling event in the feature.

The west half of Feature 65 was excavated *en toto*, and yielded 55 potsherds, one piece of daub, one triangular projectile point, 101 flakes, and seven fire-cracked rocks. Excavation of the eastern half of Zone A revealed gently sloping walls and a flat bottom in profile, with a maximum thickness of 15 cm. The eastern section of Zone A contained 30 potsherds, three fragments of daub, one Kirk Serrated projectile point, three triangular projectile points, one hammerstone fragment, 84 flakes, and 18 fire-cracked rocks. One 7-liter flotation sample was collected from the east half of Zone A.

Zone B was dark yellowish brown (10 YR 4/6) sandy silt and contained 19 potsherds, two triangular projectile points, one projectile point fragment, one core, 60 flakes, and one fire-cracked rock. This zone was concave in profile and had a maximum depth of 45 cm below the plow zone.

The dimensions and morphology of Feature 65 are consistent with a probable function as a storage pit. Deposits within the pit indicate two or three filling stages, with possible reuse of the pit after each of the first two episodes. Materials recovered from the pit matrix indicate probable Late Woodland period Ashe Ferry phase association.

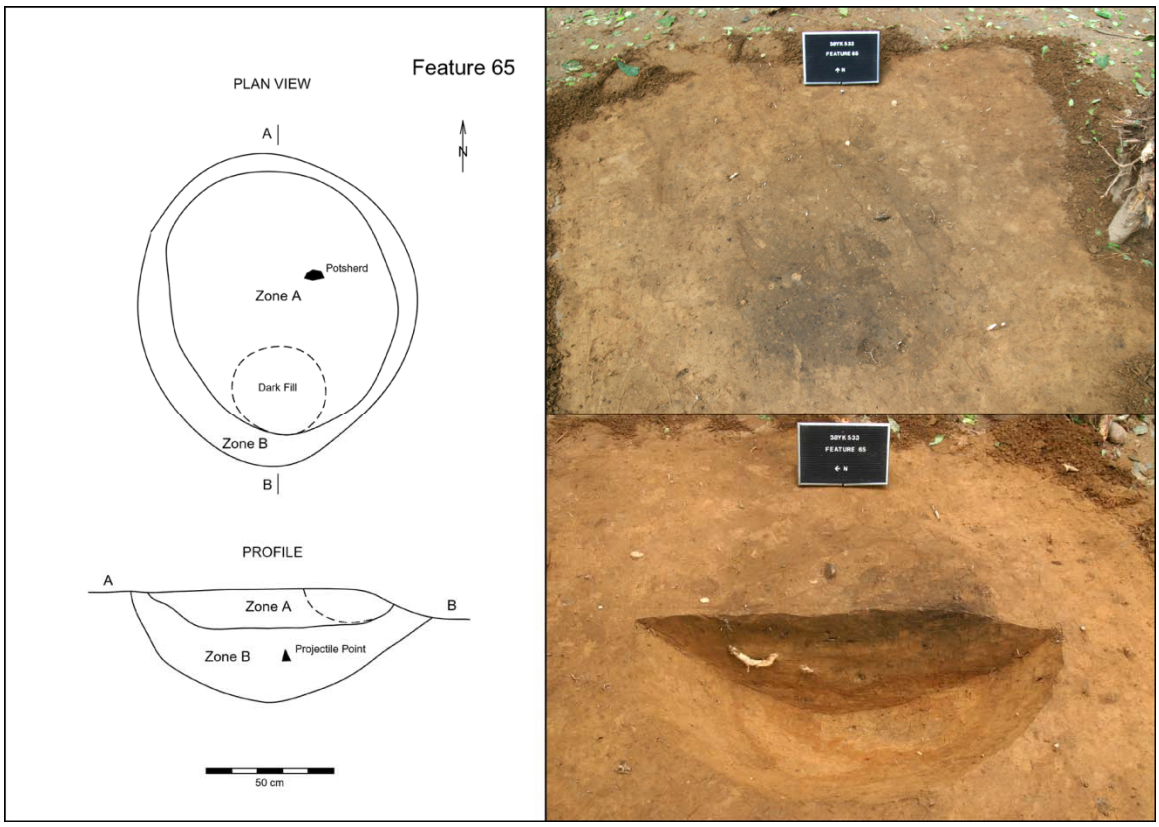

Figure B.40. Feature 65 plan view and profile drawings, and excavation photographs: top of feature (top right, view to north) and fill profile with west half excavated (bottom right, view to east).

Feature 66 (center @ 847.26R854.09) (Figure B.41)

Feature 66 was an oval basin that measured 125 cm north to south and 105 cm east to west. It contained two layers of fill. Zone A comprised an approximately 60-cm wide circle of yellowish brown (10 YR 5/4) sandy loam with charcoal patches, surrounded by a stratum of light yellowish brown (10 YR 6/4) silty sand with charcoal flecks, designated Zone B.

Zone A was found to extend only 5 cm below the base of the plow zone and contained five potsherds, 17 flakes, and two fire-cracked rocks. It had a flat bottom and gently sloping slides in profile. Ten liters of Zone A was processed as a flotation sample. Zone B had a maximum thickness of 16 cm and was also basin-shaped in profile. It yielded 16 potsherds, one polished cobble, 24 flakes, and four fire-cracked rocks. These associated materials indicate a probable Late Woodland period affiliation.

Feature 66 contained evidence of at least two distinct episodes of fill, if not use. After the pit was dug and no longer considered useful, it was filled in with Zone B. Soil compaction or re-use of Feature 66 resulted in the creation of a depression that was later filled in with Zone A. The relatively shallow profile of Feature 66 makes its original function difficult to determine. It may be a storage pit that was truncated by plowing.

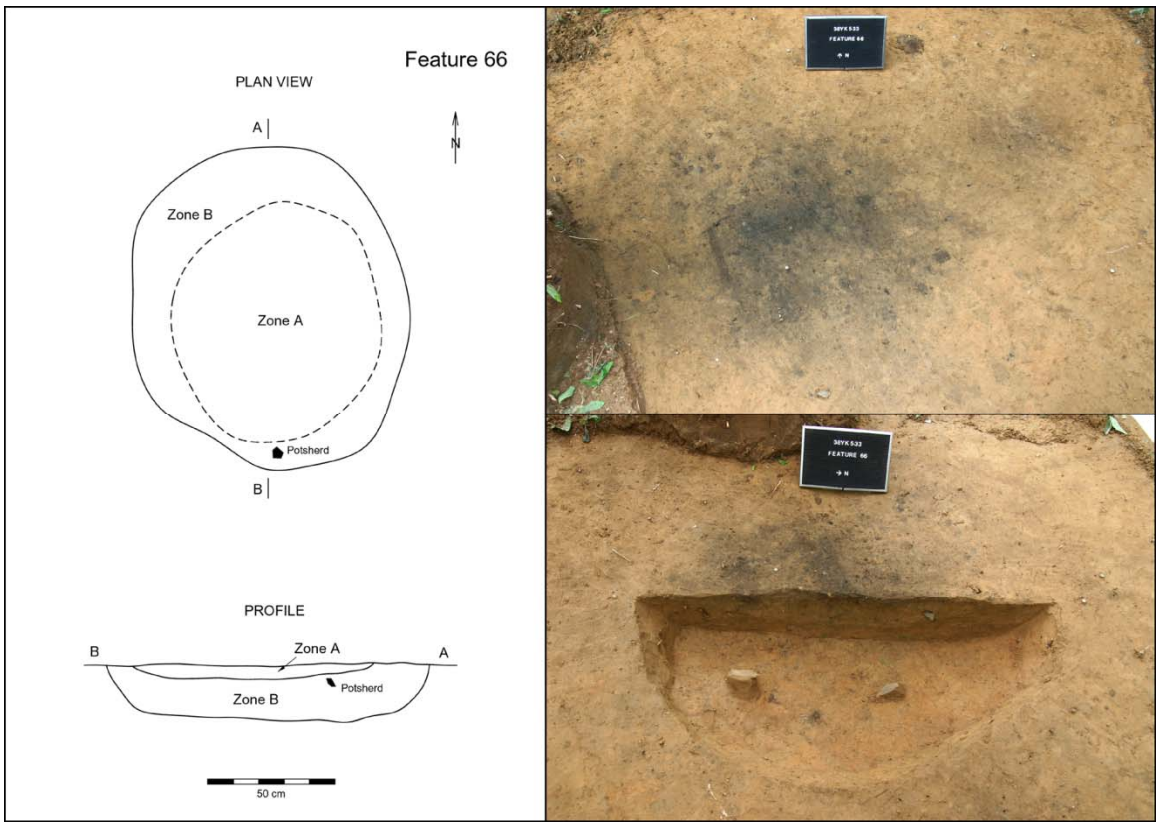

Figure B.41. Feature 66 plan view and profile drawings, and excavation photographs: top of feature (top right, view to north) and fill profile with east half excavated (bottom right, view to west).

