



Figure 112. Photograph taken in 1993 of the approximately 50 ft thick landfill at the edge of Bull Creek.

As previously noted, the riverwalk corridor through the Go-Kart site could not be designed to avoid preserved cultural deposits along the upper edge of the wooded bluff line. Shovel testing and test pit excavation in that area produced evidence of intact cultural deposits consisting of both midden and features. The primary occupations indicated by artifacts from these deposits were Archaic and Early Mississippian (Averett phase). Minor aboriginal components included late Mississippian, Bull Creek phase, and historic Creek. There were also artifacts that dated from the mid-nineteenth through twentieth centuries (Ledbetter 1994b:69). Data recovery was recommended and conducted by SAS in 1994 (Ledbetter 1995c).

The survey of the Bull Creek site was substantially more involved due to the large area to be examined and the extensive filling.

The survey methodology and results will be briefly summarized from the survey report (Ledbetter 1994b). Figure 113 depicts the site at the time of the survey and shows the locations of all collection and testing units.

A visual assessment of the site in 1993 was far from encouraging. The site area showed the scars of years of neglect and abuse. The impact of the 1920s construction of a railroad bridge across the mouth of Bull Creek were clearly seen. Large borrow pits shown in mid-twentieth century photographs and maps were probably excavated to provide fill dirt for construction of the railroad levee and trestle. In the mid-century the area was used for recreational racing and several associated structures were constructed. Modern commercial development has affected the site through grading and filling (Ledbetter 1994b:70).

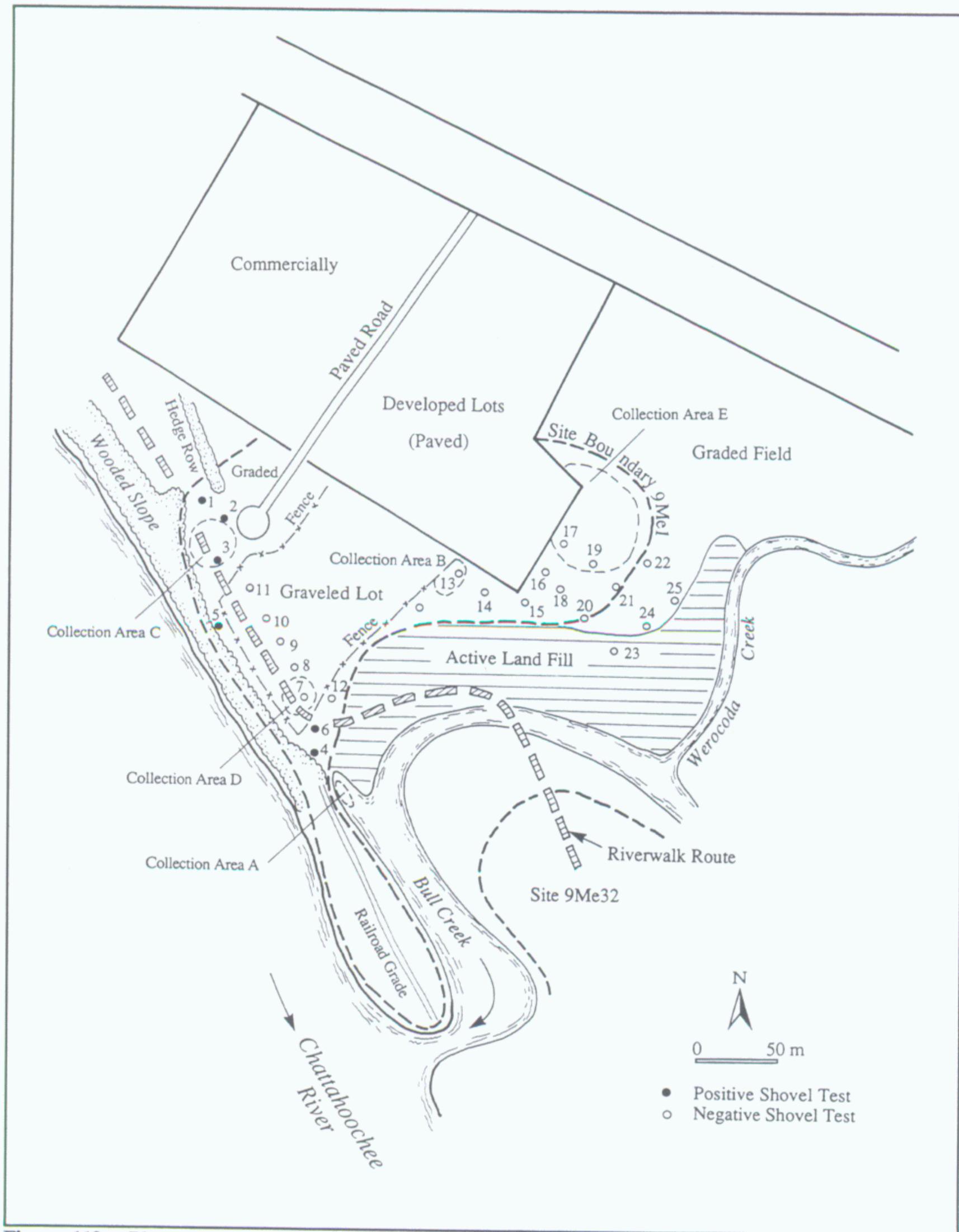


Figure 113. Plan map the Bull Creek site in 1993 showing locations of SAS shovel tests and surface collections.

The Bull Creek Site

A primary task of the present survey was to determine just how much remained of the site since the last investigation nearly 35 years ago. The field archeologists were initially guided through the site area by Columbus Museum's archeologist Frank Schnell. Mr. Schnell provided substantial assistance for interpreting the site by pointing out the general locations of old excavations. Most of the site had been graded and filled since the last excavations but the approximate location of Schnell's 1959 block was ascertained. The primary reference point remaining on the site is the railroad grade and a large depression left from the 1936 excavation of the cemetery.

The Bull Creek site was examined through surface inspection and shovel testing (see Figure 113). A few small pockets of exposed ground were found on the site. These exposed areas were collected separately and designated as separate collection units. Shovel tests were excavated as systematically as possible. The goals of shovel testing were two-fold. First, shovel tests were required to determine the depth of cultural deposits, when present. Second, shovel tests were used to assess the severity of grading and modern filling . . .

In terms of surface exposure, there was generally no correlation with subsurface remains. Across most of the site, artifacts found on the surface represent either displaced material from land clearing or residual material remaining after sheet erosion has removed all soil. The conclusion resulting from the excavation of shovel tests is that only one portion of the site remained preserved. That area lay beneath the old railroad fill. Unfortunately, that portion of the site was being actively eroded away at the time of survey.

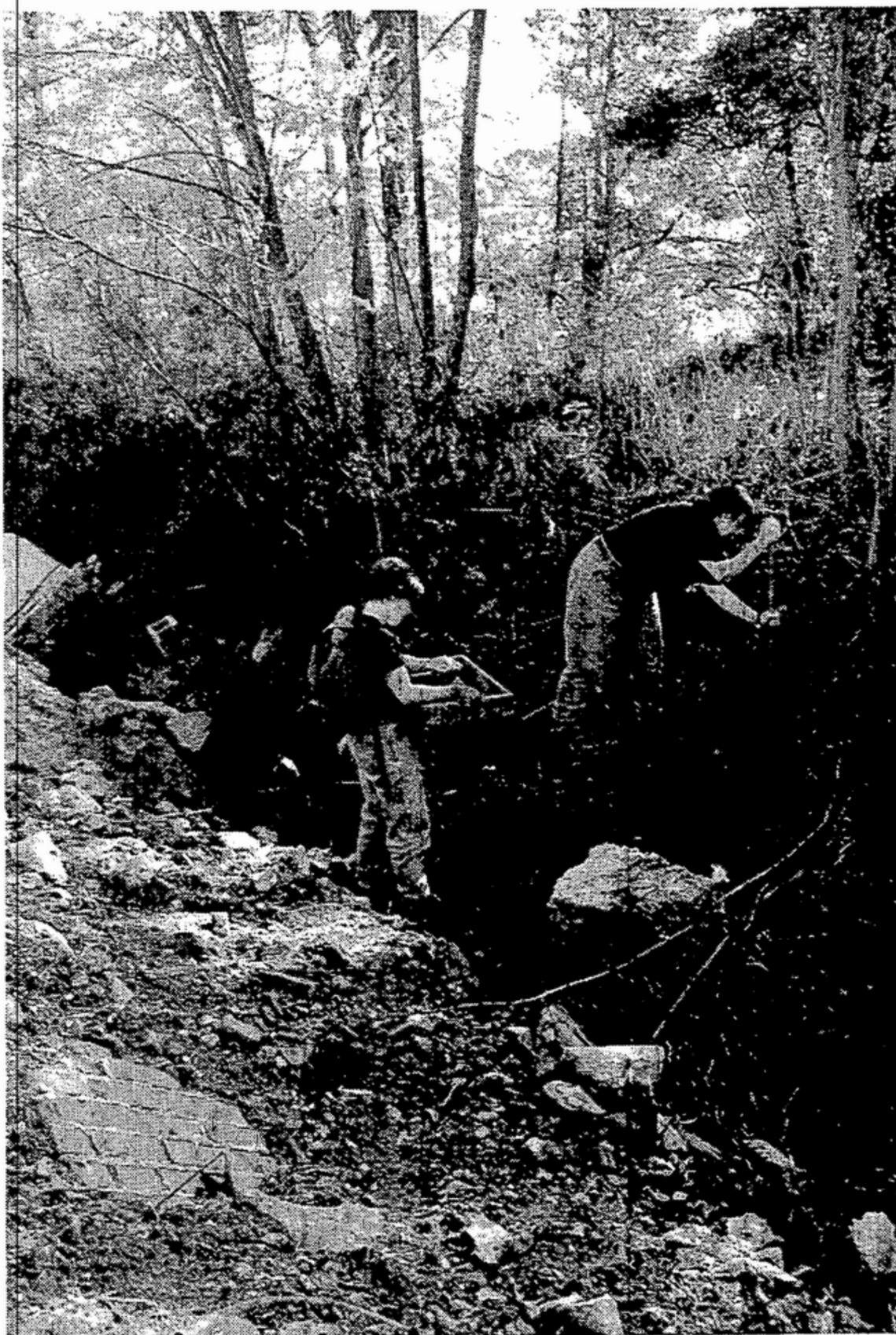


Figure 114. Photograph of 1993 shovel testing (Shovel Test 4) .

The photograph shown in (Figure 114) was taken at the location of Shovel Test 4. Shovel Test 4 represents the northernmost extent of the preserved site area. Because the slumping gully walls to the south of Shovel Test 4 produced ample evidence of an intact site, further shovel tests were not excavated in that direction. The large slump shown in the (Figure 115) photograph begins approximately 5 m south of Shovel Test 4.



Figure 115. 1993 photograph showing the large erosional feature impacting the Bull Creek site (the midden zone is being pointed out by the archeologist).

The Bull Creek Site

The field crew did take advantage of the site erosion to further investigate the site. This investigation included cleaning a section of the gully wall to examine site stratigraphy in the remaining (preserved) portion of the site (Figure 116). This was accomplished by utilizing the area of most recent slumping which was nearly vertical and extended across all soil zones associated with site (Figure 117). Because of the freshness of this slump, little cleaning was necessary to prepare the profile for mapping and photography.

The slumping midden soil at the bottom of the gully was also examined. Several large sherds were found protruding from the boulder-size chunks of soil that had fallen into the gully but much of soil and associated artifacts had obviously been washed away (Ledbetter 1994:79). Table 2 lists artifacts found by the survey crew in the midden slump at the bottom of the gully. The artifacts were recovered by troweling through large boulder-sized chunks of midden.

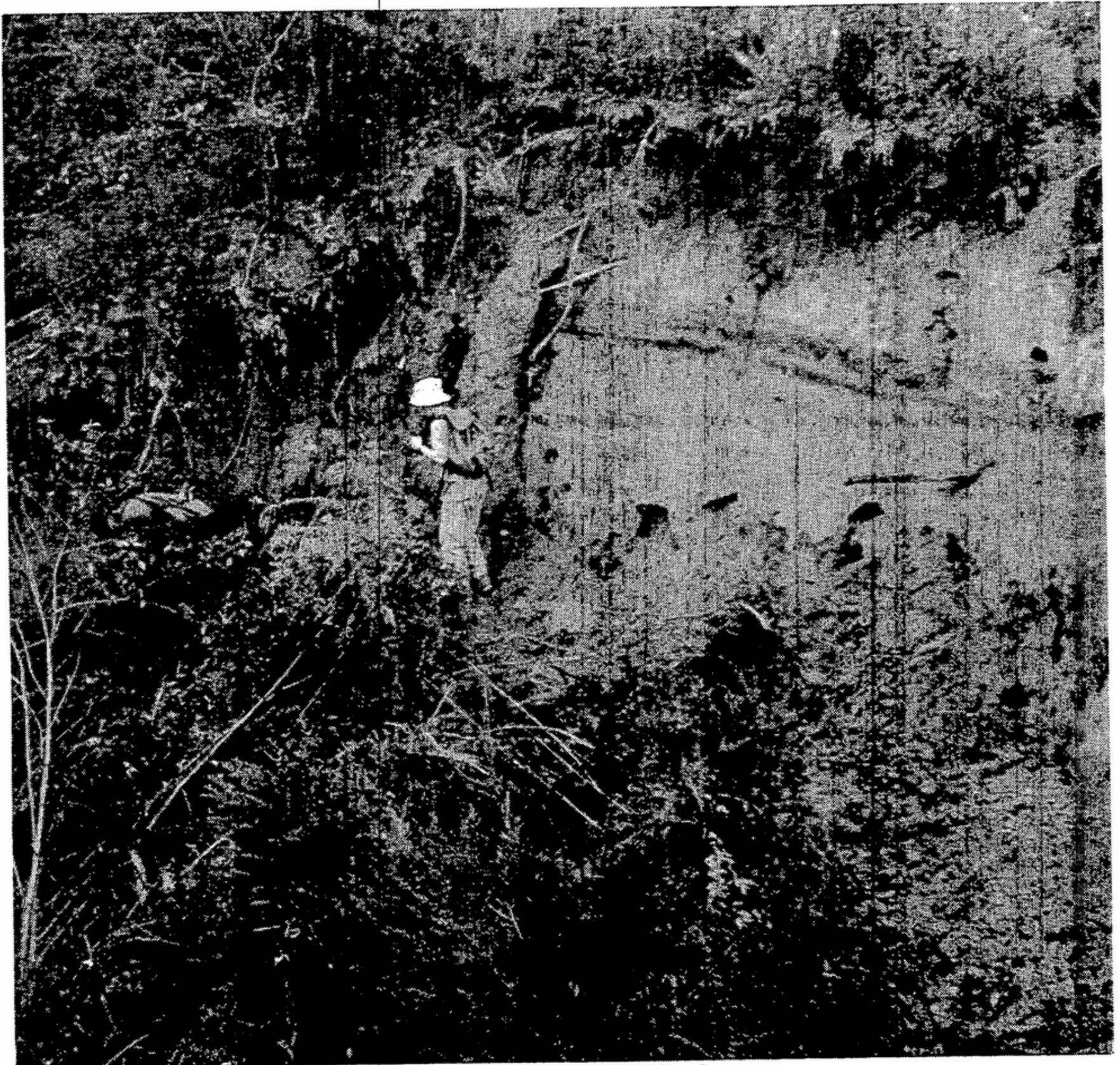


Figure 116. 1993 photograph of gully wall following profile cleaning.

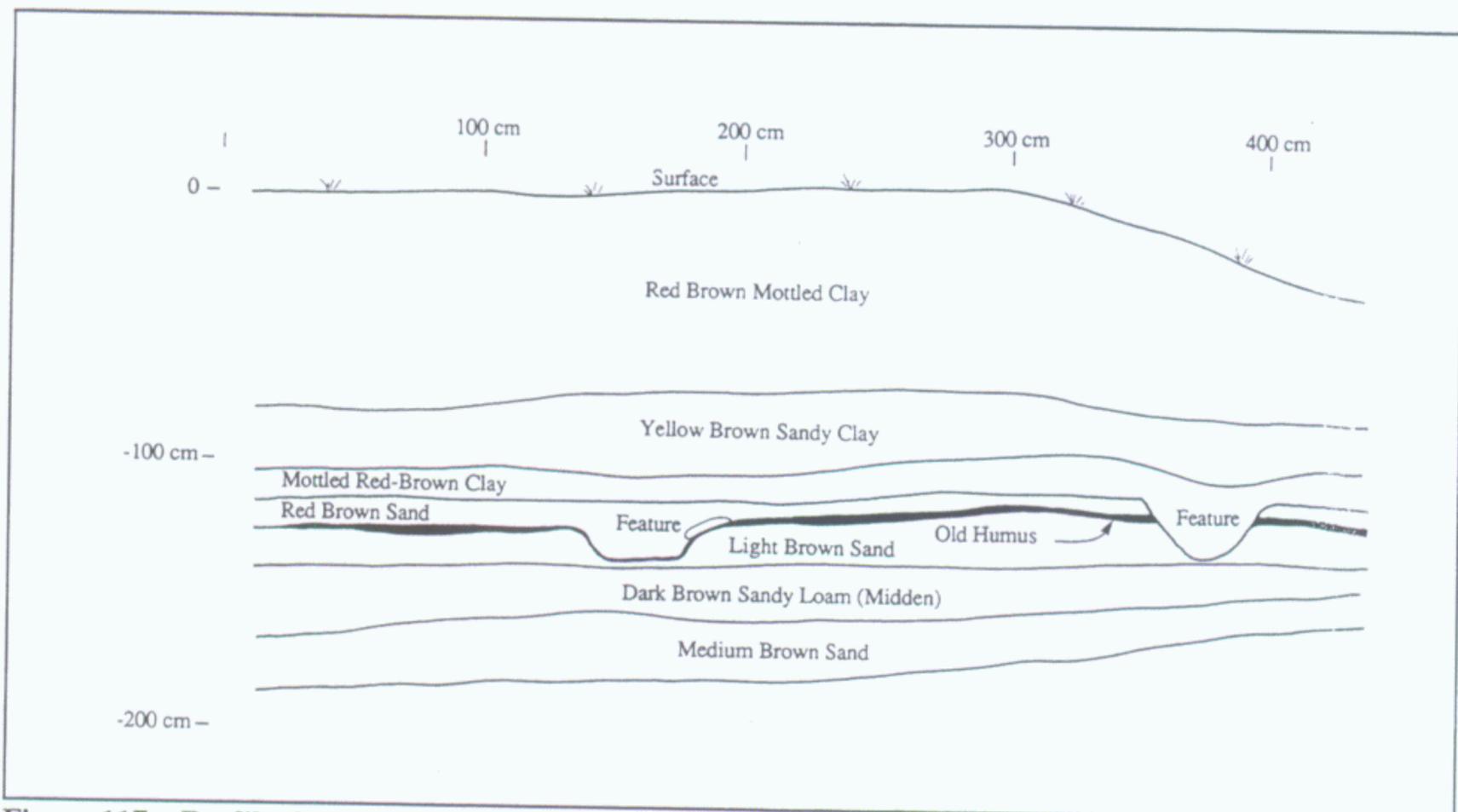


Figure 117. Profile drawing of a portion of the gully wall examined by SAS in 1993.

Table 2. Tabulation of artifacts recovered from gully midden slump from 9Me1.

| Provenience | Description | Contents |
|---------------------------|---|---|
| Surface Collection Area A | Midden slump in large gully at southwest corner of site. Material recovered by troweling large blocks of midden at base of gully. | 1 chert Archaic stemmed PP/K 1 chert utilized flake 2 quartz tertiary flakes < 2 cm 1 fragment of ground hematite 1 fire-cracked rock 78 Lamar complicated-stamped sherds 1 Lamar vertically pinched rim sherd on comp. stamped body 2 Lamar noded rims 1 Lamar folded pinched rim sherd 2 Lamar notched rims, plain body 1 Lamar notched and incised rim sherd 4 simple rims on plain body sherds 1 simple rim on comp. stamped sherd 21 plain grit-tempered body sherds 13 plain sand-tempered body sherds 5 burnished sand-tempered sherds 2 Mercier Check Stamped sherds 1 Fort Walton Zone Punctate rim sherd 1 engraved rim sherd 1 incised rim lug Artifact Total: 140 |

The profile recorded from the gully wall is comparable to the stratigraphy previously recorded for this portion of the site (see Figure 83 in Chapter 5). In the section of the SAS profile drawing shown in Figure 117, various layers of railroad fill greater than one meter in depth cover an old humus zone. The humus zone is compressed by the fill but is conspicuous because of its coloration and high loam content. The humus zone covers a light brown sand which in turn covers a darker brown sandy loam midden zone. Cleaning of the midden zone produced a few Bull Creek phase sherds but no lithics. The midden zone contained flecks of charcoal but no Mississippian features. Of interest, the Archaic projectile point was recovered from the railroad fill of the profile (yellow-brown sandy clay). This indicates the projectile point was brought in with the fill, perhaps from another site area such as 9Me50.

The features (pits) shown in Figure 117 are related to the railroad. These features represent holes cut through the old humus zone that were filled with the reddish brown clay. The feature fill is homogeneous with the lowest zone of railroad fill. Figure 118 shows a photograph of the southernmost feature.

Because previous excavations of the Bull Creek site have already produced significant information, the Bull Creek site is recommended eligible to the National Register of Historic Places. Portions of the site remain preserved that may contribute more information toward an understanding of the region's prehistory. The preserved portion of the site bounds the cemetery excavations of the WPA era. We do not know at present if the entire cemetery was actually excavated or if related



Figure 118. Photograph of section of profile shown in previous profile drawing (note pit extending from uppermost railroad fill into midden) .

features are present at the periphery of the cemetery that would provide information for better interpreting the cemetery area. This area of the site should be stabilized and protected.

The SAS survey determined that the remainder of the site has been destroyed. The SAS archeologists were instructed to find a route for the riverwalk and a location for the bridge across Bull Creek that would provide no impact to the site. This can be accomplished by routing the riverwalk and bridge across the creek near the location presently occupied by a pipeline. This area lies near the mouth of Weracoba Creek. If this is accomplished, further archeological field work will not be required (Ledbetter 1994:70-84).

Site boundaries for Bull Creek were reconstructed following the 1993 survey

(Figure 119). These boundaries, which were prepared in large measure to meet the needs of cultural resource management, represented a combination of former estimates of site boundaries as shown on site forms and the results of the 1993 shovel testing. Essentially the boundary between site 9Me1 and 9Me50 was placed at a large erosional gully. However, subsequent excavations conducted for data recovery of the Go-Kart site, 9Me50, produced evidence that this boundary was not real. These excavations produced evidence that the Bull Creek village actually extended a substantial distance onto the Go-Kart site. The results of data recovery will be briefly summarized.

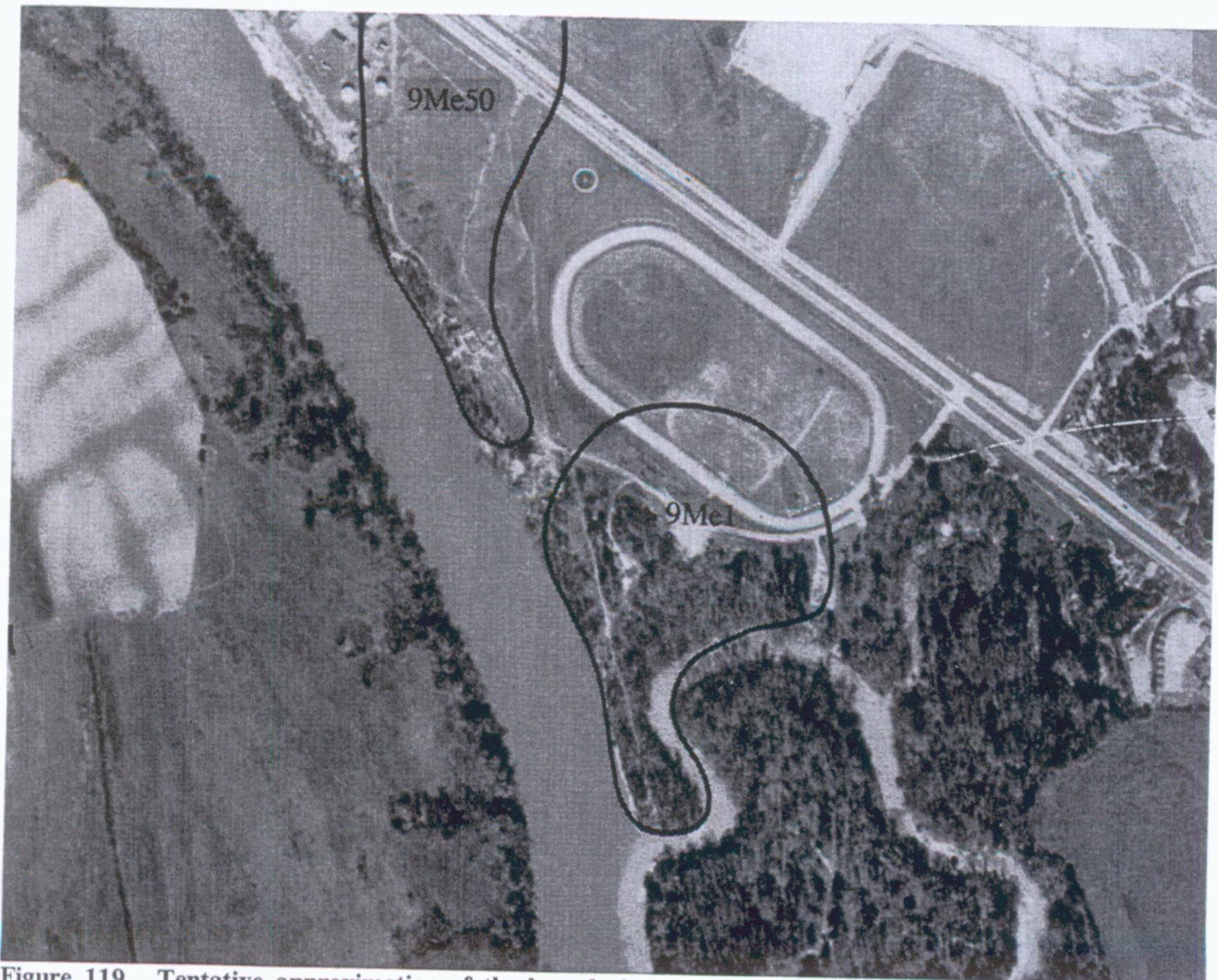


Figure 119. Tentative approximation of the boundaries of 9Me1 and 9Me50 based upon survey results (photograph source, 1950 SCS).

The Bull Creek Site

Data recovery excavation in the fall of 1994 was restricted to a narrow, 7 m wide, corridor through the Go-Kart site. Along this corridor, the site was examined by shovel

testing, test pit excavation, backhoe trenching, and machine-assisted block excavation. Figure 120 shows the larger excavation units of data recovery.

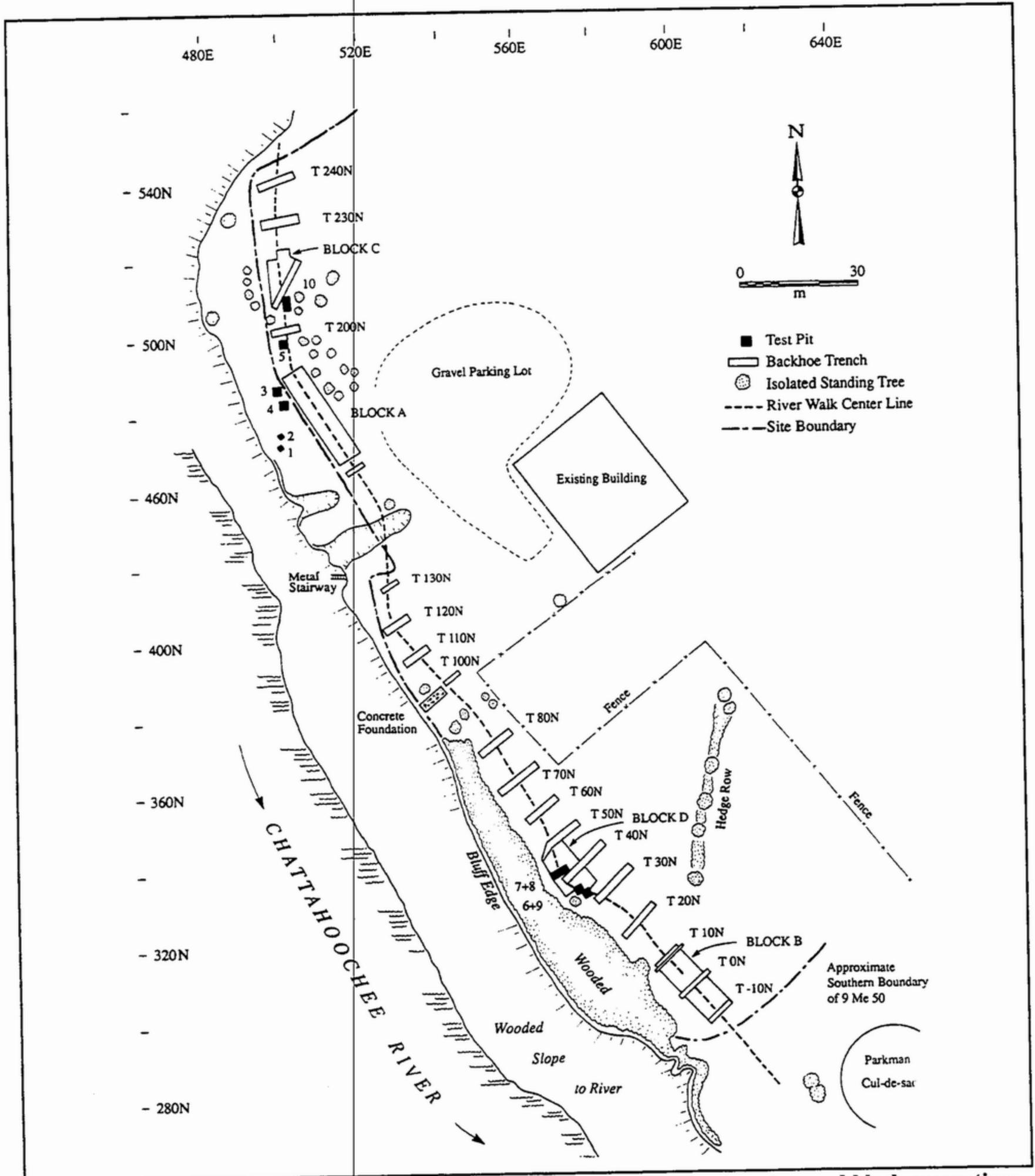


Figure 120. Plan map of data recovery area of the Go-Kart site showing trenches and block excavations

Excavation in the northern portion of the Go-Kart site yielded material and features associated primarily with an early Mississippian Averett phase occupation. The discovered features were postmolds and small pits. There was also a thin scatter of Archaic lithics. Perhaps the most significant contribution of those excavations was the procurement of several Averett phase radiocarbon dates (Table 3). These assays confirm previous age estimates (Schnell and Wright 1993; Ledbetter 1995a) and support a range for the Averett phase between the late tenth and late thirteenth centuries.

A few Bull Creek phase sherds were found in the northern part of the Go-Kart site but there was not evidence of intensive occupation. Quite possibly, the northern portion of the data recovery area represents the fringe of the Bull Creek village occupation. Whether this assessment is true or not, the available information from data recovery does indicate a scatter of Bull Creek phase pottery extending a minimum of 600 m north from the mouth of Bull Creek. The area beyond that point has been totally destroyed.

Table 3. Averett phase radiocarbon dates from the Go-Kart site.

| Sample Number | Conventional Radiocarbon Age | Intercept of radiocarbon age with calendar date calibration curve | Calibrated results in calendar years at 1 sigma (68% probability) |
|---------------|------------------------------|---|---|
| Beta 78127 | 1020 ± 70 B.P. | A.D. 1015 | A.D. 980-1040 |
| Beta 78128 | 820 ± 80 B.P. | A.D. 1235 | A.D. 1170-1280 |
| Beta 78129 | 920 ± 50 | A.D. 1065, 1075, 1155 | A.D. 1035-1195 |

Excavation in the southern part of Go-Kart produced cultural remains associated primarily with the Bull Creek phase and historic Creek occupations, along with a continuing scatter of Archaic lithics. Data from these excavations indicate that structures associated with the Bull Creek village extended a minimum of one hundred meters beyond Lester's northern most excavations. Large excavations designated Block B and Block D produced important information relating to the Bull Creek site.

Block B (Figure 121) was excavated at the southernmost edge of the Go-Kart site. The block actually intruded upon the edge of a

large gully which had tentatively been used to define the boundaries between the two site areas. Machine stripping indicated that the area had been filled within relatively recent times but beneath that fill the ground surface was badly eroded. The only cultural features to survive this erosion were a large historic Creek pit and an accompanying square postmold. The large pit was 160 cm in diameter and 110 cm deep. Figure 122 shows views of the pit during excavation. Contents of the feature included partially reconstructible vessels, various Euro-American manufactured items (Figure 123), and a relatively large amount of Bull Creek phase pottery.

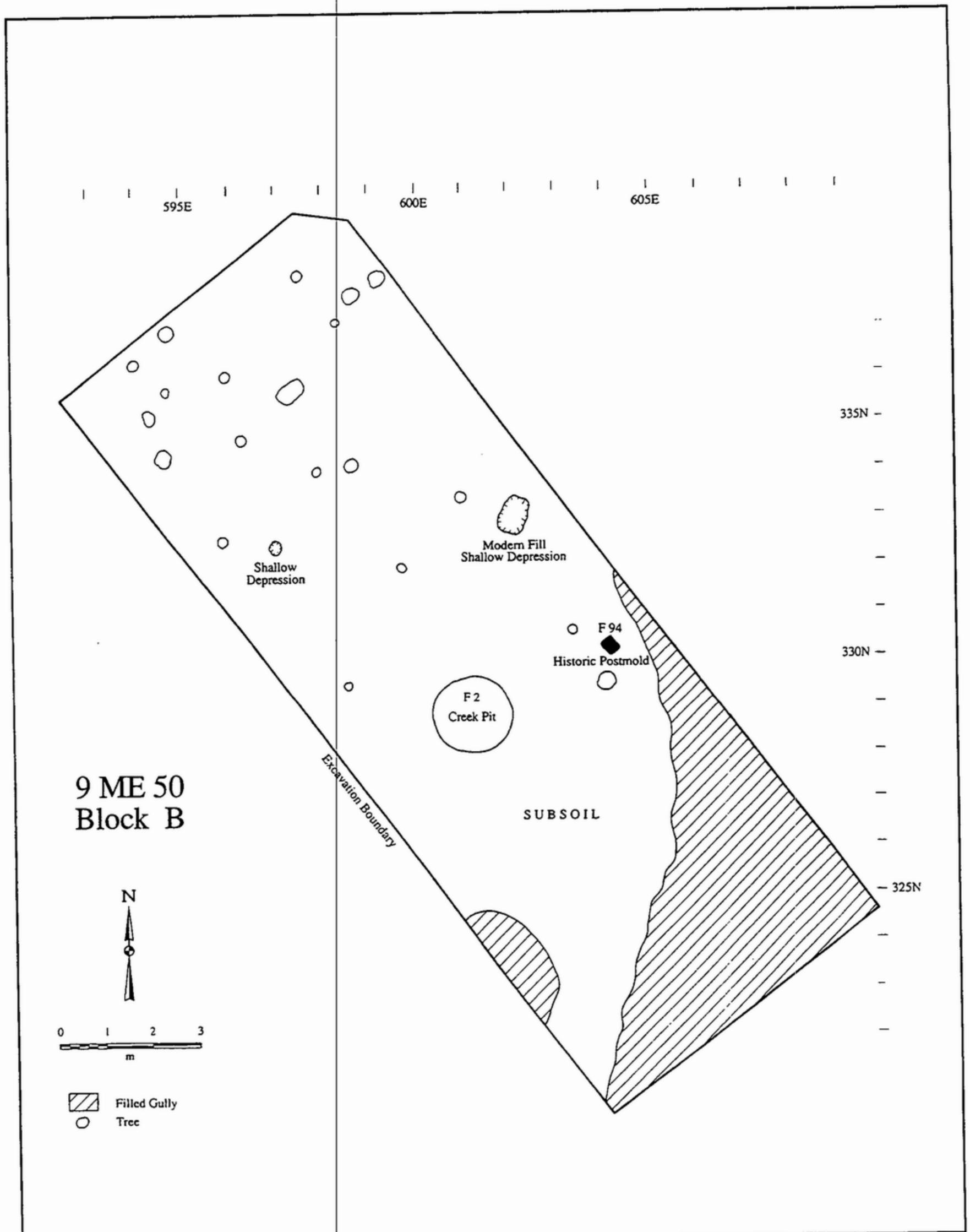


Figure 121. Plan map of block B at the Go-Kart site.



Figure 122. Two photographs of the excavation of the large Creek pit in Block B of the Go-Kart site.

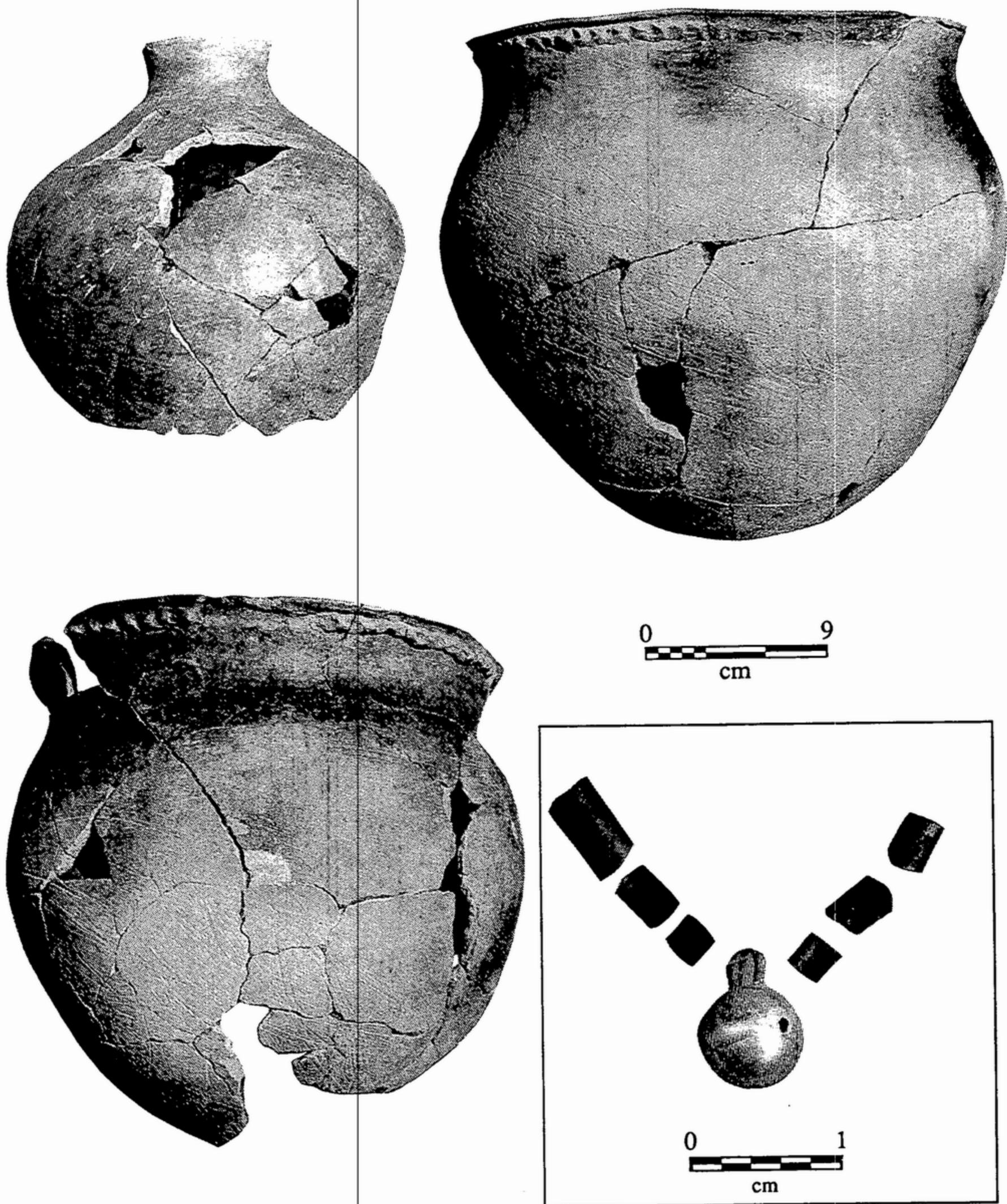


Figure 123. Examples of vessels (large Chattahoochee Brushed jars and undecorated water bottle, greatly reduced in size) and glass and metal beads (greatly enlarged) from the Creek pit.

The large Creek pit also produced more than two hundred Bull Creek phase sherds in the feature fill. These sherds were interpreted as material displaced from the surrounding midden during feature excavation and subsequent use. The number of sherds found within the Creek feature indicated a dense midden deposit was once present.

Block D, located to the north of Block B, was particularly important with respect to the Bull Creek village. Block D was located at a point where the riverwalk corridor made a short jog toward the river. Excavation of the block exposed a nearly complete post pattern representing a Bull Creek phase structure (Figures 124 and 125). Excavation produced a substantial number of postmolds and a few small pits associated with the structure. The arrangement of the postmolds suggests a subrectangular structure approximately 7 by 7 m. The perimeter postmolds were relatively

large, generally ranging from 15 to 25 cm in diameter and as much as 25 cm deep. Postmolds which form interior partitions were of comparable size. Large interior support posts were as much as 30 cm in diameter and 35 cm deep. In most respects, the Block D structure appeared similar to Lester's Structure 1.

The SAS investigations confirmed that most of the Bull Creek and Go-Kart sites have been destroyed. A small strip of both sites survives along portions of the wooded river bluff but these areas are subject to riverbank erosion and may eventually perish. Portions of the cemetery area also remain preserved but that area appears to be even more at risk from erosion. With the exception of a few extremely large and deep features such as that found in Block B, there appears to be little likelihood of discovering intact remains in the remainder of the former site area of the Bull Creek site.



Figure 124. Photograph of Bull Creek phase structure in Block D of the Go-Kart site, view to the west.

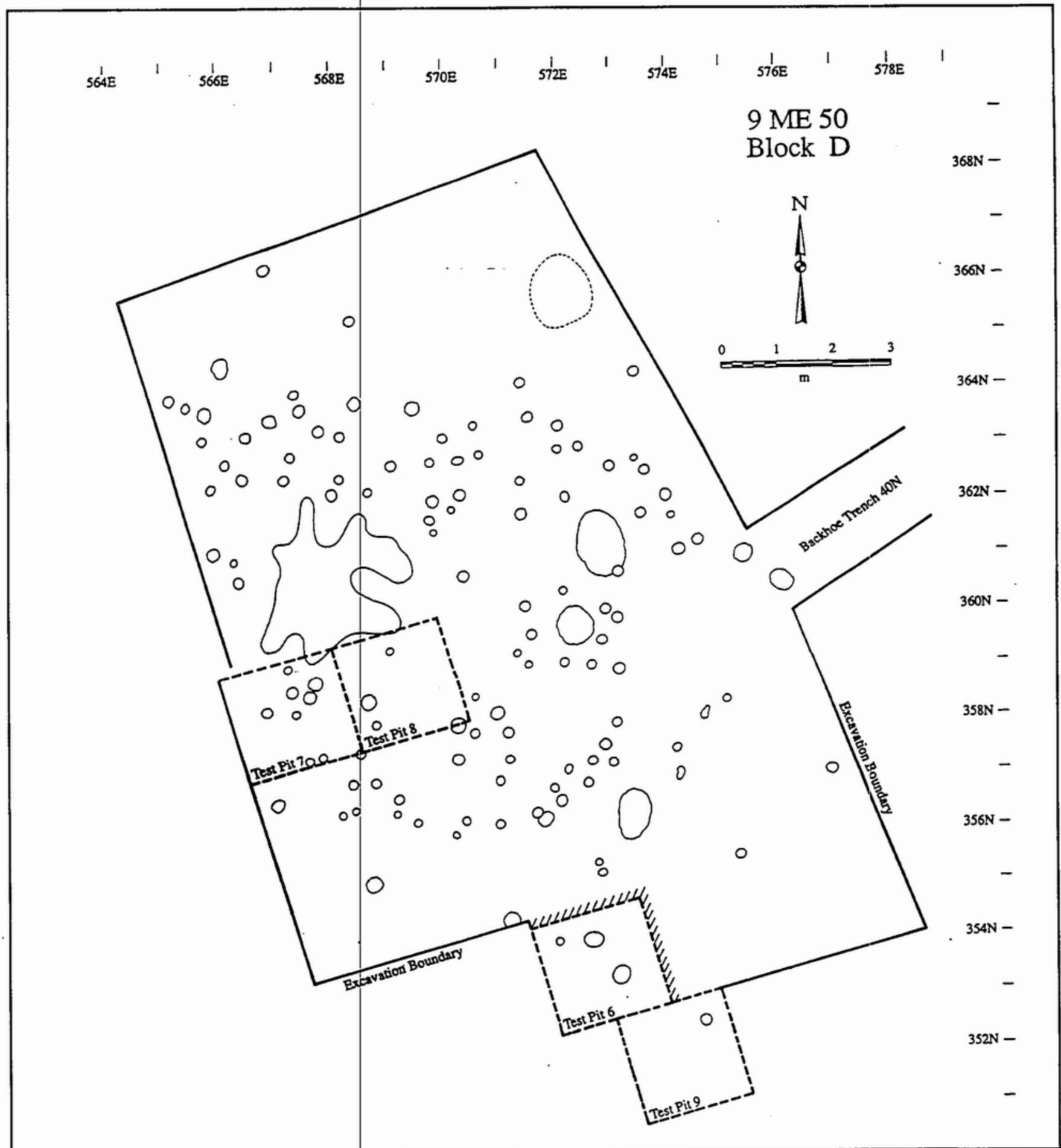


Figure 125. Plan map of Block D at the Go-Kart site.

There is a slightly greater potential for feature preservation in the area of the Go-Kart site. The data recovery investigations suggest that a series of structures associated with the Bull Creek village extended along the river for

a minimum of 450 m from the mouth of Bull Creek. The results of the SAS investigations with respect to the extent and layout of the Bull Creek village will be pursued further in Chapter 9.

Chapter 8

Bull Creek Site Material Culture

Perhaps the weakest aspect of most previous investigations at the Bull Creek site has been the paucity of artifact analyses and synthesis of material remains within a cultural framework of the late Mississippian period, and particularly the Bull Creek phase. In this chapter we will present tabulations of artifacts and interpretations found in the manuscripts and notes of previous investigations. Information pertaining to the material culture of the Bull Creek site will accordingly include the unpublished compilations of data from sundry investigations and new forms of analyses utilizing the surviving collections. An examination of the Bull Creek phase ceramic assemblage will be presented first. Following that, the relatively small amount of information available for other categories of Bull Creek phase material remains will be examined. The latter will be brief because lithic materials, in particular, accounted for a minor part of the Bull Creek phase material culture. Unlike earlier people, it appears that chipped stone projectile points were not being manufactured. The material remains from other components will be noted but not detailed. The examination of other components will be especially concise because that material is covered in detail in a separate report dealing with data recovery of contiguous site 9Me50 (Ledbetter 1995c).

Bull Creek Phase Ceramics

During the late Mississippian period, the Bull Creek site was positioned at the boundary of two groups who developed distinct ceramic traditions. The site lay at the western boundary of a region with a ceramic tradition characterized by Lamar

complicated stamped pottery. The site also lay at the northern edge of a Gulf Coast tradition characterized by pottery decorated with Fort Walton zone punctate designs. Figure 126 illustrates the geographic location of the Bull Creek site in relation to the areas of these two ceramic traditions. It should be noted that the areas shown are the approximations of two researchers and subject to variable interpretations.

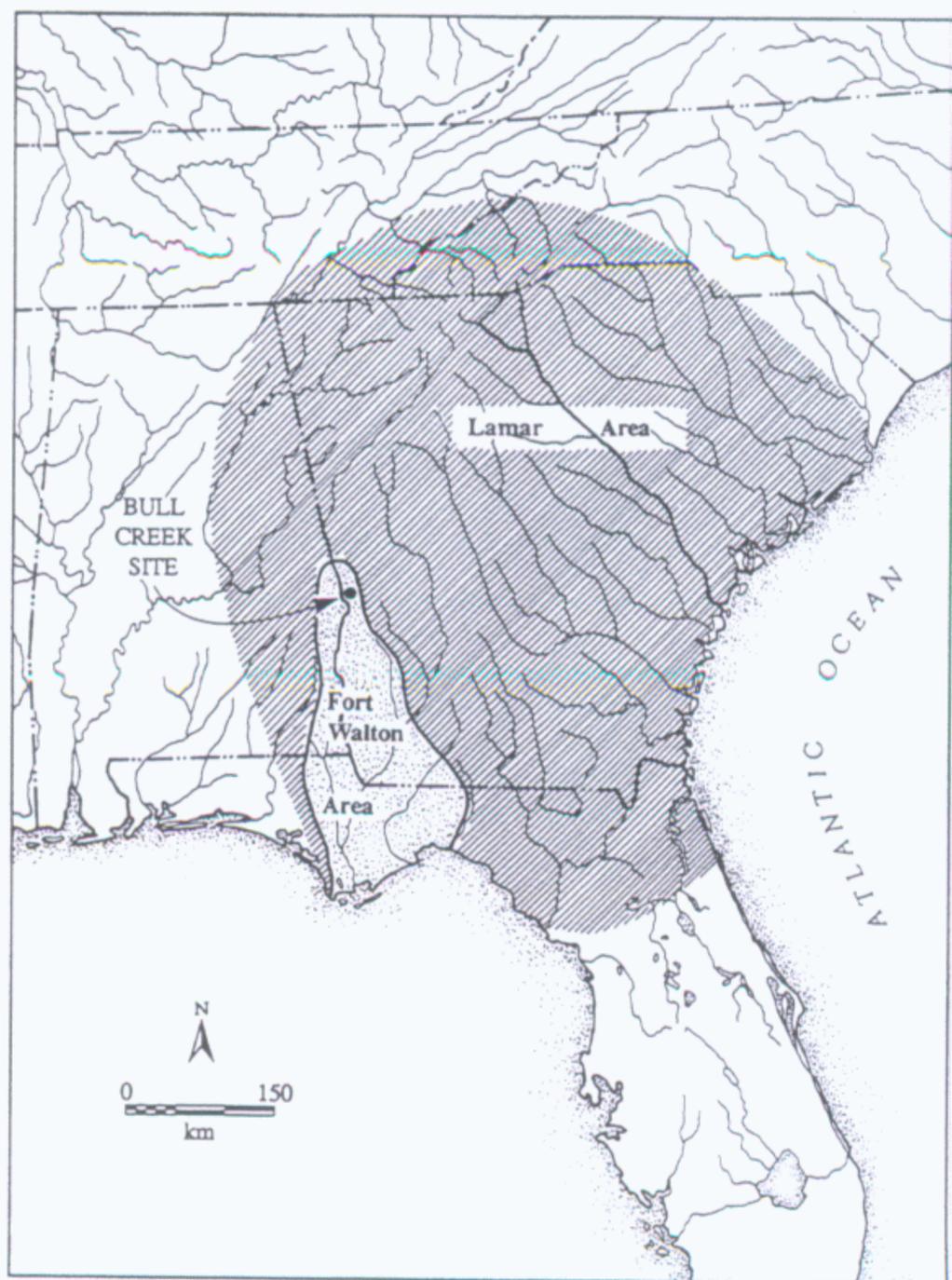


Figure 126. Location of Bull Creek showing boundaries of Lamar and Fort Walton ceramic traditions (based upon maps by Williams and Shapiro {1990:5} and Scary {1985:200}).

The pottery from the Bull Creek site is typical of late Mississippian decorative styles and vessel forms found throughout the southeast. However, the combination of ceramic characteristics based upon two ceramic traditions raises the probability of greater diversity of the Bull Creek site assemblage compared to sites located within the heart lands of either tradition. Based upon analysis of ceramics from other sites this would appear to be the case, but as Schnell has noted:

The site has over the years become a favorite example of a certain variant of Lamar. Despite this repeated use as an example, nothing has been published on the site in the way of a comprehensive study of the site and its implication in southeastern archeology (Schnell 1963).

