Phase II Testing at Sites 38KE1135 and 38KE1164
Central SC MegaSite
Kershaw County, South Carolina
S&ME Project No. 4261-16-131

Prepared for:
Kershaw County Economic Development
PO Box 763
Camden, SC 29020

Prepared by:
S&ME, Inc.
134 Suber Road
Columbia, SC 29210

September 2016

ENGINEERING INTEGRITY

PHASE II TESTING AT SITES 38KE1135 AND 38KE1164
CENTRAL SC MEGASITE
KERSHAW COUNTY, SOUTH CAROLINA

DRAFT REPORT

Prepared for:

Kershaw County Economic Development
PO Box 763
Camden, South Carolina 29020

Prepared by:

S&ME, Inc.
134 Suber Road
Columbia, South Carolina 29210

S&ME Project No. 4261-16-131

Kimberly Nagle, M.S., RPA
Principal Investigator

Authors:
Kimberly Nagle and Heather Carpini, M.A.

September 2016

MANAGEMENT SUMMARY

On behalf of Kershaw County Economic Development, S&ME, Inc. (S&ME) has completed Phase II testing of archaeological sites 38KE1135 and 38KE1164 at the proposed Central SC MegaSite, formally called the Conder Mega Site, northwest of the Highway 601 and I-20 interchange, near the town of Lugoff (Figures 1.1 through 1.4). The services were performed in general accordance with S&ME Proposal No. 42-1601101 dated September 1, 2016.

In March 2011, S&ME completed a Cultural Resources Identification Survey (CRIS) of approximately 1,455 acres at the proposed Conder Mega Site (Carta and Jones 2011). As a result of the CRIS, seven archaeological sites (38KE1129 through 38KE1135), two isolated finds, and two late twentieth century historic scatters were identified. It was S&ME's opinion that a Phase I survey be conducted on approximately 192 acres of the project area that had a high potential for containing significant archaeological sites and that Phase II testing be conducted at site 38KE1135 to determine the final National Register of Historic Places (NRHP) eligibility of the site (Carta and Jones 2011). A limited architectural survey was conducted during the CRIS and no structures 40 years or older were identified within or adjacent to the project area. The State Historic Preservation Office (SHPO) agreed with these findings in a letter dated April 18, 2011 (Appendix A).

In October 2014, S&ME completed the Phase I survey on the 192 acres recommended for additional work in the 2011 report (Nagle and Carpini 2014). These investigations resulted in identification of eight previously unrecorded archaeological sites (38KE1159 through 38KE1166), three isolated finds, and two late twentieth century artifact scatters. In addition, two sites that were identified during the CRIS—38KE1132 and 38KE1135—were re-located. Phase II testing was not conducted at site 38KE1135 at that time. Based on the results of the investigations, sites 38KE1132, 38KE1159 through 38KE1163, 38KE1165, and 38KE1166 were recommended as being ineligible for inclusion in the NRHP. Site 38KE1135, an Early Woodland through Mississippian camp site, and site 38KE1164, a Late Archaic through Mississippian camp site, contained intact deposits and had the potential to be significant sites. S&ME recommended that sites 38KE1135 and 38KE1164 be avoided by ground disturbing activities. If avoidance was not possible, it was recommend that Phase II testing be conducted to determine each site's final National Register status (i.e., eligible or not eligible). The remainder of the Conder Mega Site contained no significant cultural resources and S&ME recommend no additional work in these areas. The SHPO agreed with these findings in a letter dated November 7, 2014 (Appendix A).

In September 2016, Phase II evaluative testing was conducted at sites 38KE1135 and 38KE1164. The combined results of a reconnaissance survey (Carta and Jones 2011), Phase I survey (Nagle and Carpini 2014), and Phase II testing at 38KE1135 indicate that it is a multi-component prehistoric camp site containing Early Woodland through Mississippian (3000–350 B.P.) components. Approximately 84 percent (n=31) of the artifacts recovered during the Phase II testing were recovered from just beneath the plowzone, in a single test unit in the southeastern portion of the site; the other test units contained minimal artifacts confined to the plow zone or yielded no artifacts at all. The one formal non-diagnostic tool and the hammerstone recovered from the site came from the surface and the plow zone respectively. No features or concentrations of artifacts were identified during test unit excavation; no diagnostic artifacts were recovered from the site.

Site 38KE1135 is not associated with events that have made a significant contribution to the broad patterns of history (Criterion A), is not associated with the lives of significant persons in the past (Criterion B), does not embody the distinctive characteristics of a type, period, or methods of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C). The paucity of artifacts recovered, the minimal artifact diversity, and the lack of features or concentrations of artifacts identified at the site suggests that, although intact deposits are present, it is unlikely that site 38KE1135 will contribute new or significant information to the prehistory of the area (Criterion D). Based on the reasoning stated above, site 38KE1135 is recommended not eligible for inclusion in the NRHP.

The combined results of a Phase I survey (Nagle and Carpini 2014) and Phase II testing at 38KE1164 indicate that it is a multi-component prehistoric camp site containing Late Archaic (5000–3000 B.P.), Middle Woodland (2300–1500 B.P.), and Mississippian (1000–350 B.P.) components. The site contains chipped stone tools, both formal and expedient, within relatively intact stratigraphic deposits and has a relatively large amount and moderate diversity of artifacts. Although features were not identified, an intensive occupation was identified in Levels 1 through 3 throughout the test units at the site; the diagnostic artifacts recovered from these levels dated to the Middle Woodland subperiod.

Based on these factors, site 38KE1164 is recommended eligible for inclusion in the NRHP under Criterion A for broad patterns of settlement during the Middle Woodland subperiod in South Carolina, a subperiod in which occupations and settlement patterns are poorly documented, and Criterion D, for its potential to yield important information to the prehistory of the area. As the site is not associated with the lives of significant persons in the past (Criterion B) and does not embody the distinctive characteristics of a type, period, or methods of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C), site 38KE1164 is not eligible under these criteria.

Site 38KE1164 is recommended eligible for inclusion in the NRHP and should be avoided; if avoidance of the site is not possible, then consultation with the SHPO, federal agencies, and other consulting parties should be conducted to resolve potential adverse effects to site 38KE1164. The remainder of the Central SC MegaSite project area, formerly known as the Conder Mega Site, contains no historic properties and no additional cultural resource investigations should be necessary.

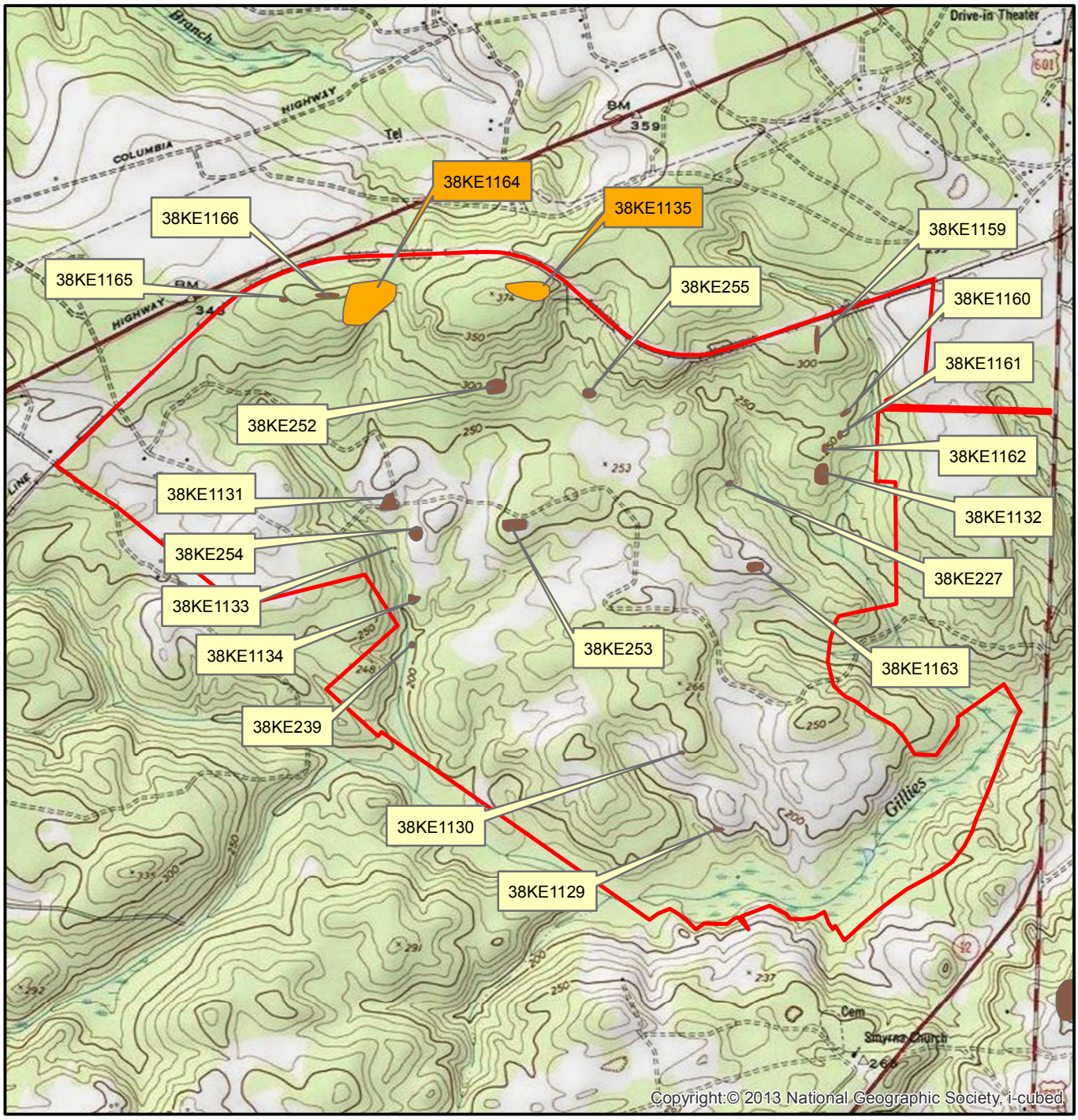


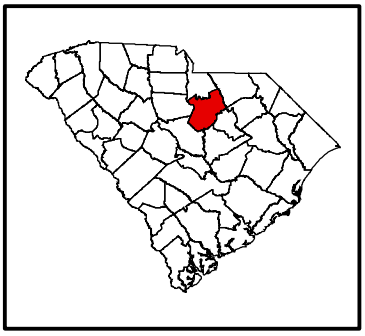
Figure 1.1. Topographic map showing archaeological site locations in the Central SC MegaSite project area.
Base Map: Lugoff (1953) 7.5' USGS topographic quadrangle.

0 0.25 0.5
Miles

N
W E
S

Sites 38KE1135 and 38KE1164
Archaeological Site
Central SC MegaSite Boundary

S&ME



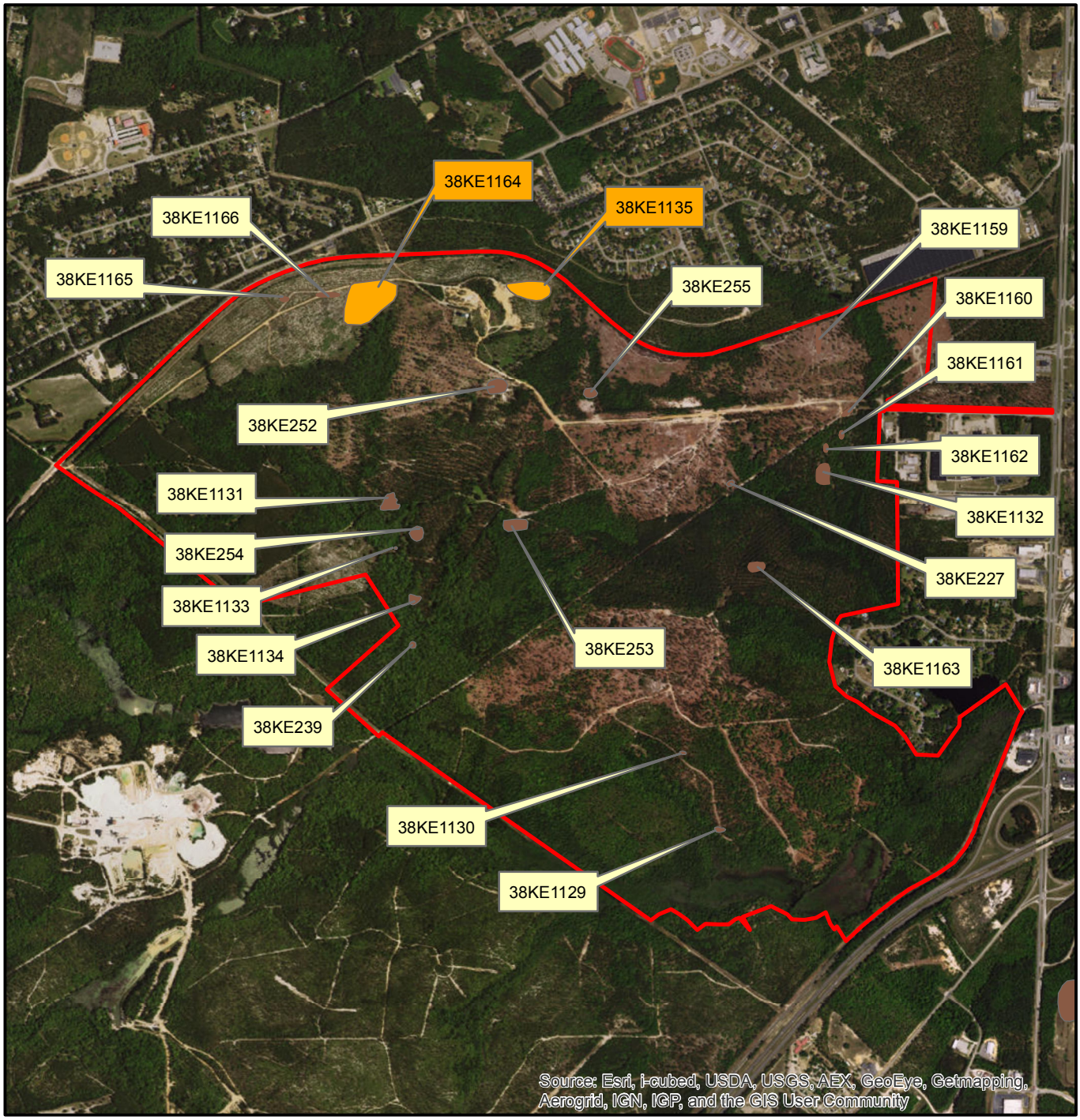


Figure 1.2. Aerial map showing archaeological site locations in the Central SC MegaSite project area.
Base Map: ESRI Aerial Imagery.

0 0.25 0.5
Miles

N
W E
S

Sites 38KE1135 and 38KE1164
Archaeological Site
Central SC MegaSite Boundary

S&ME

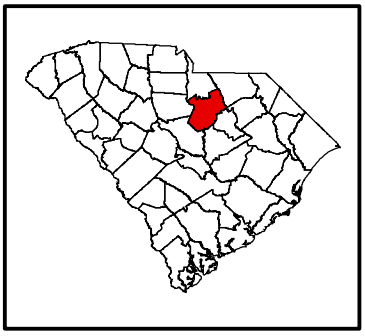


Figure 1.3. Topographic map showing zoomed in locations of sites 38KE1135 and 38KE1164.

Base Map: Lugoff (1953) 7.5' USGS topographic quadrangle.

0 110 220
Meters

N
W E
S

Archaeological Site
Central SC MegaSite Boundary

S&ME

Figure 1.4. Aerial map showing zoomed in locations of sites 38KE1135 and 38KE1164. Base Map: ESRI Aerial Imagery.

0 110 220
Meters

N
W E
S

Archaeological Site
Central SC MegaSite Boundary

S&ME

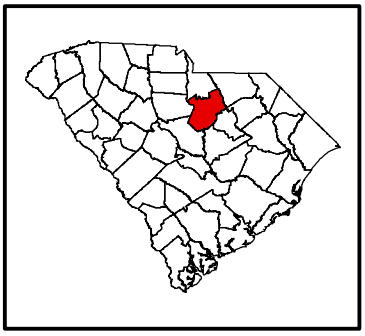


Table of Contents

List of Figures

List of Tables

1.0 INTRODUCTION

On behalf of Kershaw County Economic Development, S&ME, Inc. (S&ME) has completed Phase II testing of archaeological sites 38KE1135 and 38KE1164 at the proposed Central SC MegaSite, formally called the Conder Mega Site, northwest of the Highway 601 and I-20 interchange, near the town of Lugoff (Figures 1.1 through 1.4). The services were performed in general accordance with S&ME Proposal No. 42-1601101 dated September 1, 2016.

In March 2011, S&ME completed a Cultural Resources Identification Survey (CRIS) of approximately 1,455 acres at the proposed Conder Mega Site (Carta and Jones 2011). As a result of the CRIS, seven archaeological sites (38KE1129 through 38KE1135), two isolated finds, and two late twentieth century historic scatters were identified. It was S&ME's opinion that a Phase I survey be conducted on approximately 192 acres of the project area that had a high potential for containing significant archaeological sites and that Phase II testing be conducted at site 38KE1135 to determine the final National Register of Historic Places (NRHP) eligibility of the site (Carta and Jones 2011). A limited architectural survey was conducted during the CRIS and no structures 40 years or older were identified within or adjacent to the project area. The State Historic Preservation Office (SHPO) agreed with these findings in a letter dated April 18, 2011 (Appendix A).

In October 2014, S&ME completed the Phase I survey on the 192 acres recommended for additional work in the 2011 report (Nagle and Carpini 2014). These investigations resulted in identification of eight previously unrecorded archaeological sites (38KE1159 through 38KE1166), three isolated finds, and two late twentieth century artifact scatters. In addition, two sites that were identified during the CRIS—38KE1132 and 38KE1135—were re-located. Phase II testing was not conducted at site 38KE1135 at that time. Based on the results of the investigations, sites 38KE1132, 38KE1159 through 38KE1163, 38KE1165, and 38KE1166 were recommended as being ineligible for inclusion in the NRHP. Site 38KE1135, an Early Woodland through Mississippian camp site, and site 38KE1164, a Late Archaic through Mississippian camp site, contained intact deposits and had the potential to be significant sites. S&ME recommended that sites 38KE1135 and 38KE1164 be avoided by ground disturbing activities. If avoidance was not possible, it was recommend that Phase II testing be conducted to determine each site's final National Register status (i.e., eligible or not eligible). The remainder of the Conder Mega Site contained no significant cultural resources and S&ME recommend no additional work in these areas. The SHPO agreed with these findings in a letter dated November 7, 2014 (Appendix A).

Fieldwork for the current project was conducted in September 2016. Kimberly Nagle, M.S., RPA, served as Principal Investigator for the project, Quinn-Monique Ogden, M.A. RPA and Frank Carvino, M.A. RPA served as Archaeological Field Directors, and Chris Handley, M.A, served as a Field Technician. Artifacts were analyzed by Joseph DeAngelis, M.A. and Kimberly Nagle. The report was written by Kimberly Nagle and Heather Carpini, M.A.; report graphics were produced by Heather Carpini and Kimberly Nagle.

This report has been prepared in compliance with the National Historic Preservation Act of 1966, as amended; the Archaeological and Historic Preservation Act of 1979; procedures for the Protection of Historic Properties (36 CFR Part 800); and 36 CFR Parts 60 through 79, as appropriate. Field investigations and the technical report meet the qualifications specified in the Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation (Federal Register [FR] 48:44716-44742) and the South Carolina Standards and Guidelines for Archaeological Investigations (COSCAPA et al. 2005).

Supervisory personnel meet the Secretary of the Interior's Professional Qualifications Standards set forth in 36 CFR Part 61.

2.0 ENVIRONMENTAL SETTING

2.1 Location and Setting

The project area is located in the southwestern portion of Kershaw County, approximately one mile southwest of the community of Lugoff, South Carolina. Kershaw County, which covers approximately 740 square miles, is bounded by Chesterfield and Darlington counties to the east; Lee, Sumter, and Richland counties to the south; Richland and Fairfield counties to the west; and Lancaster County to the north.

The current project area (sites 38KE1135 and 38KE1164) is situated on a pair of hilltops and a hillslope adjacent to an active rail line and an unnamed tributary of Gillies Creek (Figures 1.1 and 1.3).

2.2 Geology and Topography

The project area is located in the Upper Coastal Plain physiographic province, which is characterized by gently rolling terrain underlain by unconsolidated sediment (Kovacik and Winberry 1989). Topography in the project area consists of broad ridges dissected by moderate to steep slopes leading down to the rivers and streams.

Site 38KE1135 is located on the edge of a hilltop adjacent to an active rail line. Topography at the site is approximately 365 ft above mean sea level (AMSL) (Figures 1.1 and 1.3). Site 38KE1164 is located on a hilltop and hillslope adjacent to an unnamed tributary of Gillies Creek. Topography at the site ranges between approximately 300–350 ft above mean sea level (AMSL) (Figures 1.1 and 1.3).

2.3 Soils

The project area is within the Lakeland-Blanton-Alpin soil association. This soil association is located on broad ridgetops and side slopes and contains very rapidly permeable and moderately permeable soils that are sandy throughout or that have a sandy surface layer and sandy/loamy subsoil (USDA 1985).

Soils at site 38KE1135 consist of Lakeland Sand, an excessively drained soil found in upland areas. Soils at site 38KE1164 include Lakeland Sand and Ailey Sand; Ailey Sand is a well-drained soil that is found on low hills (Figure 2.1).

2.4 Hydrology

The project area is located within the Wateree River drainage basin. The Wateree River is a continuation of the Catawba River and a tributary of the Santee River; it is located approximately three miles to the east of the project area. Sites 38KE1135 and 38KE1164 are located adjacent to unnamed tributaries of Gillies Creek. Gillies Creek flows into the Wateree River approximately 4.5 miles east of the project area.

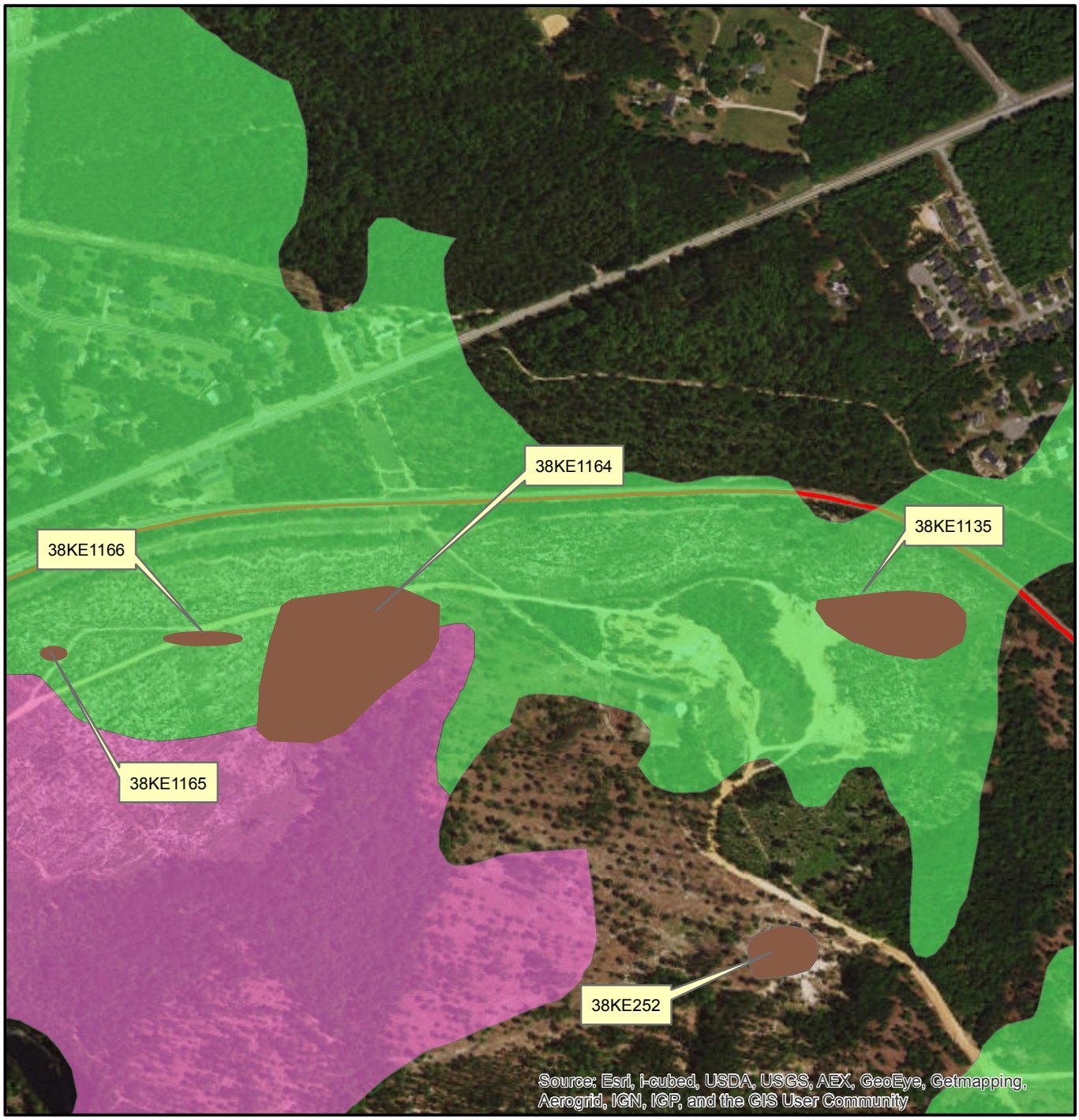


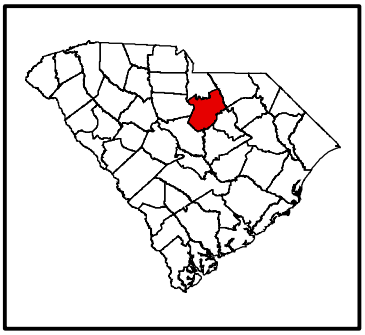
Figure 2.1. Aerial map showing soil types at sites 38KE1135 and 38KE1164.
Base Map: ESRI Aerial Imagery.

0 110 220
Meters

Central SC MegaSite Boundary
Archaeological Site
Soil Types
Ailey Sand
Lakeland Sand

N
W E
S

S&ME



2.5 Climate and Vegetation

The climate of Kershaw County is characterized by long, hot summers and moderately short, cool winters. The average daily temperatures range from 44° Fahrenheit (F) in winter to 87° F in summer. Precipitation is fairly heavy throughout the year and sustained droughts are uncommon. Rainfall is adequate for most crops during the peak-growing season of April through September. Because of the mild winters, snowfall is light, averaging about three inches annually (USDA 1985:1). Vegetation at both sites consists of young long leaf pine with limited secondary growth (Figures 2.2 and 2.3).

Figure 2.2. Typical vegetation throughout sites 38KE1135 and 38KE1164, facing north.

Figure 2.3. Typical vegetation throughout sites 38KE1135 and 38KE1164, facing south.

3.0 Cultural Context

3.1 Prehistoric Overview

Most of North America has been occupied by humans since at least 13,000 radiocarbon years before present (B.P.) (Anderson and O'Steen 1992; Bense 1994); however, a date for the initial settlement of North America is part of an ongoing debate (e.g., Adovasio and Pedler 1996; Dillehay and Collins 1988). In South Carolina, archaeologists divide the past 13,500 years into four broad prehistoric periods based on changes in technology, social structure, subsistence, environmental conditions, and presumed ideology. Each of these periods is discussed below.

3.1.1 Paleoindian Period (ca. 13,500–10,000 B.P.)

When humans first arrived in North America is a subject of great debate, with suggested dates going back more than 35,000 years (Dillehay and Collins 1988; Goodyear 2005). Evidence for pre-Clovis occupations are posited for Meadowcroft Rockshelter in Pennsylvania, the Cactus Hill and Saltville sites in Virginia, and at the Topper site in South Carolina, although this evidence is not widely accepted and has not been validated (Adovasio and Pedler 1996; Dillehay and Collins 1988; Goodyear 2005). A number of sites providing possible evidence for a presence in the New World dating between 15,000 and 13,500 years ago have been discovered. Although far from numerous, these sites are scattered across North and South America, including Alaska, Florida, Oregon, Wisconsin, and southern Chile. Despite this, the earliest widely accepted dates for occupation in the Southeastern United States are at the end of the Pleistocene, approximately 13,000 years ago (Anderson and O'Steen 1992; Bense 1994).