Feature 67 (center @ 837.83R905.86) (Figure B.42)

Feature 67 was an ovoid shallow basin that measured approximately 115 cm by 90 cm with its long axis oriented northwest to southeast. It contained a single layer of dark yellowish brown (10 YR 4/4) silty sand. This fill had a maximum thickness of 15 cm and yielded nine potsherds, three fragments of animal bone (one calcined), two Yadkin Triangular projectile points, one Yadkin Eared projectile point, 13 flakes, and 11 fire-cracked rocks. A total of 14 liters of Feature 67 fill were collected for flotation. In profile, this feature had gently sloping walls and a flat bottom.

The presence of multiple Yadkin points in Feature 67 clearly indicates Middle Woodland period occupation at 38Yk533, yet some of the ceramic sherds associated with Feature 67 are referable to the Late Woodland period Ashe Ferry series, and a probable Late Woodland period affiliation is inferred.

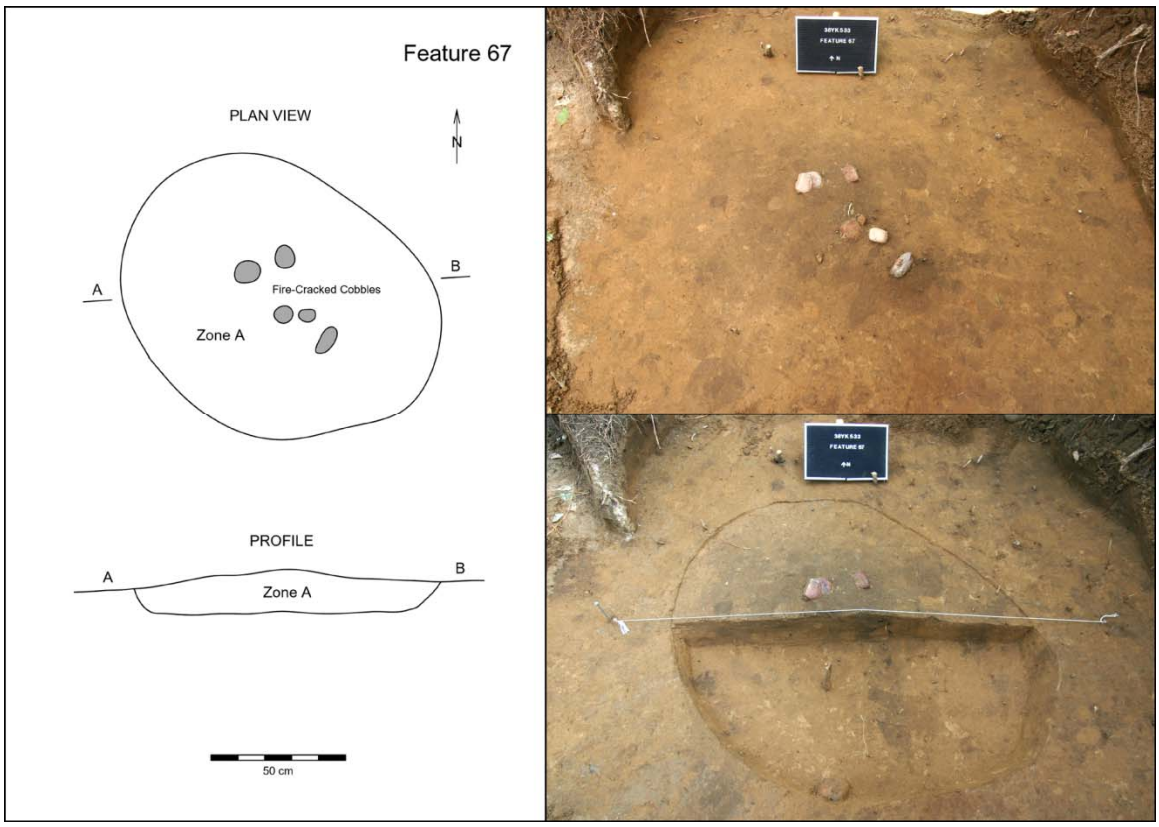

Figure B.42. Feature 67 plan view and profile drawings, and excavation photographs: top of feature (top right, view to north) and fill profile with south half excavated (bottom right, view to north).

Feature 69 (center @ 844.21R906.24) (Figure B.43)

Feature 69 was a small pit or posthole that was ovoid in plan, measuring 52 cm east to west and 40 cm north to south, and extending to a depth of 38 cm below the base of plowzone. The pit matrix consisted of two strata. Zone A consisted of dark yellowish brown (10 YR 3/4) silty sand mottled with very dark brown (10 YR 2/2) silty sand. Excavation revealed the presence of an additional layer of fill. This dark yellowish brown (10 YR 4/4) silty sand was designated Zone B.

Most of Zone A, approximately 24.5 liters, was processed by flotation. It was found to contain four potsherds, four fragments of calcined bone, 25 flakes, and one fire-cracked rock. In profile Zone A had steeply sloping sides and a concave bottom. The presence of a large quartz cobble at the base of Zone A spurred additional excavation and the discovery of Zone B. The top of this rock, which is coincident with the deepest point of Zone A, was 26 cm below the base of the plow zone.

Zone B was not excavated as a separate context in the north half of Feature 69, which was removed first. Thus two potsherds, five flakes, and one fire-cracked rock

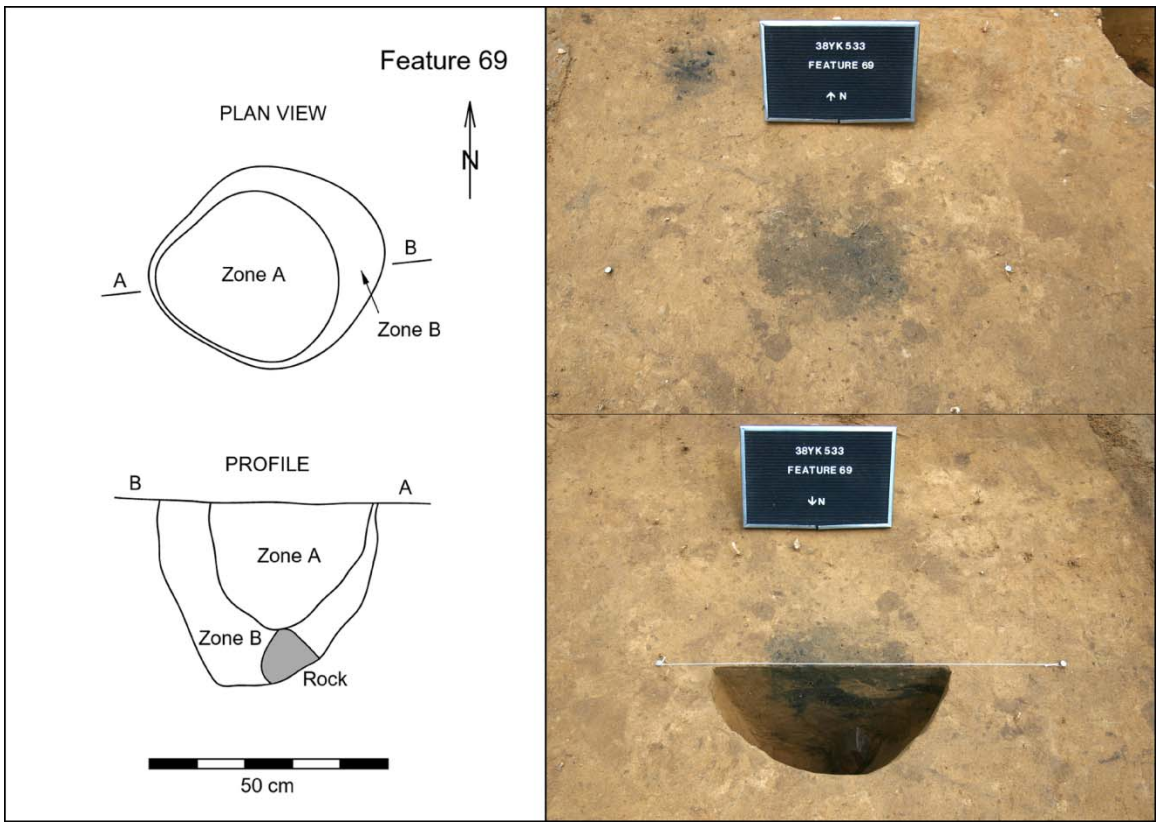

Figure B.43. Feature 69 plan view and profile drawings, and excavation photographs: top of feature (top right, view to north) and fill profile with north half excavated (bottom right, view to south).