After three decades, the essence of Schnell's commentary remains. While results of analysis of ceramics from sites such as Rood's Landing (Caldwell 1955), 9Cy51 (Broyles 1962), and Park Mound (Hally and Oertel 1977), have been interpreted as typical of the Bull Creek phase, the actual comparability of these collections to the Bull Creek type site has remained unknown. In recent years, some steps have been taken to better define the characteristics of the Bull Creek phase. Particularly important are efforts to quantify ceramic assemblages (Knight 1994; Schnell 1986, 1990; Schnell and Wright 1993; Scarry 1985) and define the geographical distributions of sites relating to this time period (Hally 1994; Schnell and Wright 1993). Hally's (1994) approximation of the boundaries of the phase are shown in Figure 127.

The work of these researchers has refined our understanding of ceramic types and ceramic relationships. Much of the following presentation of ceramic data will simply help to quantify and hopefully better describe specific attributes of the Bull Creek site pottery assemblage. Before examining the site ceramics in detail, additional background information will be presented.

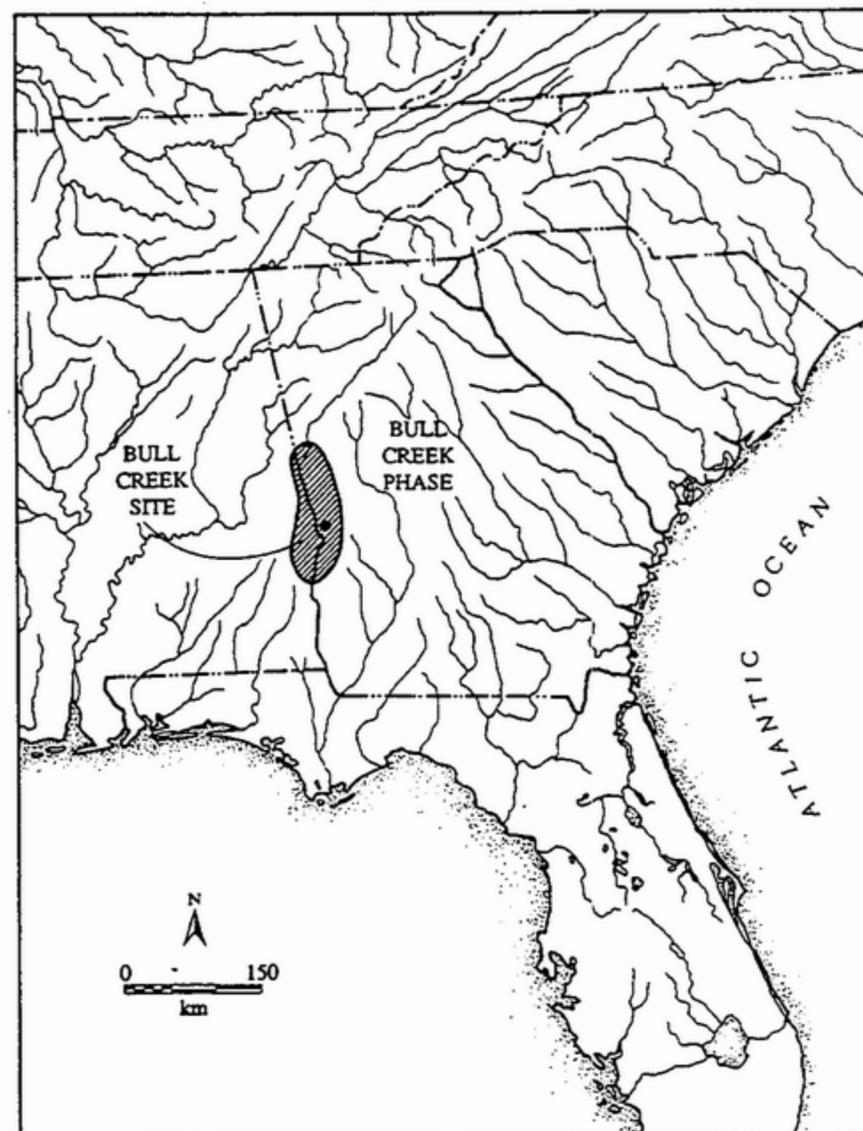


Figure 127. Geographical extent of the Bull Creek phase (adapted from Hally 1994:151).

Part of this background material includes the interpretations of earlier researchers, thus providing historical context for the data presented in this chapter. The background material is also meant to impart some of the diverging points of view which have existed, and still exist, concerning this phase. This divergence eventually culminated in splitting the traditionally defined Bull Creek focus into early and late phases (Schnell 1986, 1990).

The blending of ceramic traits from two areas created a basic set of attributes which once distinguished the Bull Creek focus, and now defines the Bull Creek phase pottery assemblage. The basic characteristics of this blending have been described by several researchers but perhaps most concisely as follows:

Bull Creek phase ceramics can be considered a blend of generic Lamar and generic Fort Walton of this period [late Mississippian]. The zone punctated type Fort Walton Incised becomes the principal Gulf Tradition decorated type, while Lamar Complicated Stamped becomes common as the principal "South Appalachian Mississippian" type added to the local assemblage (Knight and Mistovich 1984:224).

The observations of past researchers provide a historical perspective relating to the recognition of the rather unique characteristics of the Bull Creek phase ceramic assemblage. In 1951 Kelly noted:

. . . while the rim treatment, paste, and general morphology of the bulk of the stuff at Bull Creek is definitely in the time level and "feel" of Lamar, the specific designs have a Savannah stamped tradition; also there is a lot of pottery that must refer to influences coming up the Chattahoochee from Florida, Fort Walton influences. This means a very interesting variant in Bull Creek of the widespread Lamar manifestation (Ledbetter 1995b:49).

A few years later Joseph Caldwell made very similar observations concerning a related ceramic assemblage at Rood's Landing. According to Schnell (1986) the material described by Caldwell as the Later Period Culture should date to the latter portion of the traditionally defined Bull Creek phase. While the Rood's occupation may date a few decades later than the primary occupation at Bull Creek, Caldwell's observations are still important for interpreting the general time period.

The Later Period Culture, which we know in some detail from our work on the summit of Mound A, shows ceramic

similarities to Ft. Walton of northwest Florida, to the Lamar Culture of Central Georgia, and to a lesser extent Safety Harbor of the Florida east Coast. There are even some specific ceramic similarities to Moundville, Alabama, and the Dallas Culture which succeeded Hiwassee Island in eastern Tennessee. The type of notched rim strip, for instance, is found both at Moundville and in Dallas associated with effigy rim adornos.

The Later Period Culture at Rood's Landing is neither Ft. Walton nor is it Lamar, but represents rather a borderland culture between the two, apparently more closely oriented toward Ft. Walton. The variant of Lamar Complicated Stamped found at Rood's is particularly interesting in appearing to be directly derived from the older Savannah Complicated Stamped type (Figure 128). Lamar Bold Incised, as the type is known in central Georgia, is practically absent, and its place is taken by Rood's Incised which more closely resembles Floridian variants of a Ft. Walton time level (Point Washington Incised and Pensacola Incised) . . . (Caldwell 1955:45).



Figure 128. Lamar Complicated Stamped Design motifs from Rood's Landing (redrawn from Caldwell 1955: Figure 7).

The first presentation of Bull Creek pottery to the archeological community became the task of Isabel Patterson even as the WPA excavations progressed (Patterson 1936). Patterson's paper highlighted the more spectacular burial finds, but results of preliminary analysis of more than two thousand sherds were summarized.

A preliminary analysis of 2,240 sherds from the Bull Creek site show a surprising resemblance with the 5,000 sherds studied and tabulated from the Lamar Village site on the Ocmulgee. There are no major differences in the field of design or stylistic treatment. In the Bull Creek collection there are a few sherds, a fraction of one percent which are probably related to the Lower Mississippi types exhibited by James A. Ford in his work in this area. A few similar incised and punctate types found at Lamar may be ascribed to the same influence. These two sites, so far removed on different river systems, show such a striking similarity at a time [far removed] considered to be either early protohistoric, just antedating de Soto, or late prehistoric. Forty-nine percent of the Bull Creek sherds are of stamped ware, forty percent plain, two percent incised and one percent incised and punctate. All other designs are less than one percent and ninety percent of the pottery is grit-tempered (Patterson 1936).

The first attempt at a detailed description of Bull Creek pottery appeared in the mid-1940s (Fenenga and Fenenga 1945). The Fenenga survey, which focused on the lower Bull Creek drainage, resulted in relatively large collections of pottery. Because the Fenengas were not familiar with the ceramic typologies of the region, local type names (ware groups) were used and detailed descriptions were presented. The Fenenga types consisted of Weracoba Grit Tempered, Moon Dairy Sand Tempered, Columbus Fine Sand Tempered, and fiber tempered wares (Fenenga and Fenenga 1945:4-8). These wares generally equate to Schnell's (1963) Bull Creek variant of Lamar (Weracoba Grit Tempered), several types of Woodland and early Mississippian pottery (Moon Dairy Sand Tempered), several types of late Mississippian and historic

Indian pottery (Columbus Fine Sand Tempered), and Late Archaic (fiber tempered). The Fenenga's description of Weracoba Grit Tempered provides an excellent characterization for many attributes of the dominant category of coarse grit-tempered pottery found at the Bull Creek site.

The pottery designated as Weracoba Grit Tempered in this report is a thick coarse ware varying but distinctive in color. The temper is of quartzite grit particles ranging in size from 1/2 to 2 mm. The paste used is very fine and smooth. Color is either a greyish white, salmon pink or buff with an occasional dark to black sherd. The surface is characteristically smoothed giving the effect of a fine hard surface repeatedly broken by grit particles. Construction was by the annular method, and lines of fracture are frequently between the smoothed-together coils. Sherds average about 9 mm in thickness. The ware is almost invariably decorated and complicated paddle stamping is the most commonly used motif. The stamping is not clear but appears to be a combination of curvilinear and straight lines. The stamp was used over the entire surface of the vessel. Incising or incised lines in combination with punctate patterns are also present. These designs usually are placed close to the rim. They do not appear in conjunction with paddle stamping but are sometimes supplemented with pinched-up knobs. Another form of decoration restricted to the neck or rim area is a pinched-up or applied collar which is decorated with nodes, rosettes and punctations. This collar seems to be an elaboration growing out of the folded rim (Fenenga and Fenenga 1945:8).

Following extensive test excavation at Bull Creek in the mid-1950s, David Chase produced the following description of the pottery from the Bull Creek site.

The predominant pottery type found during the recent tests is, without doubt, Lamar Complicated Stamped. This is a thick, gray to black ware, heavily grit tempered with particles of the tempering medium extruding to the surface. In almost every rim of this type, the noded collar is present. Nodes are either applique or else pinched. A minority of sherds lack this collar. Stamping is poorly controlled and random over stamping with poorly cut blocks or paddles seems to be the rule.

The vessel is globular and the stamping is applied over all. The rim is usually everted and the lip squared or rounded. No handles appear with this type. Lamar Plain is either a variant of the Lamar Complicated Stamped but without the stamping, or else appears in the form of small bowls. The lips are occasionally notched. The temper is sometimes grit and in a few instances sand is used. The grit tempered pots do not always show the grit on the surface. The noded collar sometimes appears on this ware and when it does the rim is everted. Other rims indicate straight sided or inverted bowl rims. A third type is Lamar Bold Incised. Rather deep incised, usually curvate lines, appear in the region of the rim. Sometimes these consist of only two or three parallel lines circumscribing the vessel. Interlocking loops also appear on some pots. In the cassuela bowl, which is making its first appearance in Middle Lamar times, the incising is applied to the inner ledge lip. Notched rims often appear with the Lamar Bold Incised vessels. Rim adornos, usually lugs, nodes and more rarely effigies, usually of birds occur on this type of ware. Included in the Lamar Bold Incised is a variant of the Fort Walton Punctate. In actuality, most sherds decorated in this manner cannot be distinguished from the classical Fort Walton punctate type. Another Fort Walton type, acquired by trade perhaps, is the Lake Jackson Plain. This occurs as a minority ware at Bull Creek. Shell tempering is also a minority manifestation. These last traits suggest initial contact with the Fort Walton culture to the south in Middle Lamar times, a relationship which appeared to have gathered strength in later times in view of the predominance of Fort Walton ceramic types on such sites at Engineer's Landing, Kendrick's and Bickerstaff, all post-dating Bull Creek. This may well be a clue as to the origin of the Lower Creek and Appalachian alliance in protohistoric times.

A very few sherds found were of the burnished black slip variety. This is another ware which became common in later times. These were often incised, never stamped and never with handles. Adornos in this ware are often seen - usually as animal or bird effigies. An acquaintance with the Dallas Focus is suspected here. Pipes are infrequently found, at Bull Creek only three stems and one bowl fragment came to light, hundreds of pottery disks and one of stone appeared. This is not surprising since the disks prevailed from earliest Lamar times into historic period

Bull Creek was termed 'Middle' Lamar for two main reasons. First, it did not produce the massive, almost undecorated thick sand tempered ware which characterized the Lamar site at Pat-

terson. Secondly, it lacked the abundance of fine burnished black ware, shell tempered buff ware and red and yellow slip pottery so characteristic of ceramics of the proto and early historic periods.

We suspect that Bull Creek represents an early habitation site of the Middle Lamar Period due to the presence of a small amount of typical Early Lamar pottery included in the lower levels of refuse. At the time of the occupation of this site, which was quite a large town, the Lamar culture had achieved domination of the middle Chattahoochee Valley and were thus able to move from the large inland sites of Patterson and Singer to the River way which they finally controlled. No mounds are associated with Bull Creek and it is suspected that although the tradition of mound building had not perished by Bull Creek times, it was definitely on the way out. The Neisler Mounds on the Flint and the Rood's Landing Mounds represent some of the last of the great temple mounds of the southeast. By Bull Creek times the Southern Cult has probably all but died out. Whether the dog pots found by Mrs. Patterson represent a relationship to the Cult is a matter of pure speculation. The general opinion is that they were not (Chase 1957).

A detailed analysis of ceramics recovered from the Bull Creek site during the 1950 and 1959 excavations was initiated by Schnell in the early 1960s but only partially reported in his Bull Creek manuscript (Schnell 1963). Nevertheless, the analysis completed by Schnell is significant and constitutes a substantial part of the site's ceramic data base.

In terms of actual published data, the most detailed information relating to Bull Creek phase ceramics comes from sites 9Cy51 (Broyles 1962) and Park Mound, 9Tp41 (Hally and Oertel 1977). Both site reports contain thoroughly described, tabulated and illustrated accounts of ceramic collections which generally conform to Bull Creek. Observations concerning ceramics at Park Mound are especially important because of temporal implications. Based upon several attributes, rim fold width in particular, Hally concluded that the Park Mound Bull Creek phase ceramics might date as late as the late sixteenth and early seventeenth centuries (Hally and Oertel 1977:51).

Schnell now believes the ceramic assemblages from 9Cy51 and Park Mound date to the latter part of the traditional Bull Creek phase (Schnell 1986, 1990). According to Schnell's view, the Bull Creek site (9Me1) and the contemporary occupation at Kolomoki (9Er1), are the primary examples of the earlier Bull Creek phase, which should date predominantly to the fifteenth century, while 9Cy51 and Park Mound, and the contemporary occupation at Rood's Landing (9Sw1) are representative of a predominantly sixteenth century Stewart phase (Schnell 1990:67; Schnell and Wright 1993:21).

Schnell's two phases are distinguished by differences in relative proportions of complicated stamped compared to plain, incised and punctate pottery. Bull Creek phase assemblages contain complicated stamped pottery in excess of fifty percent and low counts of incised/punctate wares. Stewart phase collections contain more plain wares (> 50%), with complicated stamping dropping to about twenty percent and incised/punctate counts increasing to approximately fifteen percent. Minor amounts of check stamping occur with both phases (Schnell 1990:67-68). Figure 129 shows a graph originally prepared by Schnell (1985) which portrays these differences.

VARIATION IN LAMAR POTTERY ASSEMBLAGES
IN CHATTAHOOCHEE VALLEY SITES

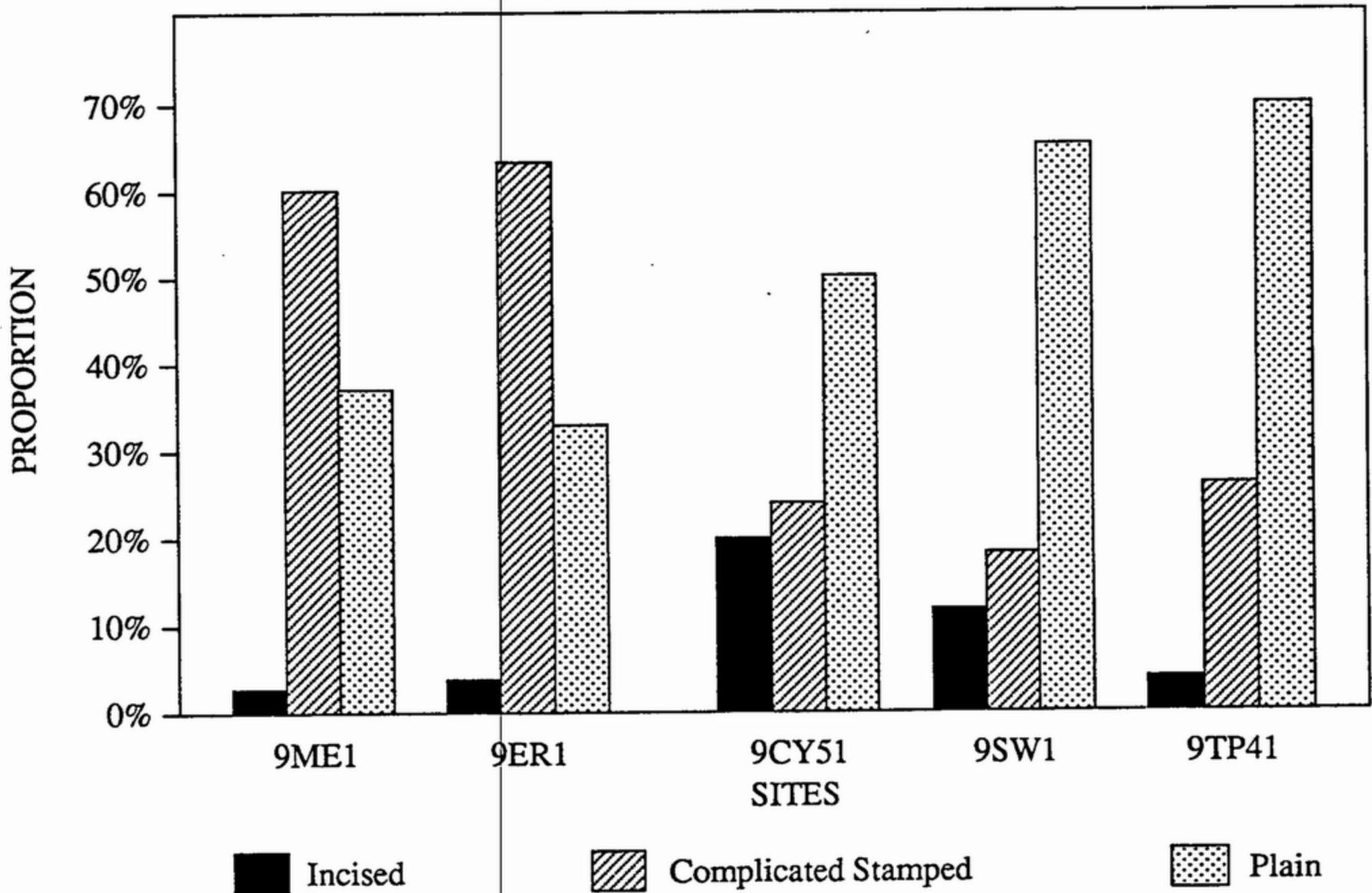


Figure 129. Graph showing differences in pottery collections from Bull Creek phase (9Me1, 9Er1) and Stewart phase sites (9Cy51, 9Sw1, 9Tp41), adapted from Schnell (1985).

Stewart phase collections are further distinguished by the addition of certain incised motifs similar to Pinellas Incised and the incised pottery of the Avery and Atasi phases to the north and northwest (Knight and Mistovich 1984:224). This would include the type Rood's incised (Caldwell 1955:27). Figure 130 illustrates an example from 9Cy51 of perhaps the most common Pinellas-like motif attributed to occupations of this latter phase (Hally 1994:154). Only one vessel with this motif has been identified at the Bull Creek site. That vessel was recovered from a pit excavated in 1981 and appears to be a rare example of a Stewart phase feature located on the Bull Creek site.

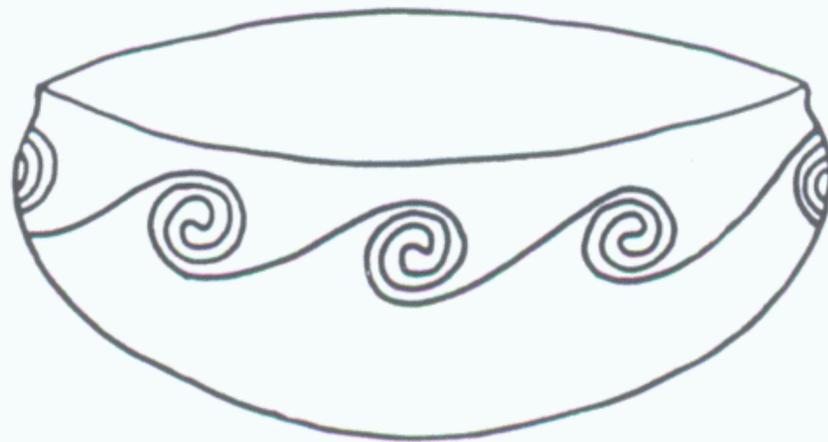


Figure 130. Drawing of typical Stewart phase incised motif (redrawn from Broyles 1962: plate 7).

In the mid-1980s, John Scarry devised a classification scheme for Fort Walton ceramics which encompasses the Bull Creek phase. Scarry's (1985) type/variety system builds upon the earlier Fort Walton typology (Willey 1949) and provides an extremely important tool for interpreting differences in ceramic assemblages within a tight temporal and regional framework. Scarry's scheme has been incorporated into our examination of the Bull Creek site pottery.

In our examination of pottery from Bull Creek, a variety of attributes will be examined which hopefully will provide a characterization of the ceramic assemblage. Throughout this report an attempt has been made to present examples of decorative styles and vessel forms found on the site. The following sections will include more quantified data. The sources of these data are tabulations from previous work, primarily housed in the National Park Service files and files of Frank Schnell, Jr., curated at the Columbus Museum, and a reexamination of the surviving collections from the Columbus Museum and University of Georgia.

Primary Pottery Attributes

While there was no formal report detailing the laboratory analysis conducted following the 1936-1937 excavations at Bull Creek, a very substantial body of data was recorded and tabulated and much of that paperwork has survived. At the regional WPA laboratory in Macon, detailed attribute analysis was conducted using the McKern System, a procedure which provided standardized techniques for examining all of the site collections excavated during the different WPA-era projects. A thick stack of paper now curated at the Columbus Museum contains coding and analysis sheets for 2240 sherds along with some summary sheets.

Copies of the coding instruction sheets used for Bull Creek have been transcribed and are included as Appendix B. The summary sheets are included where appropriate in the present chapter. Even with the coding sheets, some of the attributes used in the 1930s are difficult to understand and interpret. Some of the attribute terminology, for instance, is no longer used. Copies of the original summary sheets which tabulate the primary attributes of the site's pottery are shown in Figures 131 through 133. Keys have been added to explain the codes.

The Bull Creek Site

BULL CREEK
COLUMBUS GA

| QUALITY OF WARE | SURFACE FINISH. | HARDNESS | TEMPER | | | CROSS SECTION | | |
|-----------------|-----------------|---------------|--------------|---------------|------------|---------------|------------|---------|
| | | | Material No. | Size No. | Temper No. | Temper No. | Temper No. | Gran. % |
| No. 71 | Very No. 380 | FINGER 10 | No. 109 | No. 12 | No. 915 | | | |
| Exc. % 3 | Rough % 17.2 | NAIL | Shell % | Fine % | 40.8 | | | |
| No. 1778 | No. 1350 | | No. 2234 | No. 820 | | | | |
| Good % 78.5 | Rough % 60.2 | | Grit % 99.9 | Medium % 36.6 | | | | |
| No. 391 | No. 334 | CRYOLYTE 685 | No. 66 | No. 424 | | | | |
| Inf. % 17.3 | Smooth % 14.9 | | Veget. % 6 | Coarse % | | | | |
| Very No. 0 | No. 8 | 1 | Mic No. | Comp. % 2.6 | | | | |
| Carved % | Glossy % | GYASOM | Stone % | | | | | |
| | Polish-No. 155 | | | | | | | |
| | ed % 6.5 | | | | | | | |
| | No. 3 | 361 | | | | | | |
| | Verm. % | CALCITE 16.1 | | | | | | |
| | No. 10 | 1176 | | | | | | |
| | UNBATTERED | FLOURITE 52.4 | | | | | | |
| | No. 7 | 7 | | | | | | |
| | % | APATITE | | | | | | |
| | No. | | | | | | | |
| No. 2240 | 2240 | 2240 | 2240 | 2240 | 2240 | 2240 | 2240 | 2240 |
| Total % 98.8 | 98.8 | 99 | | | | | | 98.9 |

DECORATION

| PLAIN | STAMPED | | INCLINED | | MODELING | | |
|-------------|------------|------------|-----------|-----------------|------------|------|----------------|
| | Carv. Pad. | Wrap. Pad. | Trail-ing | Comb. or Brush. | Stamp Slip | Emb. | Rif Comb Total |
| No. 916 | 10 | 1105 | 4 | 12 | 0 | 0 | 0 |
| % 46.8 | 48.8 | 48.8 | 2.5 | 2.5 | 0 | 0 | 0 |
| No. | | | | | | | |
| % | | | | | | | |
| No. | | | | | | | |
| % | | | | | | | |
| No. | | | | | | | |
| % | | | | | | | |
| TOTAL PLAIN | 916 | | | | | | |
| STAMPED | 1105 | | | | | | |
| INCLINED | 69 | | | | | | |
| MODELING | 71 | | | | | | |
| Rim-lugs. | 29 | | | | | | |
| | 2240 | | | | | | |

DESIGN OF EXECUTION
 DECORATION OF AREA
 COLOR
 RIMS
 HANDLES
 SHAPE OF POT

Inner No. 6
 Rim % -
 Grey % -
 No. 267
 Lip % 11.3
 Outer No. 15
 Good % -
 Rim % -
 No. 0
 Excl. % -
 Shoul. % -
 No. 983
 Body % 43.8
 Unde-No. 912
 t'nd. % 43.3
 2240
 Base % 98.4

PLAIN

TOTAL PLAIN 916
 STAMPED 1105
 INCLINED 69
 MODELING 71
 Rim-lugs. 29
 2240

| Temper | | Execution | |
|-------------|-------------|------------|-------------|
| 3 | 2234 = 99% | 1 | 6 |
| 3 x 6 | 6 | 2 | 264 12% |
| | <u>2240</u> | 3 | 15 |
| Temper Size | | 5 | 983 44% |
| a | 109 5% | PLAIN | 910 40% |
| B | 2065 = 92% | HANDLE | 2 |
| c | 66 3% | S-off- | 11 |
| | <u>2240</u> | RIM | 44 2% |
| Cross Sec | | P-FAX | 4 |
| 2 | 12 | Lip | 1 |
| 4 | 820 | | <u>2240</u> |
| 6 | 915 37% | Decoration | |
| 8 | 424 40% | | |
| 9 | 69 19% | | |
| | <u>2240</u> | | |
| | | | |
| Hardness | | | |
| 2 | 1 | | |
| 2-2.5 | 10 | | |
| 2.5 | 685 = 30% | | |
| 3 | 361 16% | | |
| 4 | 1176 53% | | |
| 5 | 7 | | |
| | <u>2240</u> | | |
| Self Temper | | | |
| 1 | 380 17% | | |
| 2 | 1350 60% | | |
| 3 | 334 15% | | |
| 2 x 4 | 5 | | |
| 1 x 5 | 39 2% | | |
| 2 x 5 | 41 2% | | |
| 3 x 5 | 75 = 3% | | |
| 3 x 4 | 3 | | |
| 1 x 6 | 2 | | |
| 2 x 6 | 10 | | |
| off | <u>2240</u> | | 99 |

| | | |
|------|-------------------------------------|---------------------------|
| Key: | Temper: | 3) Crushed rock |
| | | 6) ground Micaceous stone |
| | Temper Size: | a) large |
| | | b) medium |
| | | c) small |
| | Cross-sectional Appearance of Paste | 2) medium fine |
| | | 4) medium coarse |
| | | 6) granular |
| | | 8) contorted |
| | | 9) compact |
| | (Hardness - no key needed) | |
| | Surface Finish | 1) very rough |
| | | 2) rough |
| | | 3) outer rim |
| | | 4) glossy |
| | | 5) polished |
| | | 6) vermiculated |
| | Execution | 1) crude |
| | | 2) fair |
| | | 3) good |
| | | 4) excellent |
| | | 5) unobserved |
| | (No key for plain through lip) | |

Figure 132. Copy of National Park Service summary sheet with counts for temper, paste and texture.

2240 Sherds -
Bull Creek
Columbus Ga

| Decorations - | | Quality of Ware - | | | | |
|---------------|--------|-------------------|-----|----|-------------|-----|
| ✓ | A | 1088 | 49% | 1 | 71 | 3% |
| ✓ | EL | 33 | 1% | 2 | 1778 | 80% |
| ✓ | T | 29 | 1% | 3 | 391 | 17% |
| ✗ | D | 912 | 40% | | <u>2240</u> | |
| ✓ | AN | 1 | | | | |
| ✓ | FAX | 3 | | | | |
| ✗ | E | 53 | 2% | | | |
| ✓ | AE | 4 | | 1 | 1905 | 86% |
| ✓ | RIM | 62 | 3% | 2 | 266 | 11% |
| ✓ | S-off | 11 | | 3 | 6 | |
| ✓ | C.B. | 12 | | 4 | 3 | |
| ✓ | E | 10 | | 5 | 57 | 3% |
| ✓ | HANDLE | 3 | | 10 | 3 | |
| ✓ | LIP | 3 | | | <u>2240</u> | |
| ✓ | B | 2 | | | | |
| ✓ | BL | 2 | | | | |
| ✓ | ANU | 1 | | | | |
| ✓ | A-FA | 2 | | | | |
| ✓ | PFA | 4 | | | | |
| ✓ | L | 5 | | | | |
| | | <u>2240</u> | | | | |

Part of Pot -

Key: Decorations: Undeciphered
 Part of Pot: 1 sherd from undetermined portion of pot
 2 rimsherd
 3 rim and shoulder or neck
 4 Rim and handle or lug
 5 Rim and Body
 10 Handle

Quality of Ware: 1 Excellent
 2 Good
 3 Inferior

Figure 133. Copy of National Park Service summary sheet of 2240 sherds from the 1936-1937 excavations which quantifies attributes of decoration, quality of ware and vessel portion.

According to available records, these sherds were apparently analyzed before July 15, 1936 (Walker 1989:15). This would mean that the sherds were recovered from the village area. As previously mentioned, a lack of a descriptive text accompanying the NPS summary sheets makes interpretation of some of the data rather difficult. Fortunately, a number of these pottery attributes were also tabulated by Schnell (1963). Some categories, including temper size and cross-sectional appearance of paste are not precisely defined and cannot be easily compared to other excavations.

A number of detailed drawings which illustrate sherds from the site were also generated as part of that WPA analysis process. Figures 134 and 135 illustrate selected examples of these drawings. The drawings are labeled Bull Creek or abbreviated B.C., individually numbered using a Park Service numbering system, and initialed by the artist. The drawings that survive do not illustrate the full range of Bull Creek pottery, but appear to concentrate upon incised and punctate examples.

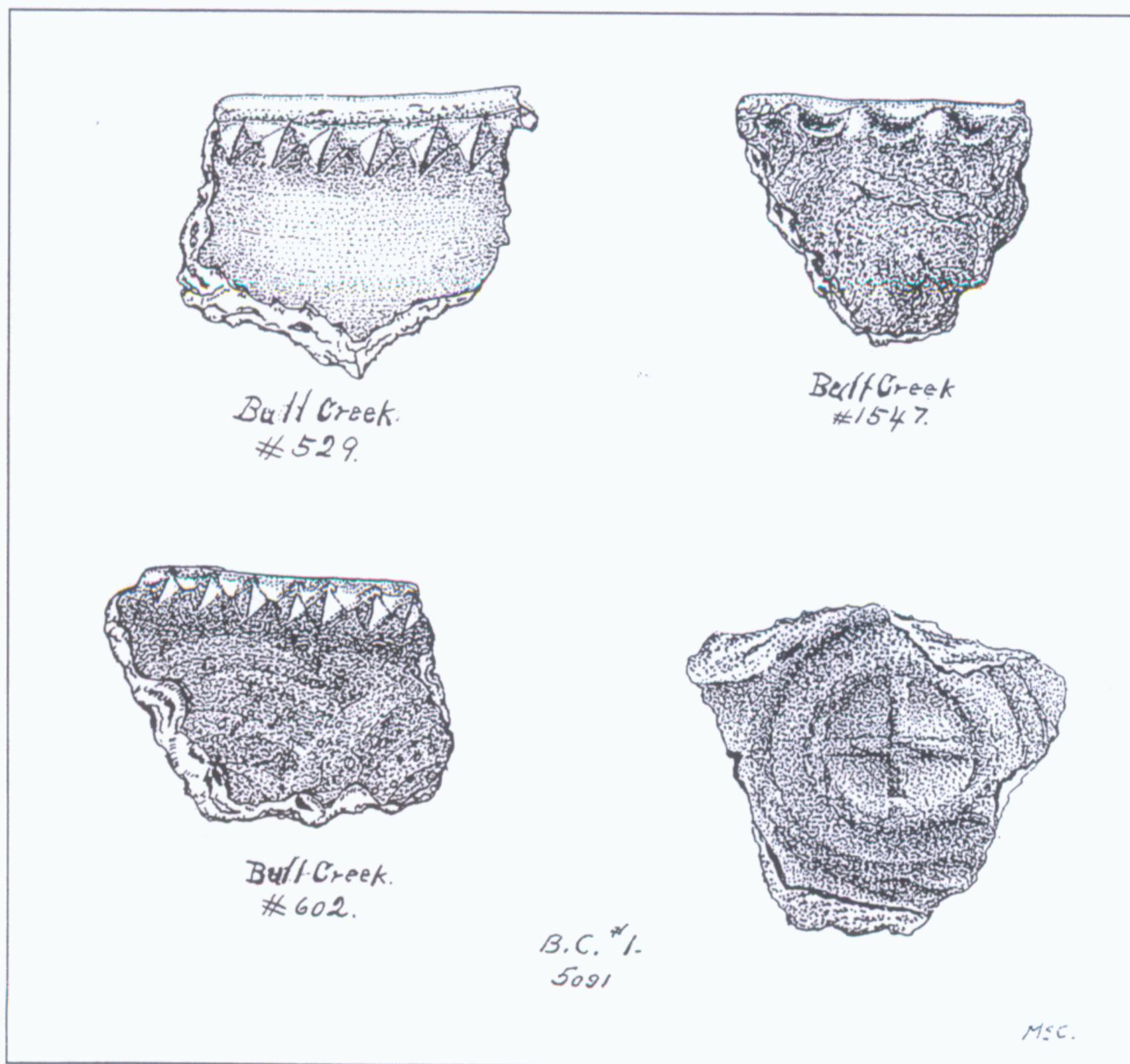


Figure 134. WPA drawings of Bull Creek phase plain and complicated stamped sherds.

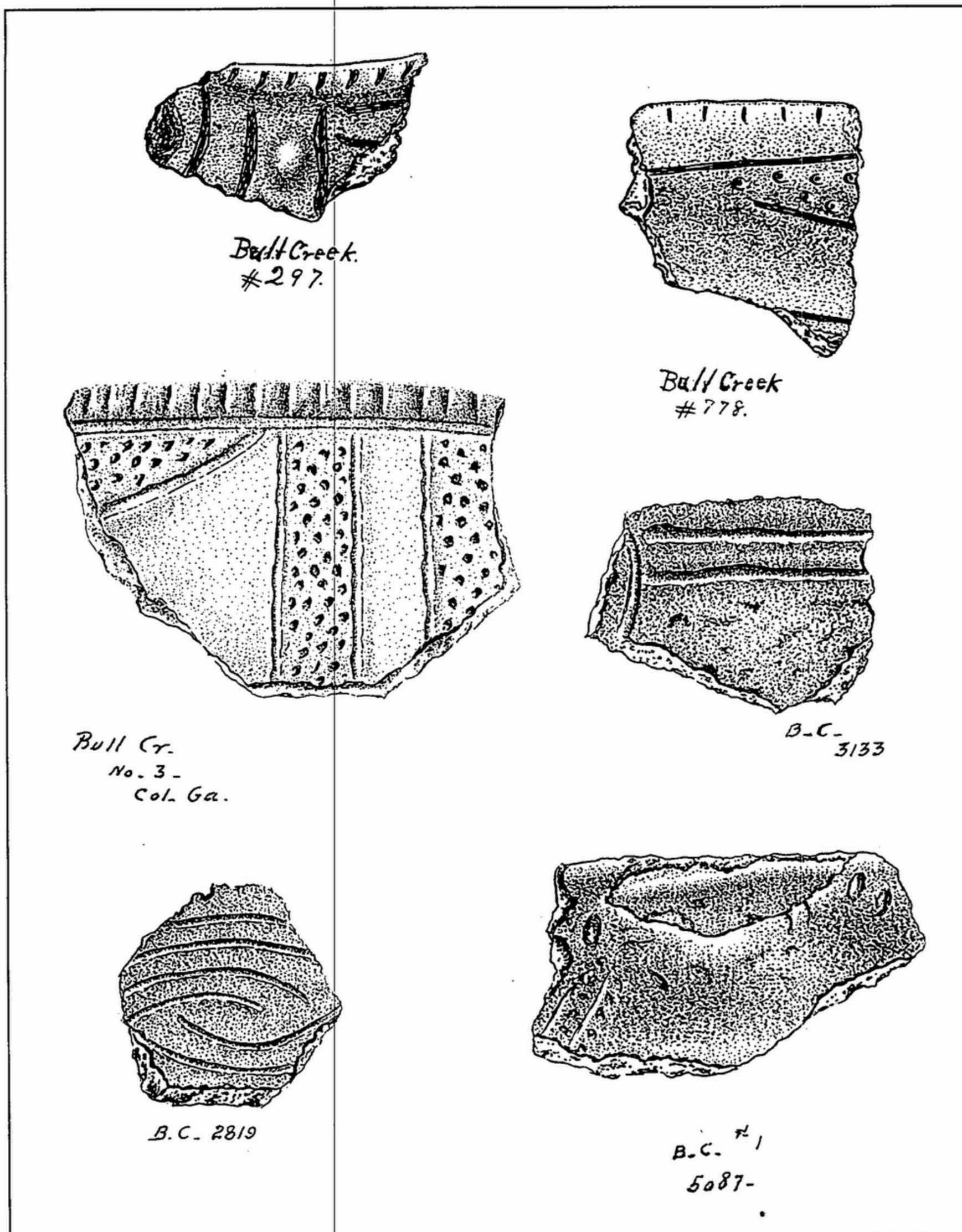


Figure 135. WPA drawings of incised and punctate sherds from Bull Creek (lower right is shell tempered).

Probably the most important collection from Bull Creek, in terms of quantifiable data, resulted from Schnell's excavations of 1959. That produced the first screened collection of material from the site (see Chapter 5). The following text and tables are taken from Schnell's Bull Creek excavation manuscript. Illustrations have been added to further define many of the attributes examined.

As may be seen in [Table 4], the basic analysis of the pottery recovered from the 1959 excavations was done from a purely modal standpoint. The following paragraph correlates these modal categories with ceramic types. All of the pottery presented in this table falls within the Lamar series as partially defined in the Southeastern Archaeological Conference Newsletter (I, 2:4-6, 9-11). Some of the type names used here have not been officially designated, but have found their way into common usage

The plain ware was divided into three major categories according to tempering mode; grit, sand and shell [Figure 136]. For purposes of present commentary, it might be mentioned that the grit tempering category is the same as the Bull Creek variant of Lamar [which designates a paste that contains large particles of garnet bearing grit extruding from the exterior and sometimes the interior]. The sand tempered category covers a gradient range from very similar to Bull Creek variant of Lamar to a very fine sand tempering. This very fine sand tempering finds its analogy in Hurt's (1975) historic and proto-

historic ware which he designated as Coweta Micaceous. The shell tempered category at the Bull Creek Site is primarily a partially leached form, indicating some, but not considerable antiquity.

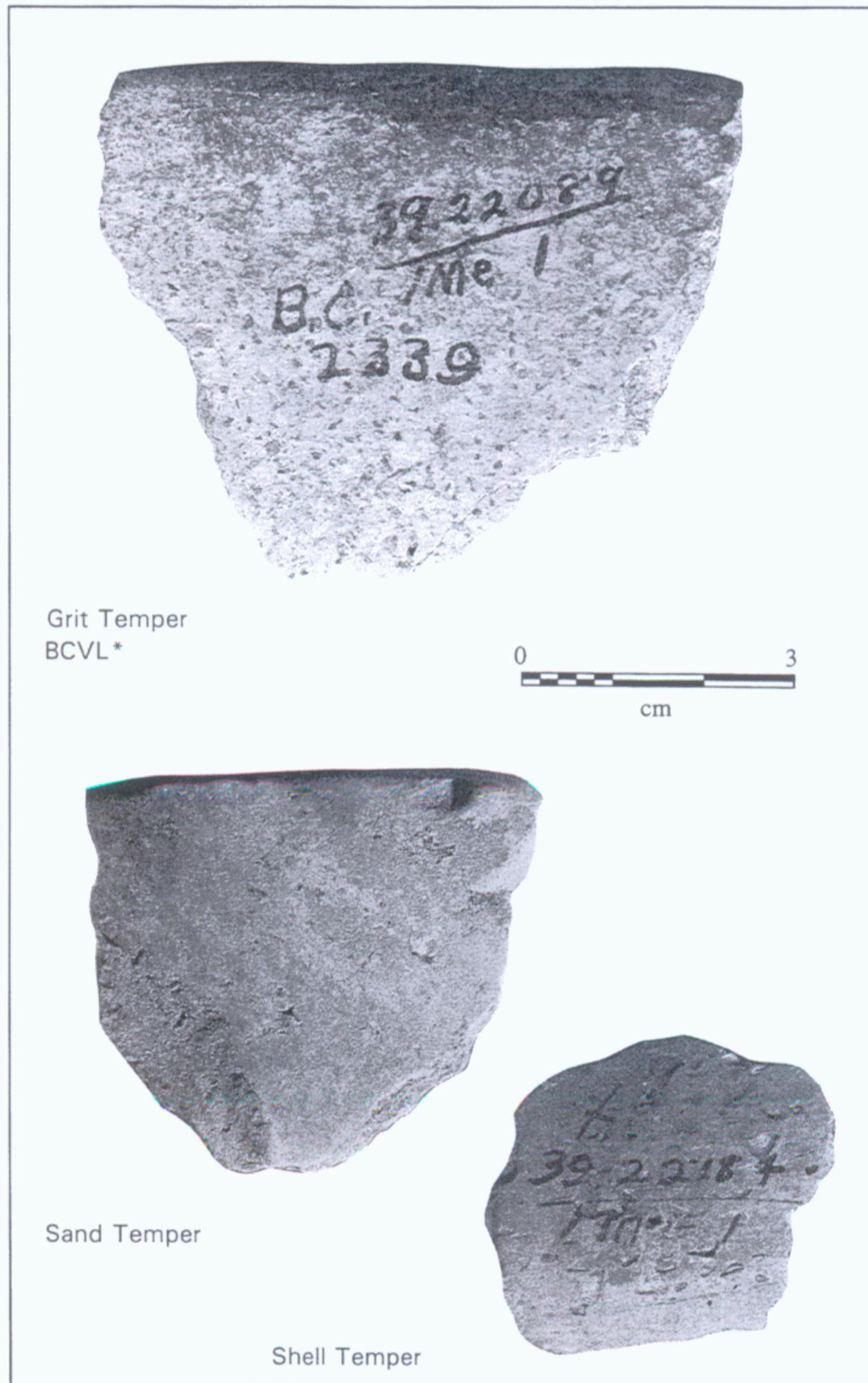


Figure 136. Enlarged photographs showing tempering agents found at Bull Creek (BCVL represents Bull Creek paste variant of Lamar).

The Bull Creek Site

The complicated stamped ware may be easily assignable to the type Lamar Complicated Stamped, with the exception that it has the Bull Creek variant of tempering. This exception also applies to check stamped, defined by W.H. Sears (1951:32) as Mercier Check Stamped. The bold incised category falls in more of a coarse sand tempering than of the tempering characteristic of the Bull Creek variant of Lamar. This type is therefore named as Lamar Bold Incised, with no particular distinction being made. The zone incised category finds its stylistic origins in Fort Walton Zone Punctated, but here again, the tempering is characteristic of the Bull Creek variant of Lamar. The punctated category seems to be most closely related to an undescribed punctated type in the original Lamar series. The engraved category is so sparsely represented here that no attempt will be made to discuss it extensively. It will simply be stated that this one example of engraving was

found on a black burnished sherd and is very similar to earlier Mississippian engraved types except for the fact that it is sand tempered rather than shell tempered. Finally, the red painted category, though statistically insignificant, should be mentioned since it is frequently found as a very minor type in many Lamar sites . . . Figures 137 and 138 illustrate examples of the primary types of surface treatment.

In the original analysis, the material was divided stratigraphically to meet one of the original objectives of the 1959 study. This objective was to determine if any differences could be detected stylistically, modally or typologically. No significant distinctions were detected. The material has therefore, for purposes of presentation in this paper, been lumped together into categories only, with no stratigraphic differentiation made.

Table 4. Ceramic counts from Schnell's 1959 excavations.

| Surface Treatment | Sherd Total | Percent (Mode) | Percent (Type) |
|--|------------------------------------|----------------|----------------|
| Plain (undecorated) | | | |
| Grit tempered | 2460 | 79.92% | |
| Sand tempered | | | |
| smoothed surface | 474 | 15.40% | |
| burnished surface | 136 | 4.42% | |
| Shell tempered | 8 | 0.26% | |
| | Total Plain | 100.0% | 36.92% |
| Complicated Stamped | 4903 | 98.12% | |
| Check Stamped | 94 | 1.88% | |
| | Total Stamped | 100.0% | 59.95% |
| Incised Punctated | | | |
| Bold Incised | 150 | 59.06% | |
| Zoned Punctated | 99 | 38.98% | |
| Punctated | 4 | 1.57% | |
| Engraved | 1 | 0.39% | |
| | Total Incised and Punctated | 100.0% | 3.05% |
| Painted | | | |
| Red Painted | 7 | 100.0% | |
| | Total Painted | 100.0% | 0.08% |
| Total Sherds in Lamar Series Collection | 8,336 | | 100.0% |



Figure 137. Examples of Lamar Complicated Stamped and Mercier Check Stamped (bottom right) sherds from Bull Creek (various collections). The upper left sherd shows typical overstepping.

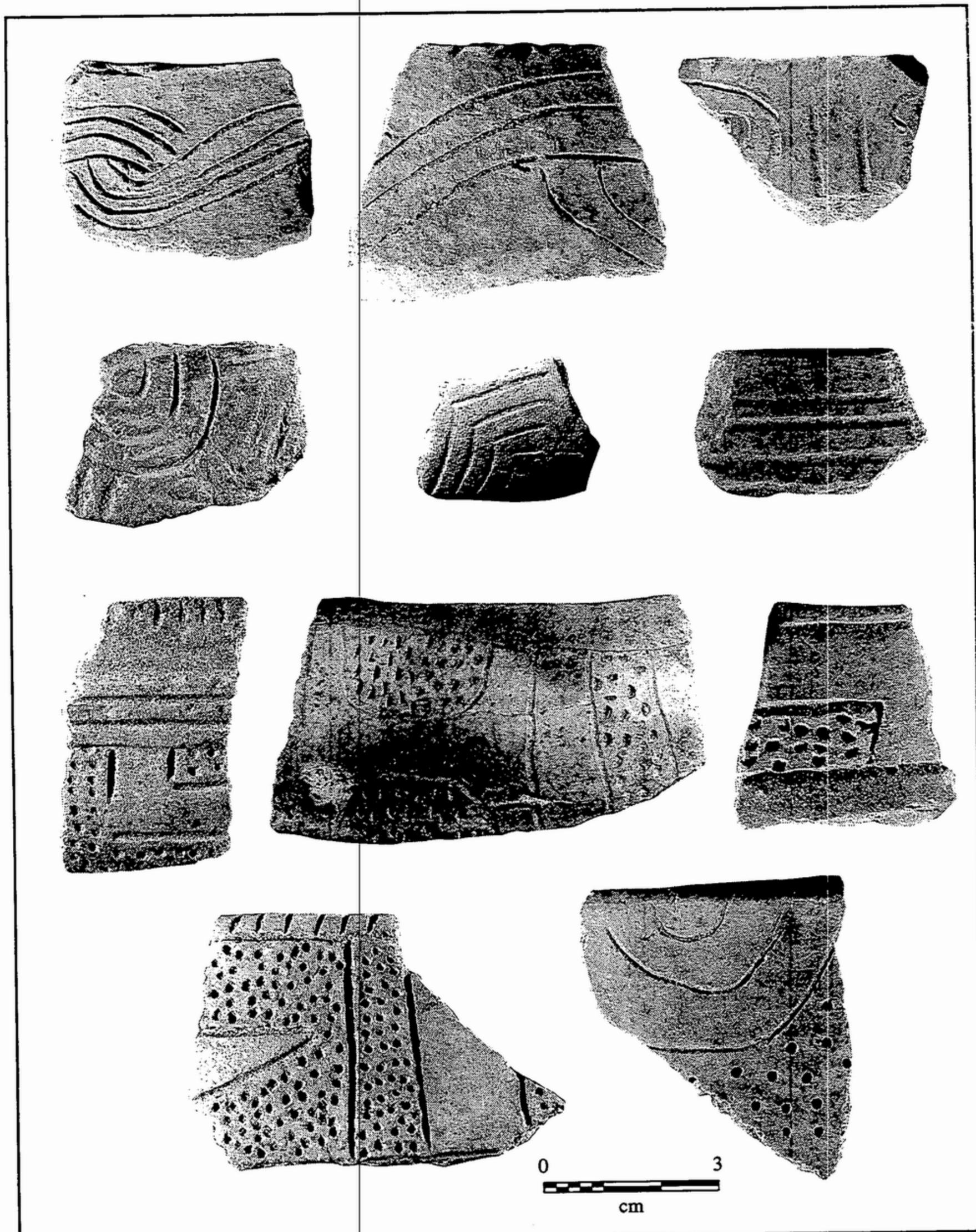


Figure 138. Typical examples of incised and punctated sherds from Bull Creek (various collections).

Schnell also examined the pottery from the 1950 investigations of Kelly.

The ceramic material recovered from Kelly's 1950 excavation [Table 5] was analyzed in order to compare this assemblage with other analyses made of Bull Creek Focus material A total of 3225 sherds were analyzed from Kelly's excavation. This analysis summarization is a combination of all of the units excavated by Kelly. It might be mentioned here that a detailed analysis of the material recovered by Patterson and Lester in 1936 has yet to be made (Schnell 1963).

Schnell's analysis of Kelly's material shows lower percentages of complicated stamped pottery compared to his 1959 work. Unquestionably, there is variation in percentages of wares from different collections. In part, this represents differing recovery techniques. However, a comparison is instructive. Figure 139 compares the frequencies of these wares from four investigations at Bull Creek (the 1993 SAS collections are included as the fourth collection).

Table 5. Analysis of sherds from Kelly's 1950 excavation (adapted from Schnell 1963).

| Pottery Category | Pottery Count | Percent Total Pottery |
|---|---------------|-----------------------|
| Bull Creek Variant of Lamar* Plain | 1362 | 42.2% |
| Bull Creek Variant of Lamar Curvilinear Complicated Stamped | 1394 | 43.2% |
| Bull Creek Variant of Lamar Check Stamped (Mercier) | 41 | 1.3% |
| Plain (moderate tempering) | 235 | 7.3% |
| Incised | 67 | 2.1% |
| Zone Punctate | 53 | 1.6% |
| Plain Shell Tempered | 13 | 0.4% |
| Plain (fine sand tempered) | 2 | 0.1% |
| Burnished Black Incised | 4 | 0.1% |
| Bull Creek Variant of Lamar Plain Lug | 5 | 0.2% |
| Bull Creek Variant of Lamar Plain Disc | 4 | 0.1% |
| Bull Creek Variant of Lamar Complicated Stamped Disc | 1 | <0.1% |
| Red Filmed | 3 | 0.1% |
| Burnished Black Plain | 24 | 0.7% |
| Brushed (probable Chattahoochee Brushed) | 13 | 0.4% |
| Negative Painted | 1 | <0.1% |
| Burnished Black with Rim Node | 2 | 0.1% |
| Simple Punctated | 1 | <0.1% |
| Total | 3225 | 100% |

**Bull Creek Variant of Lamar* designated a type of paste which contains large particles of garnet bearing grit extruding from the exterior (sometimes the interior).