Unfortunately, most data about Paleoindian lifeways in the Southeast comes from surface finds of projectile points rather than from controlled excavations. However, one recently discovered site, the Tree House site (38LX531) located along the Saluda River near Columbia, has shed light on Paleoindian lifeways in the area. The Tree House site is a multi-component, stratified site containing occupations ranging from the Early Paleoindian to Mississippian periods (Nagle and Green 2010). Evidence from the site, which yielded an *in-situ* Clovis point, indicated short-term use by relatively mobile populations. The tools found at the Tree House site could have been used for hunting and butchering, and it is likely that the site was used as a hunting camp during the Early and Late Paleoindian subperiods. Lithic raw materials associated with the Paleoindian component tended to be higher quality stone such as Black Mingo chert, Coastal Plain chert, and crystal quartz, although lesser quality local materials such as quartz were used as well (Nagle and Green 2010:264).

The limited information we have for the Paleoindian Period suggests the earliest Native Americans had a mixed subsistence strategy based on hunting (or scavenging) of megafauna and smaller game combined with the foraging of wild plant foods. Groups are thought to have consisted of small, highly transient bands made up of several nuclear and/or extended families. Paleoindian artifacts have been found in both riverine and inter-riverine contexts (Charles and Michie 1992:193). Paleoindian projectile points appear to be concentrated along major rivers near the Fall Line and in the Coastal Plain, although it is almost certain that many additional sites along the coast have been inundated by the rise of sea level that has occurred since that time (Anderson et al. 1992; Anderson and Sassaman 1996).

Paleoindian tools are typically well-made and manufactured from high-quality, cryptocrystalline rock such as Coastal Plain and Ridge and Valley chert, as well as Piedmont metavolcanics such as rhyolite (Goodyear 1979). Paleoindians traveled long distances to acquire these desirable raw materials and it is likely that particularly favored quarries were included in seasonal rounds, allowing them to replenish their stock of raw material on an annual basis.

The most readily recognizable artifact from the early Paleoindian period is the Clovis point, which is a fluted, lanceolate-shaped spear point. Clovis points, first identified from a site in New Mexico, have been found across the nation, although they tend to be clustered in the eastern United States (Anderson and Sassaman 1996:222). Paleoindian artifact assemblages typically consist of diagnostic lanceolate projectile points, scrapers, gravers, unifacial and bifacial knives, and burins. Projectile point types include fluted and unfluted forms, such as Clovis, Cumberland, Suwanee, Quad, and Dalton (Anderson et al. 1992; Justice 1987:17–43).

In South Carolina, the Clovis subperiod is generally thought to date from 11,500 to 11,000 B.P. (Sassaman et al. 1990:8). Recent radiocarbon data indicate that a more accurate time frame for the Clovis period in North America may be 11,050 to 10,800 B.P. (Waters and Stafford 2007); however, this has yet to gain widespread acceptance. Suwanee points, which are slightly smaller than Clovis points, are dated from 11,000 to 10,500 B.P. This is followed by Dalton points, which are found throughout the Southeast and date from about 10,500 to 9900 B.P.

3.1.2 Archaic Period (ca. 10,000–3000 B.P.)

Major environmental changes at the terminal end of the Pleistocene led to changes in human settlement patterns, subsistence strategies, and technology. As the climate warmed and the megafauna became extinct, population size increased and there was a simultaneous decrease in territory size and settlement range. Much of the Southeast during the early part of this period consisted of a mixed oak-hickory forest. Later, during the Hypsithermal interval between 8000 and 4000 B.P., southern pine communities became more prevalent in the interriverine uplands, and extensive riverine swamps were formed (Anderson et al. 1996; Delcourt and Delcourt 1985).

The Archaic was characterized by a long postglacial adaptation where technology became more diversified, including the introduction of ground stone woodworking and plant processing tools, carved and polished stone bowls, atlatl weights, stone pipes, and beads (Benson 2006:35). There was also a shift in lithic production toward smaller projectile points, possibly reflecting a change in hunting patterns from large to smaller game (Anderson and Joseph 1988:102; Goodyear 1974, 1982).

The Archaic Period is typically divided into three subperiods: Early Archaic (10,000–8000 B.P.), Middle Archaic (8000–5000 B.P.), and Late Archaic (5000–3000 B.P.). Each of these subperiods appears to have been lengthy, and the inhabitants of each were successful in adapting contemporary technology to prevailing climatic and environmental conditions of the time. Settlement patterns reflected a fairly high degree of mobility, making use of seasonally available resources in the changing environment across different areas of the Southeast. People relied on large animals and wild plant resources for food. Group size gradually increased during this period, culminating in a fairly complex and populous society by the Late Archaic.

3.1.2.1 Early Archaic (ca. 10,000–8000 B.P.)

The Early Archaic subperiod reflects a continuation of the semi-nomadic hunting and gathering lifestyle of the Paleoindian groups, although there was a focus on modern game species rather than megafauna, which had become extinct by this time. Changes during this subperiod include a population increase (Goodyear et al. 1989) and a shift in settlement patterns, with people concentrated in temporary encampments along river floodplains.

In the Carolinas and Georgia, various models of Early Archaic social organization and settlement patterns have been proposed (Anderson et al. 1992; Anderson and Hanson 1988). In general, these models hypothesize that Early Archaic societies were organized into small, band-sized communities of 25 to 50 people whose main territory surrounded a portion of a major drainage (Anderson and Hanson 1988). During the early spring, groups would forage in the lower Coastal Plain and then move inland to temporary camps in the Piedmont and mountains during the summer and early fall. In the late fall and winter, these bands would aggregate into larger, logistically provisioned base camps in the upper Coastal Plain, near the Fall Line. It is believed that group movements would have been circumscribed within major river drainages, and that movement across drainages into the territories of other bands was limited. At a more complex level of organization, bands were believed to be organized into larger "macrobands" of 500 to 1,500 people that periodically gathered at strategic locations near the Fall Line for communal food harvesting, rituals, and the exchange of mates and information.

Daniel (1998, 2001) has argued that access to high quality lithic material has been an under-appreciated component of Early Archaic settlement strategies. He presents compelling evidence that groups were moving between major drainages just as easily as they were moving along them. In contrast to earlier models, group movements were tethered to stone quarries rather than to specific drainages. Regardless of which model is correct, settlement patterns generally reflect a relatively high degree of mobility, making use of seasonally available resources such as nuts, migratory water fowl, and white-tailed deer.

Diagnostic markers of the Early Archaic subperiod include a variety of side and corner notched projectile point types, including Hardaway, Kirk, Palmer, Taylor, and Big Sandy, and later bifurcate base projectile point types such as Lecroy, McCorkle, and St. Albans. Additional tools of the Early Archaic subperiod include end scrapers, side scrapers, gravers, microliths, and adzes (Sassaman et al. 2002), and likely perishable items such as traps, snares, nets, and basketry. Direct evidence of Early Archaic basketry and woven fiber bags was found at the Icehouse Bottom site in the mountains of eastern Tennessee (Chapman and Adovasio 1977). There was also a greater reliance on local lithic sources than there was during the preceding Paleoindian Period and tools are sometimes made of lesser quality materials (Goodyear et al. 1989:38–39).

3.1.2.2 Middle Archaic (ca. 8000–5000 B.P.)

The beginning of the Middle Archaic subperiod coincides with the start of the Altithermal (a.k.a. Hypsithermal), a significant warming trend where pine forests replaced the oak-hickory dominated forests of the preceding periods. It was during this time that extensive riverine swamps were formed and the river and estuary systems took their modern configuration. These environmental changes caused changes in human behavior as well (Sassaman and Anderson 1995:10). However, the relationship between climatic, environmental, and cultural change during this period is still poorly understood (Sassaman and Anderson 1995:5–14). It is assumed that population density increased during the Middle Archaic, but small hunting

and gathering bands probably still formed the primary social and economic units. Larger and more intensively occupied sites tend to occur near rivers, especially within the Coastal Plain, and numerous small, upland lithic scatters dot the interriverine landscape. Subsistence was presumably based on a variety of resources such as white-tail deer, nuts, fish, and migratory birds; however, shellfish do not seem to have been an important resource at this time.

In contrast to both the Early and Late Archaic, there seems to be a wider geographic distribution and a higher density of Middle Archaic sites in the region, suggesting that a mid-Holocene population increase may have taken place. This population increase should be viewed with caution, however, as it is primarily based on the distribution of Morrow Mountain points. Morphological correlates of Morrow Mountain points (e.g., Rossville, [Ritchie 1961]), have been found in other regions dating to the Late Archaic and Early Woodland subperiods. Thus Morrow Mountain-like points could span a much longer period than is currently believed. Anderson also argues against a substantial population increase, stating "site concentrations in Georgia and the Carolinas are … unlikely to represent the presence of dense populations, but instead reflect the remains of small, organizationally uncomplicated groups ranging widely over the landscape" (Anderson 1996:164). Regardless of whether there was a population increase, small, mobile hunting and gathering bands probably still formed the core social and economic unit in South Carolina during the Middle Archaic.

During the Middle Archaic, ground stone tools such as axes, atlatl weights, and grinding stones became more common, while flaked stone tool styles became less diverse and tended to be made of locally available raw materials such as quartz (Blanton and Sassaman 1989). In addition to Morrow Mountain points, diagnostic point types of the Middle Archaic include Stanly, Guilford, Halifax, and Brier Creek (Blanton and Sassaman 1989; Coe 1964). Middle Archaic tools tend to be expediently manufactured and have a more rudimentary appearance than those found during the preceding Paleoindian and Early Archaic.

3.1.2.3 Late Archaic (5000–3000 B.P.)

The Late Archaic is marked by a number of key developments. There was an increased focus on riverine locations and resources (e.g., shellfish), small-scale horticulture was adopted, and ceramic and soapstone vessel technology was introduced. These changes allowed humans to occupy strategic locations for longer periods of time. In the spring and summer, Late Archaic people gathered large amounts of shellfish. It is not known why this productive resource was not exploited earlier, but one explanation is that the environmental conditions conducive to the formation of shellfish beds were not in place until the Late Archaic. Other resources that would have been exploited in the spring and summer months include fish, white-tailed deer, small mammals, birds, and turtles (House and Ballenger 1976; Stoltman 1974). During the late fall and winter, populations likely subsisted on white-tailed deer, turkey, and nuts such as hickory and acorn. It is also possible that plants such as cucurbita (squash and gourds), sunflower, sumpweed, and chenopod were being cultivated on a small-scale basis.

The most common diagnostic biface of this period is the Savannah River Stemmed projectile point (Coe 1964), a broad-bladed stemmed point found under a variety of names from Florida to Canada. There are also smaller variants of Savannah River points, including Otarre Stemmed and Small Savannah River points that date to the transitional Late Archaic/Early Woodland. Other artifacts include soapstone cooking discs and netsinkers, shell tools, grooved axes, and worked bone.

The earliest pottery in the New World comes from the Savannah River Valley and coastal regions of South Carolina and Georgia. Both Stallings Island and Thom's Creek pottery date from about 4500–3000 B.P. and have a wide variety of surface treatments including plain, punctated, and incised designs (Sassaman et al. 1990). For a long time it was believed that fiber-tempered Stallings Island pottery was the oldest pottery in the region (perhaps in the New World), and that sand-tempered Thom's Creek wares appeared a few centuries later (Sassaman 1993). Recent work at several shell ring sites on the coast, however, has demonstrated that the two types are contemporaneous, with Thom's Creek possibly even predating Stallings Island along the coast (Heide and Russo 2003; Russo and Heide 2003; Saunders and Russo 2002).

3.1.3 Woodland Period (ca. 3000–1000 B.P.)

Like the preceding Archaic Period, the Woodland is conventionally divided into three subperiods—Early, Middle, and Late—based on technological changes, increasing social complexity, and population increase. Among the changes that occurred during this period was the widespread adoption of ceramic technology, an increased reliance on native plant horticulture, and a more sedentary lifestyle. Ceramics became more refined and regionally differentiated, particularly with regard to temper. There was also an increase in sociopolitical and religious interactions, as evidenced by an increased use of burial mounds, increased ceremonialism, and expanded trade networks (Anderson and Mainfort 2002).

3.1.3.1 Early Woodland (3000–2300 B.P.)

By 3000 B.P., pottery was used throughout most of the Southeast and there was a proliferation of pottery styles in the Carolinas and Georgia. In the Coastal Plain of South Carolina, Refuge phase ceramics are indicative of the Early Woodland period. This pottery is characterized by coarse sand-tempered wares with surface treatments that include simple stamping, punctate, plain, and dentate stamping (DePratter 1979; Sassaman 1993; Williams 1968). Diagnostic bifaces of this period include Otarre, Swannanoa, and Gary stemmed points, as well as Badin Crude Triangular points (Anderson and Joseph 1988; Coe 1964:123–124, Sassaman et al. 1990).

Subsistence data indicate a continuation of the Late Archaic diet, including white-tailed deer, bear, small mammals, reptiles, and fish (Hanson and DePratter 1985; Marrinan 1975). One major difference, however, is that shellfish do not appear to have been an important part of the diet. Early Woodland sites tend to be small, seasonal camps located away from the marshes where shellfish are found. This may be a result of rising sea levels, which inundated the shellfish beds and possibly any sites located along the coast and tidal marshes (Trinkley 1990:12).

3.1.3.2 Middle Woodland (2300–1500 B.P.)

Middle Woodland pottery in coastal areas of South Carolina, Georgia, and Florida is represented by the Deptford pottery series, which dates from about 2800–1500 B.P. This coarse sand/grit-tempered pottery represents a continuation of the Early Woodland Refuge series and is often found in association with Refuge pottery. Surface treatments include plain, check stamped, linear check stamped, cordmarked, and simple stamped applications (DePratter 1979; Waring and Holder 1968). Also found during this period is the Yadkin series of the North Carolina Piedmont, which includes coarse sand– or crushed quartz–tempered cord and fabric-impressed surface treatments, as well as check-stamped ceramics (Coe 1964). Yadkin Large Triangular points are the most common diagnostic projectile points of the Middle Woodland (Coe 1964); although Trinkley (1989:78) mentions a very small stemmed point he calls Deptford Stemmed.

Other artifacts found in Middle Woodland assemblages include clay platform pipes, ground and polished stone ornaments, engraved shell and bone, bone tools, bifacial knives, and sharks tooth pendants (Sassaman et al. 1990:96; Waring and Holder 1968).

Middle Woodland occupations in South Carolina are not well documented and settlement models tend to follow Milanich's "seasonal transhumance" model for the Deptford period in Florida (Milanich 1971; Milanich and Fairbanks 1980), which posits that, in the winter and summer months, groups moved to the coast and lived in small, semi-permanent villages adjacent to tidal creeks and marshes. From these locations they would fish, gather shellfish, and exploit a variety of other marine and estuarine resources. In the fall, small groups moved inland to terraces adjacent to swamps to gather nuts and hunt white-tailed deer (Cantley and Cable 2002:29; Trinkley 1989:78-79). Horticulture is thought to have increased in importance during this period, with plants such as maygrass, goosefoot, knotweed, and sunflower being harvested. Unfortunately, evidence for Middle Woodland horticulture in South Carolina is still lacking.

In contrast to Milanich's model, evidence from the G.S. Lewis West site (38AK228) in Aiken County (Sassaman et al. 1990:96-98) suggests a year round settlement, occupied by a small resident population. Over 500 features, including pits, posts, human burials, and dog burials were found at the site. White-tail deer was the primary food source, with alligator, turtle, fish, turkey, freshwater mussels, hickory, and acorns also found (Sassaman et al. 1990:96). Based on the evidence at G.S. Lewis and surrounding sites at the Savannah River Site, Sassaman et al. (1990:98) suggest a pattern where small villages were occupied on a year-round basis, with smaller outlying sites (e.g., 38LX5) representing seasonally occupied logistical camps.

3.1.3.3 Late Woodland (1500-1000 B.P.)

Very little is known about the Late Woodland subperiod (1500–1000 B.P.) in South Carolina. In the Coastal Plain, there is a confusing proliferation of ceramic types for the Late Woodland period, including Wilmington, Hanover, Mount Pleasant, and Cape Fear (Anderson et al. 1996). Ceramics were tempered with either sand or grog and contain cordmarked or fabric-impressed surface treatments. Grog-tempered Wilmington cordmarked pottery is found more frequently on the southern coast, whereas Hanover grog-tempered fabric impressed pottery is found more often to the north, although there is substantial overlap between the two (DePratter 1979; Herbert and Mathis 1996:149). As the two series are very similar, Anderson et al. (1996:264) recommend combining them both into the Wilmington series.

Cape Fear pottery is nearly identical to the Hanover series, but is tempered with sand rather than grog. Also, cordmarking seems to be more common on Hanover sherds, while fabric-impressing is more common on the Cape Fear pottery (Herbert and Mathis 1996). Cape Fear ceramics have been found at the Mattassee Lake site (38BK226), with dates ranging from 1240–1430 B.P. (Anderson et al. 1982:354), while similar ceramics have been found at the Sandy Island site (38GE469) with dates ranging from 820–1180 B.P. (Clement et al. 2001:30), and at the Tidewater site (38HR254) dating from 860–1020 B.P. (Southerlin et al. 1997:75–77).

Toward the latter end of the Late Woodland and incipient Mississippian periods, ceramic assemblages in coastal South Carolina show more localized developments. St. Catherines pottery is a fine grog-tempered ware found along the lower coast, with surface treatments that include cordmarked, net-impressed, plain, and burnished plain (Anderson et al. 1996; DePratter 1979). Along the upper coast and interior Coastal

Plain, Santee Simple Stamped is a transitional Late Woodland/Early Mississippian type, with dates from Mattassee Lake ranging from 610–1140 B.P. (Anderson et al. 1982:354).

3.1.4 Mississippian Period (ca. 1000–350 B.P.)

The Mississippian Period saw dramatic changes across most of the Southeastern United States. Mississippian societies were complex sociopolitical entities that were based at mound centers, usually located in the floodplains along major river systems. The flat-topped platform mounds served as both the literal and symbolic manifestation of a complex sociopolitical and religious system that linked chiefdoms across a broad network, stretching from the Southeastern Atlantic Coast to Oklahoma (Spiro Mounds) in the west and Wisconsin (Aztalan) to the north. Mound centers were surrounded by outlying villages, hamlets, and farmsteads that provided tribute and services to the chief. While Mississippian subsistence was focused to a large extent on intensive maize agriculture, the hunting and gathering of aquatic and terrestrial resources supplemented Mississippian diets (Anderson 1994).

Mound centers have been found along most major river systems in the Southeast and South Carolina is no exception. Major Mississippian mounds in the area include the Belmont and Mulberry sites along the Wateree River in central South Carolina; Santee/Fort Watson/Scotts Lake on the Santee River; the Irene site near Savannah; Hollywood, Lawton, Red Lake, and Mason's Plantation in the central Savannah River Valley; and Town Creek along the Pee Dee River in North Carolina (Anderson 1994). There also seems to have been a substantial Mississippian presence on the coast near Beaufort that includes the Green Shell Enclosure, Indian Hill, Little Barnwell Island, and Altamaha (Green and Bates 2003).

Artifacts of the Mississippian period include small triangular projectile points, ground stone tools, and polished stone objects. In addition, various ceremonial items were manufactured from stone, bone, shell, mica, and copper that were used as symbolic markers of chiefly power and status. Mississippian ceramic styles were also different from the preceding Woodland Period and are regionally variable. Along the southern South Carolina coast and into Georgia, the Savannah series is the dominant pottery type (DePratter 1979; Williams 1968); however, along the northern coast Late Woodland styles appear to extend into the Middle Mississippian Period. Recent investigations at site 38HR243 along the Little River Neck in Horry County yielded radiocarbon dates of 750±80 B.P. and 790±80 B.P. from a pit feature containing shell-scraped, cordmarked, check stamped, and fabric-impressed pottery (Reid et al. 1999). In contrast, site 38HR254, located less than 600 m to the north (Southerlin et al. 1997), yielded slightly later dates of 660±60 B.P. and 810±60 B.P. (shell, calibrated to a.d. 1430–1645) from a shell-filled pit containing curvilinear complicated stamped pottery. At site 38GE32 along the Sampit River in Georgetown County, Mississippian complicated stamped, check stamped, and textile-impressed pottery were all found in association with a feature yielding a human cremation (Green and Holland 2004).

3.2 Historic Context

The project area is located in the south central portion of Kershaw County, approximately four miles southeast of the city of Camden. The Wateree River is located to the east and the project tract is situated between the large river tributaries of Gillies Creek and Twenty-Five Mile Creek. Kershaw County did not come into existence until 1791, when it was formed from portions of Claremont, Fairfield, Lancaster, and Richland counties; the county was named for Joseph Kershaw, who came to the area in 1758 and was a successful businessman. The development of the county is closely tied to the Wateree River, which served

as a reliable means of transportation during the 1700s and 1800s, and later became a source of power and recreation for the area.

3.2.1 Kershaw County

From its earliest settlement, South Carolina was viewed as a source of wealth for its colonial power, primarily through agricultural production. When English settlers established Charles Towne in 1670, they were following in the footsteps of both the Spanish and the French by attempting to found a permanent settlement along the Carolina coast. Unlike previous attempts, however, the Charles Towne settlement was ultimately successful. Although the earliest colonists concentrated themselves along the coast, throughout the area known as the Lowcountry, some settlers began to move further inland during the early and mid-eighteenth century. The establishment of inland townships in the 1730s attracted more residents to the area, with Fredericksburg, which later became Pine Tree Hill (and then Camden) located closest to the project tract, northeast of the Wateree River. Camden, considered the oldest inland city in the state, was settled by immigrants claiming a variety of heritages, including Quakers and Scots-Irish, who travelled north from the Charleston area and south from the Pennsylvania area on the Great Wagon Road (Edgar 1998:53–60; Weir 1997).

In 1769, the area became part of Camden District, which encompassed the territory between the Lyches River to the north and the Congaree River to the south. The town of Camden continued to grow, becoming an important trading hub for inland commerce. At the outbreak of the American Revolution, a decade later, population increases had made the European settlements in this area important strategic points (Moore 1993:19). The residents of the Camden and Kershaw County area were staunch advocates of independence from Britain and for the ideals of the American Revolution. Fighting within the boundaries of Kershaw County began in July 1780 and continued for nearly a year, with 14 battles waged within the county. August 1780 had the most fighting, including the Battle of Camden on August 16. The Battle of Camden was a significant victory for the British under General Cornwallis, allowing him to establish a seat of command in a non-coastal area. The April 1781 Battle of Hobkirk's Hill, north of Camden, was also a British victory, although the army was forced to withdraw (Gordon 2003; Edgar 1998:235). Eventually, following American victories in the Piedmont, the British were forced to abandon their inland outposts, including Camden, and subsequently Charleston, in December 1782 (Edgar 1998:240).

From the late seventeenth century into the early eighteenth century, rice and indigo were the primary cash crops for South Carolina farmers, with the largest settlements concentrated around the coast and tidal rivers. After the American Revolution, indigo underwent a sharp decline and, although rice was still grown in tidal areas, it was surpassed in importance by cotton, especially in areas further from the coast. Eli Whitney's 1793 invention of the cotton gin significantly bolstered this migration to cotton as the principal agricultural yield in South Carolina. This invention made farming of short-staple cotton in upcountry areas profitable by greatly decreasing the amount of labor needed to separate the cotton seeds from the fibers (Kovacik and Winberry 1989:83–95).

In 1790, the new United States government conducted the first census. At this time the four counties that included portions of the future Kershaw County had a total population of 22,403, with only 6,402, or approximately 28.6 percent of the population, listed as slaves; the portion of Kershaw County containing the project tract was within Richland County at the time, which had nearly 4,000 residents and a slave population that comprised 36.6 percent of that number. Following the turn of the nineteenth century,

until the Civil War, the population of Kershaw County not only expanded, but it also changed significantly in its composition. By 1800, area farmers had begun to convert to mass cotton production and slave populations increased dramatically during the first decades of the nineteenth century. In 1800, Kershaw County's population was 7,340, of which 2,530 (34.5 percent) were slaves; by 1810, the number of slaves in Kershaw County had nearly doubled from the previous decade and, by 1830, there were 8,333 slaves in the county—more than three times the number recorded only forty years earlier. Slavery had become more widespread in the county by 1830 and slaves accounted for 61.5 percent of the Kershaw County's total population, slightly higher than the state average of 54.2 percent (Inter-University Consortium for Political and Social Research [ICPSR] 2004).

In addition to the cotton gin and the growth in slave labor, cotton farmers also benefited from canal construction, which peaked in South Carolina during the early 1800s. These canals, including four canals constructed on the Catawba-Wateree River system, made shipment of raw cotton to coastal markets easier and significantly less expensive than travel over roads. Access to coastal markets made selling cotton as a cash crop a profitable enterprise, allowing plantation owners to increase land holdings and wealth. The Wateree Canal, one of the four, was built in the early 1820s, approximately seven miles north of Camden, and traversed a fall of approximately 52 feet over a five mile span with six locks; although the original wooden locks were replaced with granite ones in 1829, the Wateree Canal remained in operation only until 1838 (Kovacic and Winberry 1989). Also benefiting upstate cotton farmers was the presence of railroads, which proved to be a better means of transporting agricultural products than canals by traveling more quickly, carrying more cotton, and reaching more areas. A branch of the South Carolina Railroad, spanning from Kingsville to Camden and ultimately connecting Camden to Branchville, began running through Kershaw County before the Civil War, reaching Camden in 1848 (Kovacik and Winberry 1989: 95–98).

The advent of the railroad fostered the development of towns near the places where trains stopped. Expansion of the railroad system in the Fall Line region of South Carolina encouraged the growth of Kershaw and the surrounding counties. Small towns appeared along the railroad routes, and some villages that had already existed grew larger and more prominent. Boykin was one of the stops along the Camden to Branchville Railroad line and had a post office stop in the 1840s and 1850s, although it was discontinued in 1855 (Edgar 1998). The community of Liberty Hill, although not on the railroad line, grew in popularity as a resort town (Reed 2002).

By 1861, the region was facing the reality of the Civil War. Agriculture was disrupted by men leaving for war and cotton, no longer being sold and shipped to Northern manufacturers, sat in warehouses waiting for a buyer. Although Kershaw County did not experience significant battles until the final year of the war, a Camden hotel was converted into a Confederate Hospital in 1862. In 1865, the town was occupied by Federal troops under General William T. Sherman and sustained fire damage on Broad Street. In April 1865, during a series of raids to destroy railroads in South Carolina, the Union Army, under General Edward Potter, engaged cavalry units from Kentucky near Boykin's Mill, near the town of Boykin in lower Kershaw County. The Confederate forces were forced to retreat from Boykin's Mill and the battle proved to be the final one in South Carolina during the Civil War. Notably, the Battle of Boykin's Mill also featured troops from the 54th Massachusetts Volunteer Infantry Regiment, one of the first official black regiments in the army and famed for its role in the siege of Fort Wagner; the battle saw the final Union officer casualty of the war as well (Edgar 1998).

Like many other South Carolina residents, those in the Wateree River region mostly returned to cotton farming after the Civil War, often limiting their production to only cotton, or supplementing it with a small amount of corn. As cotton prices dropped, farmers had to grow more of the crop just to pay their bills. Farms in Kershaw County increased in number but decreased in size after the war. From 1860 to 1920, the number of farms in the county grew to more than eight times its prewar number, from 450 to 3,664, as large plantations were divided and worked by tenant farmers or sharecroppers. These systems, where small farmers worked for larger landowners, often for only a small share of profits, created a perpetual system of borrowing and debt. In turn, this necessitated the cultivation of more marginal land (ICPSR 2004; Kovacik and Winberry 1987:108–111).

In addition to the breaking up of large farms, exhausted soils caused many farmers to migrate towards the Wateree River area, looking for lands that were more fertile to increase their yields. Tenants were constantly seeking better soils and larger plots to help stay afloat in the poor cotton market. This ongoing cycle of tenancy and mobility lasted throughout the early twentieth century. The situation was further exacerbated by boll weevil infestations that caused a virtual collapse of the state's cotton industry. By the end of World War I, approximately 67 percent of farms in Kershaw County were operated by tenants, slightly higher than the 64.5 percent state average. Although both black and white farmers were part of this system, blacks often were more marginalized than their white counterparts and were more affected by these developments. This left them unable to free themselves from tenancy and sharecropping, and resulted in 69.2 percent of tenants in Kershaw County being classified as "non-white" (ICPSR 2004; Kovacik and Winberry 1987:108–111).

