

CHAPTER 5

SITE 38LX106 ASSEMBLAGE

INTRODUCTION

Site 38LX106, like 38LX5, was also located in the sandhills/uplands area, the site was characterized by a light scatter of debitage and bifacial tools on the lower slope of a large knoll at the edge of, and overlooking, the Congaree River floodplain. Artifacts were found over a 20 meter interval in the sides and base of a gully that ran down the southeastern side of the knoll, formed by the erosion of an old roadbed (Figure 25). A built-up grade for the Seaboard Coast Line Railroad is located at the base of the hill, some 60 meters southeast of the site. The area of the scatter is currently in pines and characterized by a sandy, well drained soil. The hardwood forests of the floodplain begin less than 100 meters to the southeast, and only some five to eight meters lower in elevation. The site area, close to the 160 foot MSL contour, is only 30 feet above the elevation (130 feet) that characterizes much of the Congaree River floodplain in the area immediately south of Congaree Creek.

PREVIOUS INVESTIGATIONS AT SITE 38LX106

Site 38LX106 was discovered on June 19, 1975, by Albert C. Goodyear and David G. Anderson during field survey along the corridor of the alternate three routes of the proposed Southeastern Columbia Beltway. A description of the scatter was formally entered into the state site files by Goodyear on August 25, 1975, where it was designated 38LX106. In the report on this survey, Goodyear (1975a:20-21) provided a detailed description of the site area:

This site was found in an eroding dirt road which runs down the southeastern side of the large hill just south of Congaree Creek between SC 129 and the SCL Railroad. From an aerial photograph, two roads can be seen on the southeastern slope of this hill and where the two roads merge, near the bottom, the site was found. The site is apparently Late Archaic in age since a base of a chert Savannah River point was found. About 15 flakes of bifacial retouch were found scattered near the Savannah River base, all of which were made of chert. Some of the flakes were thermally altered suggesting heat treatment of bifaces. The flakes are extremely similar in

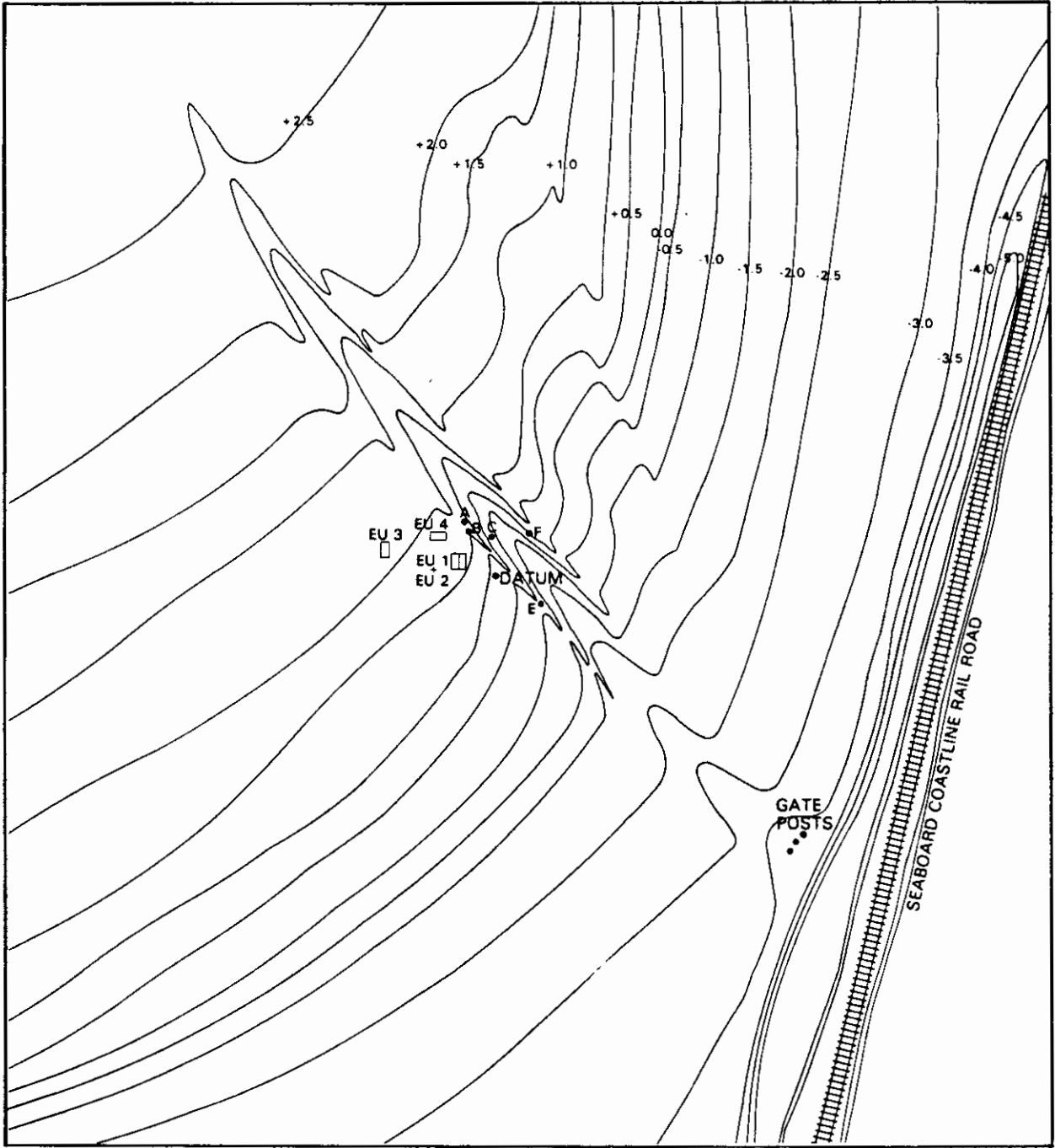
overall size and morphology suggesting perhaps they represent resharpening debitage as opposed to manufacturing waste. One ground mudstone-like fragment of a probable atlatl weight was also found. The contents of this site were disturbed roughly over an area 50 feet on a side. While some of the material came from the eroding roadbed, several flakes were found to the south of the southernmost dirt road indicating that some of the site probably lies in the grass and trees.

Goodyear (1975a:20-22) provided a thorough discussion of the potential significance of 38LX106 and sites like it, noting that small upland scatters such as this might represent deer hunting and/or butchering stations, about which little is currently known. The ecotonal nature of the area was also noted, and the suggestion made that numerous small, similar sites might be expected to occur in this micro-environmental zone.

1978 DATA COLLECTION PROCEDURES (SITE 38LX106)

Site 38LX106 was visited several times during the 1978 data recovery program prior to subsurface testing, which occurred from July 24 to 27, 1978. Only a few artifacts were observed on the surface, by and in the gully, and these were marked with surveyor wire flags. The site had suffered extensive erosion since the 1975 visit, and in the area of the scatter the gully was over a meter and a half deep, and six meters across. A 90 cm piece of half inch iron rebar was driven flush with the ground immediately west of the gully, near the center of the scatter. From this datum, the locations of all surface artifacts, excavation units, and points for a site contour and base map were taken employing a transit and tape. Thirty-eight sightings were recorded, and the datum was tied in with the central of three gate posts located at the base of the gully, in an area overlooking the railroad tracks.

Four one by two meter test pits were opened in the woods to the northwest of the datum, at distances of from five to fifteen meters (Figures 26, 27). Unit placement was intuitively based to avoid the numerous trees that characterized the woods adjacent to the gully. All four units were located on the western side of the gully for two reasons. First, only one artifact had been observed on the opposite eastern side. Second, another gully entered the first just to the south of the site scatter, and the intervening area to the east appeared highly disturbed. Unit



MAP SOURCE: C. A. I. Field Survey, 1978.

NOTES: EU Denotes Excavation Unit.

Permanent Reference USGS Bench Mark M-57
 is located approximately 244m from the site
 datum at an angle of 170.0° East of Magnetic
 North.



0 20 METERS

20 CM. Contour Interval

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SITE 38LX106 BASE MAP
ALL EXCAVATION UNITS

FIGURE 25



removal was the same as at 38LX5; the root/humus zone was taken out as a level, with arbitrary 20 cm levels opened below this to sterile deposits. Unit orientation (north-south or east-west) was determined by a coin toss. Two units were placed side by side to form a two meter block, to accommodate a possible feature. All fill was passed through one quarter inch mesh.

THE DATA ASSEMBLAGE (SITE 38LX106).

Eighty-six possible artifacts and 207.9 grams of fired clay were recovered at 38LX106 during the 1975 and 1978 field operations (Table 8). Fire-cracked rock and unmodified ferruginous sandstone accounted for nearly half of this total, with much of the remainder small fragments of chert debitage. None of the ferruginous sandstone exhibited abrader facets or other evidence for intentional modification. Two biface fragments (Figure 28:i, j) were recovered from the surface, and indicate a Late Archaic age for the scatter. One of the fragments is the base of a Savannah River Stemmed hafted knife (Coe 1964:44-45), and the other is the base of a typologically unidentifiable contracting stemmed biface. The Savannah River Stemmed is made from unaltered Allendale County chert, while the other base is made of quartz.

One charcoal stain initially interpreted as a feature was discovered in EU1, and a second one by two meter unit (EU2) was opened adjacent to the first to fully expose the area. The stain, designated Feature 1, was irregular in shape and roughly a meter in diameter. Upon removal, it was found to contain a number of small fragments of partially decomposed wood, indicating a probable origin as a tree root or stump. All of the fired clay and most of the ferruginous sandstone (N = 18, 805.9 grams) recovered from the site came from the fill of this stain; the remainder of the ferruginous sandstone occurred in the two units enclosing the feature. Five small fragments of cracked quartz weighing 8.2 grams were also found in these two units, but the sample size and distribution is too small to accurately conclude the presence of nearby hearths. Larger quantities of cracked rock were recovered in the other two units, in EU3 (N = 6, 57.2 grams) and EU4 (N = 1, 16.6 grams), from which no aboriginal artifacts were recovered. Small quartz pebbles occur naturally in some of the underlying, weathered geological deposits in the area, and a noncultural origin for some of the cracked quartz appears probable.

TABLE 8
 SITE 38LX106 ARTIFACT ASSEMBLAGE
 SOUTHEASTERN COLUMBIA BELTWAY PROJECT
 DATA COLLECTED 1974 through 1978

<u>Category</u>	<u>Frequency</u>	<u>Weight</u>
Fire-Cracked Rock	12	82.4g
Ferruginous Sandstone (Unmodified)	28	852.3g
Fired Clay	-	207.9g
Debitage and Cores	43	25.8
Chert	(39)	(12.9)
Quartzite	(4)	(12.9)
Tools and Miscellaneous Artifacts	3	
Darts	(2)	
Miscellaneous (unusual) Artifacts	(1)	
Total Artifacts	86	1168.4 ⁻¹

-1 Does not include tools and miscellaneous artifacts.



FIGURE 26— Typical unit excavation procedure during the Southeastern Columbia Beltway project. Fill from all units was screened through 1/4 inch mesh. The view is of EU10, 38LX5, looking to the west.



FIGURE 27— Site 38LX106 area, along and within an eroding gully near the edge of the sandhills/uplands environmental zone. Four one by two meter test units were opened in the woods west of the gully, yielding a few flakes.

All of the debitage recovered in the excavation units (N = 24) came from EU1 and EU2. No debitage was recovered in the two one by two meter units opened a few meters to the northwest and west, suggesting that the scatter is quite localized. Twenty-two chert and two quartzite flakes were recovered, and the area about EU1 and EU2 is tentatively interpreted as close to the probable center of the scatter. This area, as evidenced by Feature 1, had been intruded and disturbed by a comparatively recent tree. The entire site debitage assemblage consisted of 39 chert flakes (24 interior, 15 FBRs) and four quartzite flakes (all interior). Two of the quartzite flakes, both from the surface, were large and had a combined weight of 12.4 grams. All of the remaining flakes were very small, however, with the average weight of the chert flakes 0.33 grams and the other two quartzite flakes 0.25 grams.

The chert flakes were all composed of Allendale chert, and three of the interior flakes exhibited a glossy, pinkish texture indicative of intentional thermal alteration. The small size of the chert flakes, coupled with the high incidence of FBRs, (N = 15, 38.4 percent) suggests late-stage manufacture or more probable biface resharpener. The unaltered chert flakes were all very similar in appearance to the material comprising the Savannah River Stemmed biface base, and it is probable that they came from the same source. The flakes may, in fact, derive from resharpener this very tool, although no definite fits could be made during an attempt to replace flakes on the biface. The presence of three thermally altered chert flakes suggests either accidental (post-detachment) heating, or else the reduction or maintenance of another, heat-treated tool on the site. That other tools were probably used is also indicated by the quartz biface base, and the four pieces of quartzite debitage.

Two other possible artifacts were found on the site, a piece of siltstone that might have been an atlatl weight fragment, and a small piece of gneiss. Neither specimen, however, exhibited clear evidence for intentional smoothing. Moderate quantities of smoothed and eroded siltstone were noted in the gully, arguing for a local, non-aboriginal origin for the object. The use to which the gneiss might have been put, if it were imported onto the site, remains unknown.

CONCLUSIONS - THE 38LX106 SITE ASSEMBLAGE IN RETROSPECT

The 38LX106 assemblage consisted almost exclusively of bifacial tools and later stage manufacturing/reduction debris. Some ferruginous sandstone and cracked rock was present, suggesting the possibility of hearth areas, although none was conclusively identified. One concentration of debitage was found that may have been at or near the center of the original scatter, but the area had been disturbed by a recent tree. The 38LX106 assemblage suggests a single period of site use, during the Late Archaic, by a group of people employing (predominantly?) bifacial tools of chert, quartz, and quartzite. The size of the group was probably fairly small, since the scatter was constrained to an area roughly 10 meters in diameter, and was generally characterized by a low artifact density. Given the narrow range of tools and debitage, and the low density of fire-cracked rock, use of the site as a short-term extraction loci is probable (cf. Ferguson 1976, House and Wogaman 1978). The orientation of the stone tools towards cutting functions, furthermore, argues for (deer?) hunting/butchering activity.

CHAPTER 6

SITE 38LX82 ASSEMBLAGE

INTRODUCTION

The third site examined, 38LX82, was a small cluster of artifacts located in a flat, low-lying field near an old barn within the Congaree River floodplain. The river floodplain in this area is poorly drained, and a number of intermittent tributary channels and low swampy depressions are present, all draining into Congaree Creek, which in turn drains into the Congaree River some three kilometers to the east. Over the past two and a half centuries the floodplain area has been cleared and partially drained to promote farming activity, but through inspection of aerial photographs it is possible to determine the locations of some of the original swamps and channels. The 38LX82 area is located about 100 meters south of a swampy circular depression some 50 meters across, that has been partially drained in historic times by a ditch cut now overgrown into a hedgerow (Figure 29). Artifacts have been reported both to the north and south of this depression; the 1978 operations focused on the southern area, immediately in the highway right-of-way.

PREVIOUS INVESTIGATIONS AT SITE 38LX82

Site 38LX82 was located in August of 1974 by David G. Anderson during the survey of the second alternate for the Southeastern Columbia Beltway. The site was entered into the state files on September 8, 1974, and the report on the alternate two survey, released later that year, contained a brief description of the scatter:

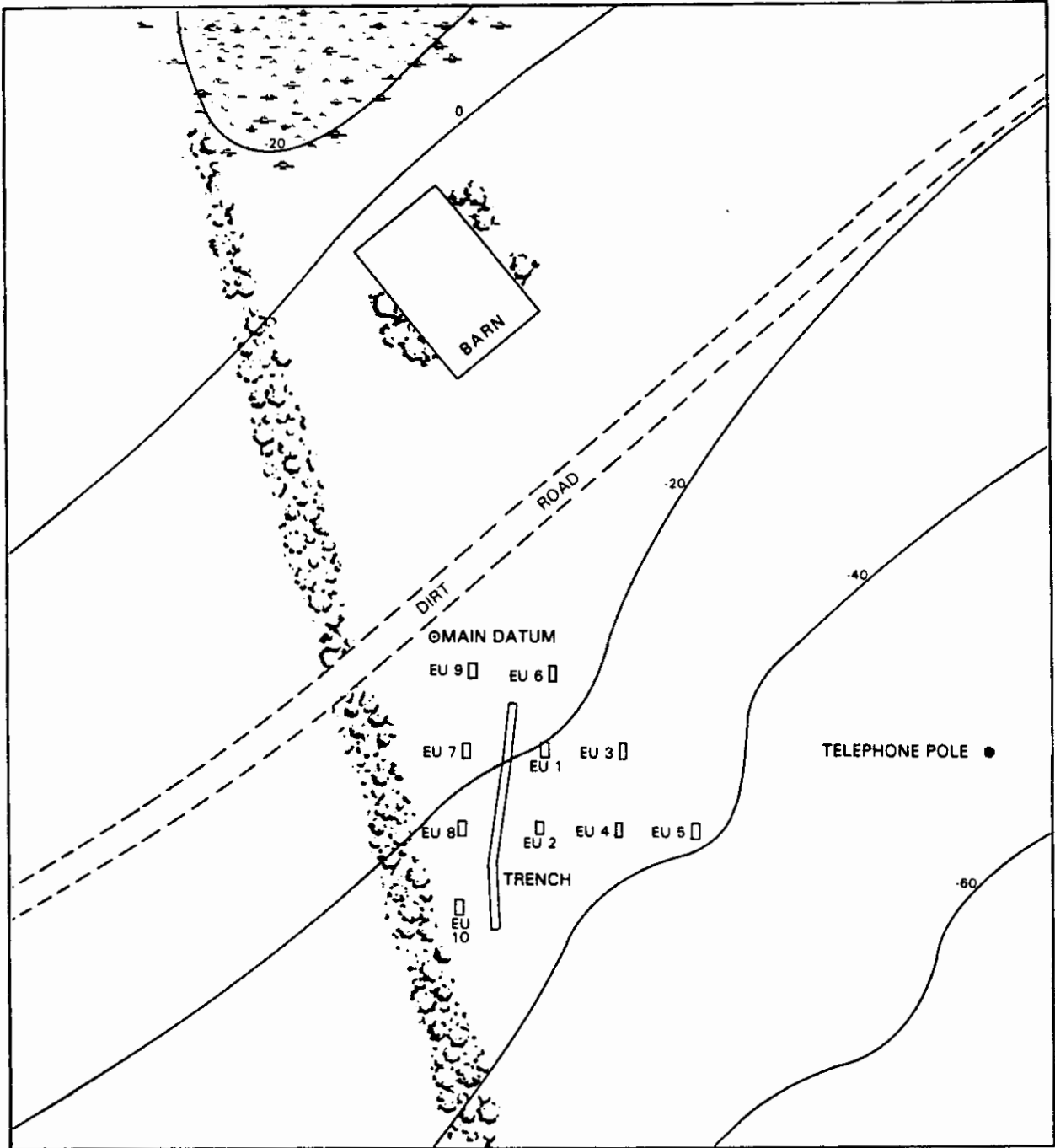
This site consists of a very small cluster of artifacts in an area some 40 feet in diameter. The site is under cultivation, with soybeans the present crop. The terrain is flat and the nearest present source of water is several hundred feet away. The soil is alluvial in nature, consisting of fine silts and sands. The fields around this site are virtually devoid of archeological materials, although an occasional flake or tool may be found. Judging by the occurrence of extensive sites located to the north (38LX54, 38LX50) and east (38LX81, 38LX19) the artifacts found outside of the small area of clustering may reflect spillover from these adjoining areas. Inspection of the artifacts indicates a Late Archaic and Woodland occupation; due to the alluvial nature of the soil, more of the site may be undisturbed below the present plow zone (Anderson 1974:140).

During the original visit to the site in August of 1974, a controlled surface collection was made, consisting of the recovery of all artifacts within a 50 foot diameter circle for a period of 20 minutes. No artifacts were observed outside of the circle, and the number found within the collection area, 22, was low compared to the density observed at a number of other sites in the area (Anderson 1974:156).

The 38LX82 area was revisited by Albert C. Goodyear and David G. Anderson on June 27, 1975, during the survey of the alternate three route for the Beltway. A general collection was made over the surface of the scatter, and several additional artifacts were recovered. The August 1974, and June 1975 visits are the only two documented in the state site files, and for which collections exist. The general area of the site was visited early in 1978, and artifacts were observed, but not collected, in the field to the northwest of the depression (James L. Michie: personnel communication). On February 8, 1978, Michie recorded this scatter as 38LX94 in the state site files. The site was described as extending 200 feet (N/S) by 75 feet (E/W), and located 250 feet from the barn. Michie observed chert, quartz, quartzite, and slate flakes, two unifacial tools, and cracked quartz within the scatter, which he interpreted as an Early Archaic hunting station. No collections were made at the time of Michie's visit, nor are any known to have been made since. A second site, 38LX54, is located some 300 meters north of the depression extending along Congaree Creek. The intervening area, and the fields immediately around the 38LX82 scatter, were found to contain few artifacts. Close to swamps or water sources, however, artifacts were almost invariably found, and sites in these areas were generally characterized by a moderately high artifact density. Site 38LX82, therefore occupies a somewhat atypical position, occurring in the flat low-lying floodplain well away from swamp or tributary margins. Use of the area appears to have been prompted by the nearby circular depression, which in the past may have supported a small swamp.

1978 DATA COLLECTION PROCEDURES (SITE 38LX82)

At the time of the 1978 fieldwork 38LX82 was partially overgrown, to a height of about one-half a meter in weeds and grasses (Figure 30). The field had apparently last been plowed the preceding fall or winter, and had lain fallow for almost a year. Surface visibility was poor, and some two hours were spent walking back and forth over the end of the field resolving the extent of the site. Ten one



MAP SOURCE: C A I Field Survey, 1978.
 NOTES: EU Denotes Excavation Unit.

Permanent Reference Point 1 (Southern Bell Pole) is located 73.5m from the site datum at an angle of 106.4° East of Magnetic North.
 Permanent Reference Point 2 (SW Corner of Barn) is located 32.5m from the site datum at an angle of 7.3° East of Magnetic North.

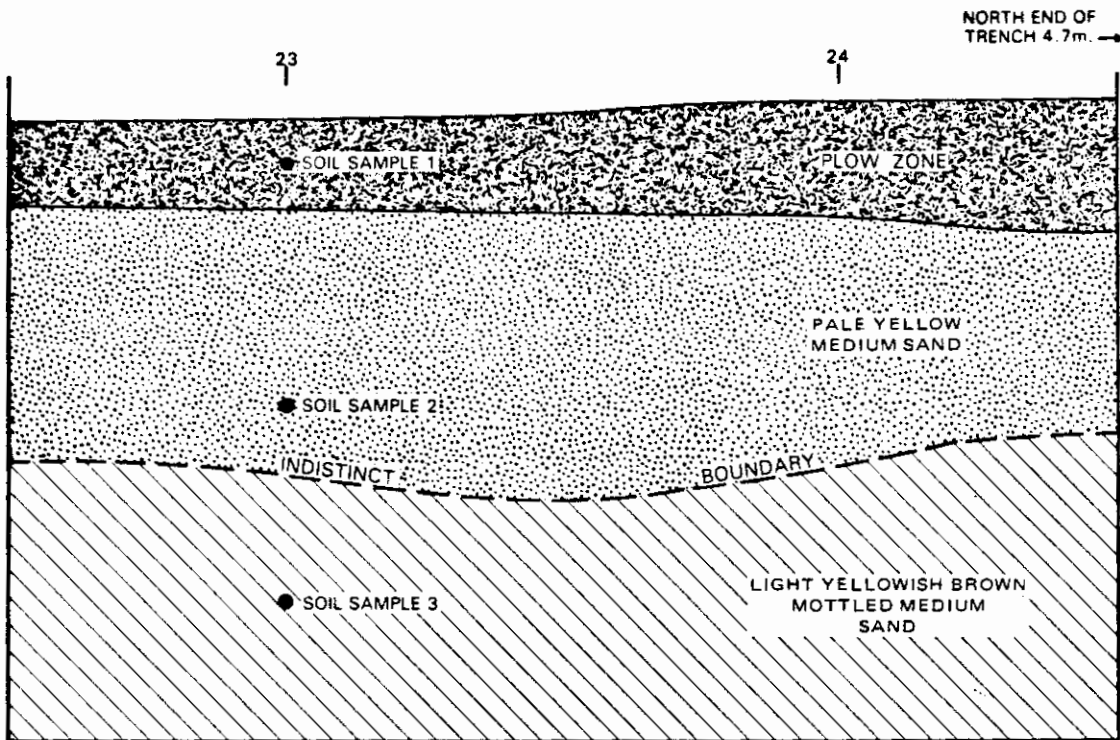


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SITE 38LX82 BASE MAP

ALL EXCAVATION UNITS

FIGURE 29



PARTICLE SIZE BREAKDOWN

SAMPLE	GRAVEL	SAND	SILT	CLAY
1	4.81%	89.20%	6.0%	
2	5.77%	85.63%	8.23%	0.37%
3	11.13%	82.08%	6.79%	

- S.S. 1 GRAYISH BROWN (10 YR 5/2) MEDIUM SAND
- S.S. 2 PALE YELLOW (2.5 Y 7/4) MEDIUM SAND
- S.S. 3 LIGHT YELLOWISH BROWN (2.5 Y 6/4) MOTTLED. MEDIUM SAND

SOURCE: C.A.I. Field Survey, 1978.
 SOILS ANALYSIS: Dr. Michael Katuna, Dept. of Geology
 The College of Charleston.



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SITE 38LX82 SOIL PROFILE

SEGMENT OF MAIN TRENCH, NORTH END OF SCATTER

FIGURE 32

by two meter test units were then systematically dispersed over the scatter using baselines laid down with a transit and triangulating in the remaining units with two 30 meter fiberglass tapes. A datum, consisting of a 90 cm piece of half inch iron rebar, was driven flush with the ground immediately south of a dirt farm road running by the site. Using a transit and stadia rod, the elevation and distance to all of the excavation units were determined, and the datum was tied in to points on the nearby barn and to a telephone pole 50 meters east of the scatter. Fifty-five separate sightings were made over the site area, and were used to prepare the site base map (Figure 29).

The plowzone from each of the ten one by two meter pits at 38LX82 was removed as a unit, with arbitrary 10 cm levels opened into the subplowzone in four of the units. All fill was passed through one quarter inch mesh. The site assemblage was found to lie entirely within and immediately at the base of the plowzone, with no artifacts recovered more than two or three centimeters into the subplowzone deposits. To check for the possibility of subplowzone features, or deeply buried artifact-bearing strata, a backhoe trench 30 meters long and 0.6 meters wide was opened across the site, through the area of maximum artifact density (Figure 31). The trench was opened to a depth of from one to one and a half meters along its entire length, with no evidence observed for subplowzone artifacts or features. Below the plowzone, the soil profile was found to consist of hard-packed medium sands with increasing amounts of gravel with depth (Figure 32). Inspection of the drainage ditch cut immediately west of the site, which had been opened to a similar depth, revealed identical stratigraphy.

Over the course of the fieldwork at 38LX82, artifacts were collected from the surface around each of the units, and were assigned a general collection provenience number corresponding to the number of the nearest pit. After all of the units had been opened, an intensive surface collection was made, again with all artifacts bagged as a grab sample in relation to the nearest pit.

THE DATA ASSEMBLAGE (SITE 38LX82)

A total of 491 individual specimens were collected from 38LX82 in 1974, 1975, and 1978, the vast majority (N = 453, 92.3 percent) from the 1978 data recovery operations (Table 9). A moderate amount of fired clay (838.7 grams) and brick (96.6 grams) was also recovered, all from

TABLE 9
 SITE 38LX82 ARTIFACT ASSEMBLAGE
 SOUTHEASTERN COLUMBIA BELTWAY PROJECT
 DATA COLLECTED 1974 THROUGH 1978

<u>Category</u>	<u>Frequency</u>	<u>Weight</u>
Fire-Cracked Rock	248	1689.2g
Ferruginous Sandstone (Unmodified)	9	18.3g
Fired Clay	-	838.7g
Brick		96.6g
Pottery	2	4.6g
Sand	(2)	
Debitage and Cores	120	168.1g
Quartz	(117)	(166.9g)
Chert	(2)	(0.7g)
Quartzite	(1)	(0.5g)
Tools and Miscellaneous Artifacts	112	-
Retouched Flakes	(6)	
Arrows and Darts	(5)	
Hammerstones	(3)	
Other Formal Tools	(7)	
Miscellaneous (Unusual) Artifacts	(91)	
Total Artifacts	491	2815.5 ⁻¹

-1 Does not include tools and miscellaneous artifacts.

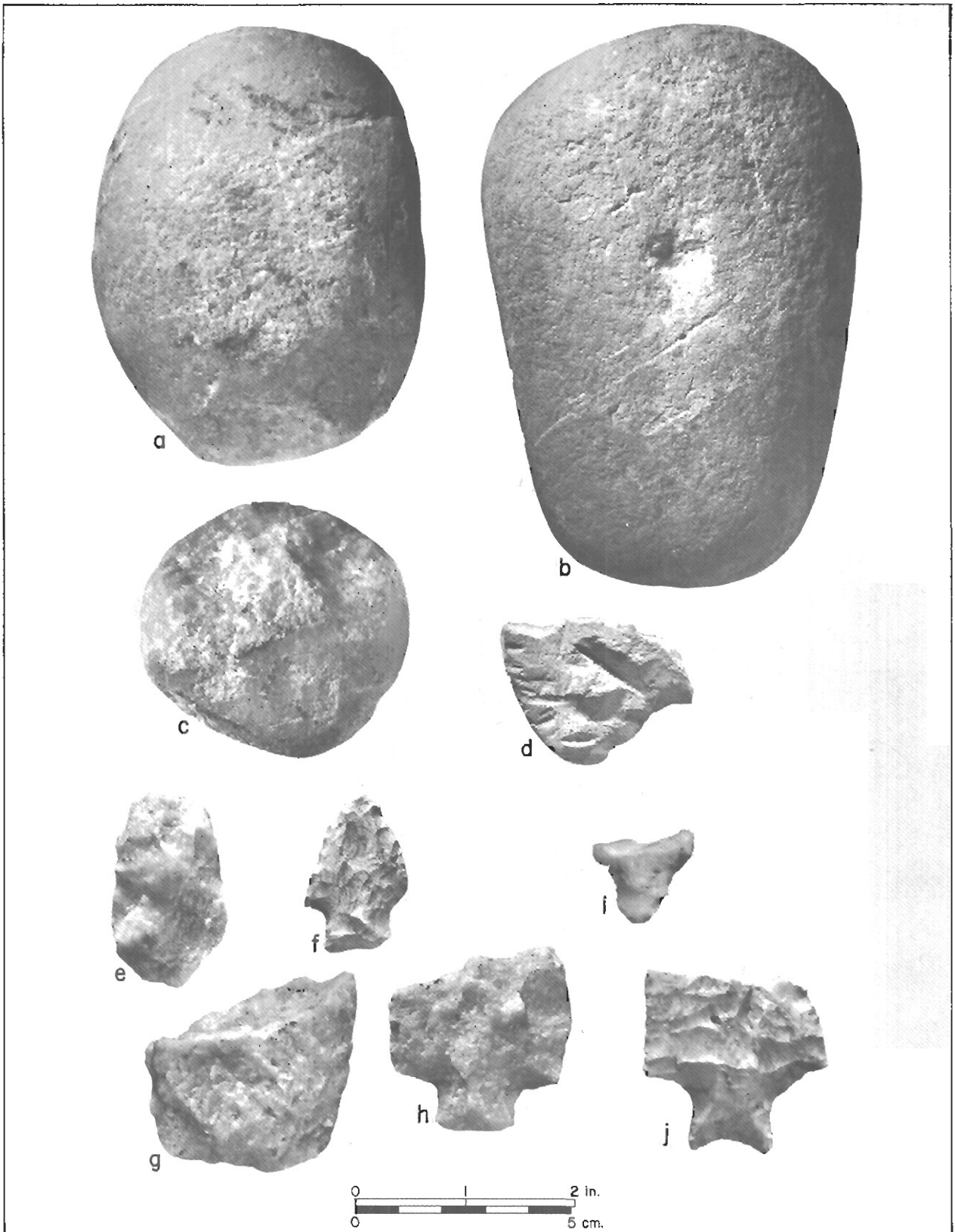


FIGURE 28 — Bifaces, cobble tools, and miscellaneous artifacts from sites 38LX82 and 38LX106. a, c hammerstone/mauls, 38LX82; b hammerstone, pitted cobble/anvil tool, 38LX82; d carved steatite disk fragment, 38LX82; e crude hafted biface or preform, 38LX82; f Otarre Stemmed-like biface, 38LX82; g bifacial knife or preform fragment, 38LX82; h Savannah River Stemmed biface base, 38LX82; i hafted biface basal fragment, 38LX106; j Savannah River Stemmed biface base, 38LX106.

Proveniences: 38LX82: (a, b, d, e, h) general surface; (c) surface by EU10, (f) EU1, plowzone; (g) EU10, plowzone. 38LX106: (i, j) general surface.