Schnell's tabulations from his 1959 excavations have been used to define the ceramic composition of the Bull Creek phase, at least with respect to surface treatment. Schnell's excavations produced a predominance of complicated stamped wares (> 50 percent) followed by plain, incised/punctate and check stamped (Schnell 1990:67).

By accepting Schnell's (1963) assessment that no stratigraphic differences existed for the pottery recovered in the portion of the site investigated in 1959, we may accept Schnell's figures as the definitive characterization of Bull Creek phase pottery with respect to surface treatment. The small SAS collections show strong parallels in percentages to the 1959 excavations.

Comparison of Bull Creek Pottery
From Four Excavations

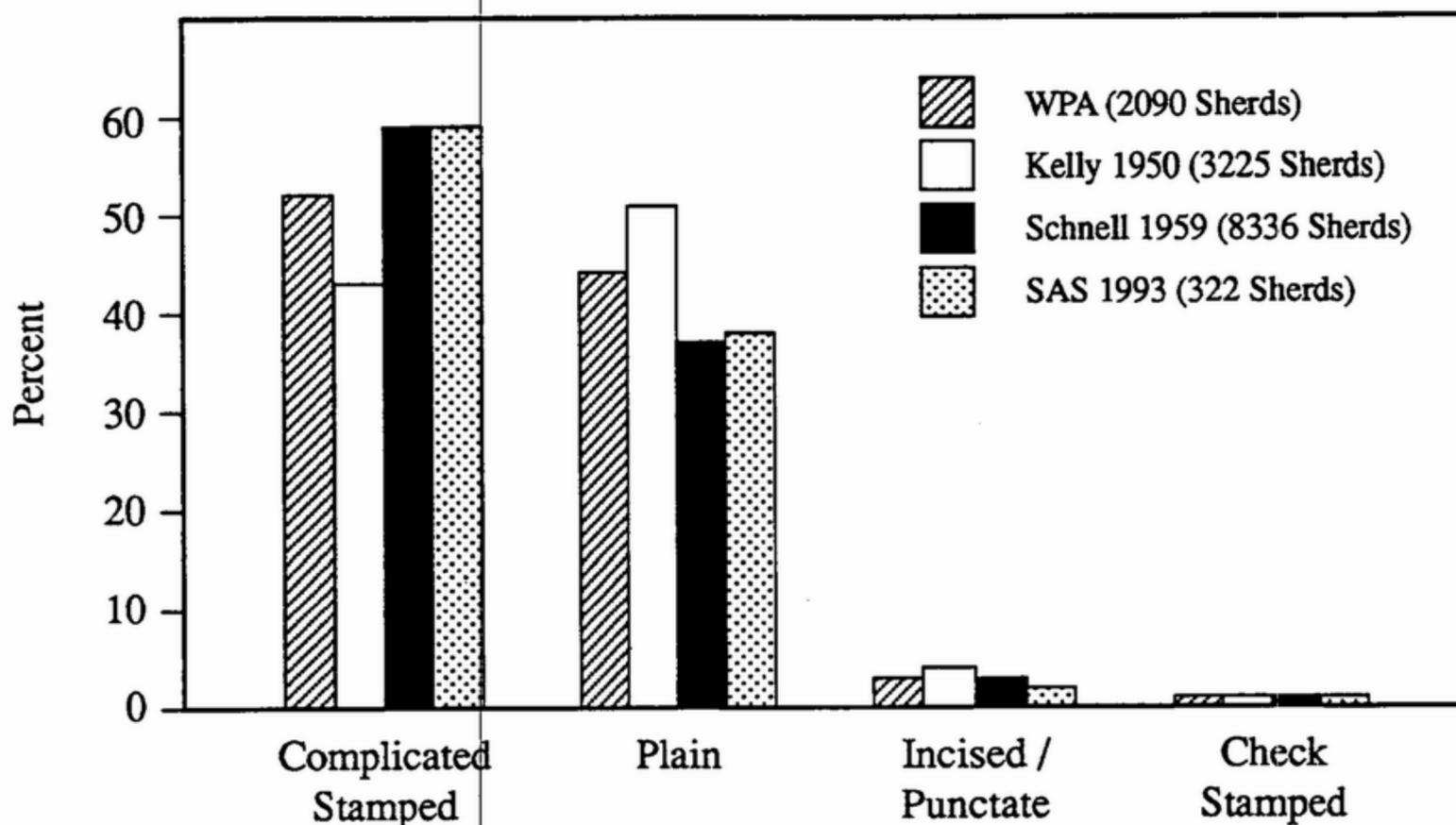
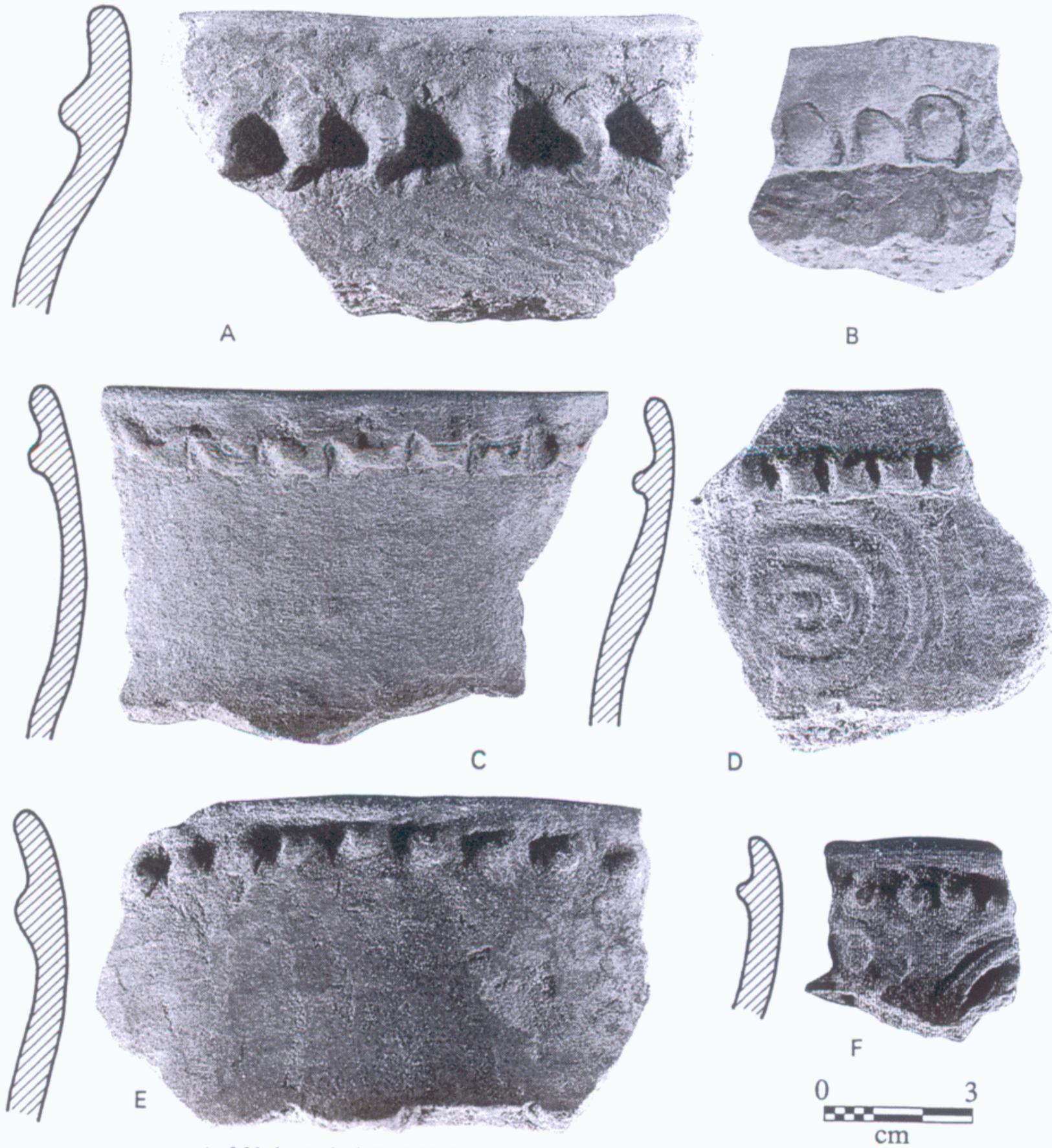


Figure 139. Comparison of pottery counts from four archeological investigations of the Bull Creek site (the WPA sherd counts exclude the modeled category).

Bull Creek Rim Attributes

Bull Creek vessels display a variety of rim forms and rim modifications typical of both Lamar and Fort Walton. The primary rim attributes of Bull Creek pottery have been

examined and quantified for the WPA-era excavations and Kelly's 1950 excavations. Figures 140 and 141 show examples of the more common rim forms from Bull Creek. Figure 142 is a copy of the NPS summary sheet of attributes for 280 rims.



A, folded, pinched; B, folded, cane punctate; C, Applied stip, pinched; D, applied strip, notched; E-F, applied strip, noded

Figure 140. Examples of applied rims from the Bull Creek site.

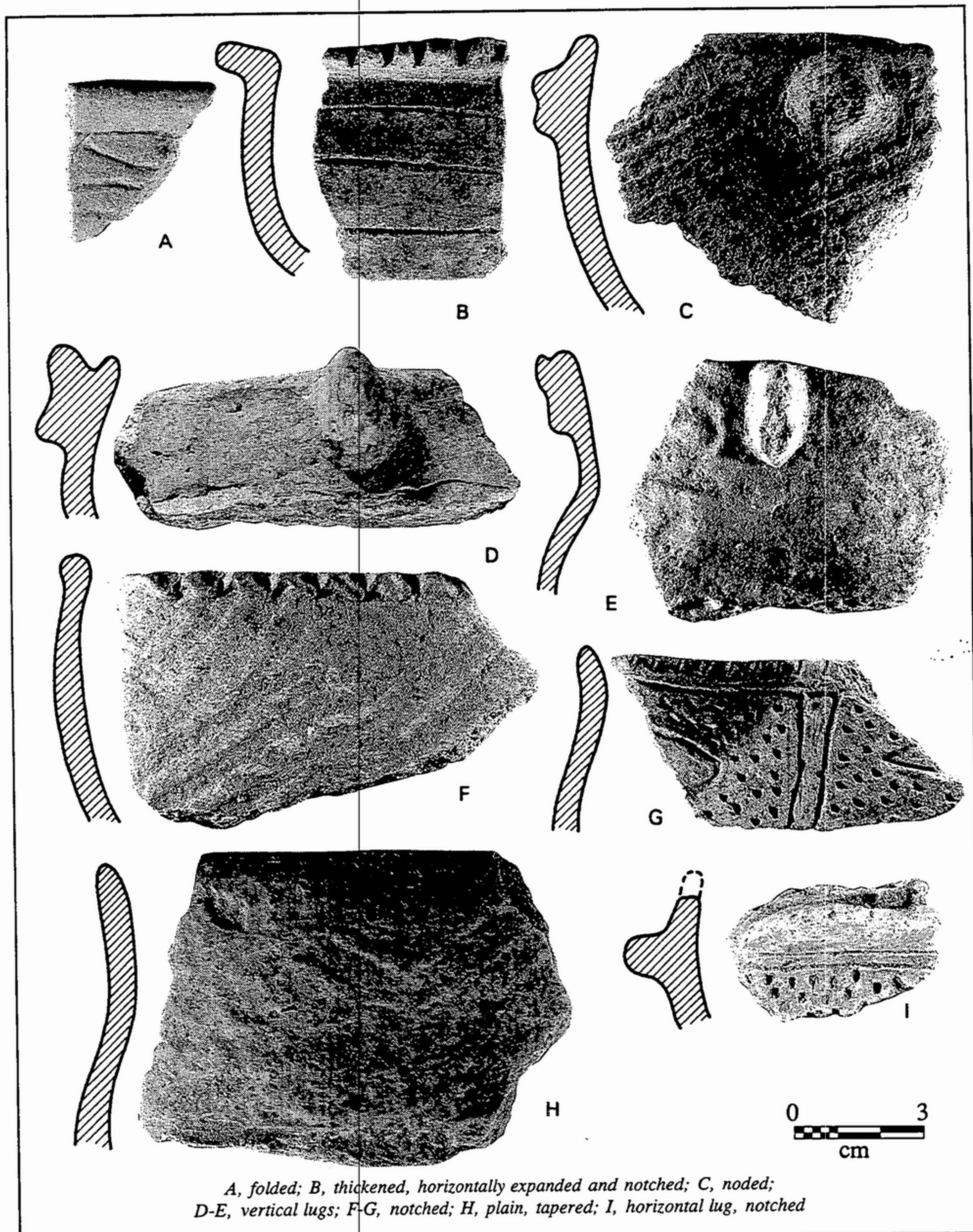


Figure 141. Examples of additional rim forms from the Bull Creek site.

The data presented in the National Park Service's summary sheet is valuable for examining both rim form and vessel decoration. The summary sheet provides counts of shape and decoration for rims and lips. Because the coding instructions (see Appendix B) are not compatible with the category of lip shape shown on the summary sheet, those tabulations have not been interpreted.

According to the summary sheet figures, the most common rim form curves outward and is decorated with an applied strip. The rim decoration referred to as applied is identified on 37.1 percent of all rims. Applied rims are formed by adding a strip of clay at the rim or a slight distance below the rim. Generally, this strip is pinched. When the rim collar is wide and extends down from the rim, it is generally referred to as a folded pinched rim and represents a typical Lamar jar style. The decoration category "gridbar" as used in the summary sheet appears to be the same as check stamped. The remaining terminology appears to be similar to that used today.

The category of pot decoration is important as it relates to other vessel attributes, discussed later. The summary sheet data may be used to approximate some vessel count traits. The figures comparing pot decoration and rim decoration show a predominance of plain vessels (57.9 percent), followed by stamped (28.9 percent), incised or punctate (12.5 per-

cent), and check stamped (0.7 percent). This will be examined again in this chapter. These figures suggest that the high percentage of complicated stamped represented by individual sherd counts (approximately 60 percent in Schnell's 1959 excavations) may result from less than thirty percent of the vessels produced on the site.

A detailed examination of Bull Creek rims was also conducted by Schnell (1963). The results of Schnell's analysis follow.

To the present, only general statements have been made about the exact nature of Lamar pottery [at the Bull Creek site]. It was decided, therefore, in order to gain a more exact understanding of the nature of Lamar types, and of the Bull Creek Focus in particular, to make a detailed rim analysis. This was done by dividing the rims from the 1950 excavation by Kelly, a total of 278 rim sherds, into a number of categories according to rim form and to designate pottery type according to the body portion below the rim [Figure 18]. The following comparative data resulted [Table 6, Figure 144].

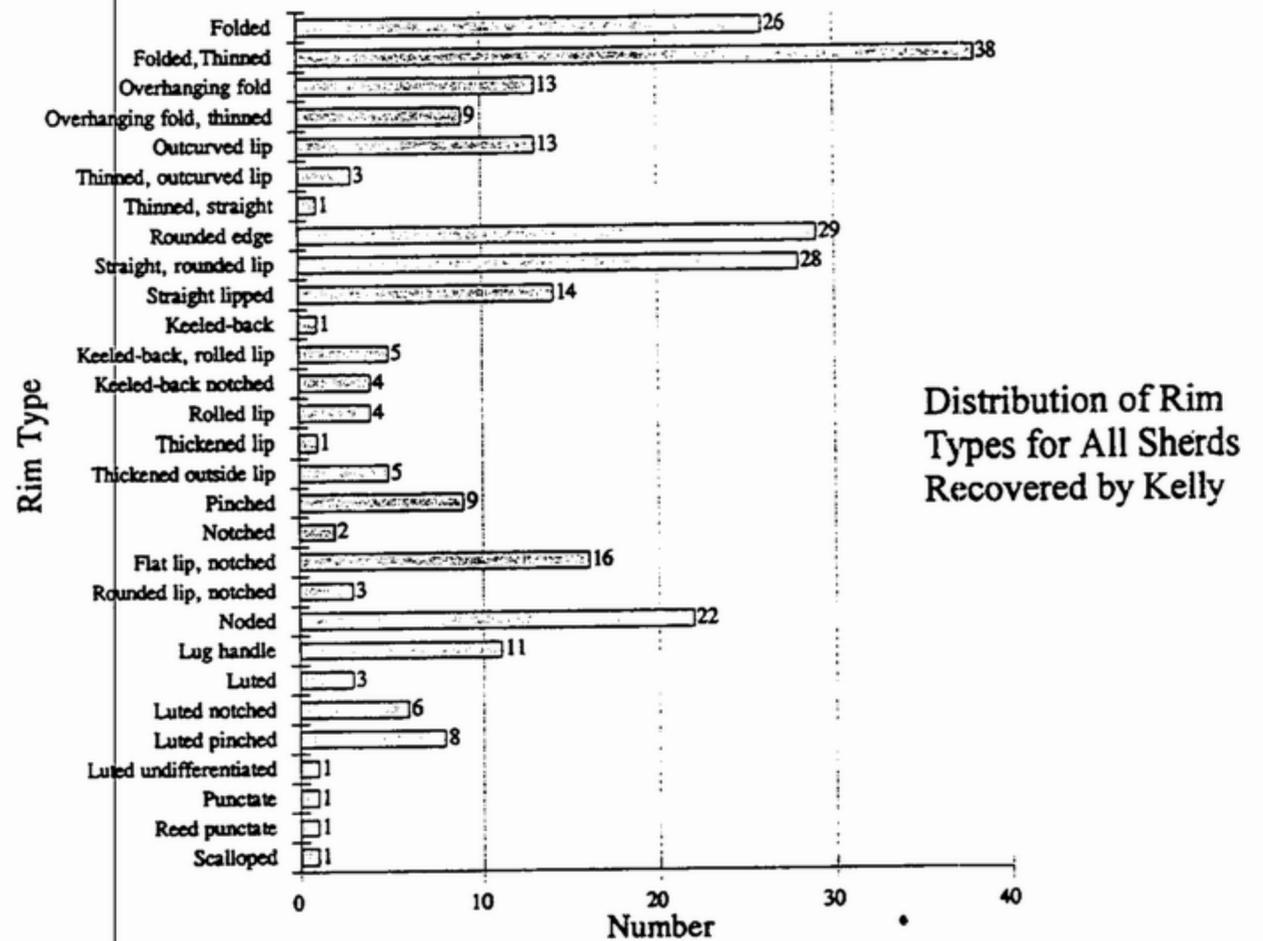


Figure 143. Graph showing rim varieties identified from a collection of 278 sherds (graph produced from figures in Schnell 1963).

Table 6. Detailed rim analysis of 278 sherds from Kelly's 1950 excavations at Bull Creek.

| Rim Type | Ceramic Type | | | | | Total |
|-----------------------------|--------------|---------------------|---------|----------------|---------------|-------|
| | Plain | Complicated Stamped | Incised | Zoned Punctate | Check Stamped | |
| 1 Folded | 25 | | | | 1 | 26 |
| 2 Folded, thinned | 29 | 9 | | | | 38 |
| 3 Overhanging fold | 10 | 3 | | | | 13 |
| 4 Overhanging fold, thinned | 9 | | | | | 9 |
| 5 Outcurved lip | 9 | 1 | 2 | 1 | | 13 |
| 6 Thinned, outcurved lip | 2 | 1 | | | | 3 |
| 7 Thinned, straight | 1 | | | | | 1 |
| 8 Rounded edge | 23 | 2 | 4 | | | 29 |
| 9 Straight, rounded lip | 16 | 1 | 9 | 2 | | 18 |
| 10 Straight lipped | 4 | 2 | 4 | 4 | | 14 |
| 11 Keeled-back | 1 | | | | | 1 |
| 12 Keeled-back, rolled lip | 5 | | | | | 5 |
| 13 Keeled-back notched | 4 | | | | | 4 |
| 14 Rolled lip | 3 | 1 | | | | 4 |
| 15 Thickened lip | 1 | | | | | 1 |
| 16 Thickened outside lip | 5 | | | | | 5 |
| 17 Pinched | 2 | 3 | | 1 | 3 | 9 |
| 18 Notched | 2 | | | | | 2 |
| 19 Flat lip, notched | 5 | 4 | 3 | 4 | | 16 |
| 20 Rounded lip, notched | | | | 3 | | 3 |
| 21 Noded | 20 | 2 | | | | 22 |
| 22 Lug handle | 10 | | 1 | | | 11 |
| 23 Luted | 2 | | 1 | | | 3 |
| 24 Luted notched | 5 | | 1 | | | 6 |
| 25 Luted pinched | 8 | | | | | 8 |
| 26 Luted undifferentiated | 1 | | | | | 1 |
| 27 Punctate | 1 | | | | | 1 |
| 28 Reed punctate | | 1 | | | | 1 |
| 29 Scalloped | 1 | | | | | 1 |
| Grand Total | 204 | 30 | 25 | 15 | 4 | 278 |

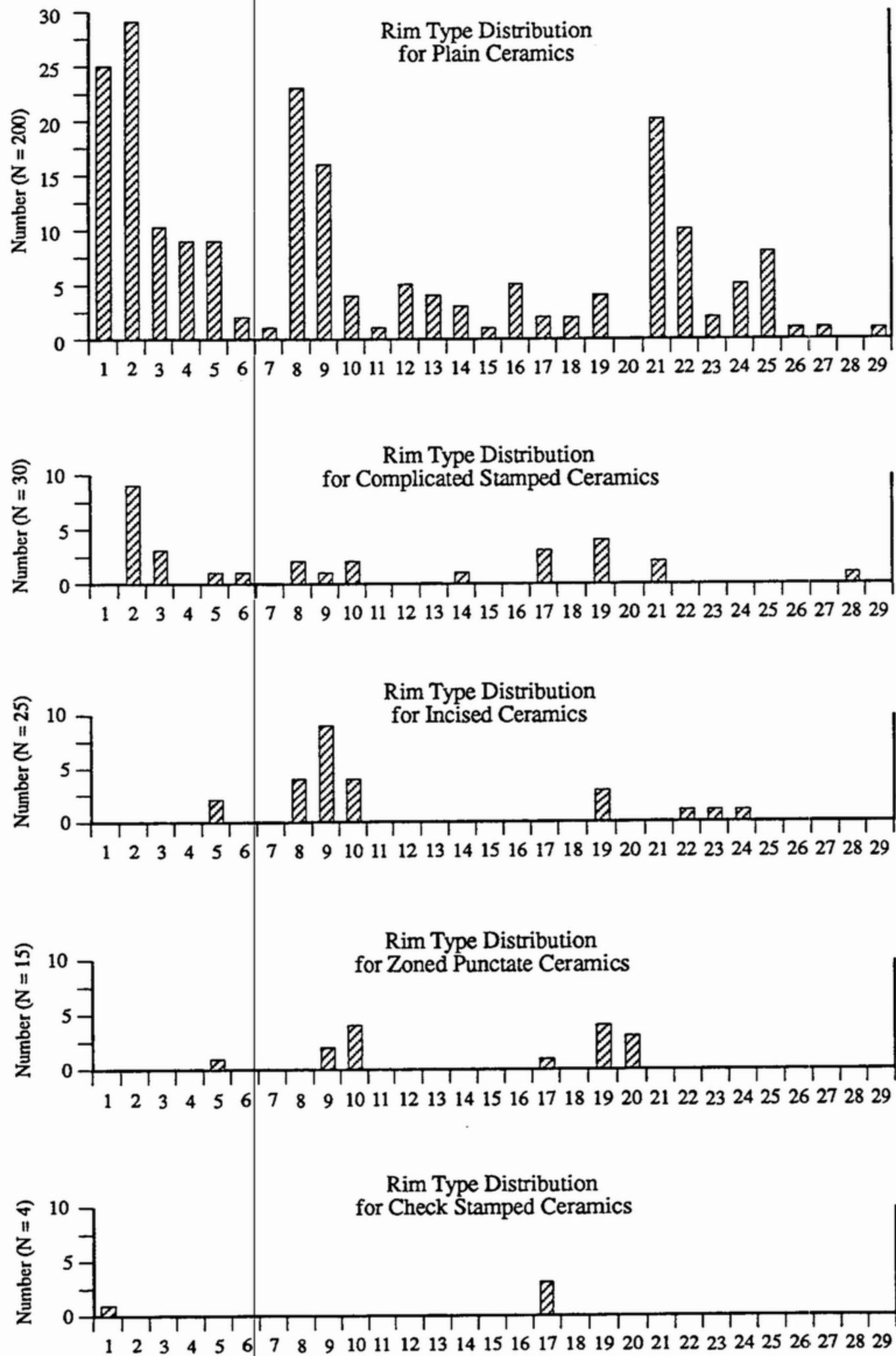


Figure 144. Series of graphs comparing rim type and vessel treatment for sherds examined by Schnell (see Table 6 for list of rim types corresponding to the numbers on the graphs).

Schnell examined rim types in great detail, but his manuscript does not contain definitions for the rim types. While most of the rim types are easily interpreted, other categories cannot be accurately understood without formal or measured descriptions. There is some discrepancy with respect to counts for ceramic types or pot types. Schnell's counts indicate that 204 of 278 sherds represent plain bodied vessels. This percentage of 73.4 percent is substantially higher than the 57.9 percent noted on the NPS summary sheets. This may represent differences in the collections, differences in analysis techniques, or simply a typographic error in that manuscript. A quick reexamination of sherds in Kelly's collections, now curated at the University of Georgia, produced a figure of approximately 53 percent plain vessels, which is more in line with the NPS figures.

The width of rim folds (applied rim strips) is today considered a critical analytical measurement with respect to Lamar pottery. The generally accepted proposal is that these rims get wider through time. Hally's examination of folded pinched rims from Park's Mound led him to conclude that the rims were sufficiently wide to indicate a late date (late sixteenth or early seventeenth century) for the occupation at that site (Hally and Oertel 1977:39). During the course of the present project, measurements were taken on folded pinched rims from various collections. A total of 112 folded pinched rims from the NPS collection were measured. That collection also included 59 rims with distinctly applied pinched strips which were generally placed about one cm below the lip. This is mentioned because there is some subjectivity involved in distinguishing sherds with smoothing of the upper portion of an applied strip from sherds that are generally described as folded pinched rims. The folded pinched rims in this collection ranged in width from 11 to 28 mm and averaged 20.3 mm, wider than the 18 mm average from Park's mound (Hally and

Oertel 1977:39). This comparison seems inconsistent with Schnell's dating of Bull Creek as an earlier phase and may indicate that certain concepts regarding rim fold width might stand further scrutiny, especially with respect to Fort Walton influences.

A second set of measurements was taken while examining all available collections for vessel form data. Sherds of sufficient size to allow measurement of rim diameter, determine vessel shape, and determine vessel decoration were also measured for width of folded rims when present. Most of the vessel form data will be presented in a later portion of this chapter; however, the rim fold width is pertinent at this point. Table 7 compares vessel rim diameter to the width of folded pinched rims for fifty sherds. All sherds represent typical Lamar constricted rim jars. These data show that while the smaller jars do display relatively smaller rim folds, there is not a direct correlation indicating increasingly larger rims with increasingly larger vessel diameters. Beginning at approximately 32 cm diameter, the rim folds tend to cluster around 21 mm in width.

Table 7. Comparison of rim diameter and width of folded pinched rim fold (sample size: 50 rim sherds).

| Rim Diameter | Count | Size Range Width of Rim Fold | Average Size Width of Rim Fold |
|--------------|-------|------------------------------|--------------------------------|
| 14 cm | 1 | 13 mm | 13 mm |
| 18 cm | 1 | 16 mm | 16 mm |
| 20 cm | 1 | 16 mm | 16 mm |
| 22 cm | 2 | 12-16 mm | 14 mm |
| 24 cm | 2 | 16-18 mm | 17 mm |
| 26 cm | 1 | 17 mm | 17 mm |
| 28 cm | 4 | 12-21 mm | 17 mm |
| 30 cm | 2 | 16-18 mm | 17 mm |
| 32 cm | 8 | 16-27 mm | 21 mm |
| 34 cm | 8 | 14-24 mm | 18 mm |
| 36 cm | 8 | 15-26 mm | 21 mm |
| 38 cm | 3 | 14-26 mm | 21 mm |
| 40 cm | 5 | 15-25 mm | 21 mm |
| 42 cm | 3 | 18-25 mm | 21 mm |
| 44 cm | 1 | 20 mm | 20 mm |

Two additional attributes of rim decoration, handles and adornos, are inadequately tabulated by the researchers of the Bull Creek site. Chase (1957) noted that handles were not found on Lamar Complicated Stamped vessels at Bull Creek and there are no references in his manuscript to handles on other pottery types. Chase does note that rim adornos, usually lugs, nodes and more rarely effigies, usually of birds, occur on Fort Walton-style vessels and a type of burnished black slip ware (Chase 1957). Schnell's summary tables list 11 lugs while the National Park Service summaries reference six handles/lugs. The handles appear to be vertically and horizontally placed lug handles. An examination of available collections produced several examples of lug handles (see Figure 141, second row) and two or three flattened fragments of pottery which appear to be portions of small strap or loop handles. Large Lake Jackson-style loop handles which appear so frequently on Mississippian sites in the region do not appear to occur at the Bull Creek site. At the Bull Creek site, lug handles appeared to be limited to plain and incised/punctate bowls.

The production of ceramic effigy figures is an important aspect of the Bull Creek pottery complex. This is most apparent in the effigy vessels and pipes found with burials. Effigies are also common on vessels found throughout the village area.

Figures 145 and 146 illustrate examples of effigy adornos from the Bull Creek site. Most of the illustrated effigy objects are animal figures of some type. The object illustrated in Figure 145 has been identified as a human representation. The effigy adorno was recovered from the midden deposits in the cemetery during the WPA excavations and numbered as Find 69. NPS notations describe the object as follows.

Very remarkable rimsherd, in the form of a woman, with her arms raised to the back of her head. Facial characteristics more or less of conventionalized form. Found 60" below the surface, 27" below the occupation level. 24" N. 6" E. Sta. 4-15L13 (Lester 1937:91).

The old National Park Service photograph fails to do justice to the exceptional features lauded by the preceding description. A search of the NPS collections suggests the artifact has been lost so it cannot be rephotographed.

At Bull Creek, effigy rim adornos appear to be associated with Fort Walton-style bowls. Similar animal style adornos are found consistently on Mississippian sites and have been reported from other late Fort Walton and Bull Creek-related sites in the region (Willey 1949:504; Broyles 1971).

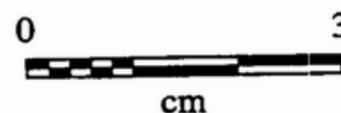
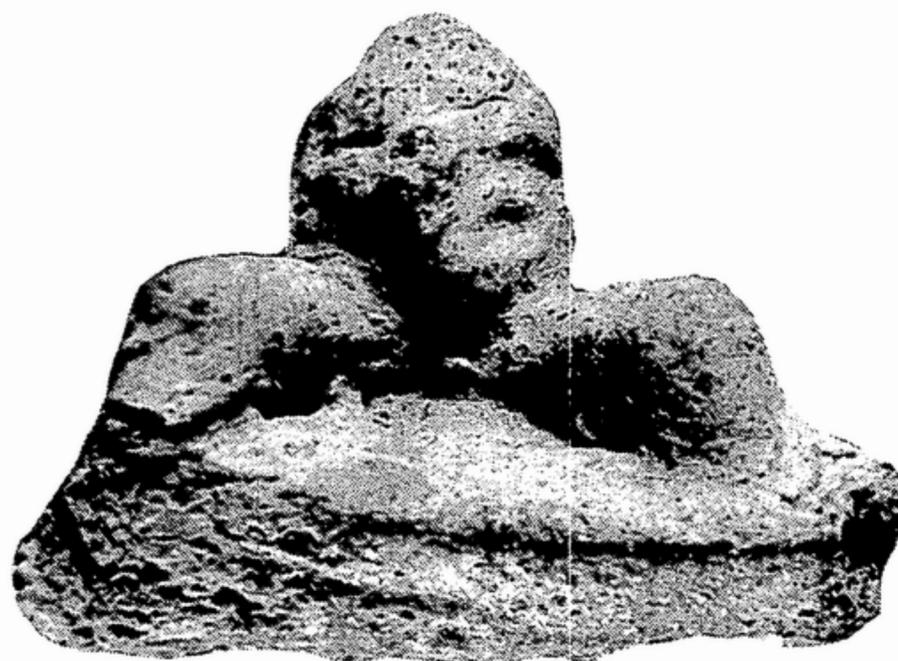


Figure 145. Photograph of human effigy adorno (copy of photograph from National Park Service files).



Figure 146. Animal effigy rim adornments from Bull Creek site collections (size of lower right is unknown).

Vessel Form Attributes

During the course of the present study all available collections of pottery from Bull Creek were examined. As one facet of that examination, all large rim sherds were pulled and selected sherds were analyzed in detail to procure vessel form data that would allow further comparison to other Mississippian site analyses (Figure 147). An attempt was made

to mend vessels and count only one rim sherd per individual vessel. Sherds were included in this analysis if they were sufficiently large to determine rim diameter, rim type, body decoration and vessel profile. Generally, a minimum rim size greater than 4 cm was required. Vessel form represents one aspect not sufficiently examined by previous researchers at Bull Creek. Our examination produced data for 219 vessels (Table 8).

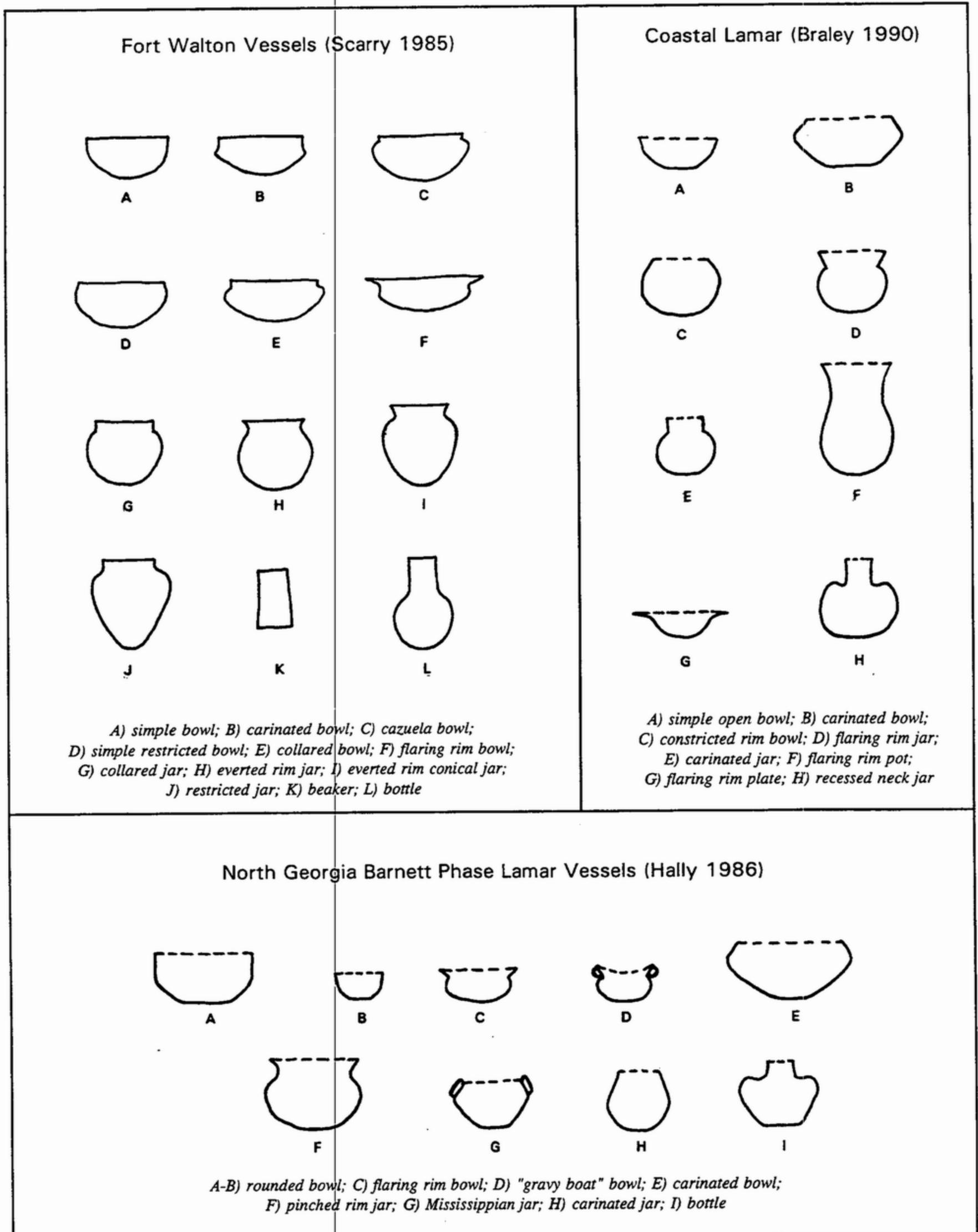


Figure 147. Examples of vessel forms identified from various Mississippian localities.

Table 8. Vessel forms and counts from Bull Creek.

| Vessel Form | Count |
|-----------------------------|-------|
| Everted Rim Jar | 83 |
| Carinated Bowl | 36 |
| Collared Globular Bowl | 2 |
| Simple Constricted Rim Bowl | 80 |
| Open Bowl | 15 |
| Effigy Bottle (Dog Pot) | 3 |
| Total | 219 |

moderately everted to conspicuously flaring rims (Figure 148). Within the collection, rim modifications include folded pinched rims (N = 50), applied strip below the rim that is noded (N = 10) or pinched (N = 5), individual nodes (N = 6) or lugs (N = 1) at or below the rim. A small number of jars have unmodified rims (N = 11). Body decoration consists of complicated stamped (N = 65), plain (N = 17), and check stamped (N = 1).

Of the 219 vessels, only four (the three dog pots and one small bowl) are burial objects. The remainder were recovered from the general midden or trash pits and are considered domestic or utilitarian vessels. Each vessel form will be described separately. Measured attributes of individual sherds are presented in Appendix C. That data will be summarized in this chapter.

Everted Rim Jars (N = 83) generally correspond to Hally's pinched rim jar (see Figure 147) and represent an extremely common vessel type on Lamar sites. Our category applies to jars with well-defined neck constrictions and

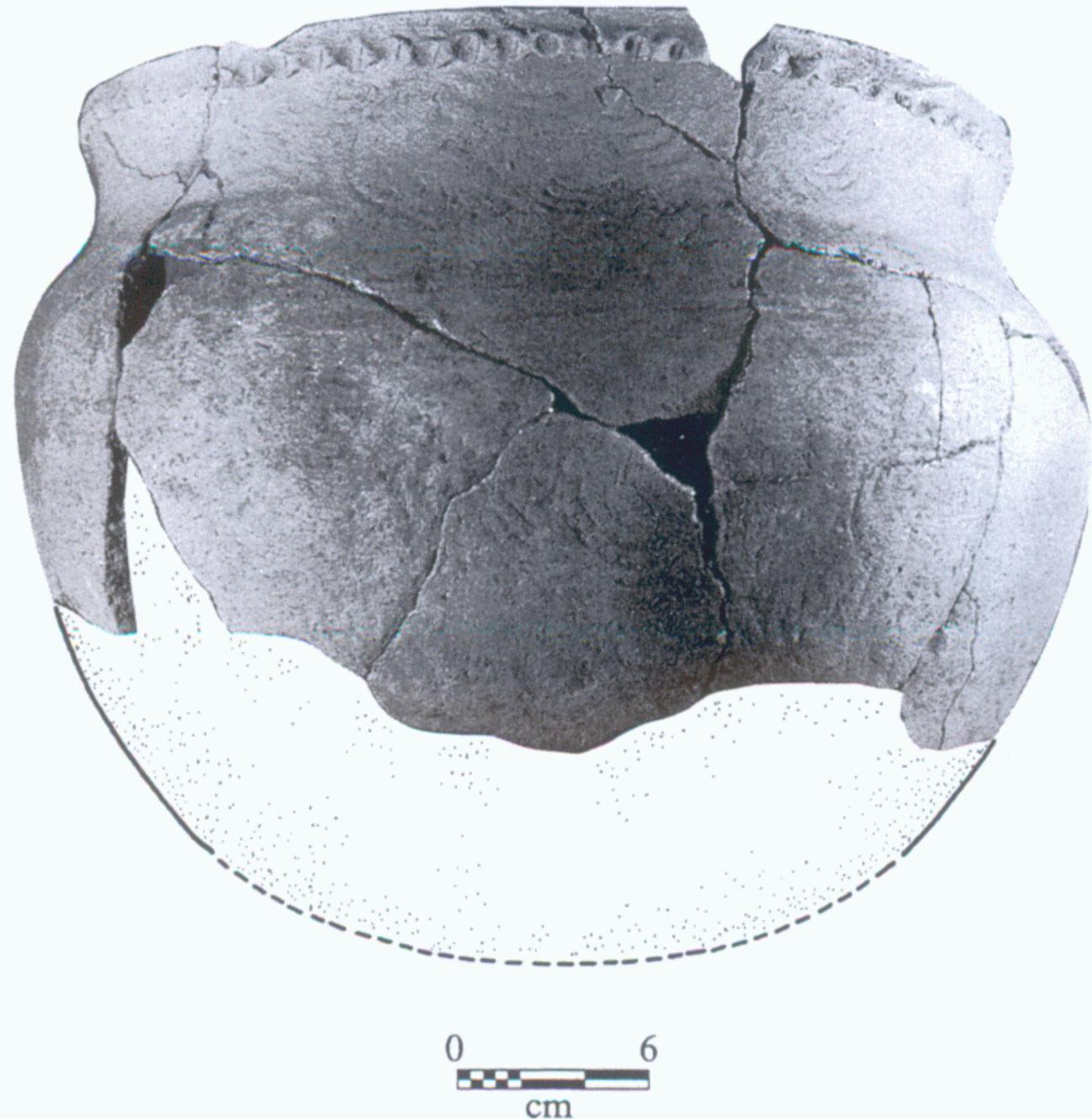


Figure 148. Partially reconstructed Lamar Complicated Stamped everted rim vessel with applied pinched rim strip (UGA collection, Bull Creek site provenience unknown).

Within this collection jars account for approximately two-thirds of the vessels decorated with complicated stamping from Bull Creek. The remaining vessels with complicated stamping are simple bowls.

Measurement of rim orifice diameter is the primary means of comparing jar size from different sites. Jars generally reach their greatest diameter a few centimeters below the neck constriction. Relatively few of the Bull Creek rims were of sufficient size to determine maximum vessel diameter but measurements of six sherds showed the increase was only 2 to 4 cm greater than rim diameter.

Rim diameters for jars range from 14 to 44 cm. Across this spread, 36.1 percent are small to medium jars of 30 cm or less and the remaining 63.9 percent are medium to large jars in the 32 to 44 cm range. A pronounced peak exists between 32 and 36 cm accounting

for 41.0 percent of all jars. Jars account for 37.9 percent of the total vessels in this collection. Figure 149 shows the range of rim sizes for the Bull Creek jars.

Large jars are considered storage vessels, with a rim shape that facilitates pouring and attachment of a protective covering (Shapiro 1990:155). Research by Hally (1986:285-286) indicates the largest jars (40 cm and larger) were used for long term storage while medium sized jars were used as general purpose cooking vessels. According to the research of Shapiro the proportions of larger storage jars (> 30 cm in rim diameter) within the overall assemblage is an important indicator of the intensity of site occupation. The relative counts for jars compared to other vessel types at Bull Creek and the relatively high frequency of larger jars are comparable to permanently occupied late Mississippian sites (Hally 1986; Shapiro 1990).

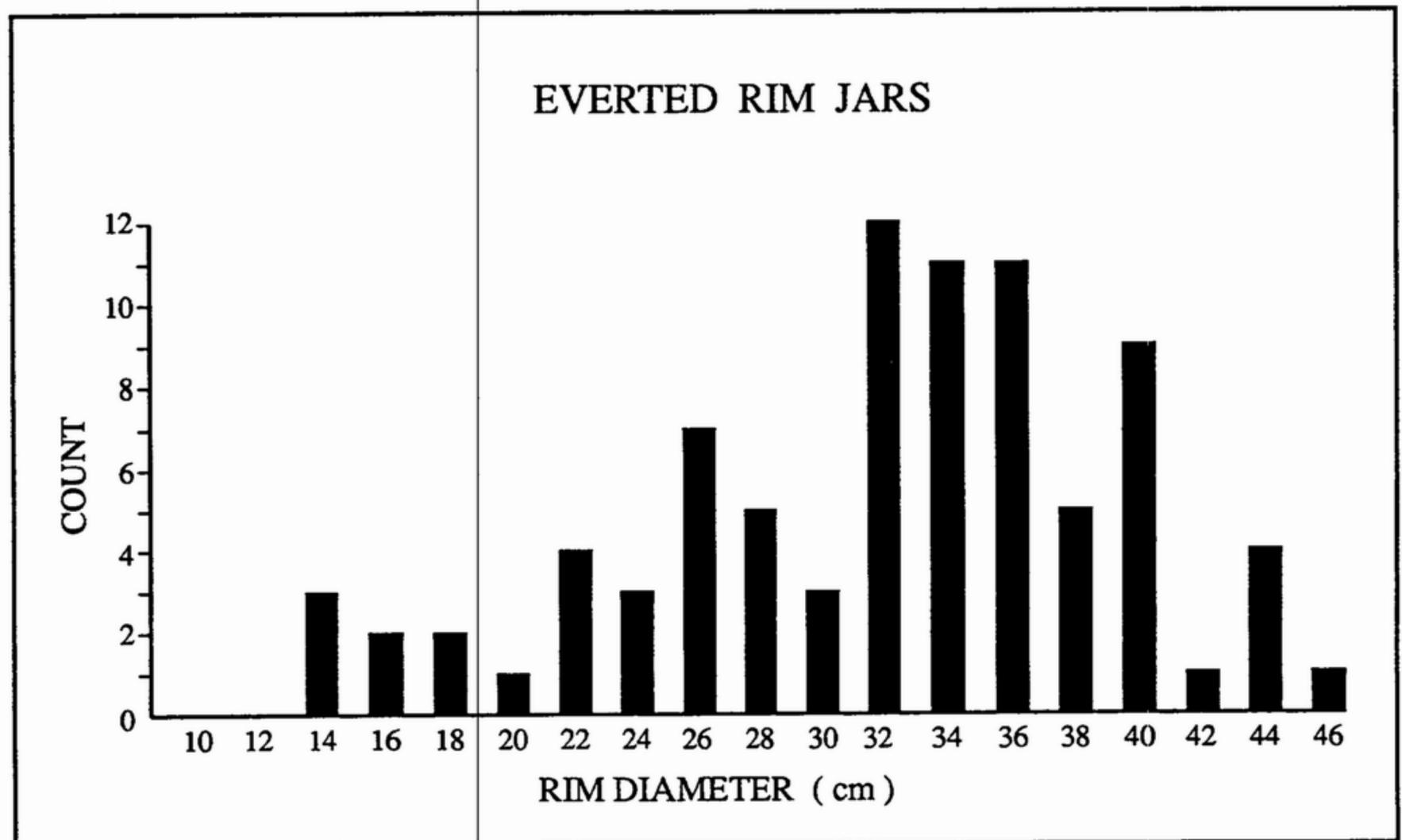


Figure 149. Graph showing the range of rim sizes for everted rim jars from Bull Creek.

Carinated Bowls (N = 36) are defined as constricted rim vessels with distinct shoulder break, which sometimes forms a well defined projecting keel or carination. Similar vessels from contemporary sites are generally flat-bottomed. The typical Lamar cazuela

bowl is included in this category. At Bull Creek, carinated bowls are typically decorated with Fort Walton incised and zone punctate patterns (Figure 150). The lower restored bowl has cane punctation at the shoulder that is not typical of the Bull Creek site.

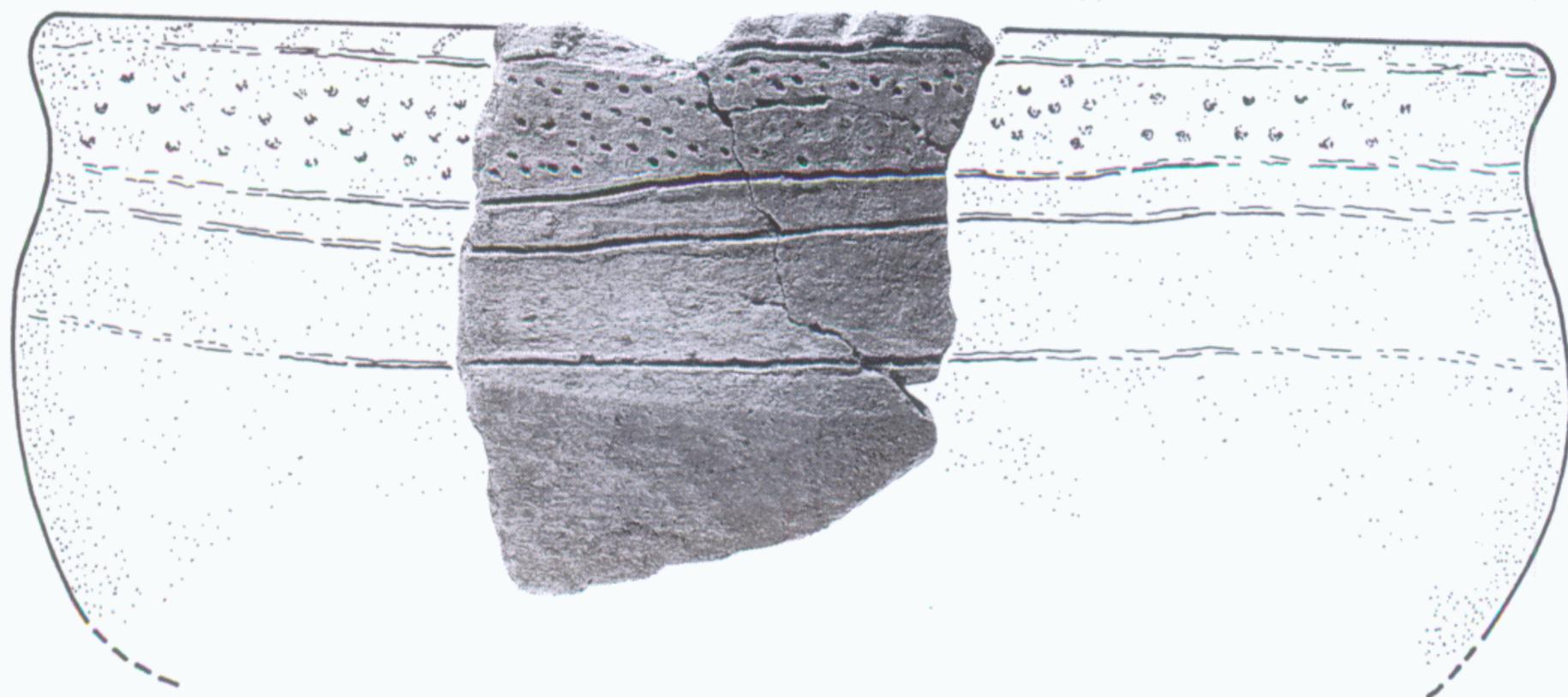


Figure 150. Examples of Fort Walton carinated bowls from Bull Creek.

All but one of the carinated bowls in this collection are decorated by incising (N = 11) or a combination of incising and zone punctation (N = 24). The style of the decoration is basically Fort Walton. The presence of Lamar bold incising is questionable. Rim shapes vary from rounded to flattened. Modification includes notching (N = 16) and incising (N = 3). Incised rims are from vessels where the incised body decoration extends to the lip of the rim. The rims of seventeen vessels are not modified. At Bull Creek, rim notching occurs on carinated bowls and simple constricted rim bowls but relative proportions are substantially higher in this vessel type.

Figure 151 shows the distribution of rim diameters for carinated bowls from this collection. The vessel occurs in sizes from 14 to 40 cm but there are some indications that some sizes were more common. Almost twenty percent of the vessels measure 24 cm in rim diameter. A second peak is evident at 30 to 32 cm (30.6 percent of all carinated bowls).

The size distributions of carinated bowls at Bull Creek is similar to that shown

for the Late Lamar Barnett Phase (Hally 1986:275). Hally suggests that carinated bowls were used to cook and serve food that was of liquid consistency and would require a minimum of cooking. Small and large sizes of carinated bowls reflected the quantities of food prepared (Hally 1986:288-289). This vessel type was widely distributed in the midden and trash pits at the Bull Creek site. At least some examples of the vessel type were found on the floor of Lester's second structure.