Railroad expansion occurred throughout the late nineteenth century, beginning with the 1887 expansion of the old South Carolina Railroad branch to Camden, extending it northward to Marion, North Carolina. A small line connecting Camden to Sumter was built around 1900. However, the construction of the Seaboard Airline Railway in 1899 brought a significant increase in prosperity to the area and induced growth of the small towns along the line, including Lugoff, Cassatt, Elgin, and Bethune (Reed 2002).

Although cotton production still dominated the South Carolina midlands region, industrial development began to occur in the late nineteenth century. Following a pattern that was occurring throughout the South, investors began financing and building mills to bring textile production closer to the source of raw cotton. They also reinvested in railroads, in an attempt to link more rural farming areas directly to mill towns and ultimately to northern markets (Kovacik and Winberry 1987:114–115). In 1890, the Camden Cotton Factory was built; it was reorganized as the Hermitage Cotton Mill 15 years later. The DeKalb Mill (which would eventually become Kendall Mill) was organized in 1899 and opened the following year; the Cotton Seed Oil Company was chartered in 1902 (Moore 1989).

By the early twentieth century, the textile mills in the region were offering a large number of jobs, which influenced many people to move into the nearby towns. Some of the mills were associated with large towns and cities and the mill communities began to interlace with the larger community. In other instances, mill owners situated their mills, as well as the associated housing and commercial ventures, away from the established cities. The DeKalb Cotton Mill had been constructed along the eastern boundary of the town of Camden and included a mill building, designed by W. B. Smith Whaley, and a village of 70 homes for workers. Although textile mills were popular investments in the early twentieth century, economic and agricultural depressions hit hard in the 1920s and many mills closed during this time. Some reopened with the increased need for production brought on by World War II (Kolbe et al. 1981).

Kershaw County was slightly different from many Southern communities during the first half of the twentieth century. Both the total population of the county and the non-white population increased from 1910 to 1940, although the increase for the non-white segment was significantly less (1,140 over three decades) as many African-Americans left the rural south for larger cities in the Northeast and Midwest, searching for steady work and better pay (Kovacik and Winberry 1987; ICPSR, 1890–1950).

In addition to the expansion of industrial and residential development, the Catawba-Wateree River system also underwent some major changes that would greatly affect the topography of the region. Upriver, new textile mills needed electricity to run their machines and the Catawba Power Company began to operating hydroelectric stations in 1904. This was the first step in what would become a network of generators. In 1919, the Wateree Hydro Station was constructed across the Wateree River, northwest of Camden, by the Wateree Power Company (a predecessor of the Duke Power Company); the facility includes a 3,380 foot long dam and generating station with five units and a 56 megawatt capacity, as well as the nearly 14,000 acre Lake Wateree (Woody and Beard 2002).

In the late twentieth and early twenty-first centuries, the Wateree River area has retained its importance and has continued to expand. DuPont began construction on a new textile plant in 1949, which opened the following year and became the largest employer in Kershaw County. The construction of Interstate 20 in the 1960s and 1970s was a significant factor in this growth, establishing a vital east-west connection between Texas and the east coast, and ultimately the northeast (Moore 1987: 238–239, 251). During the 1990s and 2000s, residential growth boomed around Lake Wateree (Reed 2002).

3.3 Previously Recorded Cultural Resources

On September 9, 2016, a background literature review and records search was conducted at the South Carolina Institute of Archaeology and Anthropology (SCIAA) in Columbia. The area examined was a 0.5-mile radius around sites 38KE1135 and 38KE1164 (Figure 3.1). The records examined at SCIAA include a review of ArchSite, a GIS-based program containing information about archaeological and historic resources in South Carolina. If cultural resources were noted within the 0.5-mile search radius, then additional reports and site forms contained at SCIAA and the South Carolina Department of Archives and History (SCDAH) were consulted.

Based on the results of the background research four archaeological sites, three archaeological points, and two cultural resource surveys have been recorded within a 0.5-mile radius of the current project area (Figure 3.1, Table 3.1). Five of the archaeological sites and archaeological points (38KE1131, 38KE1135, 38KE1164, 38KE1165, and 38KE1166) recorded in ArchSite were identified during the 2011 CRIS and 2014 Phase I Survey of the Conder Mega Site (Carta and Jones 2011; Nagle and Carpini 2014); the two remaining archaeological sites (38KE252 and 38KE255) were recorded in 2001. Site 38KE1135 is an Early Woodland through Mississippian camp site and site 38KE1164 is a Late Archaic through Mississippian camp site; both sites were recommended for additional work. The remaining archaeological sites and archaeological points were determined to be ineligible for inclusion in the NRHP.

As part of the background research, Henry Mouzon's (1775) map of North and South Carolina, Mills Atlas (1825), a 1919 soil survey map of Kershaw County, and United States Geological Survey (USGS) topographic maps from 1938 and 1953 were examined. Mouzon's map indicates that the project area was part of Camden Precinct and shows no individual landowners in the vicinity of the project area in the

eighteenth century. Mill's Atlas of Kershaw District shows a mill at the fork of the creek, just east of the 2011 project area (Figure 3.2). The 1919 soil survey map shows two structures within the 2011 project area and no structures within the current survey area (Figure 3.3). The 1938 topographic map shows 11 structures within the 2011 project area and one structure within the current survey area (Figure 3.4). The 1953 USGS topographic map depicts only two structures and two outbuildings located along the dirt road in the western portion of the 2011 project area (Figure 1.1 and 1.3), indicating that most of the other structures had been torn down during the mid-twentieth century.

Table 3.1. Previously Recorded Cultural Resources within a 0.5-mile Radius of the Project Area.

Site No.	Description	NRHP Eligibility	Reference
38KE252	Prehistoric lithic scatter	Not Eligible	SCIAA site form (2001)
38KE255	Middle Archaic lithic scatter	Not Eligible	SCIAA site form (2001)
38KE1131	Prehistoric lithic scatter	Not Eligible	Carta and Jones 2011
38KE1135	Early Woodland–Mississippian camp site	Additional Work	Carta and Jones 2011; Nagle and Carpini 2014
38KE1164	Late Archaic through Mississippian camp site	Additional Work	Nagle and Carpini 2014
38KE1165	Early to Middle Woodland scatter	Not Eligible	Nagle and Carpini 2014
38KE1166	Early to Middle Woodland scatter	Not Eligible	Nagle and Carpini 2014

3.4 Previous Cultural Resource Investigations in the Project Area

In March 2011, S&ME completed a CRIS of approximately 1,455 acres at the proposed Conder Mega Site (Carta and Jones 2011). As a result of the CRIS, seven archaeological sites (38KE1129 through 38KE1135), two isolated finds, and two late twentieth century historic scatters were identified. It was S&ME's opinion that a Phase I survey be conducted on approximately 192 acres of the project area that had a high potential for containing significant archaeological sites and that Phase II testing be conducted at site 38KE1135 to determine the final NRHP eligibility of the site (Carta and Jones 2011). A limited architectural survey was conducted during the CRIS and no structures 40 years or older were identified within or adjacent to the project area. The SHPO agreed with these findings in a letter dated April 18, 2011 (Appendix A).

In October 2014, S&ME completed the Phase I survey on 192 acres (Nagle and Carpini 2014). These investigations resulted in identification of eight previously unrecorded archaeological sites (38KE1159 through 38KE1166), three isolated finds, and two late twentieth century artifact scatters. In addition, two sites that were identified during the CRIS—38KE1132 and 38KE1135—were re-located. Phase II testing was not conducted at site 38KE1135 at that time. Based on the results of the investigations, sites 38KE1132, 38KE1159 through 38KE1163, 38KE1165, and 38KE1166, were recommended as being ineligible for inclusion in the NRHP. Site 38KE1135, an Early Woodland through Mississippian camp site, and site 38KE1164, a Late Archaic through Mississippian camp site, contained intact deposits and were through to have the potential to be significant sites. S&ME recommended that sites 38KE1135 and 38KE1164 be avoided by ground disturbing activities. If avoidance was not possible, it was recommend that Phase II testing be conducted to determine each site's final National Register status (i.e., eligible or not eligible). The remainder of the Conder Mega Site contained no significant cultural resources and S&ME recommend no additional work in these areas. The SHPO agreed with these findings in a letter dated November 7, 2014 (Appendix A).

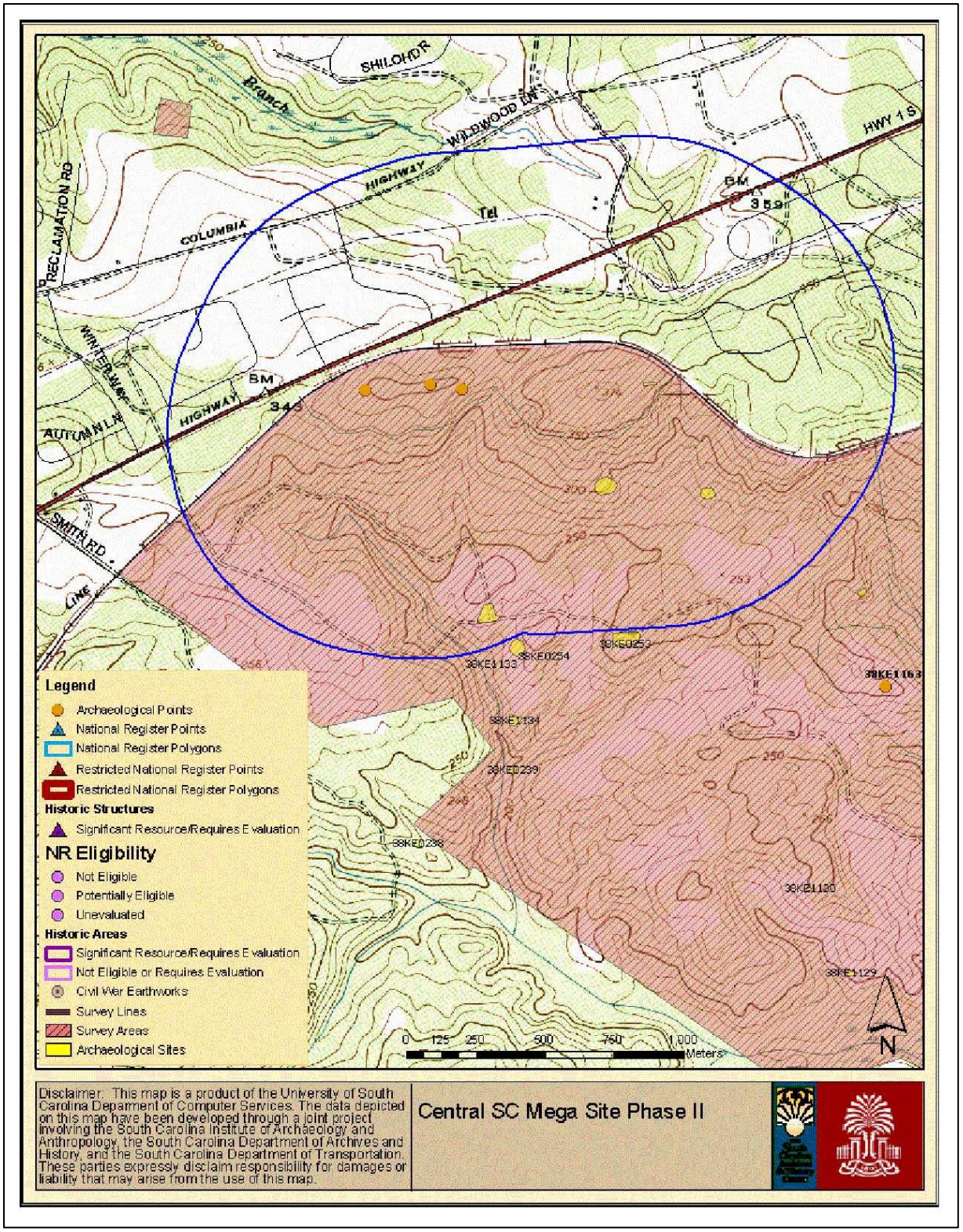


Figure 3.1. SCIAA map showing project area and 0.5-mile search radius.

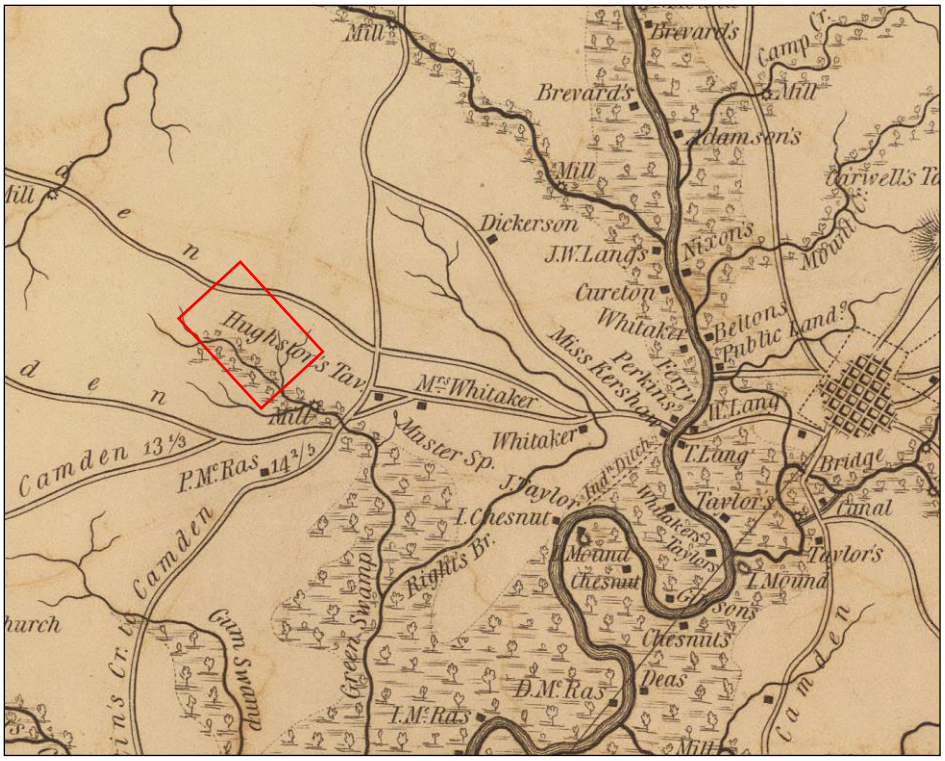


Figure 3.2. Mills Atlas Map of Kershaw District, showing approximate location of the project area.

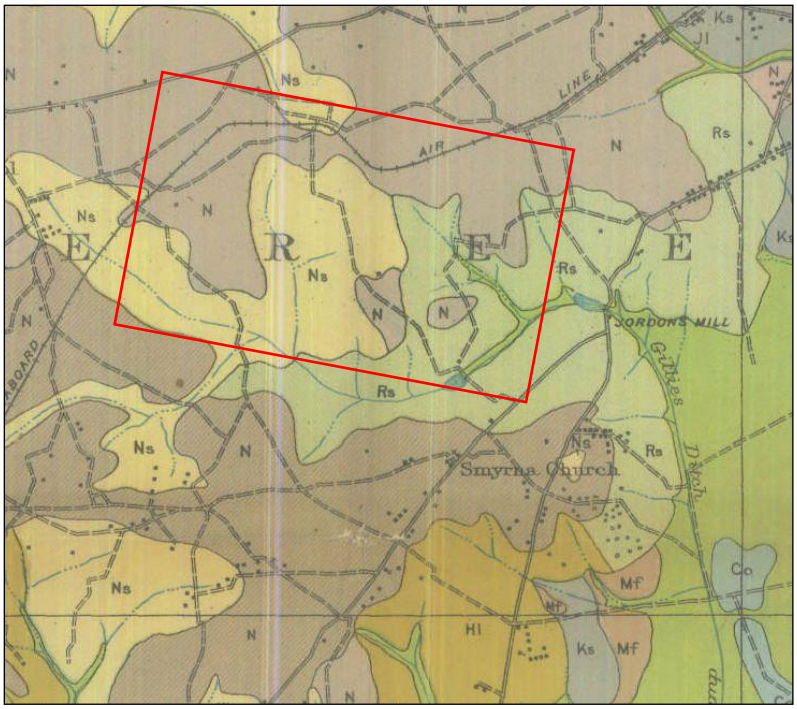


Figure 3.3. Soil survey map of Kershaw County showing approximate location of the project area.

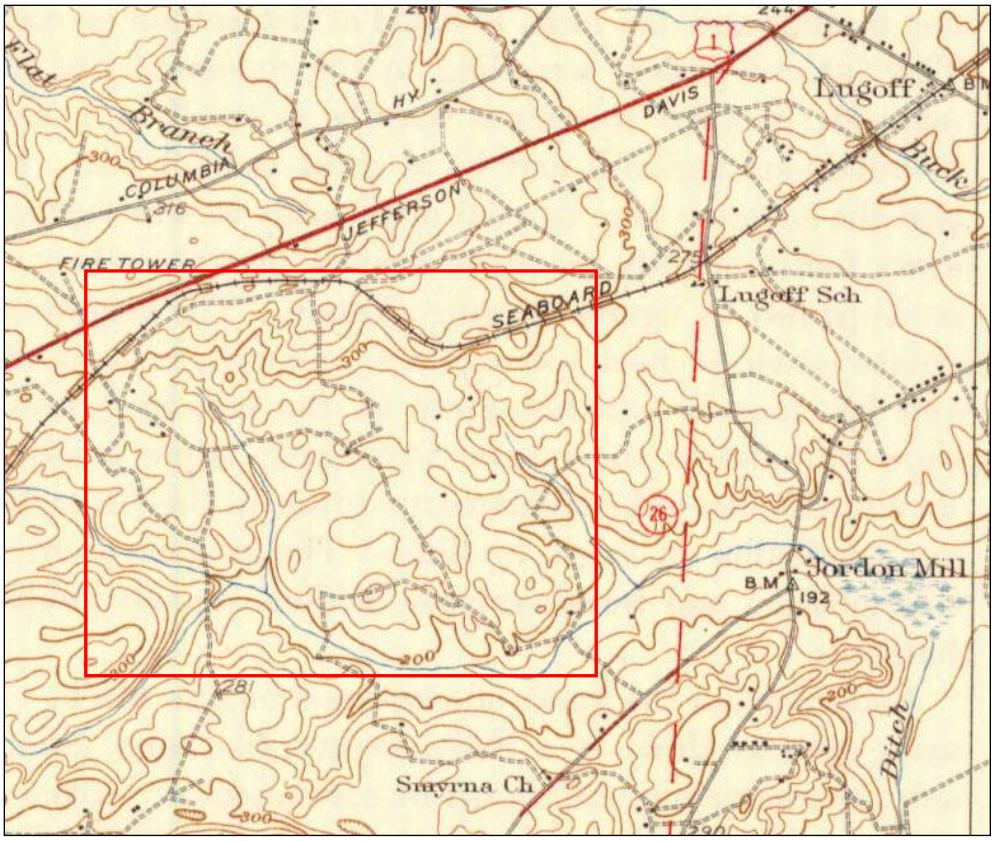


Figure 3.4. USGS topographic map (1938) showing approximate location of the project area.

4.0 METHODS

4.1 Archaeological Field Methods

From September 12 through September 16, 2016, Senior Archaeologist Kimberly Nagle, Field Directors Quinn-Monique Ogden and Frank Carvino, and Field Technician Chris Handley conducted Phase II evaluative testing at sites 38KE1135 and 38KE1164 at the proposed Central SC MegaSite (previously known as the Conder Mega Site). Three 1-x-2-m test units were excavated at site 38KE1135; three 1-x-2-m test units and one 1-x-1-m test unit were excavated at site 38KE1164. The test units were placed at various locations across the sites to investigate the types of materials present, the integrity of the archaeological deposits, the depth of the cultural material, and the nature of the soils. Another goal was to determine if intact cultural features were present and, if so, to ascertain their age and function. Test units were placed in areas of high artifact density and intact stratigraphy, based on the results of shovel testing conducted for the CRIS and Phase I and/or areas believed to have the best chance of containing significant archaeological deposits or features. UTM coordinates were obtained from the northwest corner of each test unit using a Trimble GPS unit (capable of sub-meter accuracy). The northwest corner of each unit also served as the unit elevation datum, which was placed 10 cm above the ground surface.

Excavation of test units proceeded in 10-cm levels within natural or cultural strata, with the exception of the plowzone which was removed as a single level. Excavations continued until subsoil or two culturally sterile levels were encountered, whichever came first. Soil from each test unit was screened through ¼-inch hardware cloth. Features, if encountered, were bisected, screened through 1/8-inch hardware cloth, photographed, and recorded in detail. Artifacts were placed in bags labeled with the site number, excavator's name, provenience, and date. A unit level form was filled out for each level excavated, and a unit summary form was completed for each test unit. These forms contained information regarding the excavation strategy, soil texture and Munsell color, and the number and types of artifacts and features encountered. Once excavation of the test unit was complete, a profile of one wall was drawn and photographed and the unit was backfilled.

4.2 Laboratory Methods

Artifacts recovered during the survey were cleaned, identified, and analyzed using the techniques summarized below. Following analysis, artifacts were bagged according to site, provenience, and specimen number and the information was entered into an Excel spreadsheet (Appendix B). Acid-free plastic bags and artifact tags were used for curation purposes.

Lithic artifacts were initially identified as either debitage (flakes and shatter) or tools. Debitage was sorted by raw material type and size graded using the mass analysis method advocated by Ahler (1989). When present, formal tools were classified by type, and metric attributes (e.g., length, width, and thickness) were recorded for each unbroken tool. Projectile point typology generally followed those contained in Coe (1964), Justice (1987), and Sassaman et al. (1990).

Prehistoric ceramics greater than 1 cm^2 were sorted by sherd type (rim or body), surface treatment, and temper (using the Wentworth scale). Once sorted, these categories were further analyzed for other diagnostic attributes such as paste texture, interior treatment, rim form, and rim/lip decoration. Where possible, this data was used to place the sherds within established regional types. Information on the ceramic typology of the project area was derived primarily from Anderson et al. (1996), Anderson and

Joseph (1988), DePratter (1979), Sassaman et al. (1990), and Trinkley (1990). Sherds less than 1 cm^2 were classified as "residual sherds" and only their count and weight were recorded.

Historic artifacts were separated by material type and then further sorted into functional groups. For example, glass was sorted into window, container, or other glass. Maker's marks and/or decorations were noted to ascertain chronological attributes using established references for historic materials, including Noel Hume (1970), South (1977) and Miller (1991).

The artifacts, field notes, maps, photographs, and other technical materials generated as a result of this project will be temporarily curated at the S&ME office in Columbia. After conclusion of the project, project materials will be returned to the client or transferred to a curation facility meeting the standards established in *36 CFR Part 79, Curation of Federally-Owned and Administered Archaeological Collections*.

4.3 National Register Eligibility Assessment

For a property to be considered eligible for the NRHP it must retain integrity of location, design, setting, materials, workmanship, feeling, and association (National Register Bulletin 15:2). In addition, properties must meet one or more of the criteria below:

- are associated with events that have made a significant contribution to the broad patterns of our history; or
- are associated with the lives of persons significant in our past; or
- embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- have yielded or may be likely to yield information important in history or prehistory.

The most frequently used criterion for assessing the significance of an archaeological site is Criterion D, although other criteria were considered where appropriate. For an archaeological site to be considered eligible under Criterion D, it must have potential to add to the understanding of the area's history or prehistory. A commonly used standard to determine a site's research potential is based on a number of physical characteristics including variety, quantity, integrity, clarity, and environmental context (Glassow 1977). In practice, a significant site should, in most cases, contain one or more of the following: temporally diagnostic artifacts; discrete clusters of artifacts; intact features such as pits, hearths, or postmolds; stratigraphic integrity; and/or well-preserved organic remains. These factors were considered in assessing a site's potential for inclusion in the NRHP.

5.0 RESULTS

From September 12 through September 16, 2016, S&ME conducted Phase II evaluative testing at sites 38KE1135 and 38KE1164. During fieldwork, three 1-x-2-m test units were excavated at site 38KE1135 and three 1-x-2-m test units and one 1-x-1-m test unit were excavated at site 38KE1164, in areas of high artifact density and intact stratigraphy based on the results of shovel testing conducted during the CRIS and Phase I investigations and/or areas believed to have the best chance of containing significant archaeological deposits or features.

5.1 Site 38KE1135

Site Number: 38KE1135	**NRHP Recommendation**: Not Eligible
Site Type: Prehistoric camp site	**Elevation:** 365 ft AMSL
Components: Early Woodland through Mississippian	**Landform:** Hilltop
UTM Coordinates: E526734, N3785147 (NAD 1927)	**Soil Type**: Lakeland sand
Site Dimensions: 180 m E/W x 100 m N/S	**Vegetation:** Young longleaf pine; secondary growth
Artifact Depth: Surface; 10–63 cmbd	**No. of TUs/Size of TUs:** 3/1 x 2 m

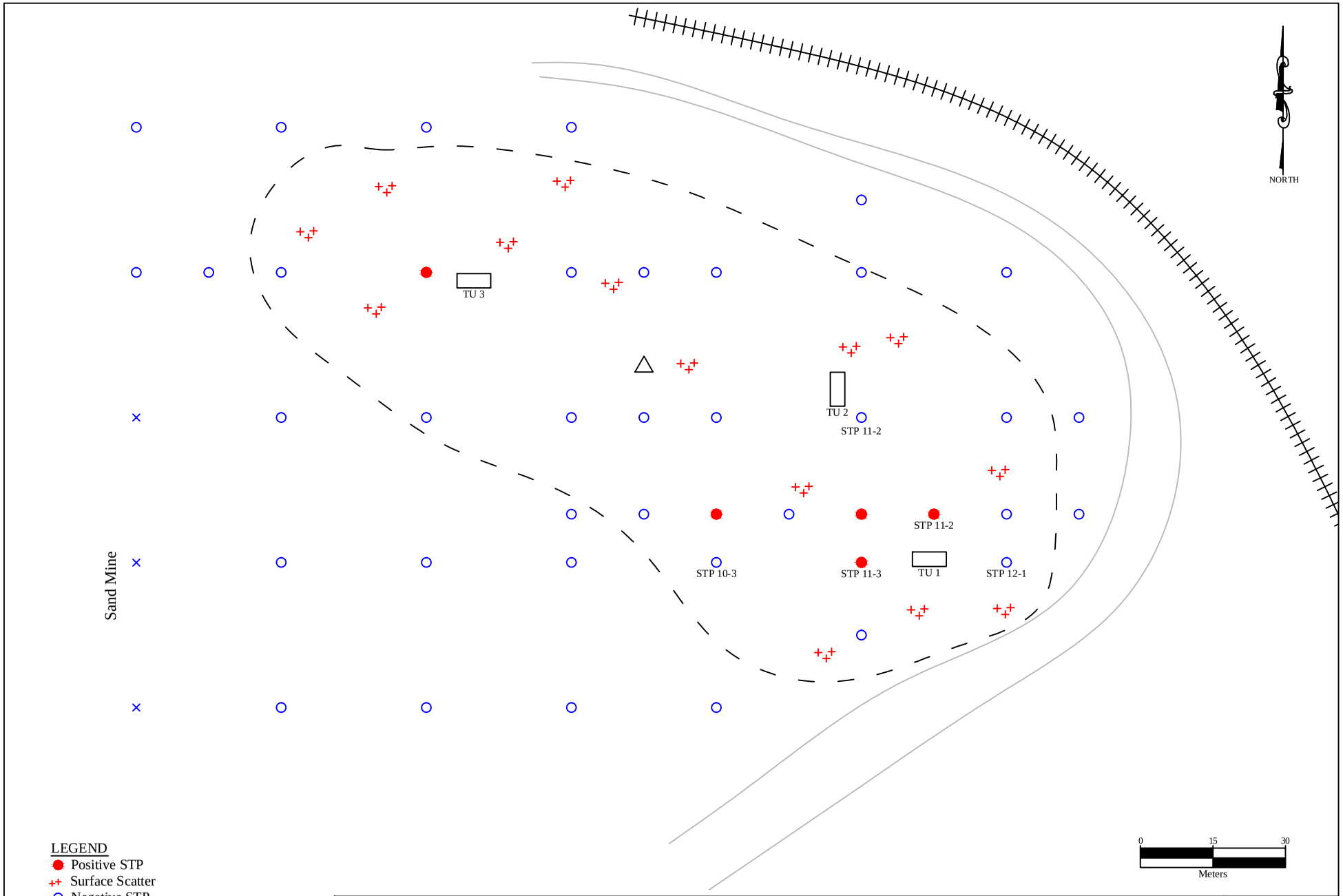
Site 38KE1135 is an Early Woodland through Mississippian camp site located on the edge of a hilltop adjacent to an active rail line, approximately 0.5-mile northwest of an unnamed tributary of Gillies Creek (Figures 1.1 and 1.3). The site measures approximately 180 m east/west by 100 m north/south. Vegetation at the site consists of young longleaf pine and secondary growth (Figures 2.2, 2.3, and 5.1).