from Feature 69 may have come from either Zone A or B. Zone B itself yielded five flakes and one fire-cracked rock. It was similar to Zone A in profile, having steeply sloping sides and a concave bottom. The bottom of Zone B, at 38 cm below the base of the plow zone, is coincident with the bottom of the quartz cobble noted at the base of Zone A.

Materials recovered from Feature 69 indicate a Late Woodland period association. Less clear is the feature's functional categorization as either a small storage or processing pit, or a large posthole (Zone B) and postmold (Zone A).

Feature 72 (center @ 849.16R851.37) (Figure B.44)

Feature 72 was a shallow basin that was ovoid in plan view and measured approximately 120 cm east to west and 80 cm north to south. A pine tree encroached on the northern edge of the pit. One zone of fill was identified prior to excavation. Zone A consisted of dark yellowish brown (10 YR 3/4) silty sand with moderate charcoal inclusions. The soil beneath Zone A was yellowish brown (10 YR 5/4) silty sand with a few charcoal flecks. In the south half of Feature 72, which was removed first, some of this soil was excavated as Zone B. Two potsherds and three flakes were recovered from Zone B, but, as excavation progressed, it became evident that Zone B was indistinguishable from surrounding soil, and it was determined that the Zone B matrix

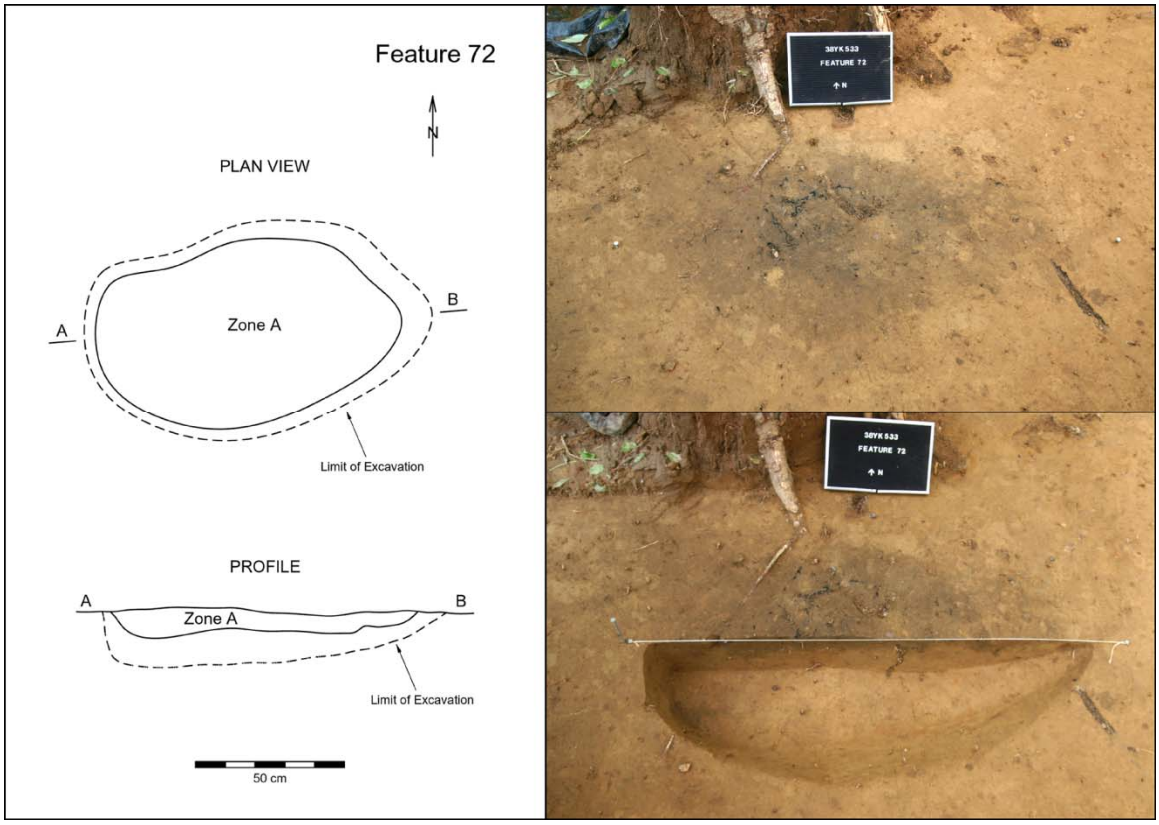

Figure B.44. Feature 72 plan view and profile drawings, and excavation photographs: top of feature (top right, view to north) and fill profile with south half excavated (bottom right, view to north).

was non-cultural in origin. No excavations below Zone A were undertaken in the north half of Feature 72.

Zone A had a maximum thickness of 13 cm but had an irregular shape in profile, with deeper areas near the east and west walls and a shallower, flat bottom in the middle of the feature. Zone A yielded eight Late Woodland period Ashe Ferry series potsherds, four pieces of daub, one triangular projectile point, 15 flakes, and one fire-cracked rock. Eight liters of this fill were processed as a flotation sample.

Feature 73 (center @ 840.66R895.35) (Figure B.45)

Feature 73 was a small pit or posthole that was oval in plain view, measuring 75 cm by 50 cm with its long axis oriented northwest to southeast. Two main zones of fill were identified prior to excavation. Zone A was 45 cm by 25 cm and consisted of very dark grayish brown (10 YR 3/2) loose silty sand with charcoal flakes. It contained a circular patch of dark brown (7.5 YR 3/4) silty sand approximately 15 cm in diameter. Surrounding Zone A was dark yellowish brown (10 YR 4/4) silty sand designated Zone B.

Zone A yielded three potsherds, one piece of daub, and five flakes. A total of 16 liters were collected from this zone for flotation processing. In profile Zone A had a vertical northern wall, a concave bottom at 28 cm below the base of the plow zone, and a