Collared Globular Bowls (N = 2) are represented by two examples from Bull Creek. The most complete example was found in a trash pit near Lester's Structure 1 (see Figure 34). The vessel form has been described as a deep globular bowl with incurving walls which constrict at the base of a short neck or collar (Willey 1949:498). The previously illustrated vessel is plain with a rim diameter of 26 cm. The rim is unmodified. The second vessel is check stamped with a slightly rolled rim and a rim diameter of 36 cm. These bowls may have been used as cooking or serving vessels.

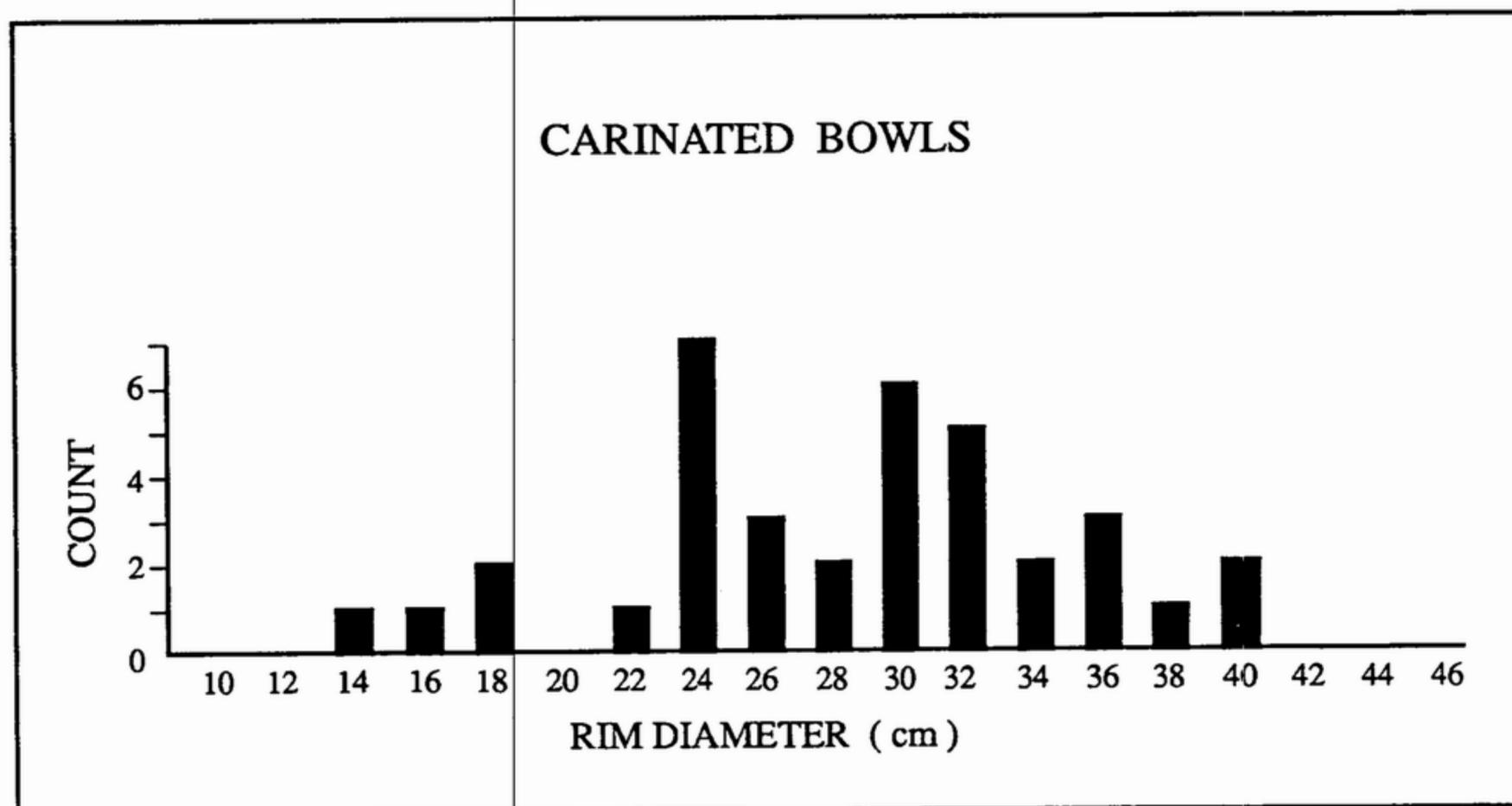


Figure 151. Graph showing the range of rim sizes for carinated bowls from Bull Creek.

Simple Rounded Bowls (N = 80)
occur with essentially the same frequency as jars. The category includes any bowl with a constricted orifice. In some cases the rim is only slightly incurving. This category is

distinguished from other simple bowls that slope outward at the orifice. The category combines vessel types similar to Scarry's simple restricted bowl and simple bowl (see Figure 147). Figure 152 shows examples of the range of profile variability.

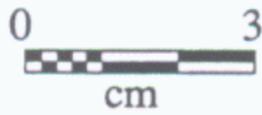


Figure 152. Examples of simple rounded bowls with slight to moderate rim constrictions.

Simple rounded bowls were decorated with complicated stamping (N = 34), incising (N = 11), a combination of incising and zone punctation (N = 2) and check stamping (N = 1). The remaining thirty-two bowls were undecorated. Within this collection sixty percent of all vessels are decorated. The percentage of Lamar complicated stamping (42.5 percent) is second only to jars at Bull Creek.

Rim types are highly variable in this vessel category. Fourteen different rim types were identified, including unmodified (N = 33), notched (N = 22), pinched (N = 2), noded (N = 2), rolled (N = 3), incised (N = 1), applied notched strip (N = 2), applied noded strip (N = 1) folded (N = 3), folded and pinched (N = 3), folded and notched (N = 3), and thickened (N = 2). The collection also contains one T-rim and two rims with effigy adornos.

Rim diameters range from 10 to 42 cm with two-thirds being greater than 26 cm

(Figure 153). Within this collection, sixty percent of the vessels fall within the range of 28 to 36 cm.

Hally's work with Barnett phase vessels suggests that large rounded bowls, which equate in size to the majority of Bull Creek vessels, were used primarily for preparing and serving large quantities of viscous and solid foods but only minimally for heating these foods. Smaller bowls were used for similar functions but in limited quantities (1986:289).

Simple Open Bowls (N = 15) refers to vessels for which the widest part of the bowl occurs at the rim orifice. These bowls differ from the previous category primarily in this one attribute. Figure 154 illustrates a typical open bowl. A restored example from the WPA excavations was shown previously in Figure 152).

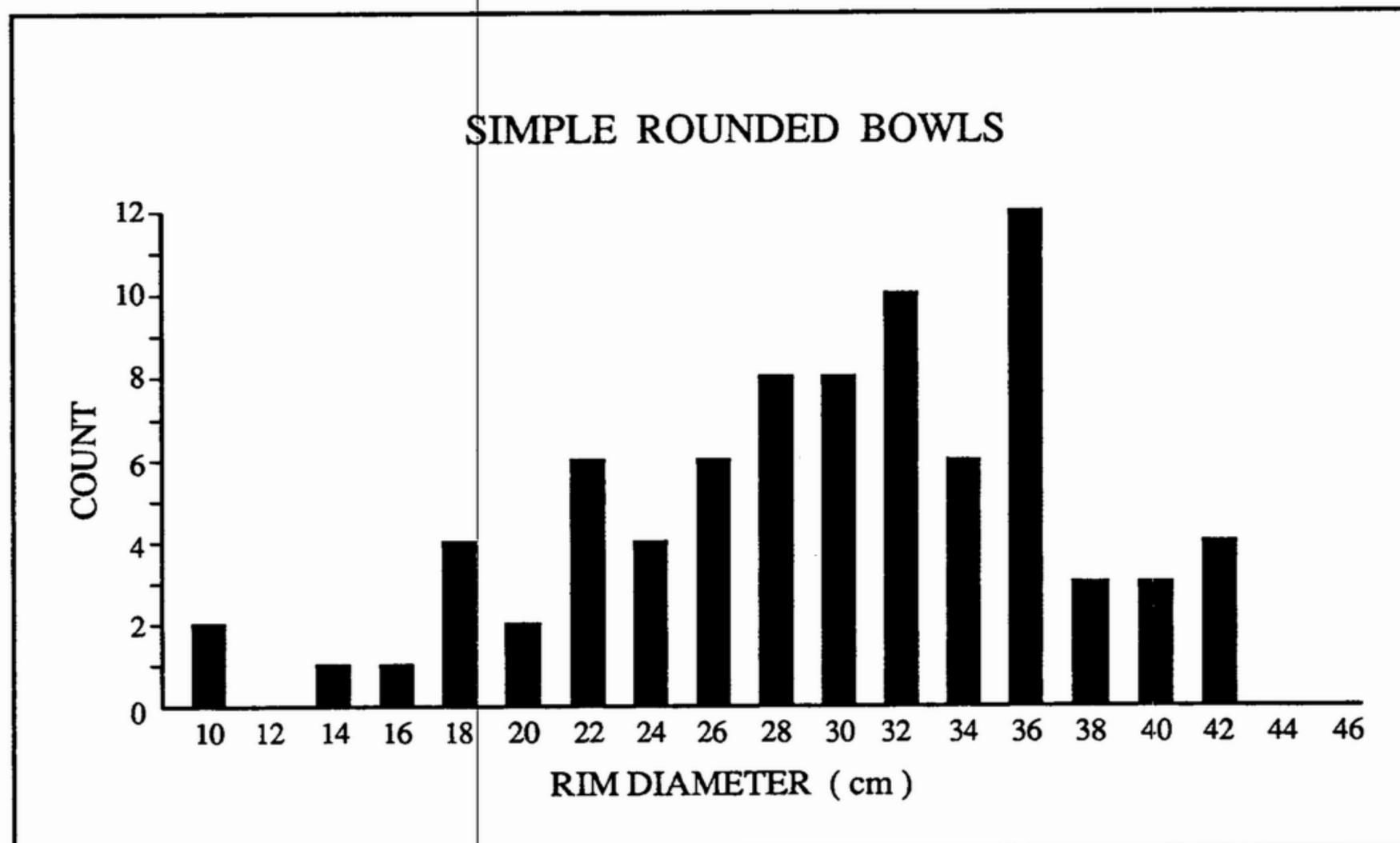


Figure 153. Graph illustrating range of rim diameters for simple rounded bowls from Bull Creek.

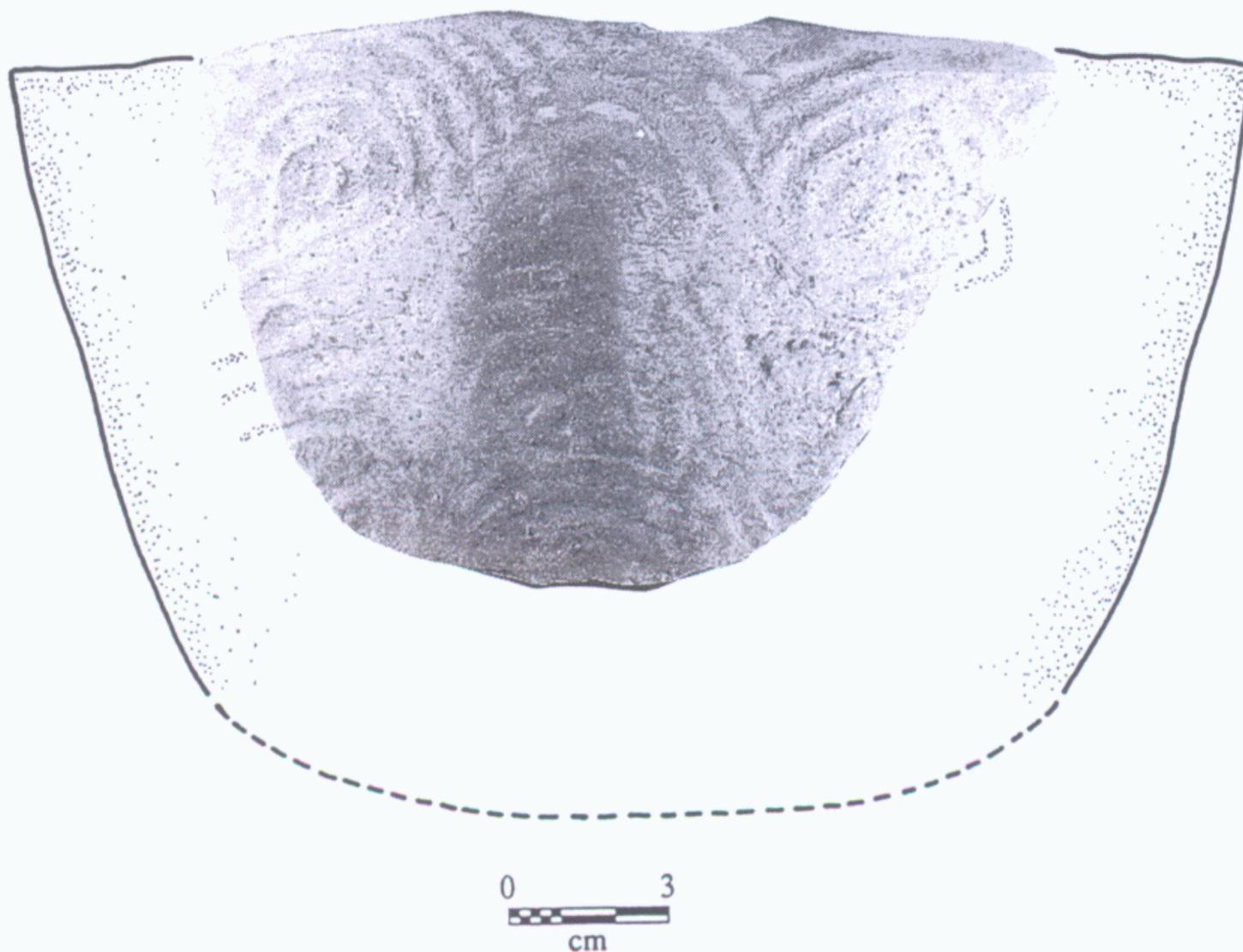


Figure 154. Example of a simple open bowl from Bull Creek.

Body decoration for open bowls includes complicated stamping ($N = 5$), incising ($N = 1$), and combined incising and zone punctation ($N = 1$). The remaining eight bowls are plain. Rims are generally unmodified ($N = 6$), or thickened ($N = 3$). Variations include thickened and L-shaped ($N = 2$), and lug handles ($N = 1$). One vessel contains incising extending to the lip and one vessel is notched. One vessel contains a simple incised design on the interior lip.

Rim diameters are shown in Figure 150. The range of 10 to 42 cm is similar to other vessel types from the site but unlike the other types there are indications of size groupings. The smaller sized vessels, which range in size from 10 to 24 cm include one small vessel from Burial 18, which appears to be a specially produced mortuary vessel. This small bowl, only 10 cm in diameter, is crudely

decorated with a Fort Walton zone punctate design (see Figure 59). That bowl's combination of diminutive size, sloppy decoration and even vessel shape is unique in the site collection. A second small bowl was also recovered from the cemetery, but that vessel has been lost and was not adequately described in the field notes. The small bowls include three plain, two incised, and three complicated stamped vessels. Rims are variable but primarily unmodified ($N = 4$). The larger bowls are either plain ($N = 4$) or complicated stamped ($N = 2$) with thickened or L-shaped ($N = 3$), plain ($N = 2$), or notched ($N = 1$) rims. The one isolated vessel at 28 cm is a slightly flaring rim bowl with interior lip incising. Aside from mortuary use for the one example, the differences in sizes may reflect uses similar to large and small varieties of simple rounded bowls.

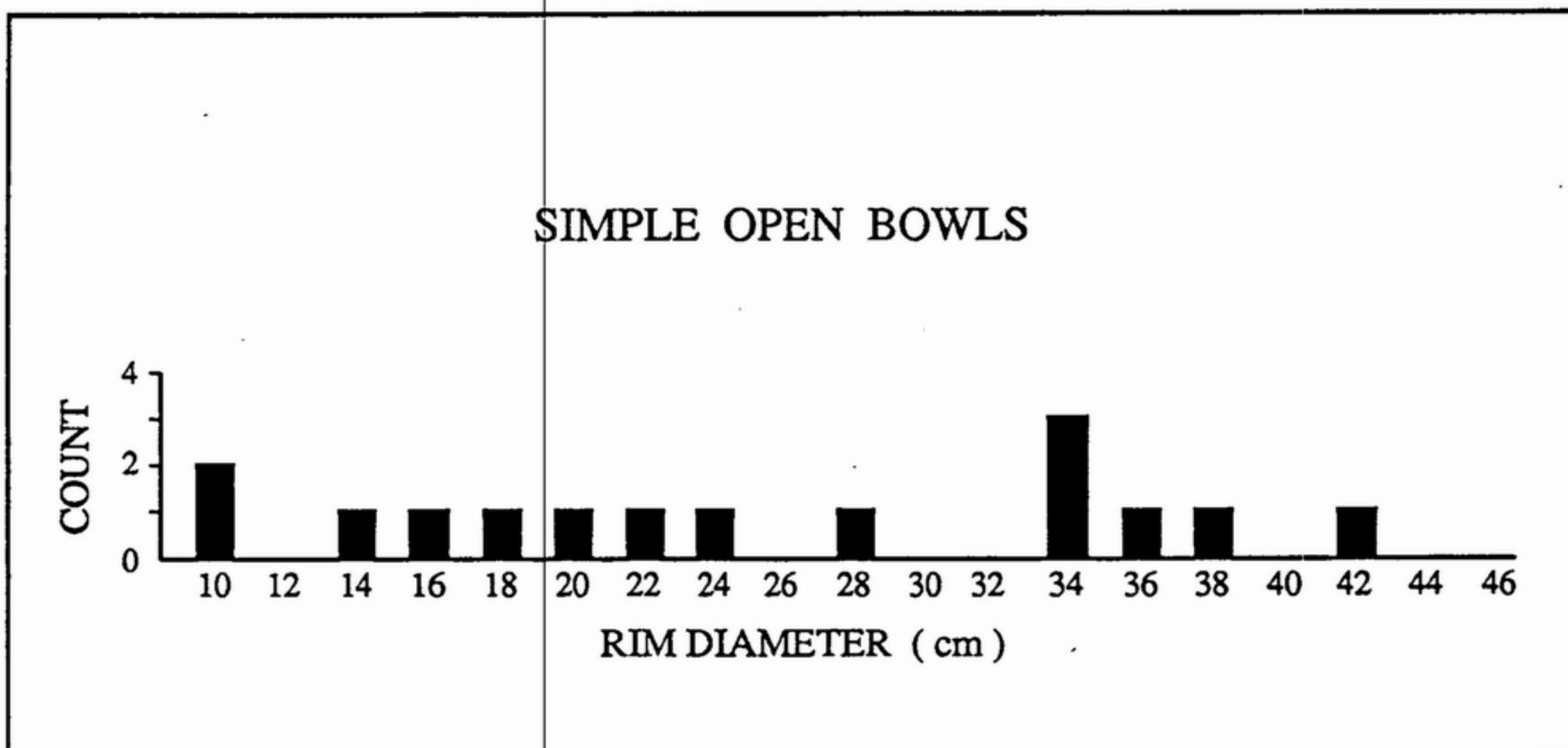


Figure 155. Graph illustrating range of rim diameters for simple open bowls from Bull Creek.

Bottles from the Bull Creek site consist entirely of mortuary vessels. Water bottles similar to the category shown by Scarry (see Figure 147) should be expected at the site. Perhaps this omission is the result of sampling error or misidentification of vessel types.

This category includes three bottles commonly known as the Bull Creek cemetery dog pots. Figure 156 shows the three vessels and three examples of similar vessels from other sites in the region. The three vessels from Bull Creek and the one vessel from Neisler Mound are considered the only known examples of this one type of negative painted dog effigy vessel (Schnell 1990:67). Selected measurements for the three vessels are shown in Table 9. The vessels will be examined further in the following section which deals with examination of Bull Creek pottery types.

Table 9. Measurements of effigy bottles from Bull Creek.

| Vessel Number | Burial No. | Height (cm) | Length (cm) | Width (cm) | Orifice Diameter (cm) |
|---------------|------------|-------------|-------------|------------|-----------------------|
| V. 117 | 3 | 26.5 | 30.0 | 19.0 | 9.5 |
| V. 118 | 7 | 27.0 | 27.5 | 19.5 | 9.5 |
| V. 119 | 16 | 32.0 | 28.0 | 18.0 | 8.0 |



BULL CREEK
BURIAL 3

BULL CREEK
BURIAL 7

BULL CREEK
BURIAL 16

NEISLER

CEMOCHECHOBEE

BELL FIELD

0 3
cm

Figure 156. Illustrations of effigy bottles from the Bull Creek site with comparative examples from other western Georgia sites.

Summary of Pottery Types

The pottery from the Bull Creek site might be viewed as something of a hybrid of ceramic styles with some similarities to Lamar and some similarities to Fort Walton. The pottery does not always fit snugly into established type descriptions. Schnell's term Bull Creek variant may be as appropriate as any means for a designation of the pottery series. Basically, this means that vessel types and decorative styles typical of either Lamar or Fort Walton occur on the site, but these vessels are tempered with a distinctive, garnet-rich grit. The size of the temper varies from 0.7 to 3.0 mm (average 1.4 mm). One problem with this is that we do not know how localized this use of tempering agent is and whether it reflects cultural distinctions. While heavy grit tempering is generally characteristic of late Lamar in western Georgia, the distinctive nature of the site's temper is quite probably a localized phenomenon reflecting the local clay and sand resources.

The recognition of a distinctive Bull Creek variant of temper does not mean that every vessel on the site was tempered the same. At the Bull Creek site, some vessels of all pottery types are tempered with finer grit or sand. This applies most strongly to the incised wares. Still, there needs to be some means to improve upon the use of purely descriptive terminology for analyzing the pottery from the site. As expected, our examination of vessel form clearly indicated that certain surface treatments (decorations) were more common on certain vessel types. This is consistent with other research where the combined attributes of decoration and vessel form have been used successfully in the examination of pottery types (Schnell et. al 1981; Scarry 1985).

Schnell's 1963 manuscript references an appendix that contains formal descriptions of the pottery types found at Bull Creek. Unfortunately, this appendix could not be found

and we are limited to the more general characterizations found within the manuscripts of Schnell and Chase. In the following summary, descriptive categories used for Bull Creek pottery will be examined more closely within the context of formally defined pottery types. For the most part, the previously cited descriptions by Chase and Schnell have adequately defined these pottery types, particularly when referenced to the original type descriptions. Lacking in the descriptions of Chase and Schnell are adequate comparisons to Fort Walton ceramics. For this reason, the work of Scarry (1985) will be incorporated into these descriptions.

Plain wares from the Bull Creek site may be considered variants of Lamar Plain or Lake Jackson Plain (Willey 1949:458). As previously noted, Schnell (1963) divided plain wares from Bull Creek into three categories according to tempering. These categories consisted of grit (79.9 percent), sand (19.8 percent) and shell (0.2 percent). Schnell implied that the heavy grit tempered category should be referred to as Bull Creek variant of Lamar. Schnell also noted that the finest sand tempered was similar to historic and proto-historic ware designated as Coweta Micaceous (Hurt 1975). Since we now know that the Bull Creek site does contain an historic Creek component, the association of this pottery type with the Bull Creek phase might be questioned. Schnell noted that the few shell tempered sherds were partially leached, indicating some, but not considerable antiquity (Schnell 1963). There is the possibility that the shell tempered sherds postdate the Bull Creek phase (Abercrombie phase).

There are several characteristics associated with rim modifications at Bull Creek which are common on Lake Jackson Plain vessels but uncommon on Lamar vessels. Rim notching and applied rim strips that are either pinched or noded are particularly common on Lake Jackson Plain vessels (Willey 1949:459).

Scarry applies the type Lake Jackson Plain varieties Ingram and Tallahassee to the Bull Creek phase (Scarry 1985:221). Variety Tallahassee contains small amounts of grog temper but has not been recognized in any examination of pottery from the Bull Creek site. Lake Jackson Plain variety Ingram, which does apply, is described as a variety with coarse grit and smoothed surfaces, common to the Rood and Bull Creek phases and in the Appalachicola Valley, the Yon phase (Scarry 1985:221).

Scarry's variety Ingram is based in part upon the type Ingram Plain which was defined at the Cemochechobee site in Clay County (Schnell et al. 1981:185). The definition for Ingram Plain suggested synonymy with the types Lake Jackson Plain, Pinellas Plain, Coweta Micaceous Utility Ware and a relationship to Lamar Plain. Ingram Plain vessels were primarily open bowls often exhibiting notched lips and sometimes exhibiting applied notched strips. The type was considered "the apparent predecessor of Lamar Plain as it is represented in the Lower Chattahoochee Valley" and further stated that with the addition of pinched folds and fillets, the type probably developed into Lamar Plain of the succeeding Bull Creek phase, but distinguishing the two types is difficult (Schnell et al. 1981:185-188).

Based upon the results of previous research we would appear to have a choice of what to call the plain ware from Bull Creek. If the site is viewed from a Fort Walton perspective, the type Lake Jackson Plain variety Ingram is appropriate. If the site is viewed from a Lamar perspective, the plain ware may be called Lamar Plain. With respect to vessel form, the Bull Creek site plain wares are associated primarily with simple bowls, accounting for 41.1 percent of those types, and to a lesser extent with jars (20.5 percent).

Complicated Stamped Wares found on Bull Creek phase sites have been universally described as Lamar Complicated Stamped. This absence of complexity results from acceptance of the proposition that, by definition, any poorly executed complicated stamping should be called Lamar. Schnell's (1963) observation was simply that the complicated stamped ware may be easily assignable to the type Lamar Complicated Stamped, with the exception that it has the Bull Creek variant of tempering (Schnell 1963).

Scarry examined complicated stamping more critically, with the caveat that his Lamar Complicated Stamped pottery includes all coarsely tempered complicated stamped vessels found in the Fort Walton area (Figure 157). Scarry notes that Lamar Complicated Stamped pottery probably developed outside the Fort Walton area in the South Appalachian Mississippian style area and was introduced after the Rood phase (Scarry 1985:221-222).



Figure 157. Examples of motifs for Lamar Complicated Stamped var. Bull Creek (top) and var. Early (from Scarry 1985:223).

Scarry defined two varieties of Lamar Complicated Stamped that should apply to the Bull Creek site (see Figure 157). Lamar Complicated Stamped variety Bull Creek is a coarse sand-tempered ware with figure-eight designs. The type site was not Bull Creek but site 9Ca51 (Broyles 1962), which Schnell now considers to date to the subsequent Stewart phase (Schnell and Wright 1993:21). Scarry also defined Variety Early for pottery containing motifs consisting of sets of concentric circles, the centers of which may contain raised dots or crosses. Variety Early was considered the dominant type of the Yon phase in the Apalachicola Valley and present in the Bull Creek phase.

At the Bull Creek site, Lamar Complicated Stamping was found on 78.3 percent of the jars and 41.1 percent of the simple bowls present in the vessel form analysis collection of 219 rims. Complicated stamping was not associated with carinated bowls, collared bowls or bottles.

Check Stamping at Bull Creek is generally referred to as Mercier Check Stamped based upon similarity to material from Kolomoki (Sears 1951). Schnell noted that Mercier Check Stamped at 9Me1 should be viewed as a Bull Creek variant because of its distinctive grit tempering (Figure 158). Scarry views the pottery as a variant of Leon Check Stamped, which includes all coarsely tempered and boldly check stamped ceramics in the Fort Walton area (Scarry 1985:225). Scarry prefers Leon Check Stamped variety Mercier as a name for the bold check stamped pottery (often with checks up to 1 cm) of the Bull Creek and Yon phases.

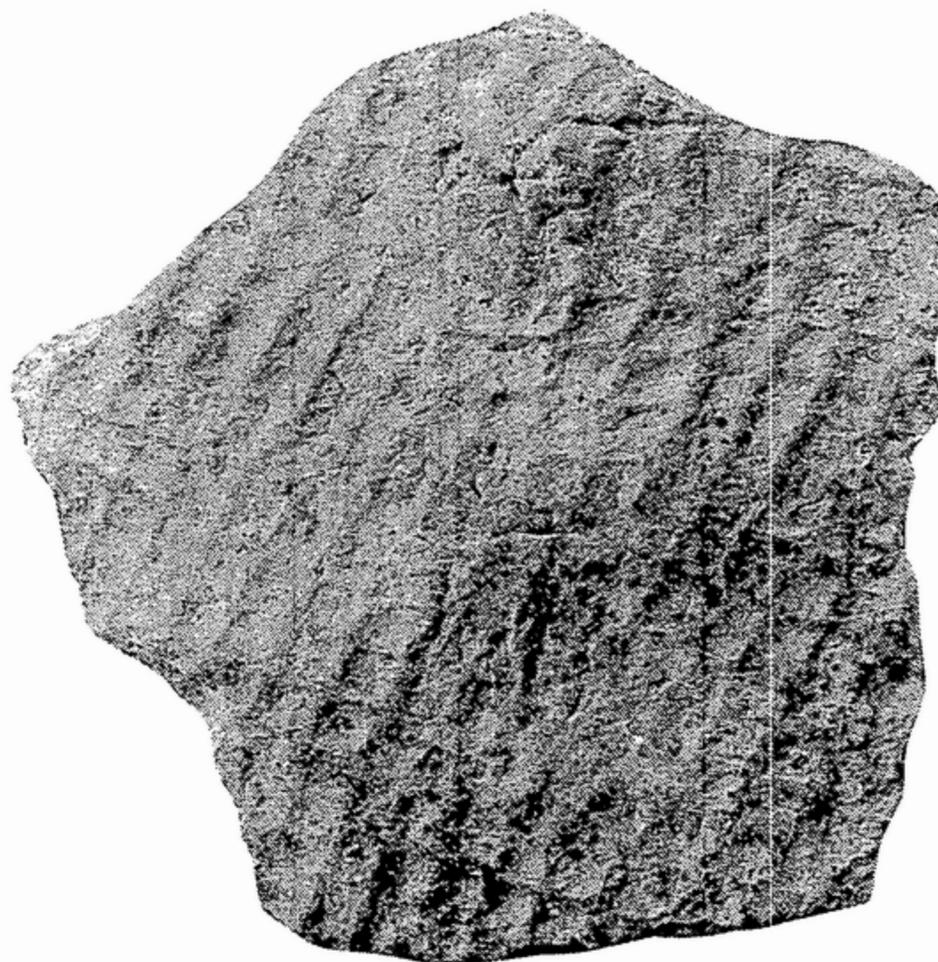


Figure 158. Example of coarse grit tempered, bold check stamped pottery from the Bull Creek site.

At Bull Creek, check stamped designs were identified on three vessel types, jars, collared bowls, and simple bowls. One example of each was found in a collection of 219 rims examined for vessel form data.

Incised and Zone Punctate Wares represent perhaps the most perplexing pottery styles found at Bull Creek. Various researchers have referred to the pottery as either Lamar Bold Incised or Fort Walton Zone Punctate. Schnell (1963) suggested that because bold incising at the site occurred more with a coarse sand tempering than with the temper characteristic of the Bull Creek variant of Lamar, the name Lamar Bold Incised should be used.

Schnell felt the zone incised and punctate sherds were variants of Fort Walton Zone Punctated, with tempering characteristic of the Bull Creek variant of Lamar. The punctated wares were viewed as more closely related to an undescribed punctated type in the original Lamar series (Schnell 1963). During our examination of available collections we found these distinctions difficult to replicate.

Chase's efforts to distinguish the two styles were rather vague. Chase identified Lamar Bold Incised by deeply incised, usually curvate lines, sometimes consisting of only two or three parallel lines circumscribing the vessel or with interlocking loops. Chase included a variant of the Fort Walton Punctate within Lamar Bold Incised which for most sherds could not be distinguished from the classical Fort Walton punctate type (Chase 1957).

Hally found that a distinguishing factor of Lamar Bold Incising at Park Mound was simply a greater width of Lamar incised lines compared to Fort Walton incising (Hally and Oertel 1977:45). Using the criteria of greater line width Hally was able to identify only 14 Lamar Bold Incised sherds from a collection of 148 incised sherds from Park Mound (Hally and Oertel 1977:45).

While the more southerly located Bull Creek site might be expected to produce even fewer typical north Georgia Lamar incised sherds, an effort was made to test Hally's conclusion that Lamar Bold Incised has measurably wider lines than other types of

incising. Measurements were taken of incising on 61 sherds from the NPS collection. Line widths for 34 incised and punctate sherds which appeared to be Fort Walton styles ranged from 0.7 to 3.0 mm (average 1.7 mm). Line widths for 27 incised sherds which lacked punctations ranged from 0.5 to 3.0 mm (average 1.8 mm). The 27 incised sherds were then sorted, somewhat subjectively, into Lamar-like and Fort Walton-like designs. Sherds identified as Lamar-like (N = 16) averaged 2.25 mm wide while the Fort Walton-like sherds averaged only 1.2 mm wide. This does indicate some difference may exist within the collections, but a substantially larger sample of sherds should be measured before firm conclusions are reached.

The same collection of 61 sherds were examined to address Schnell's assertion that Lamar Bold Incised sherds at the Bull Creek site differed in temper. The sherds were sorted into three temper types. While our sorting criteria probably differ somewhat from Schnell's, in this one small sample, there does appear to be a predominance of coarse sand and fine sand tempering for the incised pottery. However, this difference appears to relate to both zone punctate (probable Fort Walton) and incised (possible Lamar) pottery. A low proportion of Bull Creek variant tempering in the zone punctate pottery would seem at odds with Schnell's implication that most sherds contained coarse temper (see page 156). The possibility exists that apparent tempering differences reflect, to some degree, variation which exists in different collections from various areas of the site.

Table 10. Comparison of temper for zone punctate and incised pottery from Bull Creek

| Decoration | Count | Bull Creek Variant Temper | Coarse Sand Temper | Fine Sand Temper | Total |
|--------------------------------------|-------|---------------------------|--------------------|------------------|-------|
| Incised (possible Lamar Incised) | 27 | 18.5% | 44.5% | 37.0% | 100% |
| Zone Punctate (probable Fort Walton) | 34 | 35.3% | 20.6% | 44.1% | 100% |

The incised motifs associated with the Bull Creek and Stewart phases are clearly different from "typical" Lamar assemblages. These motif differences are obvious when sites from different areas are compared. Figure 159 illustrates the differences in the most common incised motifs from three phases. These illustrations are based upon Hally's research (Hally 1994:153), but similar work has been conducted by other researchers (Snow 1990; Braley et al. 1986) and found to be an extremely valuable research tool for characterizing local phase assemblages. Importantly, Hally found that within each phase certain motifs occur with greater frequency. This is especially interesting for the Bull Creek phase because Hally notes that one motif (Figure 159, third row, left) occurs on more than fifty percent of the identifiable sherds in his sample (Hally 1994:154). In light of the fact that illustrated published data available to Hally comes primarily from two sites (Park Mound and 9Cy51), which Schnell now believes postdates the occupation of the Bull Creek site, Hally's observations are particularly important for comparing and contrasting incised motifs of the Bull Creek phase and Stewart phase.

The identification of Lamar and Fort Walton design motifs is only one way of defining types of incised pottery. Other researchers working in the Chattahoochee valley have developed typologies based at least in part on vessel form (Schnell et al. 1981 and Scarry 1985). Basically, these typological schemes provide a means of extending Fort Walton type descriptions to the Bull Creek area allowing greater interpretation of various incised motifs.

Scarry's type-variety approach to the incised wares of the region provides a useful tool for interpreting the variety of designs found at Bull Creek. Table 11 presents Scarry's breakdown of incised wares which could occur at the Bull Creek site. Figure 160 illustrates examples of each.

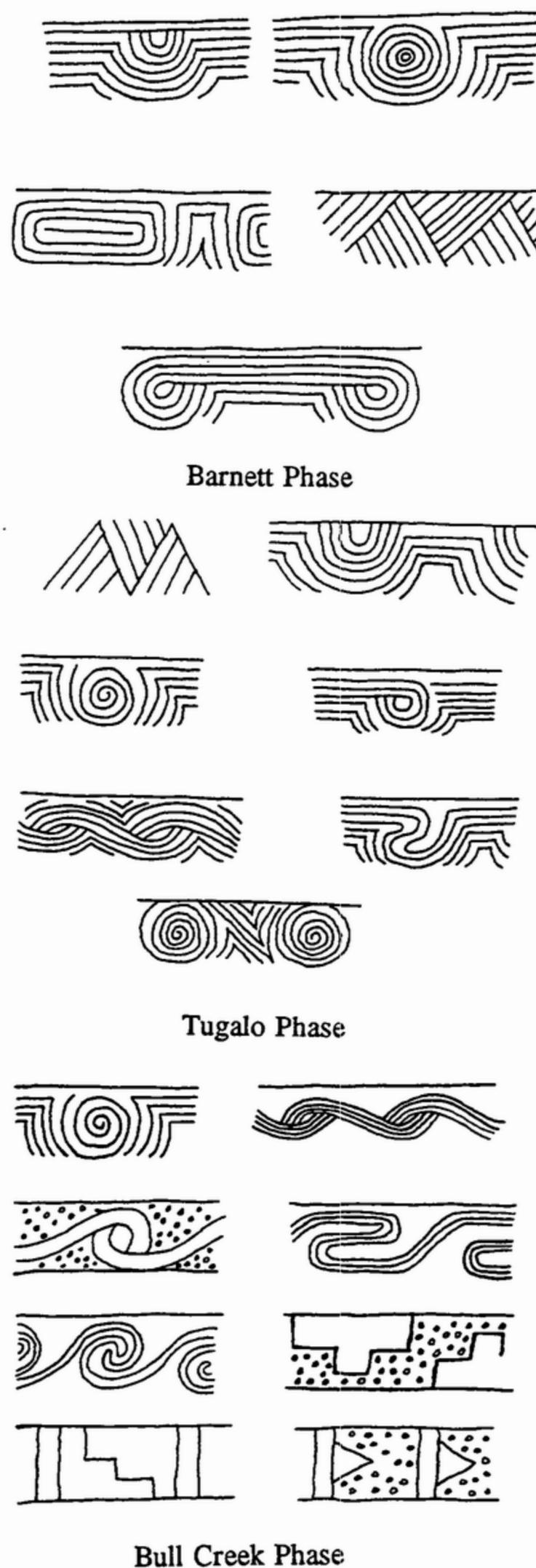
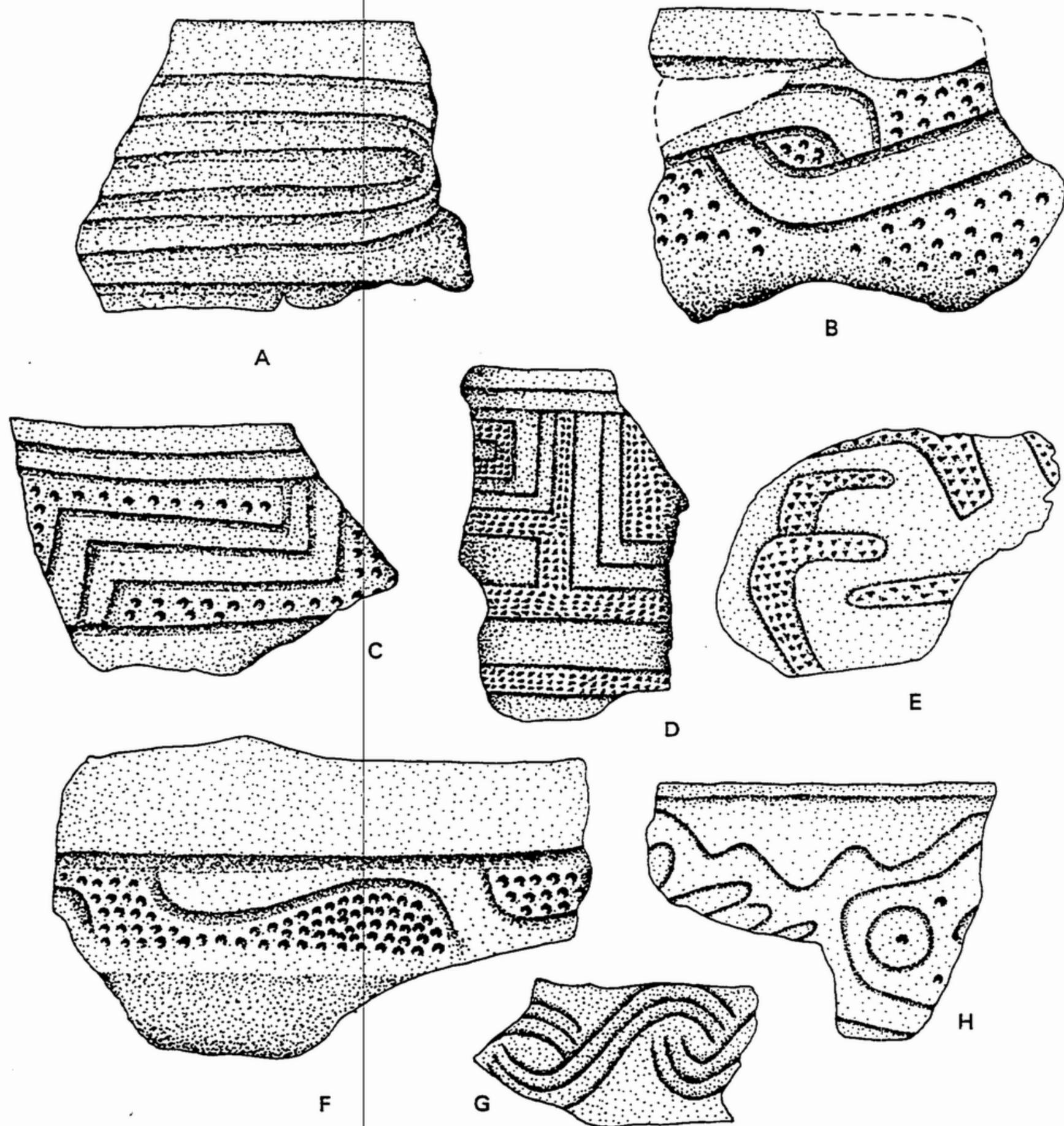


Figure 159. Comparison of common Lamar Incised designs from three Lamar phases (redrawn from Hally 1994:153).

Table 11. Presentation of Scarry's (1985) incised types and varieties of the Bull Creek phase.

| Type | Variety | Description |
|--------------------------|------------------|--|
| Lamar Bold Incised | | Subsumes all vessels tempered with coarse sand or grit that are decorated with a band of broad, deeply incised lines on the upper portion of vessel (carinated bowls and cazuela bowls). Motifs are continuous bands of curvilinear scrolls or lines of pendant loops composed of 5 to 15 lines (Scarry 1985:221). |
| Fort Walton Incised | | Subsumes all ceramics in the Fort Walton area with a sandy paste with decorations formed by incised lines with punctation filled zones or occur on punctated backgrounds. |
| Fort Walton Incised | Fort Walton | Characteristic design is a band of running scrolls (both curvilinear and rectilinear) superimposed on a band of punctations. Vessel forms include cazuela bowls, beakers and bottles. Late but widespread variety (late prehistoric and protohistoric (Scarry 1985:215). |
| Fort Walton Incised | Cayson | Characteristic design is a band containing simple incised rectilinear step figures that separate alternating plain and punctation filled zones. Vessel form is carinated bowl (Scarry 1985:215). |
| Fort Walton Incised | Englewood | Characteristic design formed by narrow, punctation-filled bands that form abstract rectilinear figures including complex interlocking maze forms, diamonds, triangles, zigzag bands or connected chevrons. Found in Rood and Lake Jackson phase context but most common in Safety Harbor (Scarry 1985:219). |
| Fort Walton Incised | Safety Harbor | Characteristic design is curvilinear equivalent of variety Englewood. Vessel forms include beakers, bottles and bowls. Most common in Safety Harbor area (Scarry 1985:219). |
| Fort Walton Incised | Sneads | Characteristic design is curvilinear equivalent of variety Cayson (Scarry 1985:219). |
| Point Washington Incised | | Subsumes all ceramics from Fort Walton area with sandy paste decorated with medium curvilinear incised lines. |
| Point Washington Incised | Point Washington | Characteristic motif consists of a series of horizontal running or interlocking scrolls. Vessel forms include carinated bowls, cazuela bowls, bottles and beakers. Late variety found in Bull Creek and equivalent phases (Scarry 1985:230). |
| Point Washington Incised | Griffith | Characteristic designs are a variety of representational forms, many of which are part of Southern Cult iconography. Vessel forms include carinated and cazuela bowls. Chronologically late, found in Bull Creek and protohistoric sites (Scarry 1985:230). |



*A, Lamar Bold Incised; B, Fort Walton Incised var. Fort Walton;
C, Fort Walton Incised var. Cason; D, Fort Walton Incised var. Englewood;
E, Fort Walton Incised var. Safety Harbor; F, Fort Walton Incised var. Sneads;
G, Point Washington Incised var. Point Washington; H, Point Washington Incised var. Griffith*

Figure 160. Examples of Fort Walton incised pottery types and varieties typical of the Bull Creek phase (taken from Scarry 1985).

The original definition of Lamar Bold Incised was based primarily on the WPA excavations in the Macon area, and as a result those definitions reflect largely the variety of pottery found in that area (Kelly 1938:47-48; Jennings and Fairbanks 1939). Willey applied those definitions to the Fort Walton area with only slight modifications:

Definition: A grit-tempered ware decorated with broad incised lines, hollow reed punctations, and rarely, dot punctations. Curvilinear designs (scrolls) usually combined with rectilinear elements, particularly horizontal lines between scrolls. Some rectilinear elements stand alone. A row of hollow-reed punctations is usually placed at base of the incised decoration which is a border around upper portion of the vessel. The forms of cazuela bowls, on which the incised designs occur, are often covered on the base with Lamar-type complicated stamping.

Relationship of type: Is related to Fort Walton Incised. May be ancestral, in part, to Ocmulgee Fields Incised and Aucilla Incised (Willey 1949:493).

Willey defined Fort Walton Incised as follows:

Technique: Lines and punctations incised into soft surface of vessel. Lines are deep, wide, and usually rectangular in cross section. Large round dot or square punctations most common. Hollow-reed punctations sometimes used.

Design: Elements are volutes, interlocked scrolls, running scrolls, circles, trifoil figures, crescentic forms, S-shaped and reverse S-shaped figures, rectilinear stepped figures, pendant loops, and triangles. Elements are usually repeated around vessel in a connected design pattern. Dot punctations used as filler for both backgrounds and for design proper. Incised lines sometimes used as fillers (Willey 1949:460).

Willey also named several other incised pottery types for the Fort Walton area, including Pinellas Incised and Point Washington Incised, which have at times been applied to the Bull Creek phase and have been incorporated into Scarry's scheme.

Distinguishing Lamar incising from Fort Walton incising is to a great extent con-

tingent on sherd size. Large sherds are required to distinguish patterns that may be typical of north Georgia Lamar pottery from those of the lower Chattahoochee Fort Walton pottery. Unfortunately there were very few large incised sherds recovered from Bull Creek.

During our examination of the Bull Creek collections, all incised designs were drawn as encountered. Most were too small to provide any meaningful indication of design. Eventually 79 sherds were determined to be sufficiently large to determine all or part of a design. Several of these were vessels reconstructed by the National Park Service. Because of the wide variability present in the collection, it was necessary in many cases to create general design categories. This was especially true with respect to the zone punctate vessels where designs differed on each sherd. General rectilinear and curvilinear design categories were selected when there was substantial variability. Figure 161 illustrates examples of each distinct design pattern found in the Bull Creek collections. Table 12 describes the criteria used to distinguish these motifs.

In examining the incised motifs found at Bull Creek, one point becomes obvious. Most of the designs are common Fort Walton decorative patterns. There is little indication of typical Lamar designs. Design Category H which consists of nested half circles bordered by parallel lines, is most similar to a Lamar Bold Incised motif. The recovered examples appear to contain two to four lines in the design, which would be most typical of an early Lamar incised style.

Recognition of Design Category L is particularly meaningful because it represents the most common form of Pinellas Incised. As previously noted, Schnell now considers this style of incising to be typical of Stewart phase but not Bull Creek phase. At the Bull Creek site, this single sherd was found in a probable Stewart phase feature.

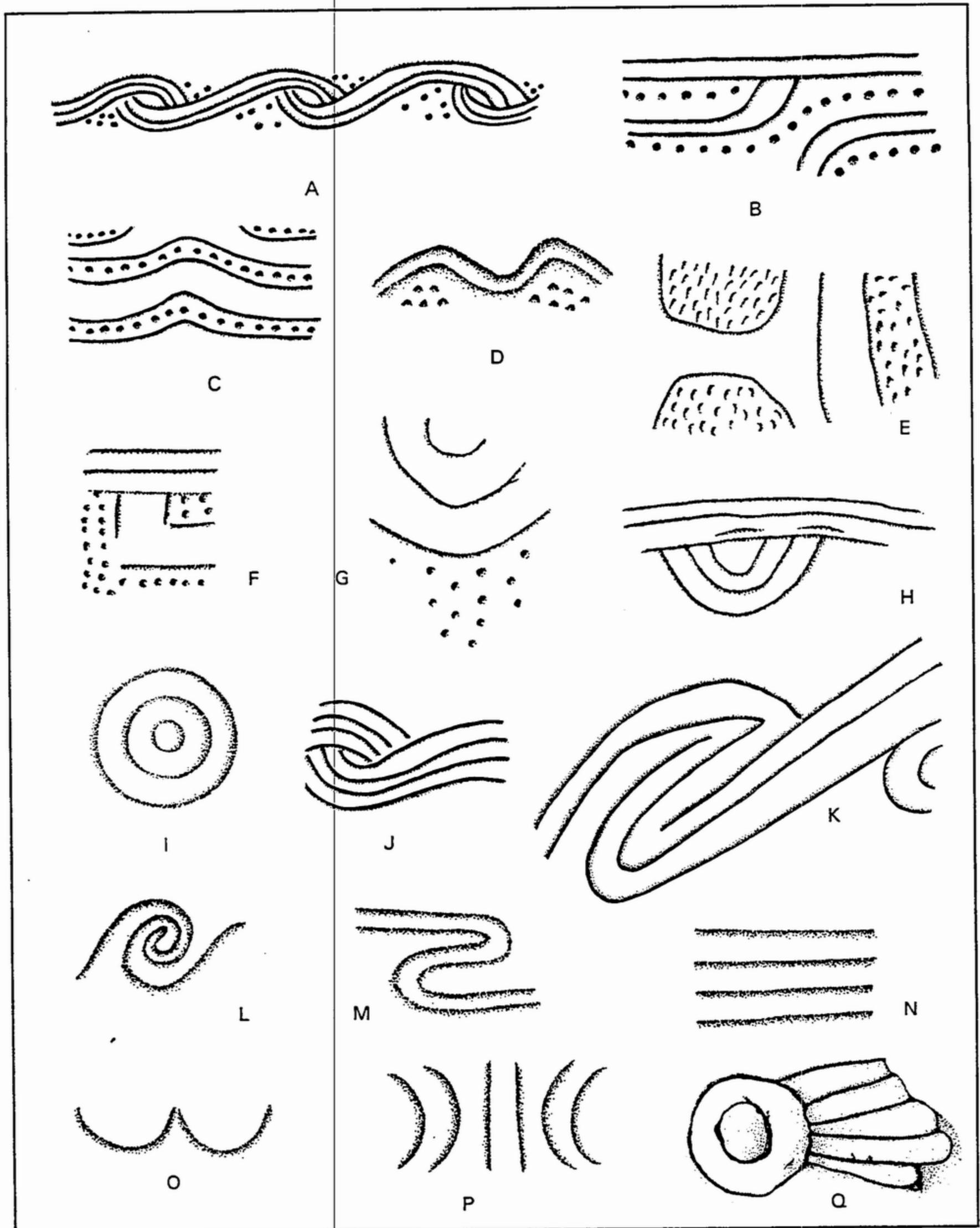


Figure 161. Incised designs found at Bull Creek (letters correspond to Table 12).

