

The Algood SR-42 Project

Report on Phase II Excavations in Putnam County, Tennessee

Sarah A. Levithol, Michael C. Moore, and W. Steven Spears



Department of
**Environment &
Conservation**

Division of Archaeology
Report of Investigations No. 18
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Many people have assisted with the Algood Project since the initial 1976 Phase I survey by the Tennessee Department of Transportation (TDOT). Foremost to be recognized is the field director of the 1988 Phase II investigations, W. Steven “Steve” Spears, who passed away in 2007 (see photo below).

In his partial draft report, Spears recognized 1988 field crew members Paul Neil Allen, Andrew Bradbury, and Jack Couch for “their expertise and efficiency in their work, as well as their ability to take it all in stride, which allowed the project to move swiftly and effectively.” He also thanked several TDOT employees for their assistance. Gerald Kline provided an excellent point of contact, and Andrea (Shea) Bishop analyzed the archaeobotanical materials. Joe Allan helped resolve conflicts that occurred along the way. Project subcontractor Eddie Hill was also commended for his understanding and cooperation throughout the project.

An initial analysis of materials recovered during the 1988 field season was conducted by Spears with assistance from Mark Norton and Mary Beth (Dowd) Trubitt. The lithic artifact assemblage was partially reanalyzed by Mike Moore in the early 1990s, but he was drawn away to other projects and the reanalysis was never completed. The artifact reanalysis and revised project report was completed by Sarah Levithol in 2015.



In memory of W. Steven Spears (kneeling to left).

INTRODUCTION

Presented herein are the results of Phase II archaeological investigations at nine prehistoric sites in Algood, Putnam County, Tennessee from September 1 through November 30, 1988. This project was conducted by the Tennessee Division of Archaeology (TDOA) prior to the relocation of a segment of State Route 42 by the Tennessee Department of Transportation (TDOT). These sites were recorded within the highway project's right-of-way during a Phase I assessment (DuVall 1976). Monitoring of the area continued for the month of December 1988, but no further excavations were conducted.

The project right-of-way extended 2.58 miles from the extant Algood Bypass to the Overton County line, and measured more than 300 feet wide in the site areas. This stretch of right-of-way was initially examined by TDOT in the fall of 1976 (DuVall 1976). At that time, a survey of two corridor alignments (Alternatives A and B) yielded 18 prehistoric archaeological sites. As a result, sites 40PM24, 40PM25, 40PM27, 40PM31, 40PM32, 40PM33, 40PM34, and 40PM37 were recommended for testing to assess their eligibility to the National Register of Historic Places. Site 40PM77 was subsequently located during investigations at 40PM37 and later included in the testing program.

The site investigations were aimed at five goals: (1) determine each site's horizontal and vertical limits within the right-of-way; (2) determine the integrity of subsurface cultural deposits; (3) recover a representative sample of cultural material; (4) determine cultural affiliations that may be represented; and (5) determine the range of archaeological data classes represented (Beckwith 1987). To that end, three primary archaeological methods were used during the investigation: controlled surface collection, manual excavation of test units, and mechanical excavation of exploratory trenches and strip blocks.

This report is presented in eleven different sections and one appendix. The report begins with a brief outline of the project area's environmental setting that includes climate, physiography, and region resources. Section II reviews previous archaeological work in Putnam County along with a brief examination of the area's prehistoric occupation. A discussion of the project history is outlined in Section III. Sections IV through X provide information about each of the nine investigated sites. These particular sections begin with a site description, followed by the excavation methodology, cultural materials and features found, and summary remarks. Section XI comprises concluding remarks about the Phase II excavation results. Appendix A contains descriptions of the lithic tools recovered from each site.

I. ENVIRONMENTAL SETTING

All nine sites investigated during this project were located in the northern area of Putnam County less than two miles northeast of the Algood community. Starting at the junction of State Highway 334N and State Route 42/111, the sites extend along a two-mile stretch (what is now mostly State Route 42/111) that ends at the Putnam-Overton County line (Figure 1). The sites were situated on, or near, the valley floor of the Turkey Creek drainage. Site elevations ranged from 990 feet AMSL (site 40PM77) to 1,080 feet AMSL (site 40PM24). There is a gradual decline in elevation as one moves north of the study area (Figure 1). West of the site area lies higher ridge formations (Buck Mountain) that reach peaks of 1,502 feet AMSL, as well as a larger valley area (Black Bottom) with several streams that feed into Turkey Creek. There are also higher ridge formations east of the site area (Algood Mountain) that reach a maximum elevation of 1,472 feet AMSL, along with lower valleys (Chimney Springs Hollow, Pointer Hollow) and smaller tributaries of Turkey Creek.

Turkey Creek runs roughly southwest to northeast through the study area and has many branching smaller streams. Peak flows tend to be during late winter and spring (January to April), with a usual decrease starting in summer months that lasts into winter (mid-May through December). Turkey Creek runs almost the entire length of the study area, parallel to State Route 42/111, before heading south towards the spring in Chimney Springs Hollow which is likely the main headwaters for the creek. Turkey Creek empties into the larger Spring Creek just a few miles north of the project area. The site area and surrounding valley have historically been used for pasture and light farming.

Physiography

The study area occurs in the northern central portion of the Eastern Highland Rim and is bounded by the Central Basin to the west and the Cumberland Plateau to the east (Figure 2). This area, peripheral to the interface of the Eastern Highland Rim and western escarpment of the Cumberland Plateau, is a unique ecozone that exhibits characteristics of both physiographic regions.

The Eastern Highland Rim is narrower than the Western Highland Rim, averaging 25 miles wide and an elevation of slightly more than 1,000 feet AMSL. The highest point within the Eastern Highland Rim is 2,074 feet at Short Mountain (Miller 1974:4-5). This province is generally more level in terrain. However, the northern portion of the Eastern Highland Rim is more rugged as it is dissected by narrow valleys and their streams that result in many waterfalls (Miller 1974:4-5). Karst terrain dotted with caves, sinkholes, and rockshelters is also common throughout the Highland Rim, especially at the confluence of the Central Basin and Highland Rim (Miller 1974:4-5). Caves and rockshelters were