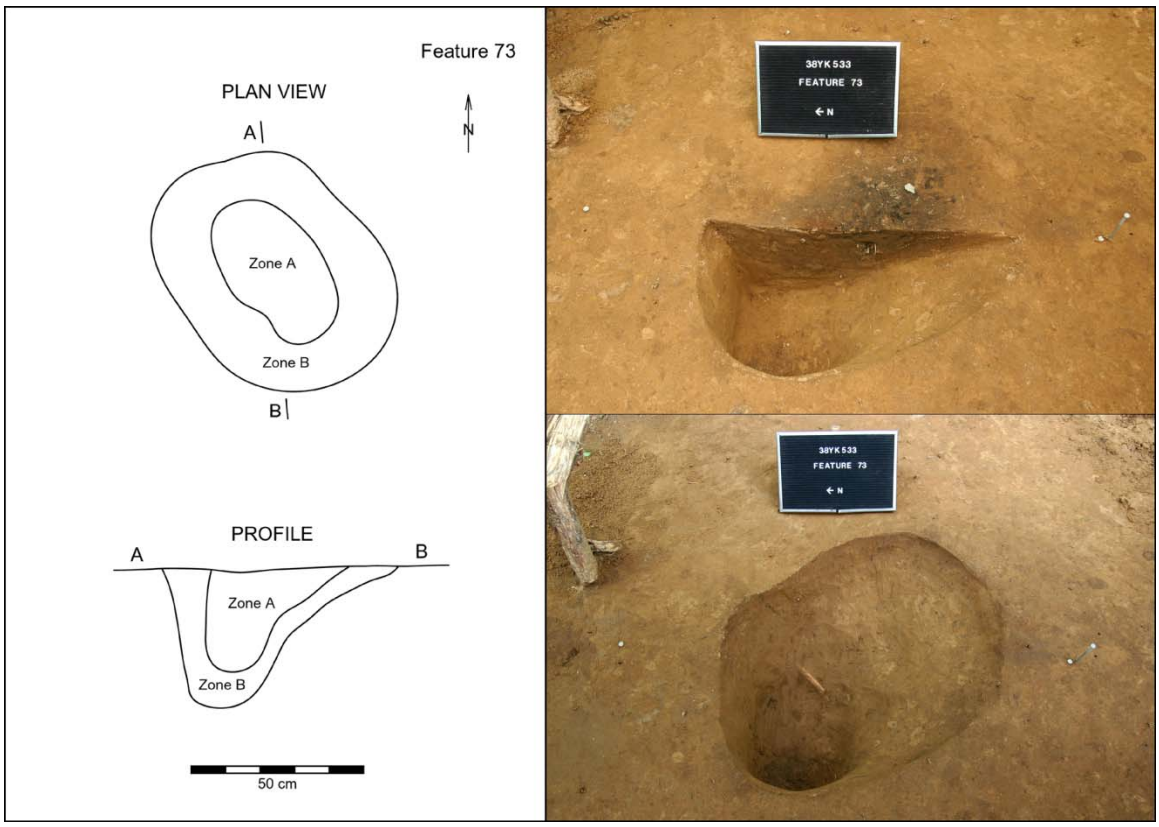

Figure B.45. Feature 73 plan view and profile drawings, and excavation photographs: fill profile with west half excavated (top right, view to east) and excavated feature (bottom right, view to east).

sloping southern wall. Zone B was found to have a similar shape in profile. It had a maximum depth of 40 cm below the base of the profile, and it yielded two potsherds, one piece of daub, one calcined bone fragment, and eight flakes. A total of 21 liters from Zone B were processed by flotation.

Materials recovered from Feature 73 indicate a probable Late Woodland period association. The shape and fill of Feature 73 are most consistent with a probable function as a posthole/postmold combination. The angled southern margin of Feature 73 may have been created when the post was removed.

Feature 74 (center @ 847.51R858.44) (Figure B.46)

This large and structurally intact rock cluster measured approximately 90 cm in diameter. The rock cluster itself consisted of 425 fire-cracked rocks stacked approximately 10 cm thick. The soil beneath the rocks was stained to a maximum depth of 5 cm. A 10-liter flotation sample was collected from the soil surrounding the rocks, which consisted of dark brown (10 YR 3/3) sandy silt with charcoal inclusions. Artifacts recovered from above and among the rocks include 48 potsherds and 13 flakes. Soil below the rocks yielded eight potsherds, one abrader, two triangular projectile points, 17 flakes, and 17 fire-cracked rocks. These associated materials indicate probable Late Woodland period Ashe Ferry phase origin and use for Feature 74.

Feature 74 presents an especially coherent and well preserved archaeological example of a rock oven-type roasting facility. As documented in the ethnographic and ethnohistoric records, such facilities were used to either dry roast or steam large quantities of foodstuffs that might require long spans of slow cooking to render them edible. The cobbles in such facilities provided thermal mass, which could be heated in an initial high intensity firing. Once the rocks were sufficiently heated, food could be roasted on the bed of ashes and coals without exposure to direct flame. Large quantities of charred acorn nutshell recovered from the Feature 74 matrix indicate a probable acorn roasting function for this facility.

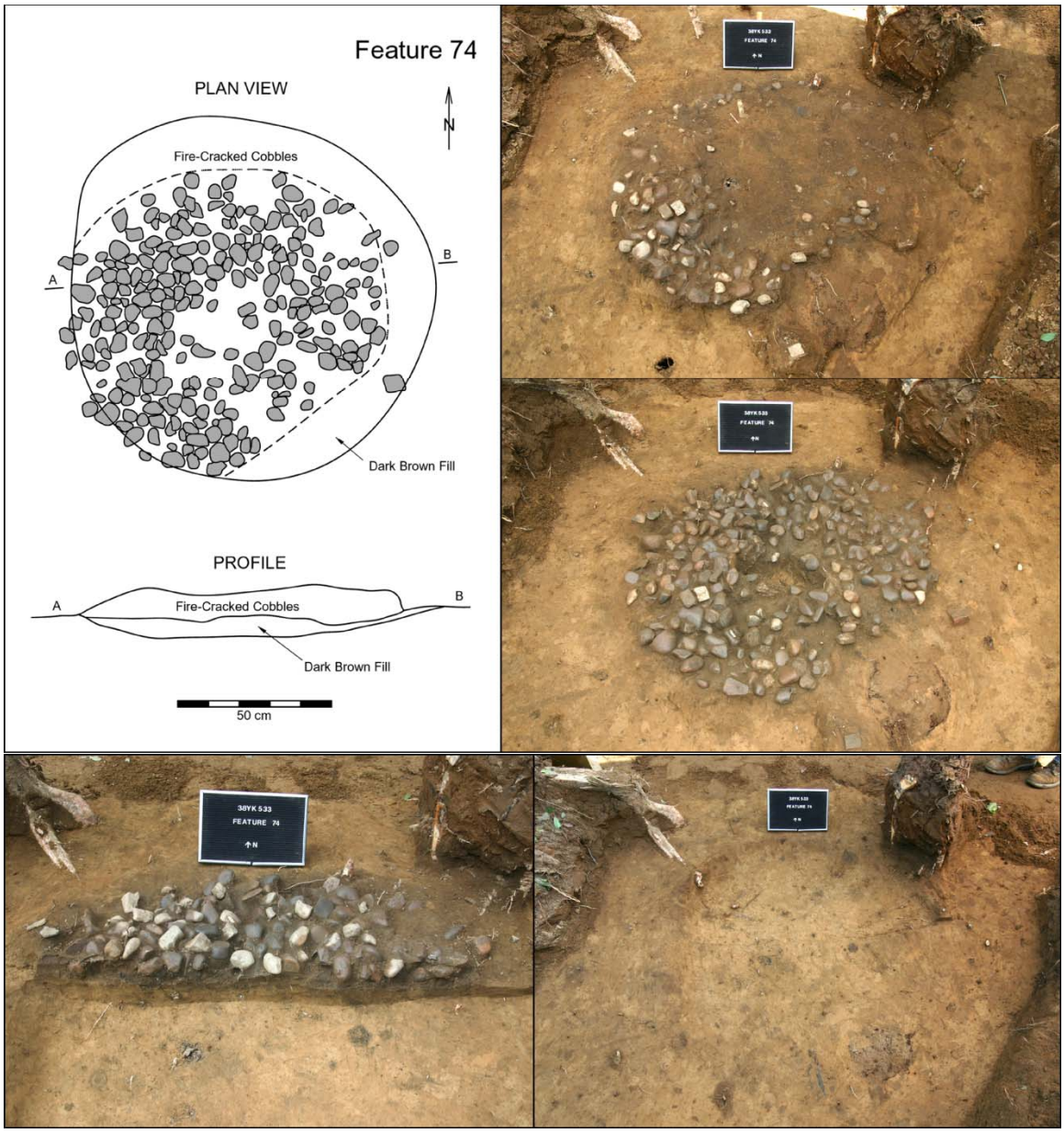

Figure B.46. Feature 74 plan view and profile drawings, and excavation photographs: top of feature (top right, view to north), top of feature with fire-cracked rocks fully exposed (middle right, view to north), fill profile with south half excavated (bottom left, view to north), and excavated feature (bottom right, view to north).

Feature 75 (center @ 827.46R923.36) (Figure B.47)

Feature 75 was a cache of tools deposited in a posthole that was approximately 25 cm in diameter. The feature was identified at the base of the plow zone by the presence of flakes, cores, a ground-stone celt, and antler fragments in dark yellowish brown (10 YR 4/4) silty sand. The deposit of cached materials was approximately 8 to 9 cm thick. Posthole fill was found to continue for another 32 cm below the bottom of the cache. Materials that were part of the cache, which may have been deposited together in a bag or bundle, include seven cores, one celt, one biface, one projectile point fragment, two worked flakes, one fragment of unidentified black mineral pigment, and an antler that was recovered in 11 fragments. Other materials collected from Feature 75 include four potsherds, one piece of daub, 14 fragments of calcined bone, and four flakes. Excavators found a fire-cracked rock lying on the bottom of the posthole.