Table 12. Incised design categories identified from the Bull Creek site collections.

| Category | Description | Count |
|----------|--|-------|
| A | Band of interlocking scrolls (guilloche) with dot (punctate) filler (Fort Walton Incised). | 9* |
| B | Simple curvilinear stepped band alternating with punctate band. | 2 |
| C | Parallel undulating bands with alternating punctate fillers. | 1 |
| D | Simple continuous undulating band with punctate fillers. | 1 |
| E | Complex designs of punctate filled oval and rectilinear elements alternating with clear zones or elements. | 17* |
| F | Rectilinear step elements with alternating punctate-filled and clear zones. | 24* |
| G | Concentric half-circles with a punctate background | 1 |
| H | Concentric half-circles bordered by parallel lines. | 3* |
| I | Concentric circles | 1 |
| J | Band of interlocking scrolls without punctate filler (Point Washington). | 5* |
| K | Running or interlocking open scroll. | 3* |
| L | Running Scroll (Pinellas Incised) | 1* |
| M | Simple looping pattern. | 1* |
| N | Multiple parallel lines. | 3 |
| O | Simple half circle single line loops at rim. | 2 |
| P | Simple discontinuous rectilinear and curvilinear incised elements below rim. | 4* |
| Q | Hand-eye motif | 1 |

*One or more examples recovered from the probable Stewart phase feature excavated in 1981.

Negative Painted Wares relate to painted water bottles at Bull Creek. There are a few references to fragments of painted pottery found in the general midden of the cemetery area excavations (Lester 1937:54), but these sherds were not relocated in our examination of the collections. Schnell does identify one sherd from Kelly's collection.

The dog pots from Bull Creek included two varieties of painting. The two vessels from Burials 3 and 7 exhibited red spiral designs on a buff background. The third exhibited a black pattern on a reddish background. A third vessel is most similar to a dog pot recovered from Neisler Mound (see Figure 156). All three designs on the Bull Creek dog pots are quite similar running scroll patterns superficially comparable to the rarely encountered Pinellas Incised vessel design category L (Figure 161-L).

In 1979 the Bull Creek negative painted pottery was given the type name Nashville Negative Painted variety Columbus and was considered a local copy of similar vessels from the northwest (Williams 1979). More recently Scarry gave the Bull Creek pots a new type status as Columbus Negative Painted variety Columbus (Scarry 1985:213).

Scarry defined Columbus Negative Painted to include all sand-tempered vessels with indirect (negative) painting in the Fort Walton area, as a distinct type from the shell-tempered Nashville Negative Painted wares. Scarry noted that the ware has thus far been found only in Rood and Bull Creek phase contexts. Variety Clay was recommended for the negative painted vessels from Cemochechobee, which differ in vessel form and painted design.

Schnell has noted on several occasions that only four examples of the Bull Creek varieties of negative painted dog pots are known to exist (Schnell 1990:69). This conclusion has been reaffirmed through communications of both Schnell and the senior author with individuals knowledgeable of the antiquities market in the region. The recovery of three-fourths of the known examples of this vessel form from a single site, Bull Creek, does represent a unique occurrence.

Other Pottery Types found in the Bull Creek collections include anomalous forms of decoration and a few sherds from other occupations. Several sherds with cordage impressions are listed on the National Park Service summary sheets and examples were relocated in those collections (Figure 162 upper). These sherds may be from non-Bull Creek phase occupations, but they may also represent impressions which commonly occur on vessel bottoms.

The collections also include a single fiber tempered sherd from Kelly's collection (Figure 162, center) and several Chattahoochee Brushed sherds (Figure 162, lower). Excavations conducted by SAS of the Bull Creek site and the contiguous Go-Kart site indicate a widespread occurrence of Archaic and historic Creek material across these site areas. The fiber tempered sherd reflects the Late Archaic occupation and the Chattahoochee Brushed sherds reflect the historic Creek occupation.

It should be noted that most of the Creek occupation occurred beyond the boundaries of most previous excavations, as is reflected in the extremely small amount of ceramics recovered from these collections. SAS excavations conducted in the larger

Bull Creek/Go-Kart site locality also produced other Creek pottery types such as Kasita Red Filmed and Ocmulgee Fields Incised. Excavation at the Go-Kart site produced substantial amounts of earlier Averett phase ceramics. These ceramics are discussed in detail in a separate report of the Go-Kart site excavations (Ledbetter 1995c) and will not be repeated here.

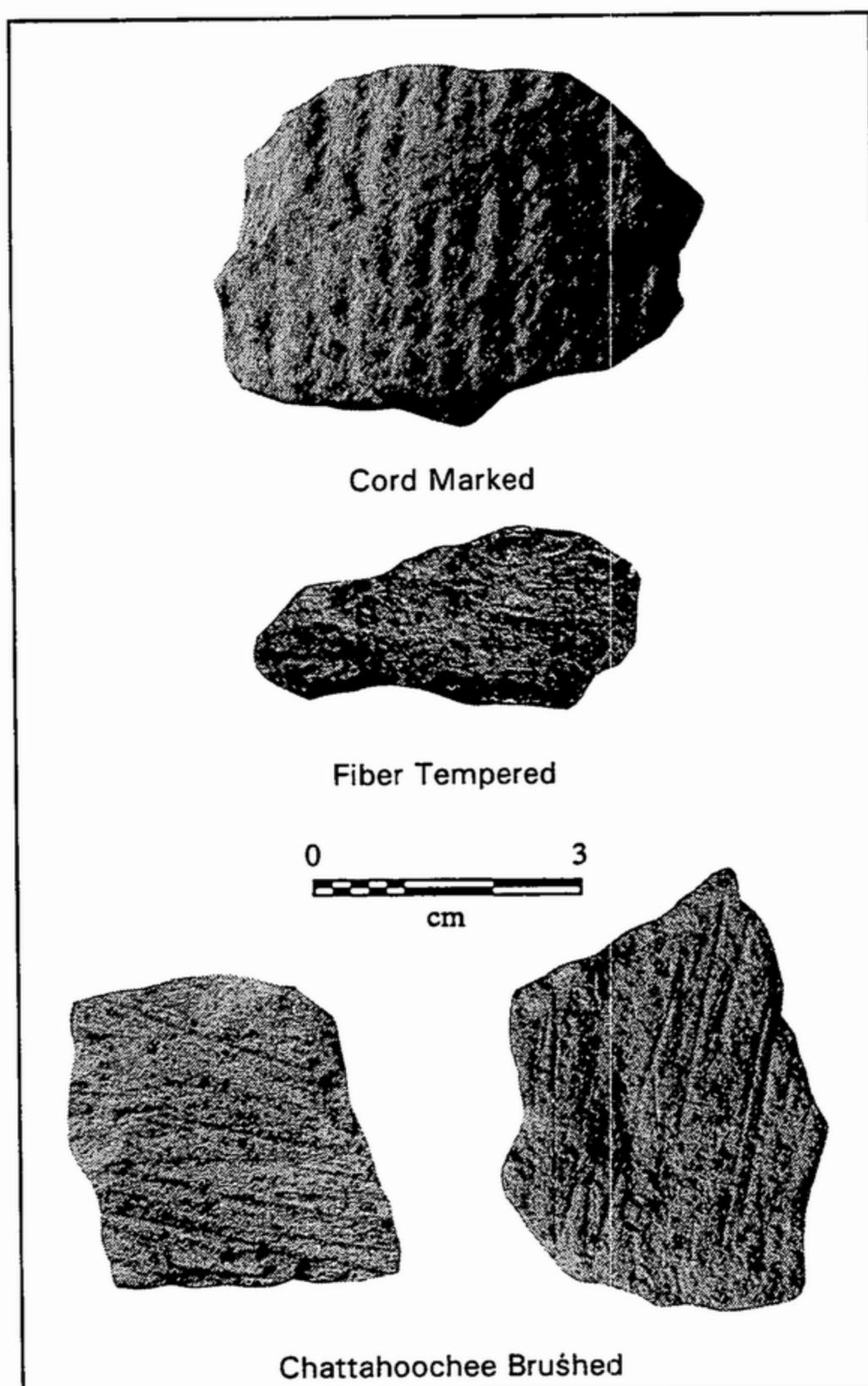


Figure 162. Examples of other pottery types from Bull Creek (Full Size).

Other Ceramic Objects

Examples of ceramic pipes and pottery discs have also been recovered from Bull Creek, but were quite rare in the collections. The low counts of pipes appear to be an accurate reflection of the scarcity of the artifact type on the site, but there is some contradiction with respect to pottery discs. Chase noted "pipes are infrequently found at Bull Creek, only three stems and one bowl fragment came to light but hundreds of pottery disks and one of stone appeared. This is not surprising since the disks prevailed from earliest Lamar times into historic period" (Chase 1957).

Our reexamination of the collections produced two complete pipes from the cemetery excavations and four fragments from the village midden. Of this total, two were recovered from the pit excavated by Fuller in 1981. We were able to record only six pottery discs from the collections. Of this total four were found in the Fuller collection. With respect to ceramic discs, we are left with the possibilities of an error in Chase's assessment of numbers or the actuality that discs were commonly found only in the portions of the site examined by Chase and Fuller.

The most complete pipes and pipe fragments found in the surviving collections from Bull Creek are illustrated in Figure 163. The upper two examples are the two effigy forms recovered from the cemetery (Burials 17 and 18). The lower examples are more simply fashioned examples from the midden.

Pottery discs from Bull Creek ranged in diameter from 30 to 45 mm. Surface treatment was divided between plain and complicated stamping (Figure 163)

One clay bead was reported from the cemetery excavations (Find 49). The artifact was not relocated by the author.



Figure 163. Examples of ceramic pipes and pottery discs from Bull Creek.

Shell and Bone Objects

Chase noted that objects of shell were not recovered from the village midden (Chase 1957). However, beads made from marine shell were relatively common in burial context. Shell beads were found with Burials 3, 18, and 20. A conch shell core was also found with Burial 18. The NPS list of special finds includes one bone awl (Find 74) from the cemetery area.

Stone Objects

Numerous objects of chipped and ground stone occur in various collections from Bull Creek, but there are no tabulations. The majority of these belong to occupations other than the Bull Creek phase. For this reason only a general characterization, with a focus on the Bull Creek phase, will be presented.

Groundstone includes many objects, such as generalized grinding implements which are shared by many cultures. Objects that are clearly associated with the Bull Creek phase are primarily burial objects. Included are greenstone celts and chisels and stone discoidals or chunky stones (Figure 164). Examples from the cemetery include celts and chisels from Burials 5, 6, 9, and a discoidal from Burial 7. Fragmentary celts and ground pebbles of undefined function were also recovered from midden contexts but no accurate counts are available.

Ground pigment was also recovered from several burials (Burials 6, 28, and 29). The descriptions from the WPA notes appear to indicate red ochre or hematite.

Little is known concerning other types of ground stone associated with the Bull Creek phase simply because few examples survive in the collections. Listed "Finds" consist primarily of crude chunky stones. There is no available data for large grinding implements comparable to a metate or grinding slab.

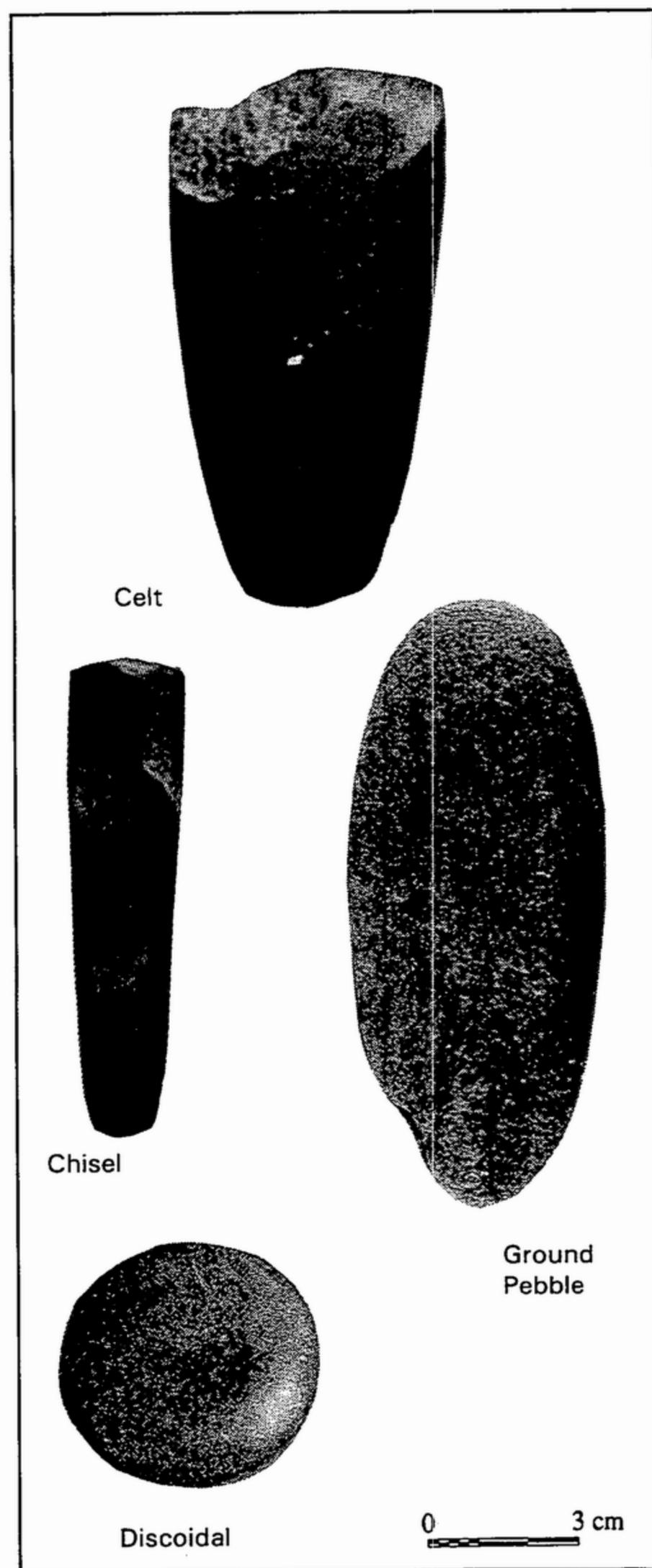


Figure 164. Examples of other ground stone objects from Bull Creek.

Chipped Stone Artifacts were substantially less common than pottery at Bull Creek, but apparently did occur in significant numbers. This is reflected primarily in the NPS list of finds which records a number of projectile points. As previously noted, these projectile points date primarily between the

Paleoindian and Late Archaic periods. Most are made from quartz and Coastal Plain varieties of chert. Figure 165 illustrates selected examples of projectile points from the WPA collections. The collections also include small amounts of lithic debris and expedient tools which probably date to these earlier occupations.



Figure 165. Examples of projectile points found on the Bull Creek site which pre-date the Bull Creek phase occupation.

The only chipped stone artifact that can definitely be associated with the Bull Creek phase occupation is a large biface recovered from Burial 6. The large blade is made from a dark chert most similar to material found to the north in the Ridge and Valley province. The biface measures 83 mm in length.

Modern Artifacts

A small number of historic artifacts have also been reported from the Bull Creek site. Some objects, such as a metal thimble mentioned in the NPS notes, may date to the historic Creek occupation. Most artifacts recovered from the site are modern and relate to modern land use. These objects will not be discussed.

In summary, the majority of artifacts associated with the Bull Creek phase are ceramic objects. The collections of ceramics are dominated by vessels of medium to large size. There is, however, a full range of vessel sizes and a moderate range of vessel forms. The remaining ceramics consist primarily of pottery discs and smoking pipes. Ground stone objects are represented by a few well-made ground stone artifacts such as celts, chisels and discoidals. Chipped stone production and tool use appears to have been insignificant during the Bull Creek phase. Little is known concerning objects made from organic materials due to poor preservation. There does appear to have been a significant use of marine shell, which survives primarily in burial context.



Figure 166. Chert biface associated with the Bull Creek phase occupation.

Chapter 9

Summary and Discussion

Our examination of the records and collections from previous investigations of the Bull Creek site disclosed a wealth of information. While records of most investigations were incomplete, surviving notes, maps, collections, and quite often unpublished manuscripts did allow all past excavations to be documented. The curation of notes, photographs, manuscripts and collections relating to the 1930s excavations of Frank Lester and Isabel Patterson was accomplished through the efforts of numerous personnel of the National Park Service. Preservation of material relating to the other excavations has been the responsibility of personnel of the Columbus Museum. Frank Schnell, Jr., in particular, has diligently preserved records of other excavations at Bull Creek which otherwise could not be documented. The Columbus Museum's files of Isabel Patterson, which includes correspondence and manuscripts, proved to be an extremely valuable source of information. The importance of the Columbus Museum as a curation facility cannot be overstated with respect to the completion of this report.

The primary goals of this project were the publication of the findings of previous investigations and a synthesis of characteristics of the material culture that defines the Bull Creek phase. This has been accomplished to varying degrees of success in the preceding chapters. Our success in researching previous investigations often depended upon the fortunate preservation of a few notes, letters, draft manuscripts and newspaper articles. Figure 167 shows the locations of major excavations outlined in the following paragraphs.

The National Park Service files contain substantial amounts of information and thus made a major contribution to this report. Shortcomings of the NPS records include missing field maps, particularly relating to the

cemetery, a lack of an osteological report, and the absence of a synthetic or interpretive report. Lester's field notes appear to be complete, but his original hand-written notes have not been located. We do not know how much information, if any, is missing in the notes transcribed by NPS personnel. With respect to an interpretive report, the lack of such a final report by A.R. Kelly was the primary motivation for the present project.

The excavation project conducted by the University of Georgia in 1950, under the direction of A.R. Kelly, was extremely important with respect to interpretation of the site, and records of the project survive only because of the public's interest in archeology. Aside from the collections, no records of the excavations survive at the University of Georgia. However, photographs and a brief report were produced by the Columbus Chamber of Commerce and these records have been preserved in the files of the Columbus Museum.

Records of more recent research features the work of Frank Schnell, Jr., who excavated on the site in 1959, and as a graduate student at the University of Georgia, undertook the site as a thesis topic. Schnell did not complete a Bull Creek synthesis due to a change in thesis topic; however, he did accumulate a substantial amount of data, particularly with respect to ceramics. Fortunately much of Schnell's data have been preserved and major portions of that research have been reproduced in the ceramic synthesis of this volume.

Records of other investigators, such as Frank Mulvihill, Margaret Ashley and Frank Schnell, Sr., Frank and Barbara Fenenga, David Chase, Jack Tyler and Terry Jackson, and Jackie Fuller, are found primarily in rare publications and unpublished manuscripts preserved in the files of Columbus Museum.

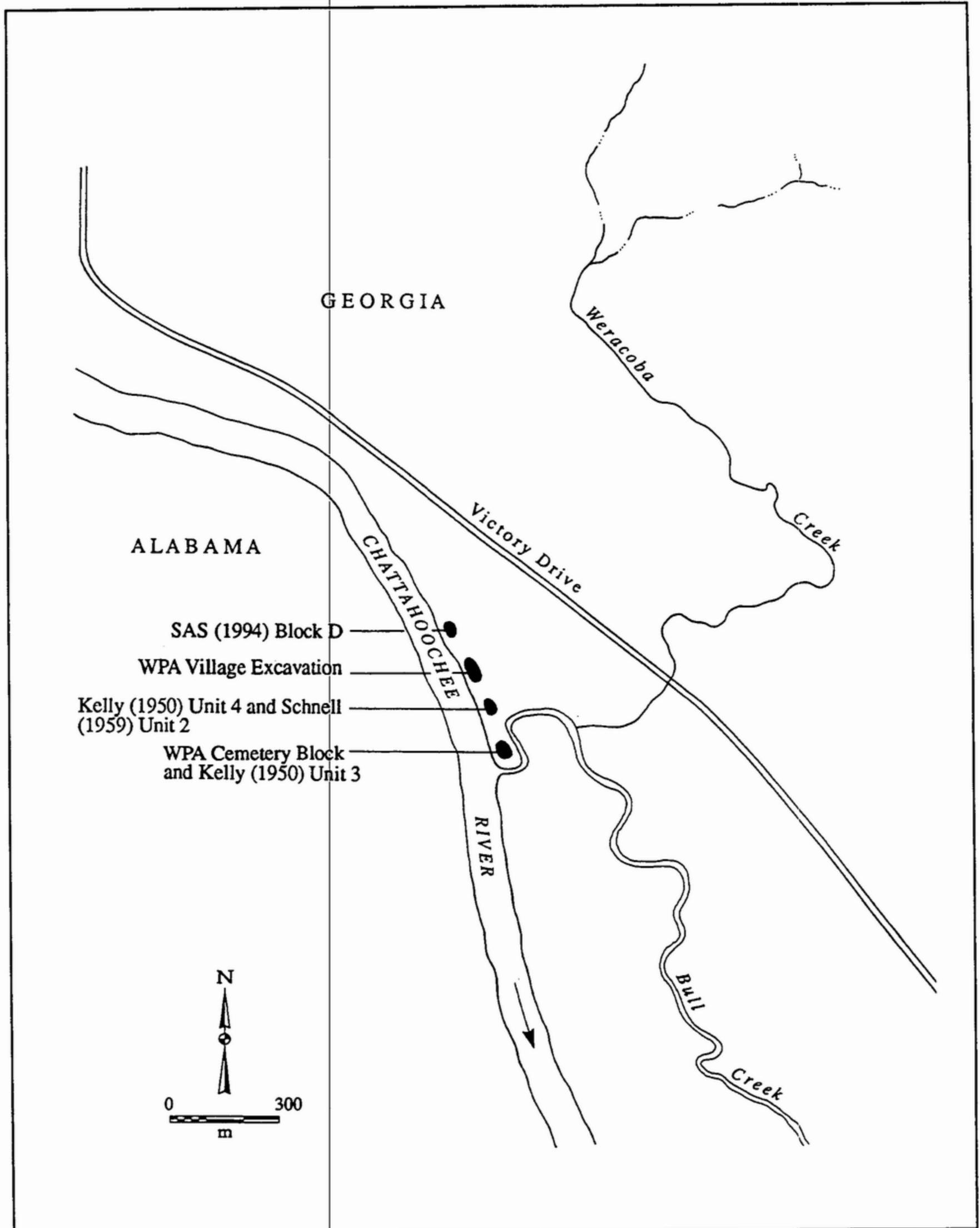


Figure 167. Locations of major archeological excavations at Bull Creek.

Accounts of work conducted on the contiguous Victory Drive site were found in a manuscript prepared by Schnell (1970). Those excavations relate primarily to an historic Creek occupation. Site boundaries created by Schnell for the Victory Drive site represent the extent of the Creek occupation. As a consequence of defining a distinct Victory Drive site, the modern site boundaries of Bull Creek differ from the boundaries of the old Bull Creek Village described in the writings of Lester (1938) and Patterson (1936).

Isabel Patterson's major work on the Bull Creek site is a 1950 article in *Early Georgia*, but a substantial body of related writings are housed in the files of the Columbus Museum. Included are letters to A.R. Kelly and others, drafts of several manuscripts, and several newspaper articles authored by Patterson. Additional records are found in various cultural resource management reports, the most current and site-specific of which was completed as a result of the Columbus Riverwalk project (Ledbetter 1994b).

Our examination of the material culture of the Bull Creek site focused on ceramics. Relatively few artifacts of other types have been collected from the site and little research has been conducted upon material such as lithics and subsistence remains. In the case of lithics, we are dealing with a Late Mississippian component at Bull Creek that made little use of chipped stone. Like contemporary Lamar populations in the Piedmont, it is apparent that small, triangular, chipped stone projectile points were not being produced at this time. While small chipped stone points were commonly found in association with the Early Mississippian Averett component on the contiguous Victory Drive site, there are no confirmed records of the recovery of any of these points in the excavated portions of the Bull Creek site. The only confirmed chipped stone artifact recovered was a large chert biface found in Burial 6 (see Figure 166). A few groundstone celts and chisels were also found

in burial context and broken examples have been found throughout the midden deposits. Few other stone artifacts exist in association with the Bull Creek phase occupation. Small amounts of pigment stone have been recovered, again from burials. The site has produced a number of marine shell artifacts, primarily beads. The majority of shell artifacts have been found in burials. Past excavations recovered sparse quantities of subsistence remains. In the older excavation projects, bone and charcoal were not commonly saved. In the most recent excavations conducted by SAS, no large pits with the potential for preserved organic material were located. Today, subsistence studies remain a primary deficiency in all investigations of the Bull Creek site.

The study of Bull Creek ceramics has been a major concern of this report. An effort has been made to integrate the ceramic studies resulting from earlier investigations with our own analysis, which focused upon vessel form. Problems in this undertaking resulted from variability in the quality of the original data from different sources, incompatibility of analysis categories and terminology, and the loss of some collections, which makes replication of the original work impossible. Also, differences in the frequencies of certain pottery traits, particularly surface treatment, between total sherd counts and minimum number of vessel counts made comparisons difficult. Nevertheless, we were successful in characterizing the Bull Creek pottery assemblage using these sources of data. This study was not exhaustive; however, much of the primary data relating to vessel characteristics have been presented as an appendix and hopefully will be examined further by other researchers. A primary result of our pottery study is the conclusion that the composition of the ceramic assemblage found on the Bull Creek site is consistent with interpretations of Schnell and others and supports the need to distinguish an early (Bull Creek) and late (Stewart) phase (Schnell 1990:67; Schnell and Wright 1993:21).

Our examination confirmed Schnell's interpretation that the Bull Creek site pottery was sufficiently different from sites such as 9Sw51 (Broyles 1962) and the Park's Mound site (Hally and Oertel 1977) to be defined as a distinct phase. At the Bull Creek site, the higher frequency of complicated stamping and the near absence of late Lamar incised and Pinellas Incised motifs does appear to indicate an earlier occupation. Unfortunately, we do not have reliable radiocarbon dates to further verify this interpretation.

Other research issues may also be pursued using the accumulated information. Issues relating to the Bull Creek village, the Bull Creek cemetery, as well as the status of the Bull Creek site within the greater Mississippian community can be addressed.

A greater understanding of the extent and architectural layout of the Bull Creek village can be gained by examining the findings of past research conducted at the site. Unfortunately, the loss of much of the site area to development prior to any thorough archeological survey means that major aspects of this issue cannot be resolved. We have good locational information for the excavated structures, and the locations of other possible structures may be inferred by the recovery of house daub and the discovery of domestic features, such as large trash-filled pits.

Several questions can be addressed with further examination of the Bull Creek cemetery by incorporating the findings of the Lester's 1930s and Kelly's 1950 excavations with modern osteological examination of the human remains. A very important question that remains unanswered is whether the burials represent an actual cemetery laid out separately from the village or whether the burials were within the floors of domestic structures.

Another question relating to the burials is the simple issue of sex and age composition. This question is addressed to some degree with

new information from an examination of the surviving remains by Chad Braley. Using Mr. Braley's 1994 observations to supplement the field observations of Frank Lester, a greater level of interpretation is possible.

Finally, we can examine the site from a larger regional perspective. This has been accomplished with the assistance of Adam King, who is currently involved in comparable research relating to the Etowah Mound group in northwest Georgia. The paragraphs relating to this topic have been prepared primarily by Mr. King. The basic research question to be addressed concerns the evolution of the Bull Creek site and the Bull Creek phase as the result of the movement of people or the adoption of basic concepts resulting from interaction of local populations with other groups.

The Bull Creek Village

The most recent investigations conducted on the Bull Creek site confirmed that most of the site has been destroyed (Ledbetter 1994b). Today, only a small strip of the site survives along the wooded river bluff edge above the Chattahoochee River. Data recovery investigations conducted on the contiguous Victory Drive site indicates that a series of structures associated with the Bull Creek Village extended along the river for a minimum of 450 m from the mouth of Bull Creek (Ledbetter 1995).

Based upon the combined work of previous investigations and the recent survey (Ledbetter 1994b), it appears the Bull Creek Village extended for a substantial distance along Weracoba Creek. Minimally, the village extended along the creek as far as the eastern boundary of the Fenegas' (1945) Weracoba Creek site (9Me379). This would put the eastern boundary of the site across Victory Drive and a straight-line distance greater than 500 m from the Chattahoochee River (Figure 168).

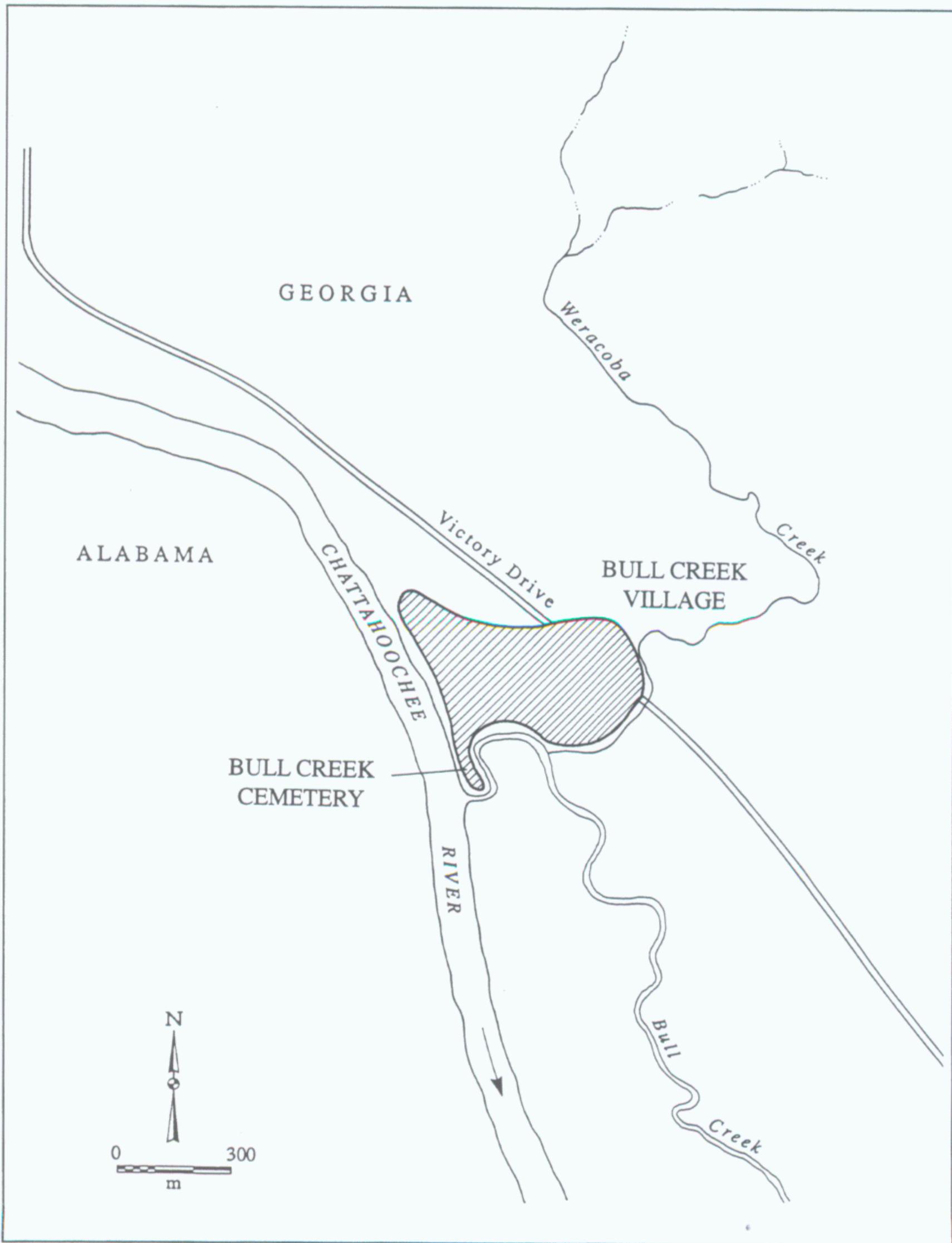


Figure 168. Map showing estimated extent of the Bull Creek Village.

The aerial extent of the Bull Creek Village may be only partially reconstructed using the results of previous archeological investigations. Because most investigations were conducted in the richest and best preserved areas of the site, most of our knowledge of the site comes from the area nearest the Chattahoochee River and Weracoba Creek. There is little information for the interior portion of the site. There is also no means of accurately determining the eastern limits of the site. For that reason, we cannot determine whether the village existed as a planned "town," with structures encircling an open plaza, or whether the site consisted of a series of structures strung along the two waterways.

Past investigations have produced no information on the presence of ceremonial or sacred structures and relatively little information on domestic structures. There are no confirmed accounts of the presence of a mound on the site. Information concerning domestic structures comes primarily from the WPA and SAS investigations.

Lester and Patterson found portions of two domestic structures. The structures were substantial post-construction houses plastered with daub. The structures were basically square but appeared to have had rounded corners. The only mapped structure (Number 1) appears to have been approximately 6 m wide. A large pit, probably excavated to procure clay for house daub, was located adjacent to the structure. A similarly shaped structure was encountered during data recovery of the Victory Drive site (Ledbetter 1995). That structure measured approximately 7 by 7 m.

While specifics of the village layout cannot be determined, there is ample information to conclude that a substantial number of structures were present on the site. A review of all excavations produced consistent evidence of structures in all areas of the site investigated. In past excavations conducted along Weracoba Creek and in the more interior por-

tions of the site, house daub and pits were consistently found. Based primarily upon the work of Chase, Schnell, and Fuller, it is apparent that structures were present along Weracoba Creek and extended into the interior of the site for a minimum distance of 150 m from the waterways.

One of many questions that cannot be answered with available information is the length of occupation. Substantial amounts of midden were deposited across a large site area. The beginnings of this accumulation equate to the Bull Creek phase time period. Apparently, the site continued to be occupied, or was re-occupied, during the subsequent Stewart phase. At present, we are unable to judge the intensity or extent of the Stewart phase settlement.

The Bull Creek Cemetery

The Bull Creek Cemetery was excavated in 1936 and 1937 under the direction of Frank Lester (Lester 1938). Lester exposed 46 burial pits containing the remains of at least 50 individuals in a block excavation that covered approximately 400 m² (Figure 169). While a sizable block was excavated, there is no evidence that the entire cemetery area was exposed. Today, prospects linger that additional burials are still preserved in the unexcavated peninsula of land that lies above the confluence of Bull Creek and the Chattahoochee River.

Much of Lester's preliminary report focused upon the cemetery excavation and description of individual burials (Lester 1938). Lester's account has been presented in Chapter 3 and additional field note information may be found in Appendix A of this report. Table 13 is a summary of Lester's burial data with new observations based upon the osteological reexamination of the remains by Braley. Observations concerning burial orientations and layout of the cemetery are also presented in this chapter.

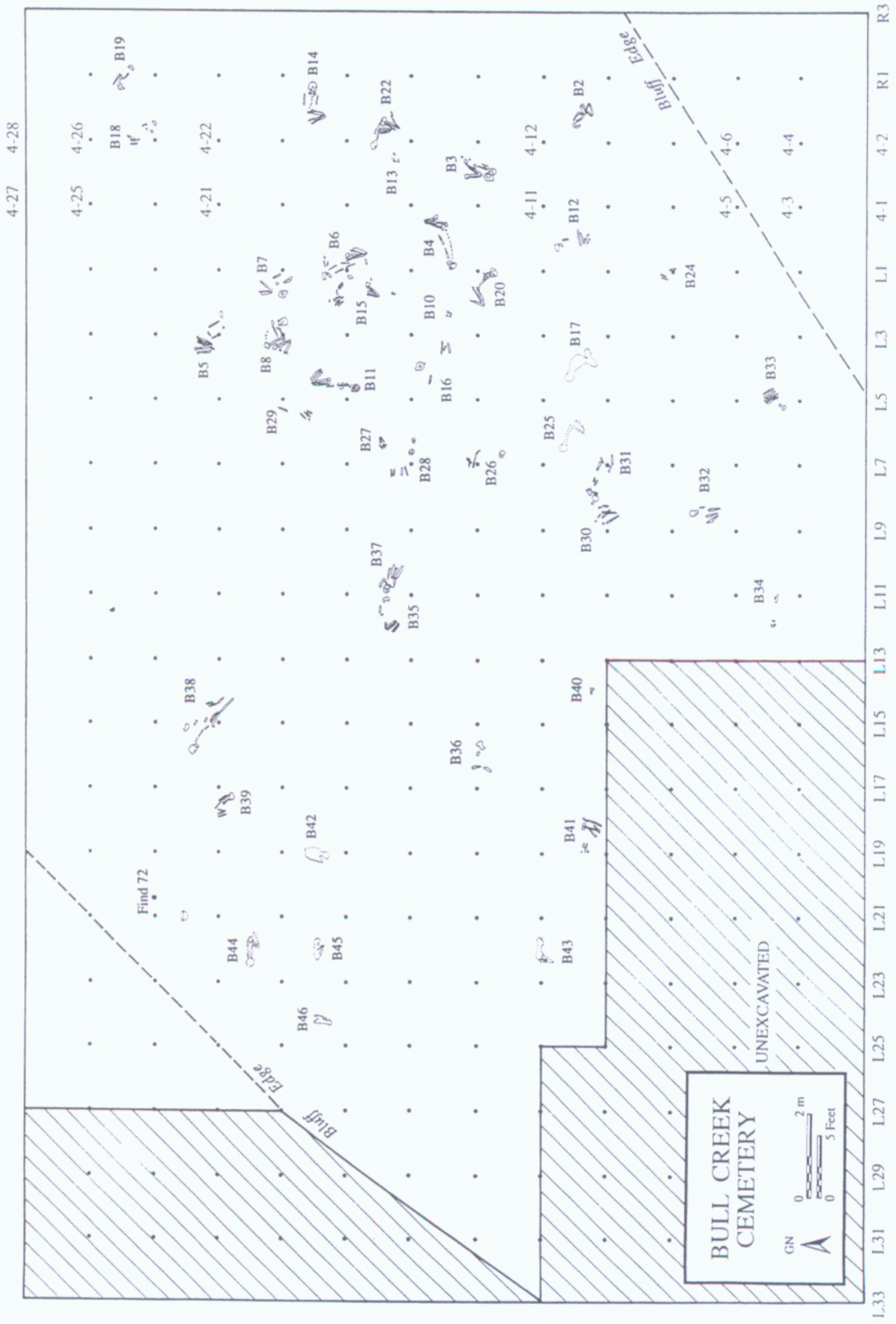


Figure 169. Plan map of the Bull Creek Cemetery.

Table 13. Summary of Bull Creek Cemetery

| Burial No. | Burial Type | Burial Depth* | Lester's Field Observation Notes | 1995 Observations of Curated Remains | Burial Furniture |
|------------|------------------------------------|---------------|---|--|--|
| 1 | unknown | NA/NA | skull only | adult male, skull complete | none |
| 2 | contracted flexed | 67"/NA | skull elongated | adult, sex and age unknown | none |
| 3 | contracted flexed | 67"/NA | some post-mortem disturbance | an elderly adult male, teeth worn down to pegs in front, secondary dentin exposed | effigy pot, shell beads |
| 4 | flexed | 44"/20" | female | sex and age unknown | none |
| 5 | contracted flexed | 72"/NA | poorly preserved, skull gone except for teeth, no cervical vertebrae or scapular | Fairly robust tibia and femurs, sciatic notch is less than 90 degrees, suggesting male. Adult, little attrition of teeth - no cranial fragments. | greenstone celt (7") |
| 6 | flexed, feet folded back to pelvis | 78"/42" | poorly preserved, and severely damaged during excavation | Left tibia has thickened mid-shaft; possibly a healed fracture. Fragments of long bones (legs), vertebra, tarsal, maxilla and mandible (no cranial frags). Male suggested by ruggedness of long bones. Person had lost first premolar and both molars (lower right) before death. Moderate attrition on teeth. | 1 greenstone celt (4") and 2 chisels, worked flint, black flint knife, red pigment |
| 7 | Contracted flexed | 78"/42" | skull, right fibula, both femora, tibiae | fragmented femurs and long bone fragments, no cranial fragments | effigy pot, discoidal |
| 8 | contracted flexed | 68"/36" | good shape, possible cranial deformation | robust tibia and femurs (male?), no cranial fragments | none |
| 9 | contracted flexed | 66"/32" | poorly preserved | adult, sex unknown, moderate tooth wear | chisel 3 1/2" |
| 10 | skull only | 54"/NA | ***** | missing | none |
| 11 | folded feet back to pelvis flexed | 73"/36" | skull is rather small and the individual was of comparatively small stature. This is a female burial. | Adult male (cranial morphology). Complete mandible and maxilla, fragments of skull, femurs and tibia. Skull shows frontal deformation. Antemortem loss of lower right first and second molars. 2 mm pit cavity in lower left third molar. | none |
| 12 | contracted flexed | 69"/35" | fragments of skull and long bones | adult male-skull cap has blunt supraorbital margins (consist of four long bones) | none |
| 13 | undetermined | 40"/26" | skull fragments, teeth, cervical vertebrae | missing | none |
| 14 | (Old Man) contracted flexed | 51"/34" | Skull is slightly misshapen, right parietal shows pathological enlargement - depression present at the lambdoid inter-section-old male. | terrible infection of the leg - massive thickening of the right femur, tibia and fibula. Fibula is almost unrecognizable as such. Probable adult male based on left femur robusticity. No cranial bone, but fragments of pelvis and long bones are present. | none |
| 15 | contracted flexed | 78"/53" | skull crushed, short fragments humeri, ulna and radius, pelvis, traces of femora and tibiae | Elderly person, sex unknown, skull-vertebra fragments, mandible and maxilla. Bone in good shape but incomplete. There was secondary dentin exposure on most teeth. Front teeth so worn they are peg-like. | none |
| 16 | double burial | NA/36" | ***** | missing | effigy pot |
| 17 | contracted flexed | NA/NA | ***** | Skull cap and three other cranial fragments are total collection. An adult- gracile characteristics of skull suggest female. There is slight cranial modification of occipital. | effigy pipe |
| 18 | contracted flexed | 61"/39" | consists of a few fragments of the skull and sections of femora | missing | bowl, shell beads, core, effigy pipe |

Table 13. Summary of Bull Creek Cemetery

| Burial No. | Burial Type | Burial Depth* | Lester's Field Observation Notes | 1995 Observations of Curated Remains | Burial Furniture |
|------------|--|---------------|--|---|---------------------------------------|
| 19 | contracted more than any found yet - knees on chest | 67"/45" | female, skull badly crushed, no cervical vertebrae, rest of the body well preservation | Sciatic notch of > 90° - probable female. Inventory: fragments of cranial, pelvis, femur, tibia, ulna, humerus, phalanges, tarsals, scapula, vertebra, ribs. No teeth, maxilla or mandible (cranial modification). | none |
| 20 | flexed-folded feet to pelvis | NA/NA | male - skull, cervical vertebrae, femora, both tibiae, clavicles, scapulae, pelvis | An adult female(?) - broad sciatic notch, gracile skull. Lower right first molar lost antemortem, attrition of teeth suggests young adult. Some cranial modification. | string of shell seed beads at neck |
| 21 | flexed - feet folded to pelvis | 36"/21" | skull, tibiae, femora, ulna, and radii | missing | none |
| 22 | flexed | 54"/40" | skull crushed but excellent preservation | adult male in very good condition but there is no skull - a very robust person | none |
| 23 | undetermined | 57"/33" | bone fragments | missing | none |
| 24 | contracted flexed | 59"/28" | skull, long bones | missing | none |
| 25 | folded flexed | 52"/21" | skull and long bones | missing | none |
| 26 | extended flexed | 79"/41" | skull and long bones | missing | none |
| 27 | contracted flexed | 75"/41" | skull and long bones | missing | none |
| 28 | flexed | 80"/35" | portions of left tibiae and femur and the skull with all of the facial bones missing | adult, but age and sex unknown | pigment, bone, stone, shell, bone awl |
| 29 | contracted flexed | 88"/47" | long bone fragments | missing | red pigment |
| 30 | flexed - with knees farthest away from body | 49"/11" | fragments of skull, tibiae, femora, small section of the pelvis | adult - Inventory: cranial (moderate tooth wear), mandible, long bone fragments-contains mandible fragments of two people | none |
| 31 | triple burial - 2 contracted flexed, 3rd is skull only | 61"/23" | (see description in Chapter 3) | missing | none |
| 32 | contracted flexed | 52"/34" | portions of skull, tibiae, femora, humeri, and ulna | probable male, based on robusticity, inventory consists of cranial, mandible, and long bone fragments | rocks, flint chips and animal bones |
| 33 | contracted flexed | 36"/7" | frag. skull, teeth, long bones | bad shape, probable adult | none |
| 34 | contracted flexed | 37"/16" | fragments of skull and tibia | bad shape, adult? | none |
| 35 | contracted flexed | 67"/27" | skull badly decayed, fragments humerus, ulna, lumbar vertebrae, pelvis, long bones | Cranial deformation of occipital. Skeletal remains of a child - sciatic notch suggests male. Unfused epiphyses of head of femur, greater trochanter, and acetabulum. | none |
| 36 | contracted flexed | 60"/35" | poorly preserved | missing | none |
| 37 | contracted flexed-face downward | 86"/36" | exceptionally well preserved | Excellent shape, possibly an adult male, but fairly gracile vault. Most of cranium intact, no deformation - strong mandible. Lost lower right first molar, lower left second premolar and first and second molars before death. | none |
| 38 | double extended burial | NA/36" | male and female (guess). See Chapter 3. | Adult male. Very broad dental arcade. Chin is unusual, shaped like a "snow plow". Complete mandible and maxilla. This burial also contains an extra mandible (right fragment). | none |

Table 13. Summary of Bull Creek Cemetery

| Burial No. | Burial Type | Burial Depth* | Lester's Field Observation Notes | 1995 Observations of Curated Remains | Burial Furniture |
|------------|-------------------|---------------|---|--|------------------|
| 39 | contracted flexed | NA/42" | skull, vertebrae, humeri, ulna, radii, metacarpal bones. Portions of pelvis, tibiae, femora, fibula, metatarsal bones | Female with extremely thin skull (teen-aged) - no cranial deformation. Third molars not erupted, little tooth wear. Collection includes mandible of a very old person - all teeth of second person are missing from canine back. | none |
| 40 | skull fragments | 61"/42" | skull fragments | an adult? sex unknown. | none |
| 41 | contracted flexed | NA/39" | fragments skull, clavicles, pelvis, long bones | adult? sex undetermined | none |
| 42 | contracted flexed | NA/26" | well preserved | A child, lacks third molars, roots of second molars still unfused, unfused ephiphyses of femur and scapula. | none |
| 43 | extended flexed | NA/50" | skull, clavicles, vertebrae, femora, tibiae, pelvis | an adult, possibly male based on robusticity - very fragmented | none |
| 44 | contracted flexed | NA/26" | complete | an adult? | none |
| 45 | contracted flexed | NA/33" | poorly preserved | an adult male | none |
| 46 | contracted flexed | NA/28" | teeth, long bones fragments | missing | none |
| unknown | | | | Box 219. Burial ? - Accession number 39-23323. Two skull caps, 1 male, 1 female or child, both with fronto-occipital flattening. | |
| unknown | | | | Burial ? Accession number 39-23326. An adult male with cranial flattening. | |
| unknown | | | | Burial ? Accession number 39-23324. Contains remains of two people, one adult with heavy tooth attrition, one adolescent with unfused roots on third molars (they had partially erupted, however). | |
| unknown | | | | Burial ? Accession number 39-23329. Adult, possibly female - sciatic notch of about 90 ° | |

*Depth: First reading is depth below surface (in inches), second is depth below occupation zone (Lester's measurements).

Our reexamination of the Bull Creek burials provided a few new insights. While there are a few contradictions between field notes and our reexamination concerning the sex and age of a few individuals, the observations are generally consistent. In this respect, a most noticeable finding is the absence of infants and small children. The cemetery appears to be composed only of adolescents and adults. Our reexamination also provided information for cranial deformation which was not included in Lester's notes.

The loss of a few individuals is apparent. This may represent a combination of extremely poor field preservation and cura-

tion problems. We do not know if all bone was saved during Lester's excavations. Consistent with NPS laboratory procedures of the times, the Bull Creek skeletons were carefully labeled and chemically treated to insure preservation. However, curation problems may have occurred as the skeletons, or portions of the skeletons, were examined by various individuals resulting in displacement or even loss of some remains. We know, for instance, that the skulls of certain burials were carefully restored and studied following excavation. This is noted in a letter from A.R. Kelly to Isabel Patterson dated June 25, 1937.

In regard to the 4 skulls Dr. Childs has. I saw him after receiving your letter. He will repair them as soon as he gets around to it. Since he is using his own materials, plaster, modeling materials, and his skill, more as a labor of love, I hesitate to press him. Also, you should know that 4 skulls restored is hardly a seriation on which to base any important conclusions regarding racial type, or for use in making comparisons with other Indians. They are valuable as a start toward a skeletal collection. I wouldn't however regard their study as an essential part of the report. Burial data should suffice here (Ledbetter 1995b:19).

Obviously, Kelly fully intended to have the burials examined in detail. In a letter to Patterson dated July 9, 1937, Kelly stated his plans.

I think now that Marshall Newman (Chicago and Harvard) is our best bet, following suggestion from Setzler. This is the young man, incidentally whom I recommended to do Physical Anthropology on Bull Creek skeletal material (Ledbetter 1995b:21).

Records of Newman's work has not been found, if indeed, any was ever conducted. If records do exist, they would be invaluable in light of the present status of the burial remains.

Questions still remain concerning the initial designation of the Bull Creek Cemetery as a discrete burial grounds separate from the remainder of the village area. Lester (1938) was not able to demonstrate the presence of structures in the area. Lester did note the existence of a thin clay layer, which might be structurally related, but his comments provide minimal information on the feature (see Figure 69). Kelly's excavations near the cemetery produced ample house daub, suggesting the presence of structures in the cemetery area (Kelly 1950). An examination of the orientations of the burials provides one means of assessing the possibility of a planned cemetery (Figures 170 and 171).

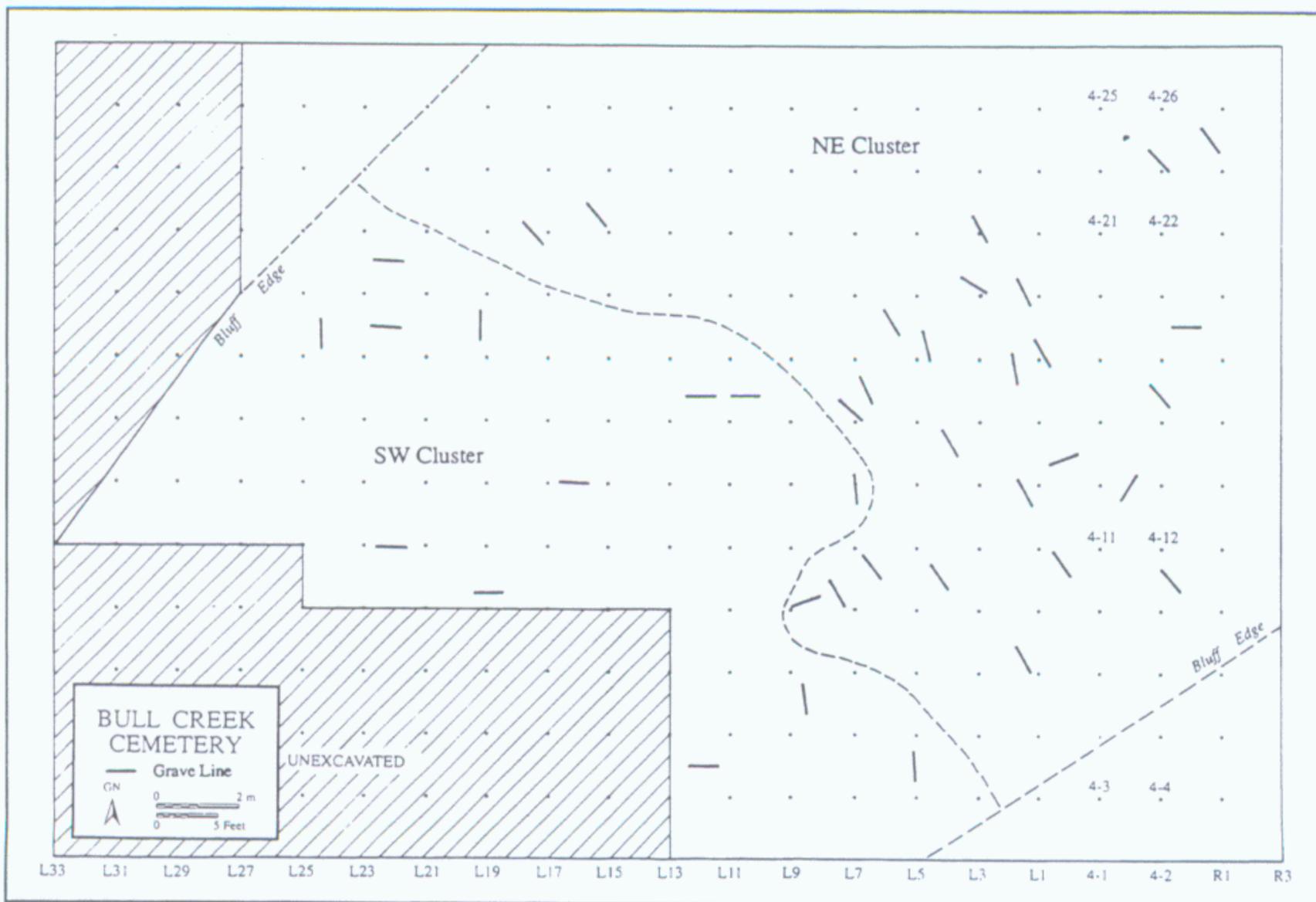


Figure 170. Burial orientations in the Bull Creek Cemetery.

