

**ARCHAEOLOGICAL RE-EVALUATION OF
38CH1078, BRICKYARD PLANTATION,
CHARLESTON COUNTY, SOUTH CAROLINA**

PREPARED FOR

BRICKYARD DEVELOPMENT CORPORATION

**BROCKINGTON AND ASSOCIATES, INC.
ATLANTA CHARLESTON**

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**BRICKYARD DEVELOPMENT CORPORATION
MOUNT PLEASANT, SOUTH CAROLINA**

BY



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ABSTRACT

Archaeological site 38CH1078 was discovered in 1989 during an intensive survey of the Brickyard Plantation undertaken to provide compliance with guidelines of the South Carolina Coastal Council concerning the management of cultural resources on permitted development areas. The site (consisting of an intact brick foundation/structure, several rubble scatters and mounds, and an associated artifact scatter) was interpreted as a probable slave village presumably associated with the industrial complex (brickyard) identified at 38CH1075 to the north. Both 38CH1078 (residential complex) and 38CH1075 (industrial complex) were recommended as eligible for the National Register of Historic Places. Preservation in place or the implementation of appropriate data recovery activities was recommended for both sites.

Following Hurricane Hugo (22 September 1989), 38CH1078 was covered by extensive debris and undergrowth. Efforts to remove this debris from 38CH1078 appeared to have damaged much of the site beyond the intact foundation/structure. If disturbed, the research potential of 38CH1078 could have been comprised, and its National Register status rendered questionable. The investigations described in this report were designed to determine whether or not the presumed features and deposits interpreted to be present at 38CH1078 in 1989 were still present, and/or to determine which portions of the site retained intact features/deposits that could contribute significant archaeological information to the understanding of the historic occupation of the region.

Regularly spaced exploratory excavations were undertaken to provide information concerning the current stratigraphy of the site and the horizontal and vertical distribution of artifacts within the site. These excavations revealed relatively intact portions of the site, areas that had been badly turbated or covered with redeposited soils, and areas that had been completely destroyed. Based on the distributions of brick fragments and several potential features encountered in the exploratory excavations, larger controlled excavations were undertaken to expose and delimit possible intact features. These excavations revealed the intact or partially intact remains of three structures (in addition to the industrial foundation/structure noted above). At least one of these structures appears to represent an domestic occupation. Based on the materials recovered, the structures appear to have been occupied during the late nineteenth and early twentieth centuries.

Given the presence of intact structural remains and associated artifact bearing deposits, 38CH1078 appears to retain much of its potential to provide information concerning the domestic occupations associated with the extensive industrial complex at 38CH1075. It also can provide additional information concerning the industrial activities that occurred at the brickyard. Therefore, 38CH1078 is recommended as eligible for the National Register of Historic Places. Appropriate data recovery activities are outlined to permit the recovery of this significant information.

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CHAPTER I

INTRODUCTION

Archaeological site 38CH1078 is located in the Brickyard Plantation, near Mount Pleasant, Charleston County, South Carolina. The site was originally discovered in the summer of 1989 during an intensive survey of the development tract undertaken to provide compliance with South Carolina Coastal Council (SCCC) guidelines concerning the management of cultural resources that may be affected by SCCC permitted development activities. The site (interpreted as a possible slave village associated with an industrial complex located at 38CH1075 to the north- see Figure 1) was recommended as eligible for the National Register of Historic Places (NRHP); preservation in place or appropriate data recovery investigations were recommended to prevent the loss of this significant resource. Efforts to remove debris from site following Hurricane Hugo (22 September 1989) resulted in some damage to the site. This damage appeared to have compromised the integrity of the site, reducing its research potential, and thereby altering its NRHP eligibility status. The present investigations were undertaken by Brockington and Associates, Inc., at the request of Brickyard Development Corporation, to determine whether the site had been damaged, the extent of any such damage, and the potential of 38CH1078 to provide significant archaeological information concerning the historic use and occupation of the region. These activities are designed to provide partial compliance with an existing Memorandum of Agreement between South Carolina Historic Preservation Office ([SHPO]-cultural resource managers for the SCCC) and Brickyard Development Corporation concerning the two eligible resources on the tract.

PROJECT DESIGN AND PURPOSE

Site 38CH1078 is located in the north central portion of the Brickyard Plantation (Figure 1). The site lies on a small peninsula between two saltwater ponds. Apparently, these ponds served as borrow pits for the brick making operations that occurred at 38CH1075 to the north (see Figure 1). A causeway leads from 38CH1078 northward onto 38CH1075, adjacent to Horlbeck Creek. Espenshade and Grunden (1989:33-37) described the site as an antebellum residential locale with an industrial structure/foundation. A scatter of historic artifacts (all recovered from shovel tests), five chimney falls, and a possible house platform, as well as the industrial structure, were observed over an area approximately 90 m by 90 m. The presence of intact architectural features and the artifact bearing deposits suggested that information concerning the domestic occupations associated with the brick making activities at 38CH1075 could be extracted from 38CH1078. Therefore, the site was recommended as eligible for nomination to the NRHP. Data recovery plans were prepared for SHPO approval in the event that the site could not be

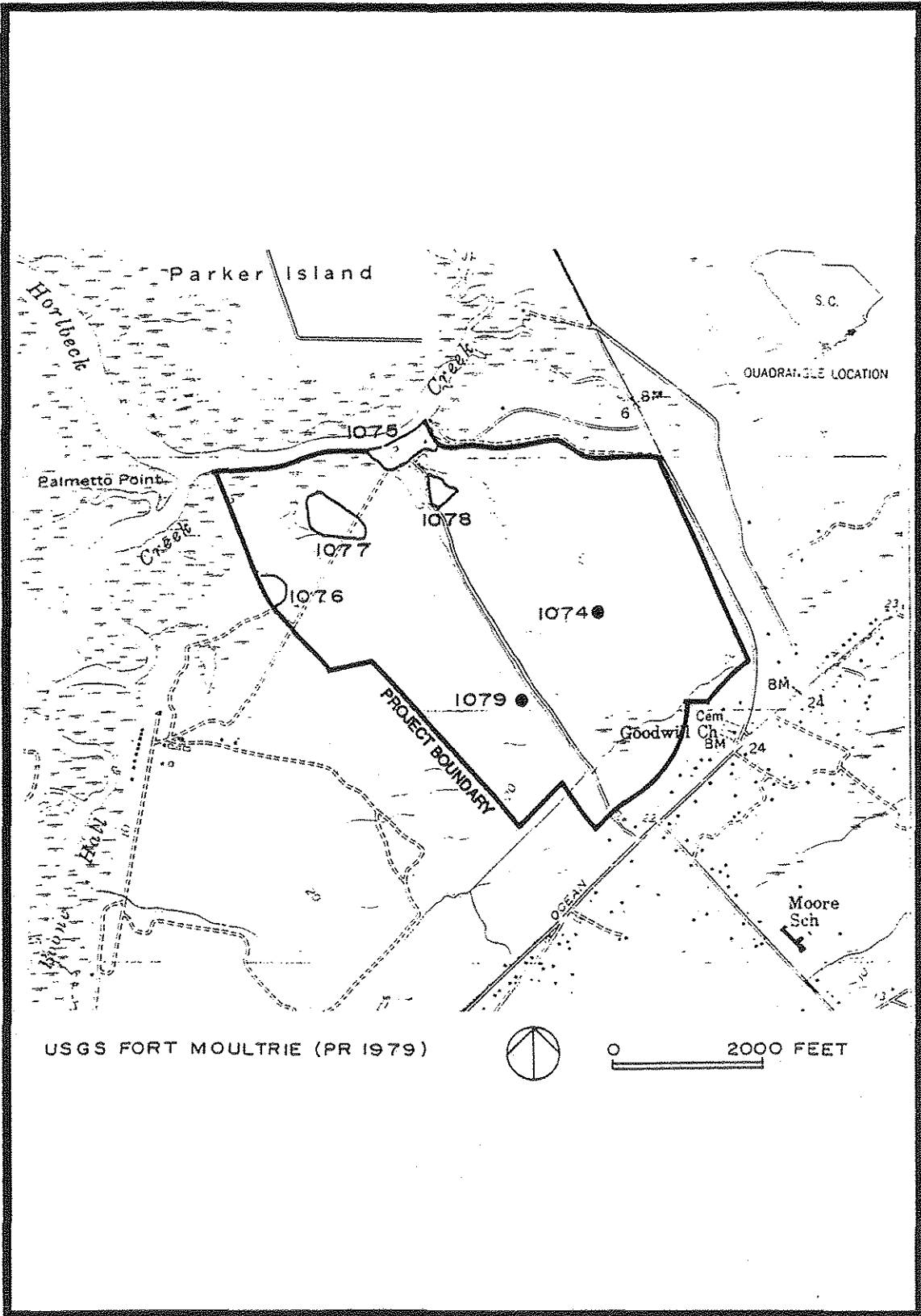


Figure 1. Cultural resources at Brickyard Plantation.

preserved in place.

Following Hurricane Hugo in September of 1989, 38CH1078 was apparently covered by extensive debris from the many pine trees formerly present on the site. Efforts to remove the debris in March of 1991 apparently damaged the surface of the site, obliterating all of the architectural "features" observed by Espenshade and Grunden (1989) except for the intact industrial foundation/structure. Possible injury to the site was noted by the developer's design consultants, who contacted Brockington and Associates, Inc., to request an examination of the site to determine whether any damage had occurred. This inspection suggested that portions of the site had been disturbed and led to the notification of the SHPO concerning the possible damage to an NRHP eligible resource on the Brickyard Plantation. This prompted an inspection of the site by the SHPO staff archaeologist in April 1991, and a determination by the SHPO that the site had suffered some loss of integrity.

In negotiations with the SCCC and the SHPO, Brickyard Development Corporation agreed to undertake an assessment of the site to determine whether the potential damage had affected the research potential of 38CH1078. The recovered information would be employed to:

- (1) determine the extent of damage to the site, if any, and assess the effect of this damage on the previously identified cultural deposits at 38CH1078.
- (2) re-evaluate the site with respect to its eligibility for the NRHP based on the information gathered concerning the current condition of the site.
- (3) develop a revised data recovery plan based on the current condition of the site, if necessary.

A proposal to assess the site was presented to the SHPO in October of 1991; this proposal was accepted by the SHPO and field investigations were initiated and completed in February 1992. These activities included the establishment of a site grid, the excavation of 56 0.5 m by 0.5 m exploratory units at regularly spaced intervals, and the controlled excavation of 16 m² of the surface of the site. Laboratory processing and analyses of the recovered remains were undertaken following the completion of the field investigations. Dr. Eric C. Poplin served as Principal Investigator for the project. Dr. Poplin was present during approximately 50 per cent of the field investigations; Mr. Jeff Gardner provided supervision during Dr. Poplin's absence during the implementation of concurrent data recovery investigations at 38CH1075. Dr. Poplin oversaw all of the processing and analyses of recovered information.

Thus, the current investigations at 38CH1078 were designed to assess whether the

site had been affected by debris clearing activities, determine the affect of this disturbance (if any) on the intact cultural deposits at the site, make recommendations concerning the current condition of the site with respect to its NRHP eligibility, and develop a data recovery plan appropriate for the present condition of the site.

PREVIOUS INVESTIGATIONS AT 38CH1078

Intensive archaeological survey of the 517 acre Brickyard Plantation was undertaken by Brockington and Associates, Inc., in the summer of 1989. Examination of the tract through the pedestrian traverse of transects spaced at 40 m intervals, supplemented by the excavation of small (30 cm by 30 cm) shovel tests at 40 m intervals along each transect, resulted in the identification of six archaeological sites within the tract. Two of these sites (38CH1075 and 38CH1078) were recommended as eligible for the NRHP based on the nature of cultural features and deposits present (Espenshade and Grunden 1989).

Site 38CH1075 consisted of the remains of a former brick yard owned and operated by the Horlbeck family, who resided at the adjacent Boone Hall Plantation. This site contained a standing brick house/commissary, a large standing brick chimney, the ruins of an early twentieth century electric generator, multiple kiln floors, and several wells and possible structure "pads" suggestive of a workshop area (Espenshade and Grunden 1989:25-33).

Site 38CH1078 consisted of an artifact scatter around five chimney falls, an intact house "pad", an intact brick foundation, and midden deposits (Espenshade and Grunden 1989:33-37). These features/deposits were located through shovel tests excavated at 10 m intervals across much of the site, and covered an area approximately 90 m by 90 m (Figure 2). The most conspicuous features of the site at that time were the large oak tree on the north central margin of the site and the industrial foundation/structure in the southwest corner of the site. Figure 3 presents views of the site area and the northern wall of the intact foundation as they appeared in 1989. The lakes to the east and west of the site presumably represented borrow pits excavated during the operation of the brick yard at 38CH1075. A narrow arm of the eastern lake formed the southern margin of the site, and probably represented a canal of some kind. Another canal extended southward from the industrial foundation, and may have joined the extension of the eastern lake described above or permitted ingress to wetlands further south. The narrow dirt road extended from the southern boundary of the development tract on US 17 through the site, and across a causeway to 38CH1075 on the bank of Horlbeck Creek. This road contained numerous brick and tile fragments, presumably waste from the brick making operations.

Artifacts recovered from the survey level investigations included whitewares (plain, molded, annular, and blue shell edged), underglaze decorated porcelain, ironstones, slipwares, bottle glass (including green, very dark green, and gold varieties), wrought and cut nails, iron spikes, animal bone, brick, mortar, and coal. In addition, oyster shell midden,

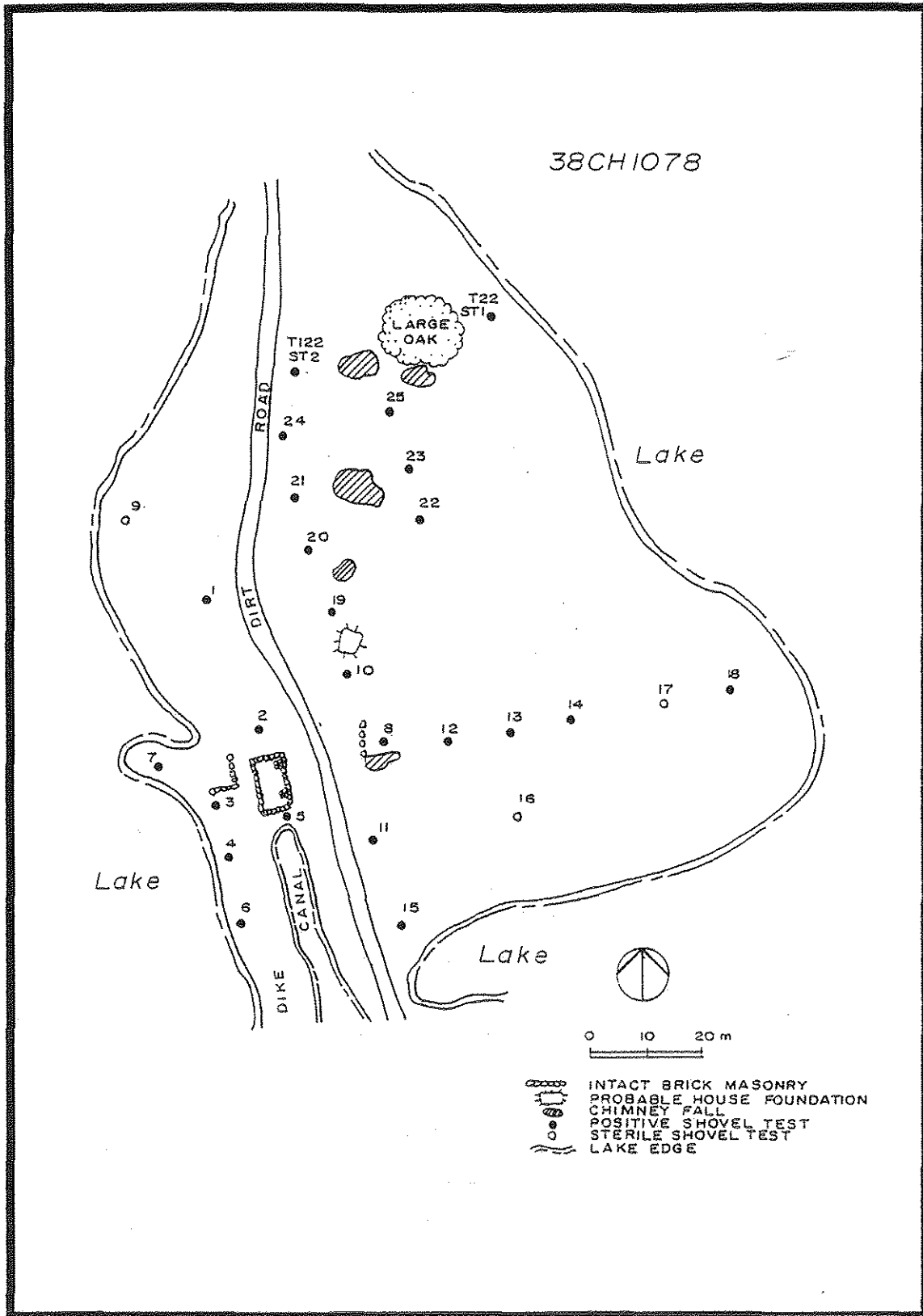


Figure 2. Sketch map of 38CH1078 prepared by Espenshade and Grunden (1989:36).



Figure 3. View of 38CH1078 in 1989 (looking southeast).

with some deposits measuring 30 cm in thickness, also were encountered in several shovel tests. These remains were interpreted as an antebellum nineteenth century domestic occupation, presumably concurrent with and related to the major operation of the brick yard represented at 38CH1075 (Espenshade and Grunden 1989:37).

A data recovery plan for the 38CH1078 was developed if the site could not be preserved in place. This plan outlined the research questions that the intact deposits at 38CH1078 could be expected to address. These issues included:

- (1) slave subsistence and the contribution of wild and self-grown foods in slave diets.
- (2) ethnicity and Colonoware manufacture.
- (3) composition of industrial slave community.
- (4) configuration and construction of industrial slave cabins.

Activities outlined to recover information to address these issues included:

- (1) detailed archival research.
- (2) recordation of the industrial foundation through pumped removal of fills, photographs and drawings of walls, and collection of visible artifacts.
- (3) excavation of 9 m² of the site surface adjacent to the chimney fall to the west of the industrial foundation.
- (4) excavation of 36 m² blocks at two of the probable house locations (total of 72 m² of the site surface) to the north and east of the industrial foundation (houses at Shovel Test 8 and Shovel Tests 21-22 were initially targeted- see Figure 2).
- (5) excavation of 16 m² of yard areas adjacent to each of the house excavation blocks.
- (6) preparation of a detailed transit map of the site and its environs.
- (7) analysis of all recovered information to permit the interpretation of the use of the site and permit the development of data to address the research issues outlined above.

Undertaking these activities would have permitted the recovery of the significant

information expected to be present at 38CH1078, and prevent the loss of this information through the proposed development activities that were scheduled to occur within the development tract.

As noted above, Hurricane Hugo (22 September 1989) resulted in the deforestation of much of the site area, and the deposition of extensive debris (downed trees, limbs, etc.) on 38CH1078. In early 1991, activities were initiated within the Brickyard Plantation to remove much of this debris and prepare the tract for its eventual residential development. During these activities, debris was apparently collected on the site, piled up, and burned. Possible damage to the site was noted by the developer's design consultants (Seamon, Whiteside & Associates, Inc.) who requested that an archaeologist from Brockington and Associates, Inc., inspect the site. This inspection was undertaken by Dr. Eric C. Poplin and Chris Espenshade in March of 1991. At this time, the surface of the site was devoid of any ground cover (either leaf litter or undergrowth), apparently as a result of the operation of large vehicles that collected the hurricane debris. Tracks of several vehicles were observed. A large pile of burned stumps and logs was present in the southeastern portion of the site, as well as a large pile of orange sandy clay. This area also was covered by a orange sandy clay soils that appeared to represent fill. All of this apparent disturbance was observed to the east of the dirt road that passed through the site. No evidence of the former chimney mounds or house pad observed in 1989 was visible except for a small scatter of brick rubble immediately south of the large oak tree noted above. The industrial foundation and chimney fall west of the road did not appear to have been disturbed, although orange sandy clays now filled the canal to the south of the foundation. Figures 4 and 5 display views of the site and the south edge of the industrial foundation as they appeared in March of 1991.

This inspection led to the notification of the SHPO by Seamon, Whitesides & Associates, Inc. that an NRHP eligible resource may have been damaged prior to any mitigative investigations. The site then was visited by the SHPO staff archaeologist, in concert with the developer, the design consultants, and Dr. Poplin; this visit determined that some of the features recorded in 1989 were no longer visible, and that some of the deposits at the site may have been damaged. Activities conducted at the site this time included inspection of the exposed surface and the excavation of a number of 31.75 mm auger tests at judgmentally selected locations. These activities were designed to provide some idea as to the nature of the soils present at 38CH1078 at this time.

Thus, 38CH1078 has witnessed a series of survey to reconnaissance level inspections prior to the present investigations. These activities initially identified the research potential of the site, and subsequently determined that this research potential may have been comprised by debris clearance related to the development of the Brickyard Tract. A program of more intensive testing was developed to determine the extent of possible damage to the site, and to provide recommendations for the continued management of 38CH1078. The details and results of these testing activities and the resultant recommendations are presented in the remainder of this report.



Figure 4. Views of 38CH1078 in 1991- (Top) to the southeast, (Bottom) to northwest towards large oak tree.



Figure 5. View of the south wall of the industrial foundation.

FORMAT OF THIS REPORT

Chapter II of this report outlines the field methods undertaken to re-evaluate 38CH1078. Laboratory processing and particular analyses undertaken also are described. Further, criteria for assessing the significance of the site based on the results of these testing activities also are outlined. These criteria form the basis for the conclusions presented in Chapter III and the recommendations presented in Chapter IV. Chapter III summarizes the field investigations undertaken at 38CH1078. Artifacts recovered and features encountered in the excavations are described. This chapter concludes with a summary of the interpretations of the suites of features encountered. Chapter IV presents the evaluation of the site based upon the recently recovered information. This chapter concludes with a plan to permit the recovery of the significant information determined to exist at the site. Artifact inventories (Appendix A), the Testing Proposal reviewed by the SHPO (Appendix B), and the resume of the Principal Investigator (Appendix C) are appended.

CHAPTER II

METHODS OF INVESTIGATION

A detailed testing proposal was developed by Brockington and Associates, Inc., and reviewed by the SHPO prior to the initiation of any activities related to the re-evaluation of 38CH1078. This proposal, included as Appendix B, served as a Scope of Work for the investigations described below. Descriptions of the methods employed to implement this proposal are outlined below.

FIELD TECHNIQUES

Three sets of activities were identified for completion during the field investigations at 38CH1078. These activities included:

- (1) establishment of a site grid and development of a detailed transit map of the site.
- (2) excavation of exploratory units to determine the horizontal and vertical distributions of artifacts within the site, and to determine the nature of soil deposits throughout the site.
- (3) excavation of larger controlled units to expose and to sample any intact features or deposits encountered in the exploratory excavations or expected to exist at the site.

A site datum was established on the western margin of the site, at the location of a transit station employed by Southeastern Surveyors, Inc. to collect information for plats and drawings for the development tract. This station is identified as Tr. 1622. This station was arbitrarily defined as 150 m North and 100 m East (150 N/100 E) on a grid for 38CH1078. The elevation of this station, as derived from topographic maps of the development tract prepared by Southeastern Surveyors, Inc., was arbitrarily defined as 1.52 m (5 ft) above mean sea level (amsl). A series of wooden stakes and metal reinforcement rods was set using a transit and tape from this station. Stakes were set at 10 m intervals along the 100 E and 130 E grid lines, and along each of the 180 N, 150 N, and 120 N grid lines; all were labeled by their grid coordinates. The locations of the initial exploratory excavations were established between these stakes were established by setting pin flags at the appropriate grid locations defined by extending a tape between any two of the grid points described above.

The elevation of the ground surface adjacent to all exploratory excavations and selected points surrounding the excavations were recorded with respect to the transit station

at 150 N/100 E (Tr. 1622) by transit and stadia rod. In addition, elevations at the corners of each larger controlled excavation were recorded in a similar manner. These data were employed to generate a contour map of the site, and provide information to determine the depth of cultural deposits at the site.

Exploratory excavations, consisting of 0.5 m by 0.5 m units, were initially placed at 20 m intervals over the entire site area. Exploratory units along adjacent grid lines (e.g., along the 100 E and the 120 E grid lines) were staggered reduce the maximum distance between any two excavations (see Kintigh 1988). That is, units along the 100 E grid line were excavated at 100 N/100 E, 120 N/100E, 140 N/100 E, etc., while units along the 120 E grid line were excavated at 110 N/120 E, 130 N/120 E, 150 N/120 E, etc. Once this initial series of units had been excavated, additional locales were selected for more intensive examination through the excavation of additional 0.5 m by 0.5 m units at 10 m intervals. These locales were selected based on the presence or nature of artifacts encountered in the first set of tests, the proximity of the locale to a feature observed during the 1989 examination of the site, and the nature of soils observed in adjacent units. This resulted in the extension of the area examined to the 210 N grid line. A total of 56 0.5 m by 0.5 m units was excavated during this phase of the field investigations. All exploratory excavations were identified by the grid coordinate of their southwest corner. The locations of all exploratory excavations are displayed in Figure 6. Figure 6 also displays the interpreted location of the features observed in 1989 to the excavations undertaken in 1992.

Also, initial units excavated in the southeast portion of the site revealed orange sandy clay deposits that extended at least 50 cm below surface. This heavy clay soil (probably redeposited on the site in 1991) was extremely difficult to screen. Therefore, a 10 cm bucket auger was employed to excavate tests into this soil horizon. The use of the large auger permitted the opportunity to recover some artifacts while permitting a more rapid excavation into and through the heavy soils present in the southern portion of the site. These tests were excavated east of the dirt road along the 110 N grid line.

All exploratory excavations were removed by shovel and trowel. All soil removed from each unit was screened through 6.35 mm hardware cloth, unless the soil horizon was obvious fill. Such fills were not screened; rather, they were removed en masse to permit access to possible undisturbed soil deposits beneath them. Artifacts recovered from each unit were retained and placed in appropriately labeled plastic bags. Brick/mortar fragments and shell recovered from each unit were weighed in the field and discarded. Soils encountered, presence/absence of artifacts, and nature of recovered remains were recorded for each unit. Profile drawings of one wall of each unit were prepared.

The controlled excavation of 16 m² of the surface of 38CH1078 was undertaken through the selection of locales suspected to contain intact cultural deposits. Initially, 1 m by 2 m units were placed in three locales that appeared to contain such deposits. Four additional 1 m by 2 m units and two 1 m by 1 m units were placed adjacent to these three units or in other locales suspected of containing intact deposits. These larger units were

BRICKYARD PLANTATION SITE 38CH1078

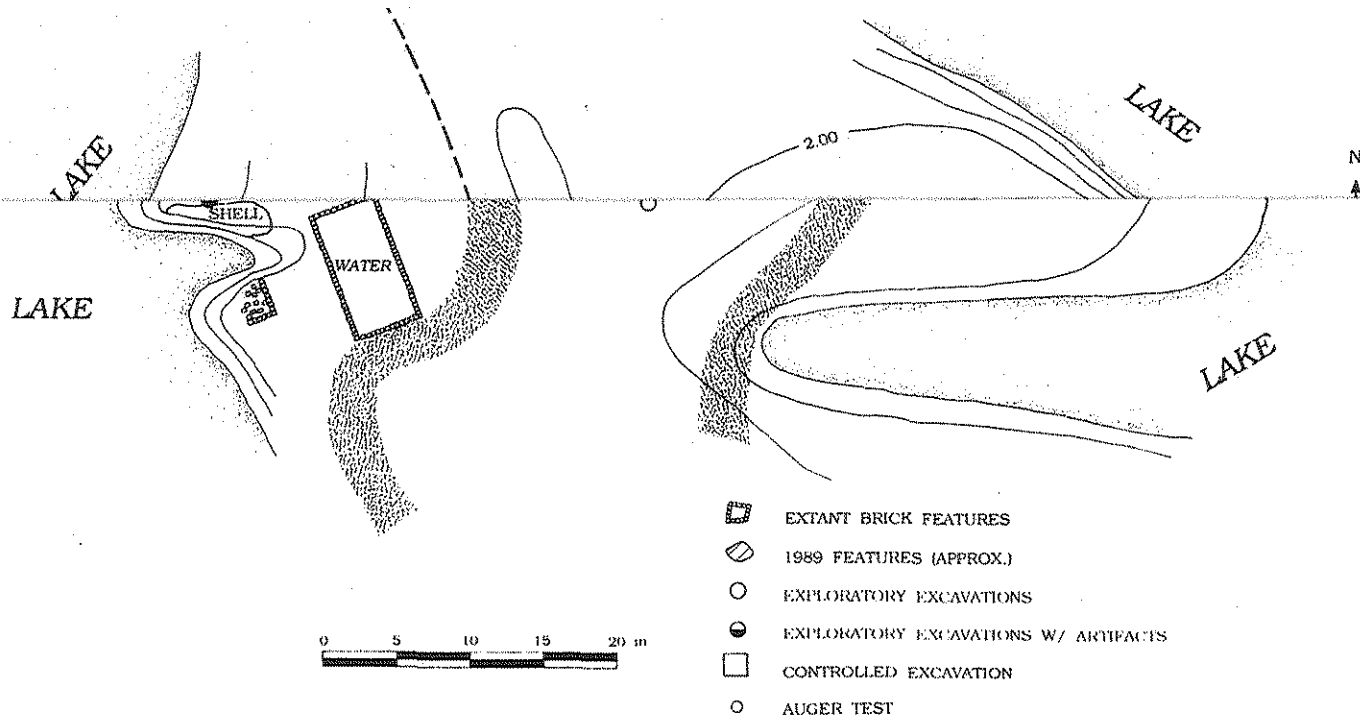


Figure 6. Plan of 38CH1078, including the locations of the 1992 excavations.

identified by the grid coordinate of their southwest corner. The locations of these units also are displayed in Figure 6.

Excavation of each controlled unit was undertaken through natural levels to the top of presumed subsoil. In most units, the removal of one or two soil horizons resulted in the exposure of the contact of the subsoil with the overlying A or B horizons. Levels were numbered sequentially (1-∞) as excavated. Soils removed from each excavation level were screened through 6.35 mm hardware cloth in mechanical sifters. All remains recovered from each excavation level were placed in an appropriately labeled plastic bag. Brick, mortar, and shell fragments recovered from each level were weighed and discarded in the field.

Recordation of the excavation of each unit was maintained on standard level record forms. Plan views were drawn at the base of each excavated level. Photographs of the base of levels displaying particular soil anomalies also were prepared. After each unit was excavated, the profile of at least one wall was drawn and photographed.

Any soil anomalies or intact architectural remains encountered in the controlled excavations were defined as features. A large chimney base encountered in units near 170 N/133 E was defined as Feature 1; a portion of the fill in the hearth area was removed for flotation processing. Feature 2 consisted of a linear stain encountered in Unit 111 N/99 E; trowel excavation of a small section suggested that this was a root stain. Feature 3 consisted of a brick floor or wall segment encountered in Unit 200 N/138 E; excavations were stopped at the top of this feature. Feature 4 consisted of a brick pier in the southeast corner of Unit 200 N/142 E that appeared to articulate with Feature 3. With the exception of the hearth area in Feature 1 and the small segment of Feature 2, no fill or artifacts were removed from the features encountered in the excavations. These features were drawn in plan view and photographed. Standard feature forms were prepared for each defined anomaly. Units containing features were backfilled, with flagged wooden laths placed in the corner to permit their rapid relocation during data recovery investigations.

While additional excavation of the features would have assisted in the interpretation, the discovery and identification of these intact deposits was deemed adequate for the evaluative investigations being undertaken. Defining and recording such features provided sufficient information to evaluate the research potential of the site.

All bags of recovered remains were recorded on a bag list. Photographic logs describing all exposures were maintained. All excavations were backfilled upon the completion of the field investigations.

LABORATORY PROCESSING AND ANALYSES

All recovered remains were washed in warm soapy water and air dried. Each

excavation unit or level within each unit were designated as a separate provenience, and assigned a sequential number (1-∞). All remains within each unit were identified as type and class following South (1977) and Noel Hume (1970), among others. Each type/class of remains was assigned a separate catalog number (sequential from 1-∞) within each provenience. All remains within a single catalog unit were placed in an appropriately labeled acid free plastic storage container. Small acid free paper tags describing each catalog unit also were placed in each such container. All containers from a single provenience were placed in a larger acid free storage container and appropriately labeled. All remains were prepared for final curation according to the standards of the South Carolina Institute of Archaeology and Anthropology (SCIAA). All remains will be forwarded to the SCIAA for permanent curation upon completion of all activities associated with 38CH1078.

Analyses of recovered remains included the generation of Mean Ceramic Dates (MCDs- after South 1977) for the site and selected proveniences in it. Further, relative frequency distributions of remains by class (following South 1977) for the site as a whole and selected proveniences also were calculated. These data were employed to estimate the relative period(s) of occupation, and examine the general function of the site and its various components. These data also were compared to similar data from other sites to provide comparisons with sites of known functions and periods of occupation in the surrounding region.

The relative size of glass and ceramic artifacts recovered from apparently disturbed and intact soil horizons in and around Feature 1 also was determined. The area of each fragment of glass or ceramic recovered from these levels was measured by comparison to a predefined scale (e.g., less than 4 cm², 4-9 cm², 9-16 cm², 16-25 cm², etc.). Comparisons in the relative size of artifacts from each of these horizons was then compared to determine whether the observed turbation had affected the artifact assemblage within the presumed disturbed horizon.

EVALUATION OF 38CH1078

The significance of 38CH1078 was re-assessed following the completion of the testing activities outlined above. While the site had been recommended as eligible for nomination to the NRHP following its initial discovery, its integrity had been potentially compromised and its ability to generate the kinds of information originally present was suspect. Thus, the site had to be re-evaluated with regard to its ability to generate significant archaeological information that can further the current understanding of the historic use and occupation of the region. Following Butler (1987), the ability of an archaeological resource to contribute to the current understanding of the history of a region must be based on a research design that defines what kinds of information are significant, and how these data will expand the current base of knowledge. As noted in Chapter I, a series of research issues were defined in the data recovery proposal developed for 38CH1078 through which

it was expected to generate significant information to the substantive knowledge of the historic use of the region. These issues included:

- (1) **slave subsistence and the contribution of wild and self-grown foods in slave diets.** The ability of slaves employed in industrial activities to pursue wild resources or plant and tend small garden plots, like those employed as agricultural hands or domestics, is unknown. If brick making required greater expenditures of time than other plantation activities, one could expect to find a greater dependence on processed foods and large domesticates than on wild foods and small vegetables, as usually associated with slave occupations. Archaeologically derived subsistence remains could provide data for comparing to agricultural slave sites to determine whether the presumed industrial slaves at 38CH1078 possessed a different diet.
- (2) **ethnicity and Colonoware manufacture.** Colonoware, a slave-manufactured coarse earthenware, has been interpreted to represent a conscious effort by slaves to maintain indicators of their African heritage. Slaves involved in industrial pursuits at 38CH1078 are hypothesized to have maintained Colonoware use and manufacture longer than those in agricultural and domestic settings due to their relative isolation from the principal residences of their owners and slave communities. Samples of Colonoware from domestic deposits at 38CH1078 could provide the comparative data necessary to address this issue.
- (3) **composition of industrial slave community.** Communities of slaves employed in agricultural and domestic pursuits generally represented "normal" populations (i.e., complete ranges of ages and both male and female members are present). The labor requirements of brick making are unknown at present. Thus, the community composition represented by the occupations at 38CH1078 may differ dramatically if only males could perform the tasks associated with brick manufacture. Archival information concerning the numbers, ages, and sex of slaves employed at the Horlbeck Brickyard (38CH1075) can outline the profile of the community that resided at 38CH1078. Archaeological information derived from 38CH1078 then can be employed to characterize this "industrial" population (if different), and provide new insight into the nature of archaeological remains associated with particular age/sex groups.
- (4) **configuration and construction of industrial slave cabins.** The extant slave cabins in front of the Boone Hall Plantation house represent more "extravagant" structures than those usually occupied by slaves in

the region. Possibly, this represents the proximity of these cabins to the main house and/or the acculturation of their residences into the Euro-American society of their owners. Possibly, the slaves who resided at 38CH1078, removed from the main house and their owners, may have not been afforded such "extravagance." Thus, the configuration, size, and nature of construction of the cabins represented at 38CH1078 could be compared to those at Boone Hall in order to define and assess the relationships between the two communities of slaves. Archaeological data provides the opportunity to describe the kinds of structures at 38CH1078.

If 38CH1078 retained the kinds of deposits and artifacts observed during its 1989 assessment, then data derived from it could address these research issues, and it would remain eligible for nomination to the NRHP. However, if these artifact and deposits had been destroyed or damaged, 38CH1078 could not generate these kinds of data, and an alternate recommendation for the NRHP status of the site would have to be developed.

Thus, if the remains of two or more structures could be identified in the apparently damaged area of the site and these remains appeared to be associated with adequate artifact assemblages to address the outlined research issues, then the site would remain eligible for the NRHP, and appropriate data recovery investigations could be implemented. Without these kinds of remains and artifacts, the site would present little opportunity to contribute significant archaeological information. Its NRHP status would have to be revised to not eligible.

Further, it is possible that additional kinds of information or avenues of investigation may become available following the testing activities outlined above. If so, new research issues or additional issues may be developed that can be addressed by information extant at 38CH1078. In this case, the site could be recommended as eligible for the NRHP, but a new data recovery plan would have to be developed outlining these new issues, data requirements to address them, and activities designed to recover this new information.

CHAPTER III

RESULTS OF THE FIELD INVESTIGATIONS

Three separate tasks were undertaken during the field investigations at 38CH1078. Initially, a site grid was established, and information was collected for the construction of a topographic map of the site. Then, exploratory units were excavated at 20 m intervals over the site area. Additional exploratory units were placed at 10 m intervals to provide additional samples and exposures of selected portions of the site. Finally, larger controlled excavations were undertaken in those areas of the site that appeared likely to contain intact cultural deposits, or that should have been near previously identified features at 38CH1078. All of the information and artifacts recovered from these excavations were processed and analyzed in an effort to interpret whether the site had been damaged, the nature of the deposits that remained at 38CH1078, and the kinds of research issues that information from the intact deposits could address.

Inspection of the site in 1991 immediately following the collection and removal of hurricane debris from the site suggested that only the brick foundation/structure and the suspected chimney fall in the southwest corner of the site were intact. During the establishment of the site grid and the collection of information for preparing a map of the site, efforts to relocate the 1989 features were undertaken. Using the sketch map displayed in Figure 2, the approximate locations of the features observed in 1989 were identified. These approximate locations are displayed in relation to the 1992 testing excavations in Figure 6 above. Only those 1989 features that were located west of the dirt road could be identified prior to the 1992 investigations. It appeared that at least two of the 1989 features were located in an area adjacent to a sewer manhole. Note that this manhole was not observed during the 1991 inspections of the site; apparently the sewer was in place but the manhole had not been constructed at the time of those visits to the site. The area around the sewer appears to be covered in a reddish orange to yellow sandy clay. This soil does not occur on other portions of the site, and may represent fill material placed around the sewer line during its installation. Alternately, it may represent deep soil deposits (i.e., from 1+ m below the surface) at 38CH1078 that were exposed during the installation of the sewer and were subsequently spread over the southeast portion of the site. This fill also was placed over the "canal" observed in 1989 in the southwest corner of the site, effectively leveling the area south of the brick foundation/structure.

The only evidence of any of the 1989 brick features observed in 1992 was a thin veneer of brick debris located immediately south of the large oak tree (near 180 N/125 E). This may be a portion of the northernmost brick rubble scatters observed in 1989. Use of a metal probe failed to identify any additional brick in the immediate area. Further, the former A horizon in this portion of the site appeared to have been scraped or graded away, presumably during hurricane debris removal. Light gray to gray sandy subsoils were

exposed in this portion of the site, with vehicle tracks evident throughout. However, a brick feature not observed during 1989 was identified in the northwest corner of the site. A square brick foundation/cistern, approximately 1.7 m (5 ft) on a side, was located immediately adjacent to the lake edge near 200 N/100 E (Figure 6). There were no artifacts near this feature, and no additional architectural features to suggest its function. It was filled with water, and probing indicated that it was over one meter deep. Possibly, it served as a sump or well for a pump utilized during industrial activities at 38CH1078.

EXCAVATION RESULTS

Two phases of excavations were undertaken. Initially, small exploratory units were excavated at regular intervals over the site area in order to determine the nature of soil stratigraphy at the site, and the horizontal and vertical distributions of artifacts within the sampled area. A total of 56 0.5 m by 0.5 m exploratory units were excavated at 38CH1078; the locations of these units are displayed in Figure 6.

Thirty-five of these units contained cultural remains. These remains included brick and mortar fragments (5,927.1 g), nails (n= 71), window glass (n= 11), ceramics (n= 37), bottle glass (n= 21), kaolin pipe fragments (n= 2), buttons (two glass and one brass), miscellaneous metal fragments (n= 13), coal (n= 2), other construction debris (ceramic tile, concrete, slate, mortar), and oyster shell (2,015.6 g).

Other than sandy clay fills, no distinct soil horizons other than the subsoil were noted in any of the exploratory excavations. Thus, separation of artifacts by soil horizons encountered during the excavations was not possible. The identification of vertical artifact distributions was not possible given this level of data. However, horizontal artifact distributions and the nature of soil horizons extant on the site could be determined. Each of these aspects of the results of the exploratory excavations are described in detail below.

SOIL HORIZONS ENCOUNTERED AT 38CH1078

Examination of the profiles of the soils exposed at 38CH1078 by the exploratory excavations permitted the development of an overall site stratigraphy. This stratigraphy was interpreted from the soils observed over the entire site. A standard nomenclature was developed to permit efficient description of the deposits encountered.

Four distinct "horizons" were defined. These horizons consist of:

- A sandy clay loam representing humus and A horizon(s) prior to recent disturbance.
- Af sandy clays that appear to represent fill materials and/or reworked or

turbated A deposits.

C1 sandy clay subsoil.

C2 clay subsoil (usually wetter than C1).

At least two different episodes of deposition may be represented by the *Af* horizon. Color differences between these deposits in the northernmost portion of the site and the central portion of the site are indicated by an asterisk following the horizon indicator. The *Af** horizon may represent an historic depositional episode where materials used in brick manufacture were spread (by an unknown mechanism) across this portion of the site. The *Af* horizon identified in the central portion of 38CH1078 appears to represent more recently deposited materials, apparently related to the clearing of hurricane debris from the site. Table 1 provides more detailed description of these horizons and serves as a key for Figures 7-10, selected composite profiles of the exploratory excavations at 38CH1078.

Definition of each horizon was based on its current condition and apparent relationship to overlying and underlying deposits. The *Af* horizons generally appear as nonconformities; that is, there is no transition between these deposits and soils that they rest on. Also, they tend to be heavier (i.e., possess a higher clay content) than the soils that underlie them. In general, one would expect most upland Coastal Plain soils to be sandier near the surface, and display more and more clay with depth. The presence of heavy (clayey) deposits at the surface of the site, with much sandier horizons below, suggests that the heavier materials have been deposited at this locale, and do not represent a normal episode of pedogenesis. The *Af* horizon observed in the central portion of the site also may represent reworked and redeposited portions of the *A* horizon. This "fill" contained numerous historic artifacts as well as modern debris (plastic, pine bark, leaf litter, etc.) that suggests that it is derived from some adjacent portions of the site, or a nearby site. Since its color and texture are similar to deposits that appear to represent intact soils at 38CH1078, the former derivation (turbation and reworking of former *A* horizon deposits at 38CH1078) appears the plausible explanation of its derivation. Similarly, the zone of admixture noted in the northernmost profile between the *Af** and *A* horizons (defined as *Af**/*A*- see Figure 10) suggests that this "fill" was present for some time, permitting the underlying *A* horizon to begin to absorb the heavier clays through normal pedogenic processes. The *Af** horizon is approximately 5 cm thick (at 2.22-2.27 m amsl at 210 N/140 E) in all locations; the underlying *Af**/*A* also is approximately 5 cm thick (at 2.17-2.22 m amsl at 210 N/140 E). The *Af* horizon is approximately 5-20 cm thick., depending on where it is encountered on the site. The deepest deposits generally occur near 160 N/140 E where they are present at 1.87-2.14 m amsl.

The *A* horizon represents the uppermost deposits that were present prior to debris removal at 38CH1078. Presumably, these deposits were encountered in shovel tests during the 1989 examination of the site. These deposits represent the present surface of the site in some areas; while in other portions of the site, they are buried under fills or totally

Table 1. Soil Horizons Defined in Exploratory Excavations at 38CH1078.

<u>HORIZON</u>	<u>COLOR</u>		<u>TEXTURE</u>
	<u>Munsell</u>	<u>Description</u>	
<i>A_f</i>	10YR4/1 10YR6/1 10YR7/3 10YR7/6	Dark gray Gray Very pale brown Yellow	Clay/Sandy Clay (mottled)
<i>A_f^{**}</i>	7.5YR8/4	Pink	Clay
<i>A_f^{**}/A</i>	7.5YR4/0	Dark gray	Sandy Clay (mixture of pink <i>A_f^{**}</i> and underlying A)
<i>A</i>	10YR3/1 to 10YR6/1	Very dark gray to Gray	Sandy Clay Loam (represents surface or uppermost deposits present in 1989?)
<i>C1</i>	10YR8/1 to 10YR6/1	White to Gray	Sandy Clay, usually mottled with yellow (10YR7/6), reddish yellow (10YR6/6), or very pale brown (10YR7/3)
<i>C2</i>	10YR3/1 to 2.5Y/5/0	Very dark gray to Gray	Clay (rarely Sandy Clay)

140N SOUTH PROFILES

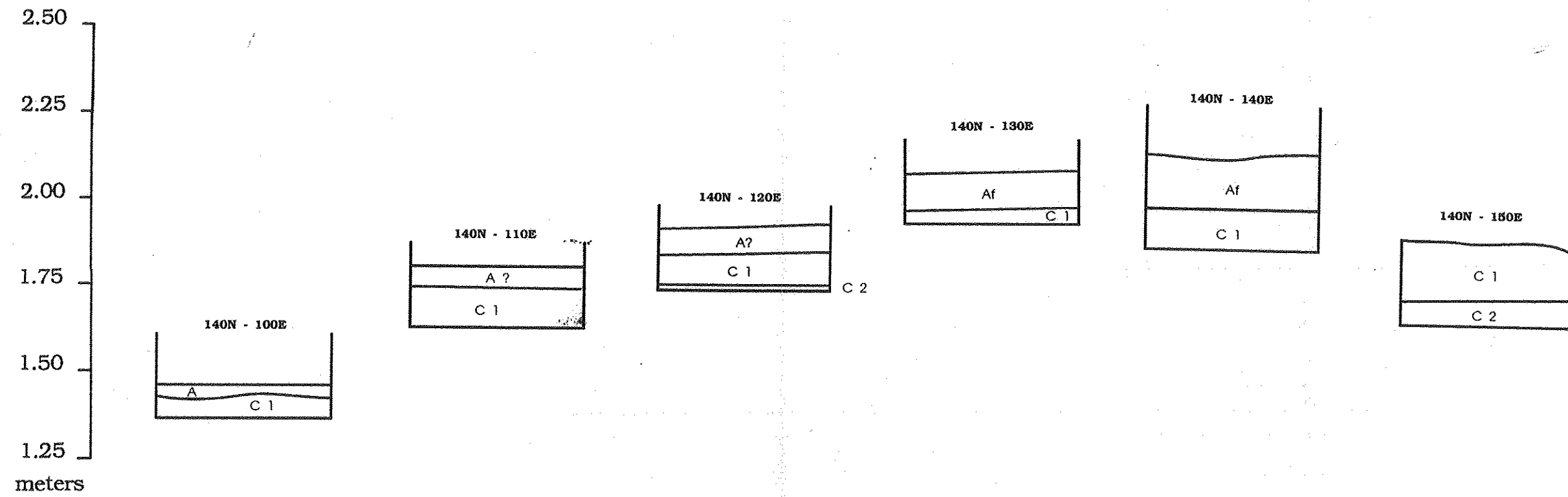


Figure 7. Composite soil profile at 140 N.

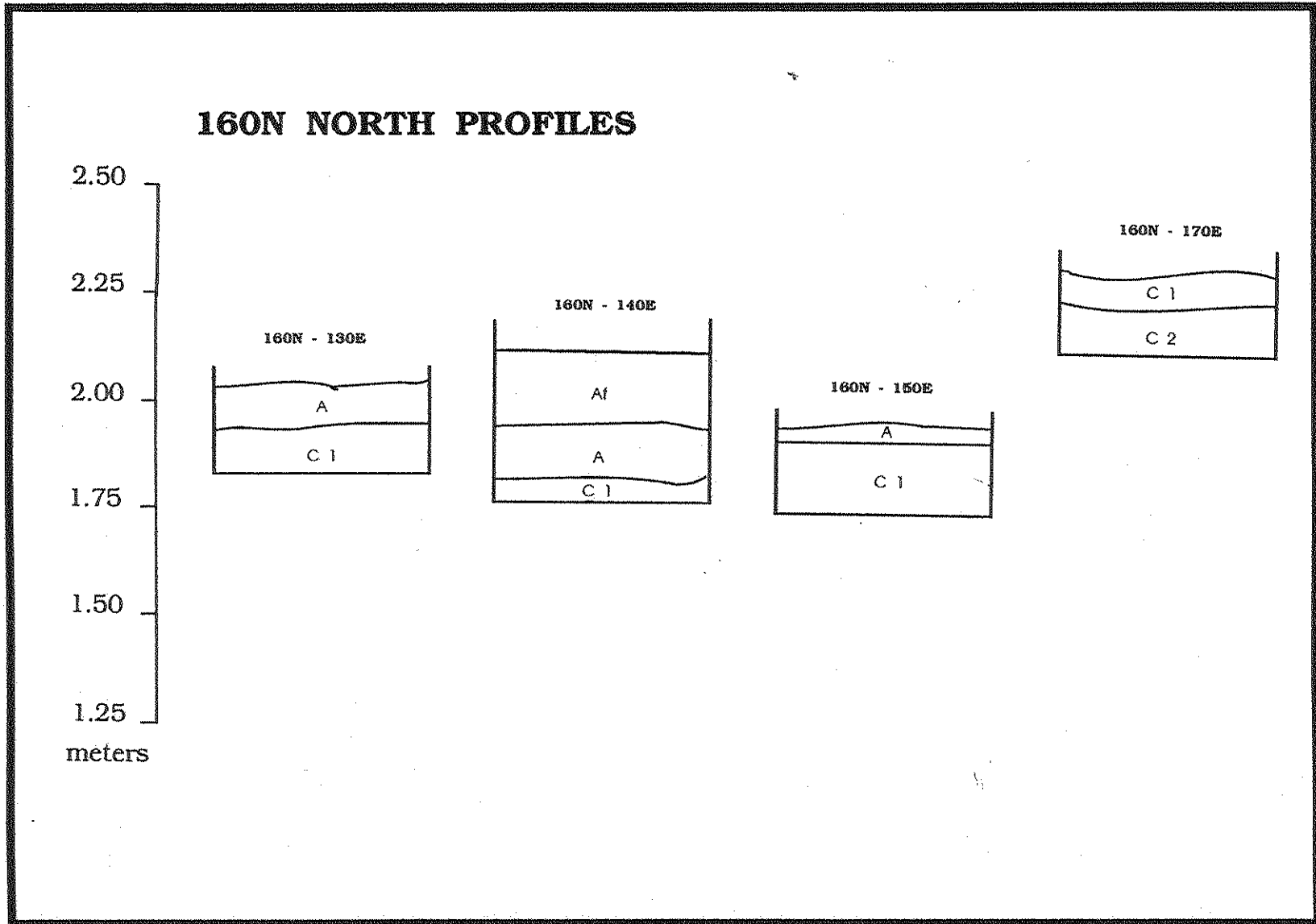


Figure 8. Composite soil profile at 160 N.

200N NORTH PROFILES

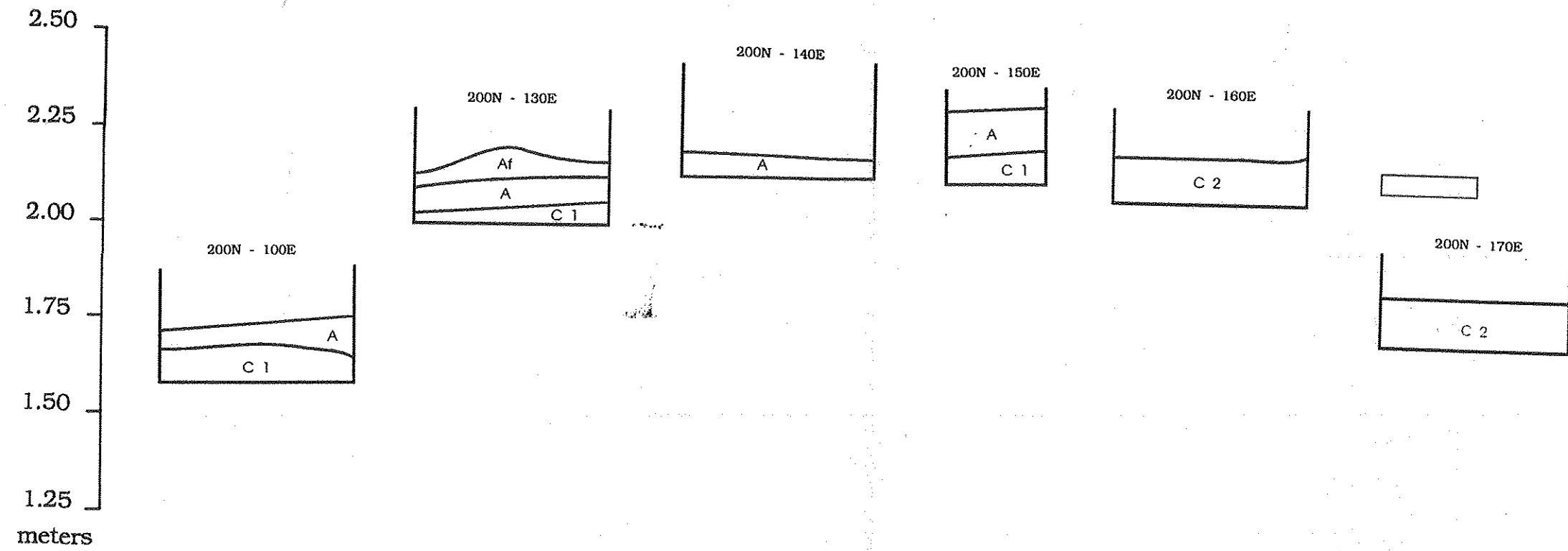


Figure 9. Composite soil profile at 200 N.

140E EAST PROFILES

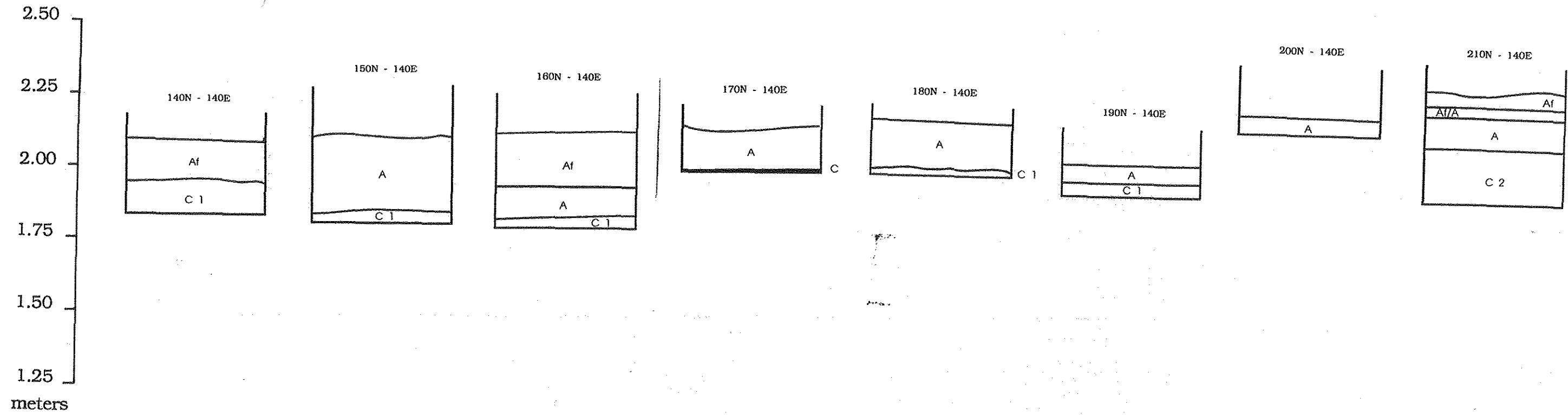


Figure 10. Composite soil profile at 140 E.

absent. It would appear that only in the southeastern portion of the site is the absence of the *A* horizon a recent phenomenon, probably related to development activities within 38CH1078. These deposits vary in thickness from 5 cm to 20 cm.

The *C1* and *C2* horizons represent intact subsoils. These heavier soils generally underlie the cultural deposits at 38CH1078, and represent parent materials from which the former (and present) *A* horizon developed. The *C1* horizon is lighter in color and sandier in texture. A darker and clayier deposit often underlies this subsoil, and probably reflects location variation in the height of the water table. That is, the darker *C2* horizon probably occurs in areas where the water table is closer to the surface. These deposits do not contain cultural remains except where artifacts have been pushed into them or cultural features extend into the subsoils. Where the *C1* deposits are underlain by *C2* soils, the upper subsoil is approximately 5-15 cm thick.

Composite soil profiles of 38CH1078 (all 0.5 m profiles drawn from the exploratory units along a particular grid line) were prepared at the 140 N grid line (Figure 7), 160 N grid line (Figure 8), the 200 N grid line (Figure 9), and 140 E grid line (Figure 10). These composite profiles help to illustrate the nature of the soils that exist at the site at present.

Examination of the 140 N profile (Figure 7) reveals that the westernmost portion of the site possesses a relatively intact soil profile. An *A* horizon, although shallow, lies atop a sandy clay subsoil (*C1*). Note that Unit 140 N/100 E lies to the west of the dirt access road that passes through the site (see Figure 6). Most of the debris clearing activities at 38CH1078 occurred to the east of this road. The intact nature of soil profiles at 140 N/100 E support this interpretation. As one moves eastward across the site (i.e., into the area where debris was collected and moved), an extensive lens of fill (*Af*) is encountered. At the eastern end of the 140 N grid line, only the heavy *C* horizons are present. There was no indication that the absence of an *A* horizon in this portion of the site was due to modern mechanical activities. Rather, this portion of the site is lower and wetter, and the heavy subsoils probably represent the normal ground surface in this portion of 38CH1078.

Profiles along the 160 N and 200 N grid lines reveal similar horizons (Figures 8 and 9). At 200 N/100 E, an intact profile is evidenced; as noted above, this unit lies to the west of the dirt road and where the majority of the debris clearing activities occurred. Unfortunately, the next 30 m east along both grid lines was underwater during the field investigations. With the exception of the units at 100 E and 110 E, this was due to deep vehicle ruts that presumably were the result of debris removal activities. The units at 110 E were close to a low ditch that paralleled the dirt road, and probably would have been inundated regardless of the movement of heavy vehicles. The unit at 160 N/100E was quite close to the pond/borrow pit to the west of the site and therefore had groundwater close to the surface. It should be noted that much of the water on the site was the result of heavy rains in the weeks preceding the field investigations, and the raised water tables in areas adjacent to the ponds following the subsequent rise in pond level. Efforts to lower the lake levels (through pumping) during the field investigations helped to reduce the amount of

standing water on the site.

These profiles also revealed the presence of the fills in the central portion of the site (at 160-170 N/130-140 E), and relatively intact profiles farther east (at 150 E). As noted for the 140 N line, the easternmost portion of the site appeared to possess no *A* horizon; however, this area also was quite low and adjacent to the pond/borrow pit. Presumably, this lack of an *A* horizon represented the soil profile in this portion of 38CH1078 prior to 1989.

These three profiles indicate that the western portion of the site (i.e., west of the dirt road) appeared to be intact. Also, areas along the eastern portion of the site appeared undisturbed, although some of these areas appeared to possess little or no *A* horizon. The central portion of the site (i.e., along the 140 E grid line) appeared to contain a lens of fill or turbated soils (*Af*). A composite profile along the 140 E grid line reveals the presumably older (*Af*^{*}) deposits at the northern edge of the site. As one moves southward, relatively intact profiles are present except at 160 N/140 E and 140 N/140 E. Here, the mottled clayey fill (*Af*) described above is encountered. It should be noted that the *A* horizon observed in units adjacent to these units also appeared very turbated. However, it was much sandier and less mottled, suggesting that it did represent the former surficial deposits at 38Ch1078 rather than the heavily reworked materials defined as *Af*. It should be noted that 0.5 m by 0.5 m units could not be excavated to the south of this point since deep clayey fills were present. Augering of these areas revealed the presence of these fills to at least 1 m below surface. These fills appear to have been brought to the site to cover and support the main sewer drain for the future residences that will be built at 38CH1078. Thus, this portion of the site must be considered heavily disturbed.

ARTIFACT DISTRIBUTIONS

The artifacts recovered from the exploratory excavations at 38CH1078 also were analyzed to determine whether the location of the features observed at 38CH1078 in 1989 could be interpreted from artifact distributions and to guide the placement of larger controlled excavations. Efforts to separate stratigraphic cultural horizons during the excavation of the exploratory units proved futile except to distinguish areas of fill, particularly those observed around the sewer line in the southeastern portion of the site. This fill was removed without screening, and any underlying deposits were excavated and screened.

Four classes of artifacts occurred in sufficient frequencies to permit the development of maps of their distributions over the surface of 38CH1078. These classes included brick/mortar, shell, ceramics, and bottle glass. Brick/mortar and shell generally represent construction debris, although shell also could represent food refuse. Ceramics and bottle glass generally represent domestic activities. The weights of brick and shell and counts of ceramics and glass from each exploratory excavation were manipulated using SURFER, a computer software program designed to generate graphic representations of data within

cartesian coordinate systems. The site grid established for 38CH1078 represents a horizontal cartesian coordinate system; the numbers or weights of each class of materials recovered from the exploratory excavation at a particular grid point provides the data set for manipulation by SURFER. Table 2 provides a summary of these data.

Employing the data summarized in Table 2, SURFER produced contour maps and three dimensional representations of the distributions of the four classes of remains defined above. SURFER interpolates the values of all data points (even those not provided) through a weighted averaging analysis of the nearest data points with values (i.e., counts or weights) to a particular point. In the following analyses, local variation (i.e., the count/weight at a single grid point) was maximized by limiting the distance the program searches for "nearest neighbors" (grid points with counts/weights) to 10 m. In essence, this forces the program to use the raw weights/counts provided. Only where several units are within 10 m of each other would the values be averaged between several points. This serves to insure that all data points (exploratory excavations that contained artifacts) were visible in the distribution maps. As well, no smoothing algorithms were employed in these analyses. This produces more irregular output but again maximizes the contribution of each grid location that possesses artifacts. The three dimension views of the artifact distributions were all directed from the southeast corner of the site, at an angle of 30° above horizontal. These parameters were chosen to provide the best aspect of the distributions within the site since the southeast portion of 38CH1078 contained few or no artifacts (due to filling and the generally low and wet nature of this area).

As noted above, seven different features were identified at 38CH1078 in 1989 that presumably represented former structures. Inspection of the site 1991 and at the initiation of the 1992 investigations suggested that evidence of only two of these structures was visible following the debris removal activities at the site. These included the chimney fall and industrial foundation/structure in the southwest corner of the site. The other five features consisted of brick rubble (chimney falls) and a house "pad" (a low platform of earth/debris upon which a former structure presumably rested). The approximate grid coordinates of these features are:

chimney fall	105 N/125 E.
house pad	125 N/120 E.
chimney fall	140 N/115 E.
chimney fall	160 N/120 E.
chimney fall(s)	180 N/125 E.

Artifact distributions derived from the exploratory excavations were examined in order to determine whether these "features" could be relocated based on the density of remains near

Table 2. Artifacts Recovered from the Exploratory Excavations at 38CH1078.

<u>PROVENIENCE</u>	<u>BRICK</u>	<u>SHELL</u>	<u>CERAMICS</u>	<u>GLASS</u>	<u>OTHER</u>
101 N 100 E	50.6	700.0	0	0	1
120 N 100 E	3.4	0.0	0	0	0
130 N 120 E	614.5	0.0	0	0	0
130 N 130 E	0.0	6.1	1	2	0
140 N 110 E	9.0	6.0	0	0	0
140 N 120 E	0.0	105.5	1	0	2
140 N 130 E	0.0	37.0	0	0	1
140 N 160 E	160.0	11.0	0	0	0
150 N 100 E	6.1	0.0	0	0	7
150 N 110 E	472.1	0.0	0	0	0
150 N 120 E	1200.0	15.0	4	1	4
150 N 130 E	800.0	4.5	1	0	0
150 N 140 E	0.0	0.0	0	4	3
155 N 110 E	108.1	85.9	3	0	0
160 N 100 E	25.0	0.0	0	0	5
160 N 130 E	1142.3	602.2	8	2	56
160 N 135 E	235.0	0.0	0	0	2
160 N 140 E	0.0	98.1	1	2	11
160 N 150 E	187.5	0.4	0	0	3
170 N 110 E	200.5	7.5	0	0	0
170 N 130 E	600.0	13.0	0	0	1
170 N 140 E	0.0	0.0	0	1	0
180 N 120 E	173.6	7.2	0	0	0
180 N 130 E	43.0	62.0	0	0	1
180 N 140 E	38.0	5.0	0	0	0
190 N 120 E	0.0	232.5	0	0	1
190 N 140 E	0.0	11.0	2	2	1
190 N 150 E	0.0	1.2	1	0	1
200 N 130 E	30.0	40.5	0	0	1
200 N 140 E	0.0	0.0	3	1	0
200 N 160 E	0.0	0.0	1	0	0
200 N 170 E	0.0	0.0	0	0	3
210 N 130 E	0.0	0.0	2	1	1
210 N 140 E	47.4	0.0	0	0	0
210 N 160 E	0.0	4.0	0	1	1

BRICK and SHELL in grams

their approximate former locations.

The distribution of brick fragments recovered from the site revealed several concentrations (Figure 11). Most notably, 0.5-1+ kg of brick were recovered from exploratory excavations near 130 N/120 E, 150 N/120 E, 160 N/130 E, and 170 N/130 E. A contour map of brick density (contour interval= 150 g) clearly indicates two of these concentrations; the three dimensional plotting displays these "peaks" as well (Figure 11). The concentrations at 150 N/120 E and 160 N/130 E may represent one of the chimney falls (the fall at 160 N/120 E?) identified in 1989. The other concentrations do not appear to correlate with any of the previously identified features.

Distribution of shell recovered from the exploratory excavations displayed three concentrations (Figure 12). A large shell deposit was observed on the ground surface and eroding into the lake near 100 N/100 E. The exploratory unit excavated at 101 N/100 E contained the most shell (700 g) of any unit excavated. Unit 160 N/ 130 E also contained a large quantity of shell (600 g). Unit 190 N/120 E contained the next largest concentration of shell (232.5 g). All of these concentrations are visible in the contour and three dimensional plots displayed in Figure 12 (note: contour interval is 40 g). Again, only the concentration near 160 N/130 E may be related to any of the previously defined features at 38CH1078.

The distribution of historic ceramics (Figure 13- note: contour interval is 0.5 sherds) displays one large concentration in the central portion of the site (near 150-160 N/120-130 E) and another in the northern portion of the site (near 200 N 140 E). Again, only the central concentration is near the location of any previously identified features at 38CH1078.

Bottle glass fragments occur in three principal concentrations (Figure 14- note: contour interval is 0.25 sherds). The largest concentration of glass sherds occurs at 150-160 N/130-140 E. Smaller concentrations occur in the north central portion of the site (near 190 N/140 E) and the south central portion of the site (near 130 N/130 E). The concentration near the central portion of the site occurs farther east than the clusters of other kinds of remains described above. Similar differences in distributions of ceramic and glass remains were noted by Poplin and Scardaville (1991) at 38CH321. Weight/density differences between glass and ceramics or differing disposal patterns for these kinds of artifacts may be reflected in these "misalignments" if they reflect intact cultural deposits/features.

Thus, only one of the features identified in 1989 at 38CH1078 may be reflected in the artifact distributions observed at the site 1992. A chimney base, located approximately near 160 N/120 E, may be represented by the large concentrations of brick, shell, ceramics, and glass that were recovered from the area 150-160 N/120-140 E. No evidence of any intact deposits or architectural features was encountered in the exploratory excavations.

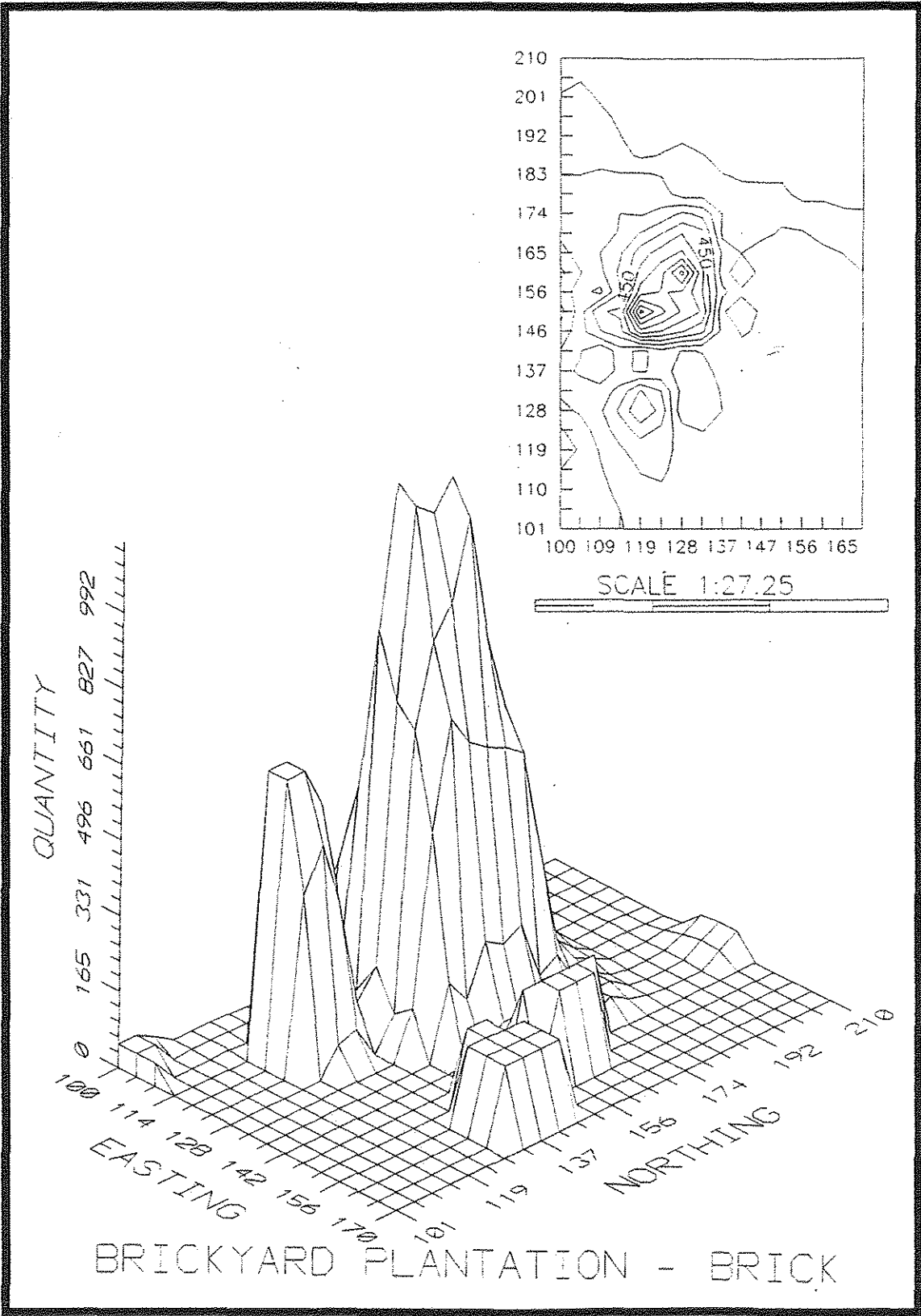


Figure 11. Distribution of brick in the exploratory excavations at 38CH1078.

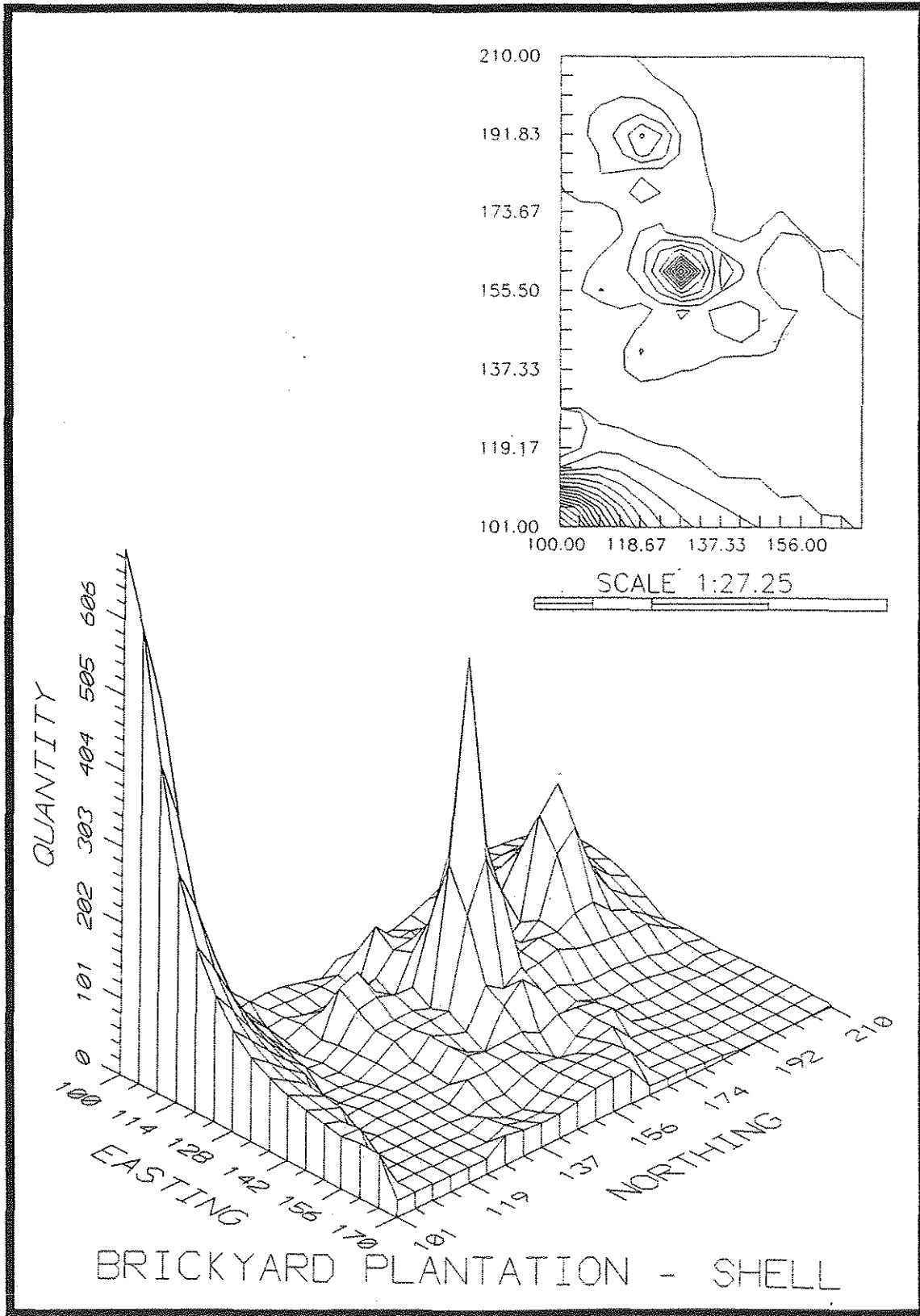


Figure 12. Distribution of shell in the exploratory excavations at 38CH1078.

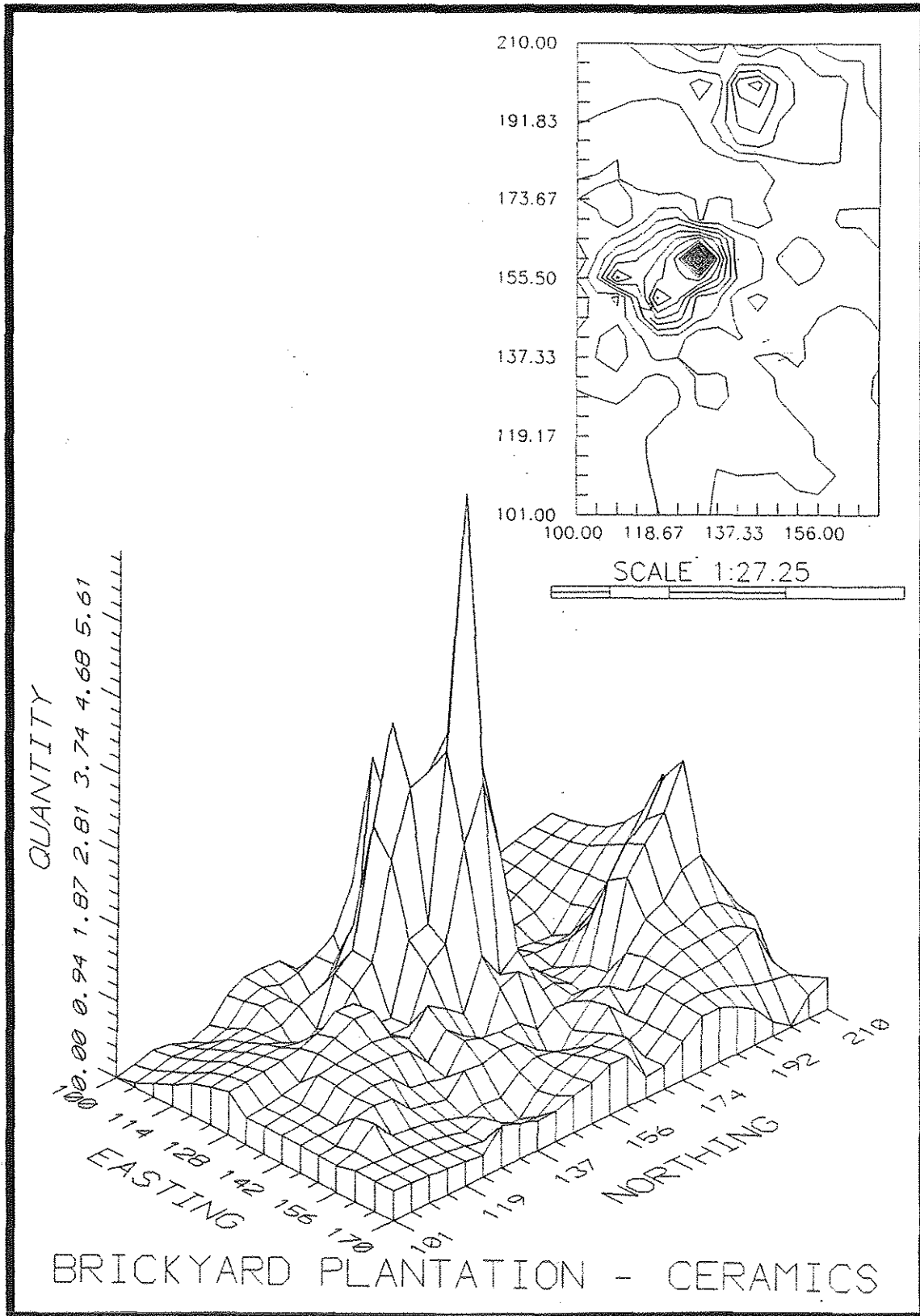


Figure 13. Distribution of historic ceramics in the exploratory excavations at 38CH1078.

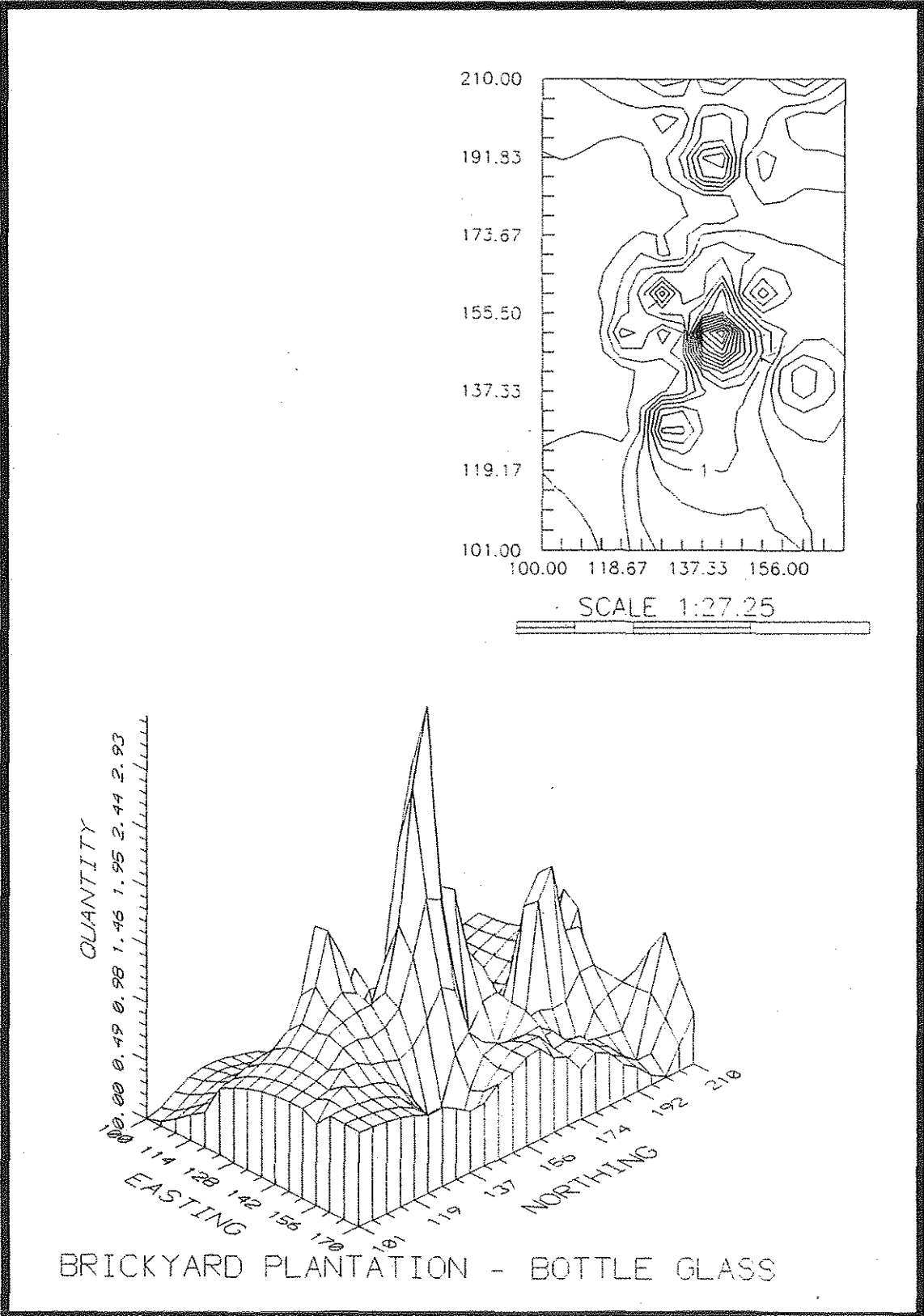


Figure 14. Distribution of bottle glass in the exploratory excavations at 38CH1078.

CONTROLLED EXCAVATIONS

Sixteen square meters of the surface of 38CH1078 were excavated in larger controlled units in an effort to expose potential features and recover a larger sample of artifacts from the site. Five separate locations were selected for examination in this manner. These areas included 111 N/99 E (1 m by 2 m unit), 150 N/120 E (1 m by 2 m unit), 160 N/129 E (1 m by 2 m unit), 170-172 N/132-135 E (two 1 m by 2 m units and a 1 m by 1 m unit), and 200-206 N/138-142 E (two 1 m by 2 m units and 1 m by 1 m unit). The unit at 111 N/99 E was intended to sample a fairly dense concentration of brick observed at the ground surface in this portion of the site. Some this brick also had been exposed by the activities of a bulldozer; apparently, a machine had scraped a single "pass" from the dirt road toward the lake in this portion of the site, exposing brick and subsoils. Large concentrations of brick were recovered from exploratory excavations at 150 N/120 E and 160 N/130 E, prompting the excavation of a larger unit adjacent to these initial units in an effort to determine whether an actual feature was present. The unit at 160 N/129 E also was near one of the presumed chimney falls identified during the 1989 examination of 38CH1078. Surface exposures of brick near 200 N/138 E also prompted the excavation of two 1 m by 2 m units in this northernmost portion of the site; an additional 1 m by 1 m unit was placed to the north of the two larger units once the wall/floor and pier were identified in 200 N/138 E and 200 N/142 E, respectively. The exact location was selected in an effort to intersect another pier, assuming the former structure was about 6.1 m (20 ft) wide at this point. The remaining units were placed in a portion of the site that appeared to contain intact soil profiles and some brick and shell (170-172 N/132-135 E). These units also were located on the narrow ridge that appeared to extend from the large oak southward towards the industrial foundation.

The excavations at 170-172 N/132-135 E revealed the best evidence of intact cultural deposits at 38CH1078. These units revealed a fairly thick lens of mottled sandy clay fills (*Af* horizon) overlying a thin lens of undisturbed *A* horizon. These units actually provided the best opportunities to interpret the derivation of the *Af* horizon at 38CH1078. Large pieces of pine bark and plastic were visible in the *Af* horizon in the east wall of 170 N/134 E, prompting the interpretation of this horizon as turbated deposits from 38CH1078 that had pushed over this portion of the site during the debris removal activities. Figure 15 provides a view of the profile of this wall. The two nails in the photograph mark the interface between the *Af* horizon and the presumably undisturbed *A* horizon underneath.

Possibly of greater interest, the base of a brick chimney (defined as Feature 1) was encountered in these units, immediately below or just at the base of the *Af* horizon. This structure consisted of articulated mortared brick placed to create two rectangular boxes (Figures 16 and 17). The westernmost box contained a lighter gray residue suggestive of ash and cinders mixing with the *A* horizon; this portion of the feature was interpreted as the former hearth. The western end of the hearth may have been open, although articulated brick appeared to close this side of the chimney base. However, it extended into the western wall of the excavations, and sufficient effort had been expended in this portion of

38CH1078
UNIT 170N 134E EAST PROFILE

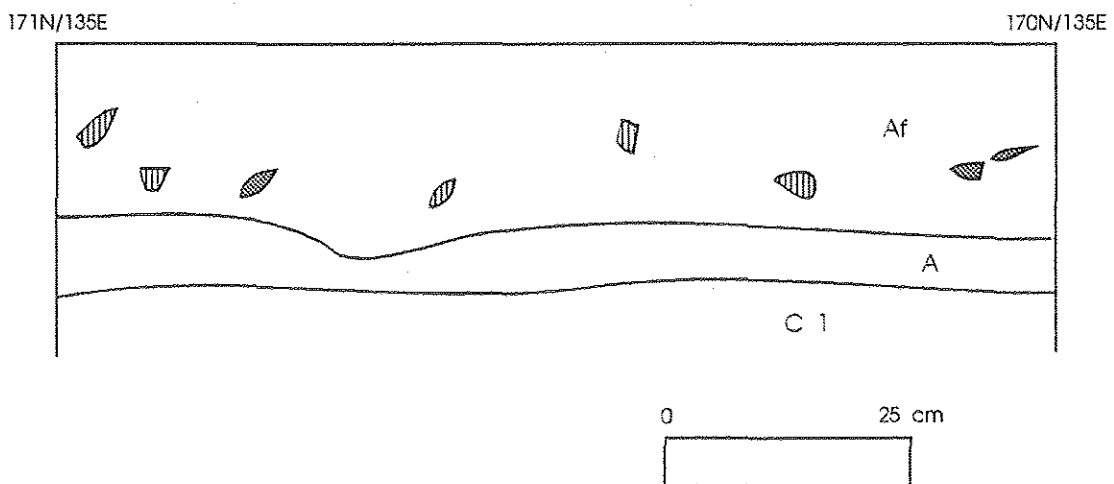
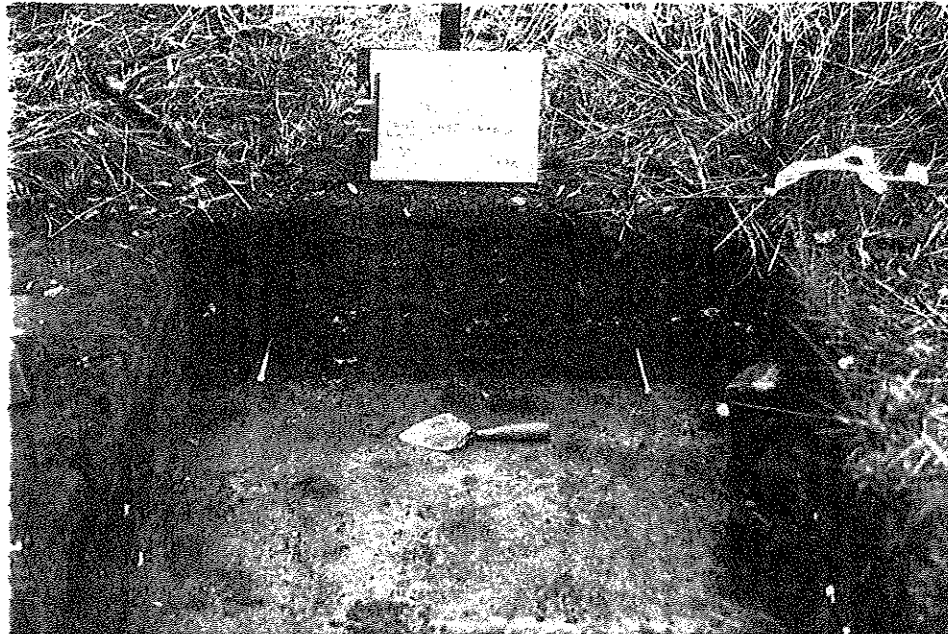


Figure 15. Profile of the East Wall of Unit 170 N/134 E.

172N - 132E

172N - 134E

38

170N - 132E

170N - 135E

**38CH1078
STRUCTURE 1
PLAN VIEW**



Hearth Fill



Roots



Brick

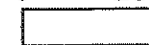


Brick w/ Mortar

NORTH



0 25 cm



171N - 135E

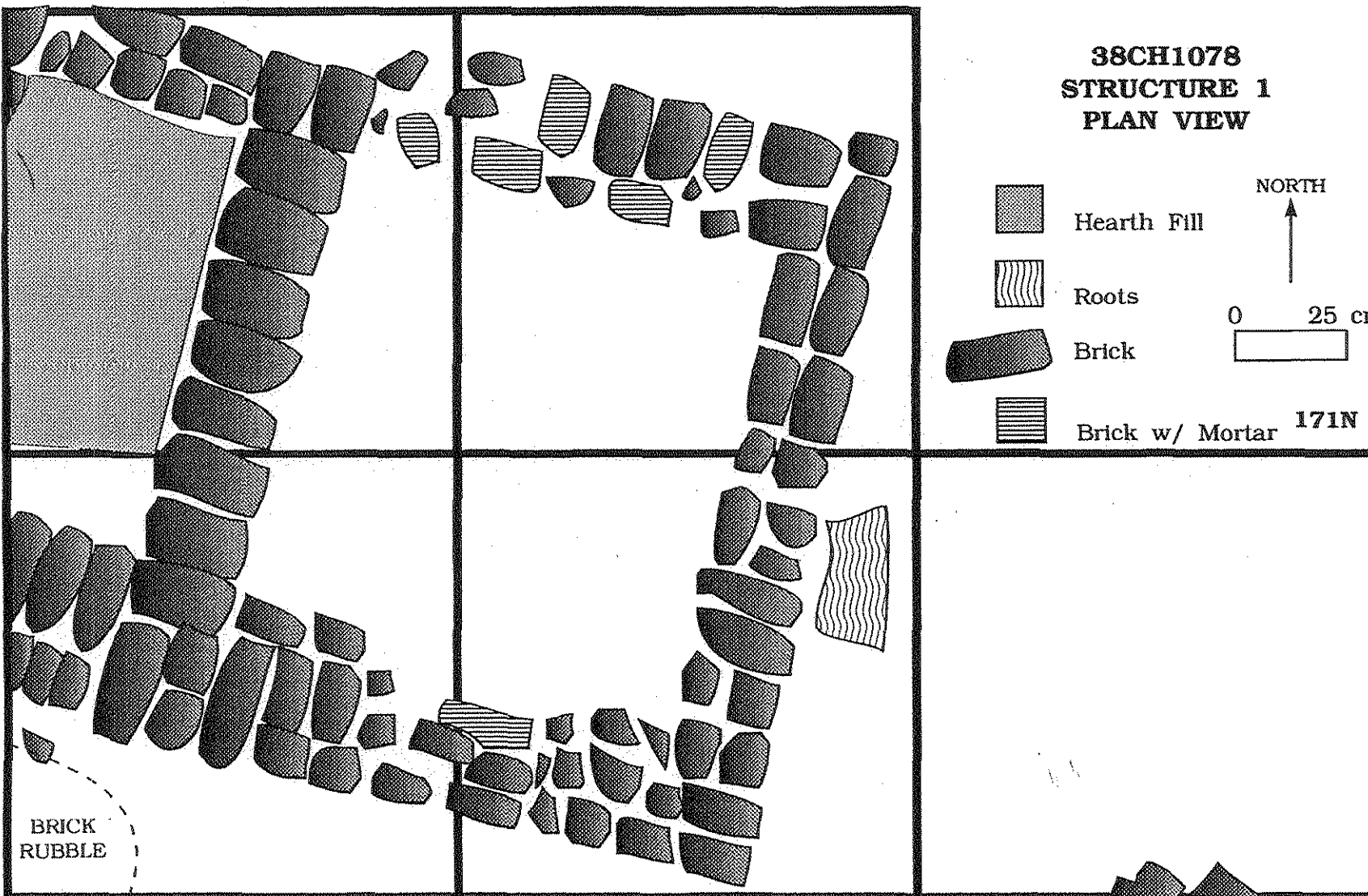


Figure 16. Plan view of Units at 170-172 N/132-135 E.

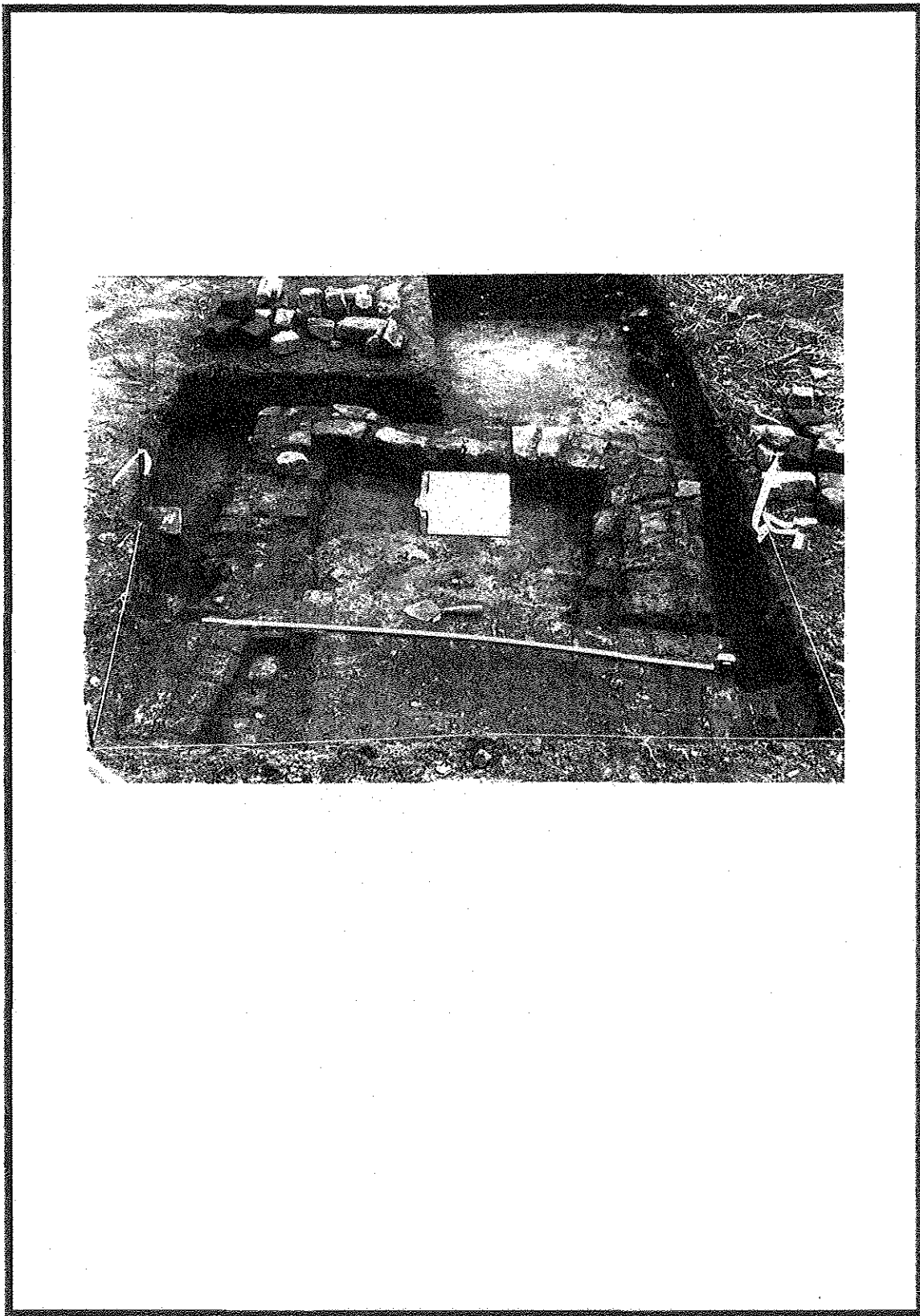


Figure 17. View of Feature 1 (chimney base) at 170-172 N/132-135 E.

the site to demonstrate that intact remains of at least one structure was present. A sample of the hearth fill was removed from the presumed firebox. The eastern portion of the chimney base consisted of a brick enclosed area that presumably supported the flue of the chimney.

Artifacts recovered around Feature 1 included metal door parts, hinges, a variety of ceramic and glass sherds, and other items. These remains were recovered from both the *Af* and *A* horizons. All of this information suggested that the remains of at least one structure were present in this portion of the site. Thus, Feature 1 and the surrounding artifact bearing deposits were defined as Structure 1, for future interpretation and reference.

The artifacts recovered from Structure 1 were sorted into categories following South (1977), and historic ceramics were typed and counted in an effort to produce a MCD for the structure. All artifacts recovered from both the intact and disturbed soils around Structure 1 were employed in these analyses. Table 3 lists the frequencies of remains by class; Table 4 summarizes the ceramic types recovered.

The distribution of artifacts among South's (1977) classes appears similar to distributions observed at a number of tenant residences throughout the region, displaying relatively equal frequencies of Kitchen and Architectural class remains, moderately high frequencies of Clothing and Activities class remains, and lower frequencies of all other classes. Similar frequencies were noted at 38BK397 by Brockington et al. (1985), at 38BU966 and 38BU967 by Kennedy et al. (1991), at 38GE363 by Poplin and Brockington (1988), and at 38GE267 by Michie (1987). Interestingly, these distributions are dissimilar from most slave patterns, primarily in reduced frequency of Kitchen class artifacts and the much lower frequencies of Tobacco class remains, as defined in the Carolina Slave pattern defined by Wheaton et al. (1983). All of these frequencies are summarized in Table 5.

Examination of the MCD for Structure 1 at 38CH1078 also suggests a later occupation than assumed for the site by Espenshade and Grunden (1991). The majority of the dateable ceramics recovered from the Structure 1 were manufactured throughout the nineteenth century (e.g., whitewares and stonewares). Thus, the 38 sherds that can be employed produced an MCD of 1846.4 for Structure 1. While this suggests that the assemblage may represent a late antebellum occupation, it could also represent occupations that continued into the later nineteenth century. The comparison of artifact distributions noted above and the similarities to primarily later nineteenth century tenant occupations also suggest that the deposits at Structure 1 probably relate to a later occupation than originally suggested. Particular artifact occurrences that further support this interpretation include the low frequency of Tobacco class remains and the low frequency of Colonoware ($n = 5/9.43$ per cent) among all ceramics. Most slave residences excavated throughout the region have produced higher frequencies of Tobacco pipe fragments (e.g., 38GE267). The relatively reduced frequency of such artifacts in later tenant occupations probably represents the widespread availability of packaged tobacco products, primarily cigarettes, in the later decades of the nineteenth century and the early twentieth century. Colonowares

Table 3. Artifact Frequency Distributions From 38CH1078.

CLASS	38CH1078		Structure 1		Structure 2		Structure 3	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
KITCHEN	535	44.66	121	34.47	156	59.77	19	79.17
Ceramics	268		53		57		13	
Glass	267		67		99		6	
ARCHITECTURE	603	50.33	215	61.25	89	34.10	1	4.17
FURNITURE	0	0.00	0	0.00	0	0.00	0	0.00
ARMS	1	0.08	0	0.00	1	0.38	0	0.00
CLOTHING	25	2.09	8	2.27	8	3.07	2	8.33
PERSONAL	3	0.25	2	0.56	0	0.00	0	0.00
TOBACCO	8	0.67	0	0.00	3	1.15	2	8.33
ACTIVITIES	21	1.75	5	1.42	4	1.53	0	0.00
Subtotal	1198		351		261		24	
MISC.	82		11		25		2	
TOTAL	1281		362		286		26	

Table 4. Mean Ceramic Date Calculation for Structure 1 at 38CH1078.

CERAMICS	MEDIAN DATE	TOTAL SHERDS	DATEABLE SHERDS	PRODUCT
PORCELAIN undecorated		2		
BUFFWARES Staffordshire	1725	1	1	1725
CREAMWARES undecorated	1791	3	3	5373
PEARLWARE annular	1805	1	1	1805
shell edged	1805	1	1	1805
transfer printed	1818	1	1	1818
STONEWARES alkaline glazed unidentified		1 2		
WHITEWARES undecorated	1860	24	24	44640
transfer printed	1845	1	1	1845
annular	1845	2	2	3690
indeterminate decoration		1		
IRONSTONE annular coloured glaze	1857	2 1	2	3714
YELLOWWARE	1875	2	2	3750
COLONWARE		5		
BURNT/UNIDENTIFIED		3		
TOTAL SHERDS		53		
TOTAL DATEABLE SHERDS			38	70165
MEAN CERAMIC DATE				1846.4474
TERMINUS POST QUEM				1775
TERMINUS ANTE QUEM				1922

Table 5. Artifact Frequency Distribution from Selected Sites.

<u>CLASS</u>	<u>Strct. 1</u> <u>CH1078</u>	<u>BK397</u>	<u>BU966</u>	<u>BU967</u>	<u>GE363</u>	<u>SLAVE</u>	<u>GE267*</u>
KITCHEN	44.66	79.30	40.58	46.60	27.50	77.40	53.25
ARCHITECTURE	50.33	18.00	55.18	49.60	69.10	17.80	42.37
FURNITURE	0.00	0.10	0.02	0.10	0.20	0.07	-
ARMS	0.08	0.20	0.12	0.10	0.70	0.17	0.04
CLOTHING	2.09	1.50	0.98	1.80	1.30	0.49	1.46
PERSONAL	0.25	0.20	0.16	0.20	0.20	0.05	-
TOBACCO	0.67	0.10	0.82	0.90	0.80	3.50	2.88
ACTIVITIES	1.75	1.70	2.10	0.50	0.20	0.50	-

**Modified frequencies due to lack of information for Furniture, Personal, and*

(slave made earthenwares) generally occur in relatively high frequencies on sites that date from the eighteenth and early nineteenth century. Their relatively low frequency at Structure 1 provides further evidence for interpreting the occupation as later. The only slave assemblage that appears similar to Structure 1 was recovered by Michie (1987) from 38GE267. This assemblage also produced a late antebellum MCD (1843.5), and contained primarily whitewares (Michie 1987).

Excavations in the northernmost portions of the site also revealed the remains of a probable structure. Immediately below the ground surface, a dense layer of brick rubble was encountered in Unit 200 N/138 E. This rubble possessed articulated brick sections that appeared to represent a narrow wall or portions of a floor that were defined as Feature 3 (Figure 18). Excavation of Unit 200 N/142 E also encountered a rectangular or L-shaped brick pier (it extended into the southern and eastern walls of the unit). This pier is approximately in line with the wall/floor (Figure 19); this structural element was defined as Feature 4. Together, Features 3 and 4 were defined as Structure 2 at 38CH1078.

Soils in and around Structure 2 were quite varied. At Unit 200 N/138 E, there was little or no A horizon; the brick feature was encountered at about 12 cm below surface. Further east (at 200 N/142 E), approximately 20 cm of A horizon was present; approximately 10 cm of A horizon covered the top of Feature 4. Figure 20 displays the profile of the south

38CH1078

STRUCTURE 2 (FEATURE 3) PLAN VIEW

201N/138E

201N/140E

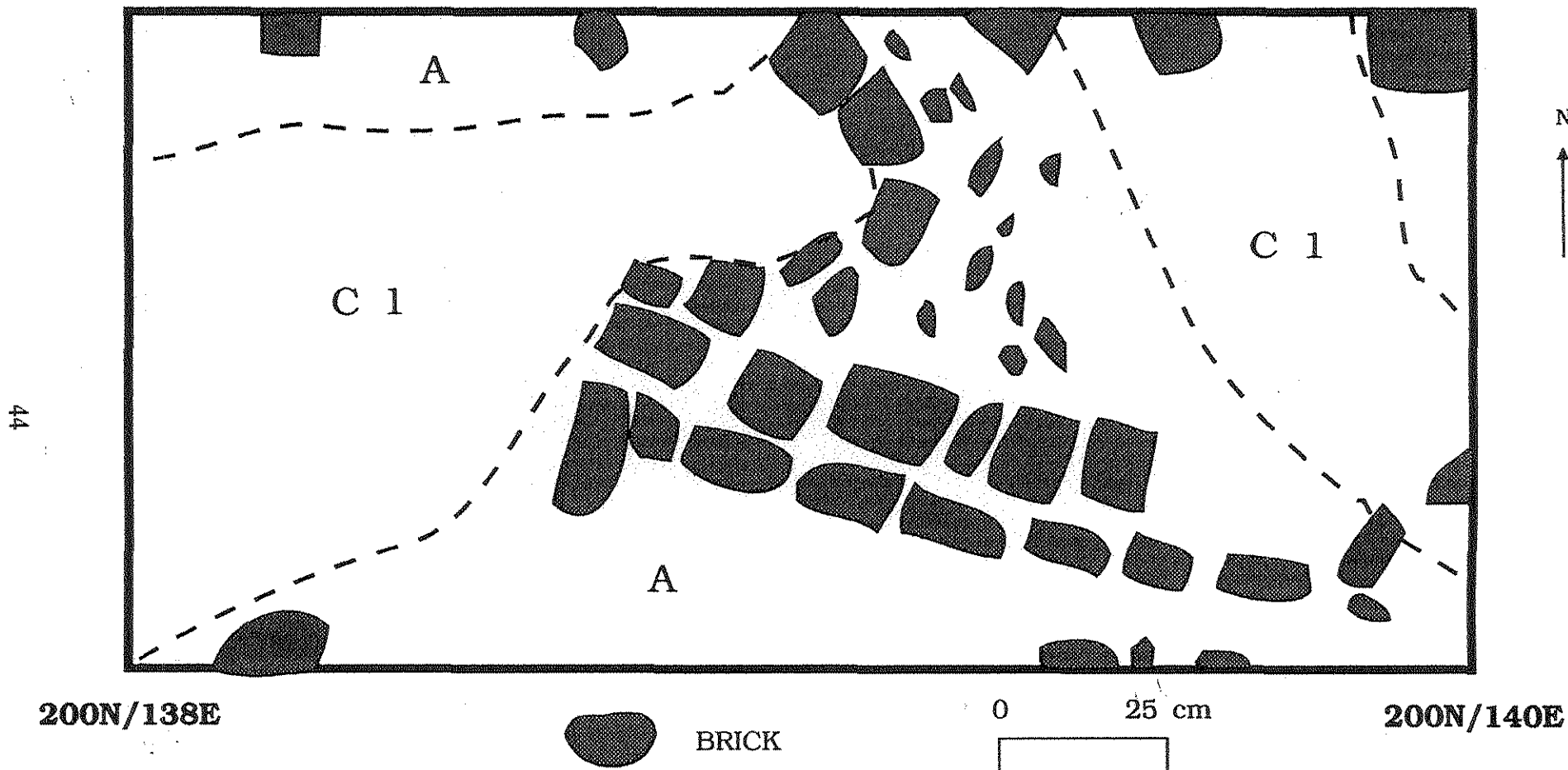


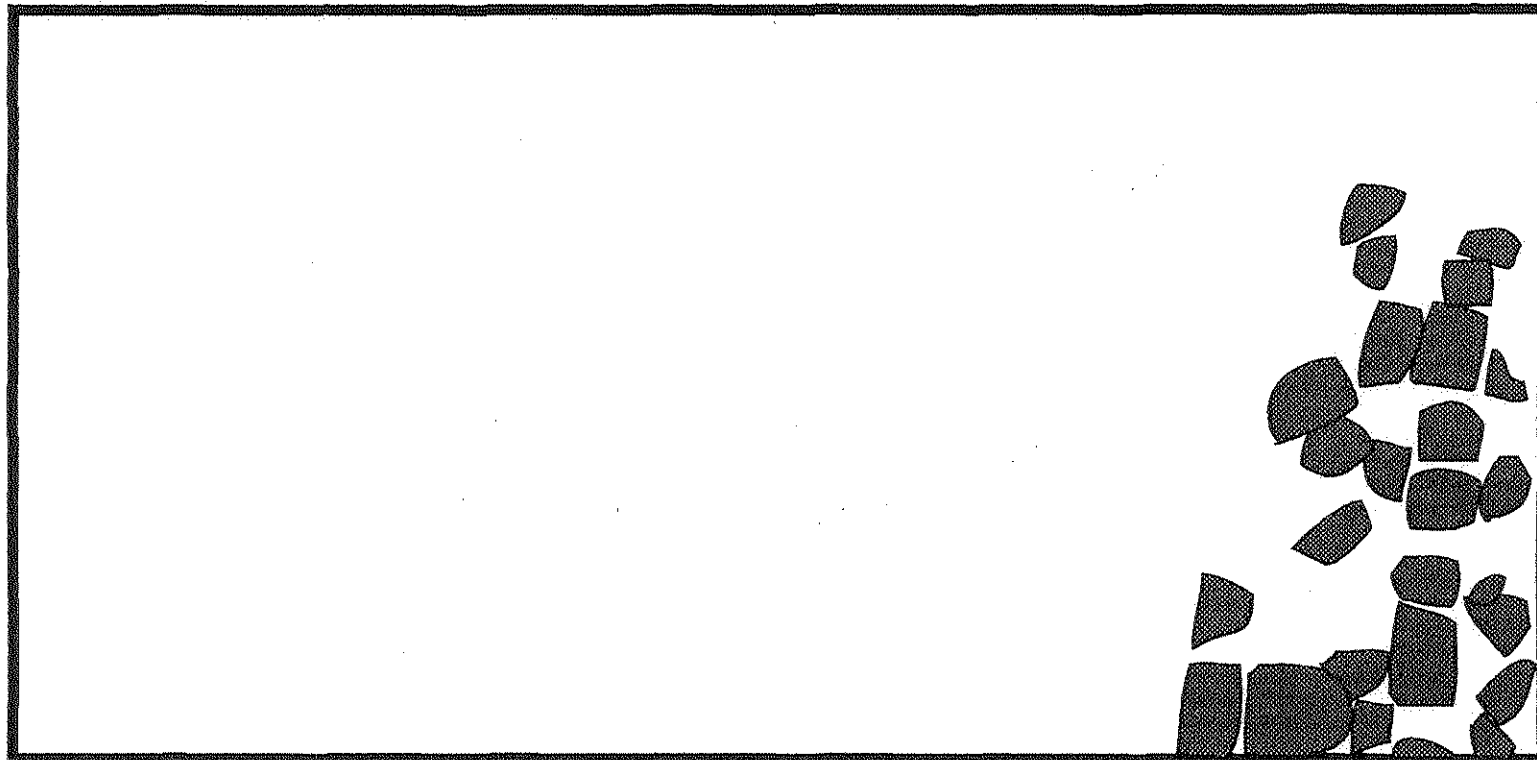
Figure 18. Plan view of Unit 200 N/138 E.

38CH1078

STRUCTURE 2 (FEATURE 4) PLAN VIEW

201N/142E

201N/144E



45



200N/142E

0 25 cm



BRICK

200N/144E

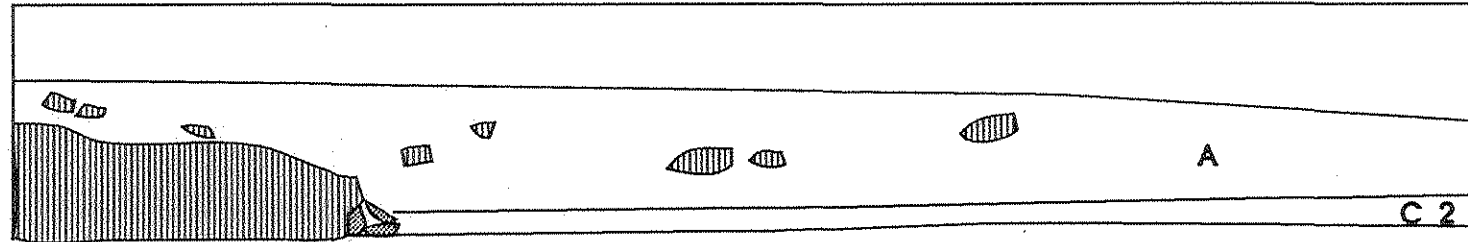
Figure 19. Plan view of Unit 200 N/142 E.

**38CH1078
UNIT 200N 142E SOUTH PROFILE**

200N/144E

STRING LINE

200N/142E



 BRICK

0 25 cm


Figure 20. Profile of the South Wall of 200 N/142 E.

wall of Unit 200 N/142 E.

Artifacts recovered from Structure 2 were similar to those recovered from Structure 1, although fewer Architectural class remains and more Tobacco class artifacts were present in the northern portion of the site (Table 3). The increased frequency of Tobacco class remains is the principal difference between the artifacts associated with each structure. Ceramics recovered from Structure 2 were of similar types, and produced a MCD of 1856.9; no Colonoware sherds were recovered from this portion of 38CH1078 (Table 6). As discussed above, a fairly late occupation is suggested by the remains recovered from Structure 2, although the increased frequency of Tobacco pipes may reflect an earlier occupation than at Structure 1.

Unit 111 N/99 E also encountered the possible remains of a structure. This unit was placed near a surface scatter of brick rubble partially exposed in a bulldozer cut. This portion of the site displays an extremely shallow *A* horizon; subsoils and brick rubble were encountered at approximately 5 cm below the ground surface. The brick rubble exposed at the base of the *A* horizon appeared to be articulated, although no mortar was present (Figure 21). In addition, a linear stain of dark gray sandy loam extended southward into the brick rubble. This stain was defined as Feature 2. Although originally thought to represent a possible drain or other structural feature, excavation of a narrow cross-section revealed that this stain probably represented a large tree root that had grown into the rubble. The possibly articulated brick was defined as Structure 3.

Very few artifacts were recovered from Unit 111 N/99 E. The frequency distribution of these remains was not like those observed at Structures 1 and 2 (Table 3). Rather, Structure 3 displayed a high frequency of Kitchen class remains, very few Architectural remains, and high relative frequencies of Clothing and Tobacco class artifacts. However, these frequencies are undoubtedly inflated by the general lack of artifacts recovered from this portion of the site. Too few dateable sherds were recovered from Unit 111 N/99 E to permit the calculation of a MCD. Types dating from the eighteenth (one delftware), nineteenth (one Littler's blue on white salt glazed stoneware sherd, two alkaline glazed Albany slipped stoneware sherds, one yellowware sherd), and the early twentieth century (one yellowware sherds) all were recovered, including five specimens of Colonoware. The diversity of these artifacts is quite interesting; however, the relative scarcity of artifacts and the poor preservation of the possible architectural features suggest that this portion of the site possess little potential to contribute significant information that can be employed in the interpretation of 38CH1078.

Unit 160 N/129 E was intended to sample a large concentration of brick encountered in the exploratory excavation at 160 N/130 E. This area also was near the location of one of the chimney falls identified in 1989. Excavation of this unit revealed no articulated brick rubble, although large quantities of brick, mortar, and shell were recovered from the two excavation levels removed from the unit. These two horizons consisted of *Af* deposits, approximately 20 cm thick, overlying approximately 10 cm of *A* horizon. Excavations were

Table 6. Mean Ceramic Date Calculation for Structure 2 at 38CH1078.

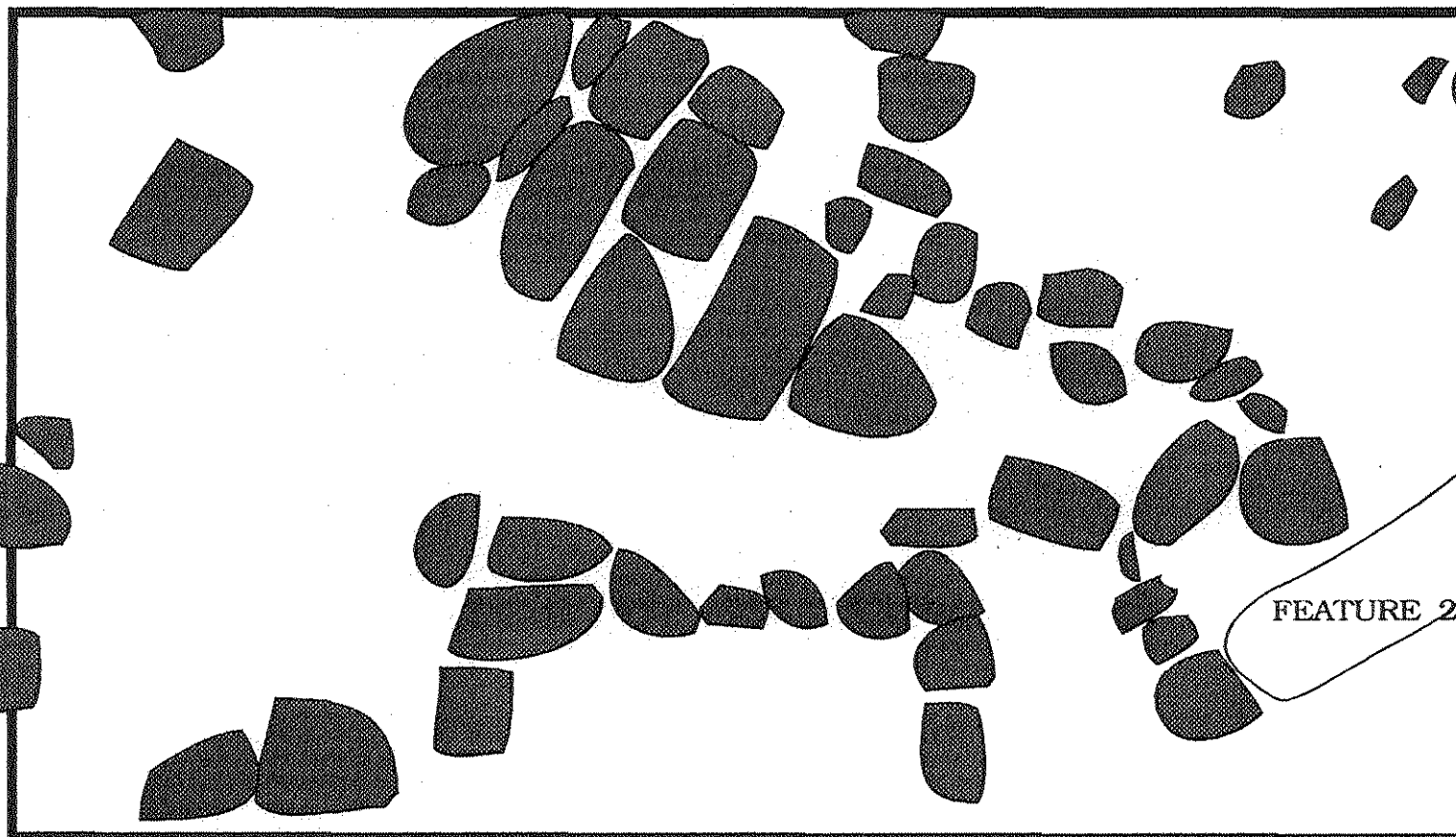
CERAMICS	MEDIAN DATE	TOTAL SHERDS	DATEABLE SHERDS	PRODUCT
PORCELAIN undecorated		1		
BUFFWARES unidentified		1		
STONEWARES unglazed		6		
WHITEWARES undecorated	1860	24	24	44640
shell edged	1845	1	1	1845
transfer printed	1845	2	2	3690
annular	1845	11	11	20295
IRONSTONE undecorated	1857	4	4	7428
transfer printed	1857	1	1	1857
YELLOWWARE	1875	5	5	9375
BURNT/UNIDENTIFIED		1		
TOTAL SHERDS		57		
TOTAL DATEABLE SHERDS			48	89130
MEAN CERAMIC DATE				1856.875
TERMINUS POST QUEM				1860
TERMINUS ANTE QUEM				1922

38CH1078 STRUCTURE 3 PLAN VIEW



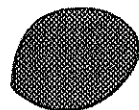
111N/99E

113N/99E



49

111N/100E



BRICK

0 25 cm



113N/100E

Figure 21. Plan view of Unit 111 N/99 E.

38CH1078
UNIT 160N 129E EAST PROFILE

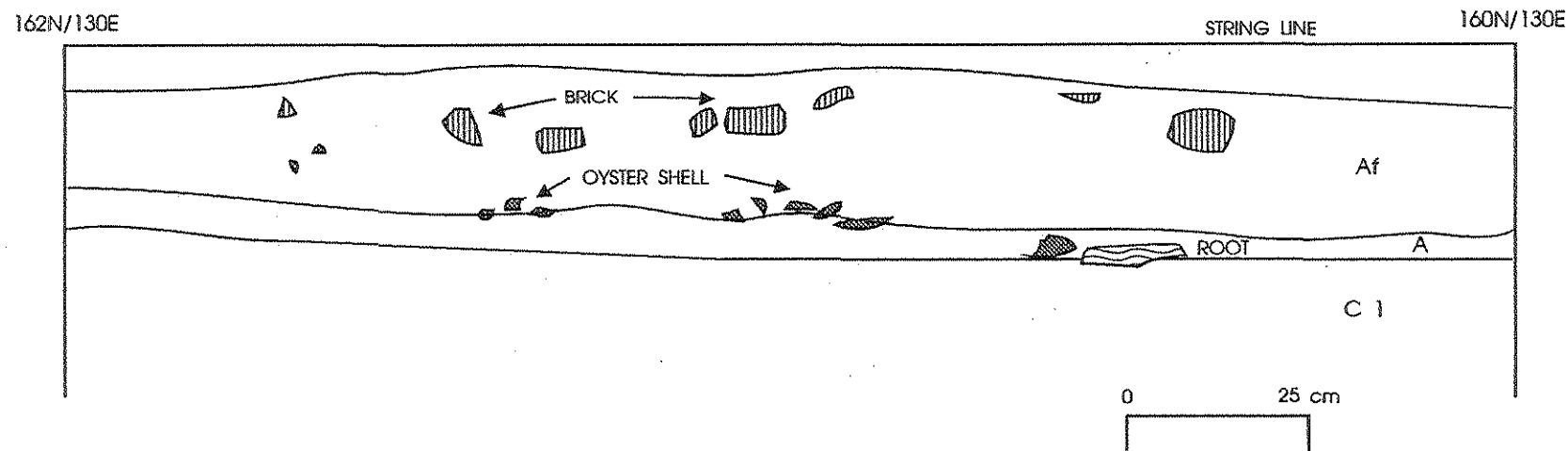


Figure 22. Profile of the East Wall of Unit 160 N/129 E.

halted at the interface between the *A* horizon and the underlying *C1* deposits. Figure 22 displays a profile of east wall of Unit 160 N/129 E.

No evidence of intact cultural deposits, other than the thin lens of *A* horizon, was encountered in Unit 160 N/129 E. Most of the brick rubble was recovered from the *Af* horizon (29 kg of brick and 6 kg of shell and mortar). Higher frequencies of shell and mortar were recovered from the buried *A* horizon (5 kg of brick and 24.5 kg of shell and mortar). As noted above, most of the shell appeared to represent construction debris rather than domestic refuse. Possibly, this reflects the remains of a possible structural feature (one might expect to find footings and ballast of shell and mortar beneath brick constructions). However, all of these materials appeared to be highly jumbled, and displayed no evidence of articulation or *in situ* deposition. Thus, no evidence of the chimney fall, other than the rubble, was encountered in Unit 160 N/129 E. A single penny, minted in 1847, was recovered from the *Af* horizon in 160 N/129 E. This suggests that the occupation principally represented at 38CH1078 dates from the late antebellum or early postbellum nineteenth century, as suggested above.

Similarly, Unit 150 N/120 E was placed at a concentration of brick encountered in an exploratory excavation. Two excavation horizons were removed from 150 N/120 E. The uppermost horizon consisted of approximately 15 cm of *Af* deposits with dense rubble (41 kg of brick and 2 kg of shell and mortar). The majority of the brick was resting on subsoil. Few artifacts were recovered from the rubble. No evidence of articulated brick or other structural elements was encountered in 150 N/120 E. All of the upper soil horizons in this portion of the site appeared to have been completely mixed, possibly by hurricane debris removal activities.

ASSESSMENT OF DAMAGE TO 38CH1078

One of the principal goals of the field investigations at 38CH1078 was to determine whether the research potential of the site had been affected adversely by the debris clearing activities. Descriptions of several evidences of disturbance or alteration to the site that appear related to these development activities have been described above. These effects are examined in more detail below, and a more thorough assessment of possible damage to the site attempted.

Two sets of development activities appear to have disrupted the cultural deposits at 38CH1078 that were present in 1989. These activities include the clearing of hurricane debris from the site and the installation of the sewer line. The effects of each of these activities upon the 1989 cultural deposits at 38CH1078 can be assessed using the results of the investigations described above.

The installation of the sewer line in the southern and southeastern portions of the site potentially presents the greatest opportunity to destroy or obliterate cultural deposits.

The sewer line installation involved the excavation of a trench to accommodate the drain culverts and placement of fill in and around this conduit. Approximately 10-20 per cent of the total site area appears to have been affected by these activities. All of the affected area lies in the southeastern and south central portion of the site.

The affected areas appear to have been highly disturbed and any cultural deposits that were present have been replaced by a dense sandy clay fill. Possibly, this fill represents deep subsoils at 38CH1078. This fill covers any deposits that may have been present to considerable depths in those areas that were auger tested during the field investigations. Thus, the installation of the sewer line has effectively destroyed any cultural deposits that may have been present in this portion of the site.

The deposits affected appear to be two of the features identified in 1989 (the southernmost chimney fall and the house pad- see Figure 6) and any midden/artifact bearing deposits associated with these former structures. Unfortunately, the southernmost chimney fall had been identified as one of the two structures that should be examined during any data recovery investigations. The sewer line fill also covers the former canal that extended from the southern edge of the brick foundation/structure in the southwestern portion of the site. Thus, interpretations of this feature with respect to its setting have been limited by these activities. It should be noted that while the sewer line installation probably destroyed or covered cultural features at 38CH1078, its affect on the total area of artifact bearing deposits at the site appears limited. Most of the area affected by the sewer line installation produced few or no artifacts during the 1989 examination of the site.

Debris removal activities appear to have affected much of the remainder of the site (approximately 60-70 per cent of the total site area). The majority of these activities occurred to the east side of the dirt road; however, some vehicle tracks and push piles are evident between the road and the western lake. The only portion of the site that appears not to have been affected is the area immediately adjacent to the brick foundation/structure in the southwest corner of 38CH1078. Unfortunately, most of the significant cultural deposits defined at 38CH1078 in 1989 were located to the east of the dirt road.

Most of the effects that can be associated with debris clearing involve the movement of large vehicles across the site. Vehicular traffic has created ruts in some areas (e.g., the swale to the northwest of the large oak tree in the northwestern portion of the site - see Figure 6) and apparently mixed many of the former surficial deposits. Further, the mixed surficial deposits appear to have been pushed across the site, presumably into areas that were slightly lower prior to 1991. Evidence of this movement of soils was observed in the eastern portion of the examined area where 10-15 cm of *Af* horizon could be observed around larger trees, atop leaf litter. Presumably the leaf litter represents the ground surface prior to the 1991 debris removal activities.

These activities appear to have completely altered the surface of the site, resulting in the removal of all of the three northernmost chimney falls defined in 1989. It should be

noted that artifact concentrations were noted near one of the 1989 features; however, no intact architectural remains were encountered in 1992. The reworking and movement of soils on the site appears to extend over much of the central portion of the site, resulting in the complete disruption of the former surficial deposits at 38CH1078 in some places (e.g., in and around 150 N/120 E). In other areas, this turbation affected the upper two-thirds of the former surficial deposits (e.g., in and around 170 N/132 E).

Excavations at 170-172 N/132-135 E and at 160 N/129 E revealed that intact cultural deposits are present in portions of the site beneath the mixed *Af* horizon. A simple evaluation of the effect of turbation on these deposits was attempted using the remains recovered from the *Af* and *A* horizons in these units. The frequencies and kinds of artifacts recovered were compared, as well as the relative size of ceramic and glass sherds. It was assumed that, if the *Af* horizon was completely mixed and redeposited that artifacts recovered from it should appear dissimilar to those recovered from the underlying intact deposits. Also, it was assumed that turbation of the *Af* horizon would result in some degradation to any artifacts that were present, including the reduction in the size of fragile remains such as ceramic or glass fragments.

Artifact frequency distributions were calculated for the *Af* horizons (Level 1) and the underlying *A* horizons (Level 2) excavated from 170 N/133 E and 160 N/129 E. These frequencies are displayed in Table 7. The kinds of artifacts recovered from each level are quite similar; the relative frequencies of all classes are fairly equal except that higher frequencies of Architectural remains and fewer Kitchen remains were recovered from the *A* horizon. Thus, the kinds of artifacts recovered from either of these horizons (one apparently disturbed and the other intact) are quite similar.

A fairly significant difference in the number of artifacts recovered from each horizon is the most noticeable difference between the assemblages. The *Af* horizon produced only 189 artifacts while the *A* horizon contained 426 artifacts. This difference is especially acute when one considers that the volume of the *Af* horizon (0.48 m^3) removed from the units was nearly twice the volume of the *A* horizon (0.28 m^3). Thus, the density of artifacts in these horizons is dramatically different. The *Af* horizon produced approximately 393.8 per cubic meter of fill removed; the *A* horizon produced 1,521.4 artifacts per cubic meter of fill (Table 7). It should be noted that these differences cannot be completely attributed to the turbation of the deposits by the debris clearing activities. Presumably, the uppermost soils at 38CH1078 prior to disturbance contained fewer artifacts than those more deeply buried and closer to intact features. Unfortunately, this possibility cannot be explored further at 38CH1078 due to a lack of information concerning the nature of the deposits prior to their disturbance. However, the ability of the *Af* horizon to provide adequate samples of artifacts is certainly questionable, plus the apparent reworking and possible redeposition within the site creates problems with assuming that any remains in this horizon are associated with any underlying intact features.

Examination of the relative size of glass and ceramic artifacts also shows some

Table 7. Artifact Frequencies from the *Af* and *A* Horizons.

CLASS	<i>Af</i> Horizon		<i>A</i> Horizon	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
KITCHEN	81	49.09	139	35.28
Ceramics	43		91	
Glass	37		47	
ARCHITECTURE	78	47.27	246	62.44
FURNITURE	0	0.00	0	0.00
ARMS	0	0.00	0	0.00
CLOTHING	3	1.82	5	1.27
PERSONAL	1	0.61	1	0.25
TOBACCO	1	0.61	0	0.00
ACTIVITIES	1	0.61	3	0.76
Subtotal	165		394	
MISC.	24		32	
TOTAL	189		426	
Volume excavated (in m ³)	0.48		0.28	
Artifact density (per 1 m ³)	393.8		1521.4	

differences between these two horizons. Size categories were defined based on surface area of recovered fragments. Counts of the number of sherds within each size category were determined, and the distribution of the sherds from each horizon among the classes compared. Table 8 summarizes these data. Ceramic and glass sherds recovered from the *A* horizon are generally larger than those recovered from the *Af* horizon. Analysis of these values was undertaken through a χ^2 comparison of these data. χ^2 estimates the differences between any two samples by comparing the observed values in each with a series of values that could be expected if the two samples were drawn from the same population. The sum of the squared differences between each observed value and its expected value are calculated to provide a χ^2 statistic. This statistic can then be compared to a series of critical values based on the number of degrees of freedom provided by the two samples and the level of significance desired. In this case, the number of degrees of freedom is defined by multiplying the number of observed rows in Table 8 (size categories= 5) minus one by the number of observed columns (the soil horizons= 2) minus one (i.e., $[5-1] * [2-1] = 4 * 1 = 4$). An arbitrary level of significance was set at 90 per cent.

Table 8. Artifact Sizes from the *Af* and *A* Horizons.

SIZE CLASS	<i>Af</i> Horizon		<i>A</i> Horizon		Expected Values	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	<u><i>Af</i></u>	<u><i>A</i></u>
< 4 cm ²	19	45.24	68	73.91	27.27	59.73
4-9 cm ²	14	33.33	13	14.13	8.46	18.54
9-16 cm ²	8	19.05	1	1.09	4.39	9.61
16-25 cm ²	1	2.38	6	6.52	0.63	1.37
> 25 cm ²	0	0.00	4	4.35	1.25	2.75
TOTAL	42		92		χ^2	14.50

If the difference between the two samples is not greater than any variation that could be associated with the random selection of any sample, then χ^2 will be less than the critical value and the two samples are assumed to represent a single population. If χ^2 exceeds the critical value, these differences are greater than could be expected between any two samples from the same population due to random error, and the two samples are assumed to represent two different populations.

With four degrees of freedom and a 90 per cent significance level, the critical value for χ^2 is 7.78. Since the χ^2 value calculated for the size classes in Table 8 ($\chi^2 = 14.50$) is greater than the critical value, the two samples are assumed to represent two distinct populations. Thus, there is a statistically significant difference between the size of sherds from the *Af* and the *A* horizons. Thus, the turbation and redeposition of the deposits in the *Af* horizon at 38CH1078 appears to have reduced the size of most glass and ceramic artifacts. This further reduces the potential of the *Af* horizon to produce information that could be employed to address research issues such as those outlined in Chapter II above.

SUMMARY

Archaeological investigations at 38CH1078 were designed to determine whether debris clearing activities at the site had damaged or destroyed any of the significant cultural deposits identified at the site in 1989. These investigations revealed that only the extreme southwestern portion of the site, containing the remains of a brick industrial foundation/structure and probable chimney fall, remain in a state similar to that observed in 1989. Evidence of five other features identified at 38CH1078 during the 1989 survey was not encountered. At least two of these other five features appear to have been destroyed or covered by fill during the installation of sewer line in the southern portion of the site. The remaining features appear to have been destroyed by the removal of hurricane debris from the site. However, evidence of three structures was encountered in excavations in portions of the site not directly associated with any of the 1989 features. An intact brick chimney base was encountered in the central portion of the site, associated with a thin but intact lens of artifact bearing deposits. Deposits overlying this feature (defined as Structure 1) appear highly mixed, presumably as a result of the debris clearing activities, but contain artifacts similar to those in the undisturbed levels in and around the chimney base. A wall/floor and footing (defined as Structure 2) were encountered in the extreme northern portion, in an area not described in 1989 as possessing architectural remains. This area possesses a shallow *A* horizon but appears to have suffered little of the turbation and possible reworking of surficial deposits noted in the central portion of the site. A jumbled array of brick in the southwestern portion of 38CH1078, north of the intact brick foundation also may represent a third structure; this area also was not interpreted as possessing architectural remains in the 1989 survey. Unfortunately, this portion of the site possesses almost no *A* horizons. Although some evidence of disturbance related to debris clearing is evident in this portion of the site, the lack of deep artifact bearing deposits probably relates to the erosion of this portion of the site since its abandonment rather than recent impacts. The ability of the remaining intact deposits to provide data to address the research issues originally defined for 38CH1078 was further assessed by comparing the density, variety, and condition of remains recovered from the intact and turbated horizons in the central portion of the site. These analyses suggest that samples of artifacts from the turbated areas generally reflect the kinds of remains that are present in the underlying intact deposits; however, artifact frequencies are lower in the turbated deposits and the ceramic and glass artifacts appear to be significantly smaller.

CHAPTER IV

EVALUATION OF 38CH1078

The 1992 field investigations at 38CH1078 revealed that portions of the site had been seriously altered since its discovery in 1989, resulting in the removal of most of the architectural features defined at that time and the disturbance of many of the artifact bearing deposits at the site. However, the remains of four separate structures appear to be present, with associated intact cultural deposits around three of these structures. Archaeological information related to the site's occupation and use can be extracted from these deposits. Thus, the site appears to retain many of the sources of information observed in 1989. The following discussions assess the significance of the site with respect to the NRHP criteria in more detail, and provide a detailed plan for the recovery of the information present at 38CH1078 at the present time.

ASSESSMENT OF NRHP ELIGIBILITY

As noted above, 38CH1078 retains the remains of at least three structures that possess the kinds of deposits and features from which significant archaeologically information can be derived. The ability of these portions of the site to address the research issues outlined Chapters I and II are assessed, and the NRHP status of the site is re-evaluated based on the results of this assessment.

Originally, four research issues were defined that could be addressed by archaeological information extracted from 38CH1078. Addressing these research issues would contribute to the "substantive knowledge" of the historic use and development of the region (following Butler 1987); thereby, 38CH1078 produces information important to the history of the region and becomes eligible for nomination to the NRHP (as per 36CFR60.4[d]). The four original research issues are:

- (1) slave subsistence and the contribution of wild and self-grown foods in slave diets.
- (2) ethnicity and Colonoware manufacture.
- (3) composition of industrial slave community.
- (4) configuration and construction of industrial slave cabins.

These issues were defined on the basis of the features observed at the site and the artifacts recovered during the 1989 survey investigations. The ability of 38CH1078 to produce

information related to each of these issues will be assessed based on its current condition.

RESEARCH ISSUE 1 - SLAVE SUBSISTENCE AND DIET

Originally, 38CH1078 was seen as an opportunity to compare subsistence strategies of industrial slaves with those engaged in agricultural or domestic pursuits. The ability of slaves employed in industrial activities to pursue wild resources or to plant and tend small garden plots, like those employed as agricultural hands or domestics, was unknown. If brick making required greater expenditures of time than other plantation activities, one could expect to find a greater dependence on processed foods and large domesticates than on wild foods and small vegetables. Archaeologically derived subsistence remains from 38CH1078 were viewed as an avenue to examine the differences between agricultural slave sites and industrial slave sites.

Data requirements for such comparisons included the recovery of subsistence remains (e.g., animal bone, charred seeds, mollusc shells, etc.) and/or adequate ceramic and glass artifacts to characterize the assemblage of food service and consumption vessels that were present at 38CH1078. Some quantities of these kinds of remains were recovered from various portions of the site in 1989. The 1992 investigations recovered few if any subsistence remains. A small amount of animal bone was recovered from around the chimney base at Structure 1. Most of the shell recovered appeared to represent building material rather than food refuse. However, no refuse pits or other dense midden deposits were encountered. It is possible that these kinds of features are present at the site. Presumably, they would have extended into the subsoils, and it is unlikely that they would have been destroyed, if present, in those portions of the site not affected by the installation of the sewer. Thus, these kinds of data are likely to remain at 38CH1078 in intact refuse pits.

Artifact assemblages associated with particular structures appear to have suffered some dislocation and degradation (i.e., a reduction in size) due to the debris removal activities. However, fairly dense concentrations of the ceramic and glass artifacts remain in undisturbed deposits in and around Structures 1 and 2. Thus, vessel reconstruction to define a household assemblage may be possible if an adequate sample of these deposits is excavated.

This suggests that information related to the subsistence of the slaves (or later tenants?) who resided at 38CH1078 can be extracted from the site given its present condition. Thus, Research Issue 1 can be addressed by future investigators at 38CH1078.

RESEARCH ISSUE 2 - ETHNICITY AND COLONOWARE MANUFACTURE

Archaeological data recovery investigations at 38CH1078 was expected to generate information related to the manufacture of Colonoware and to permit some interpretation of its role in the lifeways of the slaves who resided at the site. Colonoware manufacture and decoration has been interpreted as a conscious effort by slaves to maintain indicators of their African heritage. Originally, slaves involved in industrial pursuits at 38CH1078 were hypothesized to have maintained Colonoware use and manufacture longer than those in agricultural and domestic settings due to their relative isolation from the principal residences of their owners and other slave communities. Samples of Colonoware from domestic deposits at 38CH1078 would have provided the comparative data necessary to address this issue.

Few pieces of Colonoware were recovered from 38CH1078. This is not completely surprising given the relatively late antebellum or postbellum nature of most of the artifacts recovered during the 1992 excavations. As noted for Structures 1 and 2, ceramics recovered from the site produced MCDs from the 1840s and 1850s; a MCD of 1849.3 is generated if all ceramics recovered during the 1992 investigations are tabulated (see Table 9). Colonowares represent approximately 10 per cent (27 of 268 sherds) of all sherds; other wares manufactured during the eighteenth or early nineteenth centuries account for an additional 8.2 per cent (22 of 268 sherds) of all ceramics from the site. Thus, the artifacts present at 38CH1078 suggest that the opportunity to examine the manufacture of Colonoware in slave kitchen assemblages will be very limited. This more a factor of the period of occupation of the site than its condition following the disturbances noted above.

RESEARCH ISSUE 3 - COMPOSITION OF INDUSTRIAL SLAVE COMMUNITIES

Communities of slaves employed in agricultural and domestic pursuits generally represented "normal" populations (i.e., complete ranges of ages and both male and female members are present). The labor requirements of brick making were unknown (and generally still are not known at present). Thus, the community composition represented by the occupations at 38CH1078 was hypothesized to differ dramatically if only males could perform the tasks associated with brick manufacture. Archival information concerning the numbers, ages, and sex of slaves employed at the Horlbeck Brickyard (38CH1075) could outline the profile of the community that resided at 38CH1078. Archaeological information derived from 38CH1078 then could be employed to characterize this "industrial" population (if different), and provide new insight into the nature of archaeological remains associated with particular age, sex, or skill groups.

Data requirements for addressing this issue include archival information and adequate artifact assemblages. The debris clearing activities and installation of the sewer at 38CH1078 have not affected any archival collections of information. Further, as noted in the discussion of Issue 1 above, intact cultural deposits containing a variety of artifacts

Table 9. Mean Ceramic Date Calculation for All Ceramics from 38CH1078.

CERAMICS	MEDIAN DATE	TOTAL SHERDS	DATEABLE SHERDS	PRODUCT
PORCELAIN				
undecorated		5		
underglz. painted		1		
unidentified		1		
BUFFWARES				
Staffordshire	1725	1	1	1725
unidentified		1		
CREAMWARES				
undecorated	1791	6	6	10746
Littlers Blue	1758	1	1	1758
DELFT				
undecorated	1720	4	4	6880
PEARLWARE				
undecorated	1805	3	3	5415
annular	1805	1	1	1805
shell edged	1805	3	3	5415
transfer printed	1818	1	1	1818
Mocha	1843	1	1	1843
REDWARES REFINED/UNREFINED				
brown slipped		1		
STONEWARES				
unglazed		6		
Westerwald	1737	1	1	1737
Bristol slipped		6		
brown slt. glz, gray bodied		2		
alkaline glazed		5		
undetermined slt glz		1		
unidentified		4		
WHITEWARES				
undecorated	1860	102	102	189720
shell edged	1845	2	2	3690
hand painted	1865	5	5	9325
transfer printed	1845	12	12	22140
annular	1845	15	15	27675
Flow Blue	1852	2	2	3704
indeterminate decoration		1		
IRONSTONE				
undecorated	1857	11	11	20427
transfer printed	1857	1	1	1857
annular	1857	2	2	3714
coloured glaze		10		
YELLOWWARE	1875	15	15	28125
COLONOWARE		27		
BURNT/UNIDENTIFIED		8		
TOTAL SHERDS		268		
TOTAL DATEABLE SHERDS			189	349519
MEAN CERAMIC DATE				1849.3069
TERMINUS POST QUEM				1725
TERMINUS ANTE QUEM				1922

are present in portions of the site. The artifacts associated with intact deposits in these areas appear to be related to particular households. Thus, archaeological information can be extracted from the artifact assemblages at 38CH1078 that can characterize the inhabitants of one or more of its former structures. Thus, 38CH1078 can be expected to produce information to address Research Issue 3.

RESEARCH ISSUE 4 - CONSTRUCTION AND CONFIGURATION OF INDUSTRIAL SLAVE CABINS

Originally, architectural features of the former slave cabins at 38CH1078 were to be compared with those from the agricultural and domestic slaves who resided at Boone Hall and other sites in the region. The extant slave cabins in front of the Boone Hall Plantation house were assumed to represent more "extravagant" structures than those usually occupied by slaves in the region. Possibly, this represented the proximity of these cabins to the main house and/or the acculturation of their residences into the Euro-American society of their owners. It was hypothesized that the slaves who resided at 38CH1078, removed from the main house and their owners, were not afforded such "extravagance." Thus, the configuration, size, and nature of construction of the cabins represented at 38CH1078 were expected to be different from those at Boone Hall. These differences would serve to characterize the relationships between the two communities of slaves, and the differences between industrial and agricultural/domestic populations in general.

Archaeological features that can be employed to determine the size and medium of construction of the former cabins at 38CH1078 are necessary to address this issue. Excavations in the central and northern portions of the site (i.e., in and around Structures 1 and 2, respectively), demonstrated the presence of intact architectural features. It is highly likely that additional components of these structures are present. Thus, the kinds of information necessary to address this issue can be extracted from 38CH1078 despite the disruption and degradation of the features and deposits identified at the site in 1989 by development activities.

NRHP ASSESSMENT

Site 38CH1078 possesses archaeological deposits and remains that can be employed to address three of the four original research issues defined for the site. Extracting this information from the site can provide a significant contribution to the understanding of how slave communities were structured and operated in this portion of the Coastal Plain of South Carolina. Efforts to examine slave populations related to industrial activities in the region rather than agricultural or domestic pursuits have not been undertaken to date. Thus, 38CH1078 offers an excellent opportunity to gather information concerning an important aspect of the many "industrial" plantations on the Wando Neck of Charleston County. This potential exists despite the adverse effects the site has suffered through the

removal of hurricane debris and the installation of a sewer in the southern portion of the site. Therefore, 38CH1078 is recommended as eligible for nomination to the National Register of Historic Places.

DATA RECOVERY PLAN FOR 38CH1078

Future intensive archaeological investigations at 38CH1078 should be directed toward the recovery of information that can address three research issues. These issues include:

- (1) industrial slave subsistence and diet.
- (2) industrial slave community composition.
- (3) architectural attributes of industrial slave occupations.

All of these issues have been described in some detail above. Further discussion of each issue and the description of particular activities to be undertaken at 38CH1078 are described below.

Data recovery investigations at 38CH1078 should be initiated through an intensive review of archival information related to the past ownership and operation of Brickyard Plantation, as well as the other landholdings of the Horlbeck family (e.g., Boone Hall). Apparently, family records have been maintained both with the Horlbecks and at Boone Hall. These sources of information should be searched for information related to the date of the construction of the structures at 38CH1078, the residents of these structures, and their relationships to other members of the Horlbeck plantation community. Thus, data related to all of the research issues described above may be recovered, and employed to supplement archaeological information gained from the site itself. This research should be undertaken by a qualified historian or historical archaeologist, and should not be limited to those sources described above. Review of information curated by the South Carolina Historical Society, South Carolina Archives and History, the Charleston Library Society, and other repositories should be undertaken. This research is designed to generate the most comprehensive collection of documentary information possible. Such documentation is necessary to offset some of the limitations of the archaeological deposits at 38CH1078 that may have resulted from the debris clearing and sewer construction activities in 1991.

Archaeological investigations should be directed toward the excavation and recordation of four principal areas. These areas include:

the chimney base near 170-172 n/132-135 E (Structure 1).

the wall/floor and pier near 200 N/138-144 E (Structure 2).

the brick foundation/structure and associated chimney fall in the southwestern portion of the site (hereafter referred to as Structure 4).

the small brick structure located in the northwest corner of the site.

Excavations in and around Structure 1 should be undertaken in an area approximately 8 m by 8 m. This block should expose any additional features associated with Structure 1, thereby permitting a determination of its size and configuration. This also should be adequate to permit the sampling of portions of the yard of the former structure, hopefully exposing refuse pits and other features that can produce artifacts and remains related to the diet and subsistence practices of the former occupants.

Given the nature of the disturbed surficial deposits in this portion of the site, it is recommended that the uppermost soil horizon be removed mechanically, after an adequate sample has been hand excavated. A 10 per cent sample of this fill (eight 1 m by 1 m units) should be randomly selected, and hand excavated with all excavated soils screened through 6.35 mm hardware cloth. Using the soil profiles exposed in these units, the remaining overburden could be removed by a smooth-bladed backhoe to permit rapid access to the underlying intact deposits in and around Structure 1. This mechanical excavation would be monitored by the Principal Investigator or Field Director to insure that any architectural features are not damaged. Once the turbated fills have been removed, the remaining intact deposits will be hand excavated as a single horizon. All of this horizon removed during the hand excavations will be screened through 6.35 mm hardware cloth.

Excavations in and around Structure 2 should include the hand excavation of an area encompassing 64 m² of the surface of 38CH1078. This portion of the site does not appear to be as highly turbated as the central area. However, vehicle ruts and fill are present that will affect where excavations can be undertaken. A number of small noncontiguous blocks (e.g., 2 m by 2 m, 2 m by 4 m, 4 m by 4 m, etc.) will have to be excavated to permit the identification of any additional architectural features that may be present. All of this portion of the site should be hand excavated since some features can be expected to be present at or near the present ground surface. All artifact bearing horizons excavated in this portion of the site will be screened through 6.35 mm mesh hardware cloth. Any obvious fills will be excavated en masse and not screened.

Excavations in and around the Structure 4 complex (the industrial foundation and probable chimney fall) should include the hand removal of at least 30 m² of the surface of 38CH1078. A large portion of this excavation will be placed around the chimney fall to determine the nature of this small structure. Other small blocks may be placed adjacent to the outside of the large brick foundation to assist in the determination of its age and function. All of this area will be hand excavated, and all removed soils will be screened through 6.35 mm mesh hardware cloth unless obvious fills are encountered.

All unit excavations will be recorded on standardized level records, with appropriate

plans of the excavation floors drawn and photographed. Profiles of the excavation area, to include at least one wall or transect of the principal excavation block, will be drawn and photographed as necessary to record stratigraphic information. All units will be located and identified with respect to the site grid (established during the 1992 test investigations). Elevations will be recorded with respect to meters above sea level, as determined from bench marks established by professional surveyors at Brickyard Plantation. A transit, tape, and stadia rod will be employed to establish these locations and elevations within the site.

Recordation of the two brick foundations/structures (the large in the southwest corner and the smaller one in the northwest corner of the site) will be undertaken through the use of a syphon dredge. A small horsepower pump will direct water along a hose (approximately 5-10 cm in diameter), creating a suction that will pull water, muck, and artifacts from the enclosures. The discharge of this dredge will be pumped onto 12.7 mm mesh hardware cloth to assist in the recovery of any artifacts that may be present. Drawings and photographs of the walls and floors of the structures will be prepared once they have been emptied. These activities are designed to document these structures, provide some information concerning their age and function, and permit their interpretation considering the other structures encountered at 38CH1078.

All features encountered during the investigations will be drawn and photographed in plan view. Non-architectural features will be excavated, and appropriate profile drawings and photographs prepared. One half of each feature (or a 20 liter sample, whichever is less) will be retained for flotation processing. Feature fill not retained for flotation processing will be screened through 6.35 mm mesh hardware cloth. Architectural features will be drawn and photographed in plan view; associated construction pits or footings will be excavated around architectural features, if present. Features will be numbered sequentially within the site, and recording use standardized forms. The locations of features and structural elements identified during the excavations will be plotted on a map of 38CH1078 to demonstrate the spatial relationships between the various structures and facilities that once existed at the site.

Additional flotation samples (20 liter samples of fill) from identified midden deposits will be collected in and around Structures 1, 2, and 4. At a minimum, three such samples will be collected from the intact deposits in and around Structures 1 and 2, and two samples will be collected from around Structure 4. These samples will be flotation processed in an effort to recover subsistence remains that may not be identified in the hand excavated and screened soils.

Detailed descriptive analyses of all recovered remains will be undertaken. Additional, more intensive analyses (estimations of minimum vessels, refitting of vessel fragments, etc.) will be undertaken as well to provide information concerning the nature of the assemblage of artifacts employed by the former occupants of 38CH1078. At least three midden samples and five feature samples that were flotation processed will undergo detailed zooarchaeological and ethnobotanical analysis.

The results of these investigations will be presented in a professional quality report that meets the standards of the South Carolina SHPO. This report will include a synthesis of the information recovered from archival research and the archaeological investigations. The role of 38CH1078 will be interpreted with respect to other sites at Brickyard Plantation (i.e., 38CH1075) and other plantation sites in the region. The report will be submitted to the SHPO for review and comment. The Draft Report will be submitted within one year of the completion of the field investigations. A Final Report will be prepared addressing all comments by the SHPO, if necessary.

All artifacts, field notes, and photographs will be permanently curated at SCIAA upon the completion of all activities related to the data recovery investigations at 38CH1078.

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APPENDIX A

ARTIFACT INVENTORY

THE FIRST COLUMN PRESENTS THE PROVENIENCE/CATALOGUE NUMBER. THE SECOND COLUMN PRESENTS THE COUNT. THE THIRD COLUMN PRESENTS THE WEIGHT IN GRAMS, AS APPLICABLE.

Site No. 38CH1078

Provenience Number:	1	Description:	General surface
1-1	2		industrial porcelain
1-2	3		undecorated ironstone
1-3	1		green alkaline glaze gray body stoneware
1-4	1		undecorated creamware
1-5	1		undecorated yellowware
1-6	1		blue transfer printed whiteware
1-7	3		blue glazed brick
1-8	1		green glass
1-9	1		molded light blue soda bottle with embossed bottom, "Charleston".
1-10	1		aqua panel bottle with pontil on bottom.
1-11	1		Iron hinge.
1-12	1		Unidentifiable iron.

Provenience Number:	2	Description:	Test unit 140N 120E (50x50)
2-1	1		Undecorated whiteware.
2-2	2		Blue glazed brick
2-3	0	105.50	oyster shell

Provenience Number:	3	Description:	Test unit 101N 100E (50x50)
3-1	1		Iron strap
3-2	0	42.60	brick
3-3	0	8.00	Mortar
3-4	0	70	Shell

Provenience Number:	4	Description:	Test unit 160N 100E (50x50)
4-1	0	13.00	Brick

Provenience Number:	5	Description:	Test unit 150N 110E (50x50)
5-1	0	472.10	Brick

Provenience Number:	6	Description:	Test unit 155N 110E (50x50)
6-1	2		Undecorated whiteware.

Provenience Number:	7	Description:	Test unit 160N 150E (50x50)
7-1	0	187.50	Brick
7-2	0	0.40	Oyster shell

Provenience Number: 8 Description: Test unit 170N 110E (50x50)
8-1 0 200.50 Brick
8-2 0 7.50 Oyster shell

Provenience Number: 9 Description: Test unit 130N 120E (50x50)
9-1 0 91.03 Brick

Provenience Number: 10 Description: Test unit 180N 120E (50x50)
10-1 0 173.60 Brick
10-2 0 7.20 Oyster shell

Provenience Number: 11 Description: Test unit 190N 120E (50x50)
11-1 1 One half of a white glass button.
11-2 0 23.25 Oyster shell

Provenience Number: 12 Description: Test unit 190N 120E (50x50)
12-1 1 3.25 Undecorated whiteware.
12-2 2 Yaughan
12-3 1 Lesesne
12-4 2 Kaolin pipe.
12-5 1 Green glass.
12-6 2 Misc. iron frags.
12-7 0 120 Brick
12-8 0 115.00 Oyster shell.

Provenience Number: 13 Description: Test unit 130N 130E (50x50)
13-1 1 Brown glazed earthenware.
13-2 2 Green glass
13-3 0 6.10 Oyster shell.

Provenience Number: 14 Description: Test unit 140N 130E (50x50)
14-1 1 Coal
14-2 0 37.00 Oyster shell

Provenience Number: 15 Description: Test unit 150N 130E (50x50)
15-1 1 Undecorated whiteware.
15-2 0 80 Brick
15-3 0 4.50 Oyster shell

Provenience Number: 16 Description: Test unit 160N 130E (50x50)
16-1 3 Ironstone with makers mark.
16-2 2 Undecorated whiteware.
16-3 2 Undecorated pearlware.
16-4 1 Metal button (4 hole).
16-5 1 Green glass

16-6	1		Clear glass
16-7	1		Amethyst
16-8	0	4.50	Bone.
16-9	2		Hand wrought iron nail.
16-10	10		Machine cut square nails.
16-11	26		Unidentifiable square nails.
16-12	9		Unidentifiable nails.
16-13	2		Unidentifiable square spikes.
16-14	1		Wire spike.
16-15	0	943.30	Brick
16-16	0	199.00	Mortar
16-17	0	602.20	Oyster shell.
16-18	1		Hand painted whiteware.

Provenience Number: 17 Description: Test unit 170N 130E (50x50)

17-1	1		Iron strap.
17-2	0	60	Brick.
17-3	0	13.00	Oyster shell.

Provenience Number: 18 Description: Test unit 180N 130E (50x50)

18-1	1		Unidentified square nail.
18-2	0	43.00	Brick
18-3	0	62.00	Oyster shell

Provenience Number: 19 Description: Test unit 200N 130E (50x50)

19-1	1		Unidentified square nail.
19-2	0	3	Brick
19-3	0	40.50	Oyster shell.

Provenience Number: 20 Description: Test unit 210N 130E (50x50)

20-1	1		Undecorated pearlware.
20-2	1		Undecorated creamware.
20-3	1		Aqua glass

Provenience Number: 21 Description: Test unit 160N 135E (50x50)

21-1	1		Unidentified square nails.
21-2	0	235.00	Brick

Provenience Number: 22 Description: Test unit 150N 140E (50x50)

22-1	3		Clear glass mold made dispensary bottle.
22-2	1		Green glass bottle neck fragment.
22-3	3		Square machine cut nails.

Provenience Number:	23	Description:	Test unit 160N 140E (50x50)
23-1	1		Blue transfer printed whiteware.
23-2	1		Green glass
23-3	1		Aqua glass
23-4	0	0.80	Bone
23-5	2	0.80	Machine cut square nails.
23-6	4	0.80	Unidentified square nails.
23-7	4	0.80	Unidentified nails.
23-8	0	98.10	Oyster shell

Provenience Number:	24	Description:	Test unit 170N 140E (50x50)
24-1	1		Green glass

Provenience Number:	25	Description:	Test unit 180N 140E (50x50)
25-1	0	38.00	Brick
25-2	0	5.00	Oyster shell.

Provenience Number:	26	Description:	Test unit 190N 140E (50x50)
26-1	1		Hand painted over blue transfer printed whiteware.
26-2	1		Green alkaline glazed gray paste stoneware.
26-3	1		Clear glass
26-4	1		Amber Panel bottle glass embossed "H O W".
26-5	0	11.00	Oyster shell
26-6	1		Green bottle glass.

Provenience Number:	27	Description:	Test unit 200N 140E (50x50)
27-1	1		English Mocha.
27-2	2		Blue shell edged pearlware.
27-3	1		Aqua bottle glass.
27-4	1		White glass button.
27-5	1		Coal
27-6	3		Misc. iron fragment.

Provenience Number:	28	Description:	Test unit 210N 140E (50x50)
28-1	0	47.40	Brick

Provenience Number:	29	Description:	Test unit 190N 150E (50x50)
29-1	1		Undecorated whiteware.
29-2	0	1.20	Oyster shell

Provenience Number:	30	Description:	Test unit 140N 160E (50x50)
30-1	0	16	Brick
30-2	0	11.00	Oyster shell

Provenience Number: 31 Description: Test unit 200N 160E (50x50)
31-1 1 Undecorated Ironstone

Provenience Number: 32 Description: Test unit 210N 160E (50x50)
32-1 1 Dark green glass
32-2 1 Slate
32-3 0 4.00 Oyster shell

Provenience Number: 33 Description: Test unit 200N 170E (50x50)
33-1 3 light green

Provenience Number: 34 Description: Test unit 140N 110E (50x50)
34-1 0 9 Brick green
34-2 0 6.00 Oyster shell.

Provenience Number: 35 Description: Test unit 120N 100E (50x50)
35-1 1 Dark Green glass
35-2 5 Clear glass
35-3 1 Iron hinge strap.
35-4 0 3.40 Brick

Provenience Number: 36 Description: Test unit 150N 100E (50x50)
36-1 0 6.10 Brick

Provenience Number: 37 Description: 99 E 111 N Level 1
37-1 0 253.10 Brick
37-2 2 Shoe leather.
37-3 0 10.40 Oyster.
37-4 3 Dark olive green bottle glass.
37-5 1 Olive green bottle glass.
37-6 1 Light blue bottle glass.
37-7 1 Pink bottle glass.
37-8 2 undecorated pipestems, 4 and 5/64th
37-9 1 Undecorated yellow ware.
37-10 1 Delft with blue glaze.
37-11 5 Lesesne Colonoware.
37-12 2 Alkaline glazed albany slopped
stoneware.
37-13 1 Undecorated whiteware.
37-14 1 Litter's blue.
37-15 2 Burned sherds.
37-16 2 Coal.
37-17 1 Unidentified nail.

Provenience Number: 38 Description: 150 N 120 E level 1

38-1	0	87.10	Oyster.
38-2	0	87.10	Slag.
38-3	0	8.40	Mortar.
38-4	2		Burnt olive green glass.
38-5	11		Dark olive green glass.
38-6	1		lt green bottle glass.
38-7	2		Clear bottle glass.
38-8	6		Yaughan colonoware.
38-9	1		Lesesne Colonoware.
38-10	1		Burnt Ceramic.
38-11	0	6.10	Brick.
38-12	3		Blue glazed delft ware.
38-13	2		Polychrome whiteware.
38-14	2		Transfer printed whiteware.

Provenience Number: 39 Description: 150 N 120 E level 2.

39-1	0	30.60	Brick fragments.
39-2	5		Yaughan Colonoware.
39-3	1		Dark olive green bottle glass.

Provenience Number: 40 Description: 160N 128E level 1

40-1	0	117.60	Sewer pipe (Brick)
40-2	0	89.90	Bone.
40-3	0	10.40	Oyster
40-4	4		Unidentifiable metal objects.
40-5	16		Unidentifiable misc. metal.
40-6	1		Part of a pair of scissors.
40-7	1		Piece of wore.
40-8	1		Iron Spoon.
40-9	3		Square spike.
40-10	5		Wire nails.
40-11	8		Unidentifiable nails.
40-12	2		Unidentified wrought nail.
40-13	19		Machine cut square nails.
40-14	31		Machine cut square nails.
40-15	1		Unidentified brass object.
40-16	1		1847 Liberty head penny.
40-17	1		White glass bead.
40-18	1		1/2 white glass bead with blue edge on it.
40-19	3		Mold made decorative glass, pink tinted.
40-20	2		Light green molded glass.
40-21	7		Pink tinted bottle glass.
40-22	2		Green bottle glass.
40-23	7		Light blue bottle glass.
40-24	1		Light green bottle glass.
40-25	3		Light green window glass.
40-26	1		Brown bottle glass.
40-27	4		Olive green bottle glass.
40-28	6		Clear bottle glass.

40-29	1	Dark Cobalt blue bottle base fragment (molded).
40-30	1	salt glazed stoneware
40-31	6	bristol slipped stoneware
40-32	1	Brown salt glazed, grey bodied stoneware.
40-33	1	Undecorated stoneware.
40-34	1	Westerwald.
40-35	1	Orange/brown glazed ironstone.
40-36	1	Blue shell edged whiteware.
40-37	24	Undecorated whiteware.
40-38	1	Transfer printed whiteware.
40-39	1	Unidentified porcelain, (Annular?).
40-40	1	Hand painted whiteware.
40-41	1	Lesesne colonoware.
40-42	1	Plain Kaolin pipe stem.
40-43	1	Burned ceramic.
40-44	1	Brick glaze fragment.
40-45	2	Roofing tiles.
40-46	1	Pebble.

Provenience Number: 41 Description: 160N 128E level 2

41-1	0	4.80 Oyster
41-2	14	Unidentified metal
41-3	3	Wire nails.
41-4	16	unidentifiable nails
41-5	16	Unidentified nails.
41-6	1	unidentified wrought nails.
41-7	14	Machine cut nails.
41-8	94	Unidentifiable square nails.
41-9	1	Wire with a barb on it.
41-10	1	Fence staple.
41-11	2	Flow blue whiteware.
41-12	5	Bristol slipped stoneware.
41-13	3	Burnt Ceramic.
41-14	2	White glass buttons.
41-15	3	Annular yellowware.
41-16	2	Undecorated yellowware.
41-17	1	Modern undecorated porcelain.
41-18	2	Annular whiteware.
41-19	3	Blue glazed whiteware.
41-20	8	Light blue glazed ironstone.
41-21	3	Blue transfer printed whiteware.
41-22	18	Undecorated whiteware.
41-23	1	Undecorated creamware.
41-24	1	Blue hand painted under glazed Chinese porcelain.
41-25	1	Hand painted whiteware.
41-26	2	Orange/brown glazed stoneware.
41-27	1	Orange/brown salt glazed stoneware.
41-28	1	Orange/brown salt glazed stoneware.
41-29	6	Clear bottle glass.
41-30	2	Dark Olive green bottle glass.

41-31	3		Light green bottle glass.
41-32	5		Olive green bottle glass.
41-33	1		Light green window glass.
41-34	0	2.00	Bone.

Provenience Number: 42 Description: 170N 132E level 1

42-1	0	639.20	Oyster.
42-2	0	3.20	Burnt Bone.
42-3	0	1.30	Burnt Bone.
42-4	0	3.40	Charcoal.
42-5	0	16.50	Brick.
42-6	0	38.50	Mortar.
42-7	2		Rose tinted bottle glass with "ISP" on one and "C" on other.
42-8	1		Brown bottle glass.
42-9	1		Annular whiteware.
42-10	1		Blue glazed whiteware.
42-11	2		Undecorated whiteware.
42-12	1		Burnt ceramic.
42-13	1		Lesesne Colonoware.
42-14	1		White glass buttons.
42-15	1		18?? penny possibly a Liberty.
42-16	1		Machine cut square nail.
42-17	11		Unidentified square nail.
42-18	14		Unidentified nails.
42-19	3		Unidentifiable metal fragments.
42-20	1		Unidentified metal objects.
42-21	0	1	Brick sample.

Provenience Number: 43 Description: 170N 133E level 1

43-1	0	90.60	Oyster shell.
43-2	0	58.00	Mortar.
43-3	1		Clear bottle glass.
43-4	1		Olive green bottle glass.
43-5	1		Green bottle glass.
43-6	1		Rubber button from "Novelty Rubber Company"
43-7	1		Unidentified square nail.
43-8	2		miscellaneous metal
43-9	1		Metal hinge piece.
43-10	0	67.80	Slag.
43-11	2		Undecorated whiteware.
43-12	1		Brick sample.

Provenience Number: 44 Description: 170N 133E level 2

44-1	0	202.30	oyster shell
44-2	0	278.50	brick fragments
44-3	1		Metal ring.
44-4	0		Unidentified metal.
44-5	1		Wire.
44-6	1		Skeleton keys.

44-7	2		Fence staple.
44-8	2		Wrought square nail.
44-9	1		Wrought square nail.
44-10	2		Wire nails.
44-11	1		Spike, Unidentified.
44-12	2		Square spike.
44-13	14		Machine cut square nails.
44-14	40		Unidentifiable square nails.
44-15	22		Unidentifiable nails.
44-16	3		Glass buttons (white).
44-17	2		Light green bottle glass.
44-18	5		Dark olive green bottle glass.
44-19	1		Olive green bottle glass.
44-20	2		Green bottle glass.
44-21	4		Clear mold made bottle glass.
44-22	17		Clear bottle glass.
44-23	1		Clear flat glass.
44-24	25		Light green flat glass.
44-25	0	10.50	Bone.
44-26	1		Bone handle with metal inlay.
44-28	7		Roofing tiles.
44-29	1		Blue shell edged pearlware.
44-31	2		Annular ironstone.
44-32	1		Blue glass bead.
44-33	2		Undecorated creamware.
44-34	1		White modern porcelain.
44-35	1		Pink glazed whiteware.
44-36	2		Annular yellowware.
44-37	1		Transfer printed whiteware.
44-38	14		Undecorated whiteware.
44-39	1		Undecorated whiteware with makers mark.
44-40	1		Annular whiteware.
44-41	3		Yaughan colonoware.
44-42	1		Lesesne colonoware.
44-43	1		Alkaline glazed stoneware.
44-44	2		Indeterminant grey bodied stoneware.
44-45	0	1.40	Burned bone.

Provenience Number: 45 Description: 200N 138E level 1

45-1	0	34.50	Oyster shell.
45-2	3		Clear bottle glass.
45-3	1		White glass button.
45-4	1		Kaolin molded pipe stem. (5/64)
45-5	1		Small whiteware handle to a vase or a cup.
45-6	2		Unidentified square nail.

Provenience Number: 46 Description: 200N 142E level 1

46-1	0	180.30	Oyster shell.
46-2	2		Emerald green bottle glass.
46-3	1		Dark olive green bottle glass.
46-4	1		Olive green bottle glass.
46-5	7		Aqua bottle glass.
46-6	5		Clear bottle glass.
46-7	1		Purple tinted bottle glass.
46-8	1		Brown bottle glass.
46-9	1		Clear molded decorative glass.
46-10	3		Light green window glass.
46-11	1		White glass buttons.
46-12	2		Unidentified nails.
46-13	5		Unidentified square nails.
46-14	1		Plain kaolin pipe stem.
46-15	1		Unidentified buffware.
46-16	1		Salt glazed grey bodied ironstone.
46-17	5		Annular whiteware.
46-18	5		Undecorated whiteware.
46-19	1		Blue transfer printed ironstone.
46-20	1		Red plastic bead.
46-21	1		Roofing tile.
46-22	1		Budweiser beer can.

Provenience Number: 47 Description: 200N 142E level 2

47-1	0	414.90	Oyster shell.
47-2	0	10.20	Brick fragments.
47-3	2		Dark Olive green bottle glass.
47-4	1		Olive green bottle glass.
47-5	5		Clear bottle glass.
47-6	3		Clear chimney glass.
47-7	2		Green molded decorative glass.
47-9	3		Light green bottle glass.
47-10	1		"Coke" bottle glass.
47-11	1		Brown bottle glass.
47-12	5		White glass buttons.
47-13	0	8.50	Bone.
47-14	1		Plain kaolin pipe stem.
47-15	3		Undecorated Ironstone.
47-16	1		Burnt Ironstone.
47-17	1		Barb off of some barbed wire.
47-18	10		Unidentified metal.
47-19	14		Unidentified nails.
47-20	1		Undecorated, coarse sand tempered sherd with black paste.
47-21	1		Small lead bullet.
47-22	5		Machine cut square nail.
47-23	5		Unidentifiable square nail.

Provenience Number: 48 Description: 206N 141E level 1

48-1	0	233.00	Oyster shell.
48-2	0	22.90	Mortar.
48-3	13		Unidentified metal.
48-4	24		Unidentifiable nails.
48-5	23		Unidentified square nails.
48-6	3		Machine cut square nails.
48-7	1		Patinated glass bottle- Dark Olive green.
48-8	4		Dark olive green bottle glass.
48-9	5		Amber bottle glass.
48-10	1		Light blue molded glass.
48-11	2		Tiny clear cologne bottle machine made-top and bottom.
48-12	1		Rose tinted molded decorative glass.
48-13	2		Rose tinted bottle glass.
48-14	3		Aqua bottle glass.
48-15	4		Light green bottle glass.
48-16	5		Light green bottle base molded.
48-17	2		Purple tinted bottle glass.
48-18	29		Clear bottle glass.
48-19	1		Undecorated white porcelain (modern).
48-20	5		Undecorated yellowware.
48-21	17		Undecorated whiteware.
48-22	1		Undecorated whiteware, with part of makers mark.
48-23	1		Blue shell edged whiteware.
48-24	6		Annular whiteware.
48-25	2		Transfer printed whiteware.
48-27	1		Clear bottle glass.
48-28	6		OAlbany slipped, salt glazed stoneware.
48-29	2		Clear molded glass.
48-30	2		Light green flat glass.

Provenience Number: 49 Description: 171N 133E level 1- Feature one ext. 1x1.

49-1	0	77	Green flat glass.
49-2	0	27.10	Mortar.
49-3	0	5.10	Bone.
49-4	1		Staffordshire.
49-5	1		Modern porcelain.
49-6	1		Annular pearlware.
49-7	4		Undecorated whiteware.
49-8	1		Transfer printed pearlware.
49-9	1		Undecorated creamware.
49-10	1		Light blue glazed ironstone
49-11	2		Burnt ceramic.
49-12	0	0.10	Burnt bone.
49-13	2		Dark olive green bottle glass. Patinated.
49-14	12		Amber bottle glass.
49-15	5		Light blue bottle glass.

49-16	9	Clear bottle glass.
49-17	1	Light green flat glass.
49-18	1	Dark olive green bottle glass.
49-19	1	Light green bottle neck with twisted wire retainer attached.
49-20	1	Plastic cuff link or shirt stud.
49-21	1	Brick sample.
49-22	12	Roofing tiles.
49-23	1	Lacing bracket for a shoe.
49-24	4	Unidentifiable metal.
49-25	18	Unidentifiable square nail.
49-26	37	Unidentifiable nails.
49-27	1	Machine cut square nail.
49-28	1	Fence staple.

APPENDIX B

TESTING PROPOSAL

ARCHAEOLOGICAL ASSESSMENT OF 38CH1078
BRICKYARD PLANTATION DEVELOPMENT TRACT,
MOUNT PLEASANT, SOUTH CAROLINA

October 4, 1991

Archaeological site 38CH1078 was originally discovered during a survey of the Brickyard Plantation Development Tract in the spring of 1989 (Espenshade and Grunden 1989). The site was recommended as eligible for nomination to the National Register of Historic Places under Criterion D. Intact portions of the site (including five chimney falls, three house "pads", an industrial foundation/structure, and a dense artifact/shell midden) appeared able to address a number of research issues concerning slave occupations on antebellum plantations in the Charleston region. These issues included:

comparisons between "industrial" slave communities compared to agricultural and domestic slave communities from nearby plantations with respect to diet, Colonoware manufacture, demographic patterns, etc.

comparisons between community structure at 38CH1078 and at Boone Hall Plantation (the principal residence for the owners of Brickyard Plantation).

general aspects of brick manufacture in the antebellum nineteenth century.

Both archaeological and archival research were expected to be necessary to provide the information to address these issues.

Subsequent to Hurricane Hugo, debris removal activities on the development tract resulted in possible damage to the site. The current condition of 38CH1078 and its ability to address the research issues originally defined are unclear. Only two of the features originally identified at the site (the industrial foundation/structure and an adjacent chimney fall) are recognizable at present; the other features/midden may have been destroyed. The location of the features originally defined at the site are displayed in the attached figure. This proposal describes a two-phased approach to the assessment of the condition of the site at present and the pursuance of data recovery in the intact portions of the site.

PHASE I - ASSESSMENT OF POTENTIALLY DAMAGED AREAS

Initial archaeological investigations at 38CH1078 will be designed to determine the effects of debris clearing on formerly intact cultural deposits within the site. These activities will include the collection of information concerning the horizontal and vertical distribution of remains within the site, the identification of intact areas, and limited excavations in intact areas to determine the nature and extent of such deposits. The results of these activities will be presented for review by SC Archives and History in a formal report.

A site grid will be established with tape and transit. This grid will be employed to locate all test excavations, subsequent data recovery excavations, and to collect topographic information for the site. The topographic information will be employed to prepare a base map of the site on which all excavations, features, etc., will be plotted.

Exploratory excavations, measuring 0.5 m by 0.5 m, will be excavated at 20 m intervals over the entire site area. These small units will be excavated to sterile deposits unless intact brick work or suspected features are encountered. All fill removed from these units will be screened through 6.35 mm hardware cloth. Soil horizons exposed in these excavations will be described using USDA nomenclature and Munsell color designations.

Areas containing potential intact deposits (as determined by artifact densities/distributions, encountered soil horizons, or intact cultural features) will be subjected to more intensive exploratory excavations. Small units, identical to those described above, will be excavated at 10 m intervals in potentially intact areas to determine the extent of the cultural deposits.

A maximum of 280 exploratory excavations will be necessary if the entire site area is examined at 10 m intervals. Presumably, some portions of the site will not require such intensive examination.

More controlled excavations then will be placed in those areas that appear to contain intact cultural deposits. These excavations will consist of 1 m by 2 m or 2 m by 2 m units. A maximum of 16 m² will be excavated in this manner. The number of controlled units and their locations will be determined by the Principal Investigator in consultation with the SHPO archaeologist. Potentially, these units will be placed adjacent to suspected features encountered in the exploratory excavations, in areas that contain portions of the midden reported at the site, or in areas with high artifact densities. These excavations are designed to expose intact features, provide a better assessment of the vertical distribution of remains at the site, and recover a larger number of

artifacts than could be collected from the exploratory excavations.

The controlled excavations will be removed in natural levels, or 10 cm arbitrary levels if natural strata are not apparent or very thick. All fill removed from these units will be processed through 6.35 mm hardware cloth to standardize artifact recovery. Standard unit level records will be maintained for each level excavated in each unit. Plan views of level floors will be drawn and photographed as appropriate. Large volumes of brick/mortar or shell encountered in excavation levels will be weighed and discarded in the field.

Any features encountered in the Phase I excavations will be drawn and photographed in plan view. Excavations to determine the nature of smaller features (i.e., those located entirely within an excavation unit) will be undertaken. Such features will be bisected and half of the fill (to a maximum of 12 liters) will be retained for flotation processing. Profiles of the excavated units will be drawn and photographed. Larger features (i.e., those that extend outside of existing excavations) will be drawn and photographed in plan view. Small corings or sections may be excavated to permit their positive identification. However, the bulk of such features will be left for removal during Phase II data recovery investigations.

All remains and information recovered during the Phase I field investigations will be processed and analyzed. Recovered remains will be cleaned as appropriate for their medium of manufacture. Each excavation unit or level therein will be assigned a separate provenience within the site. All remains within that provenience will be identified as to general class (e.g., brick/mortar, nails, ceramics, glass, etc.). Where appropriate, specific types within each class also will be identified (e.g., ceramic types, bottle glass by color, wrought vs. wire nails, etc.), following Noel Hume (1969), South (1977), and others. Each class/type within a provenience will be assigned a separate catalog number. Each class/type of remains will be placed in a separate plastic storage container, appropriately labeled as to site, provenience, catalog number, and type/class. These remains will be prepared for permanent curation at a facility approved by the SC SHPO.

All of the information will be summarized in a report of the investigations. This report will meet the current guidelines of the SC SHPO for cultural resources investigations. The report will include recommendations concerning the need for additional cultural resources investigations at 38CH1078, to include more explicit plans for data recovery excavations if necessary. Upon completion, the report will be submitted to the SHPO for review and comment. Any comments by the SHPO will be addressed, and a revised version of the report produced if necessary. It is anticipated that approximately 10 copies of the report will need to be produced.

APPENDIX C

RESUME OF THE PRINCIPAL INVESTIGATOR

ERIC C. POPLIN

Brockington and Associates, Inc.
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Mt. Pleasant, South Carolina 29464
(803) 881-3128

EDUCATION

- Ph.D. *Archaeology*, Department of Archaeology, University of Calgary, Calgary, Alberta, 1986.
- B.A. *Anthropology*, Department of Anthropology and Political Science, Catawba College, Salisbury, North Carolina, 1977.

PROFESSIONAL EXPERIENCE

1988-Present

Archaeologist, Brockington and Associates, Inc., Atlanta, Georgia.

Principal Investigator

- Archaeological Survey of the Andell Tract, Seabrook Island, Charleston County, South Carolina
- Archaeological Assessment and Survey of portions of the Archdale Development Tract, Dorchester County, South Carolina
- Archaeological Survey of the Belle Hall Tract, Charleston County, South Carolina
- Archaeological Survey of a Road Right-of-way, Centre Pointe Development Tract, Charleston County, South Carolina
- Archaeological Data Recovery at the Stony Creek Battery Site (38BU1289), Beaufort County, South Carolina
- Archaeological Survey of the Coastal Commercial Center Tract, Charleston County, South Carolina
- Archaeological and Historical Overview of Daniels Island, Berkeley County, South Carolina
- Preparation of Historic Preservation Plan for Fort Jackson, Richland County, South Carolina
- Archaeological Survey of the Gift Plantation Development Tract II, Charleston County, South Carolina
- Archaeological Survey of the Jeremy Cay Development Tract, Charleston County, South Carolina
- Archaeological Survey of the Limehouse Substation Tract, Jasper County, South Carolina
- Archaeological Survey of the Myrtle Beach Farms Development Tract, Horry County, South Carolina
- Archaeological Literature Review of the North Rhett Boulevard Improvements, Charleston County, South Carolina
- Archaeological Reconnaissance of a Road Right-of-way off Palmetto Bay Road, Hilton Head Island, Beaufort County, South Carolina
- Archaeological Data Recovery at 38CH1199/1200, Charleston County, South Carolina
- Archaeological Literature Review/Architectural Survey of US 78 Improvements, Aiken to Elko, South Carolina
- Archaeological Literature Review/Architectural Survey of US 78 Improvements, Elko to Bamberg, South Carolina
- Archaeological Literature Review/Architectural Survey of North Rhett Blvd Improvements, Charleston County, South Carolina

Archaeological and Architectural Survey of the Proposed Waccamaw Waterfront Area, Conway, South Carolina
 Archaeological Survey of the Westvaco Development Tract, Dorchester County, South Carolina
 Archaeological Survey of the Wildwing Plantation Development Tract, Horry County, South Carolina
 Cultural Resources Survey of Selected Timber Harvest Areas, Fort Jackson, South Carolina
 Survey of Three Mine Sites in the French Quarter Creek Development Tract, Berkeley County, South Carolina
 Assessment of Litchfield Plantation slave cemetery, Georgetown County, South Carolina
 Cultural Resources Reconnaissance Survey, US 521 Improvements, Georgetown to Manning, South Carolina
 Testing of Six Sites in the Witherbee District, Francis Marion National Forest, Berkeley County, South Carolina
 Archaeological Survey of 990 acres of the Witherbee District, Francis Marion National Forest, Berkeley County, South Carolina
 Testing of Five Sites in the Wambaw and Witherbee Districts, Francis Marion National Forest, Berkeley and Charleston Counties, South Carolina
 Testing of Five Sites in the Wambaw District, Francis Marion National Forest, Charleston County, South Carolina
 Cultural Resource Survey of Selected Timber Harvesting Areas, Fort Benning, Georgia and Alabama
 Archaeological Survey of Selected Construction Projects at Fort Bragg and Pope Air Force Base, Cumberland County, North Carolina
 Archaeological Overview/Survey of the US 70 By-Pass at Clayton, Johnston County, North Carolina
 Archaeological Sample Survey of the US 421 Improvements, Yadkin County, North Carolina
 Archaeological Survey of the US 29A/70A, Guilford County, North Carolina
 Archaeological Survey of the Proposed Albemarle Connector, Stanly County, North Carolina
 Historical and Archaeological Survey for the W. Kerr Scott Reservoir near Wilkesboro, North Carolina
 Archaeological Survey of the Mackeys Ferry Development Tract, Washington County, North Carolina
 Historical and Archaeological Survey for the Philpott Lake Project, Roanoke River Basin, Virginia

Principal Investigator/Field Director

Archaeological Reconnaissance of a portion of the Archdale Development Tract, Dorchester County, South Carolina
 Archaeological Survey of the Aronov Development Tract, Mount Pleasant, Charleston County, South Carolina
 Archaeological Assessment of Damage to NRHP Eligible Site 38CH1078, Brickyard Development Tract, Charleston County, South Carolina
 Survey of the East Cooper Wastewater Treatment Plant, Mount Pleasant, Charleston County, South Carolina
 Survey of the Riverview Apartments Development Tract, Richland County, South Carolina
 Survey and Testing (7 sites) on the Thunderbird Tract, Beaufort County, South Carolina
 Survey of the Jenkins Point Development Tract, Seabrook Island, Charleston County, South Carolina
 Survey of Delta Plantation Development Tract, Jasper County, South Carolina
 Cultural Resources Reconnaissance Survey, US Highway 17 Improvements, Gardens Corner to Jacksonboro, South Carolina
 Archaeological Data Recovery at Long Point Plantation (38CH321), Charleston County, South Carolina
 Archaeological Survey of Two Proposed Borrow Pits, James Island, South Carolina
 Archaeological Survey of Selected Portions of the Stony Landing Development Tract, Berkeley County, South Carolina
 Archaeological Survey of the Gift Plantation Development Tract 1, Johns Island, South Carolina
 Archaeological Survey of the St. Francis Hospital Essex Farms Tract, Charleston County, South Carolina
 Archaeological Survey of Headquarters Island Development Tract, Johns Island, South Carolina
 Archaeological Survey of Sam Edwards Road Borrow Pit, Mount Pleasant, South Carolina
 Archaeological Survey of selected portions of the Plantation at Stono Ferry, Charleston County, South Carolina

Archaeological Survey of the Proposed Batch Plant and Haul Road, Boardman Dam, Fort Gordon, Richmond County, Georgia
Data Recovery at three sites (Late Archaic, Early Woodland, Mississippian) in proposed Dog River Reservoir, Douglas County, Georgia
Survey of the proposed Plant Daniel Coal Barge Facility, Jackson County, Mississippi

Field Director

Archaeological Resurvey and Evaluation of Six Sites, Rhetts Bluff Development Tract, Kiawah Island, South Carolina
Data Recovery at Midway Plantation slave/tenant village (38GE363), Georgetown County, South Carolina
Data Recovery at True Blue Plantation (38GE372), Georgetown County, South Carolina
Data Recovery at three sites (2 Early Woodland shell middens and one 19th century plantation) on Palmetto Fort Tract, Charleston County, South Carolina
Testing of six sites, Heritage Plantation, Georgetown County, South Carolina
Testing of four sites on Palmetto Fort Tract, Charleston County, South Carolina
Archaeological Site Testing at Spanish Point Development Tract, Hilton Head, South Carolina
Survey of proposed recreation area, Middle Chattahoochee Hydroelectric Project, Muscogee County, Georgia
Survey and Testing (3 sites) in proposed Dog River Reservoir, Douglas County, Georgia

1986-1988

Archaeologist, R. Christopher Goodwin & Associates, Inc., New Orleans, Louisiana.

Sample Survey of Bayou Cocodrie and Tributaries Project, St. Landry Parish, Louisiana
Survey and Testing to locate Fort du Mississippi, Plaquemines Parish, Louisiana
Survey of the Larose-Golden Meadow Hurricane Protection Levee, LaFourche Parish, Louisiana (Project Manager)
Assessment of the Faulkner Lake Revetment Project, East Baton Rouge Parish, Louisiana
Reconnaissance, Survey and Testing (7 sites) at Fort Benning, Chattahoochee and Muscogee Counties, Georgia (Co-Principal Investigator)
Survey of the East Atchafalaya Basin Protection Levee Item E-44, Iberville Parish, Louisiana (Project Manager)
Survey of North Fort Polk Family Housing Area, Fort Polk, Vernon Parish, Louisiana (Co-Principal Investigator)
Survey of the Caernarvon Diversion Site, Plaquemines Parish, Louisiana (Project Manager/Field Director)
Archaeological Plan for the City of New Orleans, Orleans Parish, Louisiana (Project Manager)
Monitoring of Montegut to Independence Streets Floodwall, Orleans Parish, Louisiana (Project Manager)
Assessment of the Bisland Battlefield (16SMY166), St. Mary's Parish, Louisiana (Project Manager)
Survey of a portion of the Bonnet Carré Spillway, St. Charles Parish, Louisiana (Project Manager)
Survey of the proposed Mechanized Infantry Training Area, Fort Benning, Chattahoochee County, Georgia (Project Manager/Field Director)
Survey of selected timber harvesting areas, Fort Benning, Chattahoochee and Muscogee Counties, Georgia and Russell County, Alabama (Project Manager/Field Director)

1980-1986

Teaching and Research Assistant, Department of Archaeology and Strathcona Archaeological Field School, University of Calgary, Alberta.

1981

Field Assistant, Lifeways of Canada, Ltd., Calgary, Alberta.

- Data Recovery at two tipi ring sites near Calgary, Alberta
- Testing of a buried Pelican Lake site near Red Deer, Alberta
- Data Recovery at a buried stratified camp site near Calgary, Alberta
- Survey of selected portions of Quintette Coal Lease, northeast British Columbia

1979, 1980, 1983

Field Assistant, Gilbert/Commonwealth and Associates, Inc., Jackson, Michigan.

- Data Recovery at three prehistoric sites in the Cooper River Rediversion Project, Berkeley County, South Carolina
- Survey of selected portions of the Harry S Truman Reservoir, Missouri and Kansas
- Testing of selected historic and prehistoric sites on a proposed Santee-Cooper steam generating plant site, Florence County, South Carolina

1977-1979

Research Assistant Archaeologist, Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

- Testing of selected sites in the Cooper River Rediversion Project, Berkeley County, South Carolina
- Survey and Testing (82 sites) in the Richard B. Russell Dam and Lake Project, Elbert and Hart Counties, Georgia and Abbeville and Anderson Counties, South Carolina
- Survey of six proposed bridge relocations, Elbert County, Georgia
- Survey of selected portions of the Mt. Holly Plantation, Berkeley County, South Carolina
- Survey of selected portions of the Crowfield Development Tract, Berkeley County, South Carolina
- Survey of the AMOCO Tract, Berkeley County, South Carolina
- Testing of Edenwood Site (38LX), Lexington County, South Carolina
- Survey of proposed navigation channel cut-offs along the lower Savannah River, Georgia and South Carolina
- Testing of West Pasture (38CH123 - historic site) and Bass Pond (38CH124 - prehistoric shell midden), Kiawah Island, Charleston County, South Carolina

1977

Assistant Director, Catawba College Archaeological Field School, Salisbury, North Carolina.

1977

Field Assistant, Archaeological Reconnaissance and Survey of Selected Portions of the Mimbres River Valley.

1975-1977

Field Assistant, Various Cultural Resource Management Projects,
Catawba College, Salisbury, North Carolina.

Survey of 5500 acres of the Uwharrie National Forest, Montgomery and Randolph Counties, North Carolina
(Field Director)

Survey of Southern Railroad Linwood Yard, Davidson County, North Carolina

Survey of proposed reservoir near Ramseur, Randolph County, North Carolina

Survey of proposed sewer treatment plant near Cornelius, Mecklenburg County, North Carolina

Survey of selected portions of Morrow Mountain State Park, Stanly County, North Carolina (Field Director)

REPORTS, PUBLICATIONS, AND PAPERS PRESENTED

1978 (with John C. Norris and Claudia B. Wolfe)

Archaeological Reconnaissance of the Mt. Holly Plantation. University of South Carolina, Institute of Archaeology and Anthropology Research Manuscript Series 33. Columbia.

1978 (with John C. Norris and Claudia B. Wolfe)

Historical Perspectives on the Mt. Holly Plantation. Paper presented at the Annual Conference of the Archaeological Society of South Carolina, Columbia.

1979 (with James M. O'Hara)

Preliminary Analysis of the Hafted Bifaces Collected during the Richard B. Russell Archaeological Project. In The Report of the Intensive Survey of the Richard B. Russell Dam and Lake Project, Savannah River, Georgia and South Carolina, by Richard L. Taylor and Marion F. Smith, Jr., University of South Carolina, Institute of Archaeology and Anthropology Research Manuscript Series 142. Columbia.

1979 (with John Norris, Claudia Wolfe, and Paul Brockington)

Archaeological Reconnaissance of Six Proposed Bridge Relocations in Elbert County, Georgia. University of South Carolina, Institute of Archaeology and Anthropology Research Manuscript Series 143. Columbia.

1979 Use Wear Patterns on Historic Period Glass Sherds-- Function or Fortuity? Paper presented at the Annual Conference of the Archaeological Society of South Carolina, Columbia.

1982 (with Brian O.K. Reeves)

The Final Report, Stage II, Heritage Resource Impact Assessment, Quintette Coal Project. Manuscript on file, Heritage Conservation Branch, Victoria, British Columbia.

1982 (with Peter D. Francis, editors)

Directions in Archaeology: A Question of Goals. Proceedings of the 14th Annual Conference of the Archaeological Association of the University of Calgary, Calgary, Alberta.

1982 (with Stephen M. Malone and James W. Helmer)

Stratified Sampling and Surface Assessment of Archaeological Sites of the North Saskatchewan River Valley. Paper presented at the 40th Annual Plains Conference, Calgary, Alberta.

1984 (with James W. Helmer and Stephen M. Malone)

Final Report of the 1983 University of Calgary Archaeological Field School at the Strathcona Site (FjPi-29): Permit 83-26-C. Research report on file, Archaeological Survey of Alberta, Edmonton.

- 1984 (with James W. Helmer and Stephen M. Malone)
Quantitative and Graphic Analysis of Artifact Distributions: A Trial Approach to the Study of Horizontal and Vertical Distributions in Non-Stratified Sites. Paper presented at the 17th Annual Meeting of the Canadian Archaeological Association, Victoria, British Columbia.
- 1984 The Use of Expedient Technologies for Intra-Site and Inter-Site Comparisons in Historical Archaeology. Paper presented at the 17th Annual Conference of the Canadian Archaeological Association, Victoria, British Columbia.
- 1985 (with James W. Helmer and Stephen M. Malone)
Final Report of the 1984 University of Calgary Archaeological Field School at the Strathcona Site (FjPi-29): Permit 84-28. Research report on file, Archaeological Survey of Alberta, Edmonton.
- 1985 (with James W. Helmer and Stephen M. Malone)
Quantitative and Graphic Analysis of Artifact Distributions: A Trial Approach to the Study of Horizontal and Vertical Distributions in Non-Stratified Sites. In Contributions to Plains Prehistory, edited by David V. Burley, pp. 155-179. Alberta Culture Historical Resources Division, Archaeological Survey of Alberta Occasional Paper 26. Edmonton.
- 1986 (with James W. Helmer and T. G. Arnold)
Final Report of the 1981-1985 University of Calgary Archaeological Field School at the Strathcona Site (FjPi-29). Research report on file, Archaeological Survey of Alberta, Edmonton.
- 1986 Expedient Technology in European North America: Implications of an Alternate use of Glass by Historic Period Occupations. Ph.D. dissertation, Department of Archaeology, University of Calgary, Alberta, Canada.
- 1986 (with R.C. Goodwin, K.G. Kelly and D.L. Bascle)
A Cultural Resources Survey of the Western Sections of the Larose to Golden Meadow Hurricane Protection Project (COELMN/PD 86-?). Report submitted to the U.S. Army Corps of Engineers, New Orleans District.
- 1987 (with D.L. Bascle, Jill-Karen Yakubik and Ana Chandler)
Cultural Resources Sample Survey of the Bayou Cocodrie and Tributaries Project, St. Landry, Evangeline, and Avovelles Parishes, Louisiana (COELMN/PD 86-16). Report submitted to the U.S. Army Corps of Engineers, New Orleans District.
- 1987 (with R.Christopher Goodwin)
Cultural Resources Assessment of the Faulkner Lake Revetment, East Baton Rouge Parish, Louisiana (COELMN/PD 87-01). Report submitted to the U.S. Army Corps of Engineers, New Orleans District.
- 1987 (with K. Manning, P.C. Armstrong and R.C. Goodwin)
Cultural Resources Survey of the East Atchafalaya Basin Protection Levee Item E-44, Iberville Parish, Louisiana (COELMN/PD 87-0?). Report submitted to the U.S. Army Corps of Engineers, New Orleans District.
- 1987 (with Kathy Manning)
Cultural Resources survey of the North Fort Polk Family Housing Area, Fort Polk, Vernon Parish, Louisiana (CX5000-7-0017). Report submitted to the National Park Service, Southeast Regional Office, Atlanta, Georgia.
- 1987 Cultural Resources Survey of a 40-acre Borrow Pit near Slidell, St. Tammany Parish, Louisiana. Prepared for C.H. Fenstermaker & Associates, Inc., New Orleans, Louisiana.

- 1987 Level II Archaeological Survey, Big Woods Development Area, Environmental Educational Center- Phase I, Barataria Unit, Jean Lafitte National Historical Park, Jefferson Parish, Louisiana. Report submitted to the National Park Service, Southwest Regional Office, Santa Fe, New Mexico.
- 1987 Cultural Resources Review of the Fort Benning Master Plan- Phase II. Report submitted to Gulf South Research Corporation and the U.S. Army Corps of Engineers, Savannah District.
- 1987 (with Paul Armstrong, David Moore, and R. Christopher Goodwin)
New Orleans is Looking Forward to its Past- Archaeological Plan for Selected Portions of the City of New Orleans. Submitted to the Division of Archaeology, Office of Cultural Development, Louisiana Department of Culture, Recreation and Tourism, Baton Rouge.
- 1988 (with Lawrence Hewitt and R. Christopher Goodwin)
The Battle of Fort Bisland: Historical Research and Development of an Archaeological Research Design (COELMN/PD 88-03). Report submitted to the U.S. Army Corps of Engineers, New Orleans District.
- 1988 (with Paul C. Armstrong)
Cultural Resources Investigations-Phase II, Bonnet Carre Spillway, St. Charles Parish, Louisiana (COELMN/PD 88-04). Report submitted to the U.S. Army Corps of Engineers, New Orleans District.
- 1988 (with R. Christopher Goodwin)
Cultural Resource Sample Survey, Mechanized Infantry Training Area, Fort Benning, Georgia. Report submitted to Gulf South Research Institute and the U.S. Army Corps of Engineers, Savannah District.
- 1988 (with R. Christopher Goodwin)
Cultural Resource Survey of Selected Timber Harvesting Areas, Fort Benning, Georgia and Alabama. Report submitted to Gulf South Research Institute and the U.S. Army Corps of Engineers, Savannah District.
- 1988 Archaeological Testing of Six Selected Sites, Heritage Plantation, Georgetown County, South Carolina. Prepared for Heritage Plantation, Ltd., Pawleys Island, South Carolina.
- 1988 (with Ruthanne Mitchell and Carol J. Poplin)
Archaeological Survey and Site Testing in the Proposed Dog River Reservoir, Douglas County, Georgia. Prepared for the Douglasville-Douglas County Water and Sewer Authority, Douglasville, Georgia.
- 1988 (with Carol J. Poplin)
Documentation, Middle Chattahoochee Hydroelectric Generating Project, Muscogee County, Georgia. Prepared for Georgia Power Company, Atlanta, Georgia.
- 1988 (with Christopher T. Espenshade)
Archaeological Survey and Testing, Palmetto Fort Tract, Charleston County, South Carolina. Prepared for the Palmetto Fort Development Corporation, Mount Pleasant, South Carolina.
- 1988 (with Paul E. Brockington Jr.)
Midway: Archaeological Profile of a Nineteenth Century Rice Plantation on Waccamaw Neck. Prepared for Heritage Plantation, Ltd., Pawleys Island, South Carolina.
- 1988 (with Marian D. Roberts and Carol J. Poplin)
Archaeological Survey of the Proposed Plant Daniel Coal Barge Unloading Facility, Jackson County, Mississippi. Prepared for Mississippi Power Company, Gulfport, Mississippi.

- 1988 Archaeological Investigations on Heritage Plantation: Interpretations of Rice Agricultural Societies on Waccamaw Neck, South Carolina. Paper Presented at the Southeastern Archaeological Conference, New Orleans, Louisiana.
- 1989 True Blue Plantation: Archaeological Data Recovery at a Waccamaw Neck Rice Plantation. Prepared for Heritage Platation, Ltd., Pawleys Island, South Carolina.
- 1989 (with Stephen H. Savage and Paul E. Brockington Jr.)
Archaeological Survey and Testing at the Thunderbird Tract, Beaufort County, South Carolina. Prepared for Wetland and Environmental Consultants, Inc., Beaufort, South Carolina.
- 1989 Archaeological Resurvey and Evaluation of Six Sites, Rhetts Bluff Development Tract, Kiawah Island, South Carolina. Prepared for Kiawah Resort Associates, Inc., Charleston, South Carolina.
- 1989 Cultural Resources Reconnaissance Survey, US Highway 17 Improvements, Gardens Corner to Jacksonboro, South Carolina. Prepared for Wilbur Smith Associates, Inc., Columbia, South Carolina.
- 1989 Archaeological Survey of the Jenkins Point Development Tract, Seabrook Island, Charleston County, South Carolina. Prepared for the Jenkins Point Development Corporation, Charleston, South Carolina.
- 1990 (with Linda Allan and Marian D. Roberts)
Archaeological Survey of the Delta Plantation Development Tract, Jasper County, South Carolina. Prepared for the Delta Plantation Development Corporation, Hardeeville, South Carolina.
- 1990 (with Marian D. Roberts)
Cultural Resources Reconnaissance Survey, US Highway 521 Improvements, Georgetown to Manning, South Carolina. Prepared for De Leuw-Cather of Virginia, Inc., Falls Church, Virginia.
- 1990 Recent Investigations on Waccamaw Neck Rice Plantations. Paper presented at the Annual Meeting of the Archaeological Society of South Carolina, Columbia.
- 1990 Prehistoric Settlement in the Dog River Valley: Archaeological Data Recovery at 9DO34, 9DO39, and 9DO45. Prepared for the Douglasville-Douglas County Water and Sewer Authority, Douglasville, Georgia.
- 1990 Archaeological Survey of the Headquarters Island Development Tract, Johns Island, Charleston County, South Carolina. Prepared for Edge and Associates, Inc., Charleston, South Carolina.
- 1990 Archaeological Survey of a Proposed Borrow Pit near Mount Pleasant, Charleston County, South Carolina. Prepared for the Georgia-Carolina Development Company, Mount Pleasant, South Carolina.
- 1990 Archaeological Survey of Two Proposed Borrow Pits, James Island, South Carolina. prepared for Felder Truck Lines, North Charleston, South Carolina.
- 1990 (with Ashley Chapman)
Archaeological Survey of Selected Portions of the Stony Landing Development Tract, Berkeley County, South Carolina. Prepared for John R. Cumbie, Moncks Corner, South Carolina.
- 1990 Archaeological Survey of the Proposed East Cooper Wastewater Treatment Plant, Mount Pleasant, South Carolina. Prepared for Jordan, Jones and Goulding, Inc., Charleston, South Carolina.

- 1990 Archaeological Survey of the Riverview Apartments Development Tract, Richland County, South Carolina. Prepared for Sterling Development Company, Inc., Dallas, Texas.
- 1990 Archaeological Survey of Three Mine Sites, French Quarter Creek Development Tract, Berkeley County, South Carolina. Prepared for French Quarter Creek Investors, Inc., Mount Pleasant, South Carolina.
- 1990 Archaeological Reconnaissance of a 23 Acre Tract in the Archdale Subdivision, Dorchester County, South Carolina. Prepared for Tamsberg Properties, Inc., Charleston, South Carolina.
- 1990 (with Paul E. Brockington, Christopher T. Espenshade and James B. Legg)
Archaeological Survey, Spanish Pointe Development, Hilton Head Island, Beaufort County, South Carolina. Prepared by Brockington and Associates, Inc., Norcross, Georgia.
- 1990 (with Marion D. Roberts, Christopher T. Espenshade and Eric C. Poplin)
Investigations of a Slave Row at Spanish Wells Plantation: Archaeological Data Recovery at 38BU869, Spanish Pointe, Hilton Head Island, South Carolina. Prepared for Spanish Pointe Development Company.
- 1991 An Overview of Plantation Archaeology in the Low Country of South Carolina and Georgia. Paper presented at the 24th Annual meeting of the Society for Historical and underwater Archaeology, Richmond, Virginia.
- 1991 (with David C. Jones)
Archaeological Survey and Testing of the Bon Secour-St. Francis Hospital Xavier Hospital Essex Farms Tract, Charleston County, South Carolina. Prepared for Bon Secour-St. Francis Xavier Hospital, Charleston, South Carolina.
- 1991 (with Michael C. Scardaville)
Archaeological Data Recovery at Long Point Plantation (38CH321), Mark Clark Expressway (I-526), Charleston County, South Carolina. Prepared for the South Carolina Department of Highways and Public Transportation, Columbia.
- 1991 (with Linda K. Allan and Marian D. Roberts)
Archaeological Survey of a Portion of the Plantation at Stono Ferry, Charleston County, South Carolina. Prepared for Stono Ventures, Inc., Charleston, South Carolina.
- 1991 Archaeological Survey of the Gift Plantation Development Tract #1, Johns Island, Charleston County, South Carolina. Prepared for Lesley Construction, Inc., Easley, South Carolina.
- 1991 (with Daid C. Jones)
Cultural Resources Survey For Construction Projects on Fort Bragg Military Reservation and Pope Air Force Base. Prepared for the US Army Corps of Engineers- Savannah District. Savannah, Georgia.
- 1991 (with Joel D. Gunn, Marian D. Roberts, Barbara Lucas, and Carol J. Poplin)
Historical and Archaeological Survey and Historic Properties Management Plan for W. Kerr Scott Reservoir, Wilkes County, North Carolina. Prepared for the US Army Corps of Engineers- Wilmington District, Wilmington, North Carolina.
- 1991 Archaeological Survey and Testing, Boardman Dam Haul Road and Batch Plant Area, Fort Gordon, Richmond County, Georgia. Prepared for the US Army Corps of Engineers- Savannah District. Savannah, Georgia.

- 1991 (with David C. Jones)
Archaeological Survey of a Proposed Electrical Substation near Hardeeville, Jasper County, South Carolina.
 Prepared for Palmetto Electric Cooperative, Hilton Head, South Carolina.
- 1991 (with Carl Steen)
An Archaeological Survey of the Undeveloped Portions of Wild Wing Plantation, Horry County, South Carolina. Prepared for Suwaso Corporation, Decatur, Georgia.
- 1991 (with David C. Jones)
Archaeological Survey and Testing in a 23 Acre Tract in the Archdale Subdivision, Dorchester County, South Carolina. Prepared for Tamsberg Properties, Inc., Charleston, South Carolina.
- 1991 Archaeological Survey of the Aronov Development Tract, Mount Pleasant, Charleston County, South Carolina.
 Prepared for Aronov Realty Company, Inc., Montgomery, Alabama.
- 1991 Archaeological Survey of a Road Right-of-Way in the Centre Pointe Tract, Charleston County, South Carolina.
 Prepared for Balcor Development Company, Skokie, Illinois.
- 1991 (with David C. Jones and Ashley A. Chapman)
Archaeological Survey of the Andell Tract, Seabrook Island, Charleston County, South Carolina. Prepared for East Seabrook Limited Partnership, Charleston, South Carolina.
- 1991 Archaeological Reconnaissance of the Five Acre Waterhouse Tract, Beaufort County, South Carolina.
 Prepared for Waterhouse Company II, Beaufort, South Carolina.
- 1991 (with David C. Jones)
Archaeological Survey of the Mackeys Ferry Landing Tract, Washington County, North Carolina. prepared for Southfork Timberlands, Inc., Plymouth, North Carolina.
- 1992 Variations in Structure: A Comparison of Absentee and Principal Residence Rice Plantations in the Low Country of South Carolina. Paper presented at the 25th Annual Meeting of the Society for Historical and Underwater Archaeology, Kingston, Jamaica.
- 1992 (with Marian D. Roberts and Rick Richardson)
Cultural Resources Survey of Selected (FY-92) Timber Harvesting Areas, Fort Jackson, South Carolina.
 Prepared for the US Army Corps of Engineers- Savannah District. Savannah, Georgia.
- 1992 (with David C. Jones)
Cultural Resource Site Evaluation of Five Sites on the Wambaw Ranger District, Francis Marion National Forest, South Carolina. Prepared for the US Department of Agriculture- Forest Service, Columbia, South Carolina.
- 1992 (with David C. Jones)
Archaeological and Historical Survey and Historic Properties Management Plan for Philpott lake Project, Roanoke River Basin, Virginia. Prepared for the US Army Corps of Engineers- Wilmington District, Wilmington, North Carolina.
- 1992 (with Joel D. Gunn, Christopher T. Espenshade and David C. Jones)
Intensive Sample Survey and Data Recovery at Marine Corps Base Camp Lejeune, Onslow County, North Carolina. Prepared for the US Army Corps of Engineers- Wilmington District, Wilmington, North Carolina.

- 1992 (with David C. Jones)
An Archaeological Survey of the Myrtle Beach Farms Tract, Horry County, South Carolina. Prepared for Burroughs and Chapin Company, Inc., Myrtle Beach, South Carolina.
- 1992 (with David C. Jones)
Archaeological Survey of the 30 Acre Westvaco Shopping Center Tract, Dorchester County, South Carolina. Prepared for Trico Engineering, Inc., Summerville, South Carolina.
- 1992 (with David C. Jones)
Archaeological Survey of the 30 Acre Coastal Commercial Center Tract, Charleston County, South Carolina. Prepared for Trico Engineering, Inc., Summerville, South Carolina.
- 1992 (with David C. Jones)
Archaeological Survey of the Jeremy Cay Tract, Edisto Island, Charleston County, South Carolina. Prepared for The Savage Company, Columbia, South Carolina.
- 1992 (with David C. Jones and Ashley A. Chapman)
An Archaeological Reconnaissance of a Portion of Palmetto bay Road, Hilton Head Island, South Carolina. Prepared for Thomas and Hutton Engineering, Inc., Savannah, Georgia.
- 1992 (with David C. Jones and Christopher T. Espenshade)
Archaeological Investigations at the Buck Hall Site (38CH644), Francis Marion National Forest, South Carolina. Prepared for the US Department of Agriculture- Forest Service. Columbia, South Carolina.
- 1992 (with C. Scott Butler)
Background and Archival Research for US 78 Improvements, Aiken to Elko, South Carolina. Prepared for Burton, Adams, Kemp and King, Inc., Raleigh, North Carolina.
- 1992 (with Marian D. Roberts)
Fort Jackson Military Reservation Historic Plan- Cultural Overview. Prepared for the US Army Corps of Engineers- Savannah District, Savannah, Georgia.