The site was initially recorded in 2011 and was identified as an unknown prehistoric lithic scatter (Carta and Jones 2011). No diagnostic artifacts were identified at the site in 2011; however, the site contained a dense variety of artifacts and raw material types in intact stratigraphy beneath the plowzone. The site was determined potentially eligible for inclusion in the NRHP and Phase II testing was recommended.

In 2014, the area containing site 38KE1135 was subjected to Phase I investigation (Nagle and Carpini 2014). The site was re-located and its boundaries were expanded to the current measurements, however, Phase II testing was not conducted at that time. Yadkin and Mississippian pottery was recovered from the site in 2014, along with fire cracked rock, hammerstone, a biface fragment, and lithic debitage. Artifacts were collected from the surface of the site and from intact deposits below the plowzone. The site was recommended for additional work to determine the site's NRHP eligibility. In a letter dated November 7, 2014, the SHPO commented that if state or federal permits, licenses, funds, loans, grants, or assistance for development were necessary for the project, they would recommend that site 38KE1135 be avoided by construction activities. If avoidance was not possible, the SHPO would recommended further testing to determine the site's eligibility for listing on the NRHP (Appendix A).

5.1.1 Phase II Testing

Phase II testing at site 38KE1135 included the excavation of three 1-x-2-m test units placed within the site, where higher artifact concentrations were identified during shovel testing (Figure 5.1). Each of these test units is described below.



LEGEND
- Positive STP
- Surface Scatter
- Negative STP
- STP Not Dug
- Site Datum
- Site Boundary
- Railroad
- Contours (approximate)

SCALE:	AS SHOWN
APPROVED BY:	KJN
DRAWN BY:	HLC
DATE:	9-22-2016

S&ME

SITE MAP
38KE1135
Central South Carolina MegaSite, Phase II
Kershaw County, South Carolina
JOB NO: 4261-16-131

FIGURE NO: 1

Test Unit 1 (TU 1) was placed in the southeastern portion of the site, at UTM coordinates E526769, N3785129, where intact prehistoric deposits were identified during the CRIS and Phase I investigations. The plowzone and seven 10-cm levels were excavated to a depth of approximately 83 centimeters below datum (cmbd). Soils consisted of approximately 10 cm (10–20 cmbd) of brown (10YR 5/3) sandy loam (Ap horizon), followed by 27 cm (20–47 cmbd) of light yellowish brown (10YR 6/4) sand, ending with 39+ cm (47–86+ cmbd) of brownish yellow (10YR 6/6) sand (Figures 5.2 and 5.3). Excavation of the test unit was terminated after two culturally sterile levels were excavated; subsoil was not encountered.

A total of 35 prehistoric artifacts were recovered from TU 1. These artifacts included one rhyolite biface fragment, 32 pieces of debitage (25 quartz, five rhyolite, and two chert), and two pieces of fire cracked rock (Table 5.1, Appendix B). Four of the artifacts were collected from the surface of the test unit, while the remaining 31 were found between 10 and 63 cmbd.

Test Unit 2 (TU 2) was placed in the northern portion of the site, at UTM coordinates E526763, N3785148. This was in an area were a dense concentration of artifacts was collected from the surface of the site during the Phase I investigations. The plowzone and two 10-cm levels were excavated to a depth of 49 cmbd. Soils consisted of approximately 9 cm (10–19 cmbd) of dark grayish brown (10YR 4/2) sand (Ap horizon), followed by 28+ cm (9–37+ cmbd) of yellowish brown (10YR 5/6) sand. Excavation of the test unit was terminated after three culturally sterile levels were excavated; subsoil was not encountered.

A total of two prehistoric artifacts were recovered from TU 2; one piece of quartz debitage and one hammerstone (Table 5.1, Appendix B). The artifacts were found between 10 and 19 cmbd.

Test Unit 3 (TU 3) was placed in the northwestern portion of the site, at UTM coordinates E526717, N3785156. This was in an area where a dense concentration of artifacts were collected from the surface of the site during the Phase I investigations. The plowzone and four 10-cm levels were excavated to a depth of 54 cmbd. Soils consisted of approximately 5 cm (10–15 cmbd) of light brownish gray (10YR 6/2) sand (Ap horizon), followed by 43+ cm (15–58+ cmbd) of yellowish brown (10YR 5/6) sand (Figures 5.4 and 5.5). No artifacts were identified in TU 3; once the first two sterile levels were excavated, a 50-x-50-cm shovel test was placed in the southeastern corner of the test unit. Three 10-cm levels were excavated in the shovel test to determine if artifacts were present in deeper levels. No artifacts were recovered and the test unit was terminated after five sterile levels were excavated.

5.1.2 Results of Analysis

In all, 37 prehistoric artifacts were recovered from three test units. Approximately 89 percent (n=33) of the artifacts consisted of lithic debitage, while the next most common categories were FCR (n=2; 5%) and formal tools (n=1) and hammerstones (n=1), which made up the remaining five percent (Figure 5.6).

The 37 artifacts were lithic, including one rhyolite biface fragment, 33 pieces of debitage (26 quartz, five rhyolite, and two chert), one hammerstone, and two pieces of FCR (Figure 5.7). The number of different formal tool types was low, represented by only bifaces in this assemblage. In addition, the ratio of debitage to tools was low at 33:1, indicating a short term camp site where tool refining was likely to be occurring more frequently than tool manufacture.

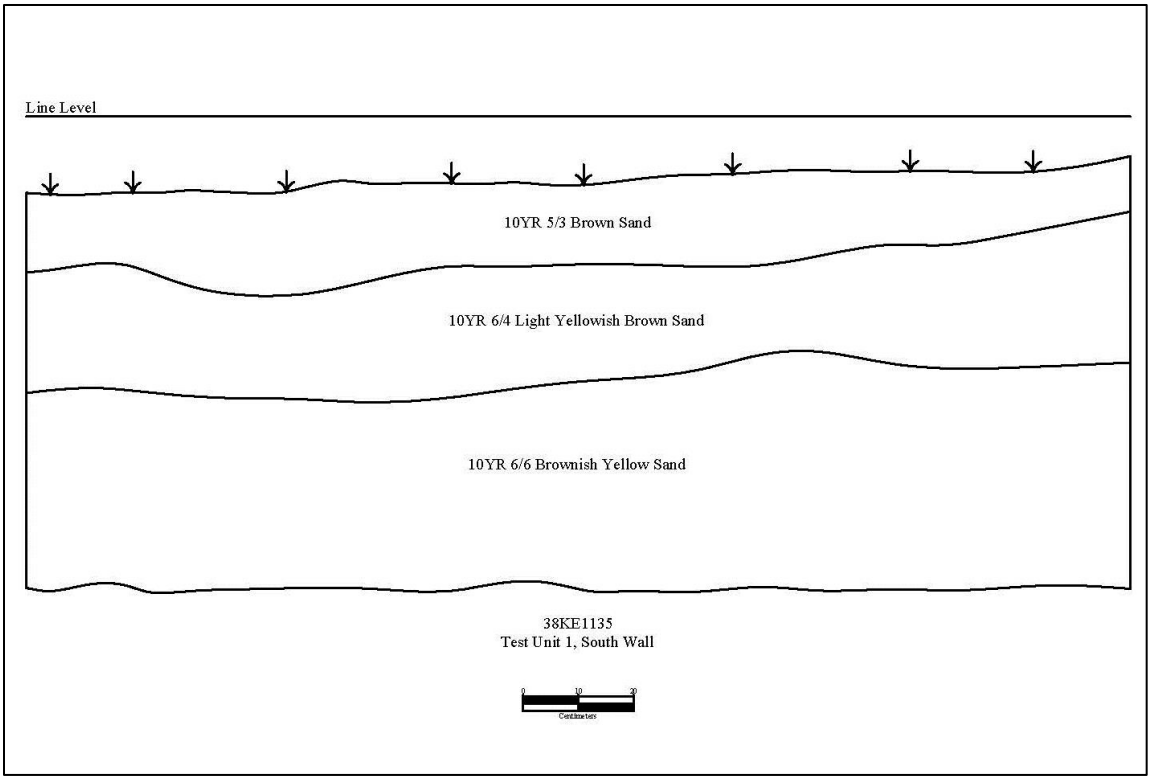


Figure 5.2. Site 38KE1135, Test Unit 1, south wall profile drawing.

Figure 5.3. Site 38KE1135, Test Unit 1, south wall profile.

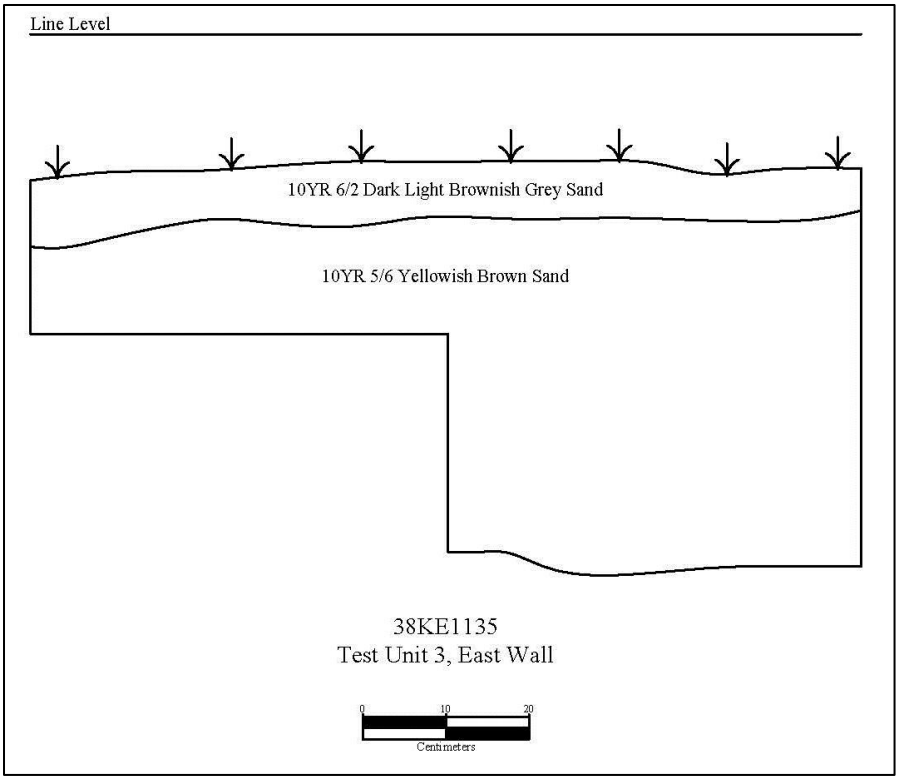


Figure 5.4. Site 38KE1135, Test Unit 3, east wall profile drawing.

Figure 5.5. Site 38KE1135, Test Unit 3, east wall profile.

Table 5.1. Site 38KE1135 Artifact Summary Table.

Test Unit/ Level	Formal Tools	Debitage	Hammerstone	FCR	Total
TU 1, Surface	1	3			4
TU 1, Level 2		7			7
TU 1, Level 3		18		2	20
TU 1, Level 5		4			4
TU 2, Level 1		1	1		2
Totals	**1**	**33**	**1**	**2**	**37**

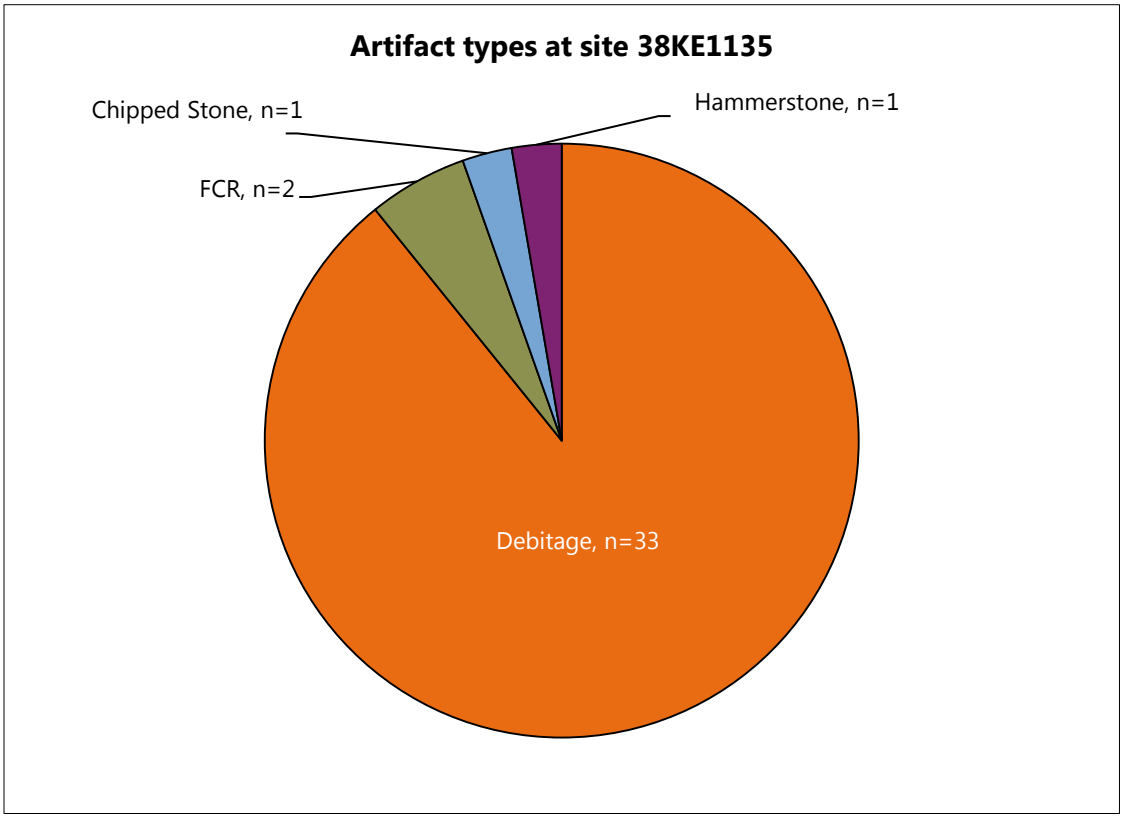


Figure 5.6. Site 38KE1135 artifact types.

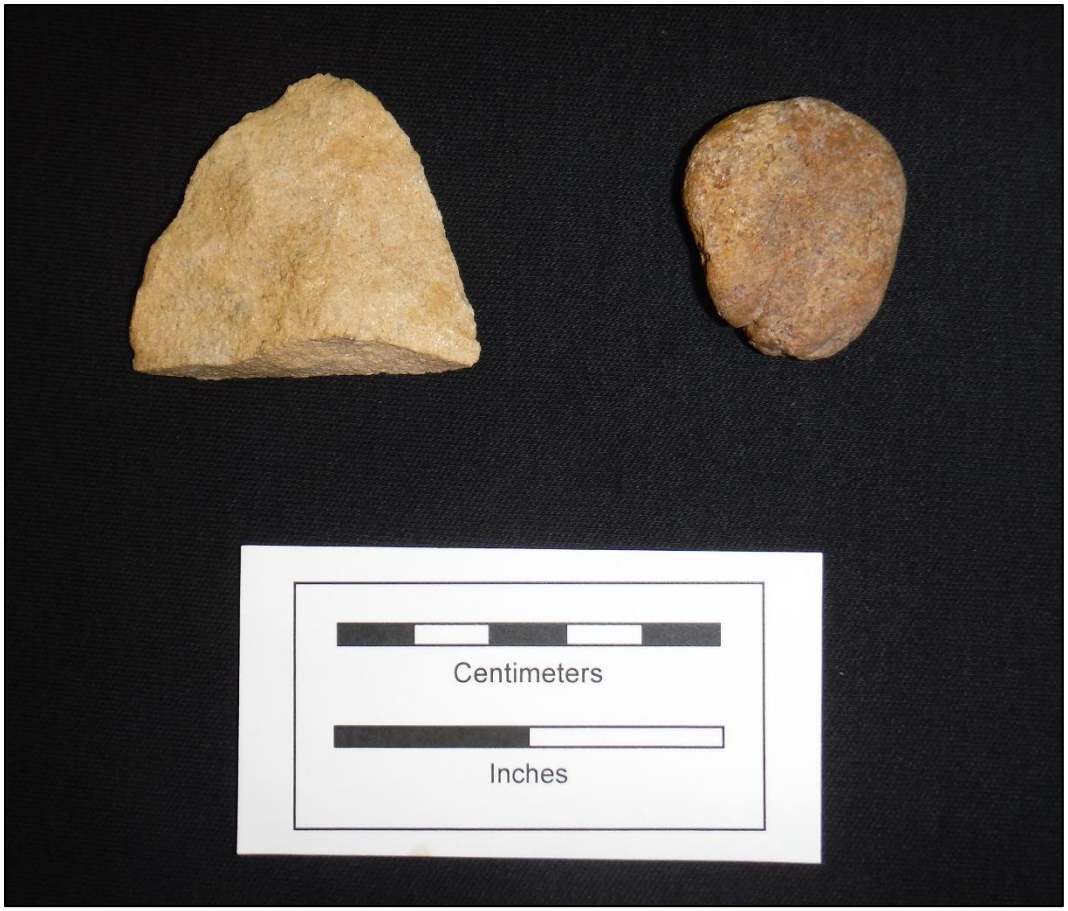


Figure 5.7. Artifacts from site 38KE1135, from left to right, rhyolite biface fragment and hammerstone.

Artifact density in test units ranged from two artifacts in TU 2 to 35 artifacts in TU 1, with a mean of 12 artifacts per test unit. The southeastern portion of site contained the densest concentration of artifacts, in TU 1 (n=35); the northwestern portion of the site had the least amount of artifacts, in TU 3 (n=0).

Artifacts were found at depths ranging from 0 to 53 cmbs (10–63 cmbd) in the test units, with 16 percent of the artifacts (n=6) being found on the surface or in the plowzone (10–23 cmbd/0–13 cmbs), and another 19 percent (n=7) being found directly beneath the plowzone (23–33 cmbd/13–23 cmbs). In Levels 3 and 5, 65 percent (n=24) of the artifacts were recovered from intact deposits (Figure 5.8). No artifacts were identified in Level 4.

Regarding the selection of lithic raw materials used at site 38KE1135, quartz (n=28, 76%) was the most common material type in the debitage assemblage, followed by rhyolite (n=6, 16%), chert (n=2, 5%), and conglomerate material (n=1, 3%) (Figure 5.9). The single chipped stone tool recovered from the site was manufactured from rhyolite. These numbers indicate that local lithic resources, such as quartz, were primarily being used for tool production, but non local material, minimally from North Carolina, was being traded or carried into the area.

Mass analysis was used for size grading the lithic debitage found at site 38KE1135 (Ahler 1989). Size Grade 1 represents debitage that is greater than 1 inch; Size Grade 2 is debitage that is between ½ and 1 inch; Size Grade 3 is between ¼ and ½ inch; and Size Grade 4 is debitage smaller than ¼ inch. As shown

in Figure 5.10, 88 percent (n=29) of the debitage was less than ½ inch in size (Size Grades 3 and 4), while 12 percent (n=4) was greater than ½ inch. These numbers, indicate that the site was used primarily for tool maintenance (e.g., resharpening) and modification; however, primary reduction activities were occurring as well, just with less frequency at the site.

5.1.3 Summary

Site 38KE1135 is an Early Woodland through Mississippian (3,000–350 B.P.) camp site located on the edge of a hilltop adjacent to an active rail line, approximately 0.5-mile northwest of an unnamed tributary of Gillies Creek. Approximately 84 percent (n=31) of the artifacts recovered during the Phase II testing were recovered from just beneath the plowzone in a single test unit in the southeastern portion of the site; these artifacts included debitage and fire cracked rock. The other test units contained minimal artifacts confined to the plow zone or yielded no artifacts at all. The one formal tool and a hammerstone recovered from the site came from the surface and the plow zone respectively. No features or concentrations of artifacts were identified during test unit excavation; no diagnostic artifacts were recovered from the site.

Site 38KE1135 is not associated with events that have made a significant contribution to the broad patterns of history (Criterion A), is not associated with the lives of significant persons in the past (Criterion B), does not embody the distinctive characteristics of a type, period, or methods of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C), and the paucity of artifacts recovered, the minimal artifact diversity, and the lack of features or concentrations of artifacts identified at the site suggests that, although intact deposits are present, it is unlikely that site 38KE1135 will contribute new or significant information to the prehistory of the area (Criterion D). Based on the reasoning stated above, site 38KE1135 is recommended not eligible for inclusion in the NRHP.

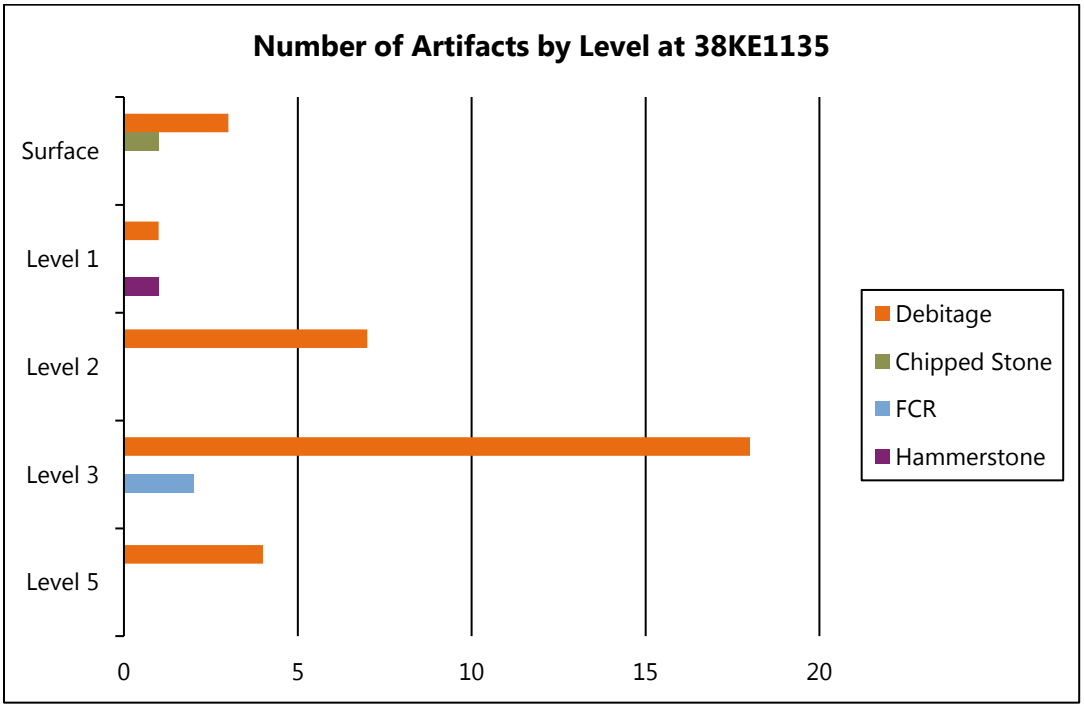


Figure 5.8. Number of artifacts per level at site 38KE1135.

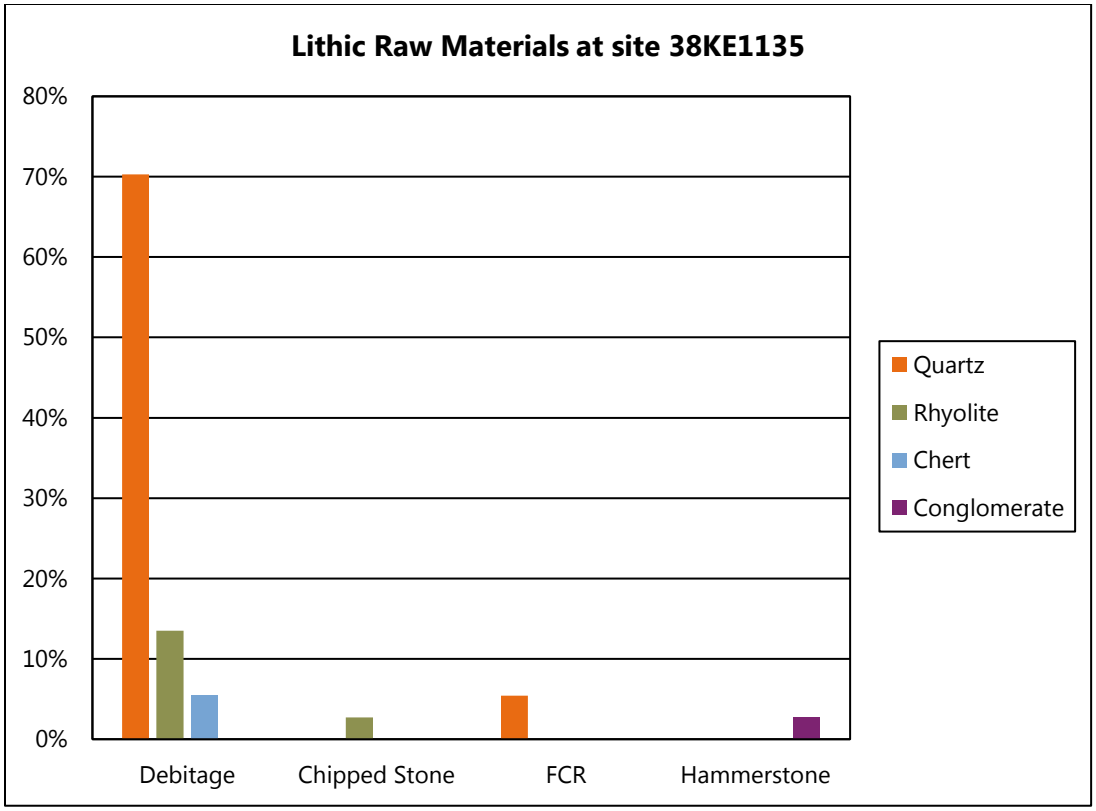


Figure 5.9. Lithic raw materials at site 38KE1135.

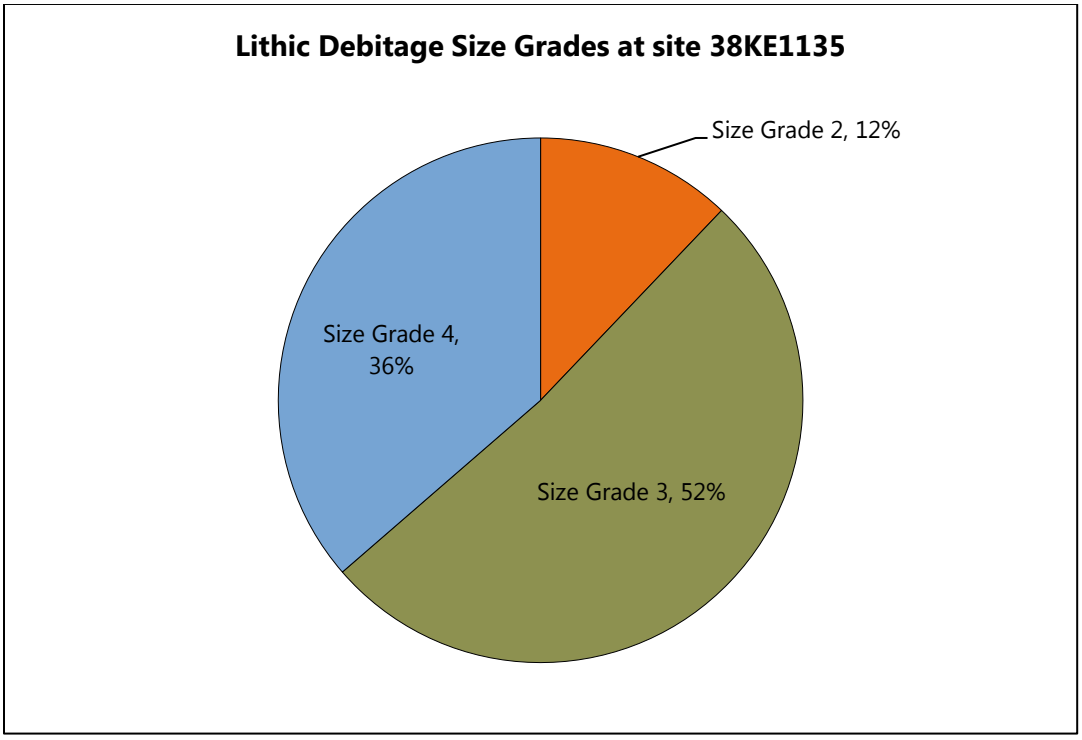


Figure 5.10. Lithic debitage size grades at site 38KE1135.

