

MISSISSIPPIAN ARCHITECTURE AND COMMUNITY DEVELOPMENT AT THE
AMES SITE (40FY7), FAYETTE COUNTY, TENNESSEE

by

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Abstract

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Ames is a small mound and town complex located near the headwaters of the North Fork of the Wolf River in the west Tennessee uplands. Previous investigations combining geophysical survey and targeted excavation in off-mound areas at Ames discovered Mississippi period wall trench structures, palisades, and large pits. This study merges the results of additional excavations with previously collected data to analyze architectural aspects of domestic and defensive features. Feature superposition and radiocarbon dates spanning from ca. A.D. 1090 to 1290 are used to develop a chronology for construction events, assess settlement continuity, and examine changes in the configuration of architecture. The findings support a hypothesis that the town plan changed through time, as indicated by differing use of space within the habitation area and the development of defensive architecture. Two temporally distinct palisades signify reorganization episodes at Ames that included changes in structure orientation and expansion of the enclosed town area.

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1. Introduction

This thesis examines Early to Middle Mississippi period architecture and community development at the Ames site (40FY7) in Fayette County, Tennessee (Figures 1 and 2). The study builds on recent research at Ames that indicates the site held a Middle Mississippi period town-sized population. The present study focuses on off-mound areas at Ames comprised of palisade, pit, and structure features using a combination of excavation results and feature analyses to develop a site settlement chronology. Feature data and radiocarbon dates are used to assess the timeline of occupation, settlement continuity, and diachronic feature variation. The results offer insight into a sequence of Mississippi period construction events that express changes in site layout and organization through time.

Excavations conducted in two locations at Ames augment pre-existing data from the site regarding feature morphology and temporal associations. Previous investigations discovered a palisade, wall trench structure, and large pits through geophysical prospection and subsequent excavation (Goddard 2011). Results of prior research suggested Ames, at least at one point in its history, contained a “classic” Mississippian town within the confines of a palisade including several structures conforming to a planned community layout adjacent to a central open plaza flanked by earthen mounds (Goddard 2011; Mickelson and Goddard 2011). Radiocarbon dates for the wall trench structure and a segment of defensive palisade placed the town within the Middle Mississippi period (Mickelson and Goddard 2011).

Regarding the present study, the wall trench structure overlaid several other wall trench features, but associations between them were unclear. Most of these wall trenches

delineate the footprints of two previous structures built in this same location.

Excavations and inferences based on magnetometry survey data indicate one of the underlying features, a wall trench projected to be more than 100 m long, represents a second palisade predating the known Middle Mississippi period palisaded town. In addition, periods of differing community planning through time are reflected in the overlap and varying orientations of the palisade and structures.

This thesis integrates data from across the Ames site. Spatial feature relationships and radiocarbon dates are used to establish a chronology for excavated features at Ames. Detailed feature analyses allow comparisons of construction events through time. This study clarifies the timing of known construction events at Ames to determine the most likely development scenario, and provides a preliminary site habitation chronology for the Early to Middle Mississippi periods.

Comparative examples are drawn from sites that date from AD 1000 to 1450 in western Tennessee, southwest Kentucky, and northeast Mississippi (Figure 1). The time-frame encompasses the Early and Middle Mississippi periods, and known Mississippian occupation at Ames from mound construction to the planned domestic and defensive features in the off-mound area. Site examples from the wider Southeastern region of the United States are used to place domestic and defensive construction at Ames in a broader spatial and temporal context within the overall Mississippian culture area (Figure 3).

Data is generally lacking for Mississippian settlements in the study area. Assessing the chronological ordering of feature construction is not only important for the Ames site, but also aids in placing construction events at an Early to Middle Mississippi period site in west Tennessee into a temporal and spatial framework on a local and

regional scale. This thesis will contribute to the growing body of knowledge concerning community dynamics and settlement systems in western Tennessee and the southeastern region.

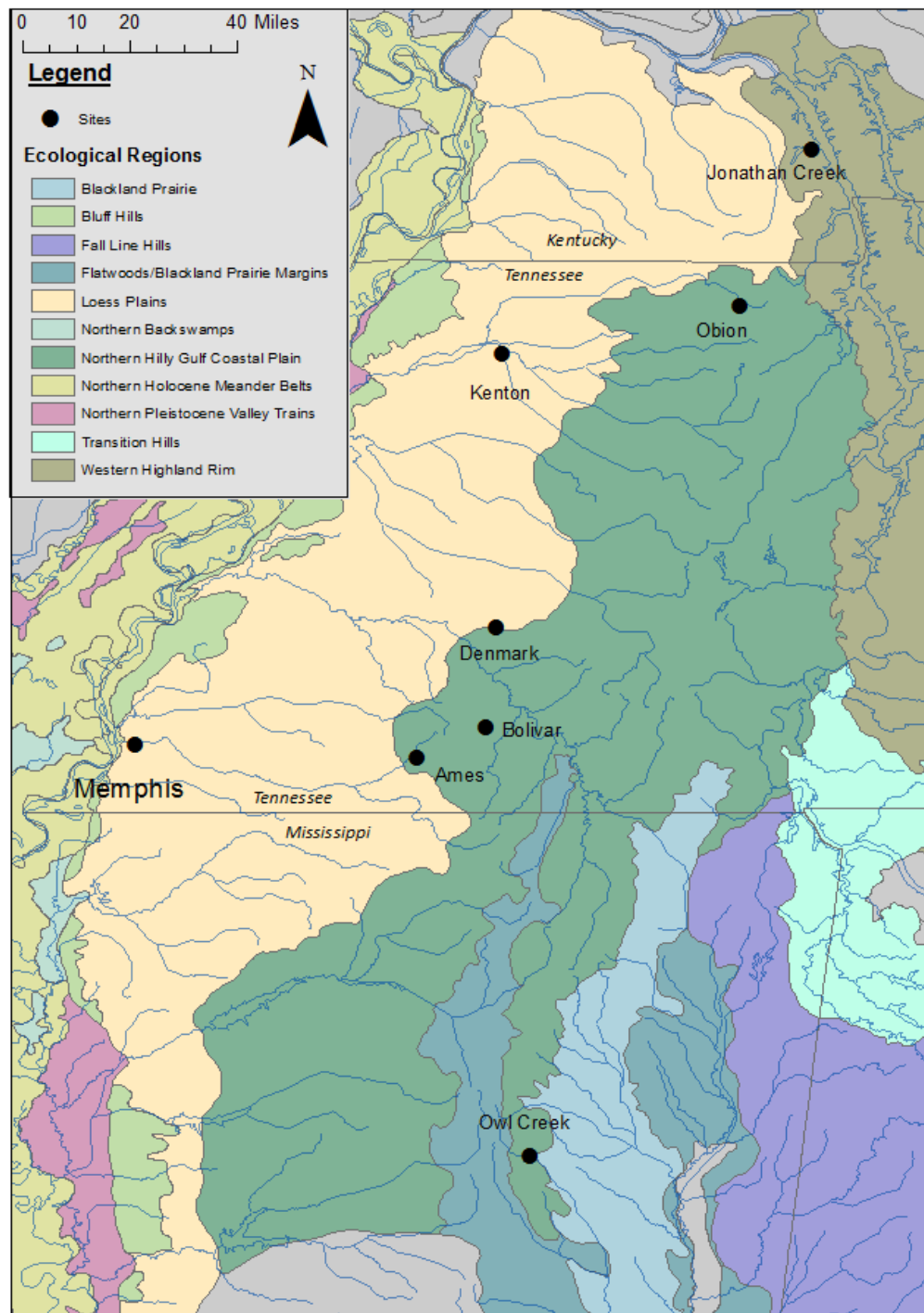


Figure 1. Location of the Ames site and other Early to Middle Mississippian period mound sites mentioned in the text.

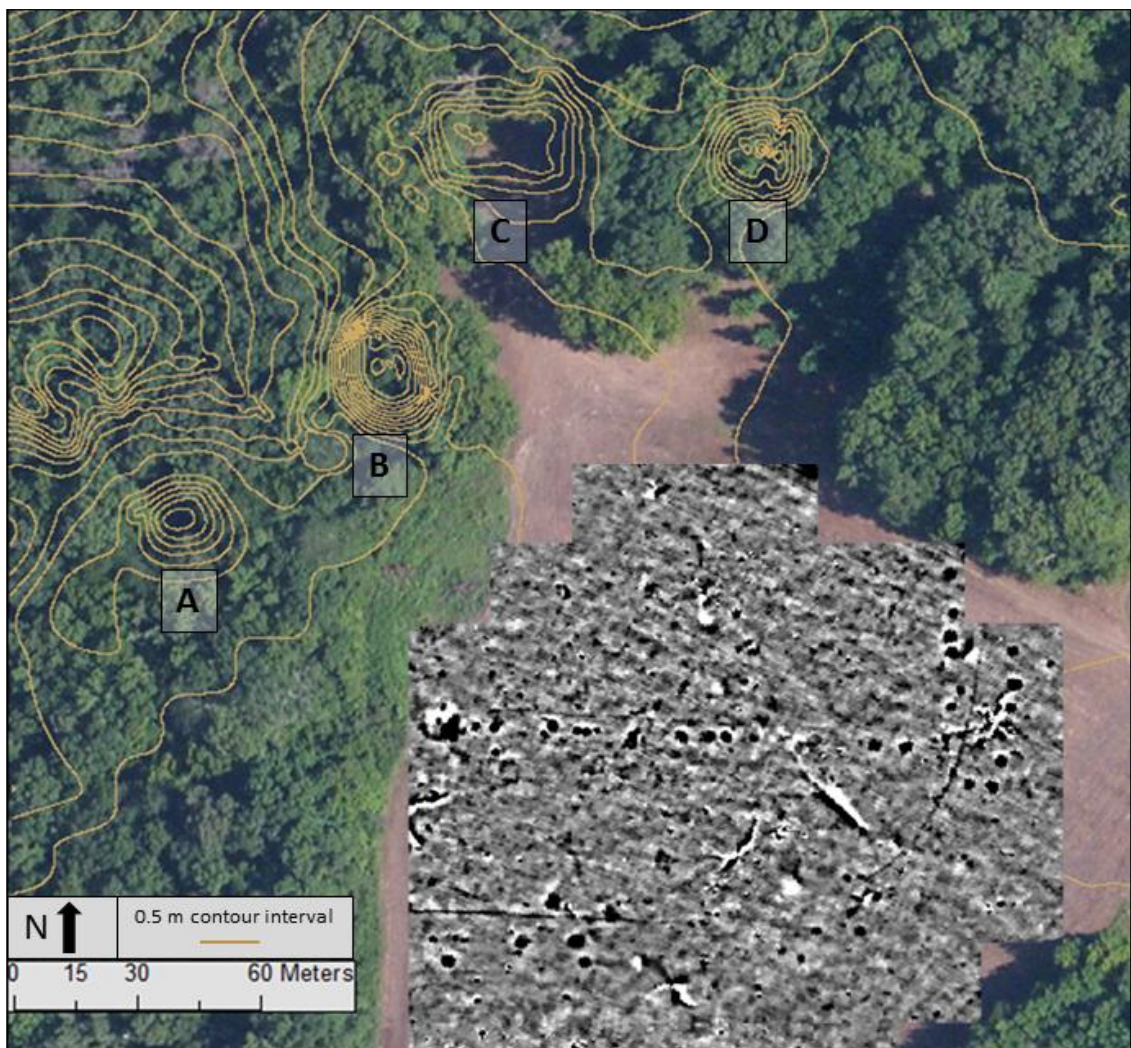


Figure 2. The Ames site overlaid with magnetometry data. Mounds A-D are visible to the northwest as topographic high points.

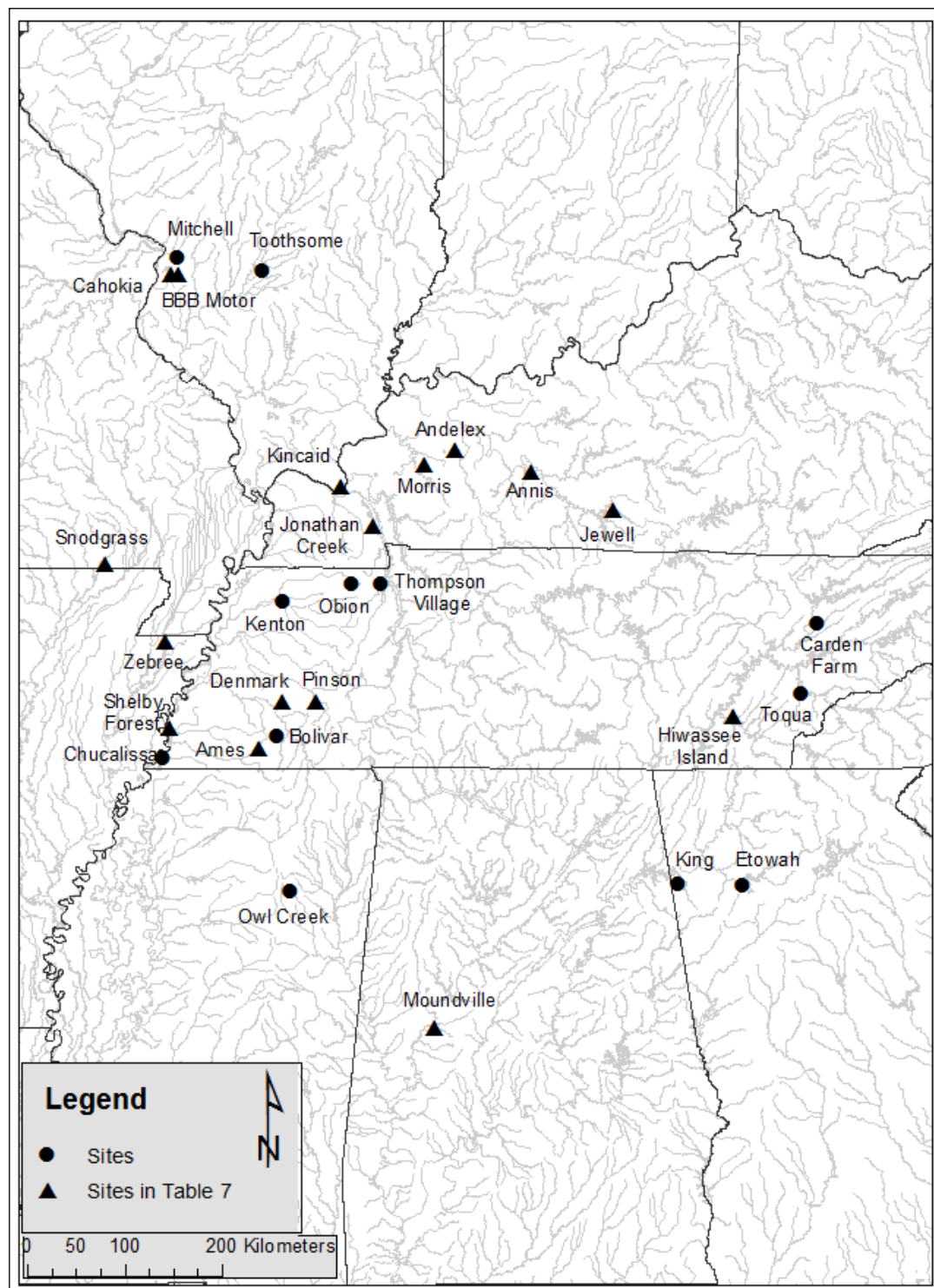


Figure 3. Southeastern sites mentioned in text. Triangles denote sites included in the structure interior floor area analysis.

Significance

Significance of this research spans multiple scales of observation and analysis. On the household scale, multiple rebuilding episodes of differing orientation in the same location provide an opportunity to diachronically explore aspects such as household size and construction methods. Town-scale significance lies in information obtained about duration and complexity of site use. Aspects of the previously excavated structure and palisade dating to ca. A.D. 1260 to 1290 are compared with earlier landuse at Ames. The relationship between an earlier defensive wall and differently oriented structures suggests multiple shifts in the town plan through time.

On the settlement scale, tentative data suggest Ames was a small, town-scale settlement with outlying farmsteads. Surface artifact clusters in the surrounding area may represent associated but distinct occupations, which has implications for settlement models employed throughout the region. These clusters are beyond the scope of this thesis, but contribute to the overarching question of how Ames fits into the distribution of humans across the local landscape. On a regional scale, Ames exhibits traits of a classic Mississippian settlement pattern found throughout the Southeast. Elements represented at Ames are consistent with a typical Mississippian town layout suggesting diffusion of ideas and/or people into the west Tennessee region during the Mississippi period. The presence of defensive architecture speaks to the nature of conflict and hostile interactions in the area, and anchors that interaction in time and space on the west Tennessee landscape.

Research Questions Regarding Spatio-temporal Aspects of Architectural Features

This study considers three interrelated research questions. First, what is the content and form of known features at the Ames site? Three gross feature classes are found in the off-mound area: (1) domestic architecture seen in rectangular wall trench structure patterns in the excavated structure block, (2) defensive architecture exhibited in wall trenches containing post molds as seen in the palisade excavation units and Trench G in the structure excavation block, and (3) large pit features including Feature 100 and Feature 117 in the structure block, and Feature 1 located just east and outside of the palisade.

The second question is how do the features spatially and temporally relate to one another? Superposition of features in the structure excavation block allows construction of a relative chronology. Radiocarbon dates for those features anchor that chronology in time. Feature data analyses highlight similarities and differences in architectural features through time.

The third research question is what can be derived from the data about settlement patterns at Ames during site occupation? This last question can be answered based on location and orientation of the excavated features, temporal associations, and inferences derived from magnetometry data.

Hypotheses

Three hypotheses were generated to test the duration and continuity of site habitation, and how site organization may have changed through time. The null, first, and second hypotheses are mutually exclusive, but the third is not. The null hypothesis (H_0) states that nothing can be said about settlement change through time at Ames given

the available data. The null hypothesis provides for the event that information is inadequate to confidently assess site development prior to the known Middle Mississippian palisaded community. Previously collected data in the form of feature superposition in the structure excavation block requires the rejection of H_0 .

The first hypothesis (H_1) is that the town plan did not change through time. This hypothesis would be supported by consistent use of the same locales exclusively for domestic habitation and the absence of any preceding or succeeding changes in palisade position. Analysis of existing data from just a small portion of the site confirms differing uses for the habitation area through time, and the existence of a possible second palisade. An extensive wall trench feature running across the habitation area likely represents an older palisade constructed between domestic structure rebuilding events.

My second hypothesis (H_2) is that the town plan changed through time including development of defensive architecture (palisades). Evidence required to support H_2 involves changes in functional use of the habitation area through time, and more than one palisade construction event. The structure excavation block provides the necessary evidence. An older palisade was built through the habitation area in between domestic construction events suggesting that multiple shifts in site layout occurred through time. Differing structure orientations reflect a change in town organization before and after construction of the presumed earlier palisade.

The third and final hypothesis (H_3) is that discontinuous settlement events took place at Ames. Significant variation in site layout through time or dissimilar radiocarbon date ranges between overlapping construction events would be expected if discontinuous settlement occurred at this site. The exposed areas provide only a small window into

what the site holds, so interpretation of variations in site layout through time is limited to what can be gleaned from those areas. A break in the type of landuse within the domestic habitation area as described above supports H₃. A structure of similar style and size built in the same location after that break seems to refute H₃, while different structure orientations before and after the break potentially support it. Radiocarbon dates were necessary in assessing continuity of site settlement as the amount of time between construction episodes was previously unknown. However, the overlapping nature of the date ranges complicates this assessment.

The next chapter of the thesis presents an overview of the environment in which Ames is situated, and previous work conducted at the site. Chapter 3 outlines the research methods and results. Chapter 4 includes an analysis of Ames off-mound features, and comparisons between those features. Chapter 5 discusses the progression of construction events at Ames and observed changes in the layout of architecture through time. Finally, Chapter 6 describes conclusions of this study and possibilities for future research at Ames.

2. Background and Setting

Environment and Resources

Mississippian settlements are often located along major waterways (Griffin 1990). Ames, on the other hand, is located on a third order stream in the hinterlands between the Mississippi and Tennessee Rivers. Ames lies at the headwaters of the North Fork of the Wolf River in extreme southwestern Tennessee. The site is flanked on the southeast by a relatively flat, previously cultivated field and on the northwest by a steep drop in elevation toward the river. Ames lies within an ecotone along the juncture of the Northern Hilly Gulf Coastal Plain and the Loess Plains, ecological regions that dominate the West Tennessee landscape (Griffith et al. 1998) (Figure 1). Other Early Mississippi period sites in the study area also fall on or close to this ecological border, including Bolivar (40HM2), Denmark (40MD85), and Obion (40HY14).

The Loess Plains are “gently rolling, irregular plains” with elevations of 250 to 500 feet above sea level, and cover a broad strip of western Tennessee stretching from the eastern border with the Northern Hilly Gulf Coastal Plain to the narrow and segmented band of Bluff Hills that lie above the Northern Mississippi Alluvial Valley to the west (Griffith et al. 1998). The Loess Plains are distinguished by loess deposits- windblown silt resulting from glacial retreat- upwards of 50 feet thick exhibiting less relief than the higher Plains and Hills region to the east (Griffith et al. 1998). Streams classified as “low gradient and murky with silt and sand bottoms” in the Loess Plains contribute to a hydrological system that includes five large rivers with wide floodplains (Griffith et al. 1998). These river systems from north to south include the Obion, Forked Deer, Hatchie, Loosahatchie, and Wolf Rivers all with headwaters within or on the border with the

Northern Hilly Gulf Coastal Plain flowing across the Loess Plains before discharging into the Mississippi (Smith 1996).

The Northern Hilly Gulf Coastal Plain within western Tennessee is similarly described as “irregular plains” exhibiting elevations upwards of 650 feet above sea level with low gradient, sandy bottomed streams (Griffith et al. 1998). The region extends from its western border with the Loess Plains to an eastern border with the Western Highland Rim and the Tennessee River (Griffith et al. 1998). Loess deposits in Fayette County range from 6 to 12 feet east to west on flat ground and gentle slopes, while the underlying Coastal Plain sediments may be exposed on steeper slopes (Flowers 1964:1). Average temperatures throughout the year range from 42° to 80° F with an average yearly rainfall of 53 inches (Flowers 1964:66).

The abundant floral and faunal resources described below were largely in place by about 1000 B.C., existing in a relatively similar state until Euro-American transformation of the landscape over the last 200 years by agricultural and timber industries (Smith 1979). Prehistoric people in the vicinity of Ames had access to varied floral and faunal resources with extensive habitats. Native vegetation included deciduous forests of predominately oak-hickory and oak-hickory-pine with bottomland hardwoods and cypress-gum swamps occurring in low-lying areas of the Loess Plains (Griffith et al. 1998). Other upland tree species included elm, chestnut, tulip poplar, sweet gum, and walnut with an understory of dogwood, cherry, mulberry, persimmon, sassafras, winged elm, and a variety of “shrubs, vines, and herbs” (Smith 1996:99). Two main terrace surfaces with distinctive Calloway, Grenada, and Henry soils had formed long before the Mississippian period along the main west Tennessee rivers (Smith 1996:99). Terrace

forests included shagbark and scalybark hickories, pin oak, red oak, cottonwood, sycamore, and sweet gum with an understory of persimmon, shrubs, vines, herbs, and cane. Smith (1996:99) notes that hickories grew in groves along the terraces, producing nuts lower in tannic acid than those generally produced by upland varieties, creating a likely important food resource for prehistoric people in this area. Descending to lower elevations, floodplain species were tupelo, red gum, cypress, willow, cane, and varieties of shrubs, vines, and herbs (Smith 1996:99).

Major faunal resources for Mississippian people included terrestrial species such as white-tail deer, turkey, rabbit, black bear, opossum, and raccoon; seasonal fowl such as ducks, geese, and passenger pigeon; and varied aquatic resources and fish found in local waterways and low swampy areas (Smith 1996:99). Access to lithic resources was limited due to a lack of lithic sources in the vicinity of Ames. But chert and quartzite gravels could be found beneath Pleistocene loess in dissected areas and stream beds, and ferruginous sandstone and siltstone was retrievable along a belt zone that crossed central west Tennessee (Smith 1996:99).

Cultural Background

Early Prehistory. The Wolf River Watershed was visited by prehistoric peoples since the Paleoindian period (Peterson 1979). Evidence for the earliest periods- Paleoindian through Middle Archaic (pre-8500 BC -3500 BC)- occurs in the form of scattered diagnostic projectile point finds along the Wolf River system (Smith 1996:100). Social organization during this time involved small hunting and gathering groups occupying seasonal camps. The Late Archaic period (3500-1500 BC) is marked by increased evidence of people on the landscape (Smith 1996). Smith (1996:103) notes the

appearance of distinct complexes along various west Tennessee drainage systems in the Terminal Archaic (1500-500 BC) suggesting habitual use of certain areas by particular groups possibly induced by a trend toward cultivation of local flora. A trend toward cultivation encouraged repeated visits to the same plant patches, and allowed higher density populations (Griffin 1990). Trends toward cultivation continue into the Woodland period (1000 BC-1000AD) with the addition of ceramic technology and mound construction made feasible by increased populations and consistent use of the same localities. Known sites attributed to the Late Woodland period in west Tennessee decrease in number. The Late Woodland sites concentrate in the floodplains, possibly related to the gradual shift from cultivation of native plant species to full-fledged agriculture (Smith 1996).

Mississippi Period. This thesis follows Cobb and Butler (2002:627) in delineation of Early (A.D. 1000-1150), Middle (A.D. 1150-1300), and Late (A.D. 1300-1450) Mississippi periods in the Midsouth. The period as a whole is characterized by increasing social, political, and economic complexity, as well as shared traits including chiefdom societies, earthen platform mounds and plazas, intensive agriculture, elaborate iconography, and shell-tempered pottery. Wall trench architecture like that found at Ames is another characteristic aspect of the Mississippian Southeast (Steponiatis 1986), though the dominance of this construction method was replaced in the latter part of the period by structures with larger wall posts individually set into the ground (Laquement 2007a). Mississippian influence extended over most of the Southeast and southern portions of the Midwest facilitated by a wide reaching exchange network (Delcourt and Delcourt 2004).

Subsistence. Subsistence relied on large-scale field agricultural practices augmented by hunting and gathering. Primary dietary staples included maize, squash, and beans. These crops were supplemented with various local cultigens such as goosefoot, maygrass, and sunflower, though the predominance of any particular species in the diet varied across the Southeast through time (Delcourt and Delcourt 2004; Fritz 1990; Milner 2006). Hunting and gathering wild resources such as deer, turkey, fish, and nuts continued, but intensified time and labor investments in field clearing and maintenance were required as a reliance on agriculturally derived foods increased (Steponaitis 1986).

Settlement. A typical tiered Mississippian settlement model involved a paramount mound center aligned with smaller communities, some with small mound groups or single mounds, which were further associated with outlying hamlets and farmsteads (Goddard 2011; Griffin 1967, 1990; Steponaitis 1986). Goddard (2011:12, 62), in a study exploring potential settlement patterns at Ames, argues that the Ames site demonstrates qualities of the Nucleated Sedentary Model in which a significant habitation area is located on the central mound site as opposed to a Vacant Center Model in which the central mound site is largely unoccupied though ritually visited by the surrounding population. Goddard (2011:63) notes his inability to discern from the extant data whether Ames represents a paramount center or a lower-tiered local mound center.

Social Organization. Social organization involved ranked lineages with extended families reinforcing lineage identity by repeatedly occupying particular areas within a habitation zone as clusters of single family or extended family dwellings, while socio-

political and religious leaders might inhabit elite locations on a mound summit (Griffin 1990; Halley and Kelly 1998).

The chiefdom societies of the Mississippi period were varied in size and complexity (Anderson et al. 1995; Griffin 1990). Mississippian polities “developed as socially ranked religious and political systems” where control was established and maintained through economic surplus and chiefly associations with supernatural forces (Beck 2003; Delcourt and Delcourt 2004: 30). Though Mississippian communities are recognized as sharing certain cultural traits, the structure of individual chiefdoms depended on more local developments, each emerging within their “distinct social and ecological settings” (Beck 2003:656). Kidder (1998:124) shares this view describing Mississippian groups as “a fluid, regionally distinct, and particularistic group of settlements... linked through shared cultural tendencies and widely diffused technological innovations.” A cluster of local communities with local leaders could independently develop a hierarchical system over time through exchange networks or family connections. Alternatively, communities might have been incorporated into a growing regional polity (Beck 2003).

Ideology. The Mississippian cosmos was composed of a horizontal quadripartite universe reflected in an emphasis on the cardinal directions, and a vertical three-tiered universe including an upper world, a middle earthly realm, and a lower world (Brown 1997). Movements of the sun, moon, and other celestial bodies aided in calendrical timekeeping, and acted as markers for ceremonial timing and the seasonal changes that directed fruitful agricultural practices (Sherrod and Rolingson 1987). Celestial deification and astronomical observations were ingrained in Mississippian society.

Power within a community might have been held by those associated with the supernatural forces and able to act as mediators between the natural and supernatural thereby cementing their roles in the continuation of the universe (Cobb 2003).

Celestial alignments manifested in a variety of ways in the arrangement of mounds, plazas, overall site plans, and individual structures have been noted at sites throughout the Southeast (Brown 1997; Daniel-Hartung 1981; Mickelson 2008; Sherrod and Rolingson 1987). The variability in alignments suggests individual communities were uniquely expressing wide-spread cosmological concepts within the limits of their particular local environment or labor force. The layout of the Ames site reflects orientations to the cardinal axes and the solstices from a site to individual structure scale.

Previous Research at Ames

Early archaeological investigations at the site include multiple small-scale investigations throughout the 1960s, 1970s, and 1980s that recorded light density ceramics and looter activity on the mounds (Mainfort 1992; Morse et al. 1962; Peterson 1979; Smith 1969). Previous investigations at Ames found no evidence to indicate a nucleated defensive settlement. Morse, Graham, and Polhemus visited and mapped the site in 1962 recording potential looter activity. No surface collection was reported, yet the site was attributed to the Mississippi Complex. At this point in time, the site had not been cultivated for at least 15 years and a house with outbuildings was located in direct proximity to the mounds (Morse et al. 1962). The mounds were documented later by Smith who specified looting had occurred in Mounds B and D, exposing evidence of two burned structures in Mound B (Smith 1969). A radiocarbon sample collected by Smith in 1969 from a burned beam in the looter pit on Mound B returned a date of AD 1020 \pm 70

(Mainfort 1992:206). Mainfort and Kwas (1985:2) listed “limited testing by Faulkner in area to south of Mounds C and D (1970), see Peterson 1979” under previous surveys on the site survey form. Peterson (1979:28) reports Guthe, through the University of Tennessee in Knoxville, tested the site in 1972 recovering very few artifacts that were sent to the landowners. The collection has yet to resurface, and exact test locations are unknown (Mickelson 2008).

Ames was one of six sites deemed worthy of subsurface testing in a survey of the Wolf River watershed conducted through Memphis State in 1979 (Peterson 1979, Mickelson 2008). Four 50 cm deep test units were placed across the site, but only one, located in what is now known as the habitation area, produced artifacts. The artifacts include 32 sherds, 12 of which are unidentifiably eroded and 20 are identified as Woodland (Peterson 1979:65). Mainfort and Kwas (1985) surveyed the site recording light density (five) surface ceramics, and documented continued looting into the mounds. Mainfort (1986) initially suggested Ames was Middle Woodland based on similarities with Pinson Mounds to the northeast, but the site was later attributed to the Early Mississippi period along with three other western Tennessee mound groups at Kenton (40OB4), Denmark, and Bolivar (Mainfort 1992). Recent work at Ames was conducted primarily through University of Memphis archaeology field schools from the summer of 2007 to the most recent in 2012.

Mound Research. The four mounds at Ames vary in form. Mounds A, B, and D are pyramidal and flat-topped, while Mound C is low and rectangular with a flat but sloping surface (Figure 2). Mound B is unique in having a ditch along the northeastern base flanking the remnant of a ramp (Mickelson 2008). Mound investigations have found

evidence for multiple construction stages and summit architecture. The 2007 and 2008 field seasons focused on excavations into Mounds B and D to obtain information on mound chronology and morphology (Mickelson 2008). A trench was placed north to south across a portion of Mound D corresponding with a previous looter trench, and extended in depth to a basal deposit of buried A horizon soil. A portion of a burned wall trench structure was recognized within the excavation trench placed on Mound D. A sample of cypress bark thatching from this structure dates the former summit of the mound to “cal AD 1170 to 1240 (1 sigma) with an intercept of cal AD 1210 (BP 740)” (Mickelson 2008:210).

A 2-x-2-m test unit was placed over a previous looter pit on the side of Mound B producing two radiocarbon samples from intact mound deposits that returned calibrated dates at two sigmas of AD 640 to 770 from the lower deposit and AD 1020 to 1210 from the higher deposit (Mickelson 2008:213). Ceramics collected at Ames over the years range from Early Woodland to Early Mississippi, contributing to initial confusion about the site’s date (Mickelson 2008). The upper deposit supports the Early Mississippi age obtained from the 1969 looter pit sample, at least for the upper part of this mound. Further work is needed in Mound B to ascertain whether the stratigraphically lower date represents a Late Woodland mound with a Mississippian addition or simply use of fill from areas containing Woodland materials (Mickelson 2008). A Woodland period date was also acquired from fill in Mound D though more extensive excavations in this mound suggest the latter of the two options in this case.

A similar explanation, regarding the use of soil containing Woodland materials to build Mississippian mounds, was suggested for Owl Creek (Rafferty 1995). Rafferty

(1995) reported Woodland dates and ceramics in the mounds at the Owl Creek site, but the mounds returned Early Mississippi period dates along with shell-tempered pottery near the base of two mounds. Woodland period features have yet to be found at Ames, but diagnostic ceramics and dates suggest activity in the vicinity during that period. Radiocarbon dates place Mississippian mound building at Ames between AD 1020 and 1270 (Goddard 2011:16) (Appendix A).

Surface Collection and Shovel Test Pits. A controlled surface survey of the adjacent field was also conducted in 2007 finding a total of 79 artifacts and providing little evidence of substantial habitation (Mickelson 2008:214). Another controlled surface collection performed in 2009 was more fruitful. Once mapped, surface artifact densities showed a concentration in the area just south of the mounds (Goddard 2011:22). Additionally, 22 shovel test pits were placed across the off-mound area to estimate plow zone artifact density. The resulting data was combined with geophysical prospection and subsequent testing providing the first evidence that the Ames site held a town-sized population in proximity to the mounds (Goddard 2011; Mickelson and Goddard 2011).

Magnetometry. Magnetometry is a non-invasive geophysical technique that can detect changes in the magnetic signatures found in the soil caused by disturbances such as digging or the use of fire (Goddard 2011). The magnetometry survey at Ames was performed in 2009 and 2010 using a Bartington 601 dual sensor gradiometer “at a 50 cm transect interval set to capture four readings per meter along each transect” collecting “95 contiguous 20 m blocks” and covering 3.8 hectares of the adjacent off-mound area (Mickelson and Goddard 2011:161). The magnetometry results indicate several

anomalies worthy of further testing, or ground-truthing, to confirm suspected cultural, rather than natural, origins (Mickelson and Goddard 2011).

Test units were placed over anomalies of interest including “a line of positive circular anomalies in a backwards “L” shaped pattern, a positive linear anomaly enclosing the circular anomalies, and several wedge-shaped anomalies” (Goddard 2011:35). Two test units placed over the wedge-shaped anomalies recovered no cultural evidence, and were determined to be “ephemeral gullies” resulting from modern agricultural activity (Goddard 2011:45). Three test units placed over the extensive linear anomaly uncovered evidence of a trench containing post molds indicating a palisade (Goddard 2011:39-44) (Figure 4). A carbonized sample from one segment of palisade produced a date ca. A.D. 1260 (Appendix A).

One of more than 20 large circular anomalies, appearing to lie in an orderly, linear manner, was tested in 2009 and found to be a large, roughly 3-x-3-m midden pit adjacent to three overlapping wall trench structure patterns (Figure 4). The uppermost structure pattern, designated Structure 1, was excavated during the Ames field school in the summer of 2011, and assumed to be associated with the large midden pit (Feature 100) as the pit overlapped walls of the two underlying structures. A radiocarbon sample from a post in the northern wall of Structure 1 returned a date ca. A.D. 1290, roughly contemporaneous with the palisade (Mickelson and Goddard 2011:167). The northern end of Structure 1 intruded upon an east-west trench containing post molds, designated Trench G, which continued beyond the excavation limits in both directions. Trench G is discussed further in the following chapter.

An isolated anomaly was also tested to the northeast of this area in 2009 and found to represent a wall trench structure. At this point, further excavations focused on the Structure 1 area due to its location within a line of several similar magnetic signatures (Goddard 2011) (Figure 4). The alignment of anomalies similar to the pit outside Structure 1 and structure locations as inferred from the magnetometry data suggest the site contains several contemporary prehistoric structures placed in a uniform manner.

Excavated evidence confirming the cultural origin of selected anomalies in the magnetometry data is projected onto similar magnetic signatures in the data. Parallels drawn between magnetometry data and excavated evidence are assumed to approximate actual subsurface realities. Therein lay the basis for the inferred town plan dating ca. A.D. 1290 that includes a row of structures with associated “backyard” refuse pits organized in a linear fashion along the cardinal axes to the south and east of an open plaza, which may contain large ceremonial structures, opposite the four mounds (Mickelson and Goddard 2011) (Figure 5). Such projections are used in the present study to aid interpretations of excavated features in two off-mound locations at the site.

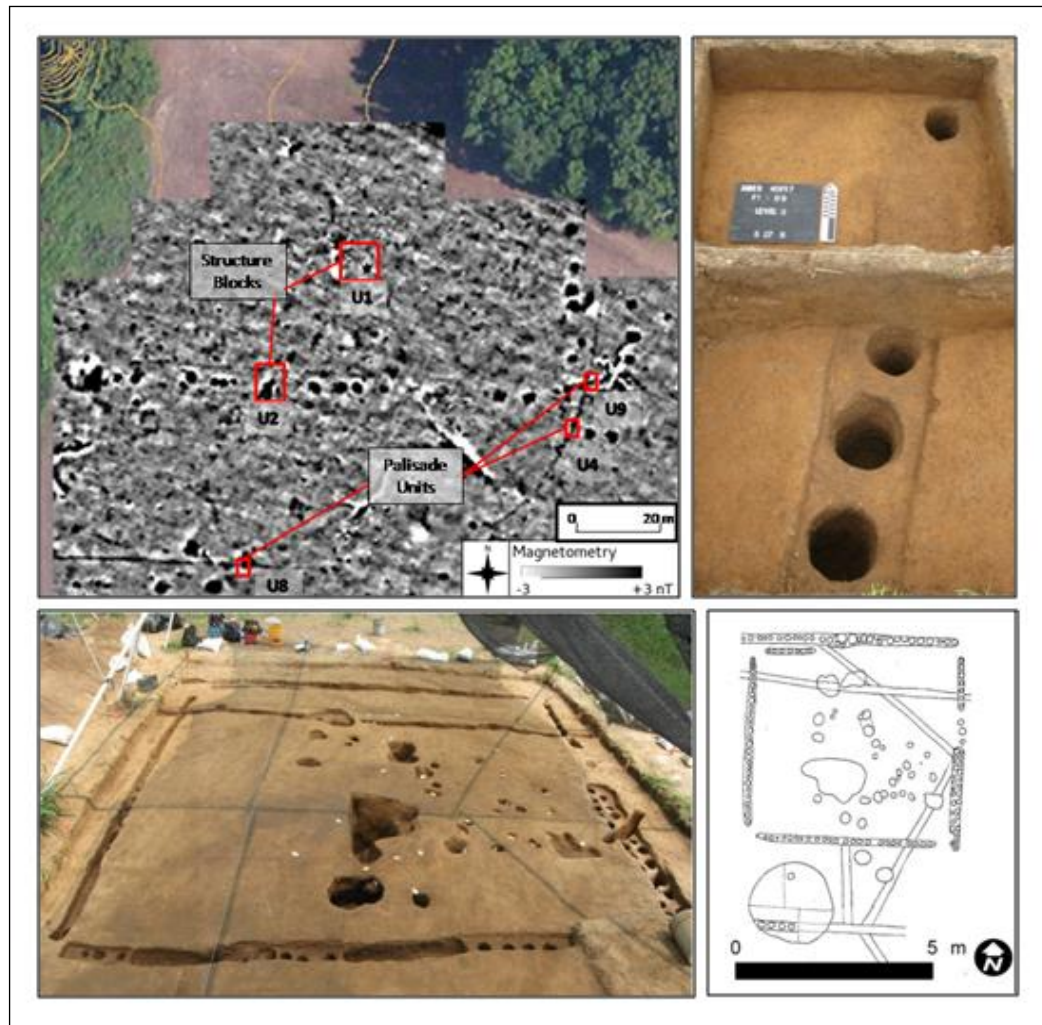
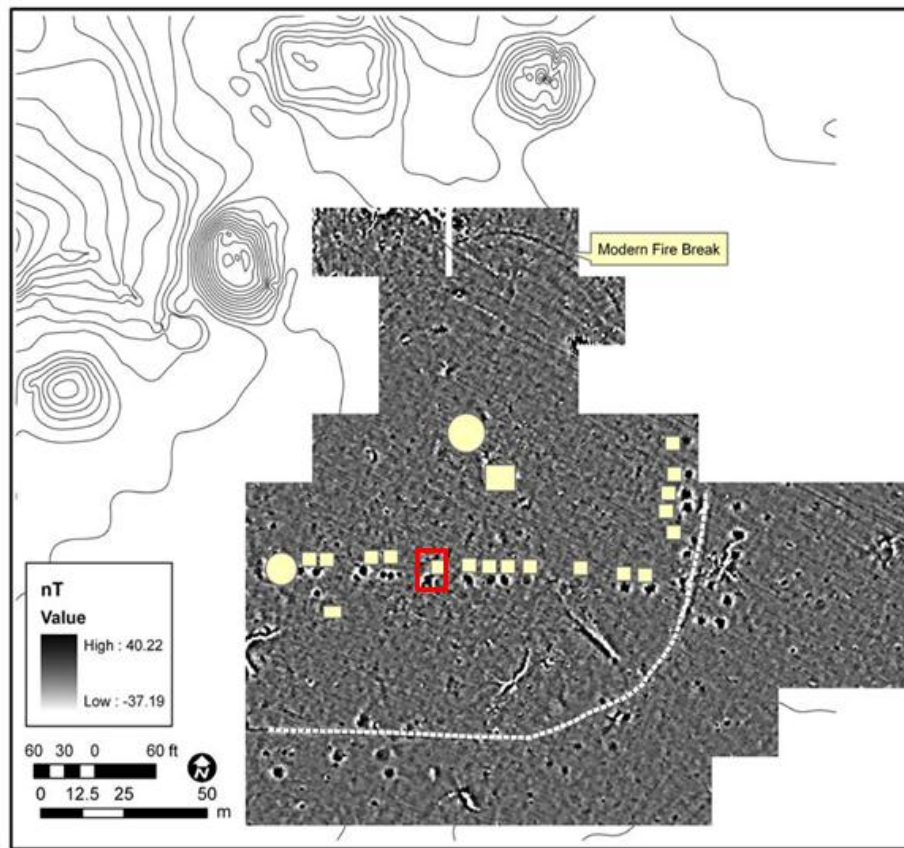


Figure 4. Location of 2009 and 2011 structure and palisade excavations (upper left). Post-excavation photograph of palisade segment (upper right). Structure 1 after excavation (bottom left). Initial F1-U2 wall trenches in plan (bottom right).



(adapted from Mickelson and Goddard 2011:Figure 9)

Figure 5. Ames town plan ca. A.D. 1290 as inferred from the magnetometry data. Yellow polygons indicate potential structure locations. Dashed line indicates palisade. Red box indicates location of structure block.

3. Methods and Results

The initial concept for this research was motivated by recent work at Ames that suggested not only an Early Mississippi age for the mounds, but also the existence of a slightly later Mississippian settlement in direct proximity to the mounds (Goddard 2011; Mickelson 2008; Mickelson and Goddard 2011). The present study focuses on three confirmed feature types that include the overlapping wall trench structures; a long, linear anomaly in the magnetometry data confirmed and designated through previous excavation as Trench G; and one of six large anomalies outside the palisade with a similar magnetic signature to the Feature 100 midden pit. Structures, palisades, and large pits at Ames were further explored through examination of field notes and maps from previous seasons, excavation, analysis of feature form, and artifact analysis to expand current knowledge about the site's off-mound habitation chronology.

Field notes and maps

The nature of this research necessitated the use of previously collected data. Details of features excavated prior to the summer of 2012 were collected from the notes, maps, and photographs taken in the field. Features within the initial Block F1-U2 excavation and the palisade within Blocks F1-U4, U8, and U9 were analyzed through these resources. Excavations in 2012 and 2013 concerning Feature 1 in Block F1-U14 and remaining portions of Trench G and Structures 2 and 3 in the F1-U2 western extension provided opportunity for me to participate in excavation and feature observation at Ames. Trench G and the previously confirmed palisade are numbered here consecutively from oldest to youngest for clarity. The term Trench G is used

interchangeably with Palisade 1 in describing the older palisade. The previously excavated younger palisade will be referred to as Palisade 2.

Analysis of field notes and maps from Block F1-U2 allowed a tentative projection as to the extent of the earlier two structures, and facilitated construction of a preliminary relative chronology for features in this block prior to 2013 excavations. Structure floor plans and their chronological sequence were supported by the results of subsequent excavation. In accord with these findings, the two earlier structures were numbered consecutively moving backward in time from Structure 1. A basic sequence of construction episodes is provided here for ease of understanding the excavation results that follow, and are discussed in more detail below. Structure 3 was built first, and then followed by Trench G. Next, Structure 2 was built. Structure 1 represents the final event.

Excavations

Results of previous geophysical surveys and subsequent excavations were combined to plan additional targeted excavations in two locations, a western expansion of Block F1-U2 and a new block excavation at F1-U14 (Figure 6). The F1-U2 expansion targeted both the structure features and Trench G, while F1-U14 exposed a large anomaly outside the area enclosed by Palisade 2. Excavation proceeded by horizontally stripping the plow zone to expose the features. All excavation was done by hand using shovel and trowel, and screens contained .25 inch mesh. Soil samples were routinely taken for flotation and future analyses. The two combined excavation locations exposed an additional area of 82 m² at Ames.

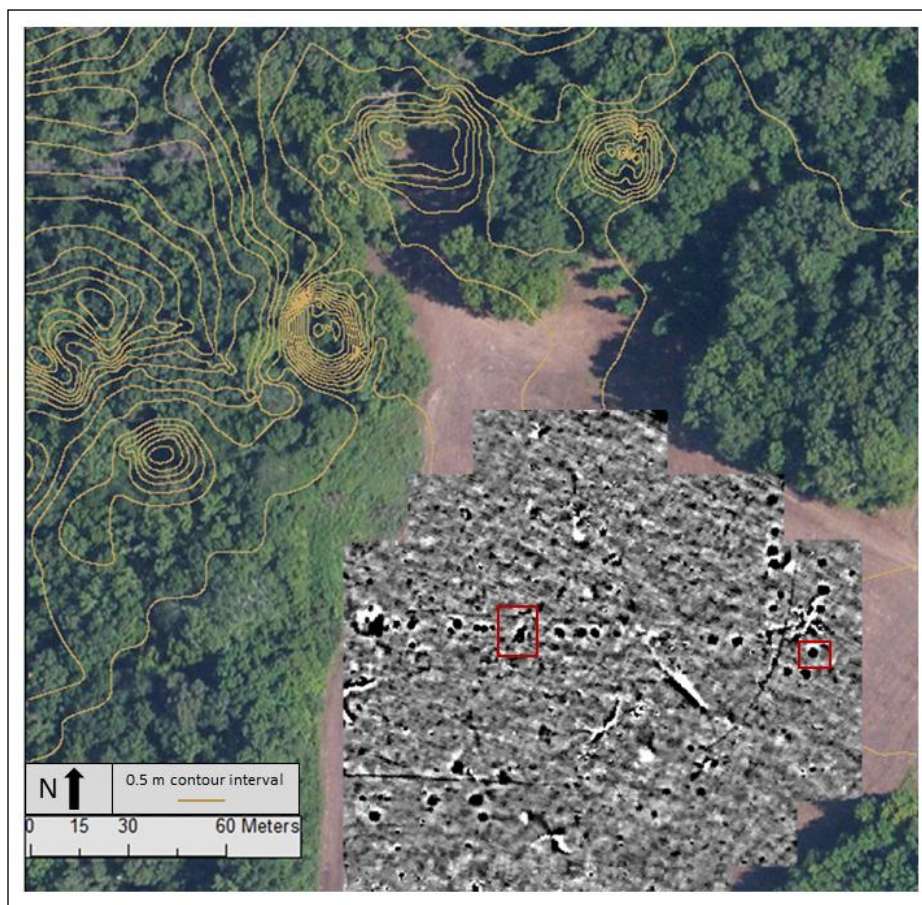


Figure 6. Red boxes indicate location of blocks F1-U2 (west) and F1-U14 (east).

Block F1-U2 – Trench G and Three Structures. The structure excavation block (FI-U2), which contains Trench G and wall trenches belonging to three distinct structures, was expanded to the west in 2012 and 2013 to confirm the continuation of Trench G and to fully expose all three structure floor plans. A 4-x-4-m area was stripped of plow zone from the northern end of the block's west side in 2012 to follow the trajectory of Trench G. Trench G spanned the entirety of this extension for 11 m of feature exposure. These results support an inference that Trench G corresponds to a linear magnetic anomaly recognized in the magnetometry data as extending approximately 100 meters east to west across the site. The block extension also exposed

the western end of the northernmost wall trench, and the northern ends of two new trenches representing the western walls of Structures 2 and 3.

Further excavations in the F1-U2 extension in 2013 included excavating a portion of Trench G and its associated posts. A charcoal sample was taken from trench fill context, and submitted for radiocarbon dating. Plow zone stripping continued to the south on the block's west side to fully expose the two partial structures. The excavation revealed the southern wall of Structure 3 and the remaining southwest corner of Structure 2. Charcoal samples were collected from trench contexts to date Structures 2 and 3. Wall trenches within the extension were selectively excavated. Level 1 extended from ground surface to feature recognition. Level 2 included all trench fill to the depth at which post stains were visible. Post fill was designated Level 3, and posts were given individual numbers within each trench.

The F1-U2 extension added 40 m² to the previous excavations for a total block exposure of 120 m². The newly exposed area was added to the previous planview maps of the block (Figure 7). The resulting full plans of all three structures confirmed their sizes, and allocation of wall trenches to particular construction events (Figure 8). Initial 2011 excavations in this block recognized nine wall trenches. Further excavation revealed three more totaling 12 trenches labeled A through L including a short segment of trench alongside the central portion of Trench D called D2.

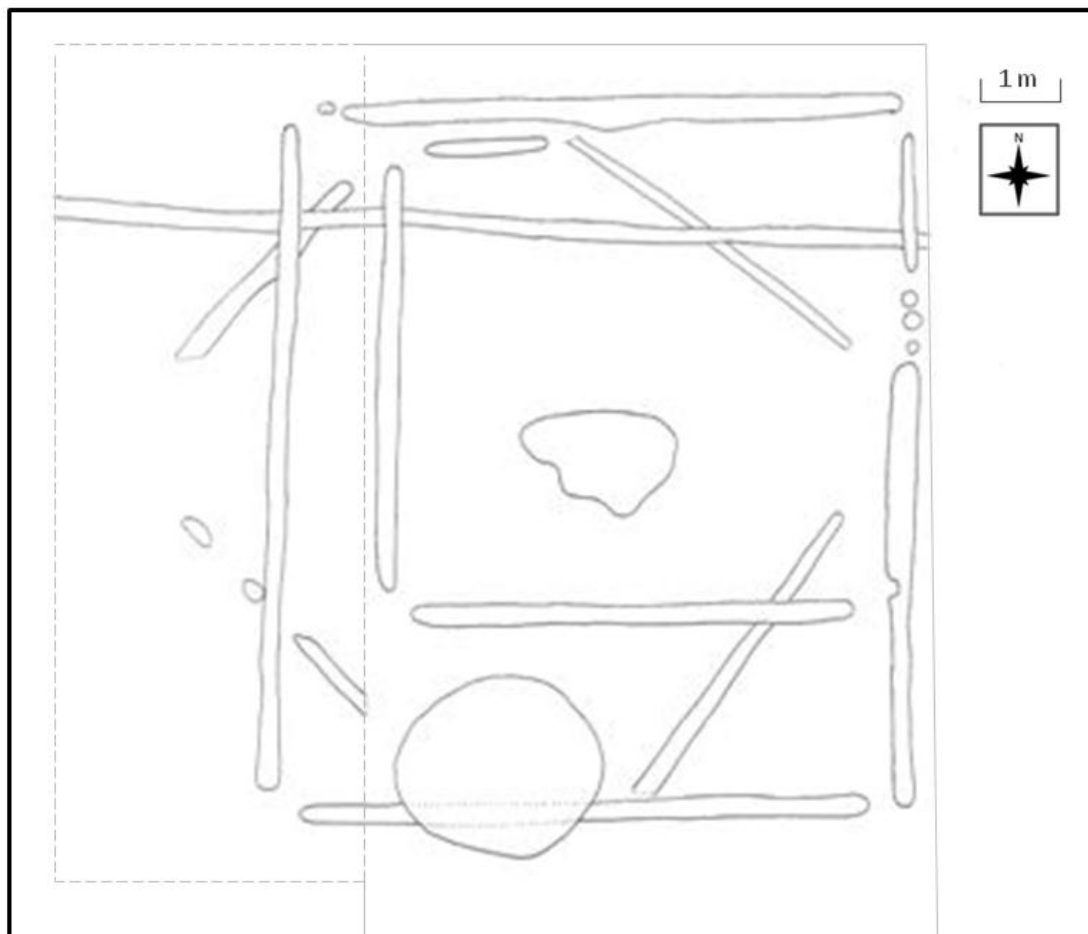


Figure 7. Schematic of the final plan of structure excavation block (F1-U2). Schematic includes only wall trench and large pit features. Other features omitted. Dashed lines indicate boundaries of western block extension.

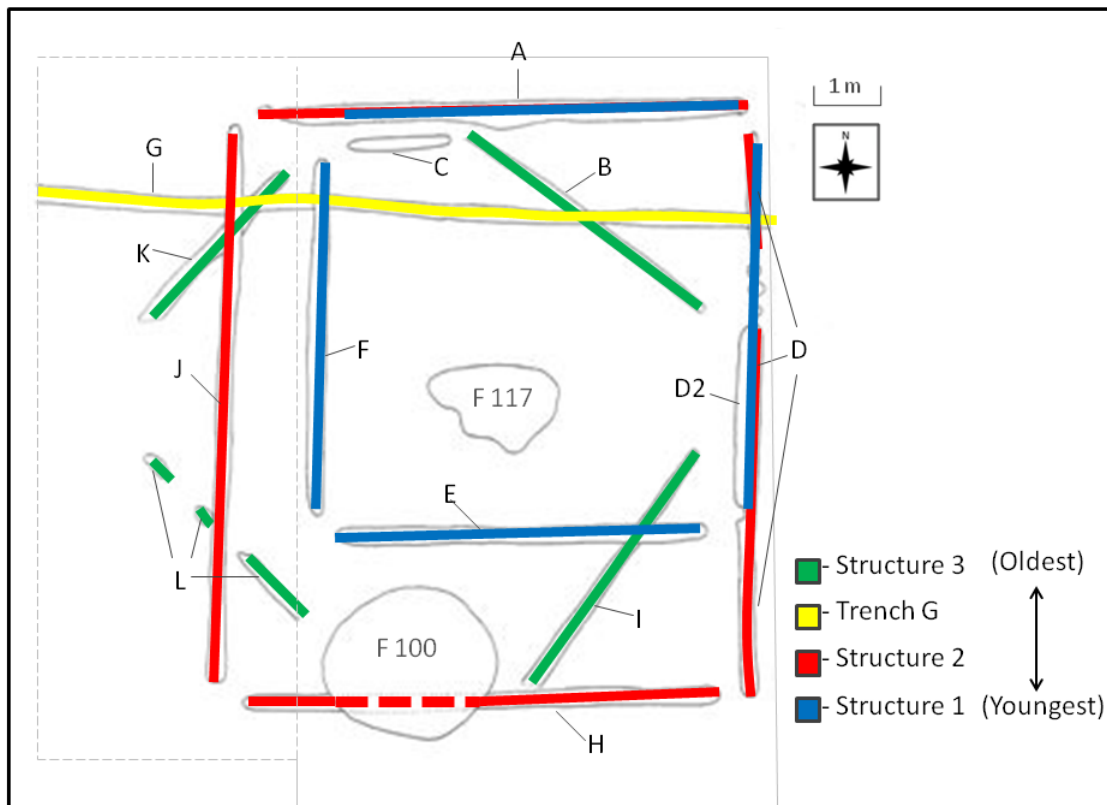


Figure 8. Block F1-U2 with trenches labeled and wall assignments color coded.

Structure 3 represents the initial construction episode. Second, Trench G, an extensive wall at least 100 meters in length, was built passing through the same location. Next, Structure 2 was constructed. Lastly, Structure 1 was built. Feature intrusions used to build a relative chronology of construction events in F1-U2 are as follows. Trench G intruded the north wall of Structure 3 (B), and was recorded as possibly intruding into the north end of the west wall (K) of Structure 3. The southern wall of Structure 2 (H) intruded the east wall of Structure 3 (I). The west wall of Structure 2 (J) intruded both Structure 3 (at the north end of K) and Trench G in the same location. The east wall of Structure 2 (D) also intruded Trench G.

The south wall of Structure 1 (E) intruded the east wall of Structure 3 (I). The west wall of Structure 1 (F) intruded Trench G. The only clue as to the order of Structures 1 and 2 lies within Feature 100, the large refuse pit presumed to be associated with Structure 1. If this association is correct, then the intrusion of the pit into the south wall of Structure 2 (H) indicates that Structure 1 is the most recent.

Block F1-U14- Pit Outside the Palisade or Feature 1. The 2012 field season involved further investigation of features identified in the magnetometry survey data including a distinct line of anomalies east of Palisade 2. A linear pattern of six circular anomalies similar to the confirmed midden pit in F1-U2 in dimension and strength of magnetic signature lie just outside Palisade 2 forming a backwards “L” which terminates at the palisade line in the south and continues to the edge of the survey area to the north (Figure 9). A new excavation block (F1-U14) was opened over one of the eastern anomalies. In Block F1-U2, a structure was located in close proximity to the large midden pit so potentially the eastern line of similar anomalies would also have associated structures. The initial reasoning for the target was to locate and date a structure outside the dated palisaded area, but evidence of a structure in the F1-U14 block was not found.

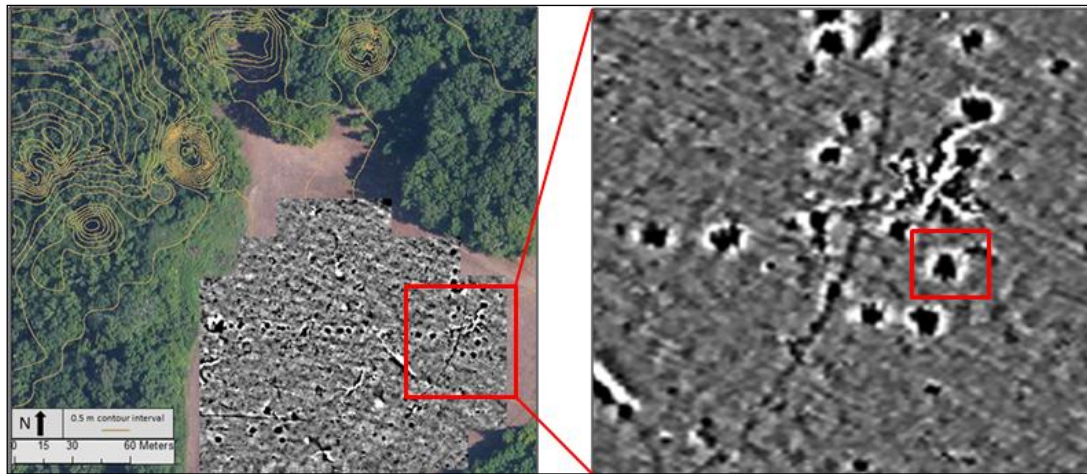


Figure 9. Close-up of Block F1-U14 area and Feature 1 as it appeared in the magnetometry data.

Excavation began as a 2-x-2-m unit placed over the target area using an image of the magnetometry data overlaid by the site grid and a total station to approximate the feature's location. About 10 cm of plow zone was removed before feature staining was observed. The initial unit caught the eastern margin of the feature staining so the unit was expanded to the west revealing dark brown soil crosscut by northwest-southeast running yellow brown plow scars (Figure 10). The block was further expanded to the west and south until all but a small northern sliver of the feature, designated Feature 1, was exposed for a total block area of 22 m². Feature 1 boundaries were unclear in plan obfuscating its actual size. Initially, it was uncertain whether the feature was a large pit or house basin.



Figure 10. Feature 1 stripping in progress. Northeast quadrant of pit visible.

First, a small window 1 m wide was removed from the eastern edge of Feature 1 extending roughly 25 cm into the feature to confirm it was not ephemeral staining. When this window showed the feature had some depth, a line of 1-x-1-m units was delineated across the feature east to west. The two easternmost units, Unit A (east) and Unit B (west), were excavated to explore the depth of the feature and to expose at least a segment of its profile (Figure 11).



Figure 11. Feature 1 after excavation of Units A and B.

Feature 1 was excavated in natural levels. All depths reported here are from the original ground surface. The upper plow zone, extending from ground surface to feature recognition, was designated Level 1. Level 2 continued from the depth of feature recognition to the base of the deepest plow scars terminating at 17.5 to 25.5 cm. Level 3 contained the same dark brown fill, but was not impacted by modern plowing. Level 4 began where the fill changed to dark yellow brown in color, 41.5 to 51.5 cm deep, and continued to the feature base. Feature fill from the window and Unit A was sifted and Unit B fill was stockpiled. Flotation samples were taken from Levels 2 through 4 for future botanical analysis.

The north, west, and south profiles were drawn according to stratum rather than excavation levels. Some strata recognizable in profile were not recognized in plan during excavation due to diffuse boundaries. Level 2 contains only Stratum I fill. Level 3 is

comprised of Stratum I and II fill. Level 4 corresponds to Strata III through V. Stratum IV is discontinuous, and does not appear in the southwest or northeast in profile. The actual base is uncertain due to a gradual and diffuse transition into subsoil. Stratum V, the lowest, could possibly be subsoil making Stratum IV the actual base level of Feature 1. Geologic and phytolith samples were taken from each stratum in the south profile. A phytolith sample was also taken from a charcoal concentration in the north profile near the pit base.

Once excavations determined this was a pit feature, one meter wide exploratory lines extending four meters to the east, south, and west, and eight meters to the north of block F1-U14 were stripped of plow zone in search of an associated structure, but no evidence was found. Excavations confirmed the anomaly as a large, deep pit feature measuring 3.5 m round with a depth of 75 to 94 cm below original ground surface. The pit edge tapered inward across 75 cm before meeting an undulating, flat base. The only distinct change in fill occurred between Levels 3 and 4 (also Strata II and III) when yellow brown mottling appeared eventually becoming the dominant fill color.

Charcoal concentrations in Feature 1. Two charcoal concentrations were encountered within Level 4 at close but differing depths. Concentration I first appeared at a depth of 68 cm, and contained small to large densely packed chunks of charcoal. This charcoal lens was somewhat linear at first shaping into a rounded 28-x-33-cm concentration as it was troweled (Figure 12). The lens was around 8 cm thick and was located on or near the pit base less than 10 cm from the eastern pit wall. The lower of two charcoal samples taken from this lens was submitted for a radiocarbon age determination. Another charcoal lens of similar diameter and shape appeared at 77 cm

deep, and was around 10 cm thick. This lens, Concentration II, was more centrally located within the pit feature, and also lay on or near the pit base.



Figure 12. Charcoal concentration I near pit edge (left). Close-up of same feature (right).

Analysis by Feature Type

This portion of the study sought to collate morphological details of confirmed features at Ames to facilitate comparisons between similar feature types. Analysis of excavated features involved a combination of measurements derived from previously recorded data including all features excavated prior to the 2012 field school excavations, and measurements taken in the field during excavations in 2012 or later.

Wall Trench Morphology. Resulting data on wall trench morphology is summarized below in table format (Table 1). Trench lengths are provided as combined measurements of all trench segments within a wall in cases where wall trenches were discontinuous. Total wall lengths combine trench length with areas between and at the ends of trenches containing only posts. Total wall lengths refer to lengths of remnant feature staining and are not estimates of original wall lengths. Trench widths were taken

as a range from the narrowest to the widest point of a particular wall with the exception of Trench D2 taken from a profile drawing. Trench depths are not always available as trench fill was generally left in place once post stains became visible enough to excavate. In a few instances, certain trenches were cross-sectioned on the long and short axis providing information on trench depth. In the case of Trench G, posts were not visible until reaching the trench base allowing documentation of depth. Depths are given as a range where more than one measurement was available. Post diameters were measured from field drawings along each axis. Average diameters include an average of both axis measurements.

Table 1. Summary of Structure Wall Trench Morphology

Wall Trench	Trench Length ^a (m)	Total Wall Length ^b (m)	Trench Width Range (cm)	Trench Depth Range (cm)	Number of Recorded Posts	Average Post Diameter (cm)
A	6.9	7.15	20-40	-	35	14.6
B	4.3	4.3	14-16	-	0	-
C	1.5	1.5	16-18	-	7	-
D	7	8.1	16-25	28	25	13.7
D2	2.62	2.62	23 ^c	32	12	12.8
E	5.52	5.52	20-26	23-25	20	-
F	5.2	5.2	19-28	-	29	11
H	7.15	7.15	20-28	-	8	18.3
I	4.2	4.2	13-26	-	5	17
J	8.25	8.25	18-30	13-29	6	13.2
K	3.1	3.1	20-25	0-8	2	14.5
L	1.4	3.3	18-20	8	-	-

Note: - = No data

^aCombines trench segments within a wall

^bCombines area between and at ends of trench segments containing individual post stains

^cMeasurement taken from a profile drawing as opposed to plan view

Artifact Analysis

All artifacts from blocks F1-U2 and F1-U14 generated over two summer field schools were organized, washed, and catalogued by the author. Artifact analysis was completed on campus in the University of Memphis archaeology laboratory. Primary categories include bone, ceramic, charcoal, daub/ burned earth, historic, lithic, other, sandstone, sandstone (possible fire-cracked rock), stone, and unidentified material.

Lithics were further separated between flakes and tools. Flakes were recorded as primary when exhibiting cortex on more than 50 percent of the outer surface, secondary when cortex covered less than 50 percent of the outer surface, tertiary in the absence of

cortex, and a flake fragment when missing the bulb of percussion. Shatter exhibited a blocky, angular appearance.

Ceramics were separated by temper and surface decoration with rim sherds catalogued individually. Identified temper materials included shell, grog, sand, quartz, clay, bone, and various combinations of all six. Surface decoration was rarely encountered. Often, sherds were too eroded to make any determination. Among the sherds with identifiable surface decoration, plain surfaces were the most common among all temper types.

A complete discussion of the Ames artifact assemblage is beyond the scope of this thesis. The full catalogue is attached as an appendix organized by feature to allow the reader opportunity to independently compare feature contents (Appendix B). Here, I provide a brief summary of the assemblage. Percentages of each primary category are as follows: bone (4.58%), ceramic (17.2%), charcoal (2.6%), daub/ burned earth (14.32%), historic (.24%), lithic (8.84%), other (.08%), sandstone (49.9%), sandstone (possible fire cracked rock) (1.85%), stone (.32%), and unidentified material (.08%). The Other category includes two galena specimens and a mud dauber nest. Daub/burned earth and sandstone would have been better represented by weight rather than counts, and may be skewing the percentages. Still, a general idea of the Ames off-mound assemblage is reflected in this data. The majority of artifacts in the assemblage came from plow zone and feature context in Block F1-U2, and appear to be general domestic refuse suggesting a domestic function for the structures.

Radiocarbon dates

Four charcoal samples were submitted for radiocarbon dating throughout the course of the present study (Table 2). An age determination for Feature 1 (F1-U14) provides insight into the relationship between locations separated by Palisade 2. Samples were also taken from the western walls of the two undated earlier structures in F1-U2 and Trench G to further clarify the temporal relationship between them. A date for Trench G would also clarify the extent to which it preceded the later palisade. Trench G and Structures 2 and 3 were dated using charred material extracted from trench contexts. Potentially, the material from Structure 3 and Trench G wall trenches could be dating earlier or slightly later deposits that filled cavities left behind if walls were dismantled, or earlier materials in soil used to fill the trenches during the construction process. The resulting radiocarbon dates provide an approximation of when the construction events occurred, and agree with feature superposition in Block F1-U14. In the case of Structure 2, the ashy trench fill is the remnant of this structure's destruction by fire so the dated material is related to Structure 2. Information for Palisade 2 and Structure 1 are also included in Table 2 to present the full suite of six radiocarbon dates from off-mound locations at Ames.

Results of the present study provided substantial morphological and temporal data for the analyses described in the following chapter. Excavation, feature analyses, and radiocarbon dates provide insight into how and when activities proceeded at the Ames site during the Early to Middle Mississippi periods.

Table 2. Ames Off-Mound Radiocarbon Dates

Sample	Provenience	Material	$^{13}\text{C}/^{12}\text{C}$	^{14}C AGE (BP)	1 Sigma Cal. Age (AD)	2 Sigma Cal. Age (AD)	Intercept (cal. AD)
Beta 343319	Structure 3 (Trench K)	charred material	-26.7	950 +/- 30	1030 to 1050 1080 to 1130 1130 to 1150	1020 to 1160	1040 1110 1120
Beta 343318	Palisade 1 (Trench G)	charred material	-25.5	890 +/- 30	1050 to 1080 1130 to 1130 1150 to 1190 1200 to 1210	1040 to 1110 1120 to 1220	1160
Beta 343782	Structure 2 (Trench J)	charred material	-24.1	830 +/- 30	1190 to 1200 1210 to 1230 1230 to 1240 1250 to 1250	1160 to 1260	1220
Beta 342278	Feature 1 (Pit Outside Palisade 2)	charred material	-25.0	770 +/- 30	1230 to 1230 1240 to 1250 1250 to 1270	1220 to 1280	1260
Beta 321853	Palisade 2	wood	-28.2	770 +/- 30	1230 to 1230 1240 to 1250 1250 to 1270	1220 to 1280	1260
Beta 301385	Structure 1 (Trench A)	charred material	-24.9	670 +/- 30	1280 to 1300 1370 to 1380	1280 to 1320 1350 to 1390	1290

Note: Calibrated with INTCAL09 (Oeschger et al. 1975; Stuiver et al. 1993; Reimer et al. 2009; Heaton et al.

4. Analysis

This chapter covers the analysis of excavated features at Ames including morphological characteristics and temporal associations. The subsequent paragraphs contain an analysis of wall trench data by individual structure from oldest to youngest, and a description of the evidence for wall rebuilding in block F1-U2. Next, comparisons are drawn between structure attributes including an assessment of the potential above-ground structure appearance based on available data and an analysis of interior structure floor areas at Ames. Ames floor areas are then compared to a sample of wall trench structures from various Southeastern sites. I discuss a large, deep pit (Feature 117) interior to the area of structure overlap, and speculate on the pit's function. Further comparisons are drawn between structures and Trench G, between the later palisade and Trench G, and between the two similar pits (Features 1 and 100). Lastly, radiocarbon dating results are discussed in terms of site chronology and settlement continuity.

Structures

Ten trenches (A-B, D-F, and H-L) are attributed to particular structures (Figure 8). Of these, two wall locations (A and D) were possibly reused in the last building episode. Three trenches in F1-U2 are not included in final wall assignments. Trench C, a short segment of trench in the north of the block, has not been assigned to a particular structure. Trench D2 is not specifically assigned to a structure as it appears to be an area of shoring along Trench D or the result of later reuse of the wall location. Trench G has considerable length and supported an extensive wall or palisade through the area. Structure wall trench assignments are listed clockwise from north for each structure.

Structure 3. Structure 3 includes trenches B, I, L, and K (Figure 13, Table 3).

Total remaining wall lengths are consistent among opposing walls in this structure, but represent only a portion of the original wall extent. The trenches in this structure are quite shallow suggesting the actual trench ends were plowed away. A trench depth of 8 cm was recorded for Trench L in a profile at its east end. Similarly, Trench B was evidently quite shallow and no post stains were seen. No data could be located for depth of Trench I, but it contained five posts ranging in depth from 26-50 cm with an average post diameter of 17 cm. Trench K was so shallow that portions of it were already gone before it was excavated due to a few surface cleanings. Two posts within the partially excavated Trench K had depths of 25 and 50 cm with diameters averaging 14.5 cm.

An absence of trench ends suggests wall foundations were deepest in the middle becoming shallower toward the ends. Additionally, the deepest posts were found toward the middle of the walls. Structure 3 trenches are shallow, but opposing posts 50 cm deep in the central portions of the east and west walls suggest trenches were either quickly packed with subsoil making true depths unrecognizable or individual posts extended several centimeters below trench base. The latter seems more likely. Posts extend beyond the depth of trench by 20 to 48 cm and are widely spaced (80 cm to 1 m) relative to the other structures suggesting certain posts were placed in individually dug postholes along the wall. Trench L lies within the extension, and remains unexcavated.

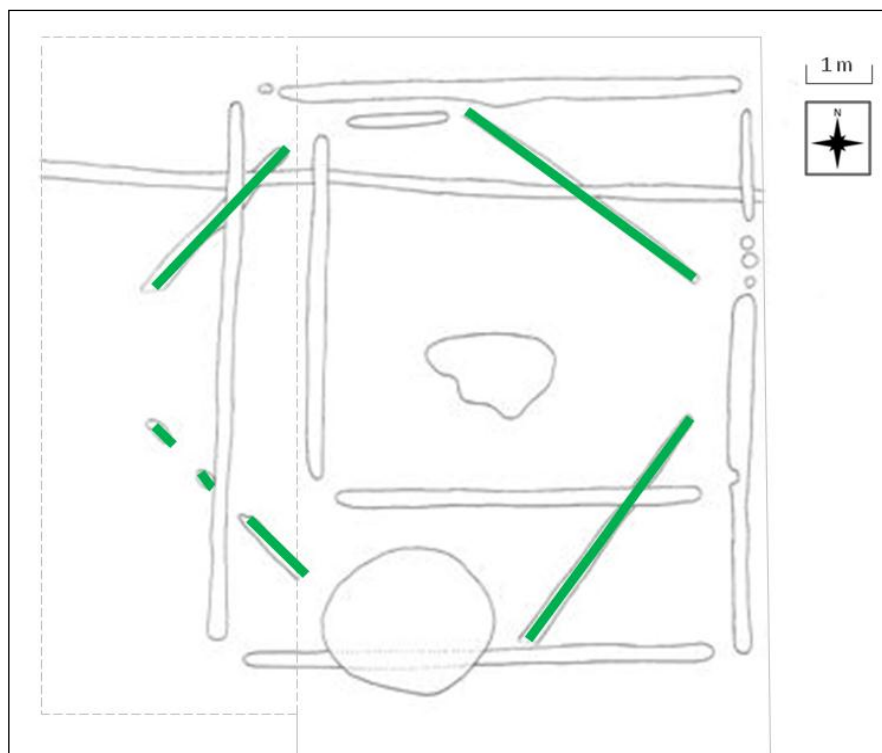


Figure 13. Structure 3.

Table 3. Structure 3 Wall Trench Information

Wall Trench	Trench Length (m)	Total Wall Length (m)	Width Range (cm)	Depth Range (cm)	# of Posts	Post Depth Range (cm)	# Post Depths	Post Diameter Average (cm)
B (north)	4.3	4.3	14-16	-	0	-	-	-
I (east)	4.2	4.2	13-26	-	5	26-50	5	17
L (south)	1.4	3.3	18-20	8	u	-	-	-
K (west)	3.1	3.1	20-25	0-8	2	25-50	2	14.5

Note: - = no data

u = unexcavated

Structure 2. Structure 2 is comprised of trenches A, D, H, and J (Figure 14, Table 4). Total wall lengths, when compared between opposing walls, indicate the full extent of Trenches A and D are firmly associated with Structure 2. Trench widths range from 16-40 cm throughout the structure. These ranges are similar among the trenches with the exception of Trench A's wide central portion. The available trench depths vary. The variation is likely due to the locations where the measurements were taken. The depth for Trench D, 28 cm, was taken near the middle of the trench. A similar depth was recorded for Trench J in a long-axis profile in the center of the wall, whereas a depth near the trench end was 16 cm shallower. These differing measurements support what Structure 3 trench depths suggest, a shallowing of trenches (and ultimately posts) toward the ends of the wall.

The number of posts per wall are difficult to discern here. Few posts were recognized within the trench fill in the southern three meters of Trench D and eastern three meters of Trench H probably due to differing field conditions and varying abilities among field school participants. Trench H posts are limited to those recognized underneath the southern edge of Feature 100. The remaining portion of Trench H in the western block extension remains unexcavated. Trench A suggests that upwards of 35 posts were used in the long walls. A few post depths are available for Trench J indicating posts were placed directly on the trench base. Posts in Trench J also appear to have been placed along the outside edge of the trench. Average post diameters range between 13.2 and 18.3 cm.

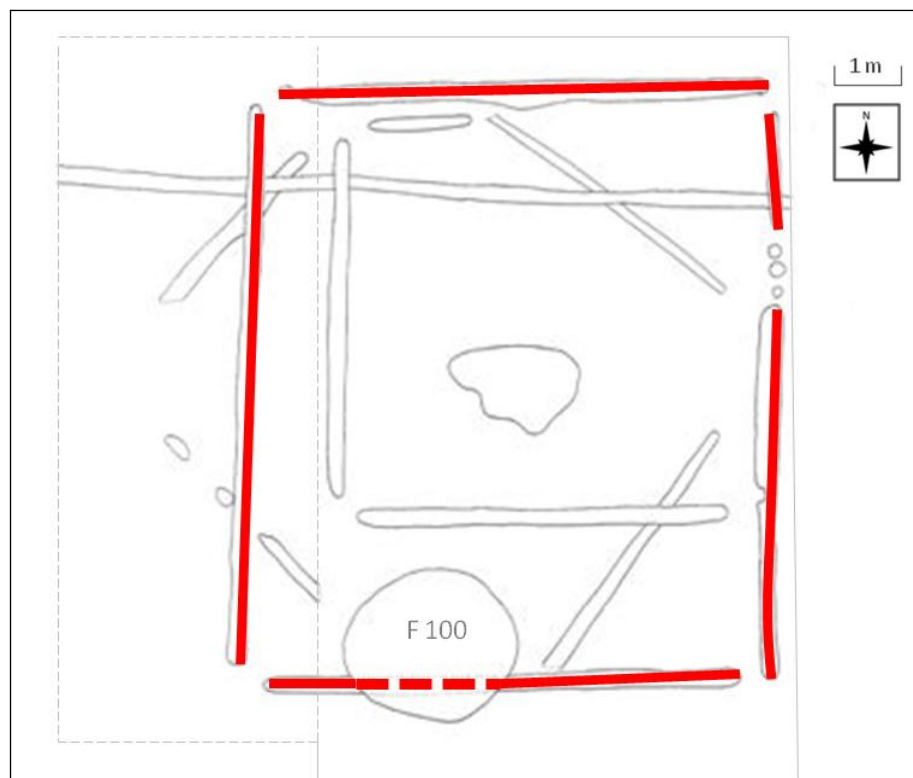


Figure 14. Structure 2.

Table 4. Structure 2 Wall Trench Information

Wall Trench	Trench Length (m)	Total Wall Length (m)	Width Range (cm)	Depth Range (cm)	# of Posts	Post Depth Range (cm)	# of Post Depths	Post Diameter Average (cm)
A (north)	6.9	7.15	20-40	-	35	-	-	14.6
D (east)	7	8.1	16-25	28	25	-	-	13.7
H (south)	7.15	7.15	20-28	-	8	-	-	18.3
J (west)	8.25	8.25	18-30	13-29	6	20-27	6	13.2

Note: - = no data

Structure 1. Trenches A, D, E, and F were designated as Structure 1 in 2011 (Figure 15, Table 5). Trenches A and D are unique in this block for exhibiting potential evidence of rebuilding supporting a supposition the wall locations belong to both Structures 1 and 2. Trench widths range from 16-40 cm throughout the structure, and are similar in range throughout with the exception of Trench A's central portion. Trench depth ranges were available for Trenches D and E showing similar depths utilized within each. The number of posts recognized in Trenches A and D and their trench lengths are not applicable here as they include posts extending beyond the limits of this structure, and, therefore, are representative of Structure 2. The short walls utilized around 20 posts, while the long walls contained around 29 posts. Recorded post depths within Trench E are shallower than trench depths by at least 4 cm suggesting an undulating base level for the trench, or that some post fills merged with trench fill toward the base complicating recognition of post bases during excavation. Average post diameter in Trench F is 11 cm.

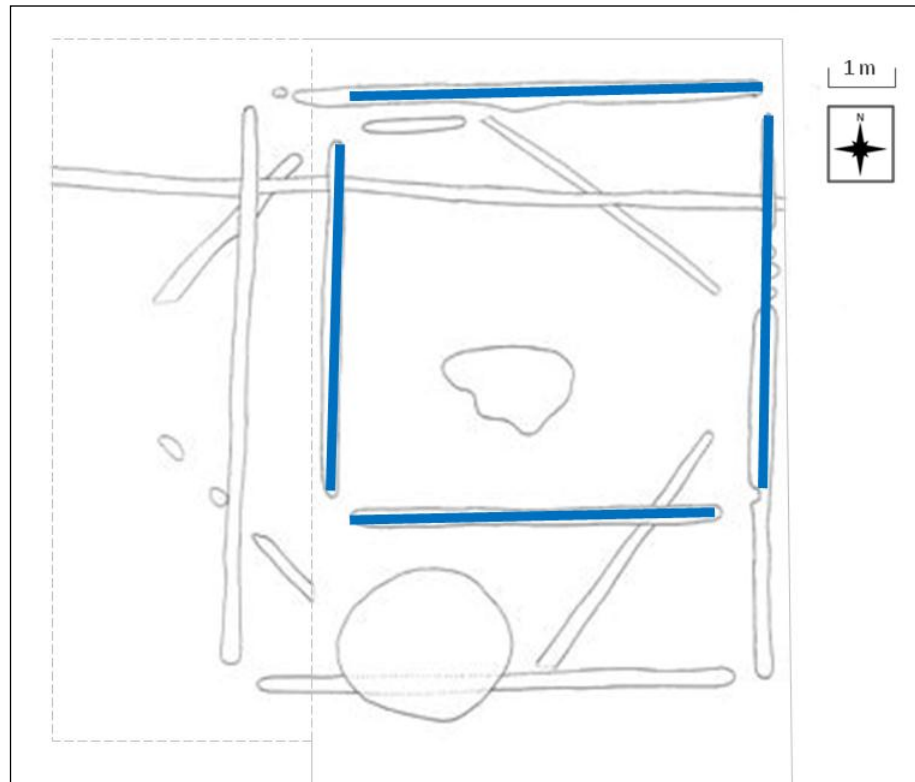


Figure 15. Structure 1.

Table 5. Structure 1 Wall Trench Information

Wall Trench	Trench Length (m)	Total Wall Length (m)	Width Range (cm)	Depth Range (cm)	# of Posts	Post Depth Range (cm)	# of Post Depths	Post Diameter Average (cm)
A (north)	6.9	7.15	20-40	-	35	-	-	-
D (east)	7	8.1	16-25	28	25	-	-	-
E (south)	5.52	5.52	20-26	23-25	20	8-19	12	-
F (west)	5.2	5.2	19-28	-	29	-	-	11

Note: - = no data

Wall Trench Rebuilding. Evidence for rebuilding is subject to interpretation. A few possibilities arise upon examination of Trenches A and D2. The evidence could indicate either a shoring of the walls while still in use as part of Structure 2 or comingling of trenches from two separate events. Trench A, the northernmost trench, has the widest trench width range of any in the block. This trench varies in width by 20 cm due to posts clustered in its central portion rather than a single line of posts throughout as is generally seen in this block. This centralized clustering of posts could be the result of comingling in the two construction episodes unrecognizable archaeologically. Alternatively, the extra posts could represent the addition of extra support or replacement of posts within a failing wall at the time of Structure 2. Structure 2 is a rather large domicile, and extra support added during original construction or during that structure's use might have been necessary. The potential rebuilding seen along the eastern wall, Trench D, is in the form of a 2.62 m long segment of wall exhibiting a double row of posts where one row, designated Trench D2, lies along the interior of the wall (Figure 16). Again, this segment could be evidence that either the wall location was reused or was shored during its original use.

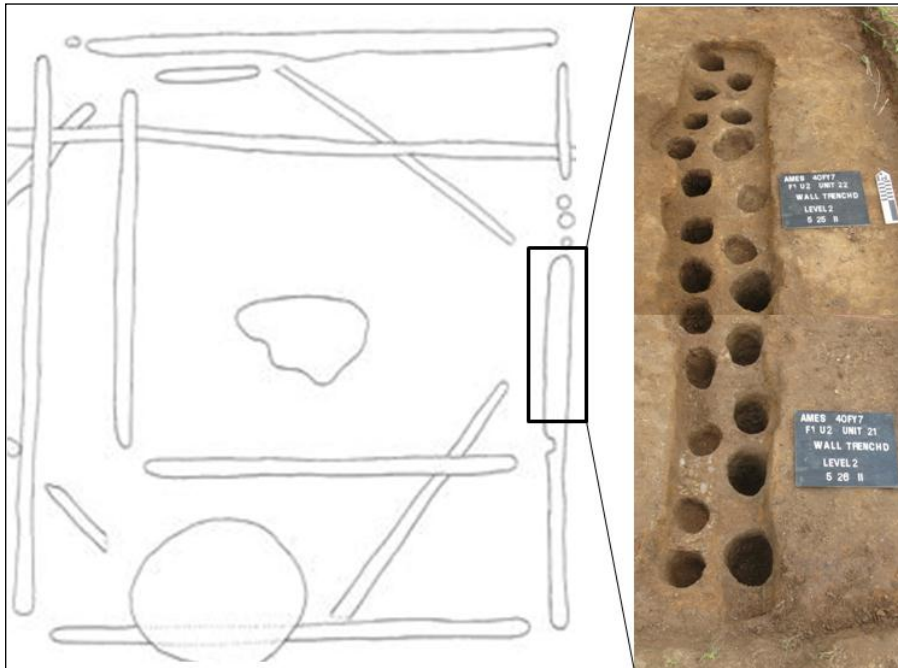


Figure 16. Area of potential rebuilding along Trench D.

Another possibility worthy of note is that Trench C, a relatively short segment of trench parallel to and just south of Trench A, represents a truncated remnant of the north wall of Structure 1. Similarly, Trench D2 could represent a truncated remnant of the east wall adjacent to and overlapping the older Trench D as opposed to being a rebuilt section of D. Both the western end of C and southern end of D2 are appropriate distances from the northern end of F and eastern end of E, respectively, to form the open corners seen in wall trench structure patterns at Ames (Figure 17).

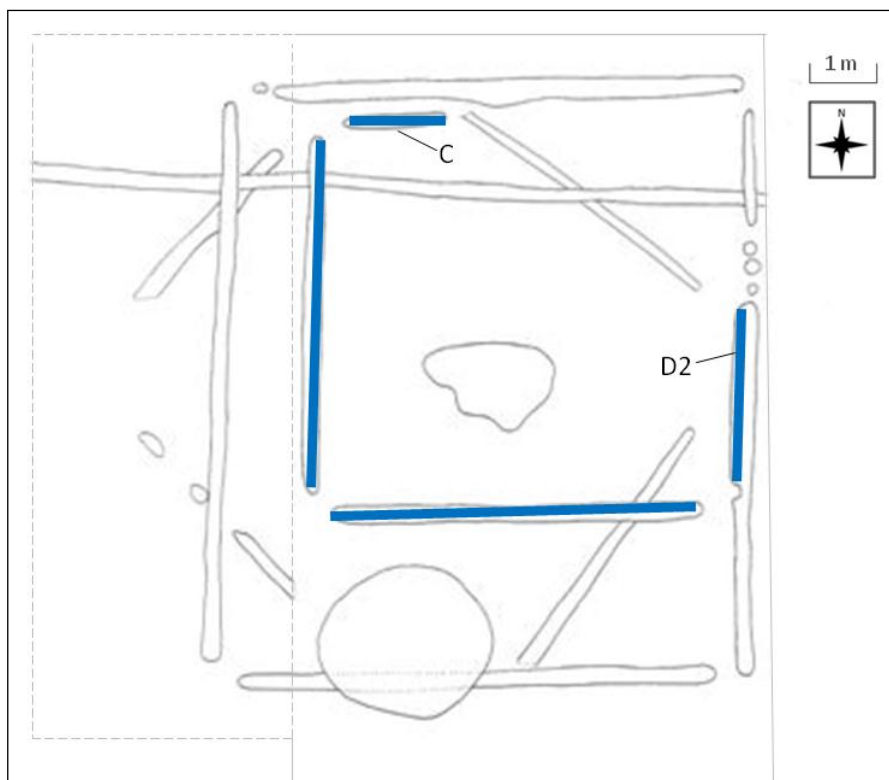


Figure 17. Alternative Structure 1 wall assignment.

If this alternative wall assignment was the case, Structure 1 would have a truncated northeast corner which is seen with every corner of Structure 3. Truncation occurring in only one corner, though, could be an argument for and against this alternative. Depth of Trench D2 suggests there is no reason why the northern half of the wall would be missing. Analysis of field photographs and available data for Trenches C and D2 in relation to Trenches E and F were inconclusive. Currently, there is not enough information to confirm or refute this scenario, so structure analyses proceed using the original wall designations for Structure 1.

Comparison of Structure Wall Trenches. Trench widths exhibit a similar range for all structures with the exception of Trench A with its wide central portion attributed to rebuilding efforts. Wall trench widths at Ames generally conform to the typical range Reed (2007:20) reports of 18-30 cm. Omitting Trench A and D2 from the calculation, average width among all structure wall trenches is 21 cm. Similar average widths are noted in wall trench structures at Etowah in Georgia (Blanton and Gresham 2007:36), Thompson Village in Tennessee (Sullivan 2007:127), and Jonathan Creek in Kentucky (Schroeder 2011:323). Trench depths, at least for central wall portions, are similar for Structures 1 and 2. Trench depths in Structure 3 are less certain, but post depths of 50 cm in the central portions of two walls are the greatest post depths recorded among all three structures. Trench depths at Ames average 22.6 cm, somewhat shallower than the average at Jonathan Creek of 43.3 cm (Schroeder 2011:323). Structures 2 and 3 both exhibit evidence the walls become shallower toward the ends.

Structure 3, the oldest, has the shallowest and most truncated trenches of all three structures. The central and likely deepest portions of these walls are all that remain creating larger gaps in the corners than is expected even for open cornered structures. Structure 3 is unique beyond its differing orientation and shallow, truncated wall trenches. Post depths and spacing are distinct from the other two structures indicating a variation of the wall trench construction method was utilized.

Average post diameters for all three structures lie within a similar range from 11 to 18.3 cm. A general range of post size can be gleaned from this information, but data is currently too incomplete to make any confident statements regarding post diameter

comparisons between the structures. Two of the three structures have not been fully excavated, and some trench segments did not produce any recognizable post features.

What did these prehistoric structures look like? Preserved architectural elements can be used to infer aspects of the above-ground nature of a prehistoric structure feature. Elements include post morphology (diameter, depth, and wood type), wall trench features, corner and interior posts, and remnant construction materials such as daub. The current debate concerning Mississippian wall trench houses revolves around two possible methods of construction. The bent pole construction method involves a pattern usually lacking unnecessary corner posts with small diameter wall poles that can be manipulated into a curve forming a continuous wall to roof element. Wall poles may be attached at a central point or ridge at the top of the structure, or may be interlaced with opposing wall poles. The rigid pole method of construction generally involves larger diameter posts set upright to support a separate roof element. Substantial interior posts and corner posts are considered necessary to help support the roof in this scenario so one would expect to see evidence of these within a rigid pole structure pattern (Lacquement 2007a). Wall trench features could represent either of these methods, though small diameter post molds and a lack of corner posts is often associated with the bent pole method (Lacquement 2007a; Reed 2007).

Wall posts at Ames range in diameter between 8 and 22 cm, and sizes generally appear randomly distributed throughout a wall. Post diameters considered appropriate for flexed pole designs vary. Brennan (2007:82) notes poles larger than 7.6 cm support the rigid pole design, yet Lewis (1995:55) considered poles between 9.1 and 15.2 cm (.3-.5 ft) indicative of flexed architecture. Post size is further complicated as a factor because

the excavated post hole may be larger than the original post diameter. Additionally, pole flexibility is determined by tree species. Wood types used in construction have yet to be identified at Ames so determinations of post size limits allowing a flexed pole structure cannot be made at this point.

Reed (2007:14) indicates a rigid pole design with a separate roof would place the most weight at the corners necessitating sturdy supports in that location. No corner supports were present in any structure examined at Ames. Knight (2007:191) suggests gradation in post sizes and depths from wall center to ends indicates a flexed pole style where the greatest weight is placed on the central axes of the structure. Shallowing of walls towards the trench ends has been documented at Ames in the two structures where depths were available, but post sizes do not appear patterned.

The Ames structure data suggests central portions of the walls bore the greatest weight, but does not provide definitive evidence for one above ground style over another. Architectural elements favor the bent pole method of construction, but a rigid pole design is still possible. Likely, some variation existed among individual structures based on limitations of their differing sizes. Schroeder (2011:331) states “households had the responsibility to create structures for their own use, but that they were still constrained by the values and traditions of the community.” This statement appropriately describes the general similarities in wall trench aspects at Ames (and throughout the Southeast), while accounting for variation within the confines of that particular construction method.

Interior Floor Area of Structures. Interior floor area for each structure was computed for further comparison between structures at Ames (Table 6), with wall trench structures found elsewhere in west Tennessee, and with similar structures located

throughout the Southeast (Table 7). Dimensions were measured across the central axes of each structure from the inside edge of the wall trenches. Length and width were then multiplied to calculate interior floor area. Structure 2 has the largest interior area by 11 m². This structure is also the most distinctly rectangular of all three. Structure 3, the oldest, is second in size, but still quite large. Structure 1 is the closest to square shaped, and the smallest of all three at just over 27 m² smaller than its predecessor, Structure 2. Comparisons with regional examples of wall trench floor size are drawn below.

Table 6. Interior Structure Dimensions and Floor Area of Ames Structures

Structure	Length (m)	Width (m)	Area (m ²)
1	E 6.15	N 5.95	36.59
2	N 8.40	E 7.58	63.67
3	NW 7.52	NE 7.00	52.64

Note: N, E, NW and NE denote directionality of measurement

Table 7 presents data regarding interior floor areas of domestic wall trench structures from various Southeastern sites (Figure 3). These regional comparisons provide an estimate of where the Ames structure sizes lie along the wall trench size continuum existing among a sample of sites. Several sites exhibit size ranges overlapping the range found at Ames, though most sites have an average structure area smaller than the smallest structure at Ames (Structure 1). Average structure areas from Annis, Kincaid, and Snodgrass are similar to Structure 1 at Ames (36.59 m²), while the Hiwassee Island example and average from Morris exceed the size of Structure 1.

Average structure size at the Jewell site in Kentucky is the only example provided here that exceeds the Ames data. Average area at Jewell surpasses the Ames average by

about 20 m² and the maximum floor area at Ames by more than 7 m². Wall trench structures from Jewell also exhibit the widest range of floor areas, and the largest documented structure size among the sample. Structures from BBB Motor, Denmark, Pinson, Shelby Forest, and Zebree are all much smaller than the Ames examples, but these sites are all represented by only one or two wall trench structures. Wall trench structures from Cahokia are by far the most numerous among this dataset with a maximum area similar to the largest structure at Ames (Structure 2). But the Cahokia average of 18.65 m² indicates the bulk of these structures lie on the lower end of the floor area range. The structures currently exposed at Ames appear to be quite large relative to this dataset, and certainly some of the largest within their immediate region.

Table 7. Interior Floor Areas of Wall Trench Structures from Southeastern Sites

Site	Minimum Floor Area (m ²)	Maximum Floor Area (m ²)	Average Floor Area (m ²)	Number of Structures
Ames	36.59	63.67	50.97	3
Annis ^a	22	58	35	-
Andalex ^b	24	30	27	3
BBB Motor ^c	10.6	15.8	13.2	2
Cahokia ^c	4.4	65	18.65	90
Denmark	21.14		21.14	1
Hiwassee Island ^c	37.9		37.9	1
Jewell ^c	26.9	199.8	71.1	9
Jonathan Creek ^d	-	-	28.4	32
Kincaid ^c	9.6	113	34.98	10
Morris ^b	19.5	65	40	10
Moundville ^c	17	47	29.9	15
Pinson ^e	30.96		30.96	1
Shelby Forest ^f	24.7		24.7	1
Snodgrass ^c	28.8	40.1	34.85	4
Zebree ^g	17.8	18	17.9	2

Note: - = no data

^a (Hammerstedt 2007:119)

^b (Clay 2006:50, 58)

^c (Steere 2011: Appendix C)

^d (Schroeder 2011:318)

^e (Mainfort 1986:110)

^f (Barker 2005:6)

^g (Morse and Morse 1980:24/1, 25/1-3)

Interior Features and Feature 117. Given the focus on structures, palisades, and large pits, few features interior to the structures in F1-U2 necessitate description. Aside from large pit features (100 and 117) and wall trenches, this block contained 33 potential cultural features. No spatial patterns among these features were recognized despite attention to this detail. Features were generally small in size with no documented internal stratigraphy. One large, deep feature warrants description and further analysis. Feature 117 measures 1.5 m east-west by 90 cm north-south at the block surface. The east wall of this feature slopes inward across roughly 85 cm to a depth of about 79 cm before dropping to a flat base at 1.03 m deep. The west wall is closer to vertical. The flat base was a rounded area about 55 x 60 cm in the western part of the feature, and described as lined with grey clay at the base (Figure 18). The profile shape and differential fill in this feature present a possibility it held a large post. The deepest portion of this feature is centrally located within Structure 2, the largest structure (Figure 19). Further, the gradually sloping east side could be indicative of a slide trench used in erecting and/or extracting such a large post. Examples of centrally located posts within structures, some with extraction trenches, potentially used as temporary scaffolding during Mississippian domicile construction have been documented at the Mitchell site in Illinois (Reed 2007:25) and Moundville in Alabama (Laquement 2007b:63).

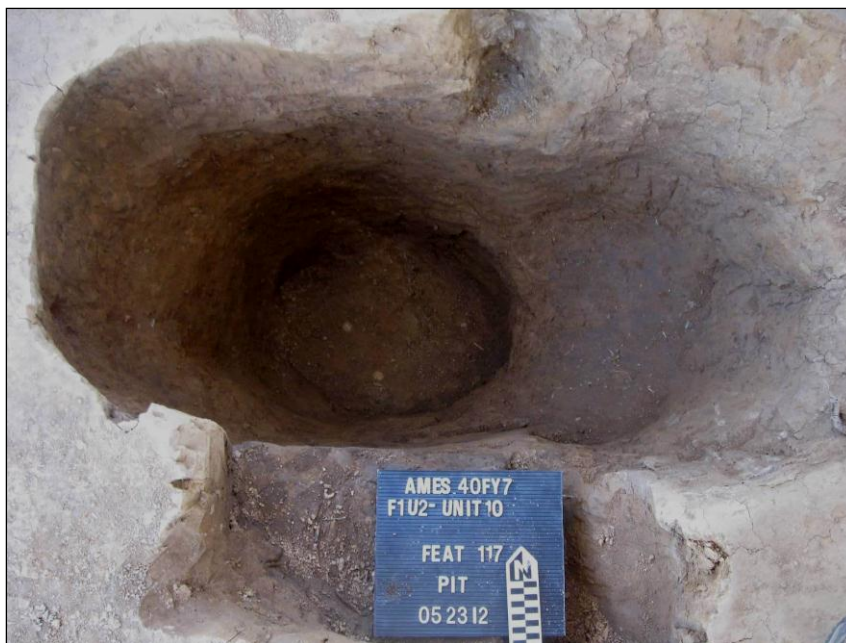


Figure 18. Planview photograph of Feature 117 after excavation.

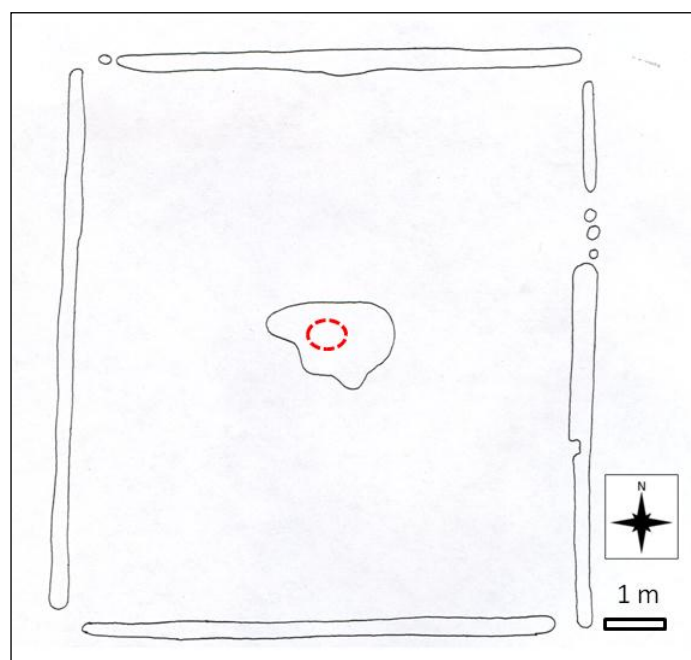


Figure 19. Approximate location of Feature 117 base within Structure 2.

The smallest of several large posts utilizing slide trenches in their placement atop Mound 6 at Obion were about 60 cm in diameter (Garland 1992:50,52). Profiles of some “post pits”, large posts with slide trenches, at Cahokia bear a resemblance to the profile of Feature 117 at Ames (Pauketat 1998:129) (Figure 20). The Cahokia post pits averaged 215 x 65 cm in plan with an average depth of 92 cm. Postmolds recognized within some of these features were as small as 40 cm in diameter (Pauketat 1998:128). Many of the Cahokia features are attributed to large, open circles of posts rather than structural supports, but the Cahokia post pit profiles provide visual examples of the archaeological expression of a post and slide trench. The Obion and Cahokia examples demonstrate that posts similar in size and depth to Feature 117 might warrant the use of an insertion or extraction trench.

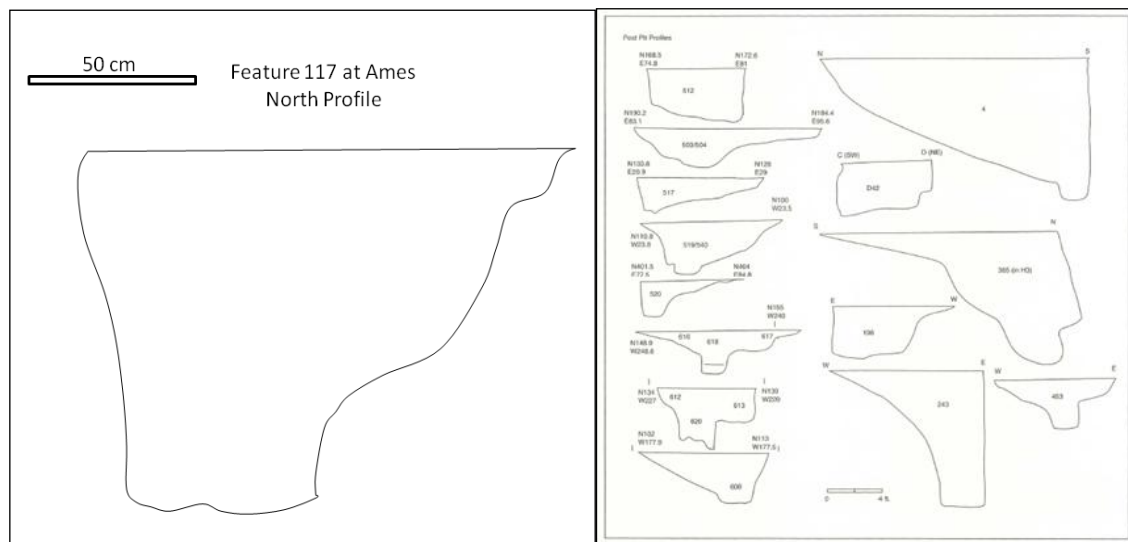


Figure 20. Profile of Feature 117 in block F1-U2 at Ames (left). Post pit profiles recorded at Cahokia (Pauketat 1998:Figure 6.39) (right).

Alternatively, this feature could be a storage pit similar to the deep cylindrical flat-bottomed pits found at Zebree in east Arkansas (Morse and Morse 1980). Reuse of the feature over time could have expanded the dimensions in the upper portion. Feature 117 likely had multiple functions through time. If this feature represents a large post erected to aid in completing the roof, the central location may have been reused for the hearth after post removal. Mickelson and Goddard (2011:165) refer to this feature as “presumably a hearth” due to the presence of “abundant ash and wood charcoal”. Reed (2007:25) mentions instances at Toqua and Carden Farms, both in east Tennessee, where hearths in intact floor contexts were placed directly above central posts likely removed after construction was complete.

Perhaps a central post was necessary to support a horizontal ridge pole spanning over eight meters in Structure 2. One version of flexed pole architecture involves a central ridge pole where poles along the long walls are bent inward toward this central point forming a series of ribs, and short wall poles are vertical being lashed to the outer ribs. A wall trench structure from the Toothsome site in Illinois provides an example of this type of architecture (McConaughy 2007:111). In reference to this particular style, McConaughy (2007:111) notes that larger poles in the center of the short walls would provide end support for the ridge pole. At Ames, the central posts in Trench A (north wall of Structure 2) are certainly some of the largest. Unfortunately, there is no information on the opposing area in Trench H (south wall).

Trench G

Trench G Compared to the Structures. Trench G and its posts overall are similar to structure trench attributes. Trench width lies within the same range as Structures 1 and 2. Trench G widths overlap the upper end of Structure 3 widths, exceeding by only 4 cm. Differences in post size become apparent on closer inspection. Post diameters in Trench G fit within the same range as structure posts, but a majority of posts in Trench G are in the upper end of that range from 16 to 22 cm. Structure posts are mostly under 16 cm in diameter. Trench G posts within the extension exhibit regularity in size and spacing absent in structure posts (Figure 21).



Figure 21. Excavated portion of Trench G within the F1-U2 block extension.

Post bases of Trench G posts exhibited a thin layer of ashy material that extended up post sides up to 8 cm. Webb (1952:18) suggests layers of charcoal present around the edges of palisade post molds at Jonathan Creek represent use of fire to cut and/or shape the post bases prior to insertion. The ashy lenses at post bases in Trench G may indicate a similar method was used at Ames. Ashy layers were noted at the base of post profiles in the south and west walls of Structure 2. Abundant ash in the trench fill suggests this structure burned, but this upper trench ash appeared distinctly separate from the thin layers at post bases suggesting similar wall post manufacturing techniques employed for Trench G and Structure 2.

Comparison of Palisade Trenches. The linear anomaly in the magnetometry data, confirmed as a palisade feature in 2011, appears on the western boundary of the geophysical survey area about 125 m south of Mound B. Palisade 2 continues almost due east for around 80 m before gently curving to the north. This palisade exits the survey area roughly 140 m east and 70 m north of the western point at which it appeared representing about 200 m of wall length (Mickelson and Goddard 2011:166). The trajectory of this feature suggests it encapsulated all four mounds likely extending to the bluff edge northeast and southwest of the mounds.

The linear anomaly corresponding to the excavated portion of Trench G extends east to west roughly 60 m north and paralleling the southern portion of Palisade 2. Trench G (Palisade 1) is at least 100 m in length terminating to the west just before the edge of the survey area and to the east around 40 m shy of the eastern portion of Palisade 2 (Figure 22). Currently, no evidence for bastions or ditches and earthen embankments associated with either palisade has been found.

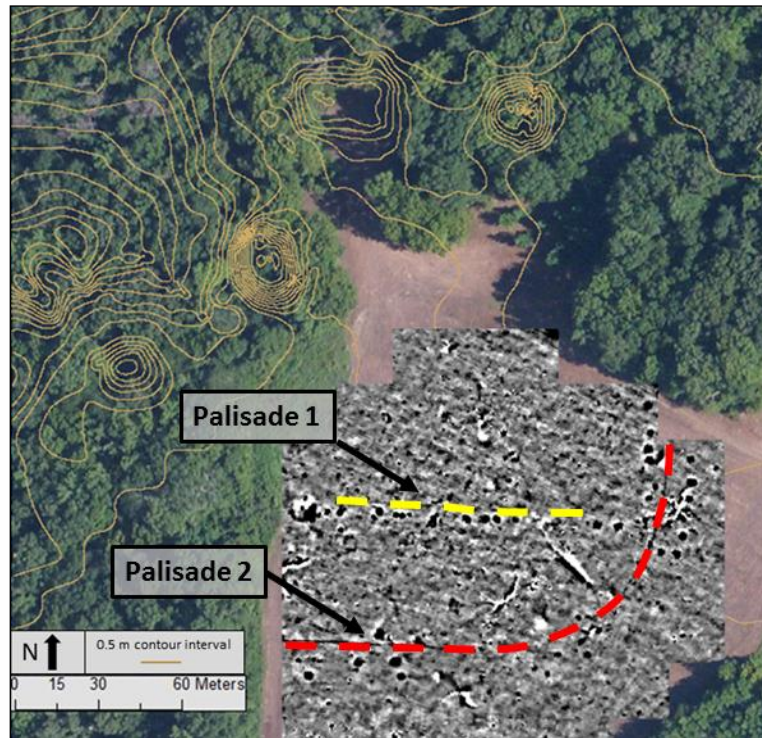


Figure 22. Location and orientation of palisades visible in the magnetometry data. Palisade 1 in yellow. Palisade 2 in red.

Though the trench width ranges overlap slightly, Palisade 2 is generally wider by 10-20 cm (Table 8). Palisade 2 appears to have been set much deeper with posts around one meter deep, whereas evidence indicates Palisade 1 posts were around 60 cm shallower. The trench depth range for Palisade 1 indicates that either individual post holes were dug (or posts were driven) beyond the depth of trench or the lowest portion of trench was quickly and compactly refilled with the excavated subsoil during the construction process. The same potential methods were employed with Palisade 2 as recognizable trench fill did not appear to extend as deep as the posts.

Of the seven posts excavated in Palisade 1 within the block extension, five were 16-20 cm in diameter, and evenly spaced with 22-24 cm between each post. Two posts were 10-12 cm in diameter, and placed between the larger posts. The smaller posts were

shallower in depth suggesting they possibly existed between each large post, but were not recognized unless they extended beyond trench fill. The planview dimensions of six posts from the previously excavated portion of Palisade 1 were found on field maps. These posts ranged in diameter from 8-22 cm similar to those in the extension, but lacking the alternating size pattern. The dimensions of 13 posts excavated from Palisade 2 overlap the size range for Palisade 1, but Palisade 2 contains some larger posts upwards of 40 cm in diameter. Post dimensions in the largest palisade at Jonathan Creek measured 15-43 cm (.5-1.4 ft) reaching depths of 61 cm-1 m (2-3.5 ft), on par with Palisade 2 at Ames (Webb 1952:15). Among a sample of 45 Mississippian palisades, Milner (2000:56-57) found that more than 80 percent had average post diameters between 15 and 25 cm, while less than 15 percent had average post diameters larger than 25 cm. Milner's (2000) compiled palisade post data suggests Palisade 1 post size is comparable to the majority of Mississippian palisades included in his sample.

Table 8. Summary of Palisade Wall Trench Morphology

Palisade	Exposed Trench Length (m)	Trench Width Range (cm)	Trench Depth Range (cm)	Number of Recorded Posts	Post Depth Range (cm)	Post Diameter Range (cm)
Palisade 1 ^a	11	20-30	5-14 cm	13	21-37	8-22
Palisade 2 ^b	4.7	28-42	50+	13	58-107	10-40

Note: ^aTrench G within F1-U2

^bPalisade confirmed in 2010 within F1-U4, U8, and U9. Data from Goddard (2011:39-44) and field maps.

Large Pit Features 1 and 100

Feature 1 (F1-U14) is similar in size to the midden pit in the structure block, but with differing fill. Feature 100 (F1-U2) contained various complex zones of midden fill with distinct boundaries suggesting it was regularly used for refuse disposal. Excavation showed Feature 100 to be rich in charcoal and artifacts. Feature 1, on the other hand, exhibited four to five successive strata with diffuse, transitional boundaries suggesting the pit was left open to fill in naturally and/or anthropogenically filled over an extended period of time. The distinct charcoal features at or near the pit base suggest an initial function other than just a refuse pit. The presence of multiple similar magnetic signatures in an orderly line suggests a large-scale operation. Notably, the alignment of the circular magnetic signatures outside Palisade 2 matches that of the portion of palisade wall to which it is adjacent. Without knowledge of the other features in this line or a complete view of this pit's base, a functional determination cannot be made at this time.

The Feature 1 pit is relatively contemporaneous with the organized Middle Mississippian palisaded town with which the Feature 100 pit is likely associated. If Feature 1 was in use at the time of Palisade 2, the pit was associated with an activity performed outside the enclosed town differing functionally from Feature 100. The large pits at Jonathan Creek were described as midden pits “usually in the vicinity of a house” with diameters ranging from 1.83-4.6 m (6-15 ft) and depths from 12-67 cm (.4-2.2 ft) (Webb 1952:62). Pit sizes are similar to those at Ames, but no stratigraphy was present in the Jonathan Creek pits (Webb 1952:62).

Chronological Considerations

Features examined at Ames appear to fall into three gross temporal slots (Table 2, Appendix A). Structure 3, the oldest in F1-U2, dates firmly in the Early Mississippi period. The two sigma date range for this structure overlaps the earlier portion of the range for a wall trench structure on a previous summit of Mound D (Appendix A). Potentially, the two structures existed at the same time, but Structure 3 may predate the mound structure. Structure 3 intercepts of A.D. 1040, 1110, 1120 average to A.D. 1090, while the Mound D structure intercept is A.D. 1210. Radiocarbon dates suggest Structure 3 coincides with early to intermediate stages of mound construction.

The two sigma date range for Palisade 1 overlaps that of Structure 3, but is known through superposition to postdate the structure. The wide calibrated date range for Palisade 1 means it could have been constructed anywhere from immediately after Structure 3 to upwards of two centuries later. Palisade 1 intercepts the calibration curve at A.D. 1160, while Structure 3 intercepts at the three ages listed above. Intercepts suggest Palisade 1 postdates this structure by 40-120 years, and indicate a shift in functional use of this space at the onset of the Middle Mississippi period. Palisade 1 also coincides with early to intermediate stages of mound construction, possibly predating the Mound D structure.

The two sigma date range for Structure 2 spans from the middle of the Palisade 1 range to the middle of the Palisade 2 range. Structure 2 intercepts the calibration curve at A.D. 1220. This date puts Structure 2 about 60 years after Palisade 1, and suggests relative contemporaneity with the structure on an intermediate summit of Mound D. The Mound D structure is oriented to the cardinal directions like Structure 2 further

supporting an association between that stage of mound construction and the later town occupation.

Palisade 2 and the large pit to the east just outside the palisade returned identical two sigma calibrated date ranges with an intercept of A.D. 1260 suggesting they are contemporaneous features, possibly postdating Structure 2 and predating Structure 1. Structure 1 has two ranges of cal. A.D. 1280-1320 and 1350-1390 at two sigmas with an intercept of A.D. 1290. This structure exhibits the only non-overlapping two sigma date range for Mississippian occupation at this site. The latest date for Palisade 2 and the Feature 1 pit is the earliest date for Structure 1 at the two sigma range.

Though Structures 1 and 2 exhibit the strongest evidence for continuity at Ames, the two sigma ranges are separated by 20 years with intercepts separated by 70 years. The continuity expressed by the similar locales and orientations of Structures 2 and 1 suggests their actual dates fall toward the extreme upper and lower reaches of their date ranges, respectively. In assuming a closer temporal relationship between these structures, they are pushed more closely in time with Palisade 2.

The settlement associated with Palisade 2 could have been constructed anywhere from immediately following to over a century after Palisade 1. Intercepts suggest around a century passed between the two events. Dates from Mounds B and D suggest mound building continued well into the Middle Mississippi period, up to and likely during the time of the last town occupation (Appendix A).

Settlement Continuity. The progression of two sigma date ranges and intercepts with the radiocarbon calibration curve agree with the superposition of features in F1-U2. Assessing continuity of settlement from this data is a more complex issue. Clay

(2006:53) aptly notes “our cautionary tendency to view radiocarbon dates from the standpoint of 1- or 2-sigma ranges conceptually tends to reduce ‘events’ to ‘continuity’”. The following considers the range of time indicated by actual events observed through excavation in relation to the entire span of overlapping two sigma radiocarbon date ranges for those events. I use only the information from block F1-U2 as the four dated events represented in this location are superimposed, and, therefore, cannot have existed at the same time.

As a whole, the two sigma date ranges from the earliest to the latest episode in F1-U2 span 370 years at the most. At the least, all four construction events span 120 years. Assuming a maximum use-life of 15 years per event (likely a liberal estimate in the humid climate of west Tennessee), a total of 60 years of standing architecture are represented in this small area (Cook 2007:442; Clay 2006:50). Compared to the minimum range seen in the radiocarbon dates, a total of 60 years is left with no standing architecture in this location. From this viewpoint, it would seem at least one break in continuity must have occurred. This does not mean activity ceased at the site altogether, but it does support potential temporal gaps between the reorganization of architecture in this block.

5. Discussion

Ames Community Development

The layout of the Ames site can be viewed as containing “socially defined spaces” common in Mississippian site arrangements where the mounds, plaza, off-mound habitation, and peripheral areas each denote particular activities and meanings (Lewis et al. 1998:3). Spatial arrangement in off-mound areas would vary through time as a function of particular culture histories and needs. Population shifts or changes in social systems necessitated reorganization or modification. Goddard (2011:48) notes the number of pit signatures in the magnetometry data suggest “18 to 24 structures... in groups of three or four” likely associated in time based on their linear arrangement. This estimate of town size and arrangement refers to the latest known occupation of the site during the late thirteenth century. If the small area represented by Block F1-U2 is any indication, the habitation area probably contains considerably more structures exhibiting differing configurations and orientations throughout the complex Mississippian occupation at Ames.

The area delineated by F1-U2 was first utilized as a habitation locale in the Early Mississippian period during the early to intermediate stages of mound construction. A nearly square 7.52 x 7 m house was built ca. A.D. 1090 using a wall trench construction technique oriented with its long axis around 45°-52° west of north (Figure 23). Next, an extensive wall was constructed through the area on an east-west axis ca. A.D. 1160. Afterward, a large wall trench structure similar in size to the first was constructed in this same location ca. A.D. 1220 measuring 8.4 x 7.58 m, but oriented to the cardinal directions with its long axis north-south. Trench fill contained copious ash and charcoal

indicating this structure burned. This second structure preceded or coincided with construction of a second stouter, more extensive palisade wall and series of large outer-settlement pits ca. A.D. 1260. Finally, a third wall trench structure was built ca. A.D. 1290 utilizing the same location as the previous domicile, but much smaller in size. The final structure measures 6.15 x 5.95 m, again oriented to the cardinal directions, but with a long axis running east-west. This structure also exhibited evidence that it burned.

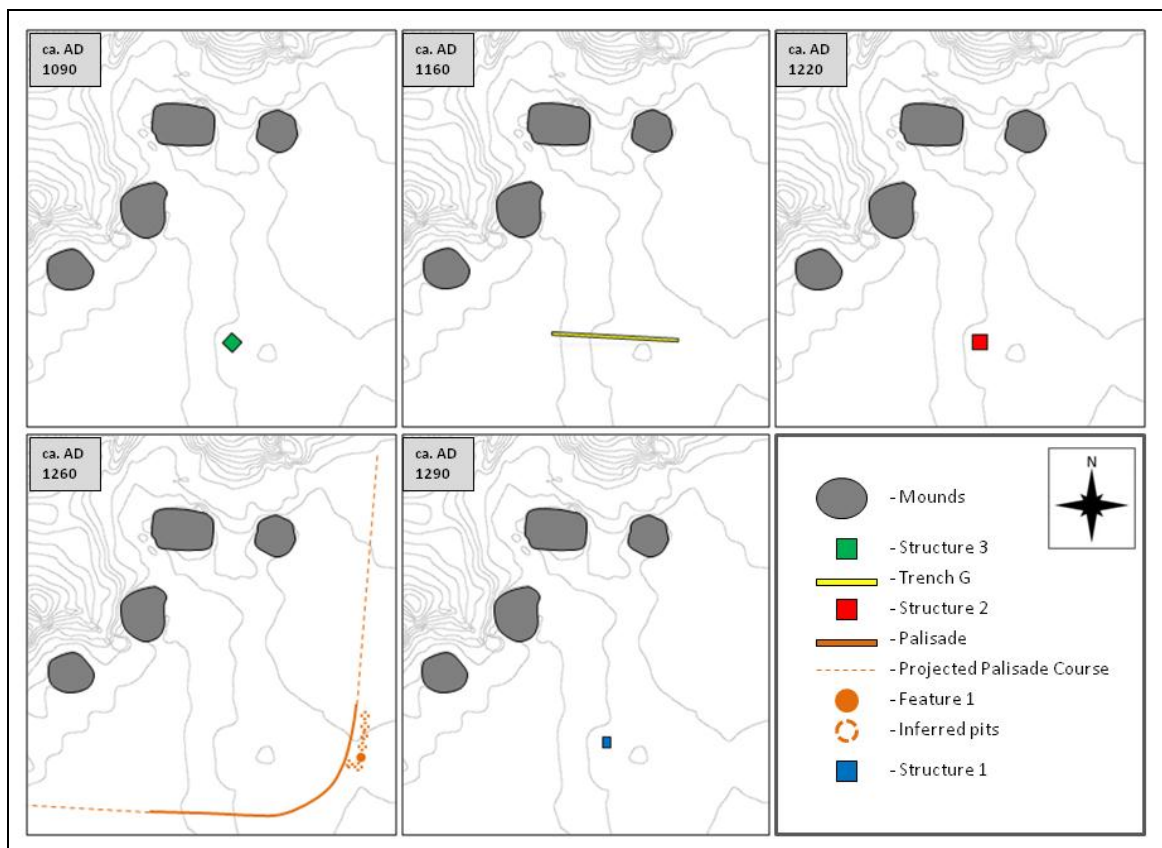


Figure 23. Progression of construction episodes at Ames.

Structure 1 was built within the footprint of Structure 2 possibly reusing identical, or nearly identical, wall locations suggesting little time passed between these last two construction episodes, at most coinciding with the span of human memory as to the

location of Structure 2. Likely, the last structure was rebuilt by the same family unit that occupied the previous domicile upon its destruction emphasizing “the role played by domestic structures as symbols of household identity and continuity” (Hally and Kelly 1998:63). A reduction in domicile size is seen at Ames from Structure 2 to Structure 1. Hally and Kelly (1998:59-60) suggest smaller structures at the King site indicate they were built toward the latter part of site occupation where space constraints from a growing population would limit house size, or resident extended families sectioned into smaller family units through time.

The differential orientation of the earliest structure suggests a change through time in the important axis on which a house was placed, and simulates the alignment of Mounds A, B, and D. These three mounds at Ames are aligned to the summer solstice sunrise and diagonally opposing winter solstice sunset (Mickelson 2008:207). Schroedl (1998:75) notes domestic structures and burials at Toqua, a large Mississippian town dating from A.D. 1200 on the Little Tennessee River in East Tennessee, were often aligned to the solstices in concert with an overall site alignment set by two mounds and a probable charnel house (Lengyel et al. 1999). The shift from a possible solstice orientation to that of the cardinal directions seen in the Ames structures could represent a shift away from certain ideological aspects considered important by early town leaders and residents, either by a community with changing values or an infusion of new ideas and/or people. A major change in the prescribed rules regarding domicile placement could also indicate succession of a chief or elite seeking to emphasize the distinctiveness of their term as leader. The differential orientation of the earliest structure may have simply been an individual decision based on less socially or politically driven motives.

Alternatively, shifts in use of space and structure configurations through time may signify one or more resettlement events at Ames, especially when viewed in light of the potential span of time between the earliest structure and the last palisade. If discontinuity occurred, it seems most likely between the first structure and Trench G based on feature comparisons and orientation. The location of Structure 3 may be coincidental in relation to the two later structures. Structure 3 utilized the same wall trench style of construction, but ultimately varies in aspects of that construction process. The similar trajectories of Trench G and the later palisade suggest some continuity in the population responsible for both construction events. Whether that group consistently occupied the site throughout that span of time is another matter. More information from across the site is necessary to make any finer-grained determinations of continuity and configurational change through time.

Two Palisades. Notably, the change in structure orientation takes place after the construction of a large wall across the same portion of the site. This certainly represents a change in the “socially defined” use of this space away from habitation then back again with a differing arrangement (Lewis et al. 1998:3). The changes suggest at least two alterations in town arrangement took place marked by defensive construction, one occurring around the Early to Middle Mississippi period transition (ca. A.D. 1160 or so) and another toward the end of the Middle Mississippi period (ca. A.D. 1250-1290). The date for Trench G is consistent with the rise in palisade construction across the Southeast after the late eleventh century (Milner 1999). The first extensive palisade was erected around “downtown” Cahokia about A.D. 1150 (Benson et al. 2007:342). Construction of an even stouter palisade wall at Ames likely several decades after the first suggests

reinvigoration of long standing hostilities in the area or a new source of hostile interaction during the latter half of the thirteenth century. Though the extent of prehistoric conflict in the Mississippian Southeast is debated, palisades constitute “one of the few sure signs of intergroup conflicts in prehistoric times” visible in the archaeological record (Milner 2000:46). The nature of prehistoric conflict would have varied in scale based on any number of factors particular to a specific place and time, and may or may not have involved a ritual element (Lambert 2002; Milner 1999). Hostilities were expressed at various levels of intensity from small to large skirmishes, raids by a small group to destruction of an entire village, and opportunistic to provoked and premeditated attacks (Milner 1999; Milner 2000).

Palisade construction at Ames coincides with two periods of intense drought recognized in recent paleoclimate studies as occurring in the mid twelfth and late thirteenth centuries (Benson et al. 2007). Benson et al. (2007) describe how these periods correspond to shifts in activity at Cahokia in Illinois beginning with defensive construction and population declines among outlying farming settlements around A.D. 1150. Climatic shifts affecting an agrarian society might cause competition over productive land, migrating populations seeking greener pastures, and increased hostilities through raiding and warfare. Any of these factors could result in the need for defensive, protective structures.

As the full extent of Trench G is unknown, the feature can only tentatively be referred to as a palisade. Trench G may also represent a lesser fence or wall functioning more as a privacy screen for ritual or elite activities inhibiting access to special areas (Pauketat 2007). Along similar lines, Kidder (1998:149) notes a lack of palisade

architecture among late prehistoric Plaquemine sites in the Lower Mississippi Valley suggesting trends toward nucleation have more to do with increasing concentrations of power, exclusive elitist activities, and “a growing gulf between those on the inside and those on the outside” rather than indications of warfare and hostility. Pauketat (2007:101) writes of “social distance” as “an unanticipated outcome” of building walls for other purposes including defense. The small portion of the site investigated allows only speculation on this point. The similar trajectories of the two temporally distinct walls suggest a similar function, and as the results of Milner’s (2000:57) palisade study show, Palisade 1 is similar in size to other Mississippian defensive structures across the Southeast.

The existence of a second, earlier palisade has important implications for the occupational sequence at Ames. First, Palisade 2 has a greater extent and encompasses far more area than Palisade 1 indicating an expansion in the size of the enclosed town. Second, the data suggest Palisade 2 was much stouter in construction than the older Palisade 1, as indicated by a greater depth and dimension of the trench and posts. The size difference could potentially be evidence of differing function as discussed above, but perhaps this difference is simply due to a lack of resource access or less intensive labor investment in constructing Trench G as a defensive wall. A looming threat might be cause for rushed palisade construction resulting in a less intensive labor effort as Webb (1952:28) and Schroeder (2006:126) suggested regarding a palisade with smaller, shallower posts at Jonathan Creek. Perhaps a growing population provided the means necessary to construct the larger, later wall. The increase in sturdiness over time may reflect increased magnitude of the danger against which the community was defending

itself. As Lambert (2002:209) states, “the time and material resources people deem necessary for protection can help define perceptions of threat.”

Regional Context

The following describes contemporaneous mound sites in the region including Denmark (40MD85), Jonathan Creek (14ML4), Obion (40HY14), and Owl Creek (22CS502). Bolivar (40HM2) and Kenton (40OB4) are both Early Mississippian upland mound sites in west Tennessee, but neither site has been investigated (Mainfort 1992). Attributes of Chucalissa (40SY1) near the Mississippi River and three sites in the hinterlands of southwest Kentucky are also discussed.

The Obion site in Henry County, Tennessee contains seven mounds constructed between A.D. 1000 and 1200 with occupation at the site lasting until A.D. 1300 (Garland 1992). Obion demonstrates a complex Early to Middle Mississippian occupation. Limited off-mound excavations were conducted by the University of Tennessee in 1940 locating wall trench features in test pits adjacent to the largest mound and on the plaza periphery, but no full structure plans were exposed (Garland 1992:41). Based on this dataset, Garland (1992:37) notes the wall trench type was the “norm” for off-mound village areas tested at the site. Obion may have had an extensive palisade as low ridges surrounding the mounds and possible village area were recorded historically as such (Garland 1992:37).

Owl Creek in north Mississippi is a five mound site situated in an upland environment away from a major river. Like Obion, excavations were generally limited to the mounds. Evidence of multiple wall trench structures was recovered from within mound contexts, but the final conclusions assert the site lacked town-scale habitation

(Rafferty 1995). Owl Creek dates as late as the early thirteenth century, and is similar in size to Ames (Goddard 2011:51; Rafferty 1995). Further, shovel tests conducted at both sites recovered similar artifact counts suggesting Owl Creek may also contain more off-mound activity than previously thought (Goddard 2011:53).

The Denmark site, located on a tributary of the Hatchie River in Madison County, Tennessee, contains three mounds. Magnetometry survey at Denmark suggests an abundance of structural remains near the mounds, but no evidence of a palisade, ditch, or earthen embankment has been recovered. Magnetometry results and preliminary excavations at Denmark suggest the site contains several structures in two distinct clusters. Ongoing investigations at Denmark mounds have partially excavated a Mississippian wall trench structure measuring 5.42 x 3.9 m (with trench widths subtracted). A charcoal sample taken from direct association with ceramics on the floor of this structure returned a date at 710 ± 30 BP (Beta-320578; charred material; $\delta^{13}\text{C} = -25.8$ ‰) corresponding with Structure 1 at Ames (Scott Hadley, personal communication 2012). Unfortunately, time constraints have not allowed complete removal of the midden fill overlying this structure, but some comparisons with the Ames structures can still be drawn from the available data.

Firstly, this structure differs from those at Ames in that the house floor has been preserved. Either the use of a house basin has resulted in floor preservation or less surface truncation at Denmark has preserved this architectural element. The former is more likely as use of a basin seems to be a contemporaneous variant of the wall trench architectural style (Schroeder 2011:314). Six of 52 wall trench structures identified at Jonathan Creek were erected in semi-subterranean basins (Webb 1952:58). Wall trench

widths within the Denmark structure range from 15-30 cm similar to those seen at Ames, but overall the structure is smaller in size than Structure 1 at Ames by about 15 m². This structure also exhibits a distinct lack of interior pit features suggesting use of outdoor storage areas, which also appears to be the case at Ames.

Chucalissa is located along a bluff above Nonconnah Creek in southwest Tennessee. The site contains two mounds with no evidence for a palisade (McNutt et al. 2012; Smith 1996). Multiple excavations since the 1940s have uncovered evidence of wall-trench structures, some oriented to the cardinal directions, in mound and off-mound contexts (McNutt et al. 2012; Smith 1996:112). Several radiocarbon dates suggest Mississippian occupation at this site primarily spanned the thirteenth to sixteenth centuries (McNutt et al. 2012:234, 236-237). The dates from Chucalissa overlap those from Ames, but activity at Chucalissa lasted well into the Late Mississippian period. The larger Mound A at Chucalissa was first constructed about the time of, or after, the latest known occupation at Ames (McNutt et al. 2012:243). Additionally, a possible plaza reorientation has been interpreted as resettlement of the site after a period of abandonment sometime after the latter part of the Middle Mississippian period (McNutt et al. 2012:243).

Jonathan Creek in southwestern Kentucky provides a particularly useful analogue to Ames. This site was excavated in the 1940s prior to inundation from Kentucky dam placed on the Lower Tennessee River. Due to the nature of the investigation, a large portion of the site was horizontally exposed revealing multiple superimposed structures and palisade lines (Webb 1952). Jonathan Creek contained the three feature types that concern this research including wall trench structures, palisades, and large pits. Three

wall trench structures dated to ca. A.D. 1260 with two sigma ranges similar to that of Structure 2 and Palisade 2 at Ames (Schroeder 2011:314). The site also demonstrates shifts in functional use of space as the site grew and shrank through time seen in alternating habitation and palisade features. Schroeder (2007:146) concluded the space occupied by a small mound at the site changed functionally through time from residential use to lying on the periphery of the town then shifting to mortuary use.

Other sites in southwest Kentucky exhibit evidence for small Mississippian palisaded communities reorganized through time including Annis Village (Hammerstedt 2007), Andalex, and Morris (Clay 2006). Annis Village dates between the twelfth and fifteenth centuries (Hammerstedt 2007:115). The site exhibits a mound containing various stages of construction and summit structures, several off-mound wall trench structures, and three successive palisades enlarging the town area through time. Three submound wall trench structures at Andalex (15HK22) in Kentucky, one of which dates roughly contemporaneous to Structure 3 at Ames, are also oriented similarly to Structure 3 with long axes northwest-southeast, but smaller in size (Clay 2006:50). At the Morris site, Clay (2006:58) suggests two distinct orientations apparent among the structures potentially represent separate occupations, though temporal affiliations at this site are unclear.

Ames demonstrates a relationship to the broader Southeastern region through similarities ranging from a classic Mississippian town layout to construction methods utilized by inhabitants to build their houses and defensive walls. These similarities indicate Ames was connected to a long-lasting network of Mississippian interaction and exchange despite its location away from a major river. This research identified likenesses

with other southeastern Mississippian sites not only in how the landscape was built, arranged, and oriented, but also in how these aspects changed through time.

6. Conclusions and Future Research Avenues

Results of this study provide a glimpse into the complex history of a west Tennessee Mississippian mound site. Excavations in two locations combined with previous research at Ames enabled general projections about community patterning through time. Evidence supports the hypothesis that the town plan changed through time including the development of defensive architecture. Multiple domestic construction events in one location confirm differing organizational patterns were utilized by occupants through time. Differing functional use of space through time is indicated by the superposition of palisade and structure features. Distinct radiocarbon date ranges confirm Palisade 2 was a temporally separate construction event from Palisade 1 that expanded the enclosed town area. The two palisades imply community growth and suggest a Middle Mississippi period reorganization episode at Ames which included expansion of site area and changes in structure orientation. Analysis of the large pit features suggests differing functional uses across space dependent on where the pits lie in relation to the overall site plan.

Whether settlement was continuous or not is more difficult to ascertain. Settlement continuity throughout the span of Mississippian occupation is neither supported nor refuted by the suite of radiocarbon dates amassed in conjunction with this research. Radiocarbon date ranges are generally overlapping, but cover a wide enough span of time that distinct settlement events are possible. Use of the same locations and similar methods in domestic construction suggest continuity of occupation. Differences in structure orientation before and after a shift in functional use of the habitation area may be evidence for discontinuous events. In either case, mound building continued

throughout the span of occupation. Data presented in this thesis represents only a small portion of the site. The staggered but overlapping nature of radiocarbon dates from these areas suggest further exploration in other habitation locales will fill any temporal gaps.

The results reveal the dynamic history of a mound and town site in the hinterlands of west Tennessee. Improving understanding of community development at Ames during the Mississippi period has implications for other mound sites in and around western Tennessee that have not been as thoroughly investigated in off-mound areas.

Future Work

Block F1-U2 represents an archaeologically complex area. Several aspects warrant further investigation. The large Feature 100 pit has yet to be dated. A confirmed temporal association with Structure 1 would support chronological assertions made above regarding the inferred town plan of the latest occupation. Further testing to determine the true extent Trench G would confirm its designation as a palisade, and the area it surrounded. Was this a site encompassing palisade wall similar to the one built later? If so, how was the site organized within this smaller space?

What appears to be a large round structure in the plaza area can be seen in the magnetometry data. This and other isolated potential structures have been recognized in the magnetometry results, but have yet to be confirmed as such. Determining the functional and temporal relationships of these structures, especially those located in the plaza area, may shed light on site organization through time beyond the change in structure orientation discussed in this work. Are other architectural forms besides open cornered wall trench structures represented at Ames? Were contemporary domestic structures oriented similarly across the site? Was a linear distribution of structures the

norm throughout the span of Mississippian occupation or was this phenomena unique to the inferred town plan ca. A.D. 1290? How do contemporary houses outside of the organized line compare? Continued efforts in the off-mound areas of this site will contribute to answering these questions.

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Appendix A. Full Suite of Ames Radiocarbon Dates

Sample	Provenience	Material	$^{13}\text{C}/^{12}\text{C}$	^{14}C AGE	Cal. Age (1 Sigma)	Cal. Age (2 Sigma)	Intercepts
Beta 343319	Structure 3 (Trench K)	charred material	-26.7 o/oo	950 +/- 30 BP	AD 1030 to 1050	AD 1020 to 1160	AD 1040
					AD 1080 to 1130		AD 1110
					AD 1130 to 1150		AD 1120
Beta 343318	Earlier Palisade (Trench G)	charred material	-25.5 o/oo	890 +/- 30 BP	AD 1050 to 1080	AD 1040 to 1110 AD 1120 to 1220	AD 1160
					AD 1130 to 1130		
					AD 1150 to 1190 AD 1200 to 1210		
Beta 343782	Structure 2 (Trench J)	charred material	-24.1 o/oo	830 +/- 30 BP	AD 1190 to 1200	AD 1160 to 1260	AD 1220
					AD 1210 to 1230		
					AD 1230 to 1240 AD 1250 to 1250		
Beta 342278	Feature 1 (Large Pit outside Palisade)	charred material	-25.0 o/oo	770 +/- 30 BP	AD 1230 to 1230	AD 1220 to 1280	AD 1260
					AD 1240 to 1250		
					AD 1250 to 1270		
Beta 321853	Later Palisade	wood	-28.2 o/oo	770 +/- 30 BP	AD 1230 to 1230	AD 1220 to 1280	AD 1260
					AD 1240 to 1250		
					AD 1250 to 1270		
Beta 301385	Structure 1 (Trench A)	charred material	-24.9 o/oo	670 +/- 30 BP	AD 1280 to 1300	AD 1280 to 1320 AD 1350 to 1390	AD 1290
					AD 1370 to 1380		
Beta 330302	Mound D Lower date	charred material	-24.4 o/oo	2930 +/- 40 BP		BC 1260 to 1010	
Beta 249932	Basal Mound B	charred material	-24.9 o/oo	1330 +/- 40 BP	AD 660 to 690	AD 640 to 770	AD 670
Beta 234401	Mound D, L. Woodland fill	charred material	-25.4 o/oo	1270 +/- 40 BP		AD 660 to 870	

Note: Calibrated with INTCAL09 (Oeschger et al. 1975; Stuiver et al. 1993; Reimer et al. 2009; Heaton et al.

Appendix A continued. Full Suite of Ames Radiocarbon Dates

Sample	Provenience	Material	$^{13}\text{C}/^{12}\text{C}$	^{14}C AGE	Cal Age (1 Sigma)	Cal Age (2 Sigma)	Intercepts
Beta 249931	Middle Mound B	wood	-25.8 o/oo	930 +/- 40 BP	AD 1030 to 1160	AD 1020 to 1210	AD 1050 AD 1090 AD 1130 AD 1140
Beta 234402	Mound D Strat IX, Burned Structure	charred material	-17.7 o/oo	840 +/- 40 BP	AD 1170 to 1240	AD 1060 to 1080 AD 1150 to 1270	AD 1210

Note: Calibrated with INTCAL09 (Oeschger et al. 1975; Stuiver et al. 1993; Reimer et al. 2009; Heaton et al.

Appendix B. Ames Artifact Catalogue

Catalog #	F# - U#	Unit	Provenience	Depth	Type	Lithic Stage/ Surf. Treatment	Temper	Body/ Rim	Count	Notes
2012-396-6	F1 - U2	8	F 100	Lvl. 3	Bone				3	
2012-396-3	F1 - U2	8	F 100	Lvl. 3	Ceramic	Unidentified	Shell	Body	4	
2012-429-3	F1 - U2	1-2	F 100	Lvl. 3	Ceramic	Unidentified	Shell	Body	7	
2012-396-4	F1 - U2	8	F 100	Lvl. 3	Ceramic	Plain	Shell/Grog	Body	1	
2012-396-5	F1 - U2	8	F 100	Lvl. 3	Ceramic	Plain	Shell/Grog	Rim	1	
2012-429-4	F1 - U2	1-2	F 100	Lvl. 3	Daub				2	
2012-429-2	F1 - U2	1-2	F 100	Lvl. 3	Lithic	Biface Fragment			1	projectile point tip
2012-396-1	F1 - U2	8	F 100	Lvl. 3	Lithic	Secondary Flake			1	
2012-396-2	F1 - U2	8	F 100	Lvl. 3	Lithic	Tertiary Flake			1	
2012-429-1	F1 - U2	1-2	F 100	Lvl. 3	Lithic	Flake Fragment			2	
2012-396-7	F1 - U2	8	F 100	Lvl. 3	Sandstone				1	coarse-grained
2012-429-5	F1 - U2	1-2	F 100	Lvl. 3	Sandstone				3	coarse-grained
2012-399-1	F1 - U2	8	F 100	70 cm	Lithic	Biface Fragment			1	heated
2011-077-6	F1 - U2	2	F 100	Lvl. 1	Bone				2	
2011-077-4	F1 - U2	2	F 100	Lvl. 1	Ceramic	Plain	Shell	Body	1	poss. Film
2011-156-1	F1 - U2	2	F 100	Lvl. 1	Ceramic	Plain	Shell	Body	1	poss. Clay in temper
2011-077-3	F1 - U2	2	F 100	Lvl. 1	Ceramic	Unidentified	Shell/Grog	Body	1	
2011-077-5	F1 - U2	2	F 100	Lvl. 1	Daub				1	
2011-156-2	F1 - U2	2	F 100	Lvl. 1	Daub				1	
2011-077-1	F1 - U2	2	F 100	Lvl. 1	Lithic	Tertiary Flake			2	
2011-077-2	F1 - U2	2	F 100	Lvl. 1	Lithic	Flake Tool			1	
2011-077-8	F1 - U2	2	F 100	Lvl. 1	Sandstone, poss. FCR				1	
2011-077-7	F1 - U2	2	F 100	Lvl. 1	Stone				1	quartzite
2012-412-8	F1 - U2	8	F 100	Lvl. 3	Bone				6	
2012-412-6	F1 - U2	8	F 100	Lvl. 3	Ceramic	N/A	N/A	N/A	2	burned
2012-412-3	F1 - U2	8	F 100	Lvl. 3	Ceramic	Plain	Shell	Body	3	
2012-412-4	F1 - U2	8	F 100	Lvl. 3	Ceramic	Plain	Shell/Grog	Body	1	
2012-412-5	F1 - U2	8	F 100	Lvl. 3	Ceramic	Unidentified	Shell/Grog	Body	3	
2012-412-7	F1 - U2	8	F 100	Lvl. 3	Daub				3	
2012-412-1	F1 - U2	8	F 100	Lvl. 3	Lithic	Tertiary Flake			4	1 w/ poss. Modified edge

Catalog #	F# - U#	Unit	Provenience	Depth	Type	Lithic Stage/ Surf. Treatment	Temper	Body/ Rim	Count	Notes
2012-412-2	F1 - U2	8	F 100	Lvl. 3	Lithic	Flake Fragment			2	
2012-412-10	F1 - U2	8	F 100	Lvl. 3	Sandstone				2	
2012-412-9	F1 - U2	8	F 100	Lvl. 3	Sandstone, poss. FCR				1	
2011-216-3	F1 - U2	2	F 100 (NE Quad)	Lvl. 1	Ceramic	Plain	Shell/Grog	Body	1	
2011-216-2	F1 - U2	2	F 100 (NE Quad)	Lvl. 1	Ceramic	Unidentified	Shell/Sand	Body	1	
2011-216-4	F1 - U2	2	F 100 (NE Quad)	Lvl. 1	Daub				5	
2011-216-1	F1 - U2	2	F 100 (NE Quad)	Lvl. 1	Lithic	Biface			1	small, poss. Scraper
2011-216-5	F1 - U2	2	F 100 (NE Quad)	Lvl. 1	Sandstone				26	
2012-377-7	F1 - U2	2	F 100 (Zone A)	Lvl. 2	Bone				4	plus unprocessed sample in foil
2012-377-5	F1 - U2	2	F 100 (Zone A)	Lvl. 2	Ceramic	Plain	Shell	Body	1	
2012-377-4	F1 - U2	2	F 100 (Zone A)	Lvl. 2	Ceramic	Plain	Shell/Grog	Body	2	
2012-377-3	F1 - U2	2	F 100 (Zone A)	Lvl. 2	Ceramic	Unidentified	Shell/Grog/Sand	Body	1	
2012-377-6	F1 - U2	2	F 100 (Zone A)	Lvl. 2	Daub				7	
2011-129-1	F1 - U2	2	F 100 (Zone A)	Lvl. 2	Lithic	Secondary Flake			1	
2012-377-1	F1 - U2	2	F 100 (Zone A)	Lvl. 2	Lithic	Tertiary Flake			1	
2012-377-2	F1 - U2	2	F 100 (Zone A)	Lvl. 2	Lithic	Flake Fragment			2	
2011-129-2	F1 - U2	2	F 100 (Zone A)	Lvl. 2	Sandstone				1	burned
2012-377-9	F1 - U2	2	F 100 (Zone A)	Lvl. 2	Sandstone				4	
2012-377-8	F1 - U2	2	F 100 (Zone A)	Lvl. 2	Stone				1	quartzite pebble
2012-322-1	F1 - U2	2	F 100 (Zone B)	Lvl. 2	Ceramic	Plain	Shell/Grog	Body	1	
2011-159-1	F1 - U2	2	F 100 (Zone B)	Lvl. 2	Sandstone				4	
2012-382-12	F1 - U2	2	F 100 (Zone C)	Lvl. 1	Bone				?	unprocessed sample in foil
2011-247-2	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Ceramic	N/A	N/A	N/A	1	unidentifiable artifact
2011-247-3	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Ceramic	N/A	N/A	N/A	1	burned
2011-247-4	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Ceramic	Plain	Shell	Body	1	
2011-194-1	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Ceramic	Unidentified	Shell	Body	1	
2012-382-4	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Ceramic	Unidentified	Shell	Body	15	
2011-247-5	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Ceramic	Plain	Shell/Grog	Body	1	
2012-382-6	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Ceramic	Unidentified	Shell/Grog	Body	2	
2012-382-5	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Ceramic	Unidentified	Shell/Grog/Sand	Body	1	
2012-382-8	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Charcoal				2	1 possible nutshell
2011-194-2	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Daub				1	

Catalog #	F# - U#	Unit	Provenience	Depth	Type	Lithic Stage/ Surf. Treatment	Temper	Body/ Rim	Count	Notes
2011-247-6	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Daub				5	
2012-382-7	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Daub				8	
2012-382-11	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Lithic	Biface Fragment			11	tip
2012-382-1	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Lithic	Secondary Flake			4	
2011-247-1	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Lithic	Tertiary Flake			2	
2012-382-2	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Lithic	Tertiary Flake			2	
2012-382-3	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Lithic	Flake Fragment			3	
2011-194-3	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Sandstone				15	
2011-247-7	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Sandstone				50	
2012-382-9	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Sandstone				3	fine-grained
2012-382-10	F1 - U2	2	F 100 (Zone C)	Lvl. 2	Sandstone				26	
2011-204-3	F1 - U2	2	F 100 (Zone C2)	Lvl. 2	Ceramic	Plain	Shell	Body	3	
2011-204-2	F1 - U2	2	F 100 (Zone C2)	Lvl. 2	Ceramic	Unidentified	Shell	Body	1	
2011-204-5	F1 - U2	2	F 100 (Zone C2)	Lvl. 2	Ceramic	Plain	Shell/Grog	Body	1	
2011-204-4	F1 - U2	2	F 100 (Zone C2)	Lvl. 2	Ceramic	Unidentified	Shell/Grog/Sand	Body	2	
2011-204-6	F1 - U2	2	F 100 (Zone C2)	Lvl. 2	Daub				1	
2011-204-1	F1 - U2	2	F 100 (Zone C2)	Lvl. 2	Lithic	Shatter			1	
2011-204-7	F1 - U2	2	F 100 (Zone C2)	Lvl. 2	Sandstone				30	
2011-248-2	F1 - U2	2	F 100 (Zone D)	Lvl. 2	Ceramic	Unidentified	Shell	Body	2	
2012-324-1	F1 - U2	2	F 100 (Zone D)	Lvl. 2	Ceramic	Plain	Shell/Grog	Body	1	
2011-248-3	F1 - U2	2	F 100 (Zone D)	Lvl. 2	Daub				3	
2011-277-2	F1 - U2	2	F 100 (Zone D)	Lvl. 2	Daub				1	
2011-277-1	F1 - U2	2	F 100 (Zone D)	Lvl. 2	Lithic	Secondary Flake			1	
2011-248-1	F1 - U2	2	F 100 (Zone D)	Lvl. 2	Lithic	Shatter			1	
2011-248-4	F1 - U2	2	F 100 (Zone D)	Lvl. 2	Sandstone				12	
2011-277-3	F1 - U2	2	F 100 (Zone D)	Lvl. 2	Sandstone				5	
2012-325-13	F1 - U2	2	F 100 (Zone E)	Lvl. 1	Bone				?	unprocessed sample in foil
2012-345-9	F1 - U2	8	F 100 (Zone E)	Lvl. 1	Bone				16	plus unprocessed sample in foil
2012-345-4	F1 - U2	8	F 100 (Zone E)	Lvl. 1	Ceramic	Unidentified	Clay	Body	3	
2012-325-5	F1 - U2	2	F 100 (Zone E)	Lvl. 1	Ceramic	Unidentified	Grog/Quartz	Body	1	possible other tempers
2012-345-5	F1 - U2	8	F 100 (Zone E)	Lvl. 1	Ceramic	Plain	Shell	Body	3	
2012-345-8	F1 - U2	8	F 100 (Zone E)	Lvl. 1	Ceramic	Plain	Shell	Body	3	

Catalog #	F# - U#	Unit	Provenience	Depth	Type	Lithic Stage/ Surf. Treatment	Temper	Body/ Rim	Count	Notes
2012-345-8B	F1 - U2	8	F 100 (Zone E)	Lvl. 1	Ceramic	Plain	Shell	Body	2	poss. Slip
2012-325-6	F1 - U2	2	F 100 (Zone E)	Lvl. 1	Ceramic	Unidentified	Shell	Body	16	
2012-345-5A	F1 - U2	8	F 100 (Zone E)	Lvl. 1	Ceramic	Unidentified	Shell	Body	1	
2012-345-8A	F1 - U2	8	F 100 (Zone E)	Lvl. 1	Ceramic	Unidentified	Shell	Body	20	
2012-325-8	F1 - U2	2	F 100 (Zone E)	Lvl. 1	Ceramic	Plain	Shell/Grog	Body	2	
2012-325-7	F1 - U2	2	F 100 (Zone E)	Lvl. 1	Ceramic	Unidentified	Shell/Grog	Body	4	
2012-345-6	F1 - U2	8	F 100 (Zone E)	Lvl. 1	Ceramic	Plain	Shell/Grog/Sand	Body	1	
2012-325-4	F1 - U2	2	F 100 (Zone E)	Lvl. 1	Ceramic	Unidentified	Shell/Grog/Sand	Body	1	
2012-345-7	F1 - U2	8	F 100 (Zone E)	Lvl. 1	Ceramic	Unidentified	Unidentified	Body	3	
2012-325-9	F1 - U2	2	F 100 (Zone E)	Lvl. 1	Daub				8	
2012-345-10	F1 - U2	8	F 100 (Zone E)	Lvl. 1	Daub				15	
2012-325-1	F1 - U2	2	F 100 (Zone E)	Lvl. 1	Lithic	Primary Flake			1	
2012-325-2	F1 - U2	2	F 100 (Zone E)	Lvl. 1	Lithic	Secondary Flake			2	
2012-345-1	F1 - U2	8	F 100 (Zone E)	Lvl. 1	Lithic	Secondary Flake			7	
2012-325-3	F1 - U2	2	F 100 (Zone E)	Lvl. 1	Lithic	Tertiary Flake			3	
2012-345-2	F1 - U2	8	F 100 (Zone E)	Lvl. 1	Lithic	Tertiary Flake			3	
2012-345-3	F1 - U2	8	F 100 (Zone E)	Lvl. 1	Lithic	Flake Fragment			6	
2012-325-10	F1 - U2	2	F 100 (Zone E)	Lvl. 1	Sandstone				2	
2012-325-12	F1 - U2	2	F 100 (Zone E)	Lvl. 1	Sandstone				30	more than 30
2012-345-11	F1 - U2	8	F 100 (Zone E)	Lvl. 1	Sandstone				3	coarse-grained
2012-345-12	F1 - U2	8	F 100 (Zone E)	Lvl. 1	Sandstone				30	more than 30
2012-325-11	F1 - U2	2	F 100 (Zone E)	Lvl. 1	Sandstone, poss. FCR				2	
2012-369-13	F1 - U2	8	F 100 (Zone E)	Lvl. 2	Bone				16	plus unprocessed sample in foil
2012-420-3	F1 - U2	2	F 100 (Zone E)	Lvl. 2	Ceramic	Unidentified	Grog	Body	1	
2012-420-5	F1 - U2	2	F 100 (Zone E)	Lvl. 2	Ceramic	Plain	Shell	Body	3	
2012-369-7	F1 - U2	8	F 100 (Zone E)	Lvl. 2	Ceramic	Plain	Shell	Body	6	
2012-420-6	F1 - U2	2	F 100 (Zone E)	Lvl. 2	Ceramic	Unidentified	Shell	Body	11	
2012-369-6	F1 - U2	8	F 100 (Zone E)	Lvl. 2	Ceramic	Unidentified	Shell	Body	25	
2012-369-9	F1 - U2	8	F 100 (Zone E)	Lvl. 2	Ceramic	Plain	Shell/Grog	Body	7	
2012-420-4	F1 - U2	2	F 100 (Zone E)	Lvl. 2	Ceramic	Unidentified	Shell/Grog	Body	1	
2012-369-8	F1 - U2	8	F 100 (Zone E)	Lvl. 2	Ceramic	Unidentified	Shell/Grog	Body	2	
2012-369-10	F1 - U2	8	F 100 (Zone E)	Lvl. 2	Ceramic	Plain	Shell/Grog/Sand	Body	3	

Catalog #	F# - U#	Unit	Provenience	Depth	Type	Lithic Stage/ Surf. Treatment	Temper	Body/ Rim	Count	Notes
2012-369-11	F1 - U2	8	F 100 (Zone E)	Lvl. 2	Ceramic	Plain	Shell/Sand	Body	1	
2012-369-14	F1 - U2	8	F 100 (Zone E)	Lvl. 2	Charcoal				7	
2012-420-7	F1 - U2	2	F 100 (Zone E)	Lvl. 2	Daub				7	
2012-369-12	F1 - U2	8	F 100 (Zone E)	Lvl. 2	Daub				18	
2012-369-1	F1 - U2	8	F 100 (Zone E)	Lvl. 2	Lithic	Secondary Flake			6	
2012-420-1	F1 - U2	2	F 100 (Zone E)	Lvl. 2	Lithic	Tertiary Flake			2	
2012-369-2	F1 - U2	8	F 100 (Zone E)	Lvl. 2	Lithic	Tertiary Flake			3	
2012-420-2	F1 - U2	2	F 100 (Zone E)	Lvl. 2	Lithic	Flake Fragment			2	
2012-369-3	F1 - U2	8	F 100 (Zone E)	Lvl. 2	Lithic	Flake Fragment			5	
2012-369-4	F1 - U2	8	F 100 (Zone E)	Lvl. 2	Lithic	Shatter			3	
2012-369-5	F1 - U2	8	F 100 (Zone E)	Lvl. 2	Lithic	Biface fragments			2	1 projectile point base
2012-420-9	F1 - U2	2	F 100 (Zone E)	Lvl. 2	Sandstone				38	
2012-369-16	F1 - U2	8	F 100 (Zone E)	Lvl. 2	Sandstone				6	coarse-grained
2012-369-17	F1 - U2	8	F 100 (Zone E)	Lvl. 2	Sandstone				20	
2012-420-8	F1 - U2	2	F 100 (Zone E)	Lvl. 2	Sandstone, poss. FCR				3	
2012-369-15	F1 - U2	8	F 100 (Zone E)	Lvl. 2	Sandstone, poss. FCR				4	
2011-313-6	F1 - U2	2	F 100 (Zone E)	Lvl. 3	Bone				3	
2011-313-4	F1 - U2	2	F 100 (Zone E)	Lvl. 3	Ceramic	Unidentified	Sand	Body	1	
2011-313-3	F1 - U2	2	F 100 (Zone E)	Lvl. 3	Ceramic	Unidentified	Shell	Body	3	
2011-313-5	F1 - U2	2	F 100 (Zone E)	Lvl. 3	Daub				3	
2011-313-1	F1 - U2	2	F 100 (Zone E)	Lvl. 3	Lithic	Secondary Flake			4	
2011-313-2	F1 - U2	2	F 100 (Zone E)	Lvl. 3	Lithic	Shatter			2	
2011-313-7	F1 - U2	2	F 100 (Zone E)	Lvl. 3	Sandstone				3	angular w/ diff. grain sizes
2012-342-7	F1 - U2	2	F 100 (Zone F)		Ceramic	Unidentified	Clay	Body	3	
2012-342-5	F1 - U2	2	F 100 (Zone F)		Ceramic	Plain	Shell	Body	1	
2012-342-4	F1 - U2	2	F 100 (Zone F)		Ceramic	Unidentified	Shell	Body	9	
2012-342-6	F1 - U2	2	F 100 (Zone F)		Ceramic	Unidentified	Shell/Grog	Body	5	
2012-342-3	F1 - U2	2	F 100 (Zone F)		Ceramic	Plain	Shell/Grog/Quartz	Body	1	poss. Slip
2012-342-1	F1 - U2	2	F 100 (Zone F)		Lithic	Tertiary Flake			1	
2012-342-2	F1 - U2	2	F 100 (Zone F)		Lithic	Flake Fragment			1	
2012-342-9	F1 - U2	2	F 100 (Zone F)		Sandstone				30	more than 30
2012-342-8	F1 - U2	2	F 100 (Zone F)		Sandstone, poss. FCR				3	

Catalog #	F# - U#	Unit	Provenience	Depth	Type	Lithic Stage/ Surf. Treatment	Temper	Body/ Rim	Count	Notes
2012-342-10	F1 - U2	2	F 100 (Zone F)		Stone				1	quartz conglomerate
2011-419-1	F1 - U2	11	F 104	Lvl. 3	Daub				1	
2011-128-2	F1 - U2	11	F 107	Lvl. 2	Ceramic	Unidentified	Sand	Body	1	eroded dec, poss. Incised
2011-128-1	F1 - U2	11	F 107	Lvl. 2	Ceramic	Plain	Shell	Body	2	some red coloration on surface
2011-128-3	F1 - U2	11	F 107	Lvl. 2	Daub				1	
2011-128-4	F1 - U2	11	F 107	Lvl. 2	Lithic	Flake Fragment			1	
2011-128-5	F1 - U2	11	F 107	Lvl. 2	Sandstone, poss. FCR				1	
2011-144-3	F1 - U2	11	F 107B	Lvl. 2	Ceramic	Unidentified	Shell	Body	6	
2011-144-4	F1 - U2	11	F 107B	Lvl. 2	Ceramic	Unidentified	Shell	Body	1	red coloration on surface
2011-144-7	F1 - U2	11	F 107B	Lvl. 2	Charcoal				3	
2011-144-5	F1 - U2	11	F 107B	Lvl. 2	Daub				1	
2011-144-1	F1 - U2	11	F 107B	Lvl. 2	Lithic	Secondary Flake			2	
2011-144-2	F1 - U2	11	F 107B	Lvl. 2	Lithic	Tertiary Flake			1	
2011-144-6	F1 - U2	11	F 107B	Lvl. 2	Sandstone, poss. FCR				1	
2011-179-1	F1 - U2	11	F 111	Lvl. 3	Ceramic	Plain	Shell	Body	1	
2011-179-2	F1 - U2	11	F 111	Lvl. 3	Daub				10	
2012-421-3	F1 - U2	10	F 113 (w/in F 117)	0-5 cm	Ceramic	Unidentified	Shell	Body	4	
2012-421-1	F1 - U2	10	F 113 (w/in F 117)	0-5 cm	Lithic	Secondary Flake			1	
2012-421-2	F1 - U2	10	F 113 (w/in F 117)	0-5 cm	Lithic	Flake Fragment			1	
2011-291-1	F1 - U2	10	F 113 (w/in F 117)	Lvl. 1-3	Ceramic	Plain	Shell	Body	1	
2011-291-3	F1 - U2	10	F 113 (w/in F 117)	Lvl. 1-3	Daub				1	
2011-291-2	F1 - U2	10	F 113 (w/in F 117)	Lvl. 1-3	Lithic	Tertiary Flake			2	
2011-151-1	F1 - U2	16	F 116	Lvl. 1	Ceramic	Plain	Shell/Grog	Body	1	
2011-135-1	F1 - U2	10	F 117	Lvl. 1	Daub				3	
2011-135-2	F1 - U2	10	F 117	Lvl. 1	Sandstone				3	
2011-153-3	F1 - U2	10	F 117	Lvl. 2	Bone				1	
2011-153-1	F1 - U2	10	F 117	Lvl. 2	Ceramic	Plain	Shell	Body	1	
2011-153-2	F1 - U2	10	F 117	Lvl. 2	Daub				3	
2011-157-1	F1 - U2	10	F 117	Lvl. 2	Daub				2	
2011-167-1	F1 - U2	10	F 117	Lvl. 3	Ceramic	Plain	Shell	Body	7	
2011-167-2	F1 - U2	10	F 117	Lvl. 3	Daub				3	
2011-167-3	F1 - U2	10	F 117	Lvl. 3	Sandstone				6	

Catalog #	F# - U#	Unit	Provenience	Depth	Type	Lithic Stage/ Surf. Treatment	Temper	Body/ Rim	Count	Notes
2011-173-1	F1 - U2	10	F 117	Lvl. 4	Daub				2	
2011-173-2	F1 - U2	10	F 117	Lvl. 4	Sandstone				1	
2011-177-1	F1 - U2	10	F 117	Lvl. 5	Ceramic	Plain	Shell	Body	1	
2011-177-2	F1 - U2	10	F 117	Lvl. 5	Daub				16	
2011-177-3	F1 - U2	10	F 117	Lvl. 5	Sandstone				4	
2011-181-1	F1 - U2	10	F 117	Lvl. 6	Daub				4	
2011-181-2	F1 - U2	10	F 117	Lvl. 6	Sandstone				3	
2011-181-3	F1 - U2	10	F 117	Lvl. 6	Stone				1	quartzite
2011-184-1	F1 - U2	10	F 117	Lvl. 7	Daub				3	
2011-193-1	F1 - U2	10	F 117	Lvl. 8	Ceramic	Plain	Shell/Grog	Body	1	
2011-193-2	F1 - U2	10	F 117	Lvl. 8	Daub				1	
2011-198-1	F1 - U2	10	F 117	Lvl. 10	Sandstone				1	
2011-200-1	F1 - U2	10	F 117	Lvl. 11	Daub				2	
2011-200-2	F1 - U2	10	F 117	Lvl. 11	Lithic	Flake fragment			1	
2011-211-2	F1 - U2	10	F 117	Lvl. 13	Ceramic	Plain	Sand/Grog	Body	1	
2011-211-1	F1 - U2	10	F 117	Lvl. 13	Ceramic	Plain	Shell	Body	1	
2011-211-3	F1 - U2	10	F 117	Lvl. 13	Daub				2	
2011-211-4	F1 - U2	10	F 117	Lvl. 13	Sandstone				2	
2011-215-1	F1 - U2	10	F 117	Lvl. 14	Ceramic	Plain	Shell/Grog	Body	1	
2011-215-2	F1 - U2	10	F 117	Lvl. 14	Daub				2	w/ impressions?
2011-219-1	F1 - U2	10	F 117 (SE Quad)	Lvl. 1	Ceramic	Unidentified	Shell/Grog	Body	2	
2011-219-3	F1 - U2	10	F 117 (SE Quad)	Lvl. 1	Daub				2	
2011-219-4	F1 - U2	10	F 117 (SE Quad)	Lvl. 1	Sandstone				8	
2011-219-2	F1 - U2	10	F 117 (SE Quad)	Lvl. 1	Sandstone, poss. FCR				1	
2011-222-2	F1 - U2	10	F 117 (SE Quad)	Lvl. 2	Daub				3	
2011-222-1	F1 - U2	10	F 117 (SE Quad)	Lvl. 2	Lithic	Biface Fragment			1	poss. Heated
2011-222-3	F1 - U2	10	F 117 (SE Quad)	Lvl. 2	Sandstone				10	
2011-230-1	F1 - U2	10	F 117 (SE Quad)	Lvl. 3	Ceramic	Plain	Shell	Body	1	
2011-230-2	F1 - U2	10	F 117 (SE Quad)	Lvl. 3	Daub				1	
2011-242-1	F1 - U2	10	F 117 (SE Quad)	Lvl. 4	Ceramic	Plain	Shell/Grog	Body	2	
2011-242-2	F1 - U2	10	F 117 (SE Quad)	Lvl. 4	Daub				3	
2011-242-3	F1 - U2	10	F 117 (SE Quad)	Lvl. 4	Sandstone				4	

Catalog #	F# - U#	Unit	Provenience	Depth	Type	Lithic Stage/ Surf. Treatment	Temper	Body/ Rim	Count	Notes
2011-251-1	F1 - U2	10	F 117 (SE Quad)	Lvl. 5	Daub				2	
2011-251-2	F1 - U2	10	F 117 (SE Quad)	Lvl. 5	Sandstone				6	
2011-417-1	F1 - U2	10	F 117 (SE Quad)	Lvl. 6	Daub				1	
2011-258-2	F1 - U2	10	F 117 (SE Quad)	Lvl. 6	Sandstone				1	
2011-262-2	F1 - U2	10	F 117 (SE Quad)	Lvl. 7	Sandstone				5	
2011-262-1	F1 - U2	10	F 117 (SE Quad)	Lvl. 7	Sandstone, poss. FCR				1	
2011-264-1	F1 - U2	10	F 117 (SE Quad)	Lvl. 8	Sandstone				1	
2011-266-1	F1 - U2	10	F 117 (SE Quad)	Lvl. 9	Ceramic	Plain	Shell	Body	1	
2011-266-2	F1 - U2	10	F 117 (SE Quad)	Lvl. 9	Lithic	Biface Fragment			1	Projectile point tip
2011-266-3	F1 - U2	10	F 117 (SE Quad)	Lvl. 9	Sandstone				2	
2011-281-1	F1 - U2	10	F 117 (SE Quad)	Lvl. 13	Daub				2	
2011-281-2	F1 - U2	10	F 117 (SE Quad)	Lvl. 13	Sandstone				2	
2012-374-15	F1 - U2	10	F 117 W½		Bone				15	some burned
2012-374-8	F1 - U2	10	F 117 W½		Ceramic	Plain	Clay	Body	4	
2012-374-9	F1 - U2	10	F 117 W½		Ceramic	Unidentified	Sand/Bone	Body	2	
2012-374-6	F1 - U2	10	F 117 W½		Ceramic	Plain	Shell	Rim	2	
2012-374-7	F1 - U2	10	F 117 W½		Ceramic	Unidentified	Shell	Body	30	
2012-374-10	F1 - U2	10	F 117 W½		Ceramic	Plain	Shell/Grog	Body	3	
2012-374-11	F1 - U2	10	F 117 W½		Ceramic	Unidentified	Unidentified	Body	12	
2012-374-13	F1 - U2	10	F 117 W½		Charcoal				7	
2012-374-12	F1 - U2	10	F 117 W½		Daub				78	
2012-374-1	F1 - U2	10	F 117 W½		Lithic	Secondary Flake			2	
2012-374-2	F1 - U2	10	F 117 W½		Lithic	Tertiary Flake			8	
2012-374-3	F1 - U2	10	F 117 W½		Lithic	Tertiary Flake			1	w/ polished outer surface
2012-374-4	F1 - U2	10	F 117 W½		Lithic	Flake Fragment			4	
2012-374-5	F1 - U2	10	F 117 W½		Lithic	Shatter			4	
2012-374-17	F1 - U2	10	F 117 W½		Sandstone				193	some burned
2012-374-16	F1 - U2	10	F 117 W½		Sandstone, poss. FCR				4	
2012-374-14	F1 - U2	10	F 117 W½		Unidentified Material				1	poss. Eggshell?
2012-340-2	F1 - U2	10	F 118	Lvl. 1	Bone				1	
2012-340-1	F1 - U2	10	F 118	Lvl. 1	Ceramic	Plain	Shell	Body	2	
2012-340-3	F1 - U2	10	F 118	Lvl. 1	Sandstone				1	

Catalog #	F# - U#	Unit	Provenience	Depth	Type	Lithic Stage/ Surf. Treatment	Temper	Body/ Rim	Count	Notes
2011-172-6	F1 - U2	9	F 119	Lvl. 1	Bone				4	
2011-172-11	F1 - U2	9	F 119	Lvl. 1	Ceramic	Plain	Shell	Body	6	
2011-172-12	F1 - U2	9	F 119	Lvl. 1	Ceramic	Plain	Shell	Body	1	w/ red coloration on surface
2011-172-17	F1 - U2	9	F 119	Lvl. 1	Ceramic	Plain	Shell	Rim	1	
2011-172-13	F1 - U2	9	F 119	Lvl. 1	Ceramic	Unidentified	Shell	Body	8	
2011-172-18	F1 - U2	9	F 119	Lvl. 1	Ceramic	Unidentified	Shell	Rim	1	
2011-172-14	F1 - U2	9	F 119	Lvl. 1	Ceramic	Plain	Shell/Grog	Body	4	
2011-172-15	F1 - U2	9	F 119	Lvl. 1	Ceramic	Unidentified	Shell/Grog	Body	2	
2011-172-19	F1 - U2	9	F 119	Lvl. 1	Ceramic	Plain	Shell/Sand	Rim	1	
2011-172-16	F1 - U2	9	F 119	Lvl. 1	Ceramic	Plain	Unidentified	Body	2	
2011-172-7	F1 - U2	9	F 119	Lvl. 1	Charcoal				---	poss. Carbonized nutshell
2011-172-5	F1 - U2	9	F 119	Lvl. 1	Daub				20	
2011-172-4	F1 - U2	9	F 119	Lvl. 1	Lithic	Biface fragment			1	poss. Projectile point tip
2011-172-1	F1 - U2	9	F 119	Lvl. 1	Lithic	Secondary Flake			4	
2011-172-2	F1 - U2	9	F 119	Lvl. 1	Lithic	Tertiary Flake			5	
2011-172-3	F1 - U2	9	F 119	Lvl. 1	Lithic	Flake Fragment			3	
2011-172-10	F1 - U2	9	F 119	Lvl. 1	Sandstone				6	
2011-172-9	F1 - U2	9	F 119	Lvl. 1	Sandstone, poss. FCR				3	
2011-172-8	F1 - U2	9	F 119	Lvl. 1	Unidentified Material				1	burned
2011-221-1	F1 - U2	16	F 123		Other				1	Mud Dauber Nest w/ poss. grass impression
2011-209-1	F1 - U2	16	F 128	Lvl. 1	Lithic	Tertiary Flake			1	
2012-328-4	F1 - U2	10	F 133		Ceramic	Unidentified	Shell	Body	2	
2012-328-6	F1 - U2	10	F 133		Charcoal				14	
2012-328-5	F1 - U2	10	F 133		Daub				7	
2012-328-3	F1 - U2	10	F 133		Lithic	Secondary Flake			1	
2012-328-1	F1 - U2	10	F 133		Lithic	Tertiary Flake			2	
2012-328-2	F1 - U2	10	F 133		Lithic	Tertiary Flake			1	poss. Flake tool
2012-328-8	F1 - U2	10	F 133		Sandstone				96	
2012-328-7	F1 - U2	10	F 133		Sandstone, poss. FCR				1	
2012-330-4	F1 - U2	4	F 137	Lvl. 1	Bone				12	1 poss. Polished
2012-330-2	F1 - U2	4	F 137	Lvl. 1	Ceramic	Unidentified	Shell	Body	4	
2012-330-3	F1 - U2	4	F 137	Lvl. 1	Daub				1	

Catalog #	F# - U#	Unit	Provenience	Depth	Type	Lithic Stage/ Surf. Treatment	Temper	Body/ Rim	Count	Notes
2012-330-1	F1 - U2	4	F 137	Lvl. 1	Lithic	Flake Fragment			1	
2012-330-5	F1 - U2	4	F 137	Lvl. 1	Sandstone				2	
2012-332-1	F1 - U2	4	F 138	Lvl. 1	Lithic	Shatter			1	
2012-388-1	F1 - U2	14	F 140	Lvl. 1	Other				1	Galena
2012-390-8	F1 - U2	14	General Collection	PZ	Bone				4	
2012-390-6	F1 - U2	14	General Collection	PZ	Ceramic	Plain	Clay/Grog	Body	1	
2012-411-7	F1 - U2	25-28	General Collection	PZ	Ceramic	Unidentified	Grog/Sand	Body	2	
2012-411-5	F1 - U2	25-28	General Collection	PZ	Ceramic	Incised	Sand	Rim	1	
2012-411-4	F1 - U2	25-28	General Collection	PZ	Ceramic	Unidentified	Sand	Body	1	
2012-411-6	F1 - U2	25-28	General Collection	PZ	Ceramic	Unidentified	Shell	Body	4	
2012-390-4	F1 - U2	14	General Collection	PZ	Ceramic	Unidentified	Shell	Body	1	
2012-413-1	F1 - U2	21-25	General Collection	PZ	Ceramic	Unidentified	Shell/Grog	Body	1	
2012-390-5	F1 - U2	14	General Collection	PZ	Ceramic	Unidentified	Shell/Grog	Body	2	
2012-411-9	F1 - U2	25-28	General Collection	PZ	Ceramic	Plain	Shell/Sand	Rim	1	
2012-411-8	F1 - U2	25-28	General Collection	PZ	Ceramic	Unidentified	Shell/Sand	Body	2	
2012-390-7	F1 - U2	14	General Collection	PZ	Daub				5	
2012-411-10	F1 - U2	25-28	General Collection	PZ	Historic				1	brick fragment
2012-413-2	F1 - U2	21-25	General Collection	PZ	Lithic	Biface fragment			1	Projectile Point Body/Base (Madison/Hamilton)
2012-411-1	F1 - U2	25-28	General Collection	PZ	Lithic	Secondary Flake			5	
2012-390-1	F1 - U2	14	General Collection	PZ	Lithic	Secondary Flake			3	
2012-411-2	F1 - U2	25-28	General Collection	PZ	Lithic	Tertiary Flake			9	
2012-390-2	F1 - U2	14	General Collection	PZ	Lithic	Flake Fragment			1	
2012-411-3	F1 - U2	25-28	General Collection	PZ	Lithic	Shatter			3	
2012-390-3	F1 - U2	14	General Collection	PZ	Lithic	Shatter			2	
2012-413-3	F1 - U2	21-25	General Collection	PZ	Sandstone				1	coarse-grained
2012-411-11	F1 - U2	25-28	General Collection	PZ	Sandstone				7	coarse-grained
2012-411-12	F1 - U2	25-28	General Collection	PZ	Sandstone				11	
2012-390-9	F1 - U2	14	General Collection	PZ	Sandstone				6	
2012-411-13	F1 - U2	25-28	General Collection	PZ	Sandstone, poss. FCR				9	
2012-411-15	F1 - U2	25-28	General Collection	PZ	Stone				2	unknown
2012-411-14	F1 - U2	25-28	General Collection	PZ	Unidentified Material				1	burned stone?
2013-431-4	F1 - U2		General Collection, W. Extension	PZ	Bone				12	

Catalog #	F# - U#	Unit	Provenience	Depth	Type	Lithic Stage/ Surf. Treatment	Temper	Body/ Rim	Count	Notes
2013-431-5	F1 - U2		General Collection, W. Extension	PZ	Daub				4	
2013-431-1	F1 - U2		General Collection, W. Extension	PZ	Lithic	Secondary Flake			2	
2013-431-2	F1 - U2		General Collection, W. Extension	PZ	Lithic	Tertiary Flake			7	
2013-431-3	F1 - U2		General Collection, W. Extension	PZ	Lithic	Flake Fragment			5	
2013-431-6	F1 - U2		General Collection, W. Extension	PZ	Other				1	Galena
2013-431-9	F1 - U2		General Collection, W. Extension	PZ	Sandstone				3	coarse-grained
2013-431-8	F1 - U2		General Collection, W. Extension	PZ	Sandstone, poss. FCR				2	
2013-431-7	F1 - U2		General Collection, W. Extension	PZ	Stone				1	unknown
2013-431-11	F1 - U2		General Collection, W. Extension	PZ	Ceramic	Unidentified	Clay	Body	2	poss. slip
2013-431-18	F1 - U2		General Collection, W. Extension	PZ	Ceramic	Unidentified	Sand	Body	3	
2013-431-15	F1 - U2		General Collection, W. Extension	PZ	Ceramic	Plain	Shell	Body	2	
2013-431-14	F1 - U2		General Collection, W. Extension	PZ	Ceramic	Unidentified	Shell	Body	1	poss. Eroded cordmark dec.
2013-431-16	F1 - U2		General Collection, W. Extension	PZ	Ceramic	Unidentified	Shell	Body	5	
2013-431-13	F1 - U2		General Collection, W. Extension	PZ	Ceramic	Unidentified	Shell/Grog	Body	1	
2013-431-12	F1 - U2		General Collection, W. Extension	PZ	Ceramic	Plain	Shell/Grog/Sand	Rim	1	
2013-431-17	F1 - U2		General Collection, W. Extension	PZ	Ceramic	Unidentified	Shell/Sand	Body	2	
2013-431-10	F1 - U2		General Collection, W. Extension	PZ	Ceramic	Plain	Unidentified	Body	1	
2011-430-1	F1 - U2	5	Intersect of WT-G and WT-F		Charcoal				2	
2012-416-1	F1 - U2	28	Junction, WT-J, WT-K, and WT-G	0-15 cm	Ceramic	Unidentified	Shell	Body	3	
2012-416-2	F1 - U2	28	Junction, WT-J, WT-K, and WT-G	0-15 cm	Daub				1	
2012-416-3	F1 - U2	28	Junction, WT-J, WT-K, and WT-G	0-15 cm	Sandstone				40	
2012-348-6	F1 - U2	3	Midden Area		Ceramic	Unidentified	Clay	Body	1	
2012-348-5	F1 - U2	3	Midden Area		Ceramic	Unidentified	Grog/Bone/Quartz	Body	1	
2012-348-4	F1 - U2	3	Midden Area		Ceramic	Unidentified	Shell/Grog	Body	2	
2012-348-7	F1 - U2	3	Midden Area		Daub				2	
2012-348-1	F1 - U2	3	Midden Area		Lithic	Secondary Flake			1	
2012-348-2	F1 - U2	3	Midden Area		Lithic	Flake Fragment			1	
2012-348-3	F1 - U2	3	Midden Area		Lithic	Shatter			1	
2011-010-1	F1 - U2	24	WT-A	Lvl. 1	Lithic	Tertiary Flake			1	
2011-010-2	F1 - U2	24	WT-A	Lvl. 1	Sandstone				4	
2011-013-1	F1 - U2	6	WT-A	Lvl. 1	Sandstone				2	1 burned
2011-17-5	F1 - U2	12	WT-A	Lvl. 2	Bone				?	unprocessed sample in foil