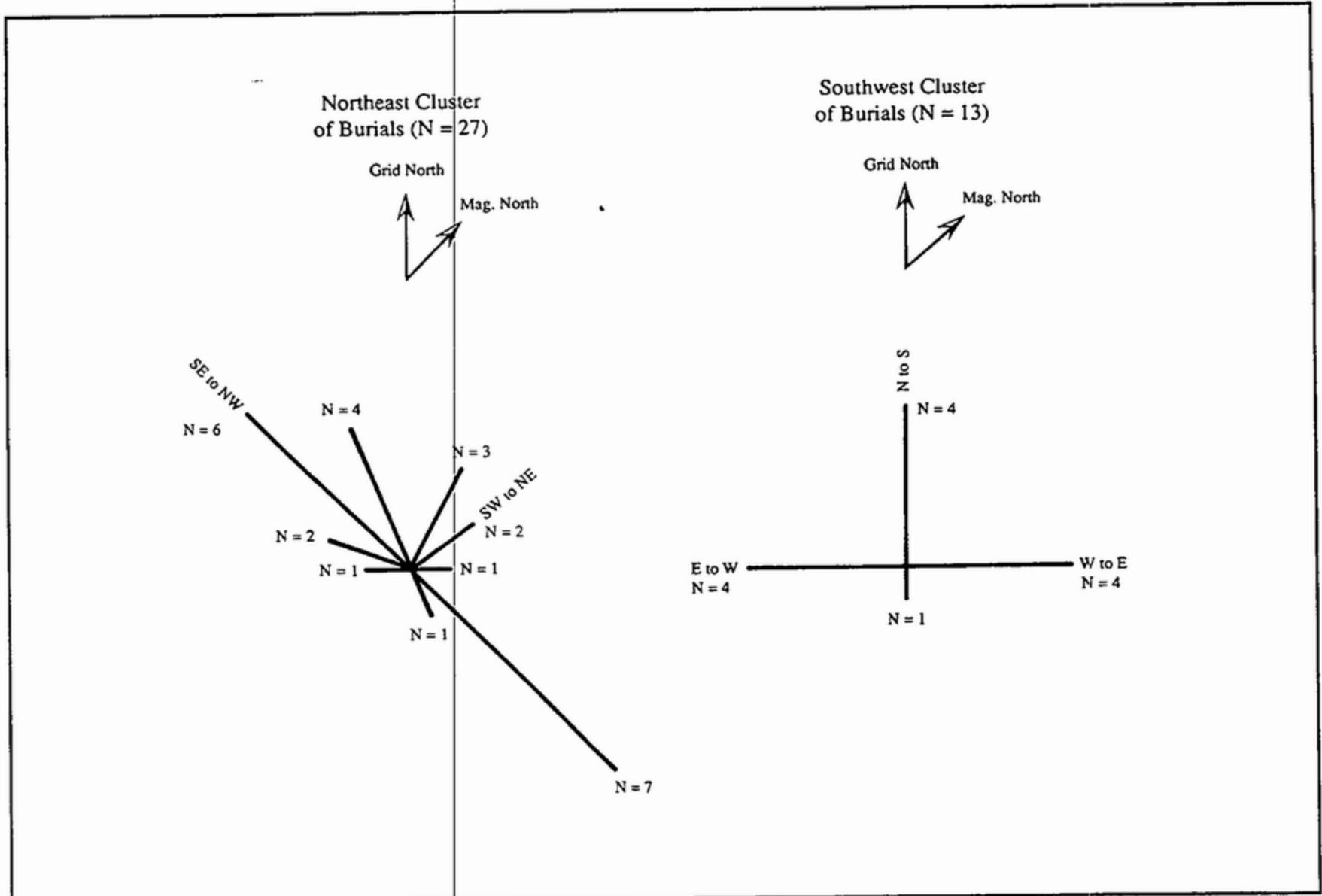


Figure 171. Contrasting burial orientations of two burial clusters in the Bull Creek Cemetery.

Burial orientations have been previously examined by Schnell (1990:67). Schnell noted variation in burial orientations with evidence of clustering along a SSE-NNW axis (24 percent) and NW-SE axis (22 percent). These compass bearings reflect Lester's grid north grid which lies approximately 45 degrees from magnetic north (see Figure 170). This means that many of the burials are oriented roughly perpendicular to the length of the peninsula and the channel of the Chattahoochee River.

The plotted orientations of the Bull Creek burials may be interpreted as evidence of both a planned cemetery and house floor burials. Some groups shown in Figure 169 appear to conform to patterns commonly associated with house floors where they would lie parallel to the walls. However, many of

the graves are aligned along a single axis, which could reflect a cemetery layout.

An interesting result of the plotting of orientations presented in Figure 170 is the apparent presence of two clusters of burials. These have been labeled as the northeast and southwest clusters on the map. Table 14 lists the range of orientations for each group. Another distinction is that burial goods were found only in the northeastern cluster.

One interpretation of this patterning is that the northeastern cluster represents a discrete cemetery group with most of the bodies generally placed parallel, while the southwest cluster conforms more closely to patterning evident with house floors. A second interpretation would be that temporally distinct burial episodes are reflected.

Table 14. Contrast of Burial Orientations from two burial clusters from Bull Creek Cemetery (based on Lester's grid north notations)

| Burial Orientation | Northeast Cluster | Southwest Cluster |
|------------------------|------------------------------|------------------------------|
| North to South | Count = 0 | Count = 1 (7.7% of cluster) |
| South to North | Count = 0 | Count = 4 (30.8% of cluster) |
| East to West | Count = 1 (3.7% cluster) | Count = 4 (30.8% of cluster) |
| West to East | Count = 1 (3.7% cluster) | Count = 4 (30.8% of cluster) |
| Northwest to Southeast | Count = 7 (25.9% of cluster) | Count = 0 |
| NNW to SSE | Count = 1 (3.7% of cluster) | Count = 0 |
| Southwest to Northeast | Count = 2 (7.4% of cluster) | Count = 0 |
| SSW to NNE | Count = 3 (11.1% of cluster) | Count = 0 |
| Southeast to Northwest | Count = 6 (22.2% of cluster) | Count = 0 |
| SSE to NNW | Count = 4 (14.8% of cluster) | Count = 0 |
| ESE to WNW | Count = 2 (7.4% of cluster) | Count = 0 |
| Total Count in Sample | 27 | 13 |

The existence of a discrete cemetery area at Bull Creek remains a possibility. Excavation in domestic structures elsewhere on the site have failed to produce burials, suggesting that graves may not have been commonly placed in house floors. Further insight into this intriguing issue would be gained through excavation and comparison of other Bull Creek and Stewart phase sites.

The Bull Creek Phase from a Regional Perspective

Since the first work was done at the site, researchers involved with Bull Creek have noted the unique character the ceramic assemblage found there. While not always explicitly stated, most would certainly agree that this blend of ceramic decorative characteristics resulted as people, pots, and ideas from different geographic areas mixed. In their discussion of the Bull Creek phase in the Oliver Basin, McMichael and Kellar (1960a) interpreted this mixing in the following manner:

At about 1350-1400, several forces begin to impinge upon Rood's focus, which eventually alters it into a Lamaroid expression. Coming from the south, moving up the Chattahoochee River, Fort Walton begins to appear in many sites, especially incised types and Lake Jackson Plain. This force is so strong that a movement of peoples is probably indicated. Secondly, coming from the east and north is the resurgent stamping tradition, complicated and check-stamped, from type Lamar, Savannah, and Wilbanks sources; again a movement of people is indicated and the Rood's Focus is acculturated into the Lamar tradition, but with the addition of Fort Walton-like traits. The culmination of this is probably to be seen at Bull Creek, on the south side of the city of Columbus (McMichael and Kellar 1960:215).

With the benefits of 35 years of archaeological research, it is now possible to see this mixing of ceramic decorative styles in a somewhat different light. McMichael and Kellar originally saw these changes taking place between AD 1350 and 1400. More recently, Schnell's (1986) definition of the Singer phase has pushed the beginning of these changes back, by approximately one century, into the Middle Mississippian period.

According to Schnell, forms and surface treatments commonly found in Savannah and Lamar period assemblages appear in the Lower Chattahoochee as early as AD 1300. During the Middle Mississippian Period (ca AD 1250-1400) a great variety of raw materials and finished goods were exchanged widely across the Southeast. In fact, during this time the entire Southeast may have been more connected, in terms of movement of physical goods, than at any other time in prehistory. One of the most important raw materials exchanged at this time period, as well as many other periods in prehistory, was marine shell. Chemical sourcing of shell found in archaeological contexts has repeatedly shown that the Gulf Coast was one of the major sources of the widely distributed shell.

Through sourcing a variety of non-local materials found at the Spiro site, Brown (1983) has been able to identify one of the Middle Mississippian corridors of exchange through which this shell and other materials and goods moved. This corridor began at the Gulf Coast of Florida, extended northward into the Tennessee Valley, and continued toward the Mississippi River and points westward. The Chattahoochee River was undoubtedly one of the major arteries in this corridor, because it offers a water route that connects the Gulf Coast to a point in the upper Piedmont a short overland distance to the major riverways in the Ridge and Valley. It is likely no accident that two of the major Middle Mississippian centers in the Southeast, Etowah and Lake Jackson, are effectively situated at either end of this segment of the corridor.

Along with the shell and other goods, people and ideas also must have traveled up and down the Chattahoochee, and during the Middle Mississippian period the traffic on this route may have been at its heaviest. In fact the connectedness of the two areas is confirmed by the appearance, in Middle Missis-

sippian contexts, of Lake Jackson pottery types at Etowah (King 1991) and Wilbanks-like Complicated Stamped sherds in the Lake Jackson area (Scarry 1985). Also, almost identical embossed copper plates were found in Middle Mississippian burials at both Lake Jackson and Etowah (Jones 1982, 1994). In this context, it should not be surprising that sites in the Lower Chattahoochee exhibit a mixture of ceramic traditions derived from the two areas that the river effectively connected.

The mechanisms that brought about this blending of ceramic decorative characteristics need not have involved the movement of people or even pots. A good deal of archaeological and ethnographic research has been done on the use of decorative style as a means of symbolic communication. Essentially, people do not decorate themselves or their possessions without a purpose, and one purpose decoration can serve is as a means of communicating certain messages (Braun and Plog 1982; Plog 1990; Weissner 1983, 1984; Wobst 1977). Depending on the items decorated and the social circumstances, communication might be aimed at the interpersonal, local, or regional level. Overall the messages communicated are relatively simple--in some sense defining an "us" and a "them". In relatively small-scale, kin-based societies like those of the prehistoric Southeast, those who were not your kin or recognized somehow as part of the social group were feared and mistrusted (Hudson 1976). In the case of the Lower Chattahoochee, the adoption of ceramic decorative characteristics may have been an actively pursued strategy whereby the inhabitants of the area acknowledged and displayed their ties to other people, especially from the north, as a way of making exchanges flow more smoothly. Undoubtedly, this was one of a set of strategies that included intermarriage, gift exchanges, etc., aimed at the same goal.

After about AD 1400, Mississippian ceramic assemblages in the Lower Chattahoochee again look somewhat different from preceding phases. While the Singer phase assemblages consist of Rood phase pottery with some Savannah/Lamar types and modes, the Bull Creek phase assemblage is essentially Lamar with some Fort Walton types and modes. In a sense, the ceramics are changed from a southern decorative tradition with some northern influences to a northern decorative tradition with some southern influences. As before, these changes are probably best understood from a regional perspective.

After AD 1400, the Southeast as a region begins to change. The extensive distribution of goods and the importance of elaborate costumes and displays so prevalent in the Middle Mississippian appear to fade. As Anderson (1990, 1994) has suggested, appeals to ideology characteristic of Middle Mississippian chiefly control may have given way to more secular control in the Late Mississippian period. Whatever the structural change, the connectedness of the Middle Mississippian seems to break down or at least regionalize at this time. Reflecting these changes, after AD 1400 the political geography of the interior Southeast seems to shift. During the Middle Mississippian the landscape was dominated by a few large, widely-spaced political centers such as Lake Jackson, Etowah, Moundville, Spiro, Winterville, and Lake George. In contrast, during the Late Mississippian there appear to have been a greater number of more closely-spaced political centers on the landscape, each apparently controlling a smaller area while intensely competing with neighboring polities for regional control (King and Freer 1995).

During this time, shell remained an important raw material used by inhabitants of chiefdoms in the interior Southeast (see Muller 1989; Smith and Smith 1989), so it seems reasonable to assume that the Chattahoochee was still an important avenue for the movement of shell from the Gulf Coast of Florida to points northward. However, unlike during the Middle Mississippian, the political geography of the region was quite different. The two powerful centers at either end of the Chattahoochee that presumably played an important role in the flow of goods through the valley, had lost much of their influence (Hally and Langford 1988; Jones 1994; King 1991). At the same time, those who lived in the Lower Chattahoochee now had immediate neighbors with whom they certainly had contact, probably both hostile and friendly.

After AD 1400, Mississippian chiefdoms of the Lamar ceramic tradition become established in the Lower Tallapoosa, Flint, and Middle Chattahoochee River valleys (see Hally 1993 for a dating of Mississippian mounds in the area). Thus for the first time during the Mississippian period, the inhabitants of the Lower Chattahoochee were surrounded on three sides by people making Lamar ceramic assemblages. Under these circumstances, the stylistic changes that brought about the Bull Creek phase are probably best seen as adjustments made to material culture as the inhabitants of the area, probably out of necessity, became actively involved in more local social and political matters.

The Bull Creek Site

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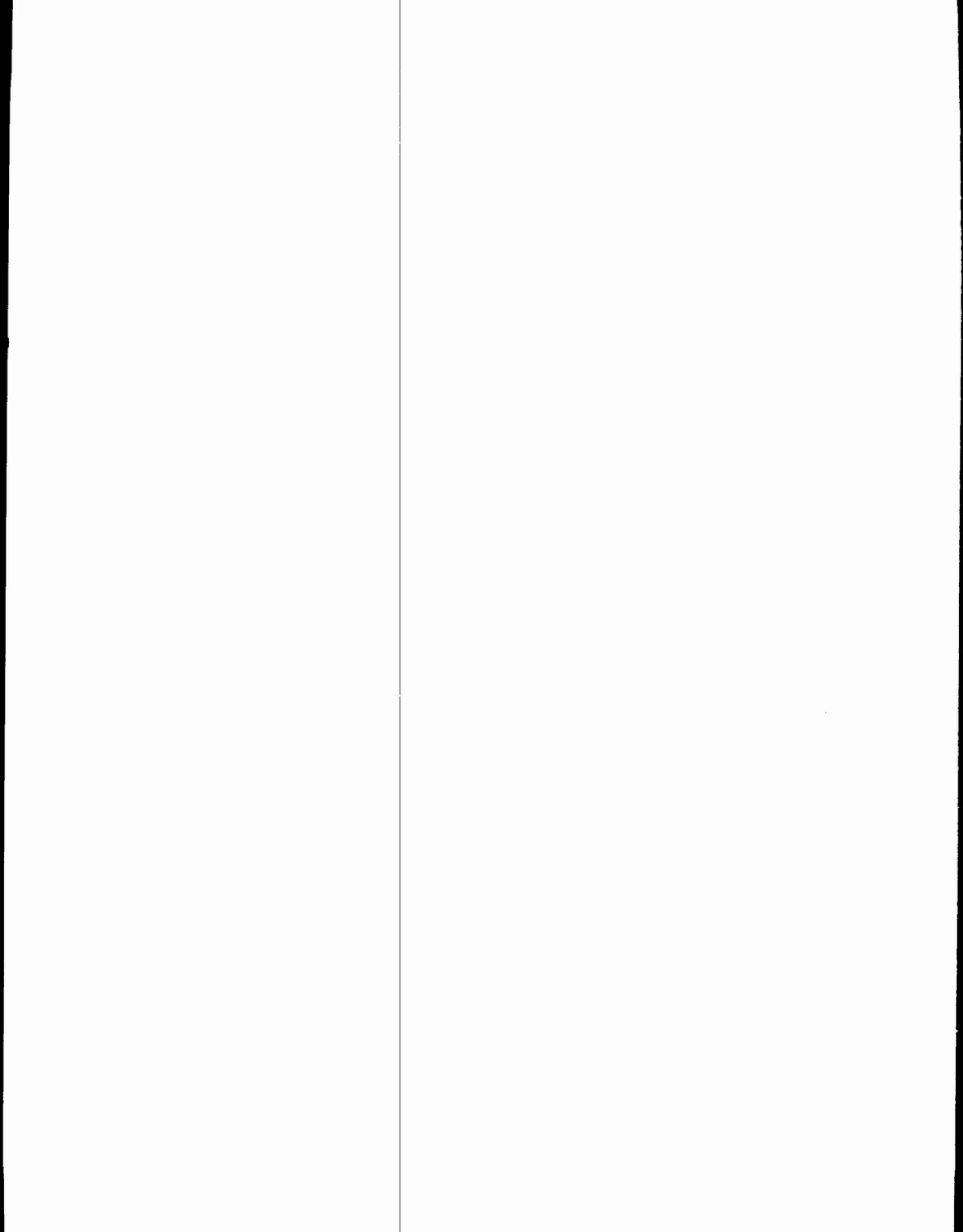
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APPENDIX A

Transcription of Lester's Field Notes
Bull Creek Site
1936



Mar. 12, 1936. Visited and made a sketch map of a Village Site, situated just North of Bull Creek, at its junction with the Chattahoochee River. The site is rather well defined, in that a roadway has been cut through it and the exposed profile shows a very definite midden accumulation, ranging in thickness from about six inches to about sixteen or eighteen inches in the middle, where the exposed bank shows the signs of a house of some type - timbers and quite an accumulation of briquettes. This deposit shows in the bank for a distance of some three to four hundred feet and appears from the exposed surface, to be very similar to the Mossy Oak type site on the Ocmulgee.

The ridge or hummocky places nearby seem to have been caused by a company making a railroad cut and are nothing more than spoil banks.

3-12-36. During the afternoon Mrs. Patterson and I visited a place across the river on the outskirts of Phenix City, Ala., where a portion of a skeleton had been unearthed - also associated with it were some trinkets, that had the appearance of early made articles. A complete circle to go in the lobe and a little bell-like pendulum below, also some small buckles of pewter.

The hill from which these were taken has been used as a gravel pit and the top has almost entirely been removed to a depth of about 3½ feet. The underlying geological formation appears to be a type of red sandy loam, either of the Greenville or Barnesville formation - some indication of mica in it. It is possible that the rise may have a small mound on top but for the most part, at least, it is probable, in fact almost certain, that it is nothing more or less than a natural elevation.

Also visited two sites on the Bussey plantation, in Ala. on the bank of the Chatt. just below the mouth of Bull Creek. Both of these sites had quite a bit of surface pottery and were rather extensive. Supposed to be Coweta towns.

3-13-36. Started excavation on the Bull Creek Site this morning, with a crew of 3 negro boys and myself. As previously mentioned, the site has been cut into by a roadway on the east and the river has made rather deep inroads from the west. The place where work was begun is on this narrow strip of ridge, on a bluff, about 40' above the river.

Control Trench #1 was staked out - trench 5' wide - stks interval 5' - stakes nos. starting at 1-39 and going to 1-52. Worked four sections, the width of the ridge from 1-39 - 1-40 to 1-49 - 1-50. Trench #1 has an orientation of N. 15 deg. W - magnetic.

The top soil is a river silt deposit of yellow sandy loam, containing an unusual amount of mica; it ranges in depth from 2" at sta. 39 to about 10" at sta. 48. No sherds were found in this level. No finds.

Immediately below the yellow top soil is a midden deposit of rather greasy type of "blue clay." Quite a number of sherds came from this level, however, they were all exceedingly small pieces. The majority of pottery found is plain, hard, grit-tempered ware, rather greyish in color - the pottery also has a rather appreciable amount of mica in it.

Find #1 - a rim-sherd with a raised notched design, about an inch from the top.

Find #2 - a rather peculiarly shaped piece of sandstone, about an inch in diameter, so nearly circular that it might have been used for a chunky stone.

Immediately below the blue-clay level which was about 2 to 4" thick, is a sort of greyish sandy clay containing quite a no. of briquettes and some sherds. This level appears to be immediately above the baked clay, belonging to the house debris. In both this and preceding level, practically no flints have been found and none with secondary working. Typical profile to date.

3-14-36. Continued excavation on house site, exposing 10' of red sandy clay mixture, presumably roof accumulation, between sta. 1-45; 1-46 and 1-49; 1-50. Area south of site 1-39; 1-40 is of a grayish sand clay-midden deposit. It appears that the scattered edge of the house site is directly under sta. 1-46; in section 1-45; 1-46 to 1-49; 150. A baked clay ridge was exposed, 1" deep in red level, this ridge appears to be floor material, and is shaped something on the order of a fire bowl, except that it has a very small degree of curvature. Further troweling should prove more enlightening on this.

The sherds from this and the immediately adjacent level of greyish clay, are very abundant - much larger pieces than previously noted.

Immediately adjacent to the bake ridge mentioned above, are other baked areas appearing at irregular intervals and slightly different levels. It is probable that all of these belong to the wall and roof structure. Quite a number of briquettes, showing reed imprint, were also found in this level.

Find #3

3-16-36. Removed yellow silt deposit and portion of black midden deposit from section 1-49; 1-50 to 1-57; 1-58. Worked black midden to a depth of 1 to 3 in. - sherds plentiful.

Find #5 - a piece of briquette, showing reed imprint, found one inch in reddish, sandy clay of house debris - 32" S of sta. 1-49 and 21" west.

Find #6 - a rim-sherd, showing a notched design on top of the rim, an incised line just beneath it and a portion of an incised whirl, showing punctate marks in it.

3-17-36. Excavated black, midden deposit from sta. 1-49; 1-50 to sta. 1-57; 1-58, to a depth of 14 to 30 inches. Quite a large number of sherds in this level. Also started excavation of reddish sand and clay (house debris) sta. 1-46; 1-45 to 1-52; 1-51. Briquettes, charcoal and pottery are scattered throughout this level.

Note for 3-17-36. Found a small piece of bone, 3" deep in reddish sand and clay, - extreme dampness made it impossible to take up. Presumably leg bone of deer, one end of which had been charred. Large "pores" in knuckle section. 29" S of sta. 1-50 to 6" W.

3-18-36. Continued troweling house site, uncovering quite a large section of briquette material between sta. 1-49 and 1-50, irregular in shape and thickness. Quite a quantity of charcoal was evident, but no timbers except a short section between sta. 1-49 and 1-51, nine to sixteen inches N 1-49 - 6" E. 11" below surface, in reddish sand and clay. Presumably a section of matting of reed with a round pine pole. Another short section 10" long was found 21" S of sta. 1-51, 11" E, 11" below surface; this appears to be a short section of a log, about 4" in diameter.

3-19-36. Further excavation of house debris continues to show briquette material in abundance. Started troweling floor section and uncovered a piece of broken pottery, laying flat on the floor, with a few

fragments of human bones in it. This is located just on the edge of the bank (road side) 19" S - 16" E of sta. 1-50. Immediately adjacent to this (26" S- 12" E sta. 1-50) is a portion of a small timber with a large briquette moulded around it.

3-20-36. Started excavation of a section between 1-39; 1-39L1 and 1-57; 1-57L1, working yellow silt top soil, and a portion of the black midden underneath. Sherds plentiful in the midden level. Also continued troweling on floor, uncovering quantities of briquette material and charcoal. Bad weather prevented much headway.

3-23-36. Excavation of black midden deposit 1-39; 1-39L1 to 1-57; 1-57L1. Quite a number of sherds, Find #11, a broken rimsherd with a very small handle found 10" deep in black midden deposit, 15" below surface, 22" S - 30" W sta. 1-49.

Between Sta. 1-45 and 1-47 a distinct line of red is observed presumably the west edge of the house debris.

Continued troweling the floor, struck a small portion of a timber about 4" long, 28" S and 3" W Sta. 1-52, lying flat on the floor, also a moulded briquette, 40" S and 15" E Sta. 1-52.

3-25-36. Rain! - no work. Made arrangements with postmaster for storage space in new P.O. and possible office space in old post office.

3-26-36 more rain and Friday.

Sat., March 28, 1936. Continued work on Bull Creek #1 house site, work out floor. Also visited and made surface collection from Coweta #3 and site at Abercrombie Mound, located on Mr. Brannen's farm, on the Ala. side of the Chattahoochee, about 3 miles below Bull Creek. Visitors in town, Dr. Kelly, Hanna, Solomon and Tony Waring.

April 6, 1936. Started N.Y.A. crew of light excavating, a 5' test trench, from sta. 1-87; 187L1 to Sta. 1-123; 1-123L1. This section lies just north of the house site already described, and shows a slight ridge running through it. Removed yellow topsoil from the whole section, topsoil ranging from 4 to 20" inches. Very few sherds, one Find (#12), a quartz arrowhead of the modified spinner type, found between Sta.

April 7th, 1936. Rain - no work

April 8th, 1936. Continued work on test trench. Working from yellow topsoil into a very rich black midden deposit. Quantities of sherds were found in this level. 5 finds (#13 to 17) Quite a number of briquettes were found in the level and it is probable that there is a portion of a house between 1-93 and 1-107. It appears that the midden deposits runs out between 1-107 and 1-111, grading into a yellow subsoil.

Midden deposit also contains things of late historical occupancy; mixture probably due to plowing; bricks, glass and other articles of such nature, mixed in with pottery fragments and briquette material.

April 9th, 10th, 11th. Rain!

April 13. Unable to work in L1 Test Trench, due to wet weather, started excavation of 5' Test Tr. E L3 line stakes from Sta. 1-95L5 to sta. 1-111L5, worked through yellow topsoil and into black midden to a depth of 9" at 1-95L5 and 13" at sta. 1-111L5, yellow topsoil an overage of 4" deep. Sherds plentiful - 3 Finds (# 18,19,20) at a depth of 13" below surface at Sta. 1-99L3, briquettes became fairly numerous between sta. 1-97L3; 1-97L5 and Sta. 1-99L3; 1-99L5. Found the pieces of a small pot in place and it will be possible to reconstruct in original form. Found 29" S - 8" W Sta. 1-99L3, also found a complete rim, pinched or beaded design, 1 ft in diameter, found 13" S - 22" W Sta. 1-99L3. Started removing section between 1-L1 and 1-L3 between sta. 1-95 and 1-103, to expose house debris. Sherds plentiful in both levels.

4/14/36. New crew of 20 men. Extended Test Trench of L3, L5 to sta. 1-143L5. Worked to a depth of 13" at 1-111L5 to 16" of 1-143L5. It is noted that the black midden deposit appears to run out between 1-115L5 and 1-119L5. being replaced by yellowish clay loam. Very few sherds found in clay loam area. Also started excavation of trench L11, L13, starting at 1-109L13 worked black humus and midden deposit to a depth of 9", worked to 1-143L13 to a depth of 5" Black midden deposit appears to run out at Sta. 1-127L13. Yellowish clay appears to extend beneath it, back to 1-107L13. Found outline of a pit in yellow clay deposit, just below black midden deposit. Find #21 found in pit just above burned area.

April 15-16. Continued excavations of area between sta. 1-91L1 - 1-91L5 to 1-123L1- L5. Briquette material appearing at a depth of 15" below surface or 1-91L1 and extending from 1-91L1 - L5 to 1-103L1 - L5. Found a pot, broken, but pieces in place, found 28" from 1-99L3, 59" - sta. 1-99L5 - 44" sta. 1-99L3. Scattered fragments in immediate vicinity, appear to belong to these two pots. Portion of another pot was found 65" SE 1-97L1, 41" NE 1-95L1. Pot is of plain type ware, resting rim down, surrounded by briquette material. There seems to be an absence of the huge moulded type of briquettes found in the first house.

April 20, 21 -'36. Worked area between sta. 1-91L5 -L9 to 1-103L5 -L9, down to a depth of 13" below surface, going through top soil and into black midden deposit, also worked a portion of house debris striking floor between 1-99L1 and 1-99L5. Briquette material shows from 1-95 to 1-95L5 to 1-103L1; 1-1-99L5. Briquettes seem to be of moulded variety but do not show as clearly as in house #1, because of plowing through them.

Total lack of timbers is also probably due to plowing. Several large pieces of pottery were found just on and above floor level. There is a total absence of trade material but modern brick are found mixed all through black midden deposit. See find #34.

4-22,23,24 -36. Staked off Con. #2, across R.R. cut, from sta. 2-55-56 to 2-91-92. Worked through topsoil and into yellow sandy clay-loam deposit underneath. No heavy accumulation of midden deposit, but sherds rather well scattered throughout plowed soil and down into yellow loam. Found a pit in Con. #2 at Sta. 2-59, showing up just under plowed soil.

Two boxes of pottery have come from this pit (See Pit #2 material), several pieces show a rather unusual design of punctate, incised body, with notched rim. At present the pit has not been completely troweled out.

Also started removing briquette material from floor and have found several large pieces of pottery resting just above floor and presumably belong to some of the pits already described. No timber supports as yet but briquettes show more of the massive size of the first house. Also removed topsoil and a

portion of black midden deposit from section between 1-103L5 -L9 and 1-115L5 -L9, worked to a depth of 6" below surface. Several boxes of pottery from this section.

The briquettes material shows use of fiber for binding purposes and there seems to be an absence of the matted reed construction -- on the whole it is very similar to the other house except that it has a harder clay floor, either due to packing or baking to a small extent. The briquettes shell off the floor proper very easily and it is thus easy to work out.

April 27 - May 4. Continued to remove briquette material from what appears to be floor of house site #2. Portions of floor appear to be intact and other portions (in con #1 - L1) show signs of having been plowed into. Small brick fragments and occasional pieces of metal show evidence of having been plowed under. At present no post mould impressions are showing.

Two burials have been located in the side of the bank, about 100 yards from where Bull Creek runs into the Chattahoochee River. One has been washed from place and has fallen into the yellow clay muck down below but the other is still in place; with a portion of the lower leg bones and thigh bones sticking out of the bank it seems that both the feet and the pelvis bone have been washed away. In the first - the skull was removed from position by the person who found it before notifying me.

May 5-6. Continued to work on house site #2. On the whole it seems to have been plowed into rather badly; very little evidences of any floor material except that already described. Working plowed soil off down to a yellowish clay loam, showing signs of briquettes and small pottery fragments. A few burned areas have turned up that may possibly develop into post-holes.

Excavated a 10 X 10 pit over the burial in the bank of Bull Creek and worked down to it to a depth of below the surface. On the whole the body is in good state of preservation, but the skull is broken in on the left side -- pelvis bone and feet are gone. Troweling out has developed that it is a flexed burial -- male (?) skeleton --The body is flexed, knees drawn up almost under the chin, and arms folded, with the left hand between the legs. All of the upper vertebrae are gone but some of the ribs remain in place.

May 7-18. Continued work on House # 2, with very small group of workers. Removed pottery from floor (?) level and continued on down. Ground so hard that necessary to keep wet all the time. Floor appears to be very uneven, sloping toward the southwest. Found baked area in S.W. corner at least 3" below level of that in N.E. corner. Still finding some pottery in floor level and traces of briquette material. Very few post moulds have turned up at the present time. Floor area is very uneven, showing patches of baked material in spots. All indications point to use of hard packed clay floor, with patched places baked in place.

May 18-22. More work on first house site, uncovering floor level between 46-45 and 52-51. Removing briquette material from hard-packed blue clay. Made a plaster mould of a large molded briquette. Started working midden deposit beyond immediate confines of house site, just below level of floor. The underlying clay seems to slope down just beyond house site. Found a large refuse pit, containing quite a bit of pottery in flooring location.

Also found some small calcined bone on floor of house site between Sta. 1-47 - 1-48 to 1-49- 50. (Above drawing) Bones are very tiny and have been burned completely through. More post moulds are turning up in this house and should present a very nice architectural floor plan.

May 25-26. Continued work on #1 house site; more evidence of post mould impressions. Removed moulded briquette from floor of house. Find #? Very little pottery showing up on house floor. Floor still shows hard-packed clay variety, with layer of charcoal just over floor. What post remain in holes are partially charred, but what fiber remains uncharred is not totally rotted. It appears that the posts charred, all around the outside and the portion still remaining in natural state is the center of the charred portions. See drawing of house for more accurate location of individual post-moulds.

May 27-June 2. Lowered 15 X 15 pit at burial on down to level of burial #2 and found evidence of another burial pit in north wall. Then extended pit 10' to the north and worked on down, finding pottery in the waterlaid sand. At a depth of approximately 5', an effigy pot was found made in the shape of a dog - painted ware. The pot is unbroken and is an exceptional piece of ware. The "dog" is complete, with eyes, nose, ears, four feet and short stubby tail. The pot is part of the furniture with a burial, found just below the pot. The body is face downward, and have only found one arm.

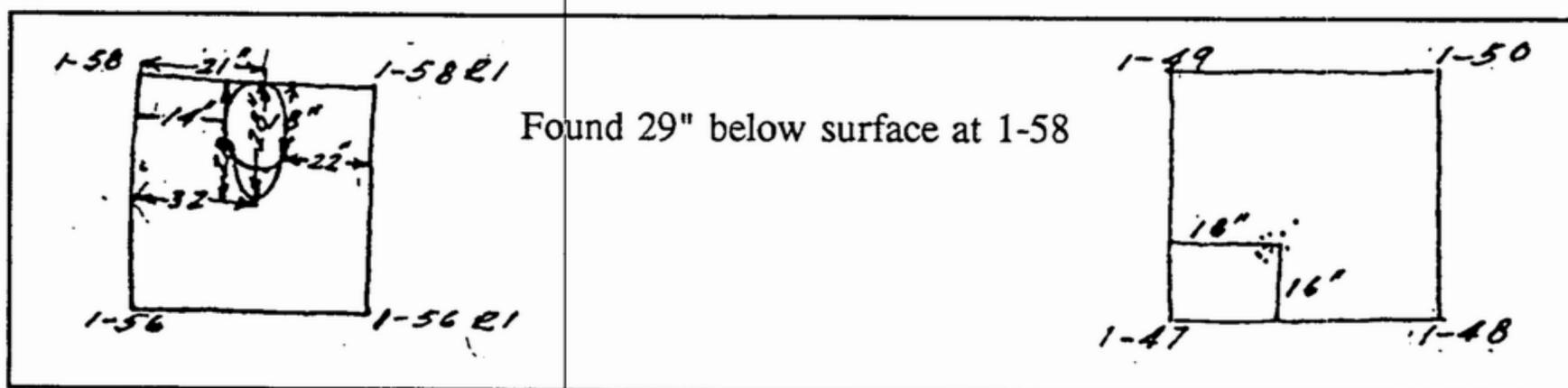
June 2-8. Continued excavation on burial #3, working down to remainder of skeleton. Sherds occur in all of fill element down to burial and some small pieces right in place with skeleton. Body is laying on the left side, head pointing South - contracted type of flexed burial - knees drawn up almost under the chin, with the pot resting between knees and chin. The hands are between the lower leg bones, right hand about 3½" below the knee-cap and the left hand about 10" above the head. Location Burial #3 between Sta. 4-14 and 4-13.

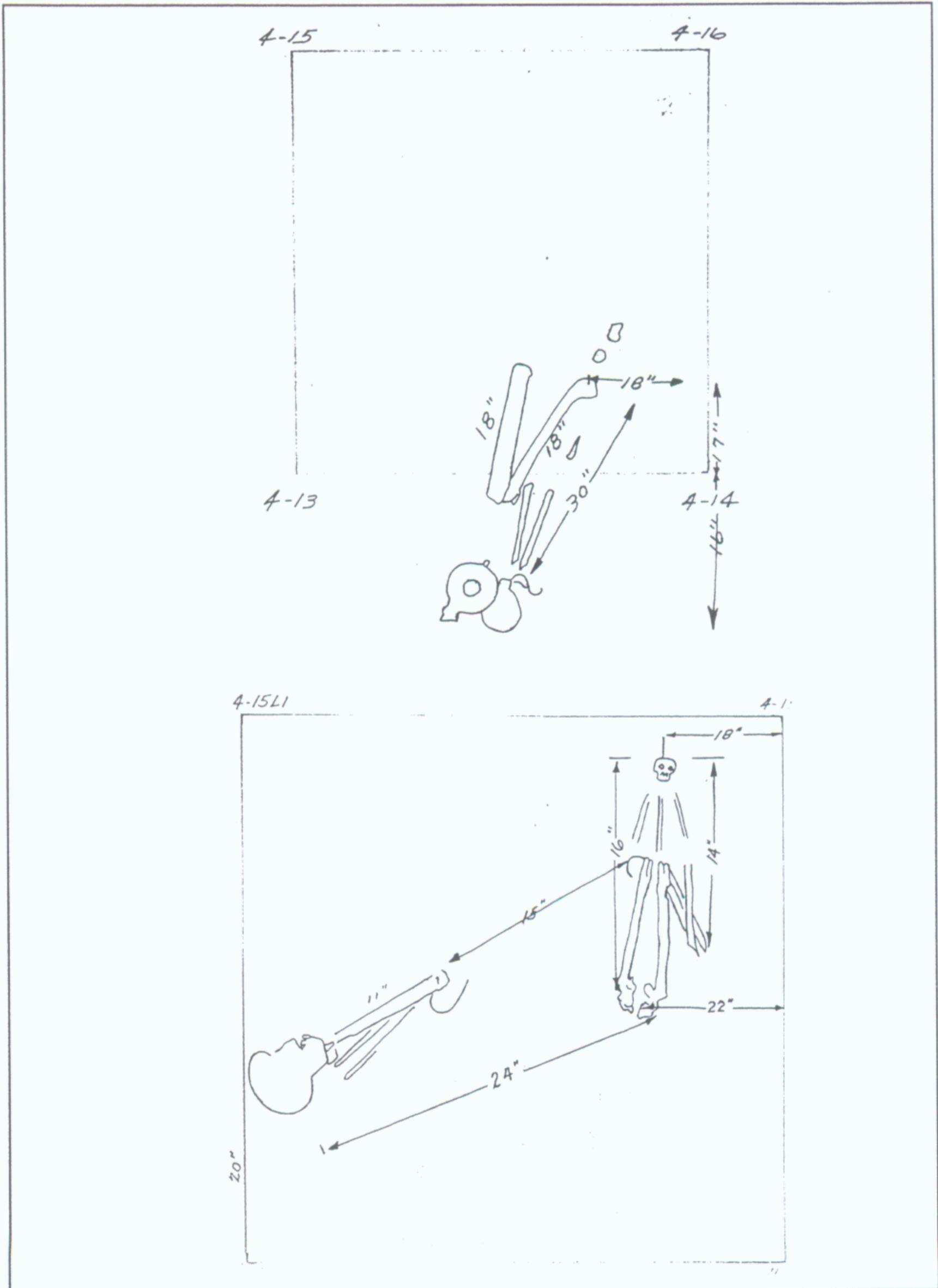
6-8 - 6-9. Started 10 X 10 pit, 10' N of burials #3 and 4, worked down to a depth of 7"; no sherds found in level. Found a skull of a dog 7" below surface, 26" N Sta. "A". Started form for removal of burial # 3 as a complete unit.

6-10 - 6-12. Lowered 10 X 10 pit to a depth of 31". Top level w-1, sand 3" to 11" deep. Old sod (historic) lies 6" deep - accumulated sand - 14" deep. Bone sherds in B and C levels. Also removed Burial #3 intact, by pouring concrete block around burial and forcing 3/8" steel plate under concrete. The body was placed on exhibit at M & M Bank and has caused quite a bit of favorable comment. Location of Burial # 3 -- 4-

6-15 to 6-22. In extending pit Northward, to remove burial #3, also ran into another burial, which was rather badly cut by the person making the discovery; the burial was found at a depth of 44" below surface and only 20" beneath bottom of occupation level.

The body is laying on the left side, head facing N.W., body oriented N.E. and S.W. Such bones as remain are in very good state of preservation, with exception of fingers, toes and ribs. The skull, pelvis and sections of the vertebrae were cut into with the shovel but the rest of the body is intact.





Field Drawing of Burials 3 and 4.

The body is on the left side, arms straight down toward the thighs, with legs folded back under the body - knees in front with heels just below the pelvis bone - slightly different from the other type of flexed burial. As the hand bones are gone, it is impossible to tell whether or not they were between the legs but it seems highly improbable, as the distance is too great from elbow to the thigh bones. The bones are comparatively small and it appears to be the skeleton of a woman. Location Burial # 4 (between Sta. 4-15L1 and 4-15).

Lowered 10 X 10 pit, sta. 4-20 to 4-24 - 4-19L1 to 4-23L1, to a depth of 78" at 4-23L1, 64" at 4-20. Sherds plentiful to bottom of occupation level. Found a burial just under sta. 4-21L1, in West profile wall, and extended pit to 4-19L3 to 4-23L3, working down to burial pit. A greenstone celt was found with the burial, resting just back of the head. Skull practically gone and remainder of bones in very poor state of preservation. Details later. Also worked section between 4-26 - 4-20 to 4-15L1 - 4-19L1 to a depth of 64" at 4-20. Found a burial in the wall on present level - (64") just under Sta. 4-17L1. Also found a burial in wall 24" W. Sta. 4-19L1 Details later.

6-23 -6-24-1936. Rain!

6-25. Troweled out burial # 5. Burial is of the contracted, flexed type. Body laying on left side, head pointing SSE. Bones in a very poor state of preservation. Burial furniture consists of a greenstone celt, approx. 7" long and 3" wide at cutting end - 2" wide at handle end. All of the skull is gone, except the upper and lower teeth; no trace of shoulder bones and only the 3 lower joints of vertebrae. Right arm folded across the body, left arm going between the thigh bones, with hand at heels. Burial is in tan sand, 36" below bottom of occupation level, 72" below surface at sta. 4-21L3. Found quite a few sherds in pit fill. (See box of section.)

Also lowered 5' X 10' pit, 4-15L1 to 4-19L1-L3, to a depth of 32"; sherds plentiful in occupation level.

June 29. Lowered section 4-15L1 -L3 to 4-19L1 -L3, to a depth of ? below surface; found 4 burials in section; one, #8, directly under 4-19L3; one, #7, on line of sta 4-19L1 -L3; one, #9, between 4-17L1 and 4-15L1; and one, #6, on line of sta. 4-17L1 -L3. Detailed locations later.

June 30th to July 3rd. Burial # 7 has with it another of the dog effigy painted pots. This pot however, is rather badly broken, the neck being found down on the pot itself, and the head and three of the feet broken off - all parts are in place though, and the vessel can be restored to its original shape. From all appearances the pot is an exact duplicate of the one found with burial #3. There is also a small greenstone discoidal stone as burial furniture; the stone is perfectly smooth and round, about 1½" in diameter and about 5/8" thick, in the middle. Removed the pot after taking photos because of danger of theft. Greenstone celt with Burial #5 having been stolen. Location and description of burial later (after further troweling).

Burial # 7 is of contracted, flexed type bones, in very poor state of preservation; body laying on left side, oriented N-S, with head to south. Skull has been crushed and remaining bones consist of sections of tibiae, femora and upper arm bones. Appears that hands went between the legs as in other burials but all trace of bones gone.

Burial # 8 is of a flexed type, with feet drawn up under the body, knees pointing away from body. Bones in rather poor state of preservation, not completely troweled out present time.

July 6th to July 8th. Moving surplus dirt back to R.R. fill. Started excavation of section 4-7L3 to 4-15L3. Lowered to a depth of 35" at 4-15L3 21" at 4-7L3. Sherds plentiful in occupation level. There is what appears to be the outline of a burial pit between 4-15L3 -L1 and 4-11L3 L1, Burial #10 first appeared at 20" below surface at 4-11L3. Several pieces of painted pottery are noted in the sherds coming from this level. Also staked out extensions of Control #4 and ran traverse lines from Con. #1 to Con. #4

July 9. No Crew!

July 10. Continued excavation on section 4-7L3 to 4-15L3. Lowered to a depth of ? at 4-7L3; at 4-15L3 Outline of a burial pit shows between 4-7L3 and 4-11. Found Burial #11 at a depth of ? below surface No burial furniture.

July 13-14-15. Lowered section Sta. 4-16 to 4-16R1 - 4-24 - 424R1 to a depth of 24" below surface, also removed large tree between sta. 4-16 and 4-16R1. Found bones of large animal 10" below surface, with a small seed bead resting with bones (Find #45). Lowered section 4-7L3 -L5 to 4-23L3 L5 to a depth of 4" at 4-L5 and 6" at Sta. 4-23L5. Note continued rain has caused considerable damage to burial 4-5-6-7-8-9-10-11, but bones can probably be salvaged.

July 17, 1936. Continued excavation on section 4-7L3 -L5 to 4-23L3 -L5, to 4-23L3-L5, working to a depth of 36" at Sta. 4-23L5, 9" at sta. 4-11L5, working through occupation level from 4-15L5 to 4-23L5, approx. 4" in tan sand. Considerable pottery from occupation level. Three finds #'s 46,47,48. Only 3 in crew.

July 20, 1936. Continued excavation in section 4-7L3 -L5 to 4-23L3 -L5, working through occupation level and into tan sand, working to a depth of ? below surface. Pottery fairly well distributed throughout the level; so far no trace of burial pits as yet. Also continued section 4-16 to 4-24, working tan sand to a depth of ? below surface. Find #49, a small clay bead found 5" deep in tan sand, 40" below surface, 11" E 4-18, on line sta. Find #50 a rimsherd of unusual design, found 6" deep in tan sand, 40" below surface, 35" S. Sta. 4-18, also found an outline of a burial pit between sta.

July 21, 22, 23, 1936. Lowered section 4-16 -4-16R1 to 4-24 -4-24L1 to a depth of 4.20 Sherds plentiful in occupational level. Found a burial #13, located at a depth of ? below the surface, between Stations 4-16 -4-16L1 and 4-18 4-18L1. Not troweled out at present; skull broken rather badly when found. Also found a burial #14, between stations 4-18 -4-18R1 and 4-20-4 20R1; bones in excellent state of preservation. Body lying on left side oriented E & W with skull pointing E. Body is in the contracted, flexed position with knees drawn up almost under the chin, with hands passing between the thighs and lower legs. Skull has peculiar indentation on back of occipital, unnatural deformation -- none of the ribs remain, however a few sections of the vertebrae remain in place; pelvis bone in fair state of preservation and a few bones of the feet are still in place, showing arch of foot and upper toes. Skull is also enlarged on right side, being slightly misshapen.

Began troweling out Burial #6. Burial is of flexed type laying on right side -- Body oriented NW-SE, head to NW with knees pointed away from body and feet drawn up under the pelvis bone. Arms go straight down at side and fingers nearly reach to femur. Body in rather poor state of preservation, having been considerably damaged after discovery, by heavy rains. Burial furniture consists of a small green celt, about 4½" long, 2½" at cutting end and 1" at butt end; two small green stone chisels. A very nice flint knife of black flint, some small pieces of worked flint and some very peculiar reddish powder in globule form, apparently some ferrous oxide, that was possibly used for paint. The flint articles and the greenstone chisels are resting on the "paint" material. 67½ below sur. 36" in tan sand.

Burial #7 is in a very poor state of preservation, nothing remaining except small section of fibula of right arm, sections of both femur and fragments of tibia. From appearances it seems that body was laying on left side, oriented SE-NW, head to S.E. and in all probability the hands went between the legs; only small section of ? and radius of right arm found. 78" below surface 47" in tan sand

July 27 to 30. July 27 Moved skeleton from M&M Bank. July 28 to 30 Troweled out burials exposed and began cleaning excavations. Found a dog-effigy type 7" S. sta. 4-15L5, 32" E. 70" below surface, 36" deep in tan sand. Pot is slightly different from other two in that neck design is slightly different, neck being higher and smaller. Body of pot painted red with black design. Vessel in perfect state of preservation except that end of dog's tail broken off and one leg loose, but in place. The legs are slightly longer and place at a slightly different angle.

July 31 --- Rain!. August 3,4,5. Complete troweling of burials 8, 14, also started excavation of section 4-24 - 4-23L5 to 4-28 - 4-27L5.

August 10. Continued excavation of section 4-24; 4-23L5 to 4-28; 4-27L5 lowered to a depth of 52" at sta. 4-27L5 and 29" at sta. 4-28. Sherds plentiful through occupation level.

Also troweled out burial #11 between sta. 4-15L3 -L5 and 4-19L3 -L5. Body is of the flexed type, head pointing SSE. Arm straight at sides and going about midway between pelvis and knee. Thighs point straight downward with legs back toward pelvis. Bones in fair state of preservation, a few of the ribs still remaining intact, also some of the bones of the arch of the foot. No burial furniture. The skull is rather small and to all appearances this is the burial of a female.

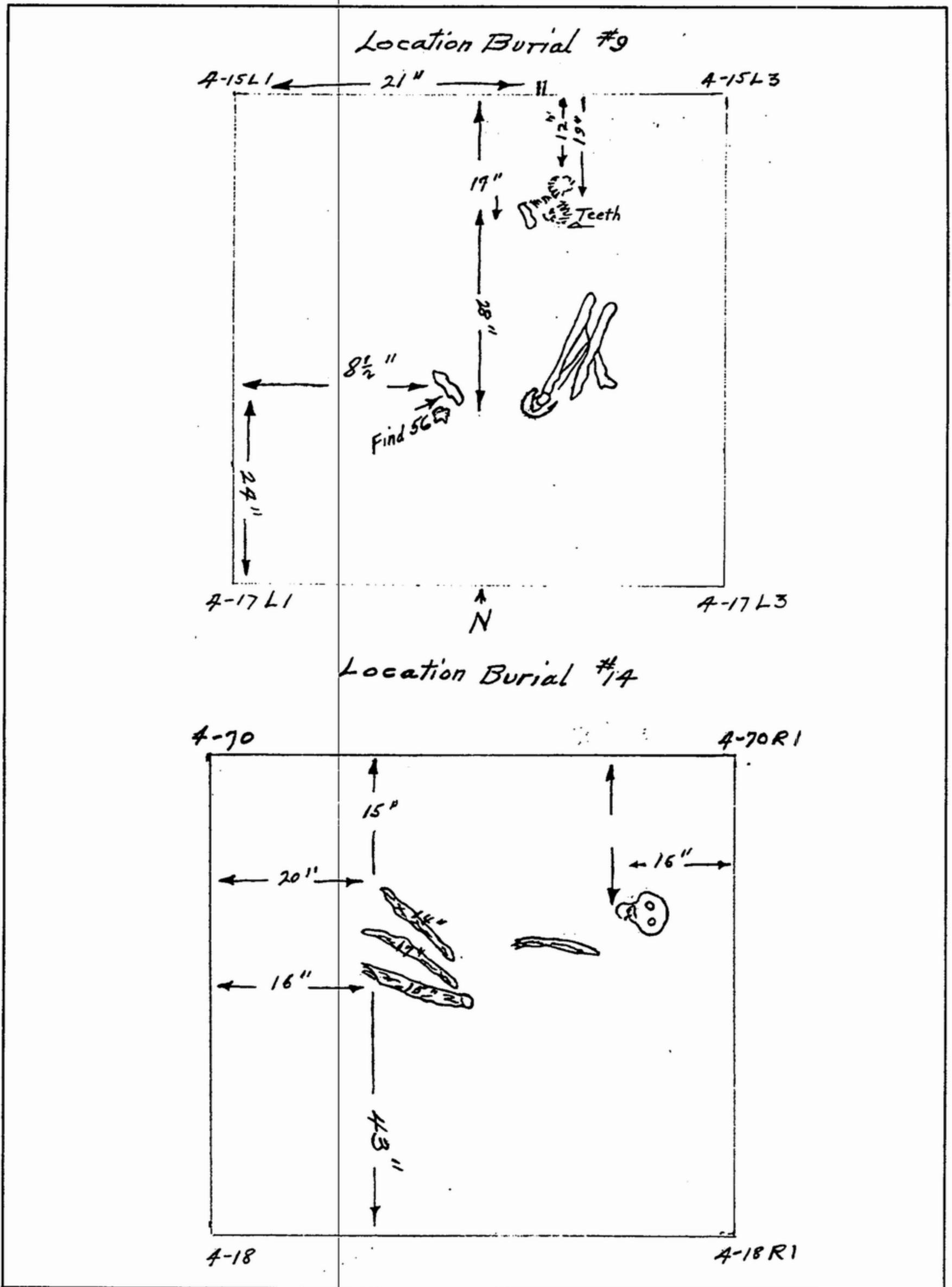
August 11 to 14. Continued excavation of section 4-24; R1 4-23L5 to 4-28; 4-27L5, lowered to a depth of 83" below surface at sta. 4-27L5. Located a burial, #18, immediately below sta. 4-24. Burial not completely troweled out, but burial furniture consists of effigy pipe, Find #64 A, core of 63 conch shell and large beads, 64B, presumably of seed. 65, and a small pot 3 3/4 in. dia. incised and punctate. Burial found 69" below surface. Also removed Burials #11, 5, 6, 8, 9.

Burial #8 is of the contracted, flexed type. Body lying on left side, oriented E-W with head to East. Skull in fair state of preservation, vertebrae of neck and portion of shoulder blade and collar bones remaining intact; left arm folded across body, hand at pelvis bone, right arm straight, going between thighs, hand bones under right tibia. Pelvis, tibia, femur, fibula and bones of feet in excellent state of preservation. Three sections of lower vertebrae remaining intact. No burial furniture. Burial located just under sta. 4-19L3. 44" below occu. in tan sand.

Burial #9 is of contracted, flexed type, bones in poor state of preservation. Oriented SE-NW on left side. Nothing remains of upper body except teeth, vertebrae of neck, section of upper arm bone about 4" long. Lower body remains - small section of pelvis bone, tibia, femur, fibula and small section of hand between femur. Burial furniture consists of small greenstone chisel, approx. 3 1/2" long (Find #56) Burial located 66" below surface 32" in tan sand between sta. 4-15L1 -L3 and 4-17L1- L3.

Burial #12 consists of small fragments of skull and portion of tibia and femur of both legs. Bones in very poor state of preservation. Burial is of contracted, flexed type, knees in front of body, oriented NW-SE Head to NW. Found between sta. 4-9 - 4-9L1 and 4-11 - 4-11L1 at a depth of 35" below occupation level. Body laying rt side.

Burial #10 consists of broken fragments of a skull, all other traces of burial gone. Skull crushed beyond repair, burial located between sta. 4-15L1 -L3 4-13L1 -L3. Found 27" below occupation level in tan sand 54" below surface.



Field Drawings of Burials 9 and 14.

Burial #13 consists of the fragments of a skull, found immediately below large tree - roots have destroyed all evidence of other bones; skull crushed. From appearances it appears that body was lying on left side, oriented N-S with head to S. Only a few fragments of the skull - some teeth and a few sections of the cervical vertebrae, small section of collar bone. No trace of burial pit - no burial furniture. Found 26" in tan sand, 40" below surface.

Burial #15 is in a very poor state of preservation, body laying on left side, oriented NNW -SSE. The burial is of the contracted, flexed type, arms appear to go below the legs, however bones in such poor state of preservation it is almost impossible to determine exact relation. Remaining bones consist of skull rather badly crushed frontal bone, decayed entirely, short section of both humerus, trace of ulnar and radius of right arm, pelvis bone almost entirely gone, and only short section of femur and tibia, no trace of fibulas or any of bones of appendages.

Burial #16 consists of a few fragments of tibia and femora, bones are scattered over a large area and this is really the remains of two bodies; general orientation is south southwest and north northeast. Burial furniture consists of the 3rd effigy dog vessel. 36" below occupation level.

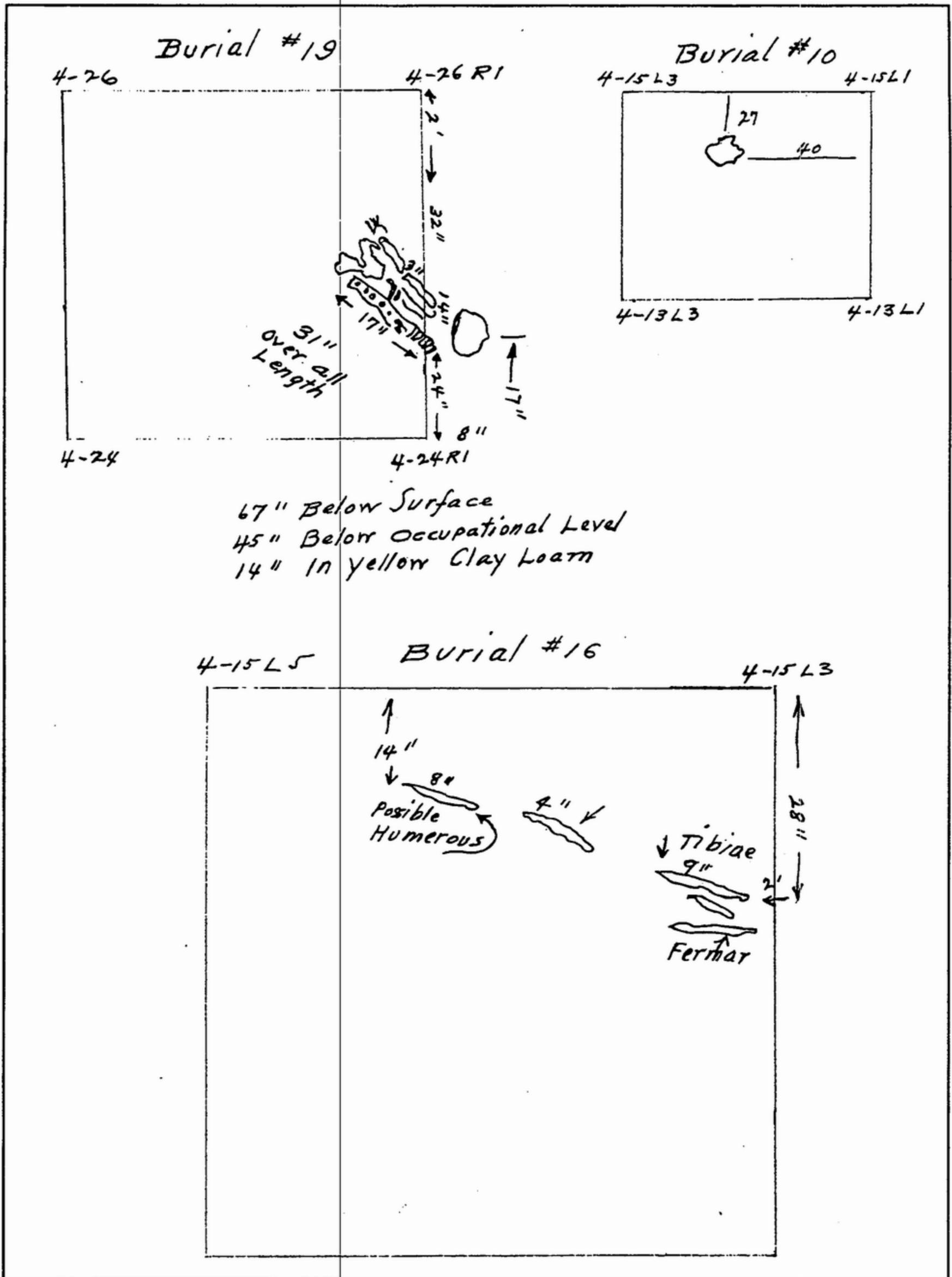
Burial #20 is of the flexed type, vertebrae straight, knees at right angles to vertebrae. Bones in fair state of preservation; remaining bones are skull, cervical vertebrae, both femora, portion of both tibia, small section of pelvis, portions of collar bones and shoulder blades. None of lower vertebrae, ribs, hands or feet. Body laying on left side, oriented ESE and WNW, head to the ESE. No sign of burial pit. Arms folded across body - folded at elbow. Burial furniture consists of beads around the neck.

Burial #18 is located directly under sta. 4-24. Bones in very poor state of preservation, only portions remaining - very small section of skull, a few of the molars and both femurs. Body appears to be laying on left side, oriented SE-NW, head to SE. Knees drawn up toward chin, and appears to be typical Bull Co. type of flexed burial. Burial furniture consists of a small pot, Find #65, approx. 3½ dia., incised and punctate design, rather poor workmanship; several large beads, Find 64B, of shell or seed, and unbroken clay pipe, Find 64A, human effigy type, and a small piece of conch shell core Find #63.

Burial #19 is of the contracted flexed type, body oriented SE-NW, head to SE laying on right side. Bones in fair state of preservation. This burial is contracted more than any previously found - very good illustration of flexed type, with arms going between the legs. All bones remain, except that skull has been crushed and is rather badly decayed. None of the cervical vertebrae remain, but all of the thoracic together with pelvic and pelvis bones. The arms are straight to elbow and then are flexed to go between the legs. Female burial. Complete overall length of burial, 31". No burial furniture. Burial pit first appears at top of yellow clay loam. Burial found 67" below surface, 45" below occupation level. 14" in yellow clay loam.

Burial #17 is of the contracted flexed type, oriented NW-SE head to NW. Body laying on right side with the knees at right angles to the vertebrae and both arms going between the legs. Skeletal remains in rather poor state of preservation - one side of skull crushed and all of metacarpal and metatarsal bones gone. Only a few joints of the lumbar vertebrae remain but 5 of the thoracic ribs. Portion of skull was all that could be removed.

Sept. 10 and 11, 1936. Moved dump started backfilling hole and excavating 4-7L5 -L7 to 4-27L5 -L7, also worked section 4-14 - 4-14R1 to 4-20 -4-20R1 down to clay loam, located a burial (#22) between sta. 4-16; 4-16R1 and 4-18; 4-18R1 almost immediately below the location of burial #13. The body is



Field Drawings of Burials 19, 10, and 16.

about 6" in yellow clay loam and the burial pit first showed about 6" above the loam in tan sand. Located another burial (#24) almost under sta. 4-7L1 in tan sand. Details on both of these burials later.

Sept. 14 and 15. Began excavation on section 4-7L5 -L7 to 4-27L5 -L7. Worked through water-laid sand, yellow clay, historic occupation, tan sand, and into Indian occupation level. Very few sherds in upper levels - rather plentiful in tan sand and occupation level.

Also began troweling out Burial #22. The body is laying on the right side, oriented N.W. and S.E. with head to N.W. The skull has been crushed on the left side but otherwise the body is in an excellent state of preservation. The pelvis is slightly higher than the head and has been slightly displaced by root growth but is in an excellent state of preservation. Remaining bones consist of - skull, in fair state of preservation - clavicles - scapular - both humeri - ulna- radii - a few of metacarpal bones - practically all of the vertebrae - tibiae - femora - fibulae - metatarsal bones and phalanges. Found 54" below surface 40" in tan sand.

Sept. 16 to 22. Continued excavation on section between 4-7L5 - L7 and 4-27L5-L7, working down into yellow loam. Located 5 burials in section. Burial #25 between 4-9L5 -L7 and 4-11L5 -L7. Burial #26 between 4-11L5 -L7 and 4-13L5 -L7. Burials #27 and 28 on line sta. between 4-15L5 -L7. Burial #29 between 4-17L5-L7 and 4-19L5 -L7. Also troweled out Burial #17 - see notes under Burial # 17 heading.

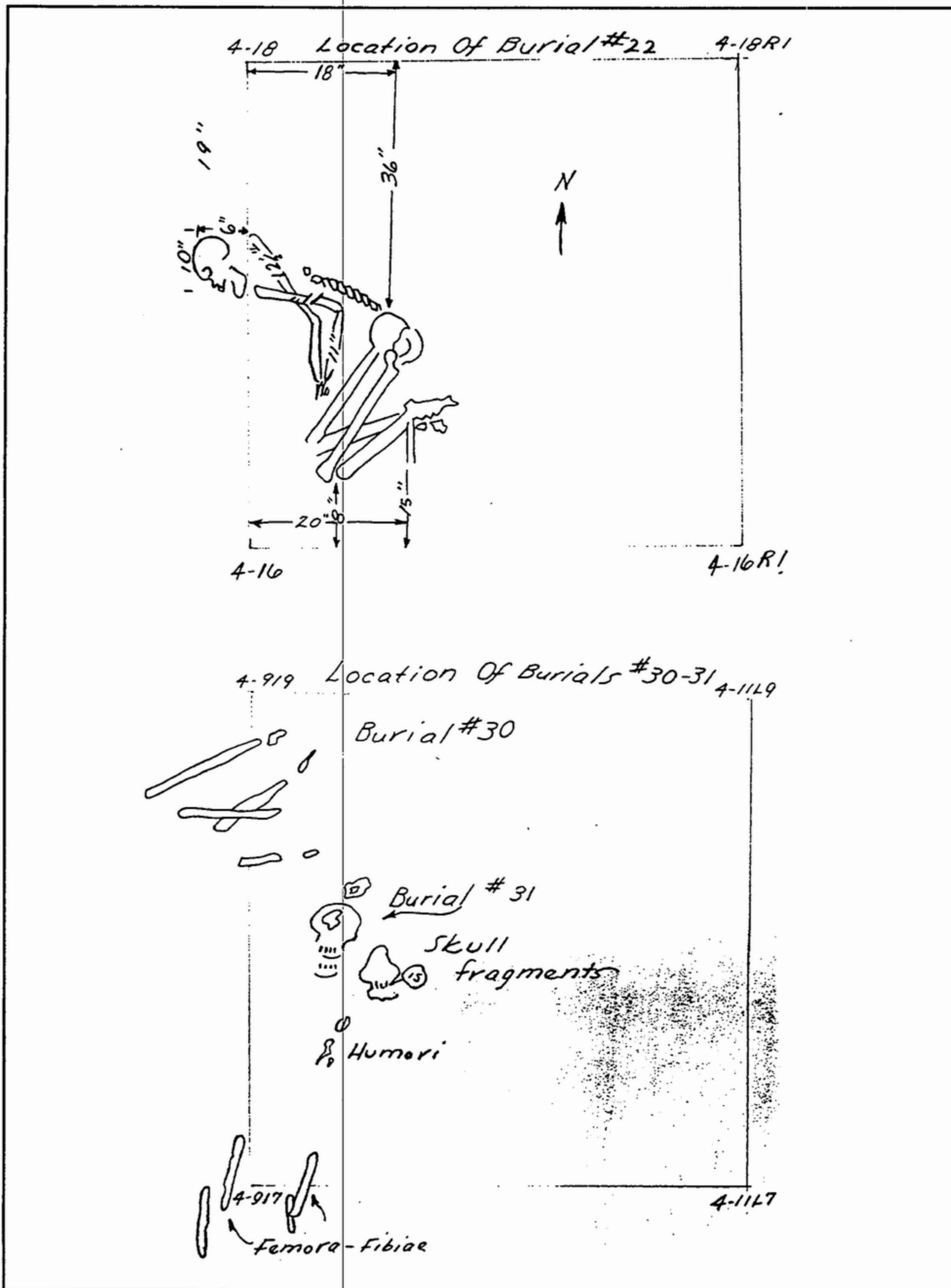
Sept. 22 to Oct. 14. This period has been marred by much bad weather, rain has prevented the working out of burials 23 to 29. Excavation was begun on the section L7-L9 and have worked section from 4-11L7 -L9 to 4-27L7 -L9 to a depth of 75" at sta. 4-27L7 -L9. Burials #30 31 and 32 have been located between 4-7L7 -L9 and 4-11L7 -L9. At the present time it appears that portions of the Burials are in the unexcavated section between L9 and L11. Burial #31 is a triple burial, found between sta. 4-9L7 -L9 and 4-11L7 -L9. These remains are in a very poor state of preservation and it is impossible to determine the exact relationship of the individual bones. It appears, however, that at least two of the bodies were flexed in the typical Bull Creek manner and the other burial was of the skull only. All of the bodies were oriented SE and NW, with the heads to the NW and were buried with the face upward, heretofore in the majority of cases the head has been turned to one side or the other. Also the skull (a) (buried without the body), highest up, is gone with the exception of portions of the back occipital and lower jaw. All that remains of (b), the next, is portions of the complete skull - frontal bones and facial bones missing and a short section of the humerus (c) consists of portions of the upper and lower jaw - traces of both humeric and radii and sections of both tibiae, fibulae, and femora. No burial furniture.

The profile at this point shows a band of clay from 2" to 6" thick between sta. 4-17L9 and 4-23L9, suggesting a house floor. There is also some trace of a sod development below the general occupation level, though it shows no definite form at this particular point.

No date. Burial #24 consists of broken portions of the skull and fragments of the humeri, femora and tibiae. The body left side, oriented NW-SE with the head to the SE. No burial furniture. It appears that this is the contracted type of flexed burial. Found 28" in tan sand - 59" below surface. 4-7L1

Burial #25 is in a very poor state of preservation. Body laying on right side, oriented NW and SE, with head to NW. Remaining bones consist of portions of skull and fragments of femora - tibiae - and fibulae.

From position of femora and tibiae it appears that the legs were doubled back under the body with the knees in front. 52" below surface - 21" in tan sand.



Field Drawings of Burials 22, 30-31.

Burial #26 is an extended flexed burial - laying on the left side, oriented N and S with the head to the south. Skeletal remains in very poor state of preservation - consists of fragments of the skull and portions of tibiae and femora. Burial is located just under sta. 4-13L7, 79" below surface, 41" below occupation level in tan sand.

Burials #27 and 28

Burial #27 is located between sta. 4-13L5 L7 and 4-17L5 L7, 75" below the surface, 41" below the bottom of the occupation level. The remains are in a very poor state of preservation, but it appears that the burial is the typical type of Bull Cr. flexed burial, with the knees drawn up toward the face. Remaining bones consist of fragments of the skull and of the tibiae and femora. Oriented SSE - NNW with head to SSE. No burial furniture.

Burial #28 is located only a foot away from #27, 80" below surface, 46" below surface - 5" in reddish brown loam. The body is laying on the back, flexed to the left - oriented ESE & WNW with the head to the ESE. Remains in very poor state of preservation - Remaining bones consisting of portion of left tibia and femur and skull with all of facial bones gone. This is a female burial. Burial furniture consists of a small amount of red pigment 12" N - 9" E 4-15L7. Find #65 on drawing - a piece of mussel shell 9": E and 16" N. #61, a piece of worked bone fragment, presumably an awl. #62, same location as 61 and 63, a group of animal bones on top of 61 and 62; 64-A small rock, apparently the same as the paint pigment.

Burial #29 is located between 4-17L5 L7 and 4-19L5 L7, 68" below surface - 47" below occupation level, 6" in reddish clay loam. Bones in very poor state of preservation - remaining bones consist of sections of tibiae, femora and a section of the right humerus. Body oriented SE and NW, with head to SE. No trace of skull. Burial is a typical flexed type. Burial furniture consists of a ball of red paint pigment.

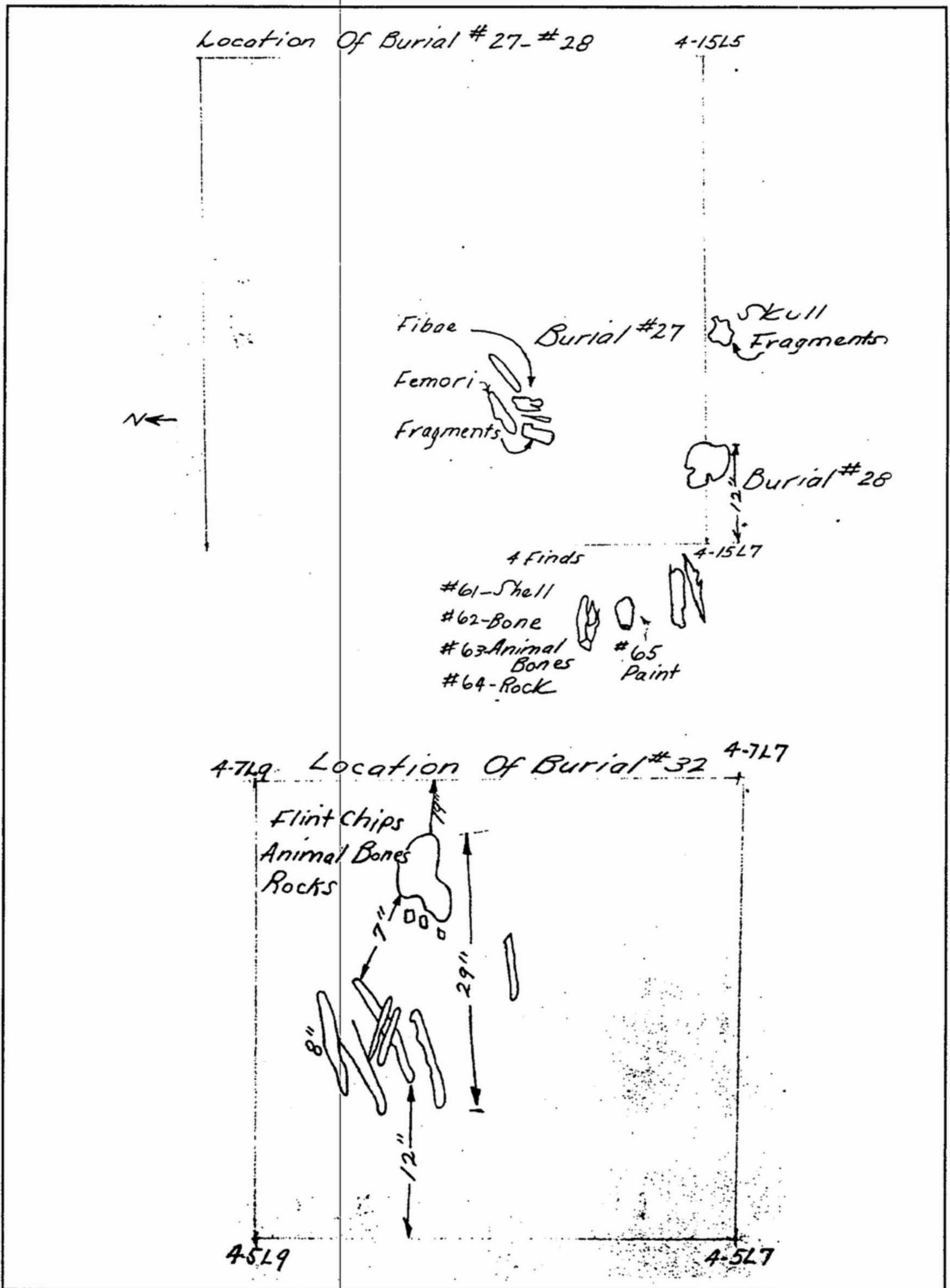
Burial #32 is the contracted type of flexed burial, laying on the right side, oriented N and S with the head to the N. The remains are in a rather poor state of preservation. Remaining bones consist of portions of the skull; tibiae, femora - humeri and ulna.

Burial furniture consists of several rocks - flint chips and fragments of animal bone all placed at the neck. Body is 52" below the surface, 34" in tan sand. (Btw. sta. 4-7L9 -L7 and 4-5L9 -L7)

Oct. 14 to Nov. 11. Burial #33 was located in yellow loam between sta. 4-3L3 and 4-3L5, when lowering section for drainage. The burial is in a very poor state of preservation, laying on the right side, oriented N and S, with the head to the south. Remaining bones consist of portions of skull and teeth and the leg bones; from the position of these bones it appears that it was the contracted type of flexed burial. No burial furniture. 36" below surface, 7" in yellow clay loam, 29" below occupation level.

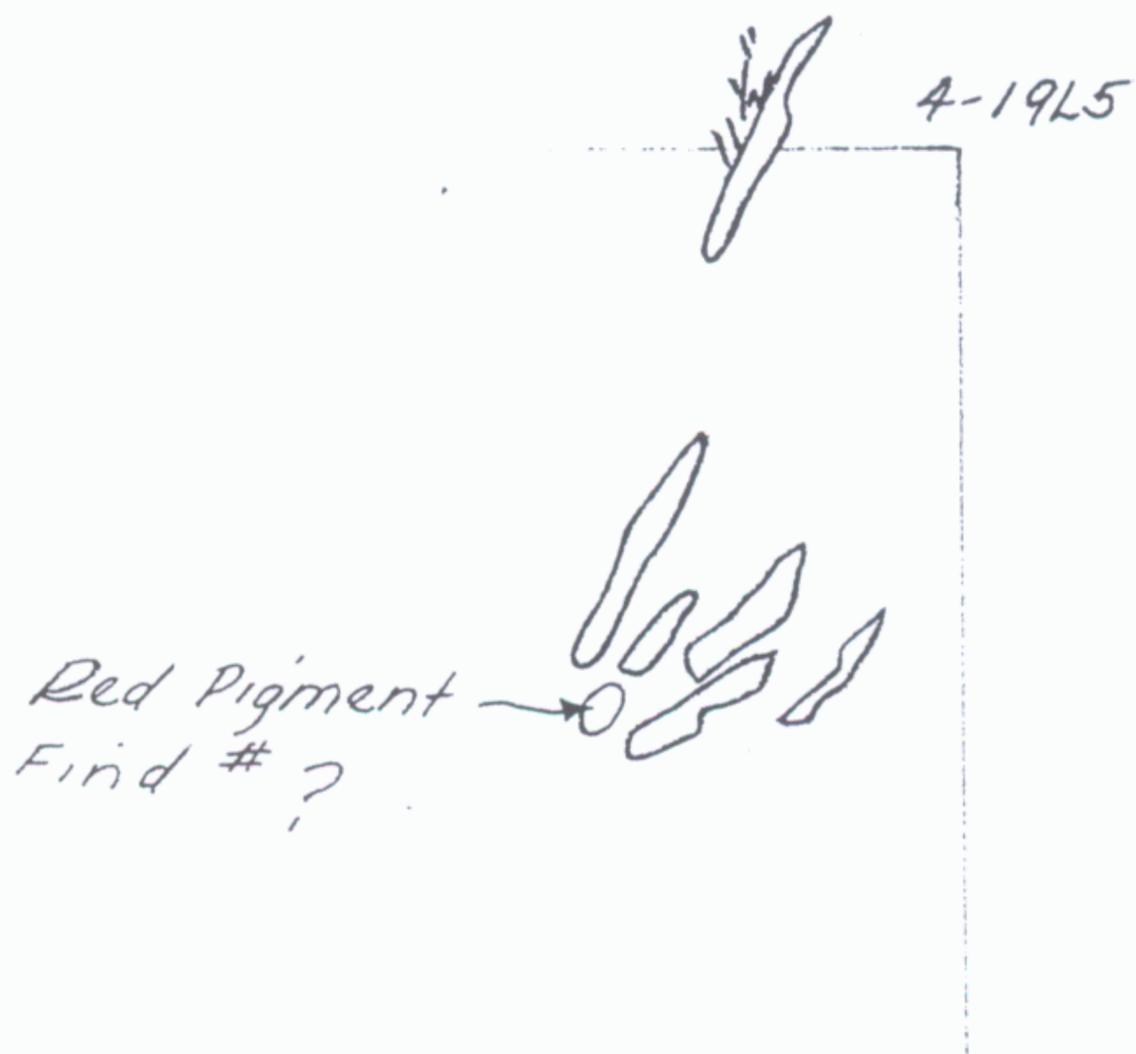
Nov. 11 to Dec. 9. Worked section from sta. 4-1L9 -L11 -L13 to 4-17L9 -L11 -L13. Found a burial #34 between sta. 4-L11 and 4-L13. Worked L11 -L13 down to bottom of occupation level. Also troweled out Burial #30. Located another burial just at edge of what appears to be a house. Several finds from this section.

Burial #30 is laying on the right side, oriented NW and SE, with head to the NW. Remaining bones consist of a portion of the skull which is in a very poor state of preservation, and portions of both tibiae and femora and small fragments of the pelvis bone. Body found 46" below surface, 11" below the occupation level in tan sand. The legs are flexed back under the body with the knees the farthest away from the body of any part of it. Bull Creek type #2. (at sta. 4-11L9)

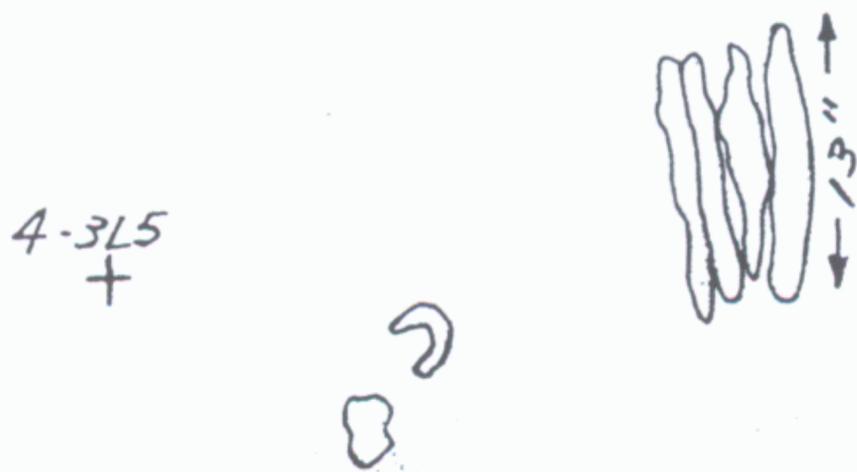


Field Drawings of Burials 27, 28, and 32.

Location Of Burial #29

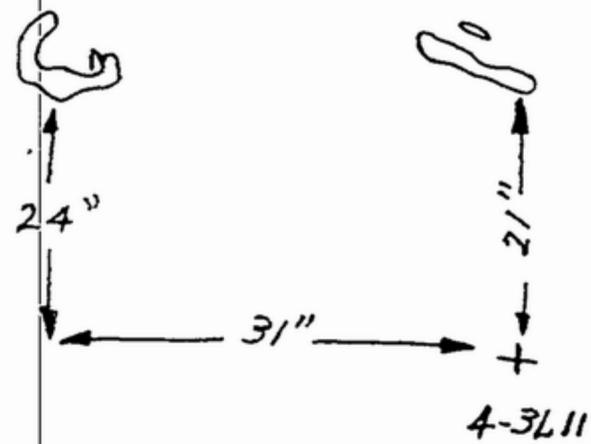


Burial #33



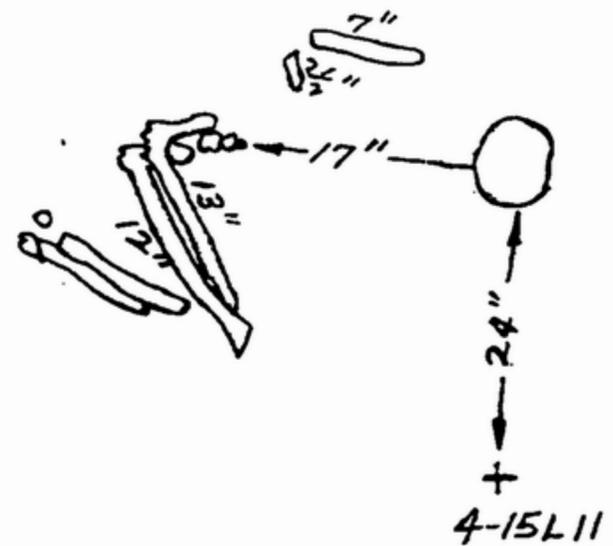
Field Drawings of Burials 29 and 33.

Location of Burial # 3A + 4-5L11



Location of Burial # 35 +

4-17L11



Burial # 36
Exact Stake
Location not
given.



Field Drawings of Burials 34-35 and 36.

Burial #34 is found between sta. 4-3L11 -L13 and 4-5L11 -L13 at a depth of 37" below the surface - 16" in tan sand.

The body is laying on the left side, oriented E & W with the head to the W. The remains are in a very poor state of preservation - remaining bones consisting - skull, which is almost entirely decayed, nothing left except of portion of the right mandible with two of the jaw teeth and a portion of occipital, - sections of both tibiae. Both of which are slightly higher than the head. This burial was evidently of the contracted, flexed type with the knees slightly higher than the skull and the arms going between the legs. No burial furniture.

Burial #35 is located between sta. 4-15L11 -L13 and 4-17L11 -L13. 67" below the surface, 27" below occupation level in tan sand. The body is laying on the left side, oriented E & W, with the head toward the east.

The burial is of the contracted, flexed type with the knees drawn up toward the chest and the right arm crooked at the elbow-not going between the legs as is the usual case.

The skeletal remains are in a rather poor state of preservation, the skull is very badly decayed--nothing is left of the upper body except a short section of the humerus and ulnar of the right arm. The lower body consists of a few fragments of the lumbar vertebrae, most all of the pelvis and portions of both tibiae, femora and fibulae. No burial furniture associated with the burial.

Dec. 10, 1936. Troweled out Burial #35 and began work on cut from 4-11L13 -L15 to 4-27L13 -L15. Working down to occupational level to examine what appears to be a house site.

Dec. 28 to 30, 1936. Lowered section between 4-11L13 -L15 and 4-27L13 -L15, to the Indian occupation level - cleared whole area 4-11L9 -L15 to 4-27L9-L15. While the ova contains a very rich midden accumulation and several buried and charred areas and a few miscellaneous post mould impressions, there is no definite sign of a house site. There is quite a profusion of pottery and a few briquettes.

Began lowering section from 4-11L11 -4-15L11 to 4-11L15-4-15L15. Found a burial #36 between 4-11L13 -L15 and 4-13L13 -L15 with part of the body extending into the wall (L17). Began excavation of area 4-11L15 -L17 to 4-13L15 -L17 and working down to burial.

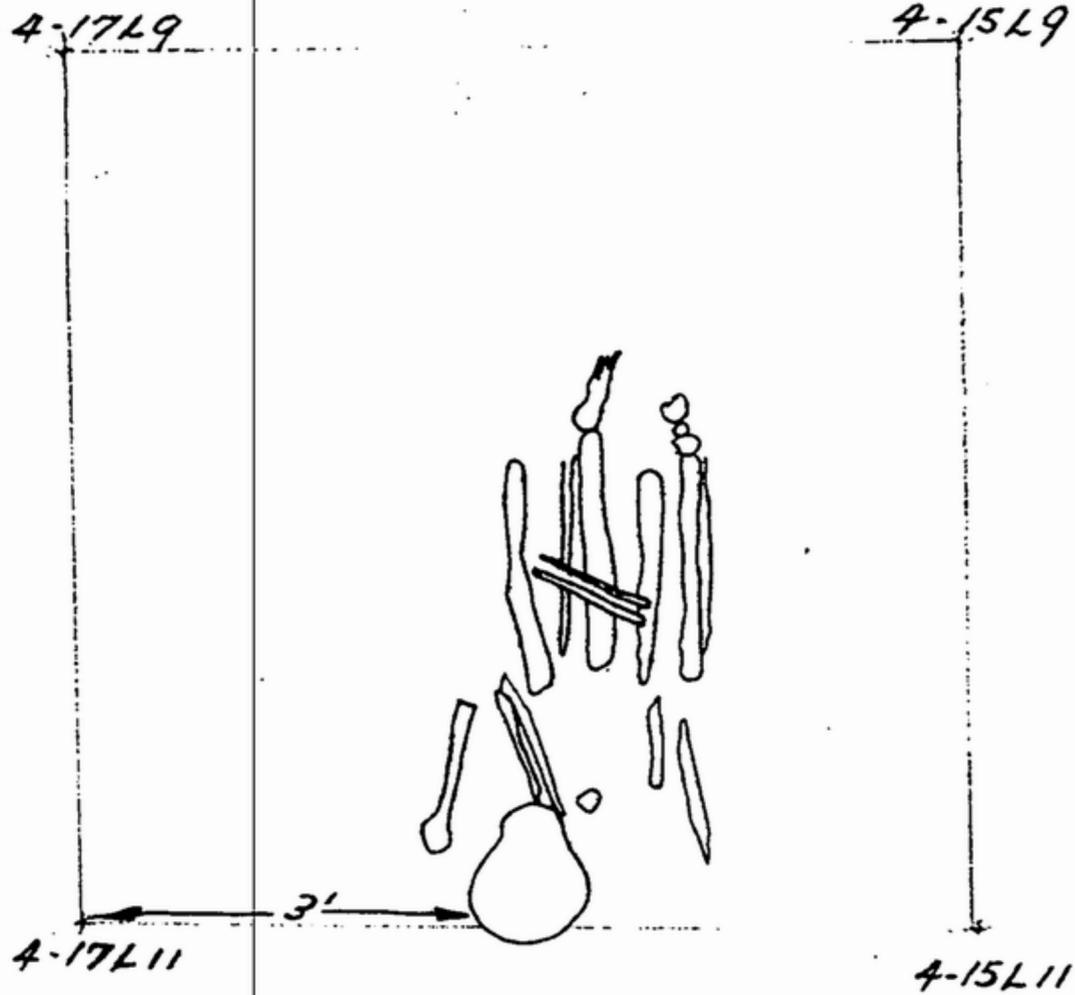
Also started cleaning profile about 20' W of 4-27L15 on the west side of the R.R. fill. Worked down through yellow clay of R.R. fill and found the same component parts of the profile developments extending through to bank of river.

Jan. 7, 1937. Burial #36 found between sta. 4-11L15 -L17 and 4-15L15 -L17. 60" below surface, 35" below occupation level. The body appears to have been placed on the back with the head turned to the left. The body is oriented E & W, with the head to the E. The knees were drawn straight up and are about 6" higher than the skull. Traces of the right humerus and both tibiae and the skull remain. No traces of any other bones.

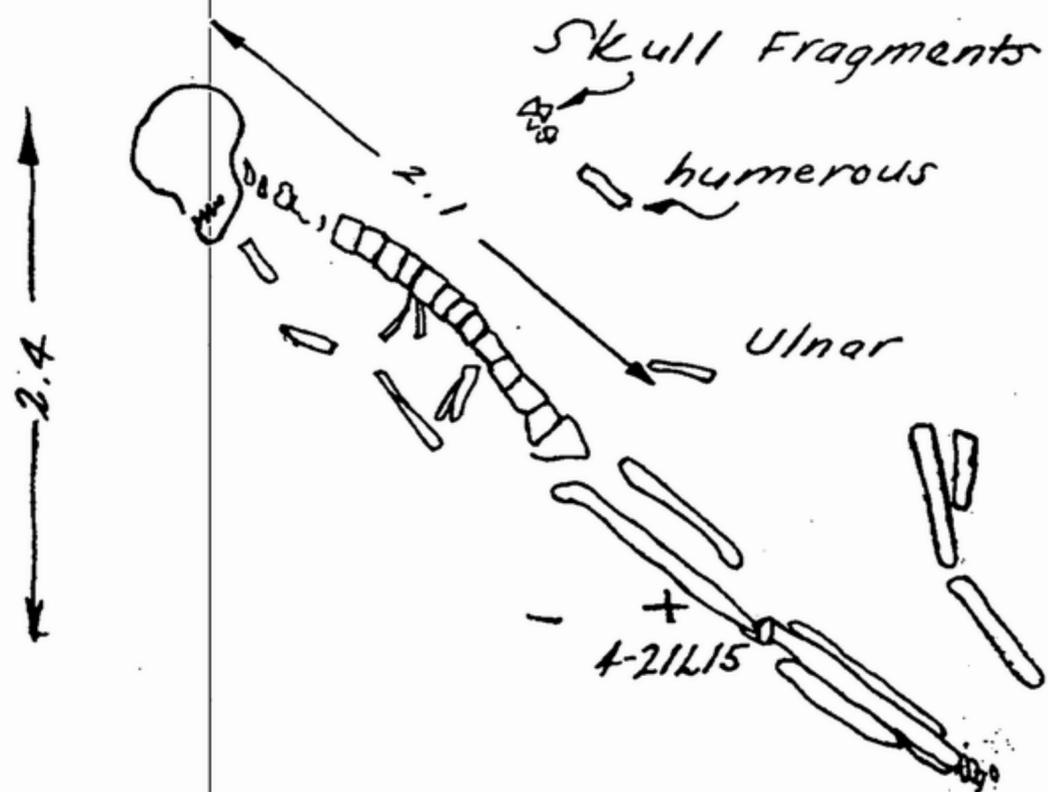
Jan. 13, 1937. Burial #37 found by lowering section between 4-11L9 -L15 and Burial located between sta. 4-17L9 -L11 and 4-19L9 -L11.

Burial is in good state of preservation. This is the contracted, flexed type of burial, oriented E & W, with the head to the W.

Location of Burial #37



Location of Burial #38



Field Drawings of Burials 37 and 38.

It is somewhat different from the previous burials, in that the body was buried face downward, the knees were drawn up evidently touching the chin and the left arm was flexed downward with the fingers on top of the right thigh, which means that the arm or hand neither went between the legs. The right arm is flexed and the right hand was at the face. The body is in a rather good state of preservation. Found 86" below the surface, 36" below the occupation level, in tan sand. No burial furniture associated with this burial.

Feb. 12, 1937. Removed overburden (R.R. fill) from remainder of area between 4-11L to 4-27L from L15 to river bank, working down to occupation level.

Located Burial #38 between sta. 4-19L17 to 4-23L17, and 4-19L13 to 4-23L13 at a depth of below surface, 36" below occupation level. This is a double burial, both bodies were extended, lying on the right side, oriented NW and SE with the heads to the NW.

A. - This body is in a rather poor state of preservation - the skull is crushed and the parts are scattered. (Note: the arms of both bodies were folded across the waist) Remaining bones of A. consist of skull fragments - broken parts of humeri, ulna and radii, portions of both tibia, femora, and fibula.

B. - Is in a much better state of preservation. Remains consisting of skull, one side of which is rather badly decomposed - sections of both ulna - humeri and radii - both collar bones and parts of both shoulder blades - all of the vertebrae with a few of the ribs attached; part of the pelvis, both tibia - femora and fibulae and most of the bones of both feet.

From the comparative size of these bodies it appears that A. was female - B. male.

No burial furniture was associated with this interment.

Feb. 15, 1937. Extension of the cut from 4-11L17 -L27 to 4-19L17 -L27, yielded Burial #39.

This burial was located between Sta. 4-21L17 and 4-21L19 at a depth of 42" below the occupation level. The body was lying on the left side, oriented SW & NE, with the head to the SW. This burial was contracted, flexed type with the legs drawn up toward the body and the head was tilted toward the knees. It was interesting to note, however, that instead of the hands going between the legs as is the usual case in this type of Bull Creek burial, the arms were flexed at the elbow and hands were at the neck. The skeletal remains were in an excellent state of preservation. Remaining bones consisted of - skull in good state. All of the cervical vertebrae, thoracic vertebrae, with most of the ribs intact. None of the lumbar vertebrae left. Both humeri, ulnae and radii - all of the metacarpal bones - portions of the pelvis. Tibiae, femora, and fibulae - metatarsal bones. No burial furniture associated with the burial.

March 9, 1937. Burial #40 consists of a few fragments of the skull found between sta. 4-9L15 -L13 and 4-11L15 -L13 at a depth of 61" below the surface - 42" below occupation level in tan sand.

Burial #41, found between sta. 4-9L17 -L19 and 4-11L17 -L19 at a depth of 39" below the occupation level. The body is lying on the right side, oriented E & W, with the head to the W. It is of the contracted, flexed type, but it is impossible to tell the position of the arms, as only a small portion of the left humerus remains. Remaining bones consist of parts of pelvis, tibiae, femora, fragments of skull and small parts of both clavicles. There is also a small piece of a joint of an animal bone, close to the upper part of the humerus, and two or three joints of the lumbar vertebrae. There is no burial furniture associated with this burial.

Burial #42, was found on line of sta. between sta. 4-17L19 and 4-19L19, 26" below occupation level in tan sand below surface.

The burial is of the contracted, flexed type, laying on the left side, oriented N & S., with the head to the South. The feet are gone but they must have been in contact with the Pelvis with the knees drawn up toward the chest. The left hand went between the thighs, about 2" from the pelvis and the right arm crooked downward at the elbow, the ulnar and radius being vertical. The head is turned to the left, thus making it face downward. The skull itself is in a rather poor state of preservation, the top or back of the head being rather badly crushed. On the whole, the body is in a fairly good state of preservation. Remaining bones consist of skull, vertebrae, some ribs, both clavicles, both ulna radii, humeri, both tibiae, femora and fibulae, two or three fingers and practically all of the pelvis.

From the general characteristics of the bones, it would seem that this is an adult female individual. No burial furniture associated with the burial.

Burial #44 is found between 4-19L19 -L21 and 4-21L19 -L21, at a depth of 26" below the occupation level in tan sand. Oriented E & W with head to W.

The body was buried face downward, with the legs flexed to the left. The arms were straight at the sides and the legs are laying on top of the left hand. The skull was rather badly crushed in the back, but otherwise is in an exceptional state of preservation. The remains on the whole are the best and most complete that have come from the Bull Creek Village, every part of the skeleton being perfectly preserved with the possible exception of a few finger joints, toes and one or two ribs. This was the interment of a male adult individual of middle age.

3-9 to 3-23, 1937. Moved surplus dirt on river side of cut - occupation level exposed as shown in preceding diagram (insert)

Worked section between 4-21L25 -L27 to 4-27L25 -L27, to a depth of 52" below occupation level.

Also troweled out Burials #43 -45. Found a small unbroken vessel, Find #72, at the excavation of section 4-21; - 4-23, at a depth of 27" below occupation level; below surface - 33" N. Sta. 4-17L21 on line of stks. There is no evidence of burial pit in this location and no trace of any bones, but this vessel must have been an article of burial furniture associated with a burial.

Burial #43 is of the extended, flexed type, found 50" below occupation level, on line of stats. between 4-11L21 and 4-11L23. The body was laying on the left side, oriented E & W with the head to the E. The feet are flexed back almost touching the pelvis and the knees are down and away from the body. It is impossible to tell the position of the arms, as nothing is left except traces of them. The skull has been rather badly crushed - Remaining bones consisted of skull - crushed - practically all of the vertebrae - both femora - tibiae, parts of the pelvis and sections of the clavicles.

Burial #45, was found between 4-17L21 -L23 and 4-19L21 -L23 at a depth of 33" below the occupation level. The remains were in a very poor state of preservation. All of the body gone except a portion of the skull and short sections of both tibiae and femora. The body was laying on the left side, oriented E & W, with the head to the E and from the position of the remains of the tibiae and femora it appeared that it was of the contracted, flexed type.

3-23 -3-30, 1937. Worked area from 4-13L27 - 4-21L27 to edge of river bank, 4-13L33 to 4-21L27 to a depth of 67" below occupation level at 4-13L27 and area between 4-9L21 -L25 and 4-27L21 -L25. Found a Burial #46 between sta. 4-17L23 -L25 and 4-29L23 L25.

Found a bone awl, Find #74, 10" deep in occupation level. 10" N -6" E. sta. 4-13L25.

4-1-'37. Completed excavation of area between 4-13L25 -L27 and 4-21L25 -27, with the possible exception that this will have to be lowered.

Burial #46 was found 28" below occupation level, in tan sand. Nothing remained of the body except the crown of a few teeth and short sections of both femora, tibiae. It was impossible to get any accurate picture of the burial, but it appeared that it was of the contracted, flexed type, laying on the left side, oriented N & S with the head to the South.

Bull Creek

| Burial # | Photo # | Orientation | Side | Position | Location | Depth |
|----------|-------------|-------------|------|----------|------------------------------|-------|
| 2 | 26-27-28 | W-E | R | C.F. | 4-10; 4-10R1 4-12; 4-12R1 | |
| 3 | 33-34 | S-N | L | C.F. | 4-13; 4-14 4-15; 4-16 | 36" |
| 4 | | SW-NE | L | E.F. | 4-13; 4-13L1 4-15; 4-15L1 | 20" |
| 5 | 44-45 | SSE-NNW | L | C.F. | 4-21L3 | 36" |
| 6 | 50 | NW-SE | R | E.F. | 4-17L1 | 47" |
| 7 | 46-47-48-49 | S-N | L | C.F.? | 4-19L1-L3 | 36" |
| 8 | 55 | E-W | L | C.F. | 4-19L3 | 44" |
| 9 | 56-57 | SE-NW | L | C.F. | 4-15L1-L3 | 32" |
| 10 | | | | | 4-15L1-L3 4-13L1-L3 | 27" |
| 11 | | SSE-NNW | L | F | 4-17L3-L5 4-19L3-L5 | 38" |
| 12 | 62 | NW-SE | R | C.F. | 4-7;4-7L1 4-11; 4-11L1 | 35" |
| 13 | | S-N | L | | 4-17; 4-18 4-15; 4-16 | 26" |
| 14 | 58 to 61 | E-W | L | C.F. | 4-20; 4-20R1 4-18; 4-18R1 | 34" |
| 15 | | SSE-NNW | L | C.F. | 4-17L1 4-17L3 | 53" |
| 16 | | SSW-NNE | | | 4-13L3-L5 4-15L3-L5 | 36" |
| 17 | | NW-SE | R | C.F. | 4-9L3-L5 4-11L3-L5 | 36" |
| 18 | 64 | SE-NW | L | C.F. | 4-24 | 39" |
| 19 | 64-66 | SE-NW | R | C.F. | 4-24; 4-24R1 4-26; 4-26R1 | 45" |
| 20 | 67 to 69 | ESE-WNW | L | E.F. | 4-13L1; L3 | |
| 21 | | NNW-SSE | R | E.F. | 4-17L5 | 21" |
| 22 | 76-77 | NW-SE | R | E.F. | | 40" |
| 23 | | | | | | 33" |
| 24 | | SE-NW | L | C.F.? | 4-11L9-L11 4-13L9-L11 | 28" |
| 25 | | NW-SE | R | C.F. | 4-11L9-L11 4-13L9-L11 | 21" |
| 26 | | S-N | L | E.F. | 4-13L9 | 41" |

| Burial # | Photo # | Orientation | Side | Position | Location | Depth |
|----------|-------------|-------------|--------------------------|------------------|----------------------------|-------|
| 27 | | SSE-NNW | | C.F. | 4-13L5-L7 4017L5-L7 | 41" |
| 28 | | ESE-WNW | back flexed to L | C.F. | 4-15L5-L7 4-17L5-L7 | 46" |
| 29 | 78-79 | SE-NW | L? | C.F. | 4-17L5-L7 4-19L5-L7 | 47" |
| 30 | | NW-SE | R | E.F. | 4-11L9 | 11" |
| 31 | 82-83-84 | NW-SE | Triple burial | | 4-9L7-L9 4-11L7-L9 | 23" |
| 32 | 87-88 | N-S | R | C.F. | 4-5L7-L9 4-7L7-L9 | 34" |
| 33 | 85-86 | S-N | R | C.F. | 4-3L5 | 20" |
| 34 | | W-E | L | | 4-3L11-L13 4-5L11-L13 | 16" |
| 35 | 89-90 | E-W | L | C.F. | 4-15L11-L13 4-17L11L13 | 27" |
| 36 | 91-92 | E-W | L | | 4-11L15-L17 4015L15-L17 | 35" |
| 37 | 93-94 | W-E | Face downward | C.F. | 4-17L9-L11 4-19L9-L11 | 38" |
| 38 | 95-96-97 | NW-SE | R | Double burial | 4-19L13-L17 4-23L13-L17 | 36" |
| 39 | 98-99 | SW-NE | L | C.F. | 4-21L17 4-21L19 | 42" |
| 40 | 100 | | | Skull only | 4-9L13-L15 | 42" |
| 41 | 101 | W-E | R | C.F. | 4-9L17-L19 4-11L17-L19 | 39" |
| 42 | 102-103 | S-N | L | C.F. | 4-17L19 4-19L19 | 26" |
| 43 | | E-W | L | E.F. | 4-11L21 4-11L23 | 50" |
| 44 | 104-105-106 | W-E | face down flexed to L | Semi C.F. | 4-19L19-L21 4-21L19-L21 | 26" |
| 45 | | E-W | L | C.F. | 4-17L21-L23 4-19L21-L23 | 33" |
| 46 | No Picture | S-N | L? | C.F.? | 4-17L23-L25 4-19L23L25 | 28" |

Bull Creek

| Type | Burial # | Depth Below Surface | Burial Furniture |
|--|----------|---------------------|--|
| Skull Only | 1 | | No furniture |
| Contracted flexed | 2 | 67" | No furniture |
| Contracted flexed | 3 | 67" | (1) effigy pot and pierced seed beads |
| Folded feet back to pelvis flexed | 4 | 44" | No furniture |
| Contracted flexed | 5 | 72" | Greenstone celt 7" long |
| Folded feet back to pelvis flexed | 6 | 78" | Greenstone celt 4" long, 2 small greenstone chisels, several pieces worked flint, black font knife, red pigment |
| Contracted flexed | 7 | 78" | (2) effigy pot, discoidal stone |
| Contracted flexed | 8 | 68" | No furniture |
| Contracted flexed | 9 | 66" | Greenstone chisel 3½" long |
| Skull only | 10 | 54" | No furniture |
| Folded feet back to pelvis flexed (Female) | 11 | 73" | No furniture |
| Contracted flexed | 12 | 69" | No furniture |
| Near #3 (Below tree) | 13 | 40" | |
| (Old Man) contracted flexed | 14 | 51" | No furniture |
| Contracted flexed (West of #6) | 15 | 78" | No furniture |
| Double burial | 16 | | (3) effigy pot |
| Contracted flexed | 17 | | |
| Contracted flexed | 18 | 61" | Small bowl 3½" in diameter, several large beads of shell, piece of conch shell core, clay pipe human effigy handled type |
| Contracted more than any found yet - knees on chest (Female) | 19 | 67" | No furniture |
| Folded feet to pelvis - flexed | 20 | | String of seed beads |
| Folded feet to pelvis - flexed | 21 | 36" | No furniture |
| Flexed | 22 | 54" | No furniture |
| Fragmentary burial | 23 | 57" | No furniture |
| Contracted flexed | 24 | 59" | No furniture |
| Folded flexed type | 25 | 52" | No furniture |
| Extended flexed | 26 | 79" | No furniture |
| Contracted flexed | 27 | 75" | No furniture |

| Type | Burial # | Depth Below Surface | Burial Furniture |
|---|----------|---------------------|--|
| Flexed | 28 | 80" | Red pigment & small stoned, mussel shell, evidently bone awl & other pieces of animal bone |
| Contracted flexed | 29 | 88" | Ball of red pigment |
| Flexed - with knees farthest away from body | 30 | 49" | No furniture |
| Trible burial - first of this sort found - 2 bodies contracted flexed, other only the skull | 31 | | |
| Contracted flexed | 32 | 52" | Rocks, flint chips, fragments animal bones, grouped around neck |
| Contracted flexed | 33 | 36" | Rocks, flint chips, fragments animal bones, grouped around neck |

Bull Creek #1
Finds

Find #1 (39-22198) 3-13-36
Rimsherd with raised, notched design, about 1/2" below rim. Found 24" N., 23" W. Sta. 1-46; 8" below surface, 1" in black midden deposit.

Find #2 (39-22199) 3-14-36
A piece of a broken arrow-point with haft type end. Found 18" N. 8" E. Sta. 1-47. 1 1/2" deep in greyish sand, midden deposit, 11" below surface.

Find #3 (39-22200) 3-14-36
Small piece of rimsherd, showing raised, notched design, about 1/4" below rim; Found 14" S.,; 4" W. Sta. 1-48; 14" below surface, 5" in greyish sand, midden accumulation.

Find #4 (39-22201) 3-16-36
Peculiar type of rimsherd, showing notched design on top of rim and incised and punctate design on the body of the pot. Found 22" N -12" W. Sta. 1-52; 6" deep in yellow sandy clay topsoil.

Find #5 (39-22202) 3-17-36
A quartz arrow point - imperfectly made, with portion of the point section broken off. Found 18" S. Sta. 1-56. 23" below surface, 3" deep, in black midden deposit.

Find #6 (39-22203) 3-17-36
Piece of broken flint, showing secondary working, possibly a portion of a scraper or chisel. Found 6" N.; 16" E. Sta. 1-49; 13" below surface, 3" deep in reddish sand clay.

Find #7 (39-22204) 3-18-36
A small broken piece of stone, elliptical in shape with a hole drilled through it. Found 22" S; 26" E. Sta. 1-49; 16" below surface, 6" deep in house debris.

- Find #8 (39-22205) 3-20-36
 Small fragment of rimsherd with small handle attached Found 29" N., 4" E. Sta. 1-47L1; 12" below surface, 7" deep in black midden deposit.
- Find #8A (39-22206) 3-23-36
 Small rimsherd with handle, found 15" below surface, 10 in black midden deposit. 22" S; 30" W Sta. 1-49.
- Find #9 (missing at time-no Park Service Number assigned) 3-21-36
 A moulded clay briquette, showing timber mould and use of vegetable fiber, as tempering agent, found resting on floor of house, 41" S. 5" E. Sta. 1-52, 26" below surface, 5" deep in house debris.
- Find #10 (39-22207) 3-21-36
 A piece of broken celt or chisel, found 3" S., 23" W. Sta. 1-53. 18" below surface, 7" in black midden deposit.
- Find #11 (39-22208) 3-26-36
 A hafted scraper of quartzite - fair workmanship of material. Found directly under Sta. 1-47L1, 8" below surface, in black midden deposit.
- Find #12 (39-22209) 4-6-36
 Quartz arrowhead, spinner type, found 2" deep in yellow topsoil, in 5' exploration trench, 36" E, 18" S. Sta. 1-111L1.
- Find #13 (39-22210) 4-8-36
 Piece of broken knife or spear-head, found 4" deep in black midden deposit, 12" below surface. 31" e., 17" S. Sta. 1-107L1.
- Find #14 (39-22211) 4-8-36
 Quartzite arrowhead, very poor workmanship, found 8" deep in black midden deposit, 13" below surface. 46" S, 7" E Sta. 1-111L1.
- Find #15 (39-22212) 4-8-36
 Chunky stone of granite type rock, found 6" deep in black midden deposit, 9" below surface. 36" N., 12" E. Sta. 1-91L1.
- Find #16 (missing at time-no Park Service Number assigned) 4-8-36
 Pieces of broken pot, found massed together, 13" deep in black midden deposit. 19" below surface, 35" E., 4" S. Sta. 1-95L1.
- Find #17 (39-22213) 4-8-36
 Portion of rimsherd, with very small handle attached; found 9" deep, in black midden deposit. 12" below surface, 18" E. - 18" S. Sta. 1-91L1.
- Find #18 (39-22214) 4-13-36
 Small piece of worked flint, possibly used as an engraving tool. Found in 5 ft test trench, 7" below surface, in black humus, 7" E., 9" N. Sta. 1-103L5.
- Find #19 (39-22215) 4-13-36

Portion of a rimsherd, made in effigy form, of a human face. Found in black humus, 3" below surface. Found 52" N., 31" W. Sta. 1-95L1.

Find #20 (39-22216) 4-13-36

Chunky stone of granite type rock, rather poor workmanship. Found 4" deep in black midden deposit, 5" below surface. 27" S.; 42"E. Sta. 1-103L5.

Find #21 (missing at time-no Park Service Number assigned) 4-14-36

Large pieces of two broken pots, found in Pit #1, 16" to 18" below surface, in pit fill. 42" S.; 31" E. Sta. 1-119L13.

Find #22 (39-22217) 4-16-36

A piece of worked quartz - knife or side scraper; found 3" deep in yellow topsoil. 39" S. - 52" W. Sta. 1-99L1.

Find #23 (39-22218) 4-15-36

Broken piece of quartz arrowhead, imperfectly worked. Found 2" below surface, in black humus. 8" S. - 52" W. Sta. 1-99L1.

Find #24 (39-22219) 4-15-26

A small quartz scraper, found 6" deep in black midden deposit, 9" below surface. 5" N. - 25" W. Sta. 1-107L1.

Find #25 (39-22220) 4-15-36

Broken arrowhead or scraper, poor workmanship, found 8" deep in black midden deposit, just above house debris, 15" below surface, 22" S. - 2" W. Sta. 1-99L1.

Find #26 (39-22221) 4-16-36

Small pottery chunky stone, found 7" below surface, in black humus. 15" S. - 28" W. Sta. 1-95L1.

Find #27 (39-22222) 4-16-36

Small spinner type arrowhead, excellent workmanship. Point of bluish flint. Found 9" below surface, 4" in black midden deposit, on level of house debris. 43" S. - " E. Sta. 1-99L5.

Find #28 (39-22223) 4-20-36

Broken quartz arrowhead or scraper, imperfectly worked, probably a reject. Found 13" below surface, 7" deep in black midden deposit. 22" N., 12" E. Sta. 1-91.

Find #29 (39-22224) 4-20-36

A portion of what appears to be a bird effigy of some type. Seemingly a portion of the rim of a pot. Found 16" below surface, 10" in black midden, directly under Sta. 1-94.

Find #30 (39-22225) 4-20-36

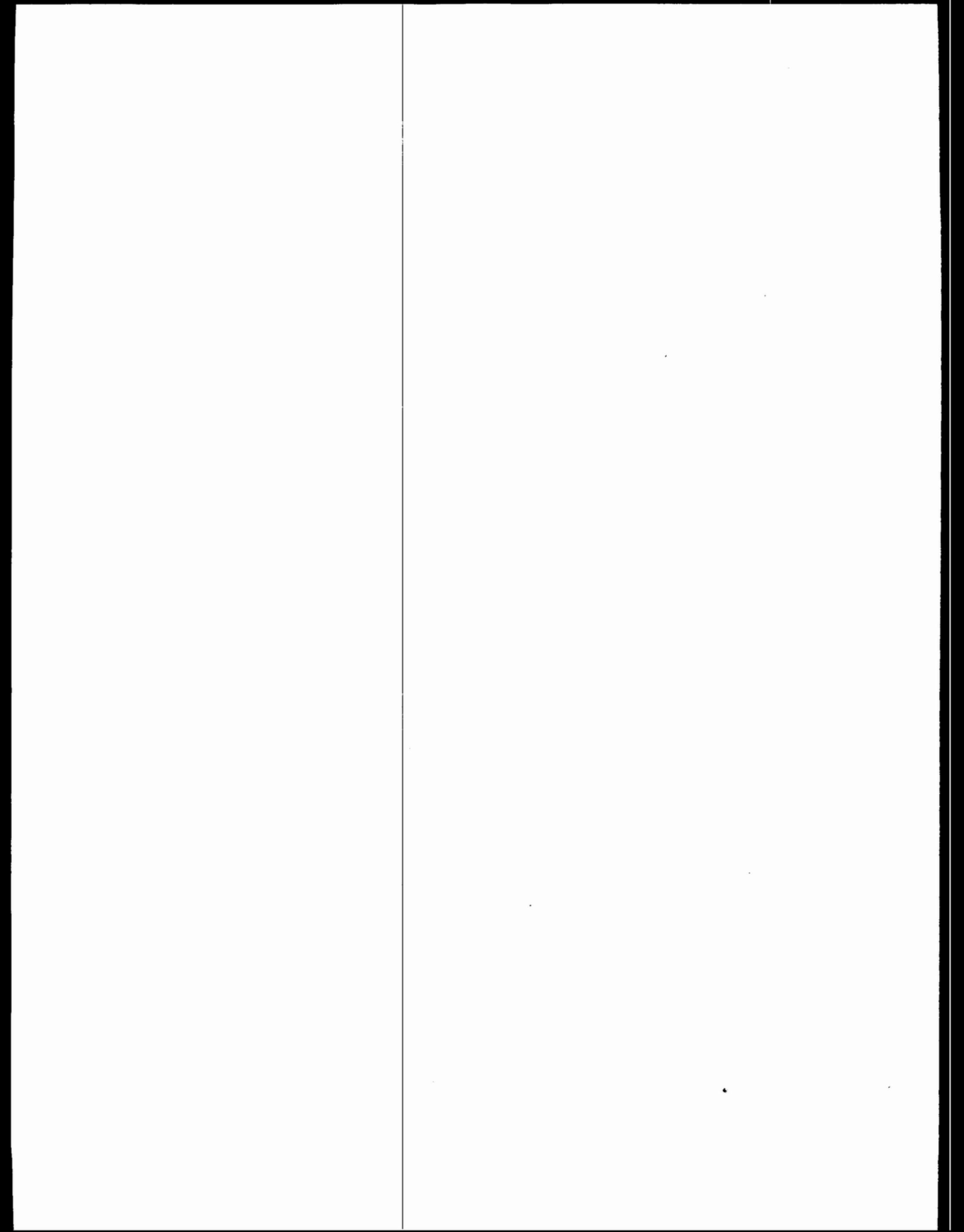
A small pottery chunky stone, found 10" below surface. 5" deep in black midden deposit. 11" E., 17" N. Sta. 1-99L7.

Find #31 (missing at time-no Park Service Number assigned) 4-20-36

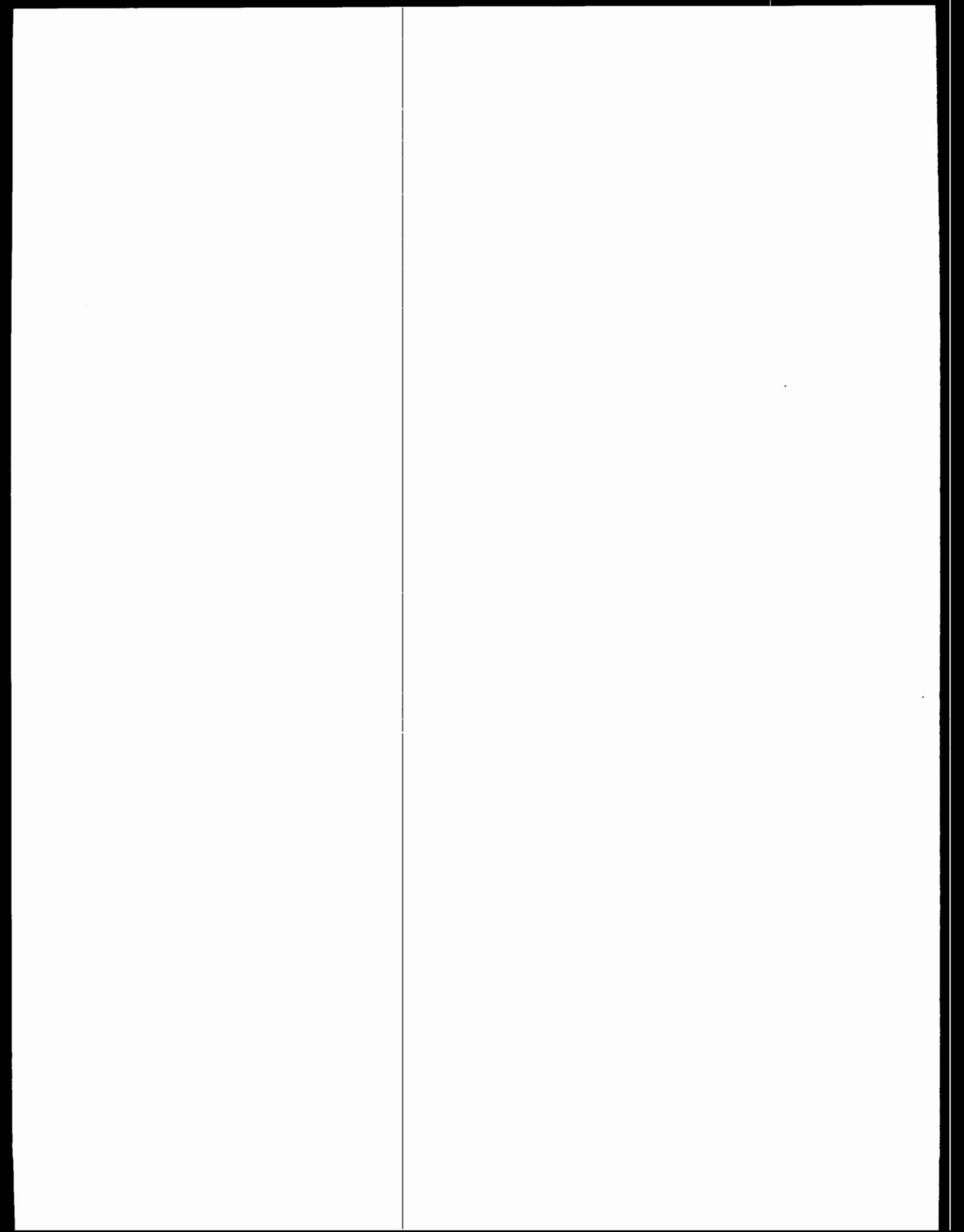
Several large pieces of one pot - plain, with beaded rim design, found 13" below surface, 7½" in black midden deposit, in what appears to be a small pit. 20" W. - 9" N. Sta. 1-93L5.

- Find #32 (39-22226) 4-20-36
 Flint scraper, very excellent workmanship, found 13" below surface, 7½" in black midden deposit. 20" W. - 9" N. Sta. 1-93L5, in what appears to be a small pit.
- Find #33 (39-22227) 4-14-36
 Broken hafted scraper or knife (flint), found 41" N. - 38" E. Sta, 1-119L13, 3" below surface in black humus.
- Find #34 (39-22228) 4-21-36
 Small metal sewing thimble, found 12" below surface, 4" deep in black midden deposit, in what appears to be slump, near edge of bank. 16" W. - 8" S. Sta. 1-100.
- Find #35 (39-22229) 4-22-36
 Small flint arrowhead, found 8" below surface, 4" in black midden deposit, 26" N. - 15" W. Sta. 1-95L7 on west edge of bank.
- Find #36 (39-22230) 4-22-36
 Quartzite hand-chopper, found 5" S. Sta. 2-70 on line of stas., 4" below surface in topsoil.
- Find #37 (39-22231) 5-14-36
 Broken pieces of a pot, found on floor level of house site #2. Bowl and rim found 42" E. - 7" N. Sta. 1-95L1. Bottom found 32" E. - 14" S. 1-95L1. Pot approximately 9" in diameter, plain design, with fluted rim.
- Find #37A (39-22232) 4-29-36
 Small arrowhead, found 11" below surface, 6" deep in midden deposit, 32" W - 12" S. Sta. 1-99L5.
- Find #38 (39-22233) 5-14-36
 Broken pieces of a large pot, notched rim, incised and punctated design on body of pot. Pieces found grouped together on floor level of house site #2, between Sta. 1-97L1 -L3 and 1-99L1 -L3.
- Find #38A (39-22234) 5-25-36
 Flint arrowhead, poor workmanship, found 12" below surface, 8" deep in midden deposit, 18" S. - 10" E. Sta. 1-41.
- Find #38B (39-22235) 5-11-36
 Small quartzite arrowhead, found 27" N. - 40" E. Sta. 1-119L9, 10" below surface in black midden deposit.
- Find #39 (missing at time-no Park Service Number assigned) 5-14-36
 Broken pieces of a small pot (approx. 9" dia.) resting on floor level of house site #2, 7" W - 31" S Sta. 1-99L3. Pot has notched rim and plain body. Body notched due to firing.
- Find #40 (39-22236) 5-14-36
 Several pieces of a large pot found on floor level of house site #2. Found 24" S. - 18" W. Sta. 1-99L3, 13" below surface.

- Find #41 (missing at time-no Park Service Number assigned) 5-14-36
 Portion of broken rim of large pot (13" dia.). Found resting on floor level of house site #2, 13" below surface - 8" W. Sta. 1-99L3. Pot shows painted or beaded rim and circular stamped design.
- Find #42 (missing at time-no Park Service Number assigned) 5-14-36
 Portion of rim of large pot (13" dia.). Found resting on floor level of house site # 2-13" below surface, 13" S. 18" W. of Sta. 1-99LE.
- Find #43 (39-22237) 4-21-36
 Hafted type flint scraper, rather poor workmanship. Found 5" below surface, in humus. 45½" N. Sta. 1-135L9 on line of stakes.
- Find #44 (39-22238) 6-17-36
 Small pottery chunky stone. Found 6" N. 6" E. Sta. 4-19L3. 25" below surface, 11" in tan sand.
- Find #45 (this is note on sheet in upper left corner)
 Small bead
- Find #46 (39-22239) 7-17-36
 Rimsherd, plain design, with small type handle. Found 3" deep in black occupation level, 30" below surface, 10" N. - 26" E. Sta. 4-19L5.
- Find #47 (39-22240) 7-17-36
 Small cylinder of baked clay. Found 36" E. Sta. 4-19L5 on line of station, 36" below surface, 9" deep in occupation level.
- Find #48 (missing at time-no Park Service Number assigned) 7-17-36
 Small briquette showing end of reed imprint, found 53" N. - 9" E. Sta. 4-19L5. 33" below surface, 7" deep in occupation level.
- Find #49 (39-22241) 7-20-36
 Clay bead, found 5" deep in tan sand, 40" below surface, 11" E. Sta. 4-18, on line of sta.
- Find #50 (39-22242) 7-20-36
 Rimsherd with unusual flanged design on neck of pot. Found 6" deep in tan sand, 40" below surface, 31" S. Sta. 4-18.
- Find #51 (missing at time-no Park Service Number assigned) 7-30-36
 Small greenstone celt, 4" long, 2½" at cutting end, 1" at butt end, found as part of burial #6. Found 67½" below surface, 35" in tan sand, 7" S. 7" E. Sta. 4-17L1.
- Find #52 (39-22243) 7-30-36
 Small greenstone chisel found 67½" below surface, 35" in tan sand, 17" N. 8" E. Sta. 4-17L1 part of burial furniture with Sta. burial #6.
- Find #53 (missing at time-no Park Service Number assigned) 7-30-36
 Small greenstone chisel found as part of burial furniture with Burial #6. Found 67½" below surface, 35" in tan sand, 26" N. 5" E. Sta. 4-17L1.



APPENDIX B
WPA Coding Sheets



PART OF POT REPRESENTED

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Sherd from Undet. portion of pot 2. Rimsherd 3. Rim and shoulder or neck 4. Rim and handle or lug 5. Rim and body 6. Rim, Body, and Base | <ol style="list-style-type: none"> 7. Body 8. Body and Base 9. Base 10. Handle 11. Whole Pot 12. Undetermined |
|--|---|

TEMPER

Material

1. Shell
2. Sand
3. Crushed Rock or Grit
4. Vegetal
5. Potsherd
6. Ground Micaceous stone
7. Hole Temper

SIZE

- A. Large
- B. Medium
- C. Small

CROSS SECTIONAL APPEARANCE OF PASTE STRUCTURE

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Fine 2. Medium fine 3. Medium 4. Medium Coarse 5. Coarse 6. Granular 7. Laminated 8. Contorted 9. Compact | <p>Criteria (1. Size of Temper (2. Distribution (3. Relatively homogeneity of paste)</p> |
|--|--|

HARDNESS

- | | |
|---|---|
| <ol style="list-style-type: none"> 2- Gypsum 2-2.5- Fingernail 2.5- Cryolite 3- Calcite 3.5- Celestite | <ol style="list-style-type: none"> 4- Flourite 4.5- Chabazite 5- Apatite 6.- Adularia |
|---|---|

SURFACE FINISH - Inner or Outer Surfaces

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Very rough - 2. Rough 3. Smooth 4. Glossy 5. Polished 6. Vermiculated - Theta, Type sherd 7. Glistening -finish- pseudo glaze | <ol style="list-style-type: none"> (1. From extrusion of temper or lumpish granular exterior knobby) (2. From pitting, holeing, intaglic effects from absorption or dissolution of temper or paste) (3. Note by extent to which smoothing process is evidenced by mechanical striation from the pottery smoother) |
|--|--|

EXECUTION of design

1. Crude
2. Fair
3. Good
4. Excellent
5. Unobserved

AREA OF DECORATION

- 1. Inner Rim
- 2. Lip
- 3. Outer Rim
- 4. Shoulder

- 5. Body
- 6. Undetermined
- 7. Base
- X. Denotes design on inside of sherd

DECORATION A. - POSSIBLY related technologically to surface finish.

Cord Marking

- 1. Irregular Criss-Cross
- 2. Checker Board
- 3. Diamond
- 4. Straight line series or parallel patterns
- 5. Single strands occur at sparse intervals
- 6. Undetermined

SMOOTHED-BURNISHED

COMBED, BRUSHING

- 1. Combing - Definition
- 2. Brushing - Definition
- 3. Scratching - Definition

V. Decoration possibly applies with Grass

Phi - Stoneware

Theta - Grass Impressions

Mottling from Firing

X. Denotes design or Execution on inside of sherd.

DECORATION B. - Specialized stamped or paddle marked technique.

Alpha- Large residual class of general stamped or paddle marked sherds in which specific designs are apparent.

- | | |
|---|----|
| 1 | 6 |
| 2 | 7 |
| 3 | 8 |
| 4 | 9 |
| 5 | 10 |

Sigma - A general class of crudely stamped or impressed sherds characterized by irregular linear or criss-cross impressions whose exact technological origin is not known, but which give a taxonomic resemblance when regarded as a whole.

Delta - A fine line cameo effect pattern (Possibly a large and small division).

Pi -

- 1. Checkerboard design squares
- 2. Rectangular
- 3. Diamond
- a. Large
- b. Medium
- c. Small

Decoration C

Technique

a. Incising

1. Narrow
2. Medium
3. Wide

b. Trailing

1. Medium
2. Wide
3. Very ?Wide

c. Engraving

d. Punctate

- a. Small
- b. Medium
- c. Large

(Punctate Design)

1. Solid rounded
2. Cylinder
3. Crescent
4. Stippling
5. Triangular
6. Rectangular
7. Bi-sected cones
8. Undetermined

T.N. Thumb nail

R. Roulette

F. Filming

- | | 1 | 2 | 3 | 4 |
|-------------------------|-----|--------|--------|-----------|
| 1. Painting | Red | Yellow | orange | and black |
| 2. Application of slip | | | | |
| a. put on before firing | | | | |
| b. Put on after firing | | | | |

Clay-wash; not the same as definite slip preparation

Modeling

- | | |
|----------|-----------------|
| 1. Fish | 8. Geometric |
| 2. Frog | 9. Naturalistic |
| 3. Owl | 10. Whole pot |
| 4. Human | 11. Rim |
| 5. Cat | 12. Body |
| 6. Snake | 13. Bass |
| 7. Eagle | 14. Lip |
| | 15. Bird |

J. Fabric Impressed

DESIGN

RECTILINEER

1. Vertical
2. Rectangles
3. Horizontal
4. diagonal or oblique
5. triangle herringbone
6. cross hatching
7. Zigzag
8. Undetermined
9. Triangle

CURVILINEER

1. Concentric Circles
2. Scroll
3. Guilloche
4. Undetermined

Nodes

1. Extruded
2. Applique
3. Moulded

Fabric Impressions

1. plain plaiting
2. plain twining - wicker
3. twilled twining
4. zigzag twilled twining
5. Chevron
6. undetermined

DECORATION D - SECONDARY FEATURES

L.H. Loop Handles

- a. Attached to lip
- b. Attached below lip
- c. Project above lip
- d. Lateral width
- e. Thickness
- f. Height
- g. Handle projection
- h. Button knob
- i. Bifurcate teats or knobs at apex (triple knobs at apex)
- j. Ribbed or single rib handle
- k. Nodes on middle handles
- l. Depression at handle apex
- m. Rim raised at handle
- n. Moulded at base
- o. Riveted at base
- p. Handle

S.H. Strap Handles

- a. Attached to lip
- b. Attached below lip
- c. Project above lip
- d. Lateral width
- e. Thickness
- f. Height
- g. Handle projection
- h. Moulded at base
- i. Riveted at base

L.G. Lug Handles

- a. Length
- b. Height
- c. Thickness
- d. Attached below lip
- e. Attached at lip
- f. Attached at shoulder
- g. Rounded
- h. Pointed or knob?
- i. Elongate or flange

R.S. Applique Rim Strip (Rim moulding or luted rim strip or band)

- | | |
|-----------------------------------|--------------|
| 1. Moulded to or joined with lip | j. Crescent |
| 2. Moulded to or joined below lip | k. Stamped |
| c. Teats or nodes | l. Scalloped |
| d. Beaded | m. Sigma |
| e. Pinched? Indented? | p. Plain |
| f. Medium thumbing or swelling | |
| g. Cylinder impressions | |
| h. Bi-sected impressions | |
| i. Rounded band at lip | |

GENERAL VESSEL MORPHOLOGY

Lip

1. Pointed
2. Narrow and Rounded
3. Flattened
 - a. Flat horizontal
 - b. Flat slopes in
 - c. Flat slopes out
4. Everted
 - a. In
 - b. Out
 - c. Both sides
5. Folded
6. Rounded

LIP DECORATION

1. Scalloped
2. Notched
3. Parallel grooved
4. Incised
5. Punctate
6. Cylinder Impression
7. Undetermined

RIM SHAPE

Pot - A vessel with curvilinear sides and partially constricted orifice.

1. Straight
2. Slightly flaring
3. Flaring
4. Pointed
5. Incurving
6. Outcurving rim

Beaker

Beaker proper
Straight side cup

Bottle

Globular body cylindrical neck

Bowl

- A. Straight
- B. Incurving rim
- C. Cazuela
- D. Outcurving rim

Plate

Straight rim
Outcurving rim

Dish

Pans

Base

1. Conoidal
2. Oval
3. Globular
4. Truncate
5. Flattened
6. Annular

7. Outer Base Legs.
 - a. Three legs
 - b. Four legs
8. Inner Legs
 - a. Three legs
 - b. Four legs
9. Footed

Size

1. Lip - thickness
2. Rim - thickness
3. Shoulder - thickness
4. Body - thickness
5. Rim - height
6. Lip diameter
7. Shoulder diameter or greatest width of body
8. Base diameter (if flattened)
9. Height
10. Neck Diameter
11. Neck Height
12. Undetermined
13. Base Thickness

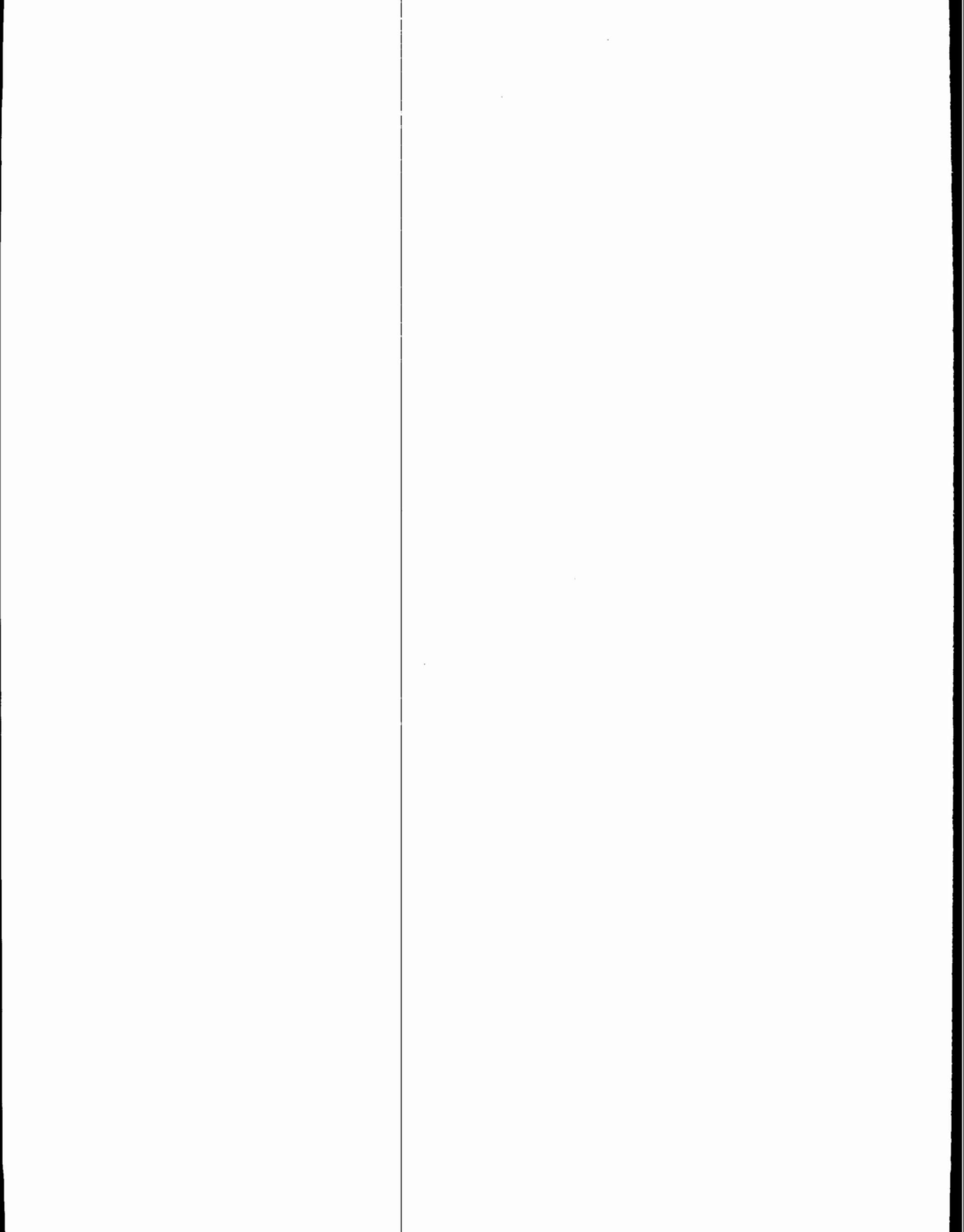
Execution of Design

| | |
|------------|---|
| Excellent | 4 |
| Crude | 5 |
| Fair | 2 |
| Good | 1 |
| Unobserved | 5 |

The Quality of the ware

1. Tenacity - Does pottery hold together or is it brittle, flexible, easily broken?
2. Porosity - is it porous; does it show crackling markedly?
3. Firing - Are firing effects evenly distributed or does ware show in cross section areas showing greater or less effects of heat?
4. Surface finish - Crude, rough finish show poorer technique in pottery manufacturing.
5. Relation of mass to tensile strength
 1. Excellent
 2. Good or fair
 3. Inferior
 5. Very crude

APPENDIX C
Bull Creek Vessel Form Data



| Everted Rim Jars | | | | |
|------------------|--------------|--------------|-------------------------|---------------------|
| Vessel Number | Collection | Rim Diameter | Rim Modification | Body Decoration |
| 1 | WPA | 32 cm | Applied Strip (Pinched) | Complicated Stamped |
| 2 | Schnell 1959 | 18 cm | No Modification | Complicated Stamped |
| 23 | Fuller 1981 | 14 cm | Folded Pinched (13 mm) | Complicated Stamped |
| 26 | WPA | 40 cm | No Modification | Plain |
| 28 | WPA | 32 cm | Folded Pinched (20 mm) | Complicated Stamped |
| 36 | WPA | 36 cm | Applied Strip (Pinched) | Complicated Stamped |
| 41 | WPA | 34 cm | No Modification | Complicated Stamped |
| 42 | WPA | 42 cm | Folded Pinched (25 mm) | Complicated Stamped |
| 43 | WPA | 32 cm | Applied Strip (Pinched) | Complicated Stamped |
| 44 | WPA | 36 cm | Applied Strip (Pinched) | Complicated Stamped |
| 45 | WPA | 36 cm | Folded Pinched (24 mm) | Complicated Stamped |
| 46 | WPA | 38 cm | Folded Pinched (26 mm) | Complicated Stamped |
| 48 | WPA | 40 cm | Folded Pinched (15 mm) | Complicated Stamped |
| 50 | Kelly 1950 | 28 cm | Folded Pinched (21 mm) | Complicated Stamped |
| 51 | Kelly 1950 | 44 cm | Folded Pinched (20 mm) | Complicated Stamped |
| 53 | Kelly 1950 | 28 cm | Folded Pinched (12 mm) | Plain |
| 55 | Kelly 1950 | 14 cm | Applied Strip (Noded) | Complicated Stamped |
| 69 | WPA | 26 cm | Applied Strip (Noded) | Plain |
| 70 | WPA | 36 cm | No Modification | Complicated Stamped |
| 71 | WPA | 32 cm | Applied Strip (Noded) | Complicated Stamped |
| 72 | WPA | 26 cm | Applied Strip (Noded) | Complicated Stamped |
| 73 | WPA | 34 cm | Applied Strip (Noded) | Complicated Stamped |
| 74 | WPA | 28 cm | Folded Pinched (14 mm) | Complicated Stamped |
| 75 | WPA | 22 cm | Folded Pinched (12 mm) | Plain |
| 77 | WPA | 16 cm | No Modification | Plain |
| 79 | WPA | 16 cm | Noded | Plain |
| 82 | Kelly 1950 | 22 cm | Folded Pinched (16 mm) | Plain |
| 85 | Kelly 1950 | 26 cm | No Modification | Complicated Stamped |
| 92 | Kelly 1950 | 22 cm | No Modification | Complicated Stamped |

| Everted Rim Jars | | | | |
|------------------|--------------|--------------|------------------------|---------------------|
| Vessel Number | Collection | Rim Diameter | Rim Modification | Body Decoration |
| 97 | Kelly 1950 | 34 cm | Folded Pinched (19 mm) | Complicated Stamped |
| 98 | Kelly 1950 | 32 cm | Folded Pinched (16 mm) | Complicated Stamped |
| 99 | Kelly 1950 | 36 cm | Folded Pinched (23 mm) | Complicated Stamped |
| 100 | WPA | 42 cm | Folded Pinched (20 mm) | Complicated Stamped |
| 101 | WPA | 32 cm | Folded Pinched (27 mm) | Complicated Stamped |
| 102 | WPA | 38 cm | Folded Pinched (14 mm) | Complicated Stamped |
| 103 | WPA | 32 cm | Noded | Plain |
| 104 | WPA | 26 cm | Noded | Plain |
| 113 | WPA | 26 cm | Noded/Scalloped | Plain |
| 120 | WPA | 38 cm | Applied Strip (Noded) | Complicated Stamped |
| 121 | WPA | 28 cm | Folded Pinched (20 mm) | Complicated Stamped |
| 122 | WPA | 32 cm | Folded Pinched (18 mm) | Complicated Stamped |
| 123 | WPA | 20 cm | Folded Pinched (16 mm) | Complicated Stamped |
| 124 | WPA | 24 cm | Folded Pinched (18 mm) | Complicated Stamped |
| 125 | WPA | 36 cm | Folded Pinched (26 mm) | Complicated Stamped |
| 126 | WPA | 34 cm | Folded Pinched (16 mm) | Complicated Stamped |
| 127 | WPA | 34 cm | Folded Pinched (16 mm) | Complicated Stamped |
| 128 | WPA | 34 cm | Folded Pinched (14 mm) | Complicated Stamped |
| 129 | WPA | 36 cm | Folded Pinched (20 mm) | Complicated Stamped |
| 130 | WPA | 36 cm | Folded Pinched (15 mm) | Complicated Stamped |
| 131 | WPA | 34 cm | Folded Pinched (22 mm) | Complicated Stamped |
| 132 | WPA | 36 cm | Folded Pinched (22 mm) | Complicated Stamped |
| 133 | WPA | 30 cm | Folded Pinched (21 mm) | Plain |
| 134 | WPA | 32 cm | Folded Pinched (23 mm) | Plain |
| 135 | WPA | 30 cm | Folded Pinched (18 mm) | Plain |
| 145 | Schnell 1959 | 40 cm | Folded Pinched (25 mm) | Complicated Stamped |
| 147 | Schnell 1959 | 34 cm | Folded Pinched (19 mm) | Complicated Stamped |
| 150 | Schnell 1959 | 36 cm | Folded Pinched (20 mm) | Complicated Stamped |
| 154 | Schnell 1959 | 14 cm | No Modification | Plain |

| Everted Rim Jars | | | | |
|------------------|--------------|--------------|-------------------------|---------------------|
| Vessel Number | Collection | Rim Diameter | Rim Modification | Body Decoration |
| 155 | Schnell 1959 | 28 cm | Applied Strip (Noded) | Complicated Stamped |
| 160 | Schnell 1959 | 26 cm | Folded Pinched (17 mm) | Complicated Stamped |
| 161 | Schnell 1959 | 38 cm | Folded Pinched (22 mm) | Complicated Stamped |
| 166 | Schnell 1959 | 24 cm | Noded | Complicated Stamped |
| 168 | Schnell 1959 | 26 cm | No Modification | Complicated Stamped |
| 171 | Schnell 1959 | 36 cm | Folded Pinched (15 mm) | Complicated Stamped |
| 172 | Schnell 1959 | 40 cm | Folded Pinched (20 mm) | Complicated Stamped |
| 173 | Schnell 1959 | 40 cm | Folded Pinched (25 mm) | Complicated Stamped |
| 176 | Schnell 1959 | 18 cm | Folded Pinched (16 mm) | Complicated Stamped |
| 177 | Schnell 1959 | 40 cm | Applied Strip (Noded) | Complicated Stamped |
| 181 | Schnell 1959 | 34 cm | Applied Strip (Pinched) | Complicated Stamped |
| 183 | Schnell 1959 | 40 cm | Lug Handles | Complicated Stamped |
| 184 | Schnell 1959 | 32 cm | Folded Pinched (25 mm) | Complicated Stamped |
| 186 | Schnell 1959 | 40 cm | Noded | Plain |
| 187 | Schnell 1959 | 38 cm | No Modification | Plain |
| 191 | Schnell 1959 | 42 cm | Applied Strip (Noded) | Check Stamped |
| 192 | Schnell 1959 | 34 cm | Applied Strip (Noded) | Complicated Stamped |
| 193 | Schnell 1959 | 34 cm | Folded Pinched (15 mm) | Plain |
| 194 | Schnell 1959 | 34 cm | Folded Pinched (24 mm) | Complicated Stamped |
| 207 | Fuller 1981 | 32 cm | Folded Pinched (22 mm) | Complicated Stamped |
| 208 | Fuller 1981 | 24 cm | Folded Pinched (16 mm) | Complicated Stamped |
| 209 | Fuller 1981 | 42 cm | Folded Pinched (18 mm) | Complicated Stamped |
| 211 | SAS 1993 | 40 cm | Folded Pinched (20 mm) | Complicated Stamped |
| 213 | SAS 1993 | 32 cm | Folded Pinched (25 mm) | Complicated Stamped |
| 214 | SAS 1993 | 30 cm | No Modification | Complicated Stamped |

| Carinated (Collarded) Bowls-Fort Walton bowls | | | | |
|---|--------------|--------------|------------------|------------------|
| Vessel Number | Collection | Rim Diameter | Rim Modification | Body Decoration |
| 3 | Schnell 1959 | 24 cm | Notched | Incised/Punctate |
| 4 | Schnell 1959 | 24 cm | Notched | Incised/Punctate |
| 10 | WPA | 14 cm | Plain | Incised |
| 11 | WPA | 16 cm | Notched | Incised/Punctate |
| 35 | WPA | 24 cm | Notched | Incised/Punctate |
| 49 | Kelly 1950 | 30 cm | Incised | Incised/Punctate |
| 56 | Kelly 1950 | 36 cm | Plain | Incised |
| 57 | Kelly 1950 | 28 cm | Notched | Incised |
| 83 | Schnell 1959 | 32 cm | Plain | Incised |
| 84 | WPA | 26 cm | Notched | Incised/Punctate |
| 91 | WPA | 24 cm | Notched | Incised/Punctate |
| 106 | WPA | 24 cm | Notched | Incised/Punctate |
| 114 | WPA | 26 cm | Notched | Incised/Punctate |
| 115 | WPA | 22 cm | Incised | Incised/Punctate |
| 138 | WPA | 32 cm | Plain | Incised/Punctate |
| 142 | WPA | 18 cm | Plain | Incised |
| 146 | Schnell 1959 | 40 cm | Incised | Incised/Punctate |
| 148 | Schnell 1959 | 30 cm | Plain | Incised/Punctate |
| 149 | Schnell 1959 | 30 cm | Plain | Incised/Punctate |
| 156 | Schnell 1959 | 36 cm | Notched | Incised/Punctate |
| 157 | Schnell 1959 | 38 cm | Plain | Incised/Punctate |
| 163 | Schnell 1959 | 32 cm | Notched | Incised |
| 164 | Schnell 1959 | 30 cm | Notched | Incised/Punctate |
| 167 | Schnell 1959 | 32 cm | Plain | Incised/Punctate |
| 169 | Schnell 1959 | 40 cm | Plain | Incised |
| 179 | Schnell 1959 | 30 cm | Plain | Incised |
| 180 | Schnell 1959 | 34 cm | Notched | Incised/Punctate |
| 196 | Fuller 1981 | 18 cm | Plain | Incised |
| 200 | Fuller 1981 | 24 cm | Plain | Incised |

| Carinated (Collarded) Bowls-Fort Walton bowls | | | | |
|---|-------------|--------------|------------------|------------------|
| Vessel Number | Collection | Rim Diameter | Rim Modification | Body Decoration |
| 201 | Fuller 1981 | 32 cm | Notched | Plain |
| 202 | Fuller 1981 | 30 cm | Plain | Incised/Punctate |
| 203 | Fuller 1981 | 24 cm | Notched | Incised/Punctate |
| 204 | Fuller 1981 | 28 cm | Plain | Incised/Punctate |
| 205 | Fuller 1981 | 34 cm | Notched | Incised/Punctate |
| 206 | Fuller 1981 | 26 cm | Plain | Incised/Punctate |
| 212 | SAS 1993 | 36 cm | Plain | Incised |
| | | | | |

| Collared Globular Bowls | | | | |
|-------------------------|--------------|--------------|------------------|-----------------|
| Vessel Number | Collection | Rim Diameter | Rim Modification | Body Decoration |
| 7 | Schnell 1959 | 36 cm | Rolled | Check Stamped |
| 20 | WPA | 26 cm | Plain | Plain |

| Simple Rounded Bowls | | | | |
|----------------------|--------------|--------------|-------------------------|---------------------|
| Vessel Number | Collection | Rim Diameter | Rim Modification | Body Decoration |
| 5 | Schnell 1959 | 32 cm | Applied Strip (Notched) | Plain |
| 6 | WPA | 32 cm | Plain | Incised |
| 12 | Kelly 1950 | 20 cm | Plain | Plain |
| 14 | WPA | 40 cm | Noded | Plain |
| 15 | WPA | 36 cm | Plain | Incised/Punctate |
| 17 | Schnell 1959 | 24 cm | Notched | Complicated Stamped |
| 18 | Fuller 1981 | 36 cm | Effigy Adorno | Incised |
| 19 | WPA | 36 cm | Notched | Complicated Stamped |
| 24 | WPA | 42 cm | Notched | Complicated Stamped |
| 25 | WPA | 36 cm | Plain | Incised/Punctate |
| 27 | WPA | 38 cm | Plain | Complicated Stamped |

| Simple Rounded Bowls | | | | |
|----------------------|------------|--------------|-----------------------|---------------------|
| Vessel Number | Collection | Rim Diameter | Rim Modification | Body Decoration |
| 28 | WPA | 30 cm | Notched | Complicated Stamped |
| 30 | WPA | 26 cm | Notched | Complicated Stamped |
| 31 | WPA | 10 cm | Plain | Plain |
| 32 | WPA | 22 cm | Plain | Plain |
| 33 | WPA | 38 cm | Notched | Complicated Stamped |
| 34 | WPA | 40 cm | Notched Fold | Plain |
| 37 | WPA | 34 cm | Plain | Plain |
| 39 | WPA | 26 cm | Notched | Complicated Stamped |
| 40 | WPA | 30 cm | Notched | Complicated Stamped |
| 47 | WPA | 28 cm | Folded Pinched | Complicated Stamped |
| 52 | Kelly 1950 | 26 cm | Rolled | Incised |
| 54 | Kelly 1950 | 24 cm | Plain | Plain |
| 58 | Kelly 1950 | 26 cm | Plain | Complicated Stamped |
| 59 | WPA | 34 cm | Notched | Complicated Stamped |
| 60 | WPA | 40 cm | Plain | Plain |
| 61 | WPA | 36 cm | Plain | Complicated Stamped |
| 62 | WPA | 40 cm | Applied Strip (Noded) | Plain |
| 63 | WPA | 32 cm | Plain | Plain |
| 64 | WPA | 34 cm | Folded Notched | Complicated Stamped |
| 65 | WPA | 32 cm | Plain | Plain |
| 66 | WPA | 26 cm | Notched | Complicated Stamped |
| 67 | WPA | 36 cm | Notched | Complicated Stamped |
| 68 | WPA | 30 cm | Notched | Complicated Stamped |
| 76 | WPA | 22 cm | Notched | Complicated Stamped |
| 78 | WPA | 34 cm | Notched | Plain |
| 80 | WPA | 28 cm | Notched | Plain |
| 81 | WPA | 32 cm | Plain | Plain |
| 86 | WPA | 30 cm | Plain | Complicated Stamped |
| 87 | WPA | 32 cm | Plain | Complicated Stamped |

| Simple Rounded Bowls | | | | |
|----------------------|--------------|--------------|-------------------------|---------------------|
| Vessel Number | Collection | Rim Diameter | Rim Modification | Body Decoration |
| 88 | WPA | 32 cm | Notched | Complicated Stamped |
| 89 | WPA | 28 cm | Notched | Complicated Stamped |
| 90 | WPA | 16 cm | Rolled | Plain |
| 93 | WPA | 30 cm | Plain | Incised |
| 94 | WPA | 36 cm | Folded Pinched | Complicated Stamped |
| 95 | WPA | 30 cm | Plain | Plain |
| 96 | WPA | 22 cm | Notched | Complicated Stamped |
| 105 | Kelly 1950 | 24 cm | Plain | Incised |
| 107 | Kelly 1950 | 30 cm | Plain | Incised |
| 111 | Kelly 1950 | 42 cm | Thickened | Plain |
| 112 | WPA | 28 cm | Effigy Adorno | Plain |
| 116 | Kelly 1950 | 36 cm | Notched | Complicated Stamped |
| 117 | Kelly 1950 | 28 cm | Plain | Incised |
| 136 | WPA | 22 cm | Notched | Complicated Stamped |
| 137 | WPA | 26 cm | Plain | Plain |
| 139 | WPA | 10 cm | Plain | Plain |
| 140 | WPA | 34 cm | Plain | Complicated Stamped |
| 141 | WPA | 40 cm | Plain | Plain |
| 143 | Schnell 1959 | 36 cm | Folded | Incised |
| 144 | Schnell 1959 | 28 cm | Plain | Plain |
| 151 | Schnell 1959 | 28 cm | Plain | Complicated Stamped |
| 152 | Schnell 1959 | 38 cm | Plain | Plain |
| 153 | Schnell 1959 | 36 cm | Plain | Plain |
| 158 | Schnell 1959 | 36 cm | Pinched | Complicated Stamped |
| 159 | Schnell 1959 | 32 cm | Thickened | Plain |
| 162 | Schnell 1959 | 18 cm | Applied Strip (Notched) | Plain |
| 165 | Schnell 1959 | 32 cm | Notched | Complicated Stamped |
| 170 | Schnell 1959 | 24 cm | Plain | Complicated Stamped |
| 174 | Schnell 1959 | 18 cm | Rolled | Plain |

| Simple Rounded Bowls | | | | |
|----------------------|--------------|--------------|------------------------|---------------------|
| Vessel Number | Collection | Rim Diameter | Rim Modification | Body Decoration |
| 178 | Schnell 1959 | 32 cm | Plain | Complicated Stamped |
| 182 | Schnell 1959 | 34 cm | Noded | Check Stamped |
| 185 | Schnell 1959 | 28 cm | Folded Pinched (16 mm) | Complicated Stamped |
| 188 | Schnell 1959 | 18 cm | Pinched | Complicated Stamped |
| 190 | Schnell 1959 | 22 cm | Plain | Plain |
| 195 | Fuller 1981 | 14 cm | Incised | Incised |
| 197 | Fuller 1981 | 18 cm | Folded | Incised |
| 198 | Fuller 1981 | 20 cm | Notched | Plain |
| 199 | Fuller 1981 | 36 cm | Folded | Incised |
| 210 | WPA | 22 cm | T-rim | Incised |
| 215 | SAS 1993 | 30 cm | Folded Notched | Plain |
| 216 | WPA | 28 cm | Plain | Plain |
| | | | | |
| | | | | |

| Open Bowls | | | | |
|---------------|-------------|--------------|------------------|---------------------|
| Vessel Number | Collection | Rim Diameter | Rim Modification | Body Decoration |
| 8 | WPA | 16 cm | L-shaped | Incised |
| 9 | WPA | 24 cm | Plain | Complicated Stamped |
| 13 | WPA | 20 cm | Lug Handles | Plain |
| 16 | WPA | 10 cm | Incised | Incised/Punctate |
| 21 | Fuller 1981 | 10 cm | Plain | Complicated Stamped |
| 22 | Fuller 1981 | 14 cm | Plain | Plain |
| 38 | WPA | 18 cm | Plain | Plain |
| 108 | Kelly 1950 | 34 cm | Notched | Complicated Stamped |
| 109 | Kelly 1950 | 34 cm | Plain | Plain |
| 110 | Kelly 1950 | 36 cm | Thickened | Plain |

| Open Bowls | | | | |
|---------------|--------------|--------------|------------------|---------------------|
| Vessel Number | Collection | Rim Diameter | Rim Modification | Body Decoration |
| 118 | Kelly 1950 | 42 cm | L-shaped | Complicated Stamped |
| 119 | WPA | 34 cm | Plain | Plain |
| 175 | Schnell 1959 | 38 cm | Thickened | Plain |
| 189 | Schnell 1959 | 22 cm | Thickened | Complicated Stamped |
| | | | | |

| Bottles | | | | |
|---------------|---------------|--------------|--------------------------|------------------|
| Vessel Number | Collection | Rim Diameter | Vessel Proportions | Body Decoration |
| 217 | WPA Burial 3 | 9.5 cm | 30 cm long, 26.5 cm high | Negative Painted |
| 218 | WPA Burial 7 | 9.5 cm | 27.5 cm long, 27 cm high | Negative Painted |
| 219 | WPA Burial 16 | 8.0 cm | 28 cm long, 32 cm high | Red ? |