The size and shape of Feature 75, which had straight walls and a flat bottom, suggest it was a posthole. When the post was removed, the hole was partially filled in with soil before someone placed a bag of tools into the upper part of the hole. Ceramic sherds within the posthole matrix indicate a Late Woodland period (or later) association for the post removal event. The obvious intentional caching of the celt and other materials within this posthole presumably indicates an unfulfilled plan for later retrieval.

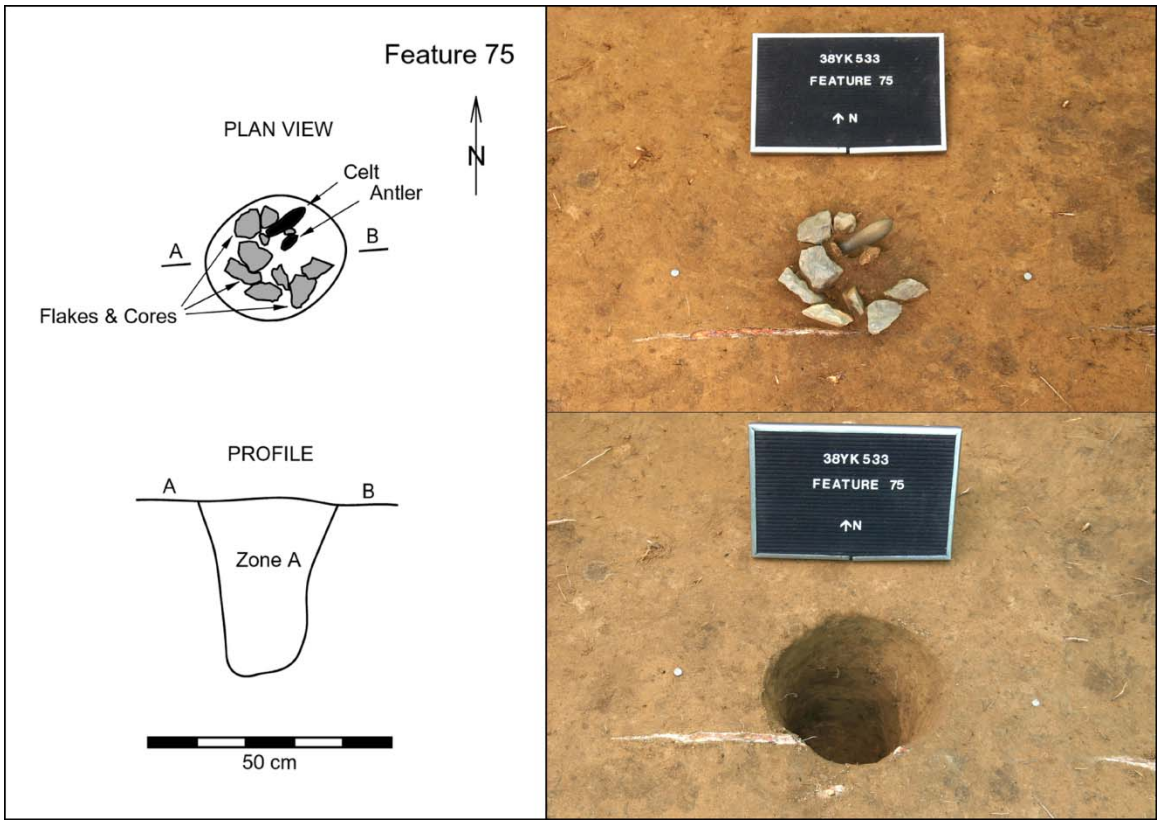

Figure B.47. Feature 75 plan view and profile drawings, and excavation photographs: top of feature showing in situ stone-tool cache (top right, view to north) and excavated feature (bottom right, view to north).

Feature 76 (center @ 850.67R850.45) (Figure B.48)

This large pit feature was intersected by Sq. 850R850 during the initial phase of test excavation at the site. The portion of Feature 76 in Sq. 850R850 was identified during excavation of the square and left in place until the entire feature could be exposed. Two large pine trees growing in the eastern half of Feature 76 complicated excavation of the feature. The western half of the feature was completely excavated, but the lower zones of the eastern half were left in place to minimize the hazard to the excavation team posed by the potential collapse of the trees.

The maximum extent of the feature in plan view was 260 cm north to south and 200 cm east to west. Two zones of fill were visible in Feature 76 at the base of the plow zone. A central zone of dark brown (7.5 YR 3/3) sandy silt loam with abundant charcoal fragments measured about 130 cm in diameter, and was surrounded by a mottled but distinct outer fill of primarily dark yellowish brown (10 YR 4/6) sandy silt loam.

As excavation of Feature 76 progressed, additional soil strata were identified. These zones were initially classified and labeled as subdivisions within two distinct episodes of fill. Later examination of photographs and field notes in the laboratory identified evidence for a third filling event, requiring revision of the zones as they were labeled in the field. For this reason, only some materials excavated from Feature 76 can be attributed to specific zones, while others can be attributed to single or multiple filling episodes. Because excavators initially defined only two zones, A and B, in the eastern half of the feature, the multiple zones evident in the exposed profile of the western half of Feature 76 were designated as subsets (e.g., Zones A^1 and $A^{2)}$ of the eastern strata.

The dark inner core of Feature 76 was designated Zone A^1. This 24 cm-thick deposit yielded 41 potsherds, three triangular projectile points, one biface, 71 flakes, and 23 fire-cracked rocks. At the base of Zone A^1 was a very dark, charcoal-laden lens about 6 cm thick. An 8-liter sample of this material (Zone A^2) was processed by flotation. One potsherd along with carbonized wood and nutshell were present in Zone A^2. Zones A^1 and A^2 appear to represent closely spaced filling events within a pre-existing basin-shaped depression created by the subsidence of the lower fill zones.

Zone B^1 appeared as an outer ring of dark yellowish brown (10 YR 4/6) sandy silt loam that surrounded Zone A^1 in plan view. The uppermost, bioturbated portion of Zone B^1 was approximately 10 cm thick and contained at least four potsherds and. The lower, less disturbed portion of the Zone B^1 Zone C was dark yellowish brown (10 YR 3/4) sandy silt loam that ranged from 12 to 18 cm in thickness. In the center of Feature 76, below Zone B^1, was a small deposit of dark fill with charcoal (Zone B^4). This zone was cone-shaped in profile and approximately 10 cm thick. It sloped downward east of the profile to approximately 50 cm below the base of the plow zone. Artifacts that can be attributed to Zone B^4 include 10 potsherds (five of which conjoin), 10 pieces of daub, one beaver (*Castor canadensis*) incisor, one core, seven flakes, and three fire-cracked rocks. An additional eight potsherds, seven pieces of daub, one triangular projectile point, 13 flakes, and six fire-cracked rocks originated from either Zones B^1 or B^4. Together, Zones C and D filled a basin-shaped depression with gently sloping sides and a flat bottom. Zone E may have intruded the bottom of this basin. Two distinct strata underlaid Zone B^1. Zone B^3 consisted of strong brown (7.5 YR 5/6) sandy silt loam. The edges of this