Catalog #	F# - U#	Unit	Provenience	Depth	Type	Lithic Stage/ Surf. Treatment	Temper	Body/ Rim	Count	Notes
2011-017-2	F1 - U2	12	WT-A	Lvl. 2	Ceramic	Plain	Shell	Body	1	
2011-009-1	F1 - U2	18	WT-A	Lvl. 2	Daub				2	
2011-017-3	F1 - U2	12	WT-A	Lvl. 2	Daub				3	plus a large unclean sample
2011-017-1	F1 - U2	12	WT-A	Lvl. 2	Lithic	Flake Fragment			1	poss. Worked
2011-009-2	F1 - U2	18	WT-A	Lvl. 2	Sandstone				1	
2011-014-1	F1 - U2	6	WT-A	Lvl. 2	Sandstone				1	
2011-017-4	F1 - U2	12	WT-A	Lvl. 2	Sandstone				2	
2011-030-1	F1 - U2	18	WT-A	Lvl. 3	Sandstone, poss. FCR				1	
2012-422-1	F1 - U2		WT-A Clean-up		Ceramic				2	
2012-422-2	F1 - U2		WT-A Clean-up		Daub				5	
2012-422-3	F1 - U2		WT-A Clean-up		Sandstone				4	
2011-033-1	F1 - U2	6	WT-A, Post 4	Lvl. 3	Sandstone, poss. FCR				1	
2011-283-1	F1 - U2	18	WT-A, Post 7	Lvl. 1	Ceramic	Plain	Sand/Grog	Body	1	
2011-283-2	F1 - U2	18	WT-A, Post 7	Lvl. 1	Ceramic	Plain	Shell	Body	1	
2012-327-2	F1 - U2	17	WT-B	Lvl. 1	Ceramic	Plain	Shell	Body	1	
2012-327-1	F1 - U2	17	WT-B	Lvl. 1	Lithic	Tertiary Flake			1	
2012-327-3	F1 - U2	17	WT-B	Lvl. 1	Sandstone				1	
2012-397-2	F1 - U2	21	WT-D	Lvl. 1	Bone				2	
2012-397-1	F1 - U2	21	WT-D	Lvl. 1	Ceramic	Unidentified	Shell	Body	1	
2012-393-1	F1 - U2	20	WT-D	Lvl. 1	Daub				1	
2012-393-3	F1 - U2	20	WT-D	Lvl. 1	Sandstone				14	
2012-397-3	F1 - U2	21	WT-D	Lvl. 1	Sandstone				6	
2012-393-2	F1 - U2	20	WT-D	Lvl. 1	Sandstone, poss. FCR				2	
2012-394-1	F1 - U2	20	WT-D	Lvl. 2	Bone				1	
2012-394-2	F1 - U2	20	WT-D	Lvl. 2	Ceramic	Unidentified	Shell/Grog	Body	1	
2012-394-3	F1 - U2	20	WT-D	Lvl. 2	Sandstone				16	
2011-269-1	F1 - U2	5	WT-D (N. segment)	Lvl. 1	Ceramic	Unidentified	Quartz/Grog	Body	1	
2011-269-3	F1 - U2	5	WT-D (N. segment)	Lvl. 1	Charcoal				1	
2011-269-2	F1 - U2	5	WT-D (N. segment)	Lvl. 1	Daub				1	
2011-428-1	F1 - U2	21	WT-D, Post 2	Lvl. 3	Daub				8	large chunks
2011-140-1	F1 - U2	21	WT-D2, Post 3	Lvl. 2	Ceramic	Unidentified	Unidentified	Body	1	
2011-140-2	F1 - U2	21	WT-D2, Post 3	Lvl. 2	Charcoal				1	

Catalog #	F# - U#	Unit	Provenience	Depth	Type	Lithic Stage/ Surf. Treatment	Temper	Body/ Rim	Count	Notes
2011-140-3	F1 - U2	21	WT-D2, Post 3	Lvl. 2	Sandstone				17	burned
2011-276-1	F1 - U2	9	WT-E	Lvl. 1	Lithic	Biface			1	Projectile point, poss. Madison or Hamilton
2011-292-1	F1 - U2	15	WT-E		Ceramic	Unidentified	Shell	Body	1	
2011-293-1	F1 - U2	9	WT-E		Ceramic	Unidentified	Shell	Body	1	
2011-293-2	F1 - U2	9	WT-E		Daub				1	
2011-292-2	F1 - U2	15	WT-E		Sandstone				2	
2011-293-3	F1 - U2	9	WT-E		Sandstone				5	
2011-273-1	F1 - U2	3	WT-E, Post 1	Lvl. 3	Daub				2	
2011-273-2	F1 - U2	3	WT-E, Post 1	Lvl. 3	Sandstone				1	
2011-300-1	F1 - U2	9	WT-E, Post 2		Daub				2	
2011-300-2	F1 - U2	9	WT-E, Post 2		Sandstone				8	some burned
2011-418-1	F1 - U2	3	WT-E, Post 3	Lvl. 3	Ceramic	Unidentified	Shell	Body	1	
2011-418-2	F1 - U2	3	WT-E, Post 3	Lvl. 3	Daub				2	
2011-301-1	F1 - U2	15	WT-E, Post 3		Ceramic	Incised	Grog/Quartz	Body	1	incised lines, poss. Bone in temper
2011-299-1	F1 - U2	9	WT-E, Post 3		Sandstone				2	
2012-321-1	F1 - U2	15	WT-E, Post 4		Bone				1	
2011-297-1	F1 - U2	9	WT-E, Post 5		Ceramic	Unidentified	Shell	Body	1	
2011-244-1	F1 - U2	3	WT-F	Lvl. 1	Ceramic	Unidentified	Grog	Body	1	
2011-150-1	F1 - U2	4	WT-F	Lvl. 1	Ceramic	Plain	Quartz	Body	1	
2011-162-2	F1 - U2	6	WT-F	Lvl. 1	Ceramic	Plain	Sand/Grog	Body	2	poss. Poda
2011-162-1	F1 - U2	6	WT-F	Lvl. 1	Ceramic	Unidentified	Sand/Quartz	Body	1	poss. Eroded, incised dec.
2011-150-2	F1 - U2	4	WT-F	Lvl. 1	Ceramic	Plain	Shell	Body	1	
2011-244-2	F1 - U2	3	WT-F	Lvl. 1	Ceramic	Plain	Shell	Body	2	
2011-246-1	F1 - U2	5	WT-F	Lvl. 1	Ceramic	Plain	Shell	Body	1	
2011-163-1	F1 - U2	5	WT-F	Lvl. 1	Ceramic	Plain	Shell	Body	1	
2011-162-3	F1 - U2	6	WT-F	Lvl. 1	Ceramic	Unidentified	Shell	Body	1	
2011-245-1	F1 - U2	4	WT-F	Lvl. 1	Ceramic	Unidentified	Shell	Body	2	
2011-150-7	F1 - U2	4	WT-F	Lvl. 1	Charcoal				4	
2011-162-6	F1 - U2	6	WT-F	Lvl. 1	Charcoal				6	
2011-163-3	F1 - U2	5	WT-F	Lvl. 1	Charcoal				12	
2011-150-5	F1 - U2	4	WT-F	Lvl. 1	Daub				9	

Catalog #	F# - U#	Unit	Provenience	Depth	Type	Lithic Stage/ Surf. Treatment	Temper	Body/ Rim	Count	Notes
2011-162-5	F1 - U2	6	WT-F	Lvl. 1	Daub				6	
2011-244-4	F1 - U2	3	WT-F	Lvl. 1	Daub				2	
2011-245-2	F1 - U2	4	WT-F	Lvl. 1	Daub				2	
2011-246-2	F1 - U2	5	WT-F	Lvl. 1	Daub				1	
2011-163-2	F1 - U2	5	WT-F	Lvl. 1	Daub				5	
2011-150-9	F1 - U2	4	WT-F	Lvl. 1	Historic				1	cut nail?
2011-150-3	F1 - U2	4	WT-F	Lvl. 1	Lithic	Secondary Flake			2	
2011-244-3	F1 - U2	3	WT-F	Lvl. 1	Lithic	Secondary Flake			1	
2011-162-4	F1 - U2	6	WT-F	Lvl. 1	Lithic	Tertiary Flake			1	
2011-150-4	F1 - U2	4	WT-F	Lvl. 1	Lithic	Flake Fragment			1	
2011-150-8	F1 - U2	4	WT-F	Lvl. 1	Sandstone				150	
2011-162-7	F1 - U2	6	WT-F	Lvl. 1	Sandstone				14	
2011-244-5	F1 - U2	3	WT-F	Lvl. 1	Sandstone				18	
2011-245-3	F1 - U2	4	WT-F	Lvl. 1	Sandstone				46	
2011-246-3	F1 - U2	5	WT-F	Lvl. 1	Sandstone				8	
2011-163-4	F1 - U2	5	WT-F	Lvl. 1	Sandstone				25	
2011-150-6	F1 - U2	4	WT-F	Lvl. 1	Stone				1	quartzite pebble
2011-163-5	F1 - U2	5	WT-F	Lvl. 1	Stone				1	unknown
2011-253-2	F1 - U2	5	WT-F, Post 1	Lvl. 2	Charcoal				1	
2011-233-1	F1 - U2	3	WT-F, Post 1	Lvl. 2	Sandstone				15	
2011-253-1	F1 - U2	5	WT-F, Post 1	Lvl. 2	Sandstone				2	
2011-272-1	F1 - U2	6	WT-F, Post 1	Lvl. 2	Sandstone				1	
2011-235-1	F1 - U2	4	WT-F, Post 1		Daub				5	
2011-235-2	F1 - U2	4	WT-F, Post 1		Sandstone				6	
2011-270-1	F1 - U2	6	WT-F, Post 2	Lvl. 2	Charcoal				1	
2011-270-2	F1 - U2	6	WT-F, Post 2	Lvl. 2	Sandstone				1	
2011-271-1	F1 - U2	6	WT-F, Post 3	Lvl. 2	Sandstone				1	
2011-236-1	F1 - U2	4	WT-F, Post 3		Sandstone				8	
2011-255-1	F1 - U2	5	WT-F, Post 4	Lvl. 2	Ceramic	Plain	Shell	Body	1	very thin
2011-234-1	F1 - U2	3	WT-F, Post 4	Lvl. 2	Sandstone				3	
2011-237-1	F1 - U2	4	WT-F, Post 4		Sandstone				5	
2011-256-1	F1 - U2	5	WT-F, Post 5	Lvl. 2	Charcoal				1	

Catalog #	F# - U#	Unit	Provenience	Depth	Type	Lithic Stage/ Surf. Treatment	Temper	Body/ Rim	Count	Notes
2011-258-1	F1 - U2	5	WT-F, Post 6	Lvl. 2	Sandstone				1	
2011-238-1	F1 - U2	4	WT-F, Post 6		Sandstone				7	
2011-239-1	F1 - U2	4	WT-F, Post 7		Ceramic	Unidentified	Shell	Body	1	
2011-239-2	F1 - U2	4	WT-F, Post 7		Daub				2	
2011-239-3	F1 - U2	4	WT-F, Post 7		Sandstone				5	
2011-240-1	F1 - U2	4	WT-F, Post 8		Sandstone				3	
2011-241-3	F1 - U2	4	WT-F, Post 9		Charcoal				1	poss. Burned bark?
2011-241-1	F1 - U2	4	WT-F, Post 9		Daub				2	
2011-241-2	F1 - U2	4	WT-F, Post 9		Sandstone				12	
2011-275-1	F1 - U2	17	WT-G	Lvl. 1	Ceramic	Plain	Shell	Body	2	one w/ poss. Sooting
2011-302-2	F1 - U2	5	WT-G	Lvl. 1	Ceramic	Plain	Shell	Body	6	
2011-302-1	F1 - U2	5	WT-G	Lvl. 1	Ceramic	Plain	Unidentified	Body	1	poss. faint cordmarking
2011-275-2	F1 - U2	17	WT-G	Lvl. 1	Ceramic	Unidentified	Unidentified	Body	2	
2011-275-6	F1 - U2	17	WT-G	Lvl. 1	Daub				6	
2011-302-5	F1 - U2	5	WT-G	Lvl. 1	Daub				1	
2011-261-1	F1 - U2	17	WT-G	Lvl. 1	Lithic	Secondary Flake			1	
2011-275-3	F1 - U2	17	WT-G	Lvl. 1	Lithic	Secondary Flake			2	
2011-302-3	F1 - U2	5	WT-G	Lvl. 1	Lithic	Secondary Flake			2	
2011-275-4	F1 - U2	17	WT-G	Lvl. 1	Lithic	Tertiary Flake			3	
2011-275-5	F1 - U2	17	WT-G	Lvl. 1	Lithic	Shatter			1	
2011-302-4	F1 - U2	5	WT-G	Lvl. 1	Lithic	Shatter			1	
2011-275-7	F1 - U2	17	WT-G	Lvl. 1	Sandstone				5	
2013-432-5	F1 - U2	28	WT-G	Lvl. 2	Ceramic	Unidentified	Grog/Sand	Body	1	
2013-432-3	F1 - U2	28	WT-G	Lvl. 2	Ceramic	Unidentified	Shell	Body	2	
2013-432-6	F1 - U2	28	WT-G	Lvl. 2	Ceramic	Unidentified	Shell/Grog	Body	1	
2013-432-4	F1 - U2	28	WT-G	Lvl. 2	Ceramic	Unidentified	Shell/Sand	Body	4	
2013-432-7	F1 - U2	28	WT-G	Lvl. 2	Daub				2	
2013-432-1	F1 - U2	28	WT-G	Lvl. 2	Lithic	Secondary Flake			2	
2013-432-2	F1 - U2	28	WT-G	Lvl. 2	Lithic	Tertiary Flake			2	
2013-432-8	F1 - U2	28	WT-G	Lvl. 2	Sandstone, poss. FCR				1	
2011-315-1	F1 - U2	5	WT-G		Bone				9	
2013-423-4	F1 - U2	28	WT-G, Post 1	Lvl. 3	Ceramic	Plain	Shell	Body	1	

Catalog #	F# - U#	Unit	Provenience	Depth	Type	Lithic Stage/ Surf. Treatment	Temper	Body/ Rim	Count	Notes
2013-423-3	F1 - U2	28	WT-G, Post 1	Lvl. 3	Ceramic	Unidentified	Shell	Body	2	
2013-423-2	F1 - U2	28	WT-G, Post 1	Lvl. 3	Ceramic	Unidentified	Shell/Grog	Body	1	
2013-423-1	F1 - U2	28	WT-G, Post 1	Lvl. 3	Lithic	Flake Fragment			1	
2011-308-1	F1 - U2	5	WT-G, Post 1		Sandstone				1	burned?
2011-312-1	F1 - U2	5	WT-G, Post 10		Ceramic	Plain	Shell	Body	1	
2011-310-1	F1 - U2	17	WT-G, Post 2		Sandstone				1	burned?
2011-306-1	F1 - U2	5	WT-G, Post 4		Ceramic	Plain	Shell	Body	1	
2011-311-1	F1 - U2	17	WT-G, Post 6		Ceramic	Plain	Shell/Grog	Body	1	
2012-344-9	F1 - U2	14	WT-H	Lvl. 1	Bone				3	
2012-347-10	F1 - U2	8	WT-H	Lvl. 1	Bone				1	
2012-344-5	F1 - U2	14	WT-H	Lvl. 1	Ceramic	Unidentified	Limestone/Quartz	Body	1	
2012-344-7	F1 - U2	14	WT-H	Lvl. 1	Ceramic	Plain	Sand	Body	1	
2012-344-6	F1 - U2	14	WT-H	Lvl. 1	Ceramic	Plain	Sand/Grog	Body	1	
2012-347-5	F1 - U2	8	WT-H	Lvl. 1	Ceramic	Plain	Shell	Body	2	
2012-344-4	F1 - U2	14	WT-H	Lvl. 1	Ceramic	Unidentified	Shell	Body	7	
2012-347-6	F1 - U2	8	WT-H	Lvl. 1	Ceramic	Unidentified	Shell	Body	2	
2012-344-12	F1 - U2	14	WT-H	Lvl. 1	Ceramic	Plain	Shell/Grog	Body	1	
2012-347-7	F1 - U2	8	WT-H	Lvl. 1	Ceramic	Plain	Unidentified	Body	1	
2012-344-8	F1 - U2	14	WT-H	Lvl. 1	Charcoal				1	
2012-344-10	F1 - U2	14	WT-H	Lvl. 1	Daub				5	
2012-347-8	F1 - U2	8	WT-H	Lvl. 1	Daub				3	
2012-344-3	F1 - U2	14	WT-H	Lvl. 1	Lithic	Biface fragment			1	Projectile point tip
2012-347-4	F1 - U2	8	WT-H	Lvl. 1	Lithic	Biface Fragment			1	poss. Projectile point tip
2012-344-1	F1 - U2	14	WT-H	Lvl. 1	Lithic	Secondary Flake			1	
2012-344-2	F1 - U2	14	WT-H	Lvl. 1	Lithic	Tertiary Flake			4	
2012-347-1	F1 - U2	8	WT-H	Lvl. 1	Lithic	Tertiary Flake			1	
2012-347-3	F1 - U2	8	WT-H	Lvl. 1	Lithic	Tertiary Flake			1	
2012-347-2	F1 - U2	8	WT-H	Lvl. 1	Lithic	Flake Fragment			1	
2012-344-13	F1 - U2	14	WT-H	Lvl. 1	Lithic	Flake Fragment			1	
2012-344-11	F1 - U2	14	WT-H	Lvl. 1	Sandstone				20	
2012-347-9	F1 - U2	8	WT-H	Lvl. 1	Sandstone				5	
2012-389-2	F1 - U2	8	WT-H	Lvl. 2	Bone				2	

Catalog #	F# - U#	Unit	Provenience	Depth	Type	Lithic Stage/ Surf. Treatment	Temper	Body/ Rim	Count	Notes
2012-389-1	F1 - U2	8	WT-H	Lvl. 2	Sandstone, poss. FCR				1	
2011-278-1	F1 - U2	2	WT-H (F 100)	Lvl. 3	Ceramic	Plain	Shell/Grog	Body	1	
2012-385-2	F1 - U2	2	WT-H, Post 1		Bone				1	
2012-385-3	F1 - U2	2	WT-H, Post 1		Daub				3	
2012-385-1	F1 - U2	2	WT-H, Post 1		Lithic	Shatter			1	
2012-386-2	F1 - U2	2	WT-H, Post 2		Ceramic	Unidentified	Shell	Body	1	
2012-386-1	F1 - U2	2	WT-H, Post 2		Ceramic	Plain	Shell/Grog	Body	1	
2012-386-3	F1 - U2	2	WT-H, Post 2		Daub				1	
2012-386-4	F1 - U2	2	WT-H, Post 2		Sandstone				1	
2012-383-2	F1 - U2	2	WT-H, Post 5		Bone				4	
2012-383-1	F1 - U2	2	WT-H, Post 5		Ceramic	Plain	Shell	Body	1	
2012-383-3	F1 - U2	2	WT-H, Post 5		Sandstone				1	
2012-380-3	F1 - U2	2	WT-H, Post 6		Bone				3	
2012-380-2	F1 - U2	2	WT-H, Post 6		Ceramic	Unidentified	Shell	Body	2	
2012-380-4	F1 - U2	2	WT-H, Post 6		Daub				1	
2012-380-1	F1 - U2	2	WT-H, Post 6		Lithic	Tertiary Flake			1	
2012-380-5	F1 - U2	2	WT-H, Post 6		Sandstone				2	
2012-378-1	F1 - U2	8	WT-H, Post 7	Lvl. 3	Ceramic	Unidentified	Shell	Body	2	
2012-378-2	F1 - U2	8	WT-H, Post 7	Lvl. 3	Sandstone, poss. FCR				1	
2012-334-2	F1 - U2	8	WT-I	Lvl. 1	Ceramic	Unidentified	Shell	Body	1	
2012-334-3	F1 - U2	8	WT-I	Lvl. 1	Daub				1	
2012-334-1	F1 - U2	8	WT-I	Lvl. 1	Lithic	Flake Fragment			2	
2012-334-6	F1 - U2	8	WT-I	Lvl. 1	Sandstone				17	
2012-334-5	F1 - U2	8	WT-I	Lvl. 1	Sandstone, poss. FCR				1	
2012-334-4	F1 - U2	8	WT-I	Lvl. 1	Stone				1	cemented quartzite
2012-319-3	F1 - U2	15	WT-I (N. of WT-E)	Lvl. 1	Ceramic	Unidentified	Shell	Body	1	
2012-319-1	F1 - U2	15	WT-I (N. of WT-E)	Lvl. 1	Lithic	Secondary Flake			1	
2012-319-2	F1 - U2	15	WT-I (N. of WT-E)	Lvl. 1	Lithic	Flake Fragment			1	
2012-319-4	F1 - U2	15	WT-I (N. of WT-E)	Lvl. 1	Sandstone				14	
2012-318-1	F1 - U2	15	WT-I (S. of WT-E)	Lvl. 1	Lithic	Secondary Flake			1	
2012-361-1	F1 - U2	15	WT-I, Post 2		Daub				1	
2012-361-2	F1 - U2	15	WT-I, Post 2		Sandstone				8	

Catalog #	F# - U#	Unit	Provenience	Depth	Type	Lithic Stage/ Surf. Treatment	Temper	Body/ Rim	Count	Notes
2012-365-2	F1 - U2	15	WT-I, Post 3		Charcoal				1	
2012-365-1	F1 - U2	15	WT-I, Post 3		Lithic	Secondary Flake			1	
2011-147-1	F1 - U2	9		Lvl. 1	Ceramic	Plain	Shell	Body	1	
2011-147-2	F1 - U2	9		Lvl. 1	Sandstone, poss. FCR				1	
2011-207-2	F1 - U2	11		Lvl. 3	Ceramic	Unidentified	Shell	Body	3	
2011-207-3	F1 - U2	11		Lvl. 3	Daub				3	
2011-207-1	F1 - U2	11		Lvl. 3	Lithic	Flake Fragment			1	
2011-207-4	F1 - U2	11		Lvl. 3	Sandstone				3	
2012-354-2	F1 - U14		F 1	Lvl. 1	Ceramic	Unidentified	Quartz	Body	1	
2012-354-4	F1 - U14		F 1	Lvl. 1	Historic				2	brick fragments
2012-354-1	F1 - U14		F 1	Lvl. 1	Lithic	Tertiary Flake			1	
2012-354-3	F1 - U14		F 1	Lvl. 1	Sandstone				2	coarse-grained
2012-357-3	F1 - U14		F 1 TU A	Lvl. 2	Ceramic	Unidentified	Shell	Body	7	
2012-357-2	F1 - U14		F 1 TU A	Lvl. 2	Ceramic	Plain	Shell/Grog	Body	2	
2012-357-4	F1 - U14		F 1 TU A	Lvl. 2	Daub				1	
2012-357-1	F1 - U14		F 1 TU A	Lvl. 2	Lithic	Tertiary Flake			1	
2012-355-1	F1 - U14		F 1 TU A	Lvl. 3	Ceramic	Plain	Shell/Grog	Body	2	
2012-358-1	F1 - U14		F 1 window		Ceramic	Unidentified	Shell	Body	2	
2012-414-2	F1 - U14		N. and S. Extension General Coll.	PZ	Historic				1	whiteware
2012-414-1	F1 - U14		N. and S. Extension General Coll.	PZ	Sandstone, poss. FCR				2	
2012-356-2	F1 - U14		W. Extension General Collection	PZ	Ceramic	Cordmarked	Quartz	Body	1	
2012-356-3	F1 - U14		W. Extension General Collection	PZ	Lithic	Biface			1	reworked corner-notched point
2012-356-1	F1 - U14		W. Extension General Collection	PZ	Lithic	Biface fragment			1	
2011-102-5	F1 - U10		General Collection	PZ	Ceramic	Unidentified	Grog	Body	1	
2011-102-4	F1 - U10		General Collection	PZ	Ceramic	Unidentified	Shell	Body	3	
2011-102-6	F1 - U10		General Collection	PZ	Ceramic	Unidentified	Shell/Grog	Body	1	
2011-102-8	F1 - U10		General Collection	PZ	Historic				2	clear glass and nail
2011-102-1	F1 - U10		General Collection	PZ	Lithic	Tertiary Flake			3	
2011-102-2	F1 - U10		General Collection	PZ	Lithic	Flake Fragment			4	
2011-102-3	F1 - U10		General Collection	PZ	Lithic	Shatter			2	
2011-102-9	F1 - U10		General Collection	PZ	Sandstone				9	
2011-102-7	F1 - U10		General Collection	PZ	Stone				1	quartzite pebble