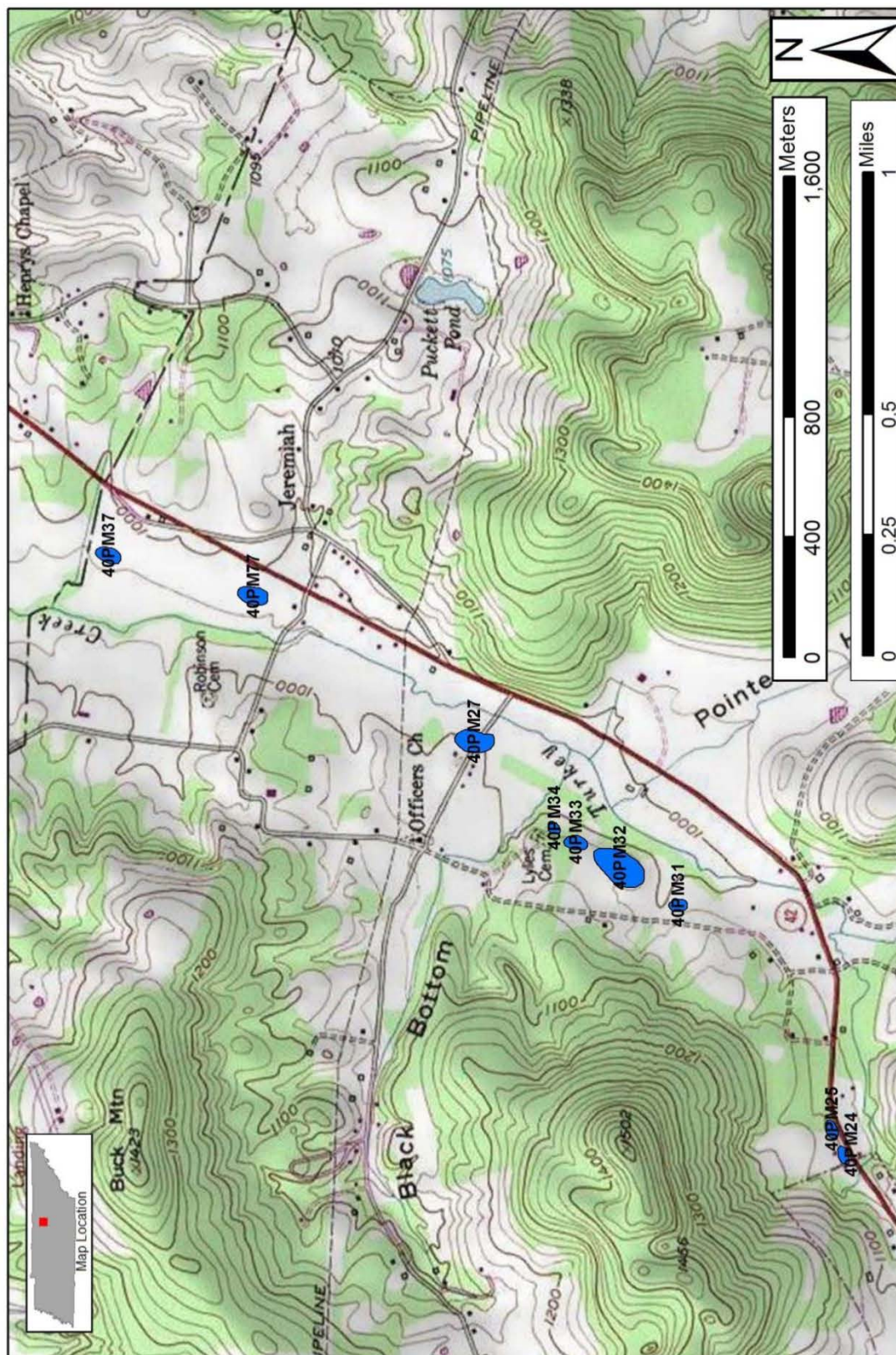


Figure 1. Topographic map of project area with investigated sites.

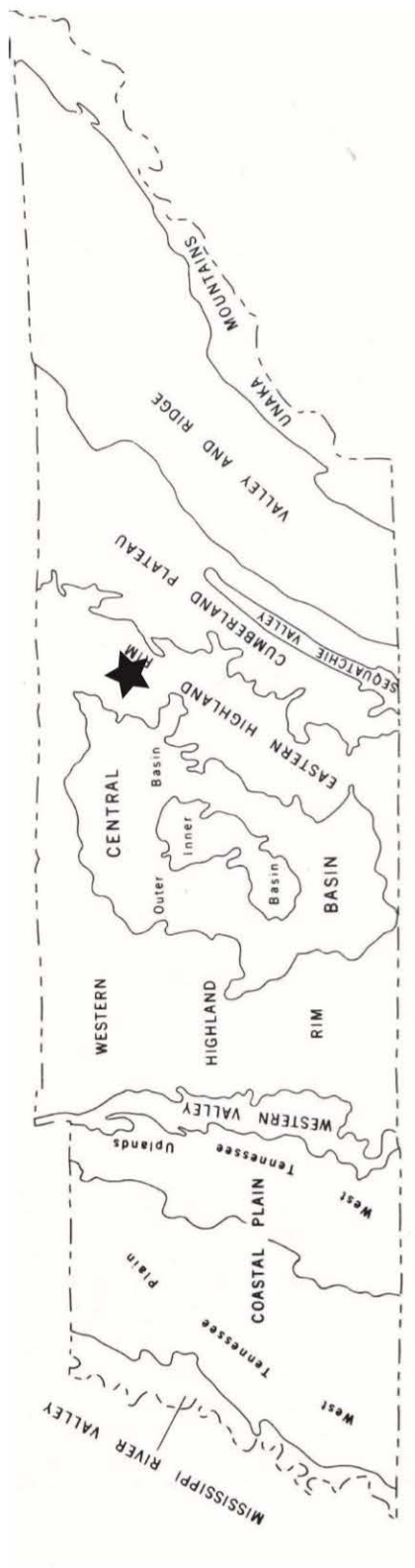


Figure 2. Physiographic province map with Algood project area.

important resources for prehistoric populations throughout all time periods for domestic, ritual, and economic activities (Crothers 1987; Dye 2008; Faulkner 1986,1988; Faulkner et al. 1984; Franklin 2002; Franklin et al. 2010, 2013; Hall 1985; Simek et al. 1998). The southern areas of the Eastern Highland Rim region are much flatter than the northern reaches and contain numerous swamps. Within Putnam County the Eastern Highland Rim is predominately undulating and rolling, although some locales are deeply cut by drainages making them hilly to steep (Jackson et al. 1963).

The Eastern Highland Rim is characterized by Mississippian sedimentary deposits that include limestone, chert, shale, siltstone, sandstone, and dolomite (Bassler 1982; Miller 1974:9). Formations found in the vicinity of the site area include St. Louis Limestone, Warsaw Limestone, Monteagle Limestone, Ft. Payne Formation, and Hartselle Formation. These sediments were deposited during the Paleozoic from around 350,000,000 to 325,000,000 years ago when most of Tennessee was under a shallow sea. The Fort Payne Formation is usually the bottom layer and comprises a highly siliceous limestone more than two feet thick containing calcareous siltstone and nodules of dense chert. Overlaying the Ft. Payne Formation is the Warsaw Formation that consists of a sandy limestone interbedded with sandstone and shale, with a thickness ranging from 30-35 meters. Above this formation is the St. Louis Limestone, a fine to medium grained, fossiliferous limestone ranging in thickness from 25 to 45 meters. On top of the St. Louis Formation is the Monteagle Limestone, which is a fine to coarse grained limestone ranging from 75-90 meters thick. The uppermost formation is the Hartselle Formation, a very fine grained sandstone that contains lenses of shale, with a thickness between 15 and 25 meters (Born 1936; Ferguson and Taylor 1968).

During the 1988 investigations, the Fort Payne Formation (found at elevations just under 1,000 feet AMSL) was observed to be exposed by Turkey Creek and its tributaries in the northern end of the study area at sites 40PM27, 40PM37, and 40PM77. The Warsaw Limestone Formation was observed at all the other sites and is known to occur at elevations between 1,000-1,100 feet AMSL. The surrounding higher elevations of the valley contained St. Louis Limestone at 1,100-1,200 feet AMSL, Monteagle Limestone at 1,200-1,450 feet AMSL, and the Hartselle Formation at 1,450-1,500 feet AMSL.