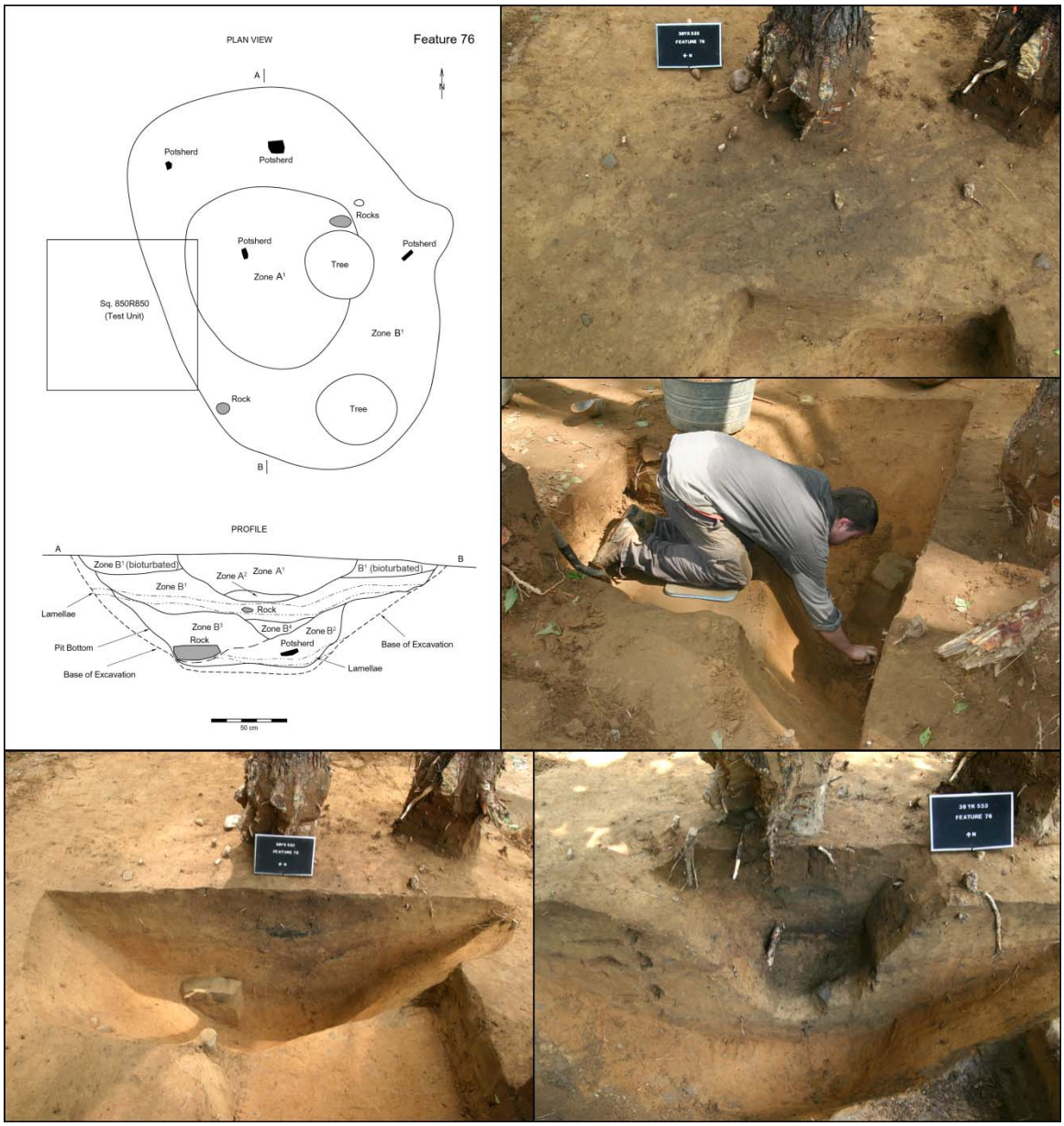

Figure B.48. Feature 76 plan view and profile drawings, and excavation photographs: top of feature (top right, view to east), excavating west half of feature (middle right, view to north), fill profile with west half excavated (bottom left, view to east), and feature after removal of Zones 1 and 2 in east half (bottom right, view to east).

zone were difficult to discern, but sparse inclusions of flecks of charcoal, flakes, and potsherds guided excavators in removing this fill. A large, unmodified, rectangular block of stone was found lying on the horizontal base of Zone B^3 at approximately 48 cm below the base of the plow zone. Beneath Zone B^3 was a dark yellowish brown (10 YR 3/4) sandy silt loam. Like Zone B^3, Zone B^2 contained few artifacts. Due to their low artifact yield and the hazard of the increasingly unsupported pine trees, neither of these zones was excavated in the eastern half of Feature 76. Taken together, Zones B^2 and B^3 appear

to represent fill that was initially deposited within a large storage pit that had relatively straight, slanting walls and a flat bottom.

Artifacts recovered from Zone B in the western half of Feature 76 derived from Zones B^1 through B^4, and cannot be more specifically attributed. These include 27 potsherds, one piece of daub, six triangular projectile points, 109 flakes, and 13 fire-cracked rocks. Another four potsherds and 11 flakes collected from the surface of Feature 76 derived from either Zone A^1 or B^1. The majority of temporally diagnostic artifacts recovered from all zones of Feature 76 are attributable to the Late Woodland period Ashe Ferry phase occupation.

The morphology of strata within Feature 76 appears to represent three stages of deposition, with possible intervening use episodes. The feature was initially excavated for use as a large storage pit. This period of use was punctuated by the deposition of Zones B^2 and B^3, in that order. Given the sparse artifact content of these zones, these strata may reflect wall collapse rather than intentional abandonment and filling of the pit. Deposition of Zones B^2 and B^3 created a much shallower, large basin-shaped pit, into which a small pit appears to have been dug and filled with Zone B^4. After this deposition, the remainder of the pit was filled in with Zone B^1. Soil compaction and bioturbation led to heavy mottling of Zone B^1 in the uppermost portion of the filled-in pit. The final stage of pit use involved excavation or subsidence of a smaller, concave basin into Zone B^1. The dense charcoal deposit (Zone A^2) at the base of this basin probably represents a single deposit from a discrete hearth-cleaning event. The remainder of the basin was then filled with a rich midden soil, Zone A^1.

The complexity of Feature 76 deposits appears to reflect episodic reuses of existing facilities by successive occupations. Trash disposal into the subsided cavity of Feature 76 (an Ashe Ferry phase storage pit) during the Early Brown phase occupation suggests opportunistic use of the surface feature, but does not necessarily indicate cultural or temporal continuities in site occupation.

Feature 77 (center @ 850.22R860.02) (Figures A.49 and A.50)

Feature 77 was a rock cluster that measured approximately 120 cm in diameter. It was surrounded by an amorphous 2.5-meter patch of dark yellowish brown (10 YR 4/4) silty sand, designated Zone B. The soil between the rocks, Zone A, was dark brown (10 YR 3/3) silty sand with frequent charcoal inclusions. The rock cluster itself consisted of 419 fire-cracked rocks and one celt fragment. Present among the rocks were 40 potsherds and 27 flakes (one worked). Eleven and a half liters of soil collected from Zone A, which had a maximum thickness of 8 cm, were processed as a flotation sample.

The soil immediately beneath Zone A consisted of brown (10 YR 4/3) silty sand mottled with dark brown (10 YR 3/3) and yellowish brown (10 YR 5/4) silty sand. It was processed separately from the rest of Zone B and yielded six potsherds, 16 flakes, and 40 fire-cracked rocks. Excavators collected a 13-liter flotation sample of this soil. The rest of the material designated Zone B contained 58 potsherds, 22 pieces of daub, five fragments of calcined bone, four triangular projectile points, 143 flakes, and 74 fire-cracked rocks. A 10-liter sample of this lighter-colored soil was processed by flotation. In general, Zone B ranged from 6 to 8 cm thick.