5.2 Site 38KE1164

Site Number: 38KE1164	**NRHP Recommendation**: Eligible
Site Type: Prehistoric camp site	**Elevation:** 300–350 ft AMSL
Components: Late Archaic through Mississippian	**Landform:** Hilltop/hillslope
UTM Coordinates: E526088, N3785115 (NAD 1927)	**Soil Type**: Lakeland sand/Ailey sand
Site Dimensions: 210 m E/W x 180 m N/S	**Vegetation:** Young longleaf pine; secondary growth
Artifact Depth: 10–65 cmbd	**No. of TUs/Size of TUs:** 3/1 x 2 m; 1/1 x 1 m

Site 38KE1164 is a Late Archaic through Mississippian camp site located on a hilltop and hillslope adjacent to an unnamed tributary of Gillies Creek (Figures 1.1 and 1.3). The site measures approximately 210 m east/west by 180 m north/south. Vegetation at the site consists of young longleaf pine and secondary growth (Figures 2.2, 2.3, and 5.11).

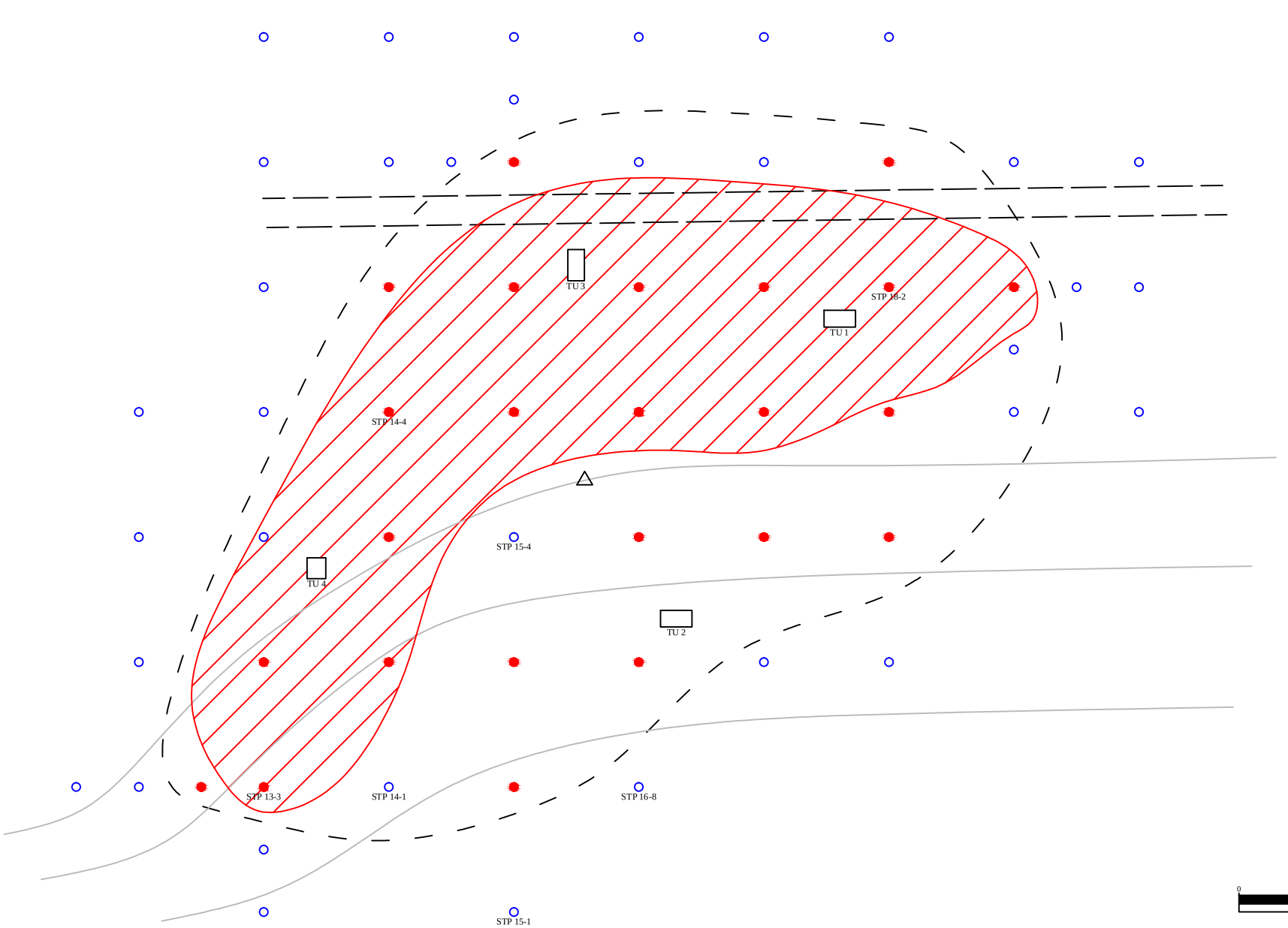
The site was initially recorded in 2014 during the Phase I investigation for the Conder Mega Site (Nagle and Carpini 2014). A Savannah River point, a Yadkin point, and Yadkin pottery were recovered from the site, along with a variety of bifaces and other formal and expedient tools. The vast majority of the artifacts were recovered from the surface of the site, but intact deposits containing lithic tools, lithic debitage, pottery, and fire cracked rock remained below the plow zone. Because of the intact deposits and variety of artifact types recovered, additional work was recommended at site 38KE1164 to determine the site's final NRHP eligibility. In a letter dated November 7, 2014, the SHPO commented that if state or federal permits, licenses, funds, loans, grants, or assistance for development were necessary for the project, they would recommend that site 38KE1164 be avoided by construction activities. If avoidance was not possible, the SHPO would recommended further testing to determine the site's eligibility for listing on the NRHP (Appendix A).

5.2.1 Phase II Testing

Phase II testing at site 38KE1164 included the excavation of three 1-x-2-m and one 1-x-1-m test units placed within the site where higher artifact concentrations were identified during shovel testing (Figure 5.11). Each of these test units is described below.

Test Unit 1 (TU 1) was placed in the northeastern portion of the site, at UTM coordinates E526167, N3785141, where a concentration of artifacts on the surface of the site and intact prehistoric deposits were identified during the Phase I investigations. The plowzone and seven 10-cm levels were excavated to a depth of approximately 75 centimeters below datum (cmbd). Soils consisted of approximately 14 cm (10–24 cmbd) of dark brown (10YR 3/3) sand (Ap horizon), followed by 18 cm (24–42 cmbd) of light yellowish brown (10YR 6/4) sand, ending with 46+ cm (42–88+ cmbd) of brownish yellow (10YR 6/6) sand. Excavation of the test unit was terminated after two culturally sterile levels were excavated; subsoil was not encountered.

A total of 89 prehistoric artifacts were recovered from TU 1. These artifacts included one quartz perforator, one quartz utilized flake, and 87 pieces of debitage (86 quartz and one rhyolite) (Table 5.2, Appendix B). The artifacts were found between 10 and 65 cmbd.



LEGEND
- Positive STP
- Surface Scatter
- Negative STP
- Site Datum
- Site Boundary
- Dirt Road
- Contours (approximate)

SCALE:	AS SHOWN
APPROVED BY:	KJN
DRAWN BY:	HLC
DATE:	9-22-2016

S&ME

SITE MAP
38KE1164
Central South Carolina MegaSite, Phase II
Kershaw County, South Carolina
JOB NO: 4261-16-131

FIGURE NO: 11

Table 5.2. Site 38KE1164 Artifact Summary Table.

Test Unit/Level	Formal Tools	Expedient Tools	Debitage	FCR	Prehistoric Pottery	Total
TU 1, Level 1	1	1	6			8
TU 1, Level 2			15			15
TU 1, Level 3			54			54
TU 1, Level 4			10			10
TU 1, Level 5			1			1
TU 1, Level 6			1			1
TU 2, Level 1			3			3
TU 2, Level 2		1	14	4		19
TU 2, Level 3		1	53	11		65
TU 2, Level 4			13	1		14
TU 3, Level 1	1		29	2	1	33
TU 3, Level 2	3	2	54	2	19	80
TU 3, Level 3		1	40			41
TU 3, Level 4			16			16
TU 4, Level 1			11			11
TU 4, Level 2			20			20
TU 4, Level 3			5			5
Totals	**5**	**6**	**345**	**20**	**20**	**396**

Test Unit 2 (TU 2) was placed in the south central portion of the site, at UTM coordinates E526143, N3785110. This was in an area where intact prehistoric deposits were identified during the Phase I investigations. The plowzone and three 10-cm levels were excavated to a depth of 46 cmbd. Soils consisted of approximately 9 cm (10–18 cmbd) of dark brown (10YR 3/3) sand (Ap horizon), followed by 14 cm (18–32 cmbd) of yellowish brown (10YR 5/4) sand, ending with 10+ cm (32–42+ cmbd) of brownish yellow (10YR 6/6) sandy clay subsoil (Figures 5.12 and 5.13). Excavation of the test unit was terminated once subsoil was encountered.

A total of 101 prehistoric artifacts were recovered from TU 2. These artifacts included two quartz utilized flakes, 83 pieces of debitage (79 quartz, three rhyolite, and one chert), and 16 pieces of fire cracked rock (Table 5.2, Appendix B). The artifacts were found between 10 and 46 cmbd.

Test Unit 3 (TU 3) was placed in the north central portion of the site, at UTM coordinates E526129, N3785153. This was in an area where a concentration of artifacts on the surface of the site and intact prehistoric deposits were identified during the Phase I investigations. The plowzone and five 10-cm levels were excavated to a depth of 64 cmbd. Soils consisted of approximately 6 cm (10–16 cmbd) of dark grayish brown (10YR 4/2) sand (Ap horizon), followed by 49+ cm (16–65+ cmbd) of yellowish brown (10YR 5/6) sand (Figures 5.14 and 5.15). Excavation of the test unit was terminated after two culturally sterile levels were excavated; subsoil was not encountered.

A total of 170 prehistoric artifacts were recovered from TU 3. These artifacts included 150 lithic artifacts and 20 pieces of pottery. The lithic artifacts included one quartz biface, one quartz biface fragment, one

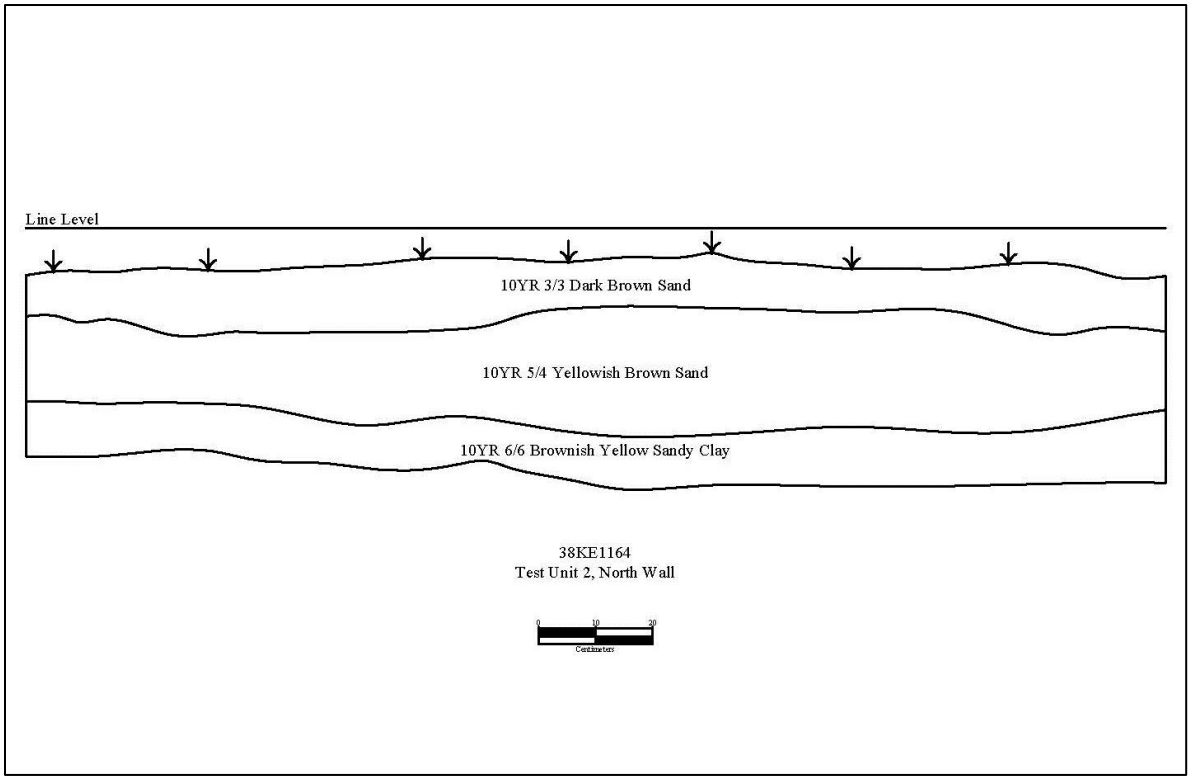


Figure 5.12. Site 38KE1164, Test Unit 2, north wall profile drawing.

Figure 5.13. Site 38KE1164, Test Unit 2, north wall profile.

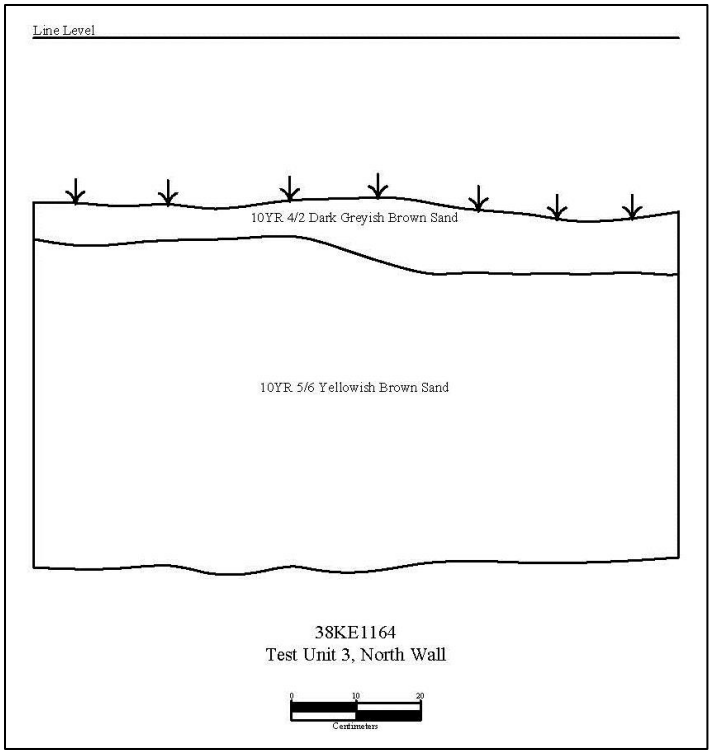


Figure 5.14. Site 38KE1164, Test Unit 3, north wall profile drawing.

Figure 5.15. Site 38KE1164, Test Unit 3, north wall profile.

quartz uniface, one quartz graver, three quartz utilized flakes, 139 piece of debitage (138 quartz and one rhyolite), and four pieces of fire cracked rock; the pottery included five pieces of quartz tempered Yadkin pottery and 15 pieces of residual pottery (Table 5.2, Appendix B). The artifacts were found between 10 and 44 cmbd.

Test Unit 4 (TU 4) was placed in the west central portion of the site, at UTM coordinates E526110, N3785135, where a concentration of artifacts on the surface of the site and intact prehistoric deposits were identified during the Phase I investigations. The plowzone and four 10-cm levels were excavated to a depth of approximately 65 centimeters below datum (cmbd). Soils consisted of approximately 14 cm (10–24 cmbd) of light brownish gray (10YR 6/2) sand (Ap horizon), followed by 32 cm (24–56 cmbd) of brownish yellow (10YR 6/8) sand, ending with 20+ cm (56–76+ cmbd) of brownish yellow (10YR 6/6) fine sand. Excavation of the test unit was terminated after two culturally sterile levels were excavated; subsoil was not encountered.

A total of 36 pieces of lithic debitage were recovered from TU 4, 35 quartz and one rhyolite (Table 5.2, Appendix B). The artifacts were found between 10 and 45 cmbd.

5.2.2 Results of Analysis

In all, 396 prehistoric artifacts were recovered from four test units. Approximately 87 percent (n=345) of the artifacts consisted of lithic debitage, while the next most common categories were FCR (n=20, 5%), prehistoric pottery (n=20, 5%) and chipped stone tools (n=11, 3%) (Figure 5.16).

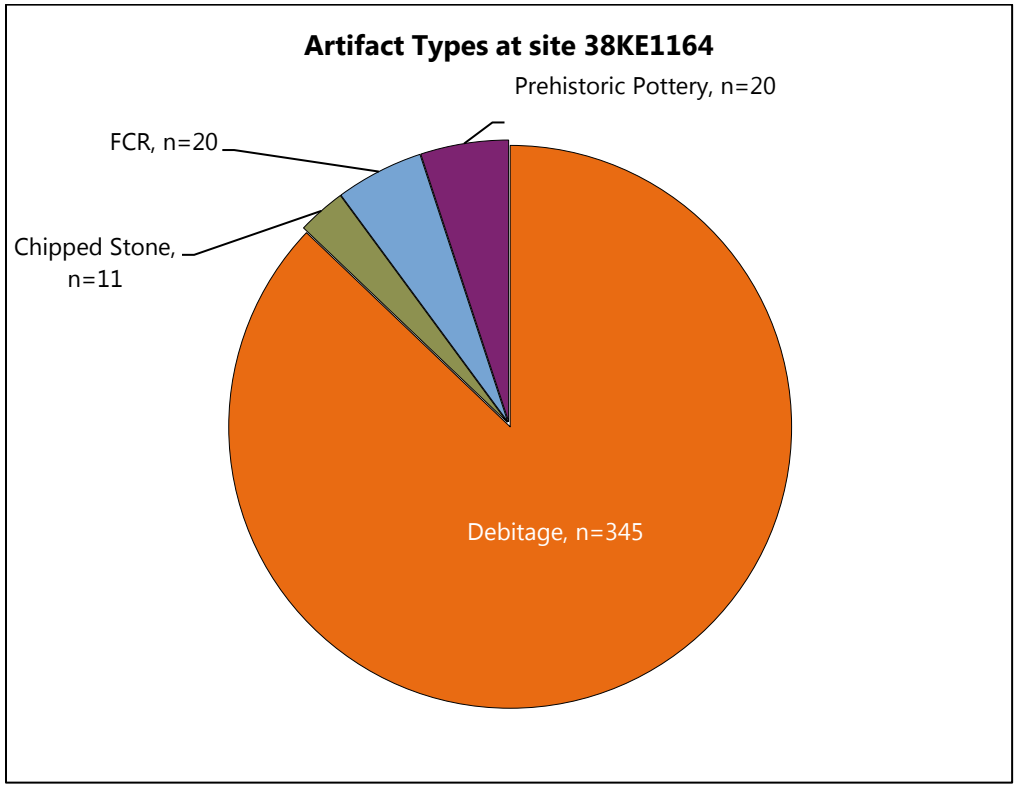


Figure 5.16. Site 38KE1164 artifact types.

A total of 376 lithic artifacts was recovered, including one quartz early stage biface, one quartz biface fragment, one quartz uniface, one quartz graver, one quartz perforator, and six quartz utilized flakes. In addition, 345 pieces of debitage (338 quartz, six rhyolite, and one chert) and 20 pieces of FCR were recovered (Figure 5.17). The number of different formal tool types was moderate, with four different types, including bifaces, a graver, a perforator, and a uniface represented in this assemblage. In addition, the ratio of debitage to tools was high at 69:1, indicating a long term camp site where tool refining and manufacturing was likely to have been occurring.

Artifact density in test units ranged from 36 artifacts in TU 4 to 170 artifacts in TU 3, with a mean of 99 artifacts per test unit. The northern and central portion of site contained the densest concentration of artifacts, in TU 3 (n=170) and TU 2 (n=101), however a fair amount of artifacts were also recovered from the eastern portion of the site in TU 1 (n=89); the southwestern portion of the site had the least amount of artifacts, in TU 4 (n=36).

Artifacts were found at depths ranging from 0 to 55 cmbs (10–65 cmbd) in the test units, with 14 percent of the artifacts (n=55) being found in the plowzone (10–25 cmbd/0–15 cmbs) and another 34 percent (n=134) being found directly beneath the plowzone (25–35 cmbd/15–25 cmbs). In Levels 3 through 6, 52 percent (n=207) of the artifacts were recovered from intact deposits. The majority of the artifacts (n=205, 52%) were found in Levels 3 and 4 (35–55 cmbd/25–45 cmbs) (Figure 5.18).

Regarding the selection of lithic raw materials used at site 38KE1164 (Figure 5.19), quartz (n=338, 98%) was the most common material type in the debitage assemblage, followed by rhyolite (n=6, 2%), and chert (n=1, <1%). Chipped stone tools were manufactured solely from quartz (n=11, 100%); fire cracked rock was composed primarily of conglomerate (n=19; 95%) and one piece of quartzite (n=1, 5%). These numbers indicate that local lithic resources, such as quartz, were heavily favored tool production at the site, but non local material, minimally from North Carolina, was being traded or carried into the area as well.

Figure 5.17. Lithic artifacts from site 38KE1164, from left to right. Top row: biface fragment, graver. Bottom row: perforator, uniface.

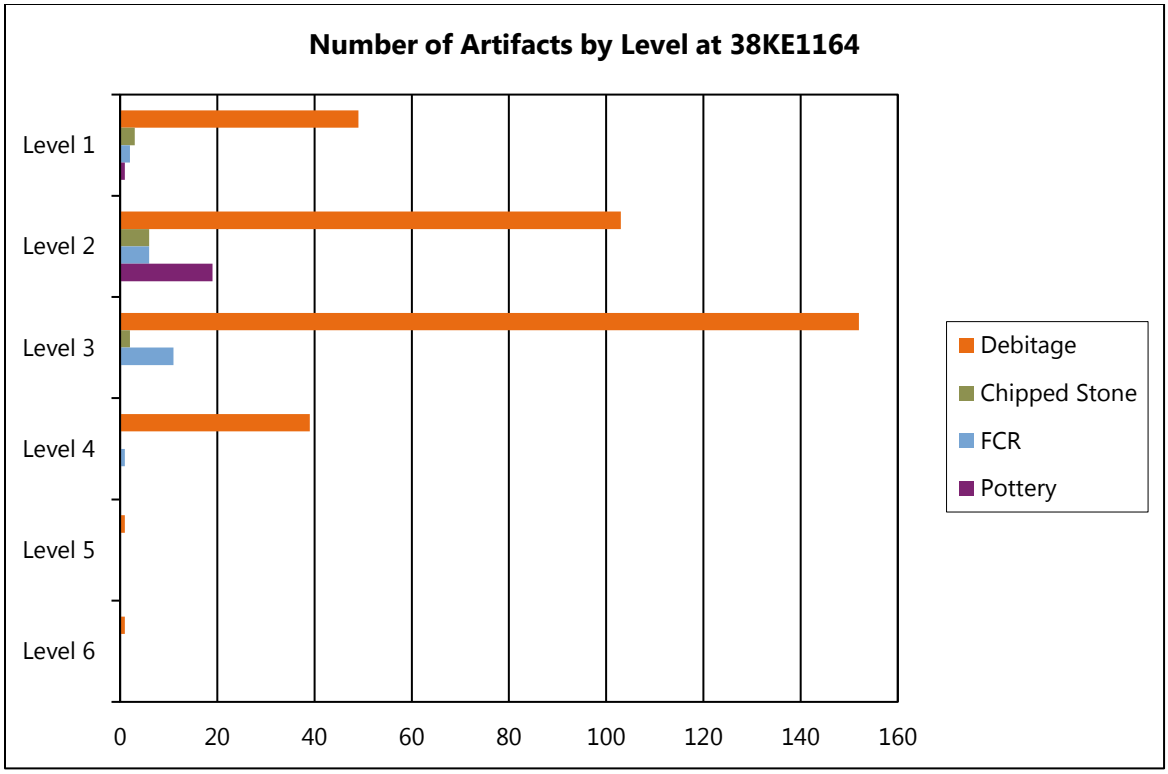


Figure 5.18. Number of artifacts per level at site 38KE1164.

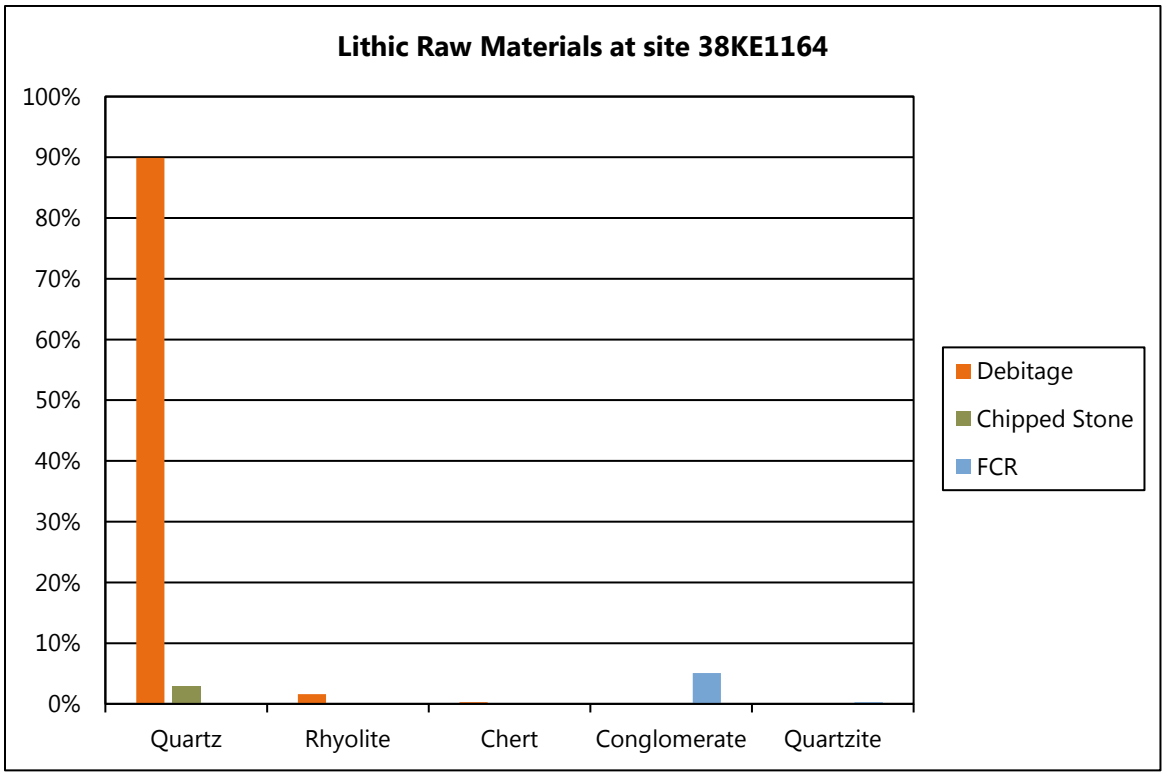


Figure 5.19. Lithic raw materials at site 38KE1164.

Mass analysis was used for size grading the lithic debitage found at site 38KE1164 (Ahler 1989). Size Grade 1 represents debitage that is greater than 1 inch; Size Grade 2 is debitage that is between ½ and 1 inch; Size Grade 3 is between ¼ and ½ inch; and Size Grade 4 is debitage smaller than ¼ inch. As shown in Figure 5.20, 89 percent (n=308) of the debitage was less than ½ inch in size (Size Grades 3 and 4), while ten percent (n=37) was greater than ½ inch. These numbers, indicate that the site was used primarily for tool maintenance (e.g., resharpening) and modification; however primary reduction activities were occurring as well, just with less frequency.

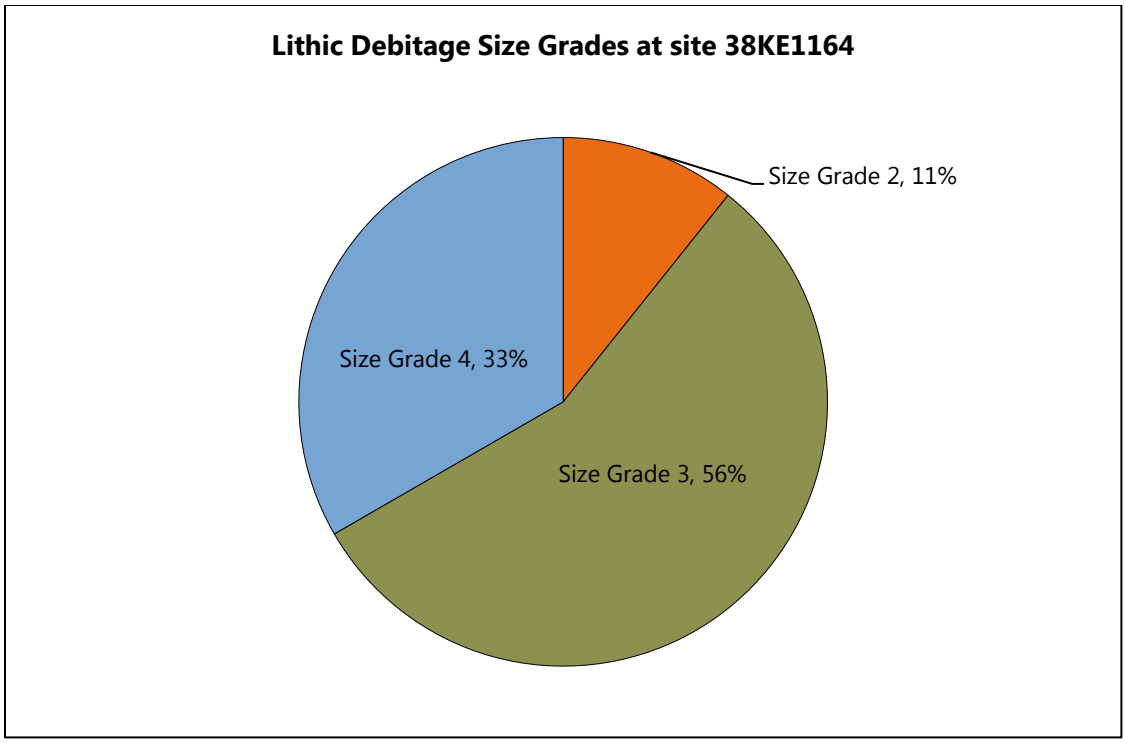


Figure 5.20. Lithic debitage size grades at site 38KE1164.

A total of 20 prehistoric pottery sherds was recovered from site 38KE1164. Of these, five were sufficiently large enough to characterize their temper and surface treatment. The remaining 15 sherds were too small to be classified (i.e. residual sherds). The five diagnostic sherds are quartz tempered with an indeterminate surface treatment (Figure 5.21); the quartz temper is indicative of Yadkin pottery, which dates to the Middle Woodland subperiod (2300–1500 B.P.).

5.2.3 Summary

Site 38KE1164 is Late Archaic through Mississippian (5000–350 B.P.) camp site located on a hilltop and hillslope adjacent to an unnamed tributary of Gillies Creek. Approximately 78 percent (n=307) of the artifacts recovered during the Phase II testing were recovered from beneath the plowzone. The site contains chipped stone tools, both formal and expedient, within relatively intact stratigraphic deposits and has a relatively large amount and moderate diversity of artifacts. Although features were not found during the Phase II, an intensive occupation was identified in Levels 1 through 3 throughout the test units at the site; the diagnostic artifacts recovered from these levels dated to the Middle Woodland subperiod.

Based on these factors, site 38KE1164 is recommended eligible for inclusion in the NRHP under Criterion A for broad patterns of settlement during the Middle Woodland subperiod in South Carolina, a subperiod in which occupations and settlement patterns are poorly documented, and Criterion D, for its potential to yield important information to the prehistory of the area. As the site is not associated with the lives of significant persons in the past (Criterion B) and does not embody the distinctive characteristics of a type, period, or methods of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C), site 38KE1164 is not eligible under these criteria.

Figure 5.21. Prehistoric pottery from site 38KE1164, Yadkin indeterminate surface treatment, crushed quartz temper.

6.0 CONCLUSIONS AND RECOMMENDATIONS

S&ME has completed Phase II testing at sites 38KE1135 and 38KE1164 at the proposed Central SC MegaSite, formally called the Conder Mega Site, northwest of the Highway 601 and I-20 interchange, near the town of Lugoff (Figures 1.1 through 1.4). Site 38KE1135, an Early Woodland through Mississippian camp site, and site 38KE1164, a Late Archaic through Mississippian camp site, contained intact deposits and had the potential to be significant sites. S&ME recommended that sites 38KE1135 and 38KE1164 be avoided by ground disturbing activities (Carta and Jones 2011; Nagle and Carpini 2014). If avoidance was not possible, it was recommend that Phase II testing be conducted to determine each site's final National Register status (i.e., eligible or not eligible).

The combined results of a reconnaissance survey (Carta and Jones 2011), Phase I survey (Nagle and Carpini 2014), and Phase II testing at 38KE1135 indicate that it is a multi-component prehistoric camp site containing Early Woodland through Mississippian (3000–350 B.P.) components. Approximately 84 percent (n=31) of the artifacts recovered during the Phase II testing were recovered from just beneath the plowzone, in a single test unit in the southeastern portion of the site; the other test units contained minimal artifacts confined to the plow zone or yielded no artifacts at all. The one formal non-diagnostic tool and the hammerstone recovered from the site came from the surface and the plow zone respectively. No features or concentrations of artifacts were identified during test unit excavation; no diagnostic artifacts were recovered from the site.

Site 38KE1135 is not associated with events that have made a significant contribution to the broad patterns of history (Criterion A), is not associated with the lives of significant persons in the past (Criterion B), does not embody the distinctive characteristics of a type, period, or methods of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C), and the paucity of artifacts recovered, the minimal artifact diversity, and the lack of features or concentrations of artifacts identified at the site suggests that, although intact deposits are present, it is unlikely that site 38KE1135 will contribute new or significant information to the prehistory of the area (Criterion D). Based on the reasoning stated above, site 38KE1135 is recommended not eligible for inclusion in the NRHP.

The combined results of a Phase I survey (Nagle and Carpini 2014) and Phase II testing at 38KE1164 indicate that it is a multi-component prehistoric camp site containing Late Archaic (5000–3000 B.P.), Middle Woodland (2300–1500 B.P.), and Mississippian (1000–350 B.P.) components. The site contains chipped stone tools, both formal and expedient, within relatively intact stratigraphic deposits, and has a relatively large amount and moderate diversity of artifacts. Although features were not found during Phase II testing, an intensive occupation was identified in Levels 1 through 3 throughout the test units at the site; the diagnostic artifacts recovered from these levels dated to the Middle Woodland subperiod.

Based on these factors, site 38KE1164 is recommended eligible for inclusion in the NRHP under Criterion A for broad patterns of settlement during the Middle Woodland subperiod in South Carolina, a subperiod in which occupations and settlement patterns are poorly documented, and Criterion D, for its potential to yield important information to the prehistory of the area. As the site is not associated with the lives of significant persons in the past (Criterion B) and does not embody the distinctive characteristics of a type, period, or methods of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C), site 38KE1164 is not eligible under these criteria.

Phase II testing indicates site 38KE1164 has the potential to contain intact features associated with the Middle Woodland subperiod and possibly intact Late Archaic deposits beneath the Middle Woodland horizon. Some of the potential research questions site 38KE1164 could address are:

- What is the earliest occupation at 38KE1164? How does that compare to occupations at other nearby sites?
- Does 38KE1164 contain diagnostic artifacts or features that could be used to help refine the chronological sequence of the area? Are there features dating to the Middle Woodland subperiod? What do they tell us about site usage and settlement patterns during that time?
- How many different occupations are represented at 38KE1164? How does that compare to the occupation pattern at nearby sites?
- Was 38KE1164 occupied repeatedly over short periods of time or is it a long-term habitation site (or both)?
- What activities can be inferred from the artifacts recovered at 38KE1164? Did these activities change through time?
- Are there faunal and/or botanical remains at the site? If so, can we reconstruct subsistence patterns and conduct seasonality studies?
- Is there evidence of horticulture during the Middle Woodland at site 38KE1164?

The deposits of the site are relatively shallow, with a minimal plow zone; block units could be excavated (e.g., 2-x-2-m or 4-x-4-m) in areas of the site that contained substantial deposits. Excavation blocks should be scattered throughout the site to yield a diverse excavation sample. Although concentrations of artifacts were identified in the northern, central, and eastern portions of the site, intact deposits were recovered up to 40 cmbs from each of the test units excavated; the quantity of artifacts was all that varied among the units.

Site 38KE1164 is recommended eligible for inclusion in the NRHP and should be avoided; if avoidance of the site is not possible, then consultation with the SHPO, federal agencies, and other consulting parties should be conducted to resolve potential adverse effects to site 38KE1164. The remainder of the Central SC MegaSite project area, formerly known as the Conder Mega Site, contains no historic properties and no additional cultural resource investigations should be necessary.

7.0 REFERENCES

Adovasio, J.M., and D.R. Pedler
1996 Monte Verde and the Antiquity of Humankind in the America. *Antiquity* 71:573-580.

Ahler, Stanley A.
1989 Mass Analysis of Flaking Debris: Studying the Forest Rather Than the Tree. In *Alternative Approaches to Lithic Analysis*, edited by D.O. Henry and George H. Odell, pp. 85–118. Archeological Papers of the American Anthropological Association No. 1.

Anderson, David G.
1994 *The Savannah River Chiefdoms: Political Change in the Late Prehistoric Southeast.* The University of Alabama Press, Tuscaloosa.
1996 Approaches the Modeling Regional Settlement in the Archaic Period Southeast. In *Archaeology of the Mid-Holocene Southeast*, pp. 157–176, University Press of Florida, Gainsville.

Anderson, David G., John Cable, Niels Taylor, and Christopher Judge
1996 *Indian Pottery of the Carolinas: Observations from the March 1995 Ceramic Workshop at Hobcaw Barony*. Council of South Carolina Professional Archaeologists, Columbia.

Anderson, David G., and Glen.T. Hanson
1988 Early Archaic Settlement in the Southwestern United States: A Case Study from the Savannah River Basin. *American Antiquity* 53:262–286

Anderson, David G., and J.W. Joseph
1988 *Prehistory and History along the Upper Savannah River: Technical Synthesis of Cultural Resource Investigations, Richard B. Russell Multiple Resource Area, Volumes I and II.* Russell Papers 1988. Report prepared for the U.S. Army Corp of Engineers, Savannah District, by Garrow Associates, Inc., Atlanta.

Anderson, David G., and Robert C. Mainfort, Jr.
2002 An Introduction to Woodland Archaeology in the Southeast. In *The Woodland Southeast*, edited by David G. Anderson and Robert C. Mainfort, Jr., pp. 1-19. University of Alabama Press, Tuscaloosa.

Anderson, David G., and Lisa O'Steen
1992 Late Pleistocene/Early Holocene Environmental Conditions in the South Carolina Area. In *Paleoindian and Early Archaic Research in the Lower Southeast: A South Carolina Perspective*, edited by David G. Anderson, Kenneth E. Sassaman, and C. Judge, pp. 3–6. Council of South Carolina Professional Archaeologists, Columbia.

Anderson, David G., and Kenneth E. Sassaman
1996 Paleoindian and Early Archaic Research in the South Carolina Area. In *The Paleoindian and Early Archaic Southeast*, edited by David G. Anderson and Kenneth E. Sassaman, pp. 222–237. University of Alabama Press, Tuscaloosa.

Anderson, David G., Lisa O'Steen, and Kenneth E. Sassaman
1996 Environmental and Chronological Considerations. In *The Paleoindian and Early Archaic Southeast*. Edited by D.G. Anderson and K.E. Sassaman, pp 3–15. University of Alabama Press, Tuscaloosa.

Anderson, David G., Kenneth E. Sassaman, and Christopher Judge (editors)
1992 *Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective*. Council of South Carolina Professional Archaeologist, Columbia.

Bense, Judith
1994 *Archaeology of the Southeastern United States*. Academic Press, San Diego.

Benson, Robert W.
2006 *Cultural Resources Overview of the Sumter National Forest*. Francis Marion and Sumter National Forests CRM Report 06-07. Prepared for Francis Marion and Sumter National Forests, USDA Forest Service, Columbia, South Carolina. Prepared by Southeastern Archaeological Services, Inc., Athens, Georgia.

Blanton, Dennis B., and Kenneth E. Sassaman
1989 Pattern and Process in the Middle Archaic Period of South Carolina. In *Studies in South Carolina Archaeology: Essays in Honor of Robert L. Stephenson*, edited by A. Goodyear and G. Hanson, pp. 53–71. Anthropology Studies 9. Occasional Papers of the South Carolina Institute of Archeology and Anthropology, University of South Carolina, Columbia.

Cantley, Charles E., and John S. Cable
2002 *Archaeological Data Recovery at Site 38SU136/137 and 38SU141, Poinsett Electronic Combat Range, Sumter County, South Carolina.* Report prepared for the U.S. Army Corps or Engineers, Savannah District, by New South Associates, Inc. Stone Mountain, Georgia.

Carta, Jean-Marie and Heather C. Jones
2011 *Cultural Resources Identification Survey of Approximately 1,455 Acres at the Conder Mega Site, Kershaw County, South Carolina*. Report prepared by S&ME, Inc. Report prepared for Alliance Consulting Engineers, Inc.

Chapman, Jefferson, and James M. Adovasio
1977 Textile and Basketry Impressions from Icehouse Bottom, Tennessee. *American Antiquity* 42:620-625.

Charles, Tommy and James L. Michie
1992 South Carolina Paleo Point Data. In *Paleoindian and Early Archaic Research in the Lower Southeast: A South Carolina Perspective*, edited by David G. Anderson, Kenneth E. Sassaman, and Christopher Judge, pp. 242–247. Council of South Carolina Professional Archaeologists, Columbia.

Coe, Joffre L.
1964 The Formative Cultures of the Carolina Piedmont. *Transactions of the American Philosophical Society* 54(5). Philadelphia.

Daniel, I. Randolph, Jr.
1998 *Hardaway Revisited: Early Archaic Settlement in the Southeast*. University of Alabama Press, Tuscaloosa.
2001 Stone Raw Material Availability and Early Archaic Settlement in the Southeastern United States. *American Antiquity* 66:237–265.

Delcourt, P.A. and H.A. Delcourt
1985 Quaternary Palynology and Vegetational History of the Southeastern United States. In *Pollen Records of Late-Quaternary North American Sediments*, edited by V.M. Bryant Jr. and R.G. Holloway, pp.1–37. American Association of Stratigraphic Palynologists Foundation.

DePratter, Chester B.
1979 Ceramics. In *The Anthropology of St. Catherines Island 2: The Refuge-Deptford Mortuary Complex*, edited by D. H. Thomas and C. S. Larson, pp. 109–132. Anthropological Papers of the American Museum of Natural History 56(1).

Dillehay, Thomas D. and M. B. Collins
1988 Early Cultural Evidence from Monte Verde. *Nature* 332:150–152.

Edgar, Walter
1998 *South Carolina: A History*. University of South Carolina Press, Columbia.

Glassow, M. A.
1977 Issues in Evaluating the Significance of Archaeological Resources. *American Antiquity* 41(3):413–420.

Goodyear, III, Albert C.
1974 *The Brand Site: A Techno-Functional Study of a Dalton Site in Northeast Arkansas.* Arkansas Archeological Survey Research Series, No. 7. Arkansas Archeological Survey, Fayetteville.
1979 *A Hypothesis for the Use of Cryptocrystalline Raw Materials among Paleo-Indian Groups of North America*. Research Manuscript Series No. 156. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
2005 Evidence of Pre-Clovis Sites in the Eastern United States. In *Paleoamerican Origins: Beyond Clovis*, edited by Robson Bonnichsen, Bradley Lepper, Dennis Standford, and Michael Waters. Center for the Study of the First Americans, Department of Anthropology, Texas A&M University.

Goodyear, III, Albert C., James L. Michie, and Tommy Charles
1989 The Earliest South Carolinians. In *Studies of South Carolina Archaeology*, edited by Albert C. Goodyear III and Glen T. Hanson, pp. 19–52. University of South Carolina Institute of Archaeology and Anthropology Anthropological Studies 9. Columbia.

Gordon, John W.
2003 South Carolina and the American Revolution: A Battlefield History. University of South Carolina Press, Columbia.

Green, William, and James Bates
2003 *The Broad River Chiefdom: A Possible Unrecognized Chiefdom in the Central South Carolina Piedmont*. Paper presented at the Southeastern Archaeological Conference, Charlotte, North Carolina.

Green, William, and Jeffrey Holland
2004 *Phase I and II Cultural Resource Investigations at the Overlook Tract, Georgetown County, South Carolina*. Report prepared for S&ME, Greensboro, North Carolina, by TRC, Inc., Columbia.

Heide, Gregory, and Michael Russo
2003 *Investigation of the Coosaw Island Shell Ring Complex (38BU1866)*. Report prepared for the South Carolina Department of Natural Resources Heritage Trust Program, by the Southeast Archaeological Center, National Park Service, Tallahassee.

Herbert, Joseph M., and Mark A. Mathis
1996 An Appraisal and Re-evaluation of the Pre-contact Pottery Sequence of Southern Coastal North Carolina. In *Indian Pottery of the Carolinas: Observations from the March 1995 Ceramic Workshop at Hobcaw Barony* pg. 136–189. Council of South Carolina Professional Archaeologists, Columbia.

House, John and David Ballenger
1976 *An Archaeological Survey of the Interstate 77 Route in the South Carolina Piedmont.* South Carolina Institute of Archaeology and Anthropology Research Manuscript Series 104, University of South Carolina, Columbia.

Inter-University Consortium for Political and Social Research (ICPSR)
2004 "United States Historical Census Data Browser." Available at: <http://fisher.lib.virginia.edu.census>

Justice, Noel D.
1987 *Stone Age Spear and Arrow Points of the Midcontinental and Eastern United States*. Indiana University Press, Bloomington.

Kolbe, Chris, Suzanne P. Wylie, and John Wells,
1981 *Kendall Mills Historic District*. National Register of Historic Places Nomination Form. On file at South Carolina Department of Archives and History, Columbia, South Carolina.

Kovacik, Charles F. and John J. Winberry
1989 *South Carolina: The Making of a Landscape*. University of South Carolina Press, Columbia.

Marrinan, Rochelle A.
1975 *Ceramic Artifacts, Mollusks, and Sedentism: The Late Archaic Period on the Georgia Coast.* Unpublished Ph.D. dissertation, University of Florida, Gainesville.

Milanich, Jerald T.
1971 *The Deptford Phase: An Archaeological Reconstruction.* Ph.D. dissertation, University of Florida. University Microfilms, Ann Arbor, Michigan.

Milanich, Jerald T., and Charles H. Fairbanks
1980 *Florida Archaeology*. Academic Press, New York.

Miller, George L.
1991 A Revised Set of CC Index Values for Classification and Economic Scaling of English Ceramics from 1787 to 1880. *Historical Archaeology* 25:1-25.

Mills, Robert
1825 *Atlas of the State of South Carolina.* F. Lucas, Jr., Baltimore. Reprint: South Carolina Historical Press, Inc., Greenville, 1980.
1826 *Statistics of South Carolina, Including a View of Its Natural, Civil, and Military History, General and Particular.* Hurlbut and Lloyd, Charleston.

Moore, John Hammond
1987 *The South Carolina Highway Department, 1917–1987*. University of South Carolina Press, Columbia.
1989 *South Carolina in the 1880s: A Gazetteer*. Sandlapper Publishing, Orangeburg, South Carolina.
1993 *Columbia and Richland County: A South Carolina Community 1740–1990*. University of South Carolina Press, Columbia.

Mouzon, Henry, Jr.
1775 An Accurate Map of North and South Carolina, with their Indian Frontiers. Sayer and J. Bennet, London.

Nagle, Kimberly and Heather Carpini
2014 *Phase I Archaeological Survey of Areas 1–4 at the Conder Mega Site, Kershaw County, South Carolina*. Report prepared by S&ME, Inc. Report prepared for Alliance Consulting Engineers, Inc.

Nagle, Kimberly and William Green
2010 *Archaeological Data Recovery Excavations at the Tree House Archaeological Site (38LX531), Lexington County, South Carolina.* Report prepared for SCE&G, Columbia, by S&ME, Inc., Columbia.

Noel Hume, Ivor
1970 *A Guide to Artifacts of Colonial America.* First Vintage Books, New York.

Phelps, David G.
1983 Archaeology of the North Carolina Coast and Coastal Plain: Problems and Hypothesis. In *The Prehistory of North Carolina: An Archaeology Symposium* edited by M.A. Mathis and J.J. Crow, pp. 1–51. North Carolina Division of Archives and History, Raleigh.

Reid, Dawn, Connie Huddleston, Marian Roberts, Joseph Sanders, Thomas Neumann, and Bobby Southerlin
1999 *Data Recovery at 38HR243, Little River Neck, Horry County, South Carolina*. Report prepared for Tidewater Golf Club and Plantation, by Brockington and Associates, Inc., Atlanta.

Reed, Mary Beth
2002 *Historic Resources Survey*. Report prepared for Kershaw County Planning and Zoning, Camden and South Carolina Department of Archives and History. Prepared by New South Associates, Inc., Stone Mountain, Georgia.

Ritchie, William A.
1961 *A Typology and Nomenclature for New York Projectile Points.* New York State Museum and Science Service Bulletin 384. Albany, New York.

Russo, Michael, and Gregory Heide
2003 *Mapping the Sewee Shell Ring.* Report prepared for the Francis Marion and Sumter National Forests. Report prepared by the Southeast Archaeological Center, National Park Service, Tallahassee.

Sassaman, Kenneth E.
1993 *Early Pottery in the Southeast: Tradition and Innovation in Cooking Technology*. University of Alabama Press, Tuscaloosa.

Sassaman, Kenneth E., and David G. Anderson
1995 Middle and Late Archaic Archaeological Records of South Carolina: A Synthesis for Research and Resource Management. *Savannah River Archaeological Research Papers 6, 2nd edition.* South Carolina Institute of Archaeology and Anthropology, Columbia.

Sassaman, Kenneth E., Mark J. Brooks, Glen T. Hanson, and David G. Anderson
1990 Native American Prehistory of the Middle Savannah River Valley: A Synthesis of Archaeological Investigations on the Savannah River Site, Aiken and Barnwell Counties, South Carolina. *Savannah River Archaeological Research Papers 1*, South Carolina Institute of Archaeology and Anthropology, Columbia.

Sassaman, Kenneth E., I Randolph Daniel Jr., and Christopher R. Moore
2002 G.S. Lewis-East: Early and Late Archaic Occupation along the Savannah River, Aiken County, South Carolina. *Savannah River Archaeological Research Papers 12*, South Carolina Institute of Archaeology and Anthropology, Columbia.

Saunders, Rebecca, and Michael Russo
2002 *The Fig Island Ring Complex (38CH42): Coastal Adaptation and the Question of Ring Function in the Late Archaic.* Report prepared for the South Carolina Department of Archives and History, Columbia.

South, Stanley
1977 *Method and Theory in Historical Archaeology.* Academic Press, New York.

Southerlin, Bobby, Dawn Reid, Connie Huddleston, and Joseph Sanders
1997 *The Grand Strand Frontier: Mississippian Period Occupation at the Tidewater Site (38HR254), Horry County, South Carolina.* Report prepared for Tidewater Golf Club and Plantation, by Brockington and Associates, Inc., Atlanta.

Stoltman, James B.
1974 *Groton Plantation: An Archaeological Study of a South Carolina Locality*. Peabody Museum Monographs, No. 1. Harvard University, Cambridge.

Trinkley, Michael
1989 An Archaeological Overview of the South Carolina Woodland Period: It's the Same Old Riddle. In *Studies in South Carolina Archaeology: Essays in Honor of Robert L. Stephenson*, edited by A.C. Goodyear and G.T. Hanson. Anthropological Studies No. 9, Occasional Papers of the South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
1990 *An Archaeological Context for the South Carolina Woodland Period*. Chicora Foundation Research Series 22, Columbia.

United States Department of Agriculture
1919 *Kershaw County*. USDA Historical Soil Survey Maps of South Carolina Digital Collection. Thomas Cooper Library, University of South Carolina, Columbia. Available at: <http://digital.tcl.sc.edu/u?/HSSM,24>
1985 *Soil Survey, Kershaw County Area, South Carolina*. Washington, D.C.

United States Geological Survey
1938 *Hagood* 15' topographic quadrangle.
1953 *Lugoff* 7.5' topographic quadrangle.

Waring, Antonio J., Jr., and Preston Holder
1968 The Deptford Ceramic Complex. In *The Waring Papers: The Collected Works of Antonia J. Waring Jr.* Papers of the Peabody Museum of Archaeology and Ethnology 58: 135–151, Cambridge.

Waters, Michael R., and Thomas W. Stafford, Jr.
2007 Redefining the Age of Clovis: Implications for the Peopling of the Americas. *Science* 315:1122–1126.

Weir, Robert M.
1997 *Colonial South Carolina: A History*. Columbia: University of South Carolina Press.

Williams, Stephen B. (editor)
1968 *Waring Papers: The Collected Works of Antonio J. Waring, Jr.* Papers of the Peabody Museum of Archaeology and Ethnology 58.

Woody, Howard and Davie Beard
2002 *Kershaw County*. South Carolina Postcards, Volume VII. Postcard History Series. Arcadia Publishing, Charleston, South Carolina.

8.0 Appendix A – SHPO Correspondence

April 18, 2011

Mr. Seth Peterson
SC Department of Commerce
Industrial Buildings and Sites
1201 Main St., Ste. 1600
Columbia, SC 29201

Re: Conder Mega Site CRIS
Kershaw County, South Carolina
SHPO Project No. 11CW0158

Dear Mr. Peterson:

Our office has received the documentation dated March 22 that S&ME submitted under the Department of Commerce Site Certification program for the tract referenced above. This letter is for informational purposes only and constitutes our office's coordination under the 2011 Memorandum of Understanding (MOU) with the South Carolina Department of Commerce. This letter is not a result of consultation under Section 106 of the National Historic Preservation Act or under any pertinent state law.

The cultural resources identification survey provided meets the requirements of the MOU. Within the Area of Potential Effect (APE), six archaeological sites, 38KE227, 38KE238, 38KE239, 38KE252, 38KE253, 38KE254, and 38KE255 were previously identified and recommended as not eligible for the National Register of Historic Places (NRHP). S&ME identified seven new sites, 38KE1129-38KE1135. In addition, the New Smyrna Cemetery (316-1349) is located with the .25 radius of the project area. Our office recommends that the five new archaeological sites, 38KE1129-38KE1134, do not meet the criteria for listing in the NRHP. Site 38KE1135 requires additional research and/or field evaluation to determine whether it meets the criteria for listing in the NRHP. Three areas within the tract (see Figure 25) have a high probability of additional archaeological resources.

If the Conder Mega Site were to require state permits or federal permits, licenses, funds, loans, grants, or assistance for development, we would recommend to the federal or state agency or agencies that an intensive archaeological survey be conducted on the 192-acre high probability area and that 38KE1135 be tested to determine its NRHP status.

Project Review Forms and additional guidance regarding our office's role in the federal and state compliance process and historic preservation can be found on our website at http://shpo.sc.gov/revcomp.

If you have any questions, please contact me at (803) 896-6181 or at jbarnes@scdah.state.sc.us.

Sincerely,

Jodi Barnes

Jodi Barnes, PhD
Staff Archaeologist/GIS Coordinator
State Historic Preservation Office

cc. Bill Green, S&ME

November 7, 2014

Kimberly Nagle
S&ME, Inc.
134 Suber Road
Columbia, SC 29210

Re: Conder Mega Site, Phase I Archaeological Survey of Areas 1-4, Draft Report
Kershaw County, South Carolina
SHPO Project No. 11-CW0158

Dear Kimberly:

On October 21, Our Office received the documentation dated October 20 that you submitted as due diligence for the project referenced above. This letter is for preliminary, informational purposes only and does not constitute consultation or agency coordination with our Office as defined in 36 CFR 800: "Protection of Historic Properties" or by any state regulatory process. The recommendation stated below could change once the responsible federal and/or state agency initiates consultation with our Office.

During the course of the survey, S&ME archaeologists identified eight new archaeological sites (38KE1159-38KE1166) and re-located two previously recorded archaeological sites (38KE1132 and 38KE1135). All but two of the sites were recommended not eligible for listing in the National Register of Historic Places (NRHP). Further evaluation was recommended at two of the sites (38KE1164 and previously recorded 38KE1135) to determine their eligibility. We concur with these recommendations.

If the Conder Mega Site were to require state or federal permits, licenses, funds, loans, grants, or assistance for development, we would recommend to the federal or state agency or agencies that the two unevaluated sites be avoided. If avoidance is not possible, we would recommend that further evaluation be done at sites 38KE1135 and at 38KE1164 to determine their eligibility for listing in the NRHP.

The State Historic Preservation Office will provide comments regarding historic and archaeological resources and effects to them once the federal or state agency initiates consultation. Project Review Forms and additional guidance regarding our Office's role in the compliance process and historic preservation can be found on our website at: http://shpo.sc.gov/programs/revcomp.

If you have any questions, please contact me at (803) 896-6181 or at edale@scdah.state.sc.us.

Sincerely,

Emily Dale
Staff Archaeologist
State Historic Preservation Office

9.0 Appendix B – Artifact Catalog

Appendix B - Sites 38KE1135 and 38KE1164 Phase II Testing Artifact Catalog

Site #	Cat. #	TU	Level	Depth (cmbd)	Ct	Wt (g)	Class	Category	Sub-Category	Type/ Description	Material	Portion	Temper	Lithic Size Grade	Notes
38KE1135	8.01	1	Surface	Surface	1	17.7	Lithic	Chipped Stone	Biface Fragment		Rhyolite	Tip			
38KE1135	8.02	1	Surface	Surface	1	7.1	Lithic	Debitage	Cortical		Chert			2	
38KE1135	8.03	1	Surface	Surface	1	1.3	Lithic	Debitage	Non-cortical		Rhyolite			2	
38KE1135	8.04	1	Surface	Surface	1	0.5	Lithic	Debitage	Non-cortical		Chert			3	
38KE1135	9.01	1	2	23-33	1	1.1	Lithic	Debitage	Non-cortical		Rhyolite			3	
38KE1135	9.02	1	2	23-33	1	1.9	Lithic	Debitage	Cortical		Quartz			3	
38KE1135	9.03	1	2	23-33	3	3.5	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1135	9.04	1	2	23-33	2	0.5	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1135	10.01	1	3	33-43	1	1.9	Lithic	Debitage	Non-cortical		Quartz			2	
38KE1135	10.02	1	3	33-43	1	0.3	Lithic	Debitage	Non-cortical		Rhyolite			3	
38KE1135	10.03	1	3	33-43	1	0.9	Lithic	Debitage	Cortical		Quartz			3	
38KE1135	10.04	1	3	33-43	7	3.9	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1135	10.05	1	3	33-43	1	0.1	Lithic	Debitage	Non-cortical		Rhyolite			4	
38KE1135	10.06	1	3	33-43	7	1.5	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1135	10.07	1	3	33-43	2	13.8	Lithic	FCR			Quartz				
38KE1135	11.01	1	5	53-63	1	0.4	Lithic	Debitage	Non-cortical		Rhyolite			3	
38KE1135	11.02	1	5	53-63	1	0.3	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1135	11.03	1	5	53-63	2	0.5	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1135	12.01	2	1	10-19	1	2.3	Lithic	Debitage	Non-cortical		Quartz			2	
38KE1135	12.02	2	1	10-19	1	17.5	Lithic	Other	Hammerstone		Conglomerate				
38KE1164	37.01	1	1	10-12	1	20.1	Lithic	Chipped Stone	Perforator		Quartz				
38KE1164	37.02	1	1	10-12	1	6.7	Lithic	Chipped Stone	Utilized Flake		Quartz			2	
38KE1164	37.03	1	1	10-12	1	1.5	Lithic	Debitage	Non-cortical		Quartz			2	
38KE1164	37.04	1	1	10-12	4	1.7	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	37.05	1	1	10-12	1	0.2	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	38.01	1	2	12-22	1	3.5	Lithic	Debitage	Cortical		Quartz			2	
38KE1164	38.02	1	2	12-22	7	3.7	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	38.03	1	2	12-22	7	1.5	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	39.01	1	3	22-32	7	20.1	Lithic	Debitage	Non-cortical		Quartz			2	
38KE1164	39.02	1	3	22-32	6	3.7	Lithic	Debitage	Cortical		Quartz			3	
38KE1164	39.03	1	3	22-32	24	15.1	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	39.04	1	3	22-32	17	2.6	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	40.01	1	4	32-45	1	1.1	Lithic	Debitage	Non-cortical		Quartz			2	
38KE1164	40.02	1	4	32-45	1	0.8	Lithic	Debitage	Cortical		Rhyolite			3	
38KE1164	40.03	1	4	32-45	3	1.7	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	40.04	1	4	32-45	1	0.1	Lithic	Debitage	Cortical		Quartz			4	

Artifact measurements in mm

Appendix B - Sites 38KE1135 and 38KE1164 Phase II Testing Artifact Catalog

Site #	Cat. #	TU	Level	Depth (cmbd)	Ct	Wt (g)	Class	Category	Sub-Category	Type/ Description	Material	Portion	Temper	Lithic Size Grade	Notes
38KE1164	40.05	1	4	32-45	4	0.8	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	41.01	1	5	45-55	1	0.5	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	42.01	1	6	55-65	1	0.2	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	43.01	2	1	10-16	2	1.5	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	43.02	2	1	10-16	1	0.1	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	44.01	2	2	16-26	1	1.0	Lithic	Chipped Stone	Utilized Flake		Quartz			3	
38KE1164	44.02	2	2	16-26	6	2.1	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	44.03	2	2	16-26	8	1.1	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	44.04	2	2	16-26	4	10.0	Lithic	FCR			Conglomerate				
38KE1164	45.01	2	3	26-36	1	6.8	Lithic	Chipped Stone	Utilized Flake		Quartz			2	
38KE1164	45.02	2	3	26-36	1	1.7	Lithic	Debitage	Non-cortical		Chert			2	
38KE1164	45.03	2	3	26-36	2	4.2	Lithic	Debitage	Non-cortical		Quartz			2	
38KE1164	45.04	2	3	26-36	2	0.6	Lithic	Debitage	Non-cortical		Rhyolite			3	
38KE1164	45.05	2	3	26-36	1	1.0	Lithic	Debitage	Cortical		Quartz			3	
38KE1164	45.06	2	3	26-36	21	13.7	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	45.07	2	3	26-36	1	0.1	Lithic	Debitage	Cortical		Quartz			4	
38KE1164	45.08	2	3	26-36	25	5.3	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	45.09	2	3	26-36	11	59.5	Lithic	FCR			Conglomerate				
38KE1164	46.01	2	4	36-46	1	1.5	Lithic	Debitage	Utilized Flake		Quartz			3	
38KE1164	46.02	2	4	36-46	1	0.2	Lithic	Debitage	Non-cortical		Rhyolite			3	
38KE1164	46.03	2	4	36-46	9	5.3	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	46.04	2	4	36-46	2	0.3	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	46.05	2	4	36-46	1	1.3	Lithic	FCR			Conglomerate				
38KE1164	47.01	3	1	10-14	1	1.2	P. Ceramic	Vessel	Residual						
38KE1164	47.02	3	1	10-14	1	1.6	Lithic	Chipped Stone	Graver		Quartz				
38KE1164	47.03	3	1	10-14	1	1.3	Lithic	Debitage	Non-cortical		Rhyolite			2	
38KE1164	47.04	3	1	10-14	19	11.8	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	47.05	3	1	10-14	9	1.7	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	47.06	3	1	10-14	1	17.4	Lithic	FCR			Conglomerate				
38KE1164	47.07	3	1	10-14	1	19.4	Lithic	FCR			Quartzite				
38KE1164	48.01	3	2	14-24	5	14.3	P. Ceramic	Vessel	Indet.	Yadkin		Body	Crushed Quartz		
38KE1164	48.02	3	2	14-24	14	11.4	P. Ceramic	Vessel	Residual						
38KE1164	48.03	3	2	14-24	1	5.5	Lithic	Chipped Stone	Uniface		Quartz				
38KE1164	48.04	3	2	14-24	1	1.9	Lithic	Chipped Stone	Utilized Flake		Quartz			2	
38KE1164	48.05	3	2	14-24	1	2.2	Lithic	Chipped Stone	Utilized Flake		Quartz			3	
38KE1164	48.06	3	2	14-24	1	20.5	Lithic	Chipped Stone	Biface		Quartz				
38KE1164	48.07	3	2	14-24	1	2.2	Lithic	Chipped Stone	Biface Fragment		Quartz				

Artifact measurements in mm

Appendix B - Sites 38KE1135 and 38KE1164 Phase II Testing Artifact Catalog

Site #	Cat. #	TU	Level	Depth (cmbd)	Ct	Wt (g)	Class	Category	Sub-Category	Type/ Description	Material	Portion	Temper	Lithic Size Grade	Notes
38KE1164	48.08	3	2	14-24	5	46.1	Lithic	Debitage	Cortical		Quartz			2	
38KE1164	48.09	3	2	14-24	9	25.1	Lithic	Debitage	Non-cortical		Quartz			2	
38KE1164	48.10	3	2	14-24	3	3.1	Lithic	Debitage	Cortical		Quartz			3	
38KE1164	48.11	3	2	14-24	28	25.1	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	48.12	3	2	14-24	9	1.2	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	48.13	3	2	14-24	2	110.8	Lithic	FCR			Conglomerate				
38KE1164	49.01	3	3	24-34	1	11.3	Lithic	Chipped Stone	Utilized Flake		Quartz			2	
38KE1164	49.02	3	3	24-34	1	4.2	Lithic	Debitage	Cortical		Quartz			2	
38KE1164	49.03	3	3	24-34	4	21.2	Lithic	Debitage	Non-cortical		Quartz			2	
38KE1164	49.04	3	3	24-34	23	19.2	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	49.05	3	3	24-34	12	2.1	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	50.01	3	4	34-44	3	8.1	Lithic	Debitage	Non-cortical		Quartz			2	
38KE1164	50.02	3	4	34-44	9	2.7	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	50.03	3	4	34-44	4	0.5	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	51.01	4	1	10-25	1	3.4	Lithic	Debitage	Non-cortical		Quartz			2	
38KE1164	51.02	4	1	10-25	3	3.9	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	51.03	4	1	10-25	7	1.3	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	52.01	4	2	25-35	1	0.5	Lithic	Debitage	Non-cortical		Rhyolite			3	
38KE1164	52.02	4	2	25-35	1	1.2	Lithic	Debitage	Cortical		Quartz			3	
38KE1164	52.03	4	2	25-35	12	7.2	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	52.04	4	2	25-35	6	1.2	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	53.01	4	3	35-45	4	4.0	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	53.02	4	3	35-45	1	0.3	Lithic	Debitage	Non-cortical		Quartz			4	

Artifact measurements in mm

10.0 Appendix C – Site Forms

SOUTH CAROLINA INSTITUTE OF ARCHAEOLOGY AND ANTHROPOLOGY
UNIVERSITY OF SOUTH CAROLINA
SITE INVENTORY RECORD
(68-1 Rev. 85)

STATE: SC COUNTY: Kershaw SITE NUMBER: 38KE1135 - revisit
Recorded By: Kimberly Nagle Affiliation: S&ME, Inc. Date: 9-16-16

A. GENERAL INFORMATION
1. Site name: _____ Project: Central SC Megasite Phase II @ site 38KE1135
2. USGS Quadrangle: Lugoff Date: 1953 Scale: 7.5 or 15 minute (circle one)
3. UTM: Zone 17 Easting 526734 Northing 3785147
4. Other map reference: _____
5. Descriptive site type (see handbook):
☑ Prehistoric Early Woodland - Mississippian camp site ☐ Historic _____
6. Archaeological investigation (circle): Survey ☐ Testing ☑ Excavation ☐
7. Property owner: private property – Phone number: _____
8. Address: _____
9. Other site designations: _____
10. National Register of Historic Places status (circle one):
Potentially eligible ☐ Probably not eligible ☑ Additional work ☐

Office Use Only

Determined eligible Determined not eligible Date _____
On NRHP Date _____

---

11. Level of significance (circle): National ☐ State ☐ Local ☐
12. Justification: _____

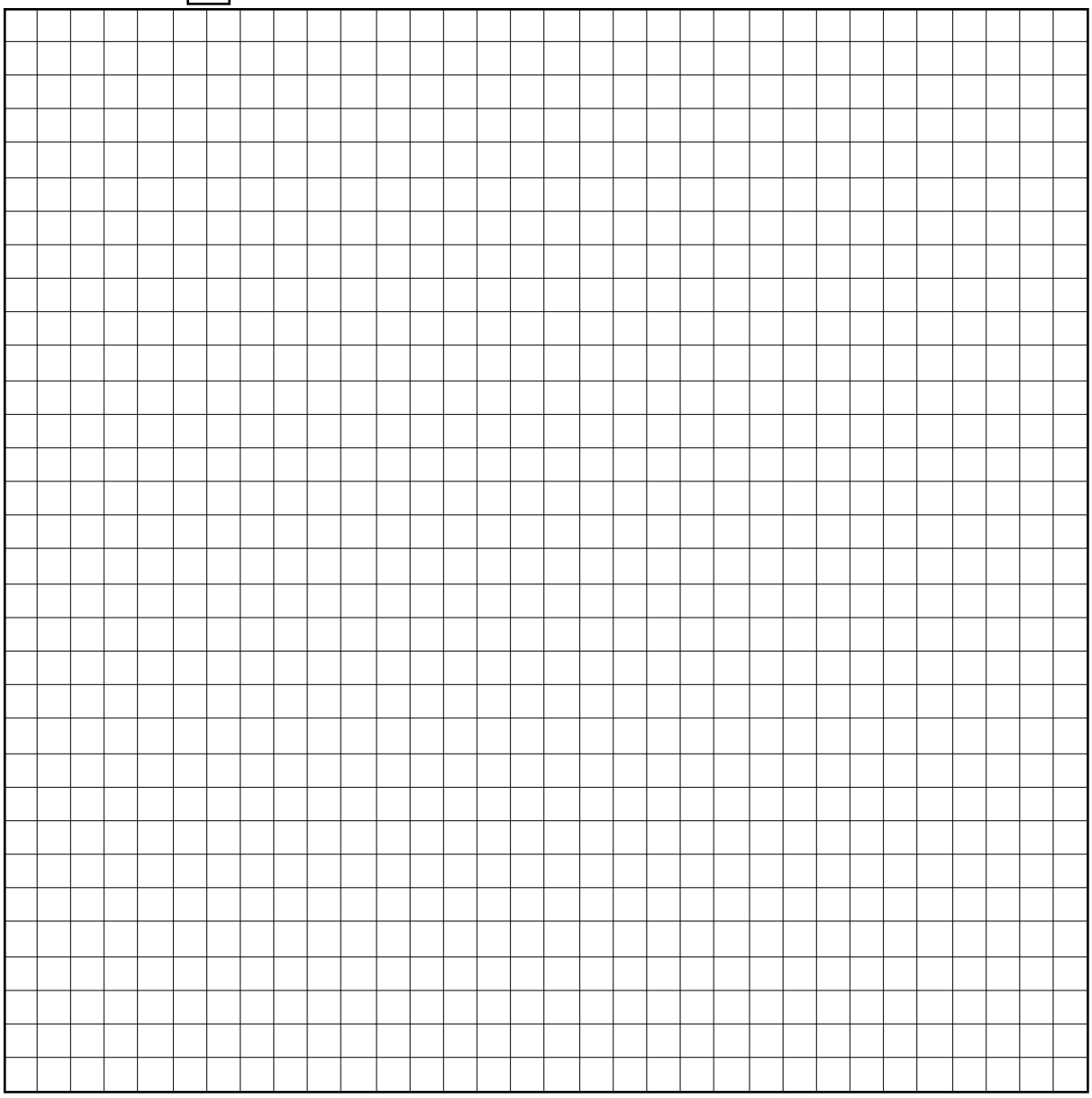
B. ENVIRONMENT AND LOCATION
1. General physiographic province (circle):
Lower Coastal Plain ☐ Middle Coastal Plain ☐ Upper Coastal Plain ☑
Piedmont ☐ Blue Ridge Mountains ☐
2. Landform location: Hilltop Site elevation (above MSL): 365 (in feet)
3. On site soil type: Sand Soil classification: Lakeland Sand
4. Major river system (circle): Pee Dee ☐ Santee ☑ Ashley-Combahee-Edisto ☐ Savannah ☐
5. Nearest river/stream: unnamed tributary of Gillies Creek
6. Current vegetation (circle): Pine/coniferous ☐ Hardwood ☐ Mixed pine/hardwood ☐
Old field ☐ Grass/pasture ☐ Agricultural/crops ☐ Wetlands/freshwater ☐
Wetlands/saltwater ☐ Other ☑ Comments: young pine and hardwood, scrub brush
7. Description of groundcover (circle): Absent ☐ Light ☑ Moderate ☐ Heavy ☐

C. SITE CHARACTERISTICS
1. Estimated site dimensions: 180 E/W meters by 100 N/S meters
2. Site depth: Surface; 0-80 cm.
3. Cultural features (type and number): _____
None noted
4. Presence of (circle): midden ☐ floral remains ☐ faunal remains ☐ shell ☐ charcoal ☐
5. Human skeletal remains (circle): present ☐ preservation (circle): good ☐
absent ☑ poor ☐
6. General site description: _____
Site is located on a hilltop. Site consists predominately of a surface scatter, artifact were found in intact stratigraphy just below the plow zone. The majority of the aritfacts consisted of quartz debitage. None of the artifacts recovered during the Phase II were diagnostic and no features were encountered.

(Use in conjunction with handbook)

See Attached Map ☑

Site Map



Scale

The following information should be provided on the site map: site boundaries, nearby topographic features, associated streams, modern cultural features, different land use types in site area, collection loci, test excavation loci, archaeological features and means of access (include north arrow and scale).

MAP KEY:

Verbal description of location: see attached sketch map

D. ARCHAEOLOGICAL COMPONENTS

☐ Paleo Indian	☑ Middle Woodland	☐ 17th Century
☐ Early Archaic	☑ Late Woodland	☐ 18th Century
☐ Middle Archaic	☑ Mississippian	☐ 19th Century
☐ Late Archaic	☐ Unknown prehistoric	☐ 20th Century
☑ Early Woodland	☐ 16th Century	☐ Unknown historic

E. DATA RECOVERED

List materials recovered: Total number of artifacts: 37

1 rhyolite biface fragment
1 hammerstone
2 pieces of FCR
26 pieces of quartz debitage
5 pieces of rhyolite debitage
2 pieces of chert debitage

(Attach additional artifact inventory sheets if needed)

F. DATA RECOVERY METHODS

1. Ground surface visibility (circle one): 0% ☐ 1-25% ☐ 26-50% ☐ 51-75% ☐ 76-100% ☑
2. Number of person hours spent collecting (total hours X total people): _____
3. Description of surface collection methods (circle):
   Type: grid collection ☐ Extent: complete ☐
   grab collection ☐ selective ☐
   controlled sampling ☐ no collection made ☐
   other (specify): collected from surface of test unit
4. Description of testing methods (circle):
   Systematic ☐ Type _____ Test units:
   Nonsystematic ☐

Number	Size/max. depth	
_____	_____	cm.
_____	_____	cm.
_____	_____	cm.

5. Description of excavation units:

Number	Size/max. depth		Comments:
3	1x2m / 73 cmbs	cm.	
_____	_____	cm.	
_____	_____	cm.	
_____	_____	cm.	

G. MANAGEMENT INFORMATION

1. Present land use (circle):
   ☐ Agricultural
   ☐ Forest
   ☑ Fallow
   ☐ Residential, low density
   ☐ Residential, high density
   ☐ Commercial
   ☐ Industrial
   Other (specify) _____

MANAGEMENT INFORMATION (Cont.)

2. Present condition/integrity of site (circle):
☐ Intact ☑ Damaged

Extent of damage: ☐ light ☑ moderate ☐ heavy

Nature of damage: ☐ erosion ☐ cultivation ☑ logging ☐ construction/development ☐ vandalism ☐ inundation ☐ other (specify) _____

3. Potential impacts and threats to site (circle):

Potential threat:
☐ none
☐ low
☐ moderate
☑ high

Nature of threat:
☐ erosion
☐ cultivation
☐ logging
☑ construction/
☑ development
☐ vandalism
☐ inundation
☐ other (specify) _____

☑ direct impact zone
☐ indirect impact zone
☐ outside impact zone
☐ indeterminate

4. Recommendations for further work (circle):
survey ☐ testing ☐ excavation ☐ archival ☐ none ☐ other: _____
Comments: _____

5. References (circle): Historic/archival documentation Yes ☐ No ☐ Not Known ☐

Archaeological documentation Yes ☐ No ☐ Not Known ☐

6. Additional management information/comments: _____

7. Location of existing collections: S&ME Columbia
8. Location of photographs: S&ME Columbia
9. Location of special samples: _____
Type of special samples: _____

Signature of observer: _____ Date:_____

Subsequent visits:
Observer _____ Date: _____
Observer _____ Date: _____
Observer _____ Date: _____

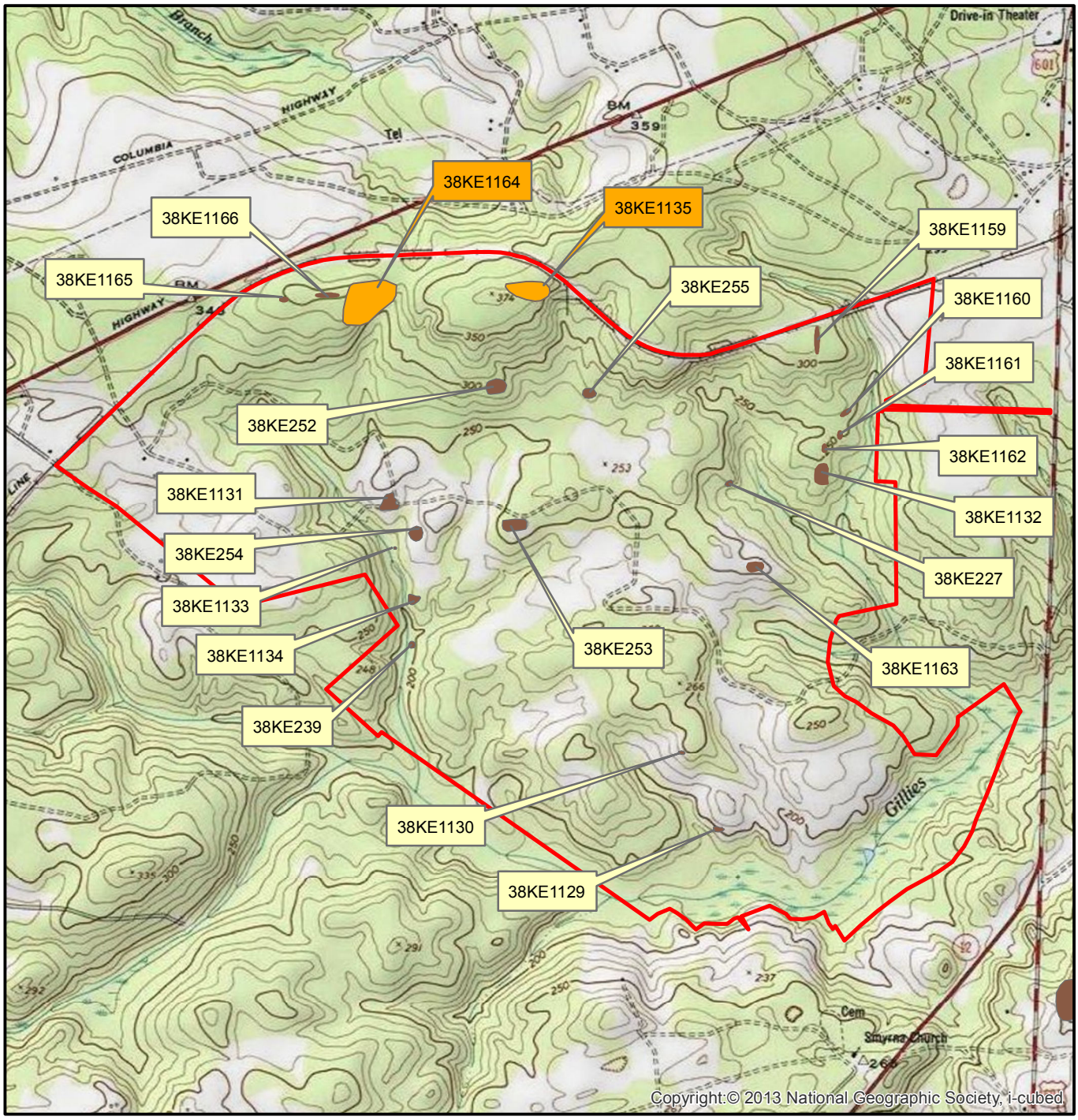


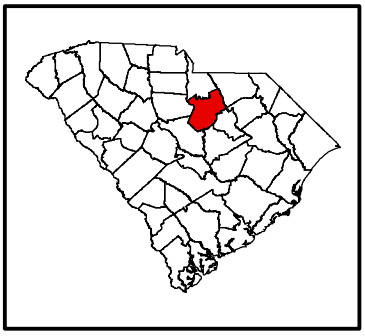
Figure 1.1. Topographic map showing archaeological site locations in the Central SC MegaSite project area.
Base Map: Lugoff (1953) 7.5' USGS topographic quadrangle.

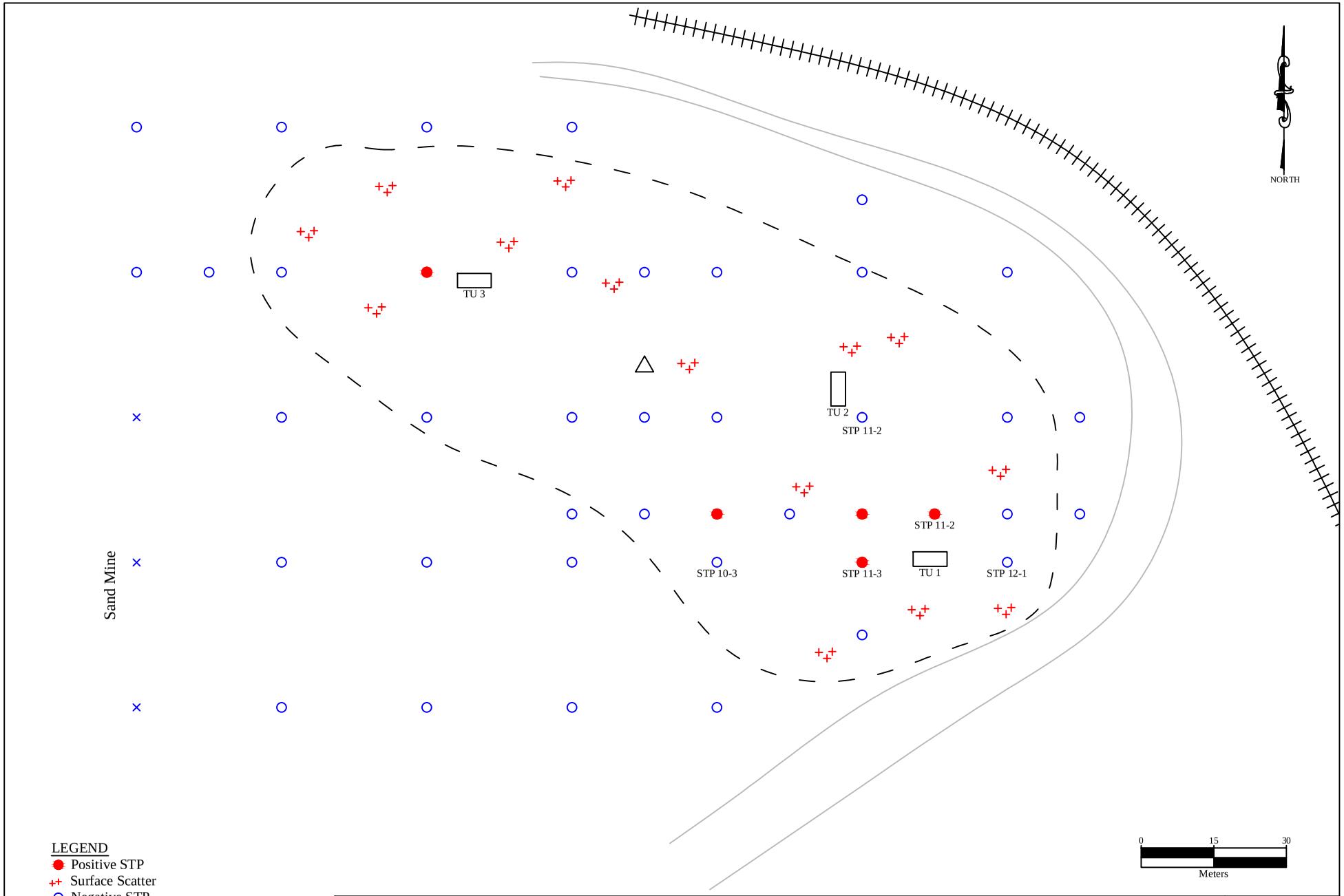
0 0.25 0.5
Miles

N
W E
S

Sites 38KE1135 and 38KE1164
Archaeological Site
Central SC MegaSite Boundary

S&ME





LEGEND
- Positive STP
- Surface Scatter
- Negative STP
- STP Not Dug
- Site Datum
- Site Boundary
- Railroad
- Contours (approximate)

SCALE:	AS SHOWN
APPROVED BY:	KJN
DRAWN BY:	HLC
DATE:	9-22-2016

S&ME

SITE MAP
38KE1135
Central South Carolina MegaSite, Phase II
Kershaw County, South Carolina
JOB NO: 4261-16-131

FIGURE NO: ?

SOUTH CAROLINA INSTITUTE OF ARCHAEOLOGY AND ANTHROPOLOGY
UNIVERSITY OF SOUTH CAROLINA
SITE INVENTORY RECORD
(68-1 Rev. 85)

STATE: SC COUNTY: Kershaw SITE NUMBER: 38KE1164 - revisit
Recorded By: Kimberly Nagle Affiliation: S&ME, Inc. Date: 9-16-15

A. GENERAL INFORMATION
1. Site name: _____ Project: Central SC Megasite Phase II @ site 38KE1164
2. USGS Quadrangle: Lugoff Date: 1953 Scale: 7.5 or 15 minute (circle one)
3. UTM: Zone 17 Easting 526088 Northing 3785115
4. Other map reference: _____
5. Descriptive site type (see handbook):
☑ Prehistoric Late Archaic through Mississippian camp site ☐ Historic _____
6. Archaeological investigation (circle): Survey ☐ Testing ☑ Excavation ☐
7. Property owner: private property – Phone number: _____
8. Address: _____
9. Other site designations: _____
10. National Register of Historic Places status (circle one):
Potentially eligible ☑ Probably not eligible ☐ Additional work ☐

Office Use Only
Determined eligible Determined not eligible Date _____
On NRHP Date _____

11. Level of significance (circle): National ☐ State ☐ Local ☐
12. Justification:
The site contains chipped stone tools, both formal and expedient, within relatively intact stratigraphic deposits, and has a relatively large amount and moderate diversity of artifacts. Although features were not identified, an intensive occupation was identified in Levels 1 through 3 throughout the test units at the site; the diagnostic artifacts recovered from these levels dated to the Middle Woodland subperiod. Based on these factors, site 38KE1164 is recommended eligible for inclusion in the NRHP under Criterion A for broad patterns of settlement during the Middle Woodland subperiod in South Carolina, this is a subperiod in which occupations and settlement patterns are poorly documented, and Criterion D, for its potential to yield important information to the prehistory of the area.

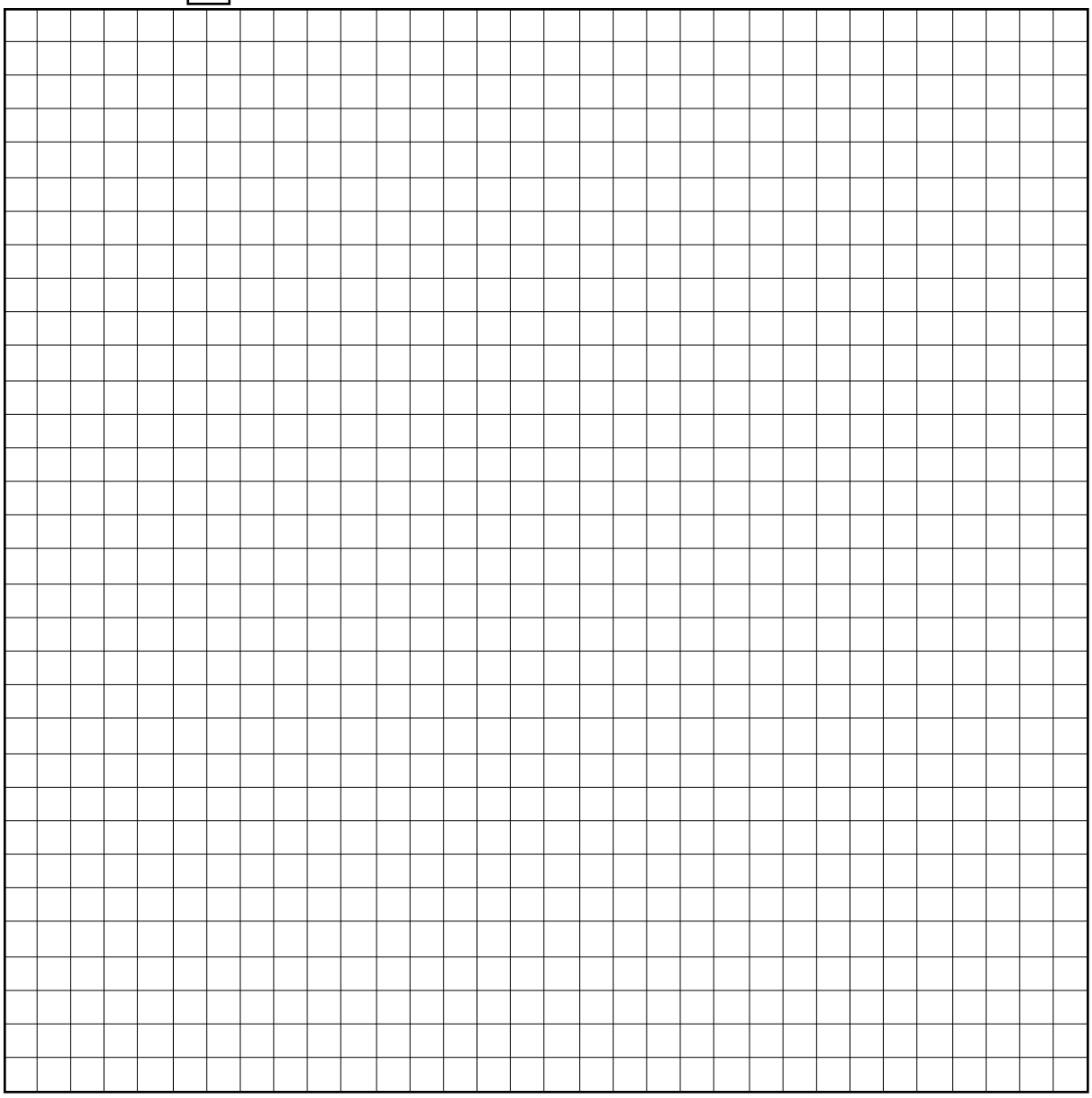
B. ENVIRONMENT AND LOCATION
1. General physiographic province (circle):
Lower Coastal Plain ☐ Middle Coastal Plain ☐ Upper Coastal Plain ☑
Piedmont ☐ Blue Ridge Mountains ☐
2. Landform location: Hilltop and Hillslope Site elevation (above MSL): 300-350 (in feet)
3. On site soil type: Sand Soil classification: Lakeland Sand and Ailey Sand
4. Major river system (circle): Pee Dee ☐ Santee ☑ Ashley-Combahee-Edisto ☐ Savannah ☐
5. Nearest river/stream: unnamed tributary of Gillies Creek
6. Current vegetation (circle): Pine/coniferous ☐ Hardwood ☐ Mixed pine/hardwood ☐
Old field ☐ Grass/pasture ☐ Agricultural/crops ☐ Wetlands/freshwater ☐
Wetlands/saltwater ☐ Other ☑ Comments: young scattered pine and scrub brush
7. Description of groundcover (circle): Absent ☐ Light ☐ Moderate ☐ Heavy ☐

C. SITE CHARACTERISTICS
1. Estimated site dimensions: 210 E/W meters by 180 N/S meters
2. Site depth: Surface; 0-55 cm.
3. Cultural features (type and number): _____
None noted

4. Presence of (circle): midden ☐ floral remains ☐ faunal remains ☐ shell ☐ charcoal ☐
5. Human skeletal remains (circle): present ☐ preservation (circle): good ☐
absent ☑ poor ☐
6. General site description:
Site is located on a hilltop and hillslope adjacent to an unnamed tributary of Gillies Creek. Site is very large and consists of a massive surface scatter that was likely disturbed when the area was subjected to silviculture. Intact deposits beneath the plow zone are present and appear to date to minimally the Middle Woodland based on the identification of Yadkin pottery. Non diagnostic shipped stone tools were also recovered, the debitage to toll ratio suggests a long term camp site. During the Phase I artifacts dating to the Mississippian and Late Archaic were also recovered.

See Attached Map ✔

Site Map



Scale

The following information should be provided on the site map: site boundaries, nearby topographic features, associated streams, modern cultural features, different land use types in site area, collection loci, test excavation loci, archaeological features and means of access (include north arrow and scale).

MAP KEY:

Verbal description of location: see attached sketch map

D. ARCHAEOLOGICAL COMPONENTS

☐ Paleo Indian	☑ Middle Woodland	☐ 17th Century
☐ Early Archaic	☑ Late Woodland	☐ 18th Century
☐ Middle Archaic	☑ Mississippian	☐ 19th Century
☑ Late Archaic	☐ Unknown prehistoric	☐ 20th Century
☑ Early Woodland	☐ 16th Century	☐ Unknown historic

E. DATA RECOVERED

List materials recovered: see attached artifact inventory

Total number of artifacts: 396

(Attach additional artifact inventory sheets if needed)

F. DATA RECOVERY METHODS

1. Ground surface visibility (circle one): 0% ☐ 1-25% ☐ 26-50% ☐ 51-75% ☐ 76-100% ☑
2. Number of person hours spent collecting (total hours X total people): _____
3. Description of surface collection methods (circle):
   - Type: grid collection ☐ / grab collection ☐ / controlled sampling ☐ / other (specify): _____
   - Extent: complete ☐ / selective ☐ / no collection made ☑
4. Description of testing methods (circle):
   - Systematic ☐ Type _____
   - Nonsystematic ☐
   - Test units:

Number	Size/max. depth	
_____	_____	cm.
_____	_____	cm.
_____	_____	cm.

5. Description of excavation units:

Number	Size/max. depth		Comments:
4	1x2m / 75 cmbs	cm.	
1	1x1m / 45 cmbs	cm.	
_____	_____	cm.	
_____	_____	cm.	

G. MANAGEMENT INFORMATION

1. Present land use (circle):
   - ☐ Agricultural
   - ☐ Forest
   - ☑ Fallow
   - ☐ Residential, low density
   - ☐ Residential, high density
   - ☐ Commercial
   - ☐ Industrial
   - Other (specify) _____

MANAGEMENT INFORMATION (Cont.)

2. Present condition/integrity of site (circle):
☐ Intact ☑ Damaged

Extent of damage: ☐ light ☑ moderate ☐ heavy

Nature of damage: ☐ erosion ☐ cultivation ☑ logging ☐ construction/development ☐ vandalism ☐ inundation ☐ other (specify) _____

3. Potential impacts and threats to site (circle):

Potential threat: ☐ none ☐ low ☐ moderate ☑ high

Nature of threat: ☐ erosion ☐ cultivation ☐ logging ☑ construction/ ☑ development ☐ vandalism ☐ inundation ☐ other (specify) _____

☑ direct impact zone ☐ indirect impact zone ☐ outside impact zone ☐ indeterminate

4. Recommendations for further work (circle):
survey ☐ testing ☐ excavation ☐ archival ☐ none ☐ other: _____
Comments: _____

5. References (circle): Historic/archival documentation Yes ☐ No ☐ Not Known ☐

Archaeological documentation Yes ☐ No ☐ Not Known ☐

6. Additional management information/comments: _____

7. Location of existing collections: S&ME Columbia
8. Location of photographs: S&ME Columbia
9. Location of special samples: _____
Type of special samples: _____

Signature of observer: _____ Date:_____

Subsequent visits:
Observer _____ Date: _____
Observer _____ Date: _____
Observer _____ Date: _____

Appendix B - Site 38KE1164 Phase II Testing Artifact Catalog

Site #	Cat. #	TU	Level	Depth (cmbd)	Ct	Wt (g)	Class	Category	Sub-Category	Type/ Description	Material	Portion	Temper	Lithic Size Grade	Notes
38KE1164	37.01	1	1	10-12	1	20.1	Lithic	Chipped Stone	Perforator		Quartz				
38KE1164	37.02	1	1	10-12	1	6.7	Lithic	Chipped Stone	Utilized Flake		Quartz			2	
38KE1164	37.03	1	1	10-12	1	1.5	Lithic	Debitage	Non-cortical		Quartz			2	
38KE1164	37.04	1	1	10-12	4	1.7	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	37.05	1	1	10-12	1	0.2	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	38.01	1	2	12-22	1	3.5	Lithic	Debitage	Cortical		Quartz			2	
38KE1164	38.02	1	2	12-22	7	3.7	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	38.03	1	2	12-22	7	1.5	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	39.01	1	3	22-32	7	20.1	Lithic	Debitage	Non-cortical		Quartz			2	
38KE1164	39.02	1	3	22-32	6	3.7	Lithic	Debitage	Cortical		Quartz			3	
38KE1164	39.03	1	3	22-32	24	15.1	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	39.04	1	3	22-32	17	2.6	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	40.01	1	4	32-45	1	1.1	Lithic	Debitage	Non-cortical		Quartz			2	
38KE1164	40.02	1	4	32-45	1	0.8	Lithic	Debitage	Cortical		Rhyolite			3	
38KE1164	40.03	1	4	32-45	3	1.7	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	40.04	1	4	32-45	1	0.1	Lithic	Debitage	Cortical		Quartz			4	
38KE1164	40.05	1	4	32-45	4	0.8	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	41.01	1	5	45-55	1	0.5	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	42.01	1	6	55-65	1	0.2	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	43.01	2	1	10-16	2	1.5	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	43.02	2	1	10-16	1	0.1	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	44.01	2	2	16-26	1	1.0	Lithic	Chipped Stone	Utilized Flake		Quartz			3	
38KE1164	44.02	2	2	16-26	6	2.1	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	44.03	2	2	16-26	8	1.1	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	44.04	2	2	16-26	4	10.0	Lithic	FCR			Conglomerate				
38KE1164	45.01	2	3	26-36	1	6.8	Lithic	Chipped Stone	Utilized Flake		Quartz			2	
38KE1164	45.02	2	3	26-36	1	1.7	Lithic	Debitage	Non-cortical		Chert			2	
38KE1164	45.03	2	3	26-36	2	4.2	Lithic	Debitage	Non-cortical		Quartz			2	
38KE1164	45.04	2	3	26-36	2	0.6	Lithic	Debitage	Non-cortical		Rhyolite			3	
38KE1164	45.05	2	3	26-36	1	1.0	Lithic	Debitage	Cortical		Quartz			3	
38KE1164	45.06	2	3	26-36	21	13.7	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	45.07	2	3	26-36	1	0.1	Lithic	Debitage	Cortical		Quartz			4	
38KE1164	45.08	2	3	26-36	25	5.3	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	45.09	2	3	26-36	11	59.5	Lithic	FCR			Conglomerate				
38KE1164	46.01	2	4	36-46	1	1.5	Lithic	Debitage	Utilized Flake		Quartz			3	
38KE1164	46.02	2	4	36-46	1	0.2	Lithic	Debitage	Non-cortical		Rhyolite			3	
38KE1164	46.03	2	4	36-46	9	5.3	Lithic	Debitage	Non-cortical		Quartz			3	

Artifact measurements in mm

Appendix B - Site 38KE1164 Phase II Testing Artifact Catalog

Site #	Cat. #	TU	Level	Depth (cmbd)	Ct	Wt (g)	Class	Category	Sub-Category	Type/ Description	Material	Portion	Temper	Lithic Size Grade	Notes
38KE1164	46.04	2	4	36-46	2	0.3	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	46.05	2	4	36-46	1	1.3	Lithic	FCR			Conglomerate				
38KE1164	47.01	3	1	10-14	1	1.2	P. Ceramic	Vessel	Residual						
38KE1164	47.02	3	1	10-14	1	1.6	Lithic	Chipped Stone	Graver		Quartz				
38KE1164	47.03	3	1	10-14	1	1.3	Lithic	Debitage	Non-cortical		Rhyolite			2	
38KE1164	47.04	3	1	10-14	19	11.8	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	47.05	3	1	10-14	9	1.7	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	47.06	3	1	10-14	1	17.4	Lithic	FCR			Conglomerate				
38KE1164	47.07	3	1	10-14	1	19.4	Lithic	FCR			Quartzite				
38KE1164	48.01	3	2	14-24	5	14.3	P. Ceramic	Vessel	Indet.	Yadkin		Body	Crushed Quartz		
38KE1164	48.02	3	2	14-24	14	11.4	P. Ceramic	Vessel	Residual						
38KE1164	48.03	3	2	14-24	1	5.5	Lithic	Chipped Stone	Uniface		Quartz				
38KE1164	48.04	3	2	14-24	1	1.9	Lithic	Chipped Stone	Utilized Flake		Quartz			2	
38KE1164	48.05	3	2	14-24	1	2.2	Lithic	Chipped Stone	Utilized Flake		Quartz			3	
38KE1164	48.06	3	2	14-24	1	20.5	Lithic	Chipped Stone	Biface		Quartz				
38KE1164	48.07	3	2	14-24	1	2.2	Lithic	Chipped Stone	Biface Fragment		Quartz				
38KE1164	48.08	3	2	14-24	5	46.1	Lithic	Debitage	Cortical		Quartz			2	
38KE1164	48.09	3	2	14-24	9	25.1	Lithic	Debitage	Non-cortical		Quartz			2	
38KE1164	48.10	3	2	14-24	3	3.1	Lithic	Debitage	Cortical		Quartz			3	
38KE1164	48.11	3	2	14-24	28	25.1	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	48.12	3	2	14-24	9	1.2	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	48.13	3	2	14-24	2	110.8	Lithic	FCR			Conglomerate				
38KE1164	49.01	3	3	24-34	1	11.3	Lithic	Chipped Stone	Utilized Flake		Quartz			2	
38KE1164	49.02	3	3	24-34	1	4.2	Lithic	Debitage	Cortical		Quartz			2	
38KE1164	49.03	3	3	24-34	4	21.2	Lithic	Debitage	Non-cortical		Quartz			2	
38KE1164	49.04	3	3	24-34	23	19.2	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	49.05	3	3	24-34	12	2.1	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	50.01	3	4	34-44	3	8.1	Lithic	Debitage	Non-cortical		Quartz			2	
38KE1164	50.02	3	4	34-44	9	2.7	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	50.03	3	4	34-44	4	0.5	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	51.01	4	1	10-25	1	3.4	Lithic	Debitage	Non-cortical		Quartz			2	
38KE1164	51.02	4	1	10-25	3	3.9	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	51.03	4	1	10-25	7	1.3	Lithic	Debitage	Non-cortical		Quartz			4	
38KE1164	52.01	4	2	25-35	1	0.5	Lithic	Debitage	Non-cortical		Rhyolite			3	
38KE1164	52.02	4	2	25-35	1	1.2	Lithic	Debitage	Cortical		Quartz			3	
38KE1164	52.03	4	2	25-35	12	7.2	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	52.04	4	2	25-35	6	1.2	Lithic	Debitage	Non-cortical		Quartz			4	

Artifact measurements in mm

Appendix B - Site 38KE1164 Phase II Testing Artifact Catalog

Site #	Cat. #	TU	Level	Depth (cmbd)	Ct	Wt (g)	Class	Category	Sub-Category	Type/ Description	Material	Portion	Temper	Lithic Size Grade	Notes
38KE1164	53.01	4	3	35-45	4	4.0	Lithic	Debitage	Non-cortical		Quartz			3	
38KE1164	53.02	4	3	35-45	1	0.3	Lithic	Debitage	Non-cortical		Quartz			4	

Artifact measurements in mm

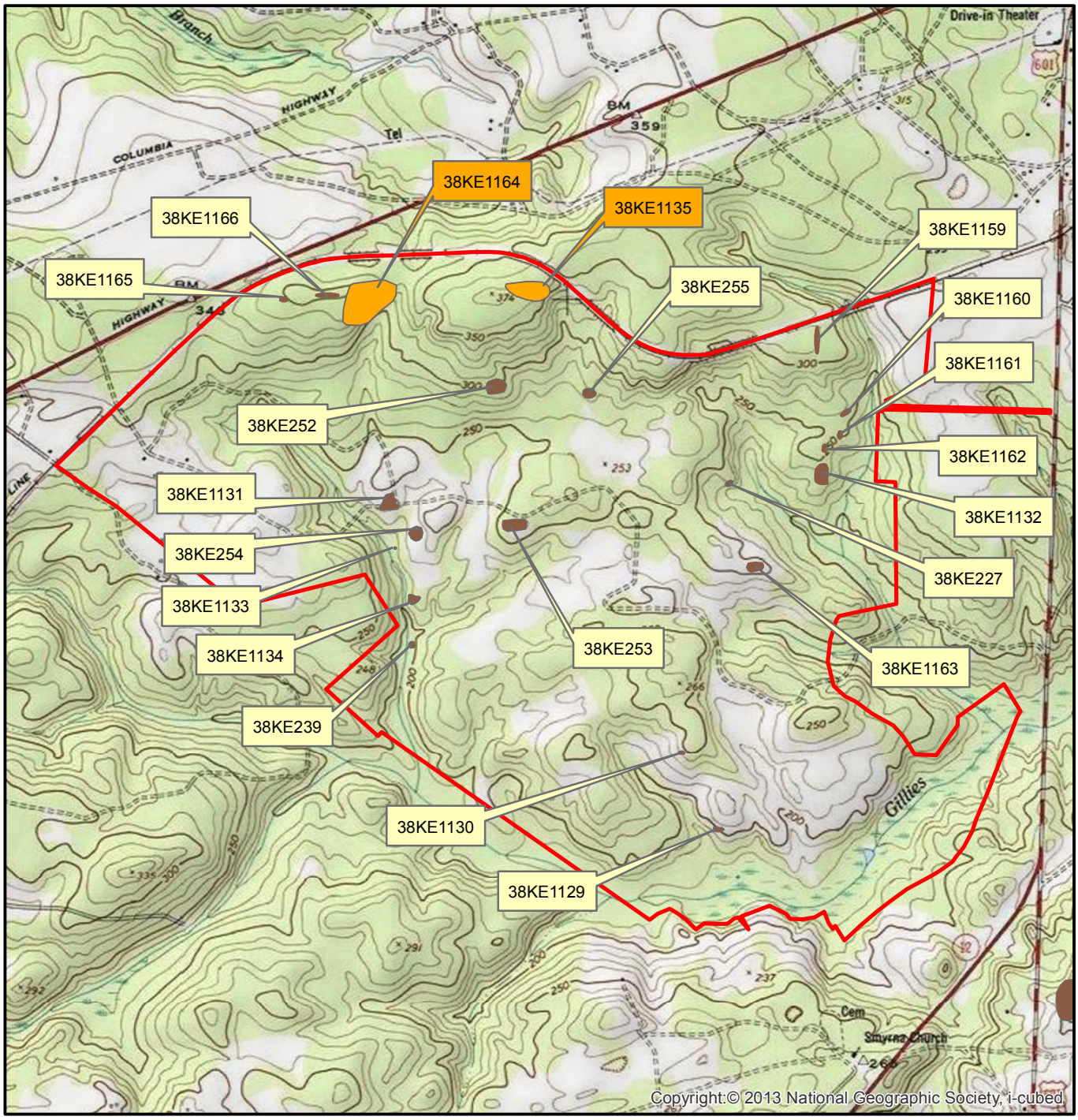


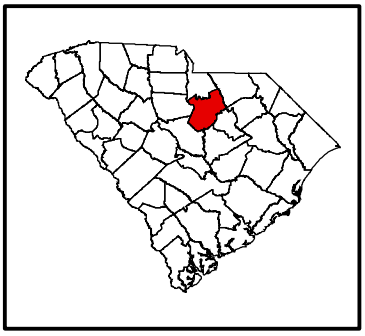
Figure 1.1. Topographic map showing archaeological site locations in the Central SC MegaSite project area.
Base Map: Lugoff (1953) 7.5' USGS topographic quadrangle.

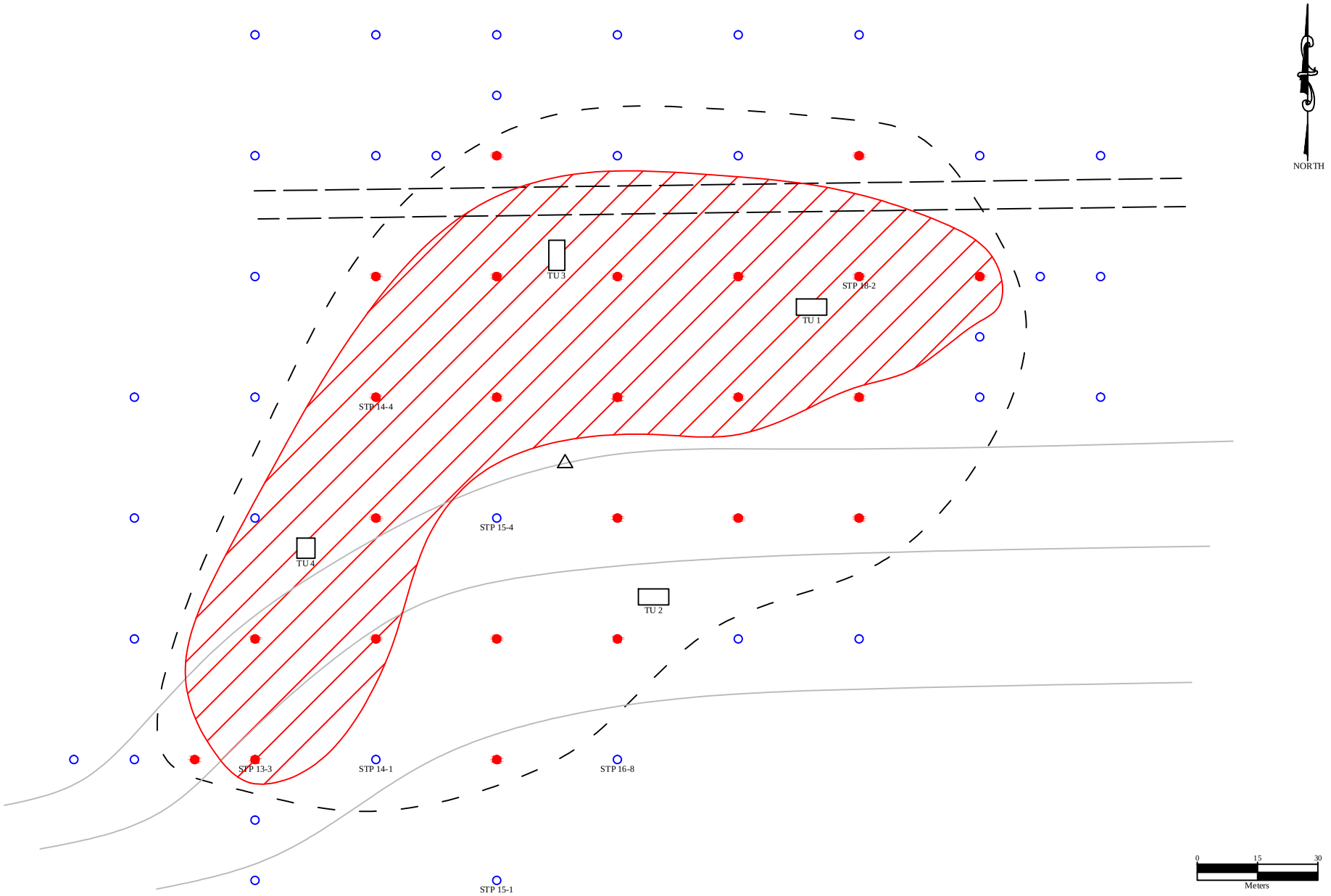
0 0.25 0.5
Miles

N
W E
S

Sites 38KE1135 and 38KE1164
Archaeological Site
Central SC MegaSite Boundary

S&ME





LEGEND
- Positive STP
- Surface Scatter
- Negative STP
- Site Datum
- Site Boundary
- Dirt Road
- Contours (approximate)

SCALE:	AS SHOWN
APPROVED BY:	KJN
DRAWN BY:	HLC
DATE:	9-22-2016

S&ME

SITE MAP
38KE1164
Central South Carolina MegaSite, Phase II
Kershaw County, South Carolina
JOB NO: 4261-16-131

FIGURE NO: ?