The Ft. Payne, Monteagle Limestone, and St. Louis Formations would have been economically important as chert sources for prehistoric people occupying the Eastern Highland Rim (Amick 1987; Faulkner and McCollough 1973). This physiographic region is known for containing an abundance of high quality, easily accessible chert (Amick 1987). Fort Payne chert represents a desirable and generally high grade material with superior flaking qualities that was readily available in the study area. St. Louis chert also represents a quality resource choice for the native residents (Amick 1987). The Monteagle Limestone would have been a poor choice for lithic tool manufacture due to its porous and

fossiliferous qualities. Many flakes found during the 1988 excavations displayed a homogenous texture and medium to light grey/blue color characteristic of both Ft. Payne and St. Louis cherts. As a result, it was near impossible to determine which type of chert was used more to make lithic tools, or if different site residents preferred one source over the other.

Climate

Putnam County is characterized by abundant rainfall, mild winters, and warm summers. The Anderson Pond site in neighboring White County (25 miles due south of Algood) noted the region's climate for the last 10,000 years as generally warm (Delcourt 1979; Delcourt et al. 1986). During this time the precipitation varied from wet to dry to moist, and the vegetation simultaneously mirrored these changes. The present average temperature is 58°F, with the first fall freeze around October 20 and last spring freeze around April 13. The mean annual precipitation is 56 inches (Springer and Elder 1980).

Soils

Algood area soils (Figure 3) are formed by loess and underlying beds of limestone and siltstone lenses that make up the Highland Rim (Jackson et al. 1963:96). These rocks are the parent material for the region's sloping and deep soils. The decay of these limestone layers has caused many sinkholes, especially in the northern part of the Highland Rim, which includes the project area (Jackson et al. 1963; Springer and Elder 1980). For the Algood project, the soils are best described as Christian-Mountainview, consisting of "rolling and hilly, well drained, clayey soils from siltstone and limestone and undulating well drained, silty soils from thin loess and limestone" (Springer and Elder 1980:31). Few steep slopes exist, except near deeper drainages, and usually range from 3 to 15 percent slope. Many areas are also flat. The soils are pale, deep, very acidic, and highly leached. Dominant soils have a brown, loamy surface layer and yellowish-red clay subsoil. The lower subsoil tends to be red clay that is visible on the surface in areas of significant erosion (Jackson et al. 1963:95; Springer and Elder 1980:31). Field observations during the site excavations confirmed the area's deflated and eroded soils, which were also noted by William E. Myer during his area explorations of the late nineteenth and early twentieth centuries (Myer 2014:81).

Most of the study area land has been cleared, but small wooded areas can be seen along the steepest or most eroded areas. Small fields of corn and tobacco are grown due to poor quality soils and irregular slopes. However, the majority of land is used for pasture and hay.

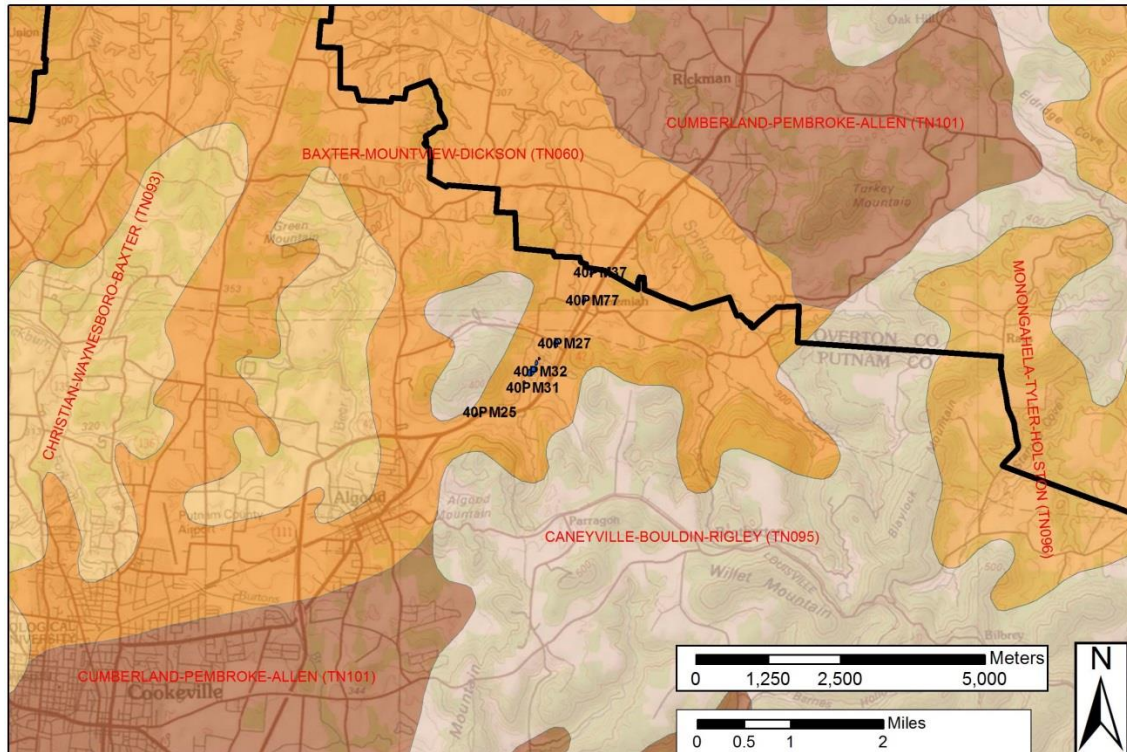


Figure 3. Algood project area soils.

Natural Resources

Putnam County contains both the Western Mesophytic Forest and Mixed Mesophytic Forest Regions. The Western Mesophytic Forest occurs on the Plateau areas of the county, and the Mixed Mesophytic Forest occurs between the Highland Rim and Central Basin transition. The project area lies within this transitional area with native vegetation that includes mixed upland oak, hickory, poplar, maple, and other deciduous trees (Braun 1964). Present day vegetation is dominated by oak-hickory communities with some poplar, black walnut, sassafras, cedar, maple, sycamore, cane, and other forbs and grasses observed during the project. Many of these plants were available to prehistoric inhabitants. Archaeobotanical materials recovered from sites 40PM27, 40PM32, and 40PM34 confirm the presence and use of several plant species.

Pollen data from the nearby Anderson Pond site in neighboring White County suggests the rim landscape was continuously forested (albeit by different species) from full glacial times (19,000 years ago) to the present (Delcourt 1979; Delcourt et al. 1986). This data also shows how the region's climate changed over time. By 16,500 years BP the late glacial climate reflected a decline in the number of xeric/dry boreal conifers and an invasion of cool temperature deciduous trees. During the Early Holocene, warmer and dryer climates began to occur as evidenced by the change in forest composition from a more mesic/moist

deciduous forest to more xeric. Later Holocene forests reflected a return to more moist climatic conditions as noted by more mesic taxa (Delcourt 1979; Delcourt et al. 1986).

Generally speaking, Middle Tennessee falls into the Carolinian Biotic Province, which is characterized by a rich faunal assemblage (Dice 1943). Common animal species include white tailed deer, elk, black bear, mountain lion, grey wolf, raccoon, bobcat, fox, mink, otter, skunk, weasel, muskrat, woodchuck, squirrel, rabbit, mouse, opossum, bat, eagle, hawk, owl, turkey, quail, pigeon, goose, duck, snakes, frogs, turtles, fish and mollusks (Schultz et al. 1954). These species were available to the prehistoric occupants of the area, but no faunal remains were recovered during the project. While the prehistoric inhabitants of the area most certainly consumed local fauna, the lack of faunal data may be attributed to a variety of factors that include: (1) poor bone preservation due to acidic soils; (2) an actual absence of animal butchering and related activities during occupation; and/or (3) sample bias due to the confined nature of the project within the right-of-way.