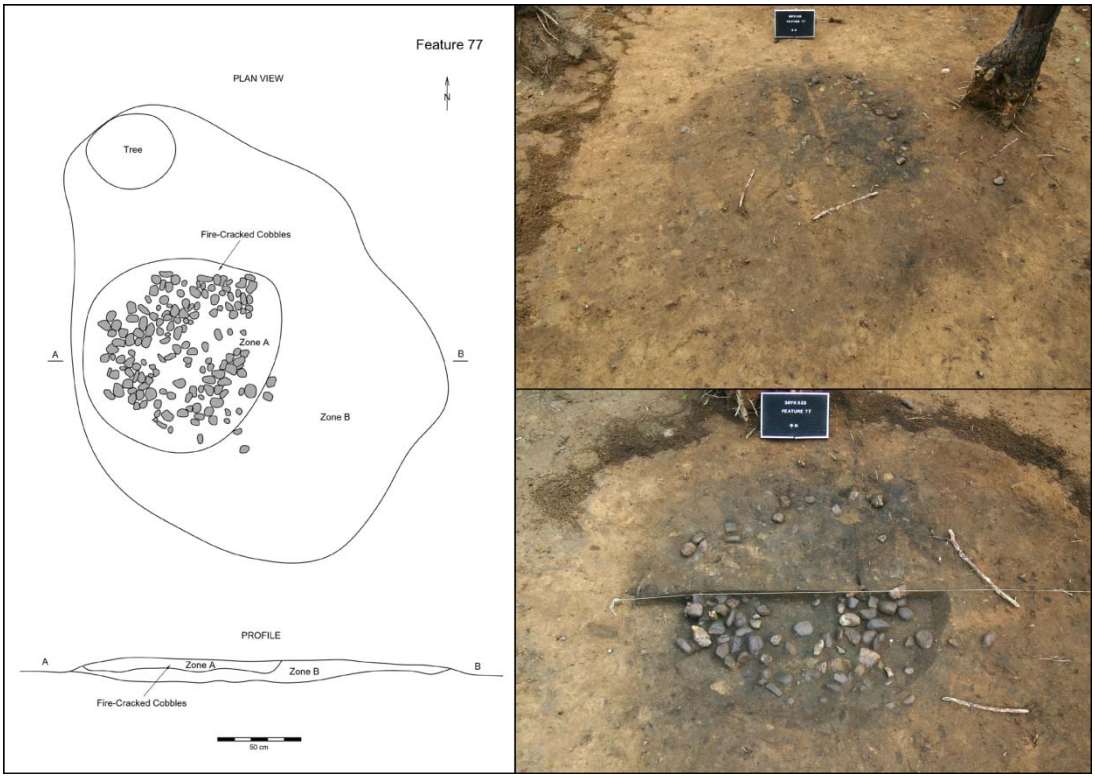

Figure B.49. Feature 77 plan view and profile drawings, and excavation photographs: top of feature (top right, view to west) and fill removed from top of fire-cracked rocks in south half (bottom right, view to north).

Figure B.50. Feature 77 excavation photographs: feature with Zones A and B removed from south half (top left, view to north), feature with Zone A removed and rock cluster fully exposed (top right, view to north), fill profile of rock cluster with south half fully excavated (bottom left, view to north), and rock cluster fully excavated (bottom right, view to north).

Zone B seems to be a midden-like soil into which the rock cluster was deposited; the base of Zone B was approximately the same elevation as the base of the surrounding plowzone, but the relatively shallower plowing in this spot preserved both midden and rock cluster. Feature 77 appears to be another example of a shallow rock oven, a common facility type associated with the Late Woodland period Ashe Ferry phase component; AMS dating of Feature 77 materials produced an estimate of 104±30 years B.P. (2σ calibration, cal. A.D. 970 to 1030; calibration curve intercept, cal. A.D. 1010). Archaeobotanical samples from Feature 77 included very high absolute counts and high relative frequency of acorn nutshell. These acorn remains appear to represent *de facto* residues from food processing. The prevalence of similar roasting facilities at 38Yk533 indicates that food processing (primarily acorn parching) was a major activity focus of the seasonal site occupations during the Ashe Ferry phase.

Feature 78 (center @ 837.60R869.62) (Figure B.51)

Feature 78 was an oval rock cluster that measured 100 cm by 70 cm with its long axis oriented northwest to southeast. The feature was apparent as the base of the plowzone as a patch of dark brown (10 YR 3/3) silty sand with a mottled patch of very dark grayish brown (10 YR 3/2) silty sand. This fill was 5 to 8 cm thick and capped the rock cluster. Because the matrix exhibited a high density of charcoal inclusions, all 28.5 liters were processed by flotation. This fill yielded 37 potsherds, one piece of daub, one biface, 69 flakes (two worked), and 58 fire-cracked rocks. These rocks were probably part of the rock cluster itself, which consisted of an additional 187 fire-cracked rocks stacked one to two courses high.

The soil beneath the rock cluster was very dark grayish brown (10 YR 3/2) silty sand containing a large quantity of charcoal. All of this material, totaling 14 liters, was processed by flotation. This fill was approximately 5 cm thick and contained one potsherd, two flakes, and 12 fire-cracked rocks. Feature 78 had a maximum thickness of 13 cm and was basin-shaped with a flat bottom.

Feature 78 is consistent in morphology with other rock-filled roasting facilities defined at 38Yk533, and archaeobotanical samples from the facility included abundant (and predominant) charred acorn shell fragments. An AMS assay of charred botanical material from Feature 78 yielded a date of 750±30 years B.P. (2σ calibration, cal. A.D. 1230 to 1290; calibration curve intercept, cal. A.D. 1270), indicating facility use during the Early Brown phase occupations. Use of such acorn roasting facilities during the Early Brown phase indicates continuity in site function across the Late Woodland period and Middle Mississippian period site occupations.

Feature 79 (center @ 837.82R869.89) (Figure B.52)

Feature 79 was a small (60cm x 47cm), ovoid pit located approximately 5 cm north of Feature 78. The pit matrix was a single, 20cm-thick layer of dark yellowish brown (10 YR 3/4) silty sand. A 9-liter sample of fill from this feature was collected for flotation processing.

The pit surface was marked by a cluster of potsherds at the base of the plow zone; most of these sherds, and those recovered from the pit matrix (total, 49 sherds) were parts

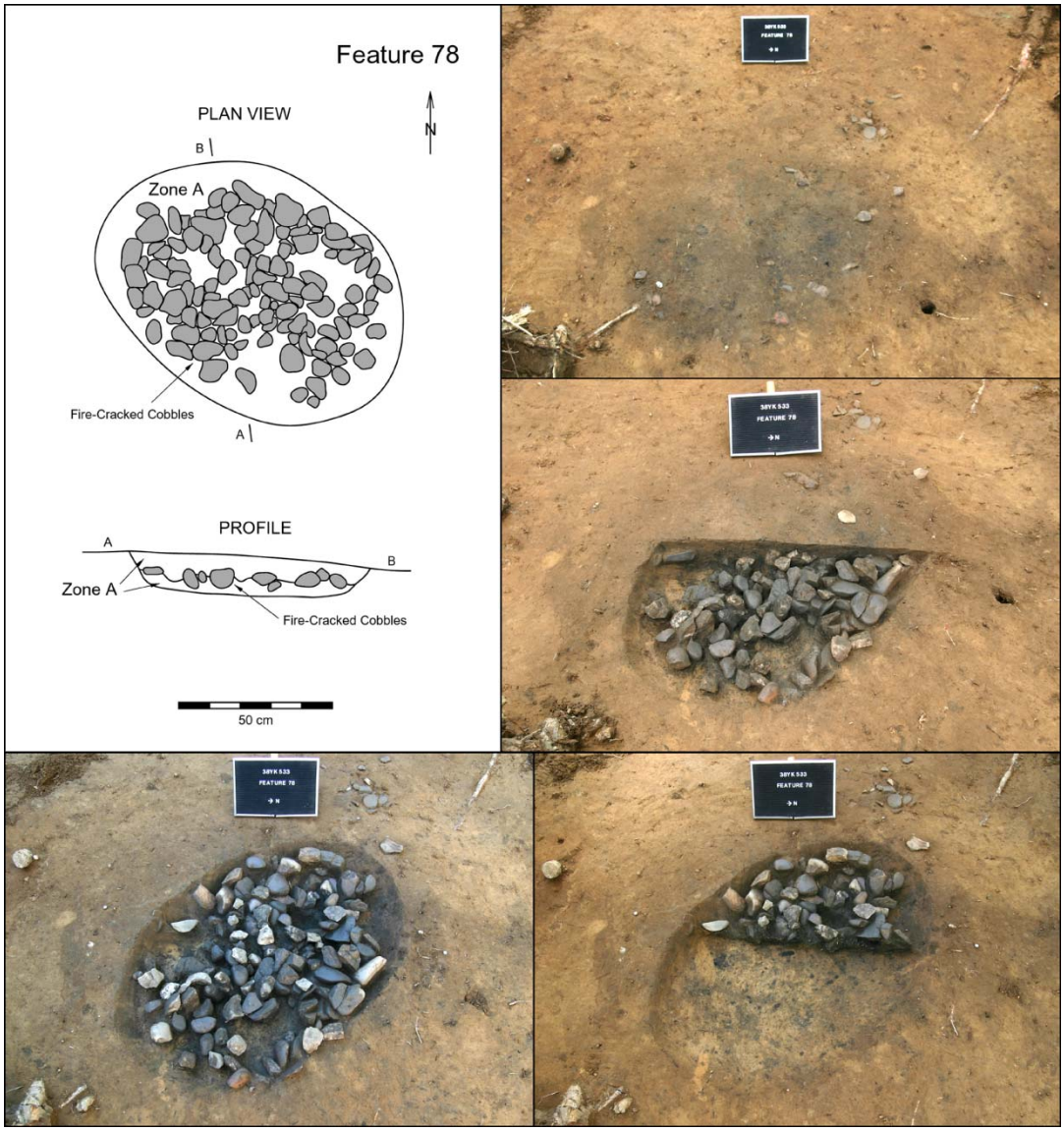

Figure B.51. Feature 78 plan and profile drawings, and excavation photographs: top of feature (top right, view to west), fill profile with rock cluster in east half fully exposed (middle right, view to west), rock cluster fully exposed (bottom left, view to west), and fill profile with rocks in east half removed (bottom right, view to west).

of a Twelve Mile Check Stamped vessel attributed to the Early Brown phase occupations of the site. Fragments of the same vessel were recovered from the matrix of nearby Feature 78, a context that yielded an AMS date of 750±30 years B.P. (2σ calibration, cal. A.D. 1230 to 1290; calibration curve intercept, cal. A.D. 1270).. Other artifacts found in this feature include two triangular projectile points, one triangular biface, and 34 flakes (one worked).

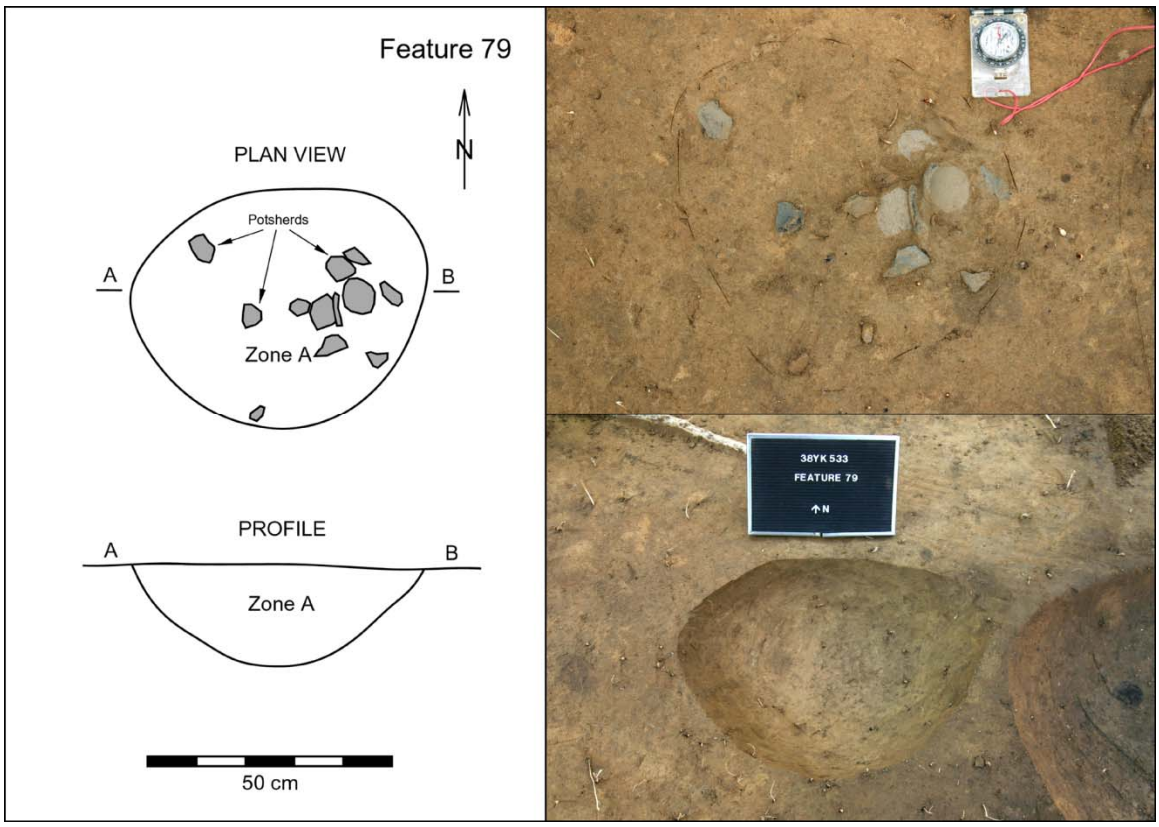

Figure B.52. Feature 79 plan and profile drawings, and excavation photographs: top of feature (top right, view to north) and excavated feature (bottom right, view to north).

Feature 80 (center @ 843.74R850.53) (Figure B.53)

Feature 80 was a small (15 cm diameter) cache of Late Archaic artifacts resting in a shallow depression that extended only a couple of centimeters below the base of the plow zone. The assemblage from this feature consists of one Savannah River projectile point, three bifaces, four cores, and two flakes. Like the tool cache in Feature 75, these materials were probably stored for later use and contained in a bag or bundle that has since decomposed.

Feature 81

Feature 81 is a probable pit or basin located at the southeastern edge of the project corridor that was sampled as part of the excavation of Square 749R956. The northwest corner of the feature was exposed at the base of the plow zone in Square 749R956, but the surface was substantially disrupted by bioturbation, and was not recognized as a discrete feature until several successive levels were removed from the unit. The curvature and observed dimensions of this quadrant indicate a facility greater than 2 meters in diameter. The temporal association of this facility was not conclusively determined, but a portion of the northwestern quadrant of the pit (excavated as part of Square 749R956) yielded Ashe Ferry Simple Stamped sherds, consistent with the majority of discrete contexts defined at 38Yk533. Because Feature 81 is located beyond the limit of the area of probable effect in the bridge replacement project, investigators elected to leave this feature as a control for future excavations.

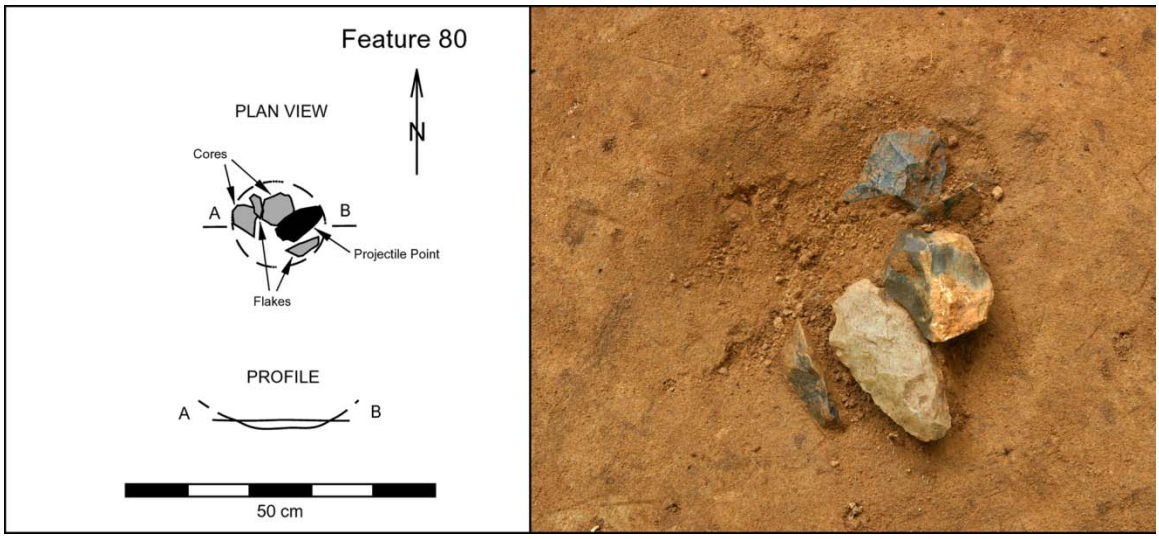

Figure B.53. Feature 80 plan and profile drawings, and photographs at top of feature (right, view to west).