

FIGURE 18 – Retouched unifacial and bifacial tools, and unusual abraded cobbles, from 38LX5. a, h, k, n, u flakes exhibiting unifacial edge damage (wear retouch); c unifacial graver; i, j, m steeply chipped unifaces; 1 possible denticulate; f, g blade-like flakes exhibiting unifacial wear retouch; r, t spokeshaves; o, p bifacial (arrow?) preforms; s, t, v crude bifaces exhibiting wear or intentional retouch along one or more margins; b, d grooved abrading tools; e possible pecked netsinker or bolas stone.

Proveniences: (a) F4 (b) general surface (c) CSC30 (d) EU5, plowzone (e) GS19 (f) EU40, 0.20cm (g) F4 (h) Block 4, general surface (i) GS12 (j) EU25, 22.51cm (k) EU21, 24.40cm (l) EU10, plowzone (m) EU5, plowzone (n) Block 4, general surface (o) EU5, 20.40cm (p) EU5, 20.40cm (q) GS37 (r) Block 1, general surface (s) EU42, 0.30cm (t) GS28 (u) EU21, 24.40cm (v) GS24.

Some variation in raw material selection and use is evident over the 38LX5 retouched flake assemblage. The majority of the assemblage is quartz (53.9 percent) with chert (38.2 percent) the second most popular raw material. Only minor selection appears to have occurred for other raw materials. Functional use of the two primary raw material forms appears to have differed somewhat, although both chert and quartz retouched flakes were similar in size (average weight) and in the average number of working surfaces per tool. The working edge angles differed between the two raw material types, however, with the average for chert, at 33° , considerably lower and more acute than the average of 41° noted on the quartz retouched flakes. The difference in edge angles suggests that chert flakes may have been more commonly selected for cutting functions, perhaps to take advantage of the comparatively sharper edges characteristic of this more homogeneous, isotropic raw material. Quartz, on the other hand, is somewhat more difficult to flake to a sharp edge, due in part to the presence of numerous small internal flaws characteristic of transported cobbles. When flaked, however, quartz is more wear resistant than chert, and may have been used in more heavy-duty or multi-task functions, something also suggested by the higher edge angle.

The summary measurements for the retouched flake assemblage indicate an overall orientation towards low functional angles, regardless of the raw material selected. If materials other than quartz or chert were selected, however, the resulting tools did tend to be somewhat larger in average size, with steeper working angles and more functional edges per specimen. A deliberate selection for cortical flakes, possibly to provide backing, is also apparent over the retouched assemblage. Thirty-five of the 102 tools (34.3 percent) summarized in Table 6 are on decortication flakes, a much higher percentage than the incidence of decortication flakes (11.4 percent) in the unmodified assemblage (Table 4).

The single graver recovered on the site (Figure 18:c) was composed of chert, was plano-convex in cross section, and had a 2.0 mm long bifacially isolated spur with a rounded tip. The artifact came from controlled surface collection Circle 47 at the southeast end of the site, near the Woodland pottery concentration in Block 1. One well defined spokeshave-like tool (Figure 18:r) was recovered from the site, although a number of other unifacially and bifacially worked specimens had suspicious concavities present that may have served a similar function (e.g. Figure 18:t). The clear example is from the Block 1 general surface collection. It was made on a flat quartz flake and had three notches which all measured 8 mm wide by 2 mm deep. Between two of the notches a unifacially worked edge 2.1 cm long indicated that the object

may have served as a multifunctional tool. The final unifacial tool category, steeply chipped unifaces, consisted of four specimens, three of quartz and the fourth of rhyolite (Figure 18:i,j,m). Edge angles varied from 40 to 90°, with considerable variation apparent on each specimen. None of these tools was particularly well made, and each appeared to reflect opportunistic retouch of a suitably shaped flake. Three of the four steeply chipped unifaces, and 63 of the 102 retouched flakes recovered in 1978 came from the surface or plowzone. The overall distribution suggests somewhat greater flake tool use during later (post-Archaic) periods on 38LX5.

COBBLE TOOLS AND ABRADERS

A total of 92 cobble tools and abraders were recovered at 38LX5, including 40 hammerstones and hammerstone fragments, six pitted cobbles, six possible abraded faceted cobbles, 39 possible ferruginous sandstone abraders, and one possible grinding basin. Except for the abraded faceted cobbles, which came predominantly from the subplowzone levels, most of the cobble tools came from the site plowzone or surface, indicating more extensive use of these tool forms during later (post-Archaic/Woodland) times. Seventeen intact and 23 fragmentary hammerstones were recovered; all but four, or 90 percent, were composed of quartz. The average weight of the intact specimens (N = 16) was 156.8 grams, and each had from one to five battered areas present, with an average of 2.75. One specimen (Figure 18:e) was excluded from the analysis because it had a highly unusual, grooved margin and appeared to have been an intentionally shaped weight or bolas stone. While some of the specimens are extensively battered, most exhibited one or a few small (under 2 cm diameter) localized zones of battering on prominent edges. The pitted and crushed appearance of these tools, together with the localized battering, argues for use in knapping functions. Twenty-four of the 40 recognizable hammerstones and fragments recovered at 38LX5 came from the surface and plowzone.

Six pitted cobbles were recovered at 38LX5, five of which exhibit rough, battered pits indicative of use as anvil stones, and one (Figure 19:l) with two smooth pits on opposite faces that may have functioned as a "nutting" stone. All of the tools were made of quartz, and three exhibited battering in one or more areas suggesting use as a hammerstone. The two intact specimens were moderately large, weighing 431.5 and 625.7 grams. Five of the six pitted cobbles came from the site surface or plowzone, suggesting a post-Archaic age for most or all of the tools.

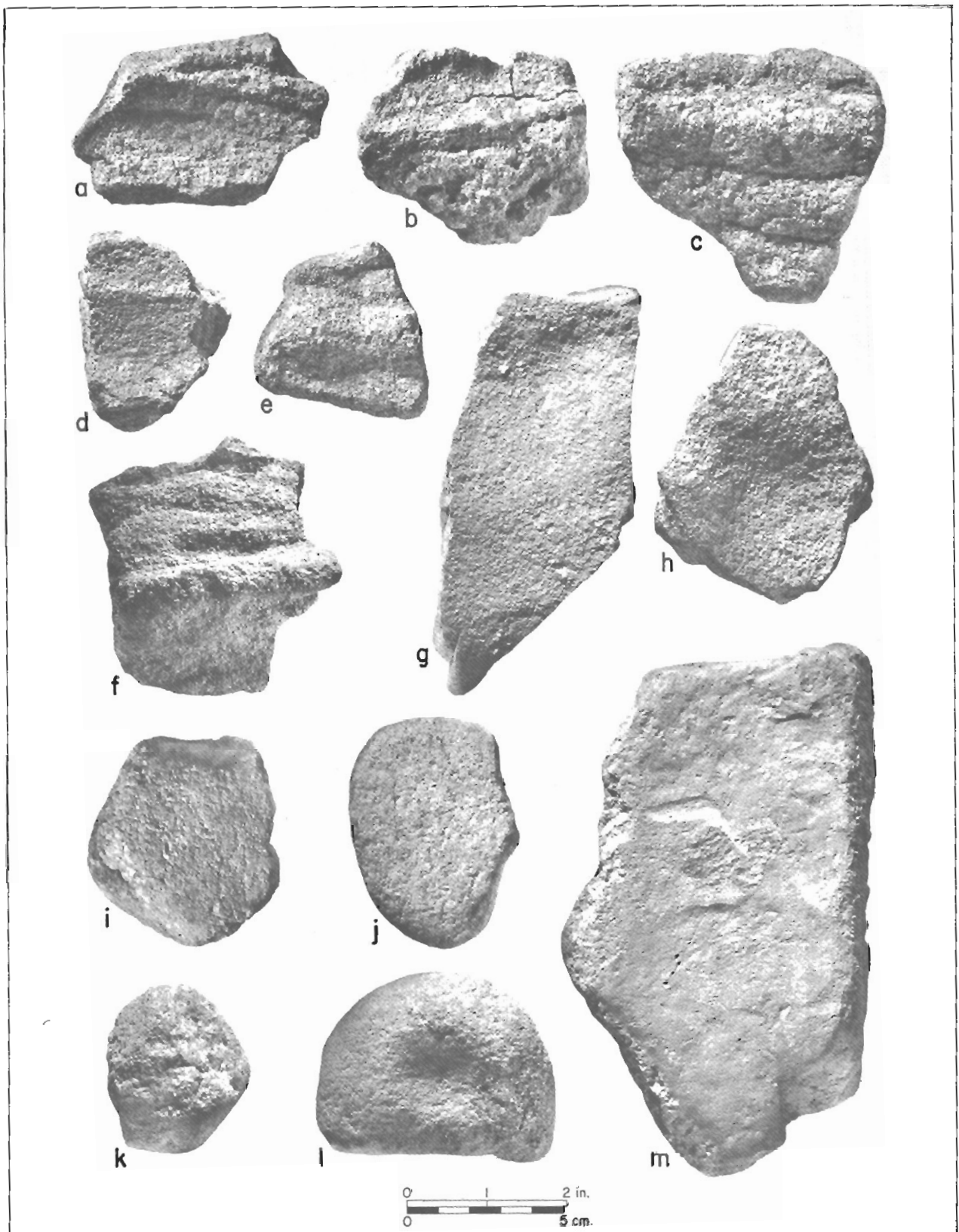


FIGURE 19 — Cobble tools and abraders from 38LX5. a-h possible ferruginous sandstone abraders; i, k hammerstones; j possible abrader faceted cobble; l pitted cobble; m possible grinding slab or basin.

Proveniences: (a) EU32, 40-61cm (b) F1 (c) F4 (d) F1 (e) Block 4, general surface (f) EU3, 20-40cm (g) Block 4, general surface (h) Block 1, general surface (i) GS21 (j) GS35 (k) CSC17 (l) GS6 (m) GS13.

Six cobbles were also recovered that exhibited possible smoothing or abrading facets on one or more surfaces (Figure 19:j). Four were composed of quartz, one of rhyolite, and one of an unidentified metamorphic material. The category consisted of all raw materials, exclusive of ferruginous sandstone, which was treated separately. The metamorphic specimen exhibited a well defined facet (Figure 18:b), and may have been used specifically for tool edge preparation, or for abrading small objects, as evidenced by the size of the facet (6.0 x 1.7 x 0.4 cm). Most of the other specimens in this category have only questionable facets that might be due to weathering. A similar weathered appearance characterized the one possible grinding basin (Figure 19:m) recovered, from near controlled collection Unit 13 at the north end of the site. This specimen, which weighed 1205.3 grams, consisted of a metamorphic fine-grained ferruginous sandstone like material. The "basin" area was poorly defined due to heavy weathering, and the facet may be naturally rather than intentionally produced. The raw material, however, is not indigenous to the site area and was imported for some purpose. Five of the six abrader faceted cobbles, and the possible grinding basin, came from the plowzone.

The final category of cobble tools recovered at 38LX5 were ferruginous sandstone abraders. A total of 39 specimens were found, 13 from the surface or plowzone, and the remainder from subplowzone levels or features. Typically these specimens are angular, fragmentary, and heavily weathered in appearance (Figure 18:d; 19:a-h). The predominantly subplowzone distribution of the possible tools argues for use during the Archaic; with the advent of pottery, sherds may have been substituted for use as abraders, although no clear examples were noted at 38LX5. Some post-Archaic continued use of the material, for abrading or for pigment, appears indicated by the plowzone specimens. The unmodified ferruginous sandstone, as noted previously, is evenly distributed between the plowzone and subplowzone units (Table 2), additional evidence for post-Archaic use of the material. Working surfaces include circular depressions, flattened facets, and U and V shaped grooves. Twenty-two of the specimens came from feature areas, arguing for other than natural modification, although the weathered appearance of most of the specimens make conclusive statements about (abrading) function impossible to put forth with confidence. Use of these objects, with their sandpaper-like texture, may have been in abrading wood, bone, or even stone (platform preparation). Some of the specimens, particularly those characterized by oval or circular depressions, present a palette-like appearance, and may have been abraded for (red) pigment (Figure 19:g,h).

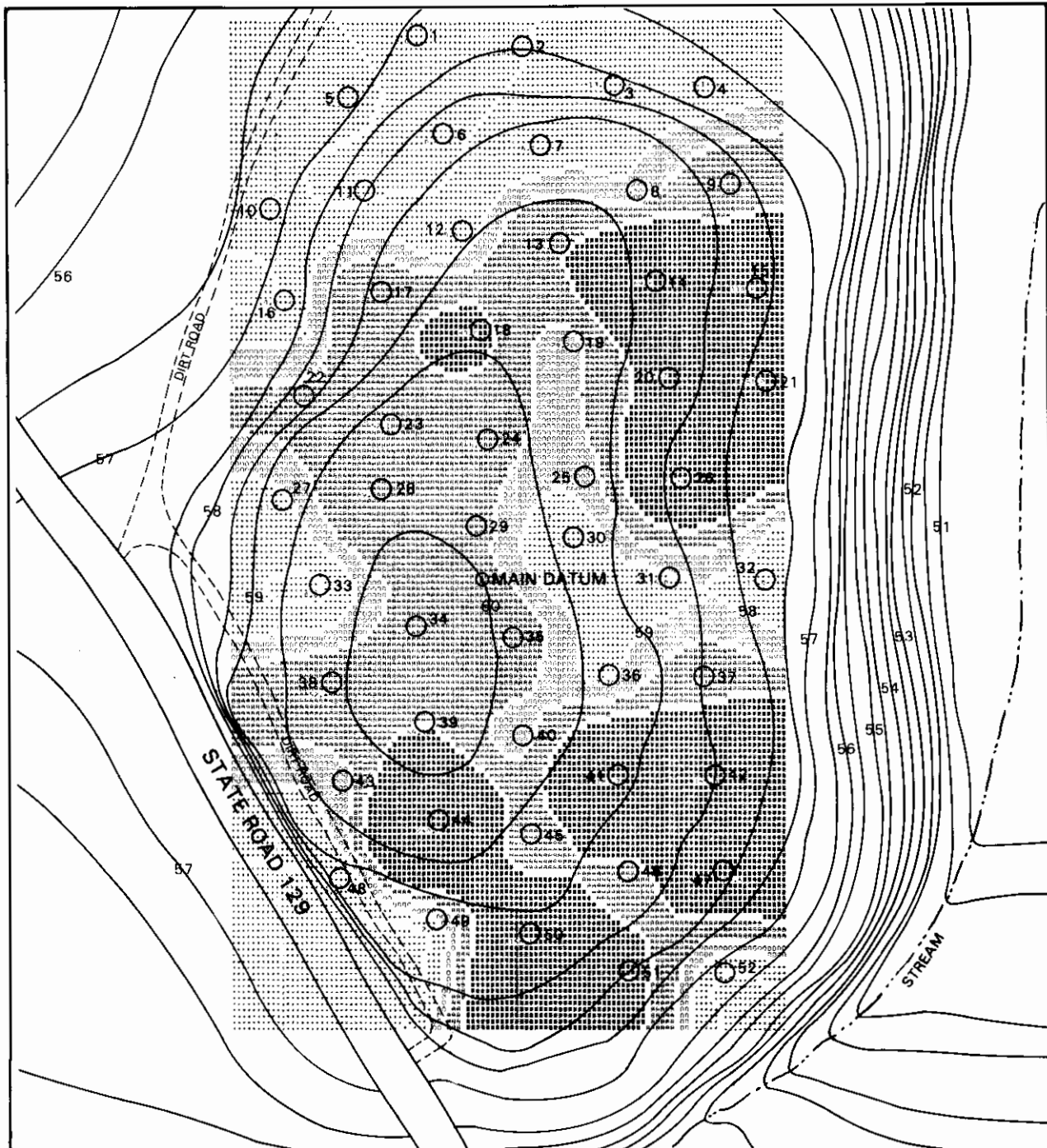
MISCELLANEOUS LITHIC ARTIFACTS

In addition to the formal stone tool categories described above, a number of unusual lithic artifacts were recovered at 38LX5. Five small fragments of steatite were recovered in EU35, from 44 to 60 cm, near Feature 5, which was tentatively assumed to be Middle Archaic in age. This suggests a possible Middle Archaic age for the steatite, although the association of the material with the feature, and even the exact age of the feature, are uncertain. Where steatite has been recovered in the general region, it is almost invariably associated with Late Archaic and/or Early Woodland remains, suggesting that possibly both the steatite and Feature 5 date to this period (cf. Coe 1964, Keel 1976, Anderson, Lee and Parler 1979). Twenty-three fragments of unmodified sandstone were recovered from the units, but little can be inferred about either function or possible periods of association. The material does not occur locally and appears to have been imported, possibly as part of larger, cobble tools.

Forty small fragments of gneiss were recovered, all but one from excavation units. Aboriginal use of this non-local, Piedmont material is probable, but exactly how or in what functions cannot presently be determined. One small lump of hematite, possibly a fragment of red ocher, was found in EU19 below the plowzone. Very few artifacts were found in association, however, and the implications of this specimen remain obscure. It may, in fact, be a natural formation; ferruginous concretions were previously noted as common to some soils in the site area (Chapter 3; Lawrence 1976:19). The final category, split gravel, was represented by only four specimens, three of which came from the surface, and one from the subplowzone. These objects may reflect plow or shovel damage rather than aboriginal behavior; their low overall incidence precludes much importance on the site.

CERAMIC ARTIFACTS

A total of 2044 potsherds, weighing 9041.1 grams, and 213.9 grams of fired clay were recovered at 38LX5. None of the fired clay was clearly identifiable as daub, and the distribution, similar to that for fire-cracked rock, suggests an origin in hearth fill. The pottery assemblage was recovered predominantly from the surface and plowzone areas, with only 1712.5 grams, or 18.9 percent, from subplowzone levels in the test pit and block units. The spatial distribution of the pottery assemblage was with most of the material occurring in an arc encompassing the southern, western, and northeastern portions of the site (Figure 20). Only one major section of the scatter, at the east central



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

MINIMUM	1.00	1.11	1.22	1.33	1.44	1.55	1.66	1.77	1.88	1.99
FREQUENCY	1	1	1	1	1	1	1	1	1	1
LEVEL	1.00	1.11	1.22	1.33	1.44	1.55	1.66	1.77	1.88	1.99
SYMBOLS



SOUTH CAROLINA

0 10 20 30 METERS

50 CM. Contour Interval

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SITE 38LX5 BASE MAP
CONTROLLED GRAB SURFACE COLLECTION
ALL POTTERY — WEIGHT IN GRAMS
FIGURE 20



edge of the knoll, was generally devoid of ceramics. The pottery distribution was similar to that for fire-cracked rock (Figure 17), and it is possible that the two categories are byproducts of cooking and/or habitation activity.

The pottery assemblage was sorted into five paste and twelve surface finish categories (Table 7) as described in Chapter 3, with a nondiagnostic category used to accommodate specimens of doubtful paste or finish. Sherds in the non-diagnostic category (N = 822) were usually small and weathered. The majority of the assemblage (54.8 percent) was characterized by sand paste, while plain (58.4 percent) was the most common finish encountered. On typological grounds, artifacts from at least four more groups were present, Thom's Creek (N = 13), Deptford (N = 314), Cape Fear (N = 174), and Chicora (N = 3) (Figures 21 and 22).

Most of the assemblage appears to date to the Woodland period, with only small quantities of Late Archaic (Thom's Creek) and Mississippian (Chicora) pottery present in the scatter. The Deptford and Cape Fear wares are scattered over the arc described previously, and generally occur together. The Thom's Creek material is somewhat more clustered, with most of the sherds occurring in the north central part of the site, to the northeast and east of the central knoll. The three Mississippian sherds occur at opposite ends of the scatter, one in the northern (Circle 25 area) and the other two in the southern (Circle 43 area) part of the site.

Examination of paste/surface finish combinations over the assemblage (Table 7) indicates a number of apparent selection practices. The most obvious pattern was the ubiquitous presence of sand paste over all of the finish categories. The widespread temporal occurrence of this paste strongly argues for the extended exploitation of similar (sandy) clay sources. Plain, cord marked, and linear check stamped finishes tend to occur over all paste categories, however, suggesting that at least some of the observed paste variation may also be due to the exploitation of different clay sources by the same groups of people. This is likely in the case of the linear check stamped material, since this finish is unambiguously associated with only one period, the Early Woodland, in the area (e.g. South 1976).

The presence of small micaceous inclusions was also noted over several finish categories; if these inclusions reflect a Piedmont clay source, then some movement of people or pottery from that area is indicated. One paste, the coarse sand/grit category, appears to be associated almost exclusively with plain, cordmarked, and fabric impressed pottery. This may be an idiosyncratic phenomenon, possibly vessel or pottery specific, but it may also point to a

TABLE 7
 SITE 38LX5
 CERAMICS: PASTE, FINISH AND TYPOLOGICAL AFFILIATIONS

<u>Finish</u>	<u>Coarse Sand/Grit</u>		<u>Mica</u>	<u>Red Clay</u>	<u>White Clay/Grog</u>	<u>Total</u>	<u>Typological Affiliation</u>
	<u>Sand</u>	<u>Grit</u>					
Random punctate	1					1	Thom's Creek
Drag and jab punctate	5		1			6	Thom's Creek
Linear Separate punctate	5		1			6	Thom's Creek
Incised	1	1		2		4	?
Linear check stamped	218	1	5	1	11	236	Deptford
Bold check stamped	52					52	Deptford
Fine check stamped	20					20	Deptford/Chicora
Simple stamped	5	1				6	Deptford
Fabric impressed	6	3	1	1		11	Cape Fear
Cord marked	91	20	9	33	10	163	Cape Fear
Complicated stamped	3					3	Chicora
Plain	<u>263</u>	<u>288</u>	<u>34</u>	<u>85</u>	<u>44</u>	<u>714</u>	?
	670	314	51	122	65	1,222	

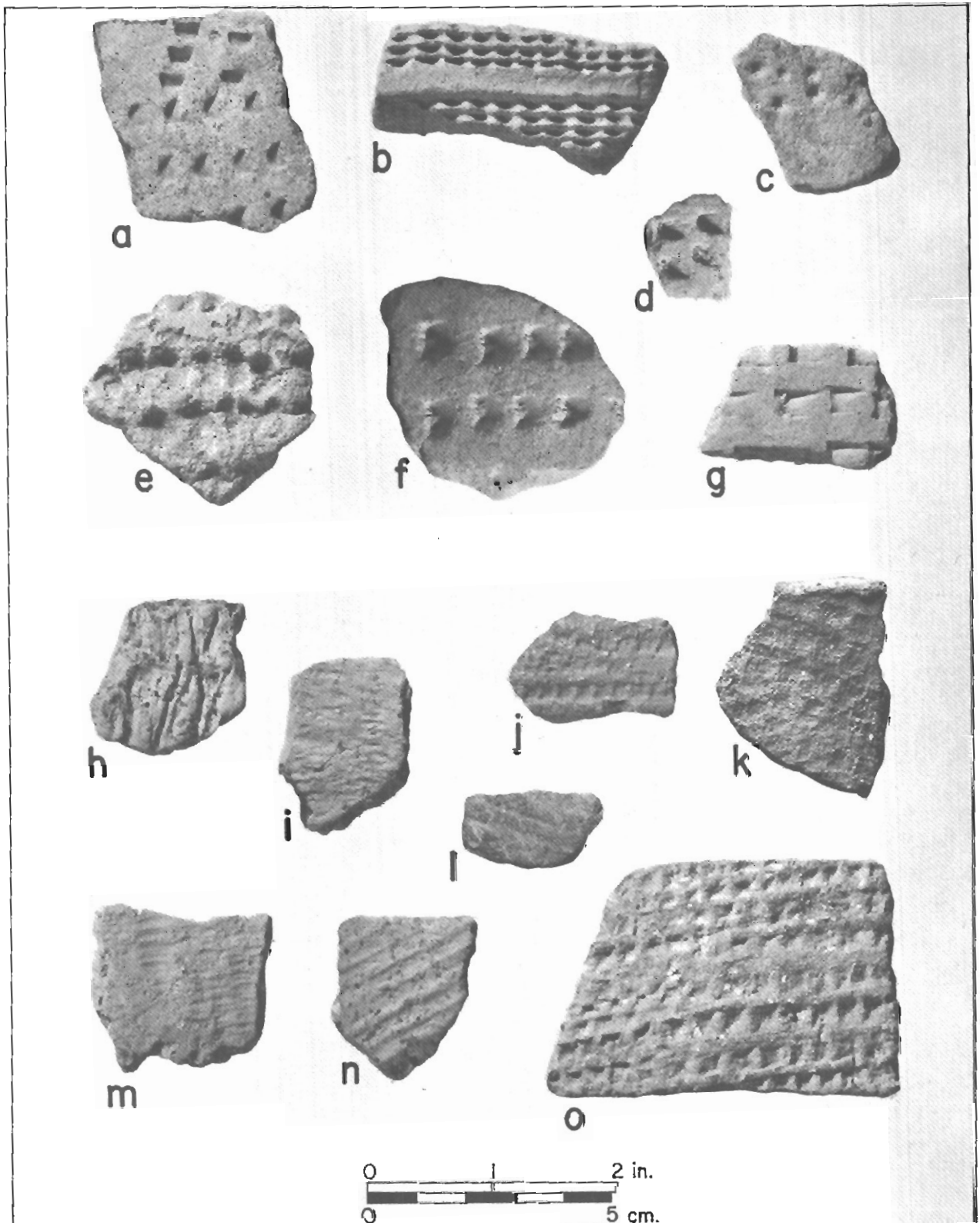


FIGURE 21 — Thom's Creek, Deptford, and (possible) Cape Fear ceramics from 38LX5. a, c Thom's Creek sherds exhibiting random punctations; b, e, g Thom's Creek sherds exhibiting drag and jab punctations; d, f Thom's Creek sherds exhibiting linear separate punctations; h Cape Fear (?) cord marked; i, m Cape Fear (?) fabric impressed; l, n Deptford (?) simple stamped; j, k, o Deptford linear check stamped. a, b sand paste with micaceous inclusions; c- g sand paste; h, i, m, n coarse sand/grit paste; j- l, o sand paste with white clay/grog inclusions.

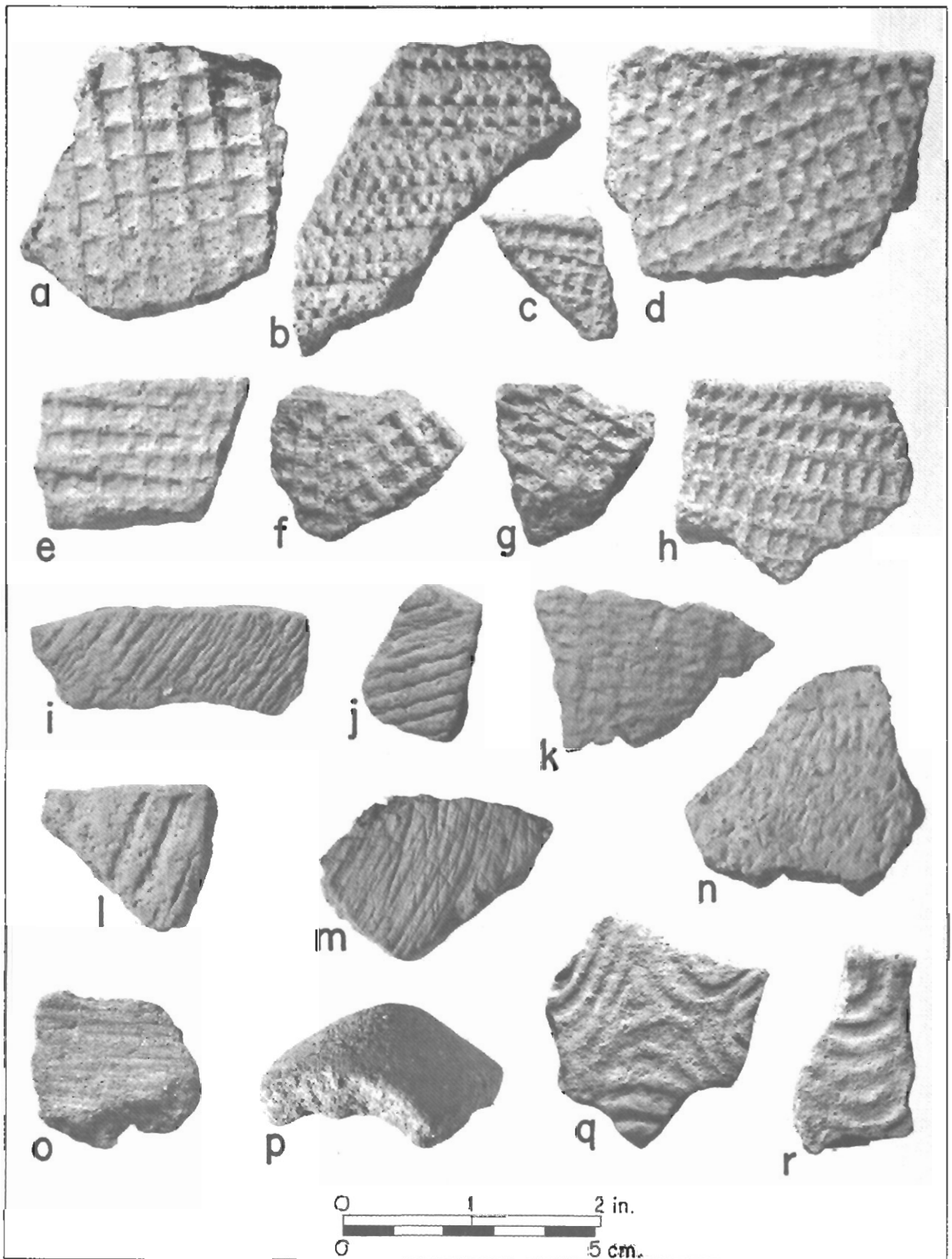


FIGURE 22 — Probable Deptford, Cape Fear, and Chicora ceramics from 38LX5. All of the sherds were characterized by sand paste. a Deptford (?) bold check stamped; b-e, h Deptford linear check stamped; f, g Deptford (?) check stamped; i, j, l, m Cape Fear cord marked; k, n Cape Fear fabric impressed; o incised; p plain pottery base fragment; q, r Chicora complicated stamped.

temporally or behaviorally discrete ware or group of wares. This paste appears to be a temporally early ware at 38LX5. Eighty-one sherds with coarse sand/grit paste were recovered in the 27 random sample units, 36 (44.4 percent) in subplowzone levels. The other four paste categories, in contrast, were all almost entirely found within the plowzone, suggesting later popularity. The incidence of these other categories in the plowzone was as follows: sand (N = 134; 76.6 percent), sand/red clay (N = 46; 85.2 percent), micaceous (N = 12; 85.7 percent), and white clay/grog (77.3 percent). Given the absence of meaningful stratification, and the small spatial sample collected at 38LX5, however, it is difficult to attribute temporal or behavioral significance to all of the observed paste/finish variation.

CONCLUSIONS: THE 38LX5 SITE ASSEMBLAGE IN RETROSPECT

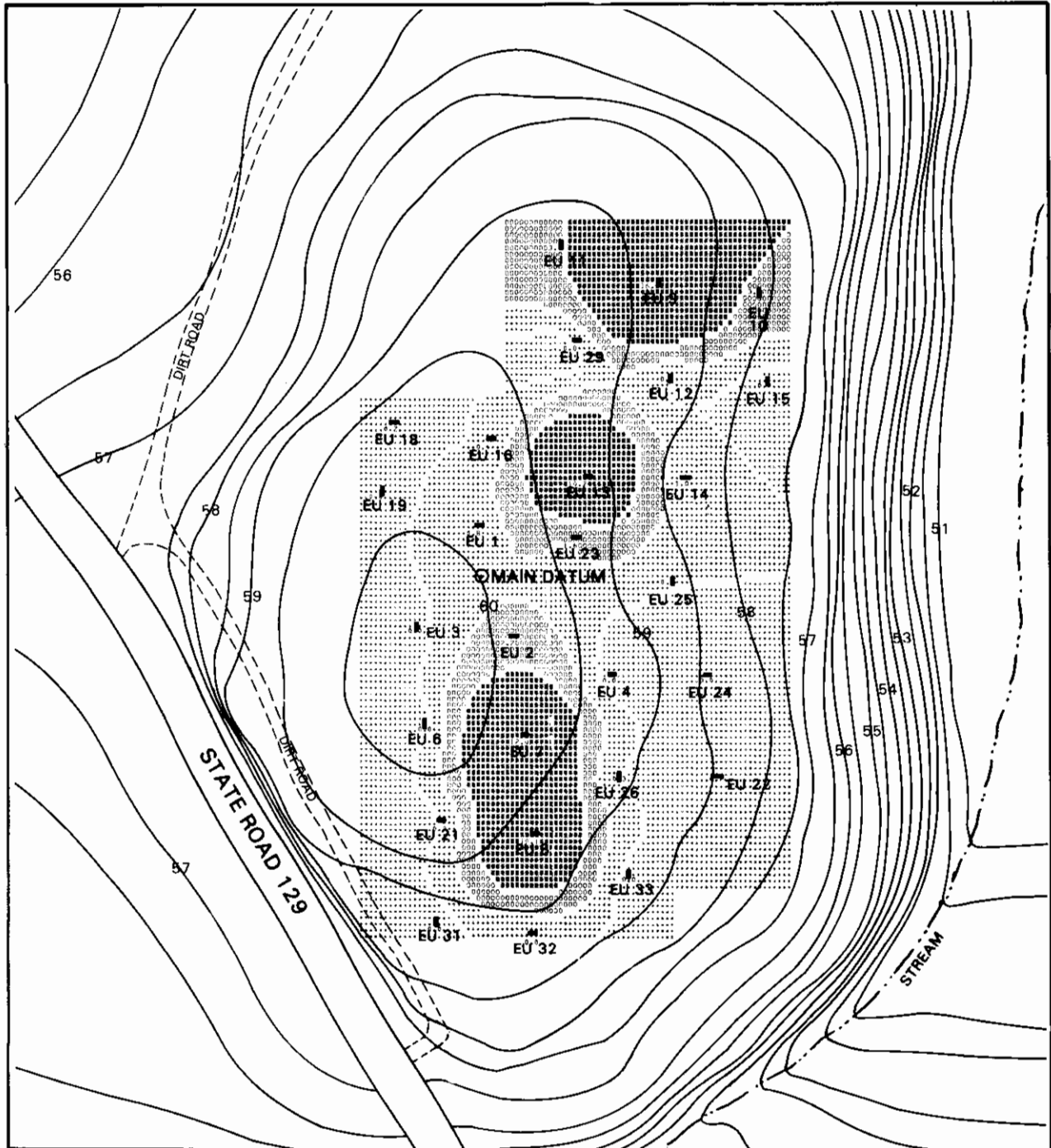
Site 38LX5 was characterized by a series of components dating from the Middle Archaic to the Mississippian period. The major period of site use, as evidenced by the ceramic and lithic assemblage, appears to have been during the Woodland period, from roughly 1000 or 1500 BC to about AD 500 to 1000. Even during this primary period of use, evidence for extended occupation is minimal; the Woodland (and other) features found on the site are small hearth or chipping/working floor clusters. No clear evidence for structures was noted, and the overall lithic assemblage, largely bifaces, hammerstones, abraders, acute angled flake cutting tools, and later stage manufacturing/reduction debris, suggests repeated, relatively short-term use of the site area in hunting/butchering activity (cf. Ferguson 1976, House and Wogaman 1978).

The 38LX5 analysis provides a tentative picture of prehistoric use of the upland/sandhills environment. The artifact assemblage recovered at 38LX5 is fairly uniform over most of the deposits, suggesting roughly similar patterns of site use over time. The overall assemblage suggests use of the site as an extraction locus probably related to hunting/butchering, given the relatively narrow range and functional orientation of the tools and debitage encountered. The quantities of fire-cracked rock and pottery encountered are considerably greater than predicted for short-term extraction loci (cf. Ferguson 1976, House and Wogaman 1978), however, and may point to seasonal, rather than shorter term occupation. The vast majority of the fire-cracked rock is in the subplowzone, while the pottery occurs mainly in the plowzone. The two distributions are similar over the site, suggesting some contemporaneity, and also selection, over time, for the same site areas. The quantity of fire-cracked rock during earlier periods may indicate somewhat

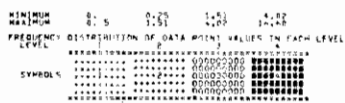
extended site use, even if not on a seasonal or year round basis. The incidence of cobble tools recovered in the plowzone suggests that a greater range of activities may have been occurring on the site during later times. Most of these cobbles are hammerstones, however, and may complement a hunting station tool kit. The complete absence of evidence for structures in the areas examined, however, coupled with the infrequent occurrence of hearths, points to relatively uncomplicated use of the site. Structures, if present, were almost certainly ephemeral, leaving no traces in the archeological record.

The controlled collection from the site surface, coupled with the excavation samples from the plowzone and subplowzone levels, provide a picture of artifact variation and distribution over the 38LX5 area.

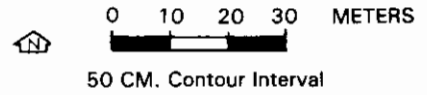
The site distributional data also help document the post-depositional modification of the site assemblage (Figures 23, 24). Comparison of plowzone and subplowzone distributions over most artifact categories, for example, reveals clear patterns of artifact movement due to modern plowing. Artifacts tend to be spread about, and downslope from, major subplowzone concentrations. The site data set, in conclusion, offered the opportunity to explore not only local prehistoric lifeways, but also questions about recovery and analysis techniques of general archeological significance.



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



SOUTH CAROLINA



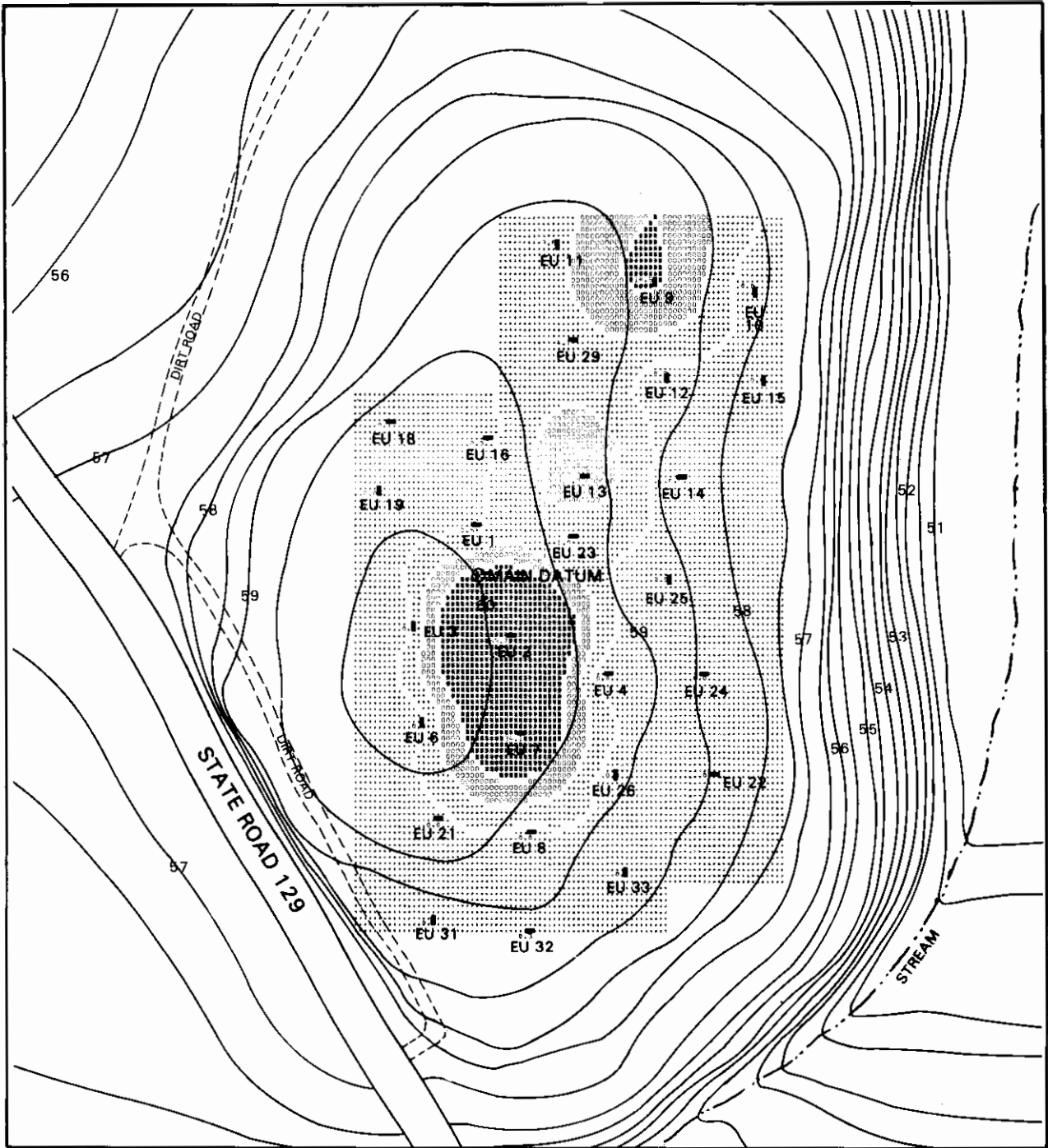
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SITE 38LX5 BASE MAP

PLOWZONE SAMPLE EXCAVATION UNITS
RHYOLITE CORES AND DEBITAGE – WEIGHT IN GRAMS

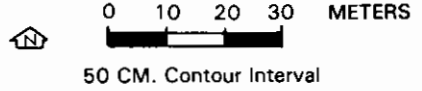
FIGURE 23





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

MINIMUM	0.0	1.00	2.25	10.00
MAXIMUM	1.00	2.25	10.00	100.00
FREQUENCY DISTRIBUTION OF DATA POINT VALUES IN EACH LEVEL				
LEVEL	1	2	3	4
SYMBOLS	[Symbol 1]	[Symbol 2]	[Symbol 3]	[Symbol 4]



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SITE 38LX5 BASE MAP
SUBPLOWZONE SAMPLE EXCAVATION UNITS
RHYOLITE CORES AND DEBITAGE — WEIGHT IN GRAMS
FIGURE 24