II. ARCHAEOLOGICAL BACKGROUND

As of December 2015 there are 150 sites recorded within Putnam County (Figure 4). Of this number, 124 have a prehistoric component and 45 have a historic component (these numbers reflect sites that have more than one component). This total is relatively small when contrasted with other counties such as Montgomery with over 1200 sites, or Davidson with 650+ sites. Counties bordering Putnam have equally low site numbers (see Table 1). This perceived lack of recorded sites is most likely due to the general rural nature of Putnam and surrounding counties, and does not represent a real absence of archaeological sites in the area. While there are heavily populated (more urban) areas within Putnam County, such as Cookeville, the majority of the county is used for agricultural and/or pastoral activities (around one-third of the county population are employed in non-farm related occupations). The majority of archaeological sites in Tennessee are found due to development projects. So, it is no surprise that Putnam County with around 73,500 residents (roughly 1.2% of the Tennessee population) would have a relatively small number of recorded archaeological sites due to the lack of major development.

Table 1. Number of Recorded Sites in Counties Bordering Putnam County.

County	Total Number of Sites	Historic Component	Prehistoric Component
Smith	226	61	193
Jackson	267	40	255
Overton	165	12	160
Cumberland	69	8	56
White	145	30	118
Dekalb	123	33	93

While a lack of widespread major development projects within the county has certainly served to protect archaeological sites, it also means that very few formal archaeological investigations have taken place. The majority of sites have been recorded during Phase I and II archaeological surveys conducted for various highway, bridge, and utility line projects. Figure 4 illustrates that these recorded sites tend to occur along major roadways, pipelines and other utility corridors, and waterways. Few Phase III (data recovery) projects have been carried out within the county, and no additional sites have been formally recorded in the county since 2008.

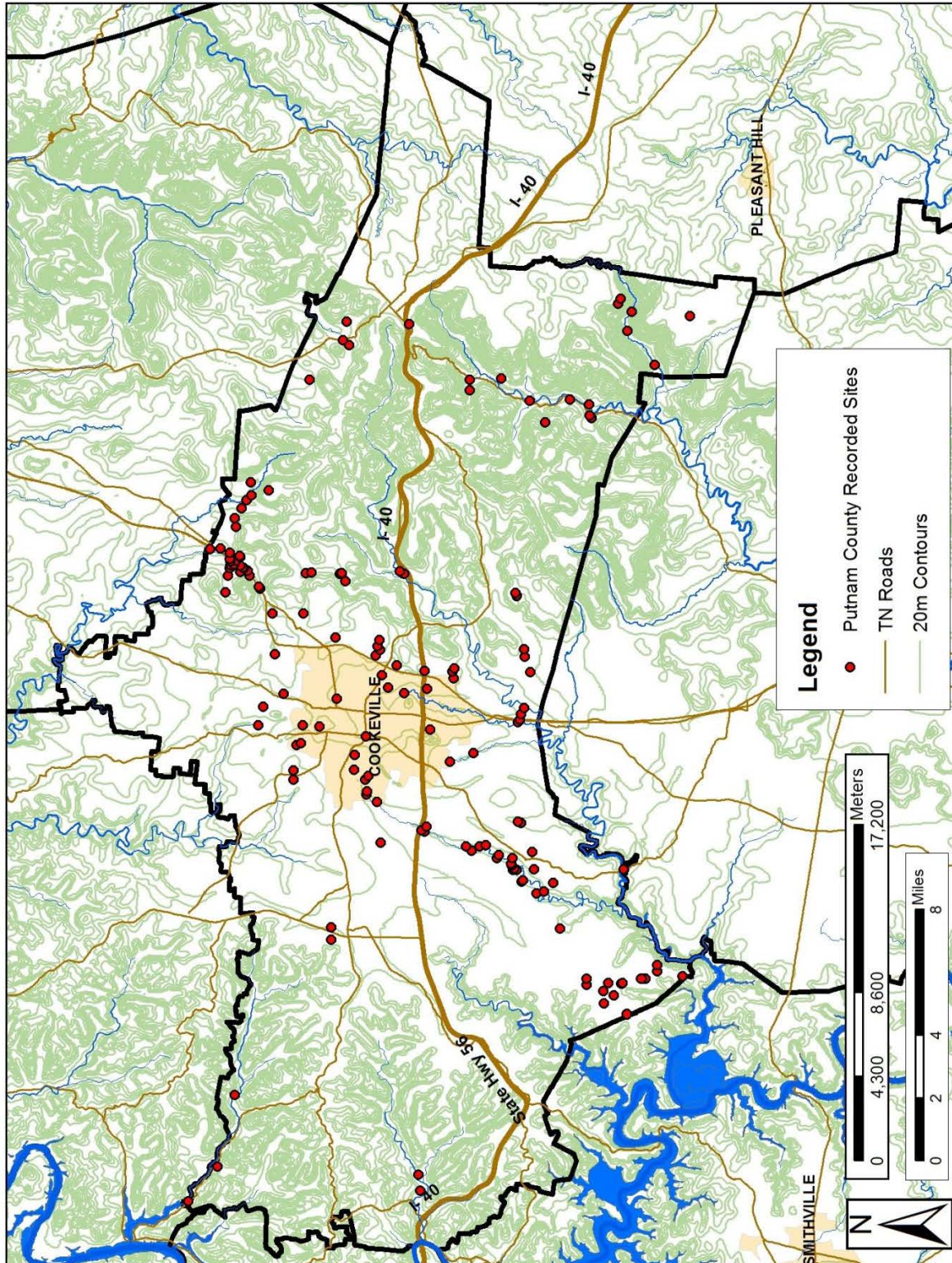


Figure 4. Map of recorded sites in Putnam County.

Previous Investigations

William Edward Myer

The first mention of any archaeological site in Putnam County comes from William Edward Myer's unpublished manuscript *Catalogue of Archaeological Remains in Tennessee* (Myer 1923). In this work, Myer mentions four sites within Putnam County. The first and most significant is Officer Mounds, claimed to be on the land of Abraham H. Officer two and one-half miles northeast of Algood on Turkey Creek, and one mile from the northern base of Algood Mountain (Myer 1923:103). This site was quite large, with its three mounds still somewhat intact when he visited despite the fact that they had been plowed for 25 years. Mound 1, almost completely plowed out of existence, was noted by Mr. Officer to have been ten feet high and 35 feet in diameter. The decayed remnant of a wood pole (12 inches in diameter) was reported at the mound top. Mound 2 was originally six feet high and 35 feet in diameter, and Mound 3 was formerly eight feet high. Myer's investigation did not yield any burials or significant artifacts, and Mr. Officer claimed he never found any in his years farming the land (Myer 2014:80-81).

Spears noted in a partial draft manuscript that local residents mentioned a prehistoric mound site was behind Officer Chapel, but that it was no longer present due to plowing activity. This report was not investigated at that time as the reported site was well outside the project right-of-way. The Officer Mound mentioned by Myer is possibly the same mound mentioned by the locals. While no mound is recorded in the vicinity of Officer Chapel in the Division site files, there are at least six sites recorded in that area (40PM26, 40PM27, 40PM35, 40PM36, 40PM83, 40PM84). Three have an undetermined prehistoric component, and the other three have Archaic and/or Woodland components.

The second site Myer mentions is Early Burial Cave in the headwaters of Spring Creek on the Overton/Putnam County line. This site was said to have a large amount of Indian remains that were long since removed by relic hunters. A third site mentioned is Inhabited Cavern reported on the land of O.A. Kirby two miles north of Bilbrey Station. This particular site contained few relics (Myer 1923:102). Another site named is Standing Stone, a pink sandstone monument reportedly erected by Native Americans sometime in the past that stood 13 feet high. Standing Stone is located one mile west of modern day Monterey in Putnam County on Walton Road, roughly 20 miles from the Algood project area. This monument most likely marked a significant Native American trail that passed through the area (discussed more below). Supposedly the monument fell over in the 1800s and small pieces were chipped off by trail travelers, with some looting by early settlers (Myer 2014:81; 294). A version of the monument still exists in Monterey today, standing eight feet tall, and is reported as having been the boundary between Cherokee and Shawnee territory, as well as a marker of the Cherokee Tallonteeskee Trail.

All of the Myer sites in the Algood vicinity are said to have been at (or near) an old Indian trail used by the Cherokee that led from Kingston in Roane County, TN via Standing Stone in Monterey to the Cumberland River in Jackson County (Myer 1923:102; 1971:99; 2014:81). Myer called this trail the Cumberland Trace (Figure 5), which connected East Tennessee to the Nashville settlements, branching off into several different prongs right outside Algood (Myer 1971:99-103; 2014:293-320). Early settlers also used this trail, and a branch of it passed by Fort Blount (Smith and Nance 2000).

Modern Archaeological Investigations

The first sites recorded in Putnam County were found during a 1973 survey at the bequest of a housing developer. This survey was mostly in Cumberland County but extended into the southeast corner of Putnam County. Four prehistoric sites (three rockshelters) were located within Putnam County (40PM1, 40PM2, 40PM4, and 40PM4) along Dark Hollow Branch/ England Cove. These sites were recorded as having Archaic, Woodland, and Mississippian occupations, although only 40PM4 is recorded as having material from all three periods as well as the only site to have Mississippian artifacts (Dickson 1973).

Memphis State University conducted a 1975 survey in the Cane Creek watershed (Peterson 1975) west of Cookeville for the USDA Soil Conservation Service and found sixteen prehistoric sites (40PM204-219). These sites were recorded in two clusters, one near the town of Ditty and the other at the Cane Creek headwaters. One site (40PM214) yielded a possible Paleoindian point fragment and represents one of three potential Paleoindian occupations in the county. Five sites (40PM206, 40PM208, 40PM212, 40PM216, and 40PM217) had Early Archaic components, and one (40PM206) had a Middle Archaic component. Two sites (40PM218 and 40PM219) were noted as general Archaic.

In 1976, a survey in areas surrounding the towns of Cookeville and Algood stopped just short of the SR-42 project area. This survey was conducted to assess the potential damage of planned construction on sewer lines outside of these two towns. Of the possible 37 sites found, nineteen were recorded as actual sites (40PM5 through 40PM23), with ten returning Archaic occupations and six having evidence of Early to Middle Woodland components (Kleinhans 1976).

Following the Phase I and subsequent Phase II investigations for the SR-42 project, numerous sites were recorded by road and bridge construction, placement of new utility lines, and construction of buildings and houses (Alexander 1995; Anderson 1997, 1998; Barrett and Karpynek 2008; Bentz and

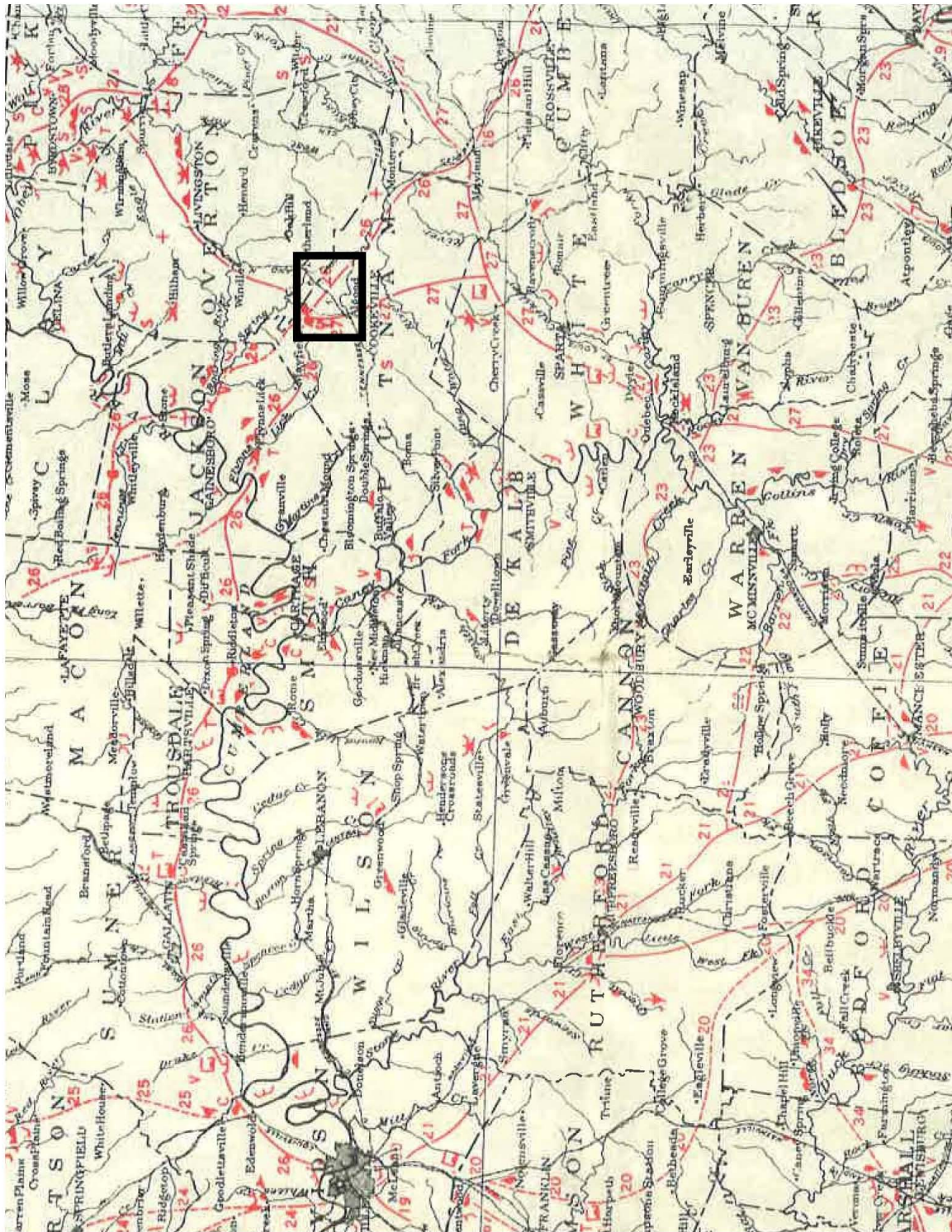


Figure 5. Myer's Indian Trails Map. Bold square shows the project area. The trail numbered 26 is the Cumberland Trace. Map from Myer 1971.

Allen 2010; Bosworth et al. 2004; Collins et al. 2001; Dippel 1999; DuVall 1995, 1997; Hockersmith 2008, 2013; Hockersmith and Karpynec 2009; Jones and Karpynec 2008; Karpynec 2008a, 2008b; Kline 1994; McKee and Burr 2014; Miller 2005; Moore 1994; Moore and Kline 1995, 1996; Patch and Gregory 2011; Wampler and Nichols 2001; Willey 1947).

Within the specific SR-42 project area (northeast Putnam County), a relatively small number of sites (n=17) have been discovered since 1988. All of these sites have prehistoric components, with historic components represented at six sites. Most of these sites were recorded during surveys for transmission lines, natural gas pipelines, and road projects (Buchner 1990; Childress and Buchner 1991a; Childress and Buchner 1993; McNutt and Buchner 1991; Wampler and Nichols 2002).

Beginning in 1990, a major Phase I survey project was undertaken to assess the damage to cultural resources by a large natural gas pipeline project (East Tennessee Natural Gas Pipeline) that spanned multiple counties (Buchner 1990). The pipeline corridor intersected and ran roughly perpendicular to the State Route 42 realignment, following the eastern edge of Putnam County and then crossing the northern county section. This survey discovered a number of sites (40PM35 and 40PM81-90) in eastern Putnam County adjacent to the SR-42 corridor. Over half had an indeterminate prehistoric occupation (40PM35, 40PM81, 40PM82, 40PM83, 40PM87, 40PM88, 40PM90). Five sites yielded cultural material indicative of Early Archaic (40PM85, 40PM89), Late Archaic (40PM84, 40PM86), Middle Woodland (40PM89), and historic (40PM83, 40PM84, 40PM86, and 40PM89) periods.

Additional Phase II testing was conducted at sites 40PM85, 40PM86, 40PM87, 40PM88, 40PM89 and 40PM90 just southeast of the SR-42 project area (Childress and Buchner 1991a). Subsequent data recovery excavations were conducted at three sites (40PM85, 40PM89, and 40PM90) deemed eligible for the National Register (Childress and Buchner 1993). Figure 6 shows their location in relation to the sites discussed in this report.

Site 40PM85 contained a large amount of lithic material with all temporally sensitive material representing an Archaic occupation (most likely Early Archaic). The data recovery investigation confirmed site use from the Early to Late Archaic periods, but did not discover any new features. The work did result in a radiocarbon date of 1290 BC (Childress and Buchner 1993:118–136).

The 40PM89 data recovery work confirmed late Paleoindian, Archaic, and Woodland occupations. This work revealed intensive use of a terrace knoll during the late Middle Woodland (AD 650-700) based on assemblage data, structural remains, and several radiocarbon dates. This site appears to have been used as a warm season habitation based on floral remains and architectural details. Two small structures uncovered at the site were interpreted as a warm season

dwelling and storage building. Both are considered part of the late Middle Woodland component. Light use of the knoll from the Early Archaic until Mississippian periods was evidenced by point types and a circular Cox Mound shale gorget fragment (Figure 7) that dates AD 1200-1350 (Childress and Buchner 1993:137–202). Most gorgets of this style are made of marine shell, which makes this find very unusual. A similar, yet smaller, shale specimen was recovered from the Castalian Springs mound complex in Sumner County (DuVall & Associates 2005).

Investigations at 40PM90 defined Late/Terminal Archaic (1100-700 BC), late Middle Woodland (AD 650-700), and Late Woodland (AD 820) occupations. The site was most heavily occupied during the Terminal Archaic Motley occupation as a warm season habitation area used by groups that seasonally rotated between the Cumberland River floodplain and the eastern edge of the Highland Rim (Childress and Buchner 1993). Afterward, the site remained largely unoccupied until a brief late Middle Woodland occupation that probably corresponded to 40PM89. The Late Woodland occupation was represented by a rectangular wall trench structure and may have been settled by a group with ties to complexes further east.

The ceramics recovered from 40PM89 and 40PM90 are noteworthy as Putnam County sites generally lack ceramic artifacts. Only three open habitation sites (40PM3, 40PM18, and 40PM40) have yielded them, in addition to a few looted rockshelters.

Sites 40PM96 and 40PM97A were discovered by an additional Phase I survey for the East Tennessee Natural Gas Company for pipe storage yards along the pipeline corridor (McNutt and Buchner 1991). Both sites occur east of the SR-42 project area and comprise lithic scatters of undetermined age.

A 2002 survey for a proposed road project discovered sites 40PM113-40PM115 northwest of Algood. Site 40PM115 returned temporally sensitive materials with one Early Woodland and one Middle Woodland point. Sites 40PM113 and 40PM114 had undetermined prehistoric occupations (Wampler and Nichols 2002).

In 2007, sites 40PM120-40PM127 were recorded during a survey of proposed TVA transmission lines (Hockersmith and Karpynec 2007). These sites yielded flake debitage, with historic components also noted for 40PM123 and 40PM126. Controversy surrounding this proposed project resulted in an additional survey of the project right-of-way with four rockshelter sites recorded in the Buck Mountain area. These newly discovered Late Paleoindian to Late Woodland sites were not impacted by the proposed TVA project.

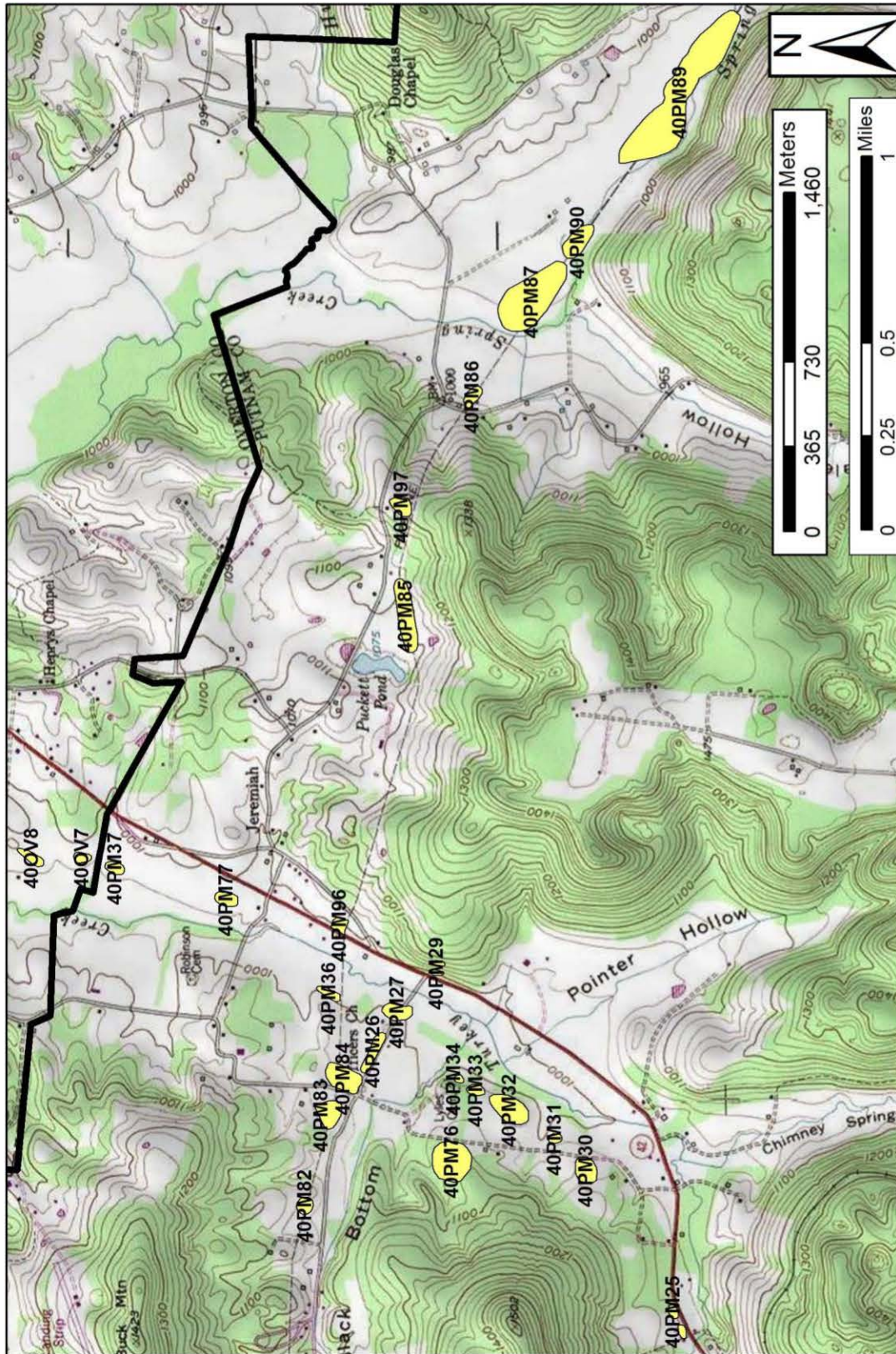


Figure 6. Topographic map of sites recorded around project area.



Figure 7. Cox Mound Style gorget from the Billbrey site, 40PM89.

Of the 150 recorded sites in Putnam County, over 80% (n=124) have at least one prehistoric component, and 30% (n=45) have a historic component (Table 2). Twenty-seven sites (18%) have both prehistoric and historic occupations. Interestingly, nearly one-quarter of sites in the county (n=37, 24.7%) exhibit evidence for multiple components ranging from Paleoindian to historic. Within the county, 42% (n=63) of sites have a prehistoric component that could not be specified to a time period.

No human remains have been documented within the county aside from two historic cemeteries. This is likely due to acidic soils across the county that contribute to poor bone preservation.

Prehistoric Settlement of Putnam County

The vast majority of prehistoric sites in Putnam County are classified as open habitations. The few exceptions include a mound site (40PM78) recorded just outside the town of Monterey. Spears reported the mound was possibly a hill formed by natural erosion. A scatter of lithic material was observed on and around the hill. The Johnson Cave site (40PM101) contains Pleistocene fauna

remains (jaguar skeleton donated to Sewanee), but no evidence of human occupation (Corgan 1976:84). In addition, there are ten rockshelter sites recorded within the county, but most have been previously looted.

Evidence for Paleoindian (12,000 BC to 8,000 BC) occupations is sparse with only 2% (n=3) of recorded sites in Putnam County having potential components (40PM102, 40PM214, and 40PM220). This relatively small number, however, may reflect sampling bias and limited research strategies rather than actual absences of sites. Previously recorded Paleoindian artifacts have come from private collections. A potential Clovis preform was recovered by the landowner of 40PM102 along with other artifacts dating from the Early Archaic through Middle Woodland periods. Site 40PM220 also produced evidence of a long occupation spanning Late Paleoindian/transitional Paleoindian through Late Archaic. Evidence of a Paleoindian occupation at this site consists of a few point fragments collected from the surface. Paleoindian use of 40PM214 is based on one possible point collected from the surface (Peterson 1975).

The fifty sites with Archaic period (8,000 BC to 1,000 BC) components account for well over one-third of recorded Putnam County prehistoric sites. This number supports a substantial (and admittedly obvious) increase in area population over the previous Paleoindian period. A review of Table 2 shows there are Early Archaic components at 21 sites, Middle Archaic components at 16 sites, and a notable increase of 30 sites with Late Archaic (3,500 BC to 1,000 BC) components. Sites containing evidence of only one period of occupation include 12 sites with an Early Archaic component, two with Middle Archaic components, and 20 sites with Late Archaic components. Five sites yielded evidence of relatively continuous occupation from the Early through Late Archaic periods. Site 40PM85, along with the Wiley site (40PM90), represent the best documented Archaic occupations in the county (Childress and Buchner 1993). Numerous sites with Archaic components have been found elsewhere on the Eastern Highland Rim and adjacent Cumberland Plateau (Faulkner and McCollough 1974; Ferguson et al. 1986; Jolley 1979; Kleinhans 1976; Wilson and Finch 1980).

The Woodland period (1,000 BC to AD 900) is represented by 20% (n=30) of recorded Putnam County prehistoric sites. Seventeen sites with Late Archaic components also had Woodland components, with two sites (40PM3 and 40PM4) having Early, Middle and Late Woodland occupations. A review of Table 2 shows there are Early Woodland components at 14 sites, Middle Woodland components at 16 sites, and 10 sites with Late Woodland components. Sites with single Woodland components account for one-third (n=10) of the Woodland total with four Early Woodland components, three Middle Woodland components, and three Late Woodland components. These numbers suggest the Putnam County Woodland populations were somewhat comparable to the previous Archaic populations. The previously mentioned sites 40PM89 and 40PM90 also

represent the best documented Woodland occupations in the study area to date (Childress and Buchner 1993).

Five sites with evidence of Mississippian period (AD 900 to 1500) occupations have been defined in Putnam County. Table 2 shows 40PM4 has Late Archaic through Mississippian components (Dickson 1973:39). Another site (40PM25, discussed in this report) has Late Woodland and Mississippian components. The assignment of sites 40PM4, 40PM25, and 40PM222 as Mississippian is somewhat tenuous through the presence of one or two projectile points. Site 40PM40 and 40PM89 yielded more substantial evidence of Mississippian habitation in the form of shell-tempered ceramics (40M40) and the previously mentioned shale gorget (40PM89).

From the information presented in Table 2, Putnam County was most heavily occupied during the Archaic and Woodland periods, with an apparent population decline during the Mississippian period. The Late Archaic period seems to have been a particularly favorable time with 30 sites (25% of the prehistoric total). This more substantial presence coincides with developments occurring throughout the southeast as the climate became moister, allowing for an increase in the variety of available food sources. This is also a time when the cultural influence of Poverty Point was at its peak with a complex trading system in exotic goods (such as marine shell and copper) extending throughout the southeast.

Table 2. Site Components in Putnam County.

Site Number	Unidentified Prehistoric	Paleo-indian	Archaic Undetermined	Early Archaic	Middle Archaic	Late Archaic	Woodland Undetermined	Early Woodland	Middle Woodland	Late Woodland	Mississippian	Historic	Rock Shelter	Mound	Cave
40PM1										X			X		
40PM2	X							X	X	X			X		
40PM3						X									
40PM4						X		X	X	X	X		X		
40PM5						X			X	X		X			
40PM6	X											X			
40PM7												X			
40PM8				X	X	X		X	X						
40PM9	X											X			
40PM10	X														
40PM11	X				X								X		
40PM12				X	X							X			
40PM13				X	X							X			
40PM14						X		X				X			
40PM15	X														
40PM16	X														
40PM17						X									
40PM18				X					X	X					
40PM19	X											X			
40PM20	X														
40PM21				X											
40PM22	X														
40PM23								X	X						
40PM24	X														
40PM25					X					X	X				
40PM26						X									
40PM27						X		X					X		
40PM28															
40PM29	X														
40PM30	X														
40PM31					X										
40PM32				X				X							
40PM33									X						
40PM34	X														
40PM35	X														
40PM36	X														
40PM37															
40PM38	X												X		
40PM39	X												X		
40PM40							X				X		X		
40PM41				X	X	X		X	X						
40PM42									X						
40PM43						X		X	X						
40PM44				X		X									
40PM45					X	X									
40PM46	X														
40PM47	X														
40PM48				X	X										
40PM49															
40PM50												X			
40PM51												X			
40PM52												X			
40PM53												X			
40PM54												X			
40PM55												X			
40PM56												X			

Table 2. Site Components in Putnam County. (continued)

Site Number	Unidentified Prehistoric	Paleoindian	Archaic Undetermined	Early Archaic	Middle Archaic	Late Archaic	Woodland Undetermined	Early Woodland	Middle Woodland	Late Woodland	Mississippian	Historic	Rock Shelter	Mound	Cave
40PM57												X			
40PM58												X			
40PM59												X			
40PM60												X			
40PM61				X											
40PM62												X			
40PM63												X			
40PM64												X			
40PM65												X			
40PM66												X			
40PM67												X			
40PM68												X			
40PM69												X			
40PM70	X												X		
40PM71					X										
40PM72	X					X									
40PM73									X						
40PM74	X														
40PM75	X														
40PM76						X									
40PM77							X								
40PM78	X													X	
40PM79	X														
40PM80													X		
40PM81	X														
40PM82	X														
40PM83	X											X			
40PM84				X		X						X			
40PM85					X										
40PM86				X		X									
40PM87	X														
40PM88						X		X	X						
40PM89				X		X		X	X		X				
40PM90						X			X	X					
40PM91	X														
40PM92												X			
40PM93	X														
40PM94	X														
40PM95	X														
40PM96	X														
40PM97	X											X			
40PM98			X									X			
40PM99				X		X									
40PM100					X	X									
40PM101															
40PM102		X			X	X		X							X
40PM103	X														
40PM104			X												
40PM105			X												
40PM106															
40PM107	X		X												
40PM108	X														
40PM109	X														
40PM110	X														
40PM111												X			
40PM112	X											X			
40PM113	X														

Table 2. Site Components in Putnam County. (continued)

Site Number	Unidentified Prehistoric	Paleoindian	Archaic Undetermined	Early Archaic	Middle Archaic	Late Archaic	Woodland Undetermined	Early Woodland	Middle Woodland	Late Woodland	Mississippian	Historic	Rock Shelter	Mound	Cave
4QPM114	X					X									
4QPM115								X							
4QPM116												X			
4QPM117												X			
4QPM118												X			
4QPM119												X			
4QPM120	X														
4QPM121	X														
4QPM122	X														
4QPM123					X	X						X			
4QPM124	X														
4QPM125	X														
4QPM126	X											X			
4QPM127	X														
4QPM128	X														
4QPM129	X						X								
4QPM130	X						X								
4QPM131	X						X					X			
4QPM204	X														
4QPM205	X														
4QPM206				X	X										
4QPM207	X														
4QPM208				X											
4QPM209	X														
4QPM210			X												
4QPM211	X														
4QPM212				X											
4QPM213	X														
4QPM214		X													
4QPM215	X														
4QPM216				X											
4QPM217				X											
4QPM218			X												
4QPM219						X									
4QPM220		X		X	X	X									
4QPM221	X												X		
4QPM222				X		X			X		X	X			
Totals	63	3	6	21	16	30	5	14	18	8	5	45	10	1	1

III. PROJECT BACKGROUND AND METHODS

Phase 1 Survey, 1976

All nine sites investigated in 1988 were recorded in 1976 during a Phase I archaeological reconnaissance on State Route 42 in Putnam and Overton counties by TDOT personnel (DuVall 1976). This survey was initiated to assess the impact of alternative corridor alignments (A and B) on previously unrecorded sites. Sites were recorded based on cultural material visible during the surface survey as no subsurface testing was conducted during this phase of the project. A total of 18 sites were recorded during this survey (17 open habitations and one rockshelter). Observed artifacts were collected, and cultural affiliations were assigned for those sites that contained a sufficient amount of temporally sensitive artifacts. Recovered projectile points suggested these sites ranged in age from the Early Archaic to Late Woodland periods. Eight of the initial 18 sites (40PM24, 40PM25, 40PM27, 40PM31, 40PM32, 40PM33, 40PM34, and 40PM37) were recommended for additional investigation (Beckwith 1987; DuVall 1976). As previously mentioned, site 40PM77 was located during the 40PM37 investigation and further evaluated.

Phase II Testing, 1988

Phase II testing by TDOA staff began on September 1, 1988 and continued until November 30, 1988 (Figure 8). Five objectives were presented in TDOT's proposal to assess the National Register potential of each site: (1) determine each site's horizontal limits within the proposed right-of-way; (2) determine each site's vertical parameters and integrity of subsurface cultural deposits within the proposed-right-of-way; (3) recover a representative sample of cultural material; (4) determine the cultural affiliations of each site, when able; and (5) determine the range of archaeological data classes present (Beckwith 1987).

Excavation Methods

Investigation methods to be used included "controlled intensive systematic surface collection with manual excavation of limited numbers of test pits and excavation of exploratory trenches or block areas using heavy machinery" (Beckwith 1987). Due to varying conditions at each site (state of preservation, topography, and visible surface material), no blanket method could be applied to all sites. Instead, each site required a different combination of the investigation methods mandated by TDOT.



Figure 8. Crew during excavation of Strip Block 2 at site 40PM34.

Site excavations were generally accomplished with a four-man crew and a backhoe. The order of site excavations were prioritized according to the amount and type of work required in consideration of the construction schedule. A site investigation was initiated by a surface survey to determine the extent of visible cultural materials, followed by a controlled collection that mapped all temporally sensitive artifacts. Six sites had to be plowed in strips or block units to facilitate a surface collection due to dense pasture grasses and weeds (Figure 9).

Subsurface investigations were then employed in the form of backhoe trenches, strip blocks, test units, and feature excavations. Strip blocks and trenches were excavated using a backhoe with a toothless bucket. Excavated fill from these units was trowel sorted with all observed artifacts collected. Strip block excavations were terminated at the base of the plow zone, while trenches extended to clay subsoil. Test units were excavated by hand using shovel and trowel in either natural or arbitrary (six-inch) levels that terminated at sterile subsoil. All unit fill was screened through $\frac{1}{4}$ -inch mesh. Features exposed during these investigations were bisected, with the first half screened through $\frac{1}{4}$ -inch mesh and the second half bagged as a bulk soil sample for flotation.



Figure 9. Plowing employed during select site excavations.

All measurements, grids, datum locations, and site maps were referenced to the TDOT project construction plans, extant right-of-way stations, and right-of-way boundaries. These plans were drawn using the standard U.S. measuring system, and feet and inches were used during the archaeological investigations instead of metric units more commonly used for prehistoric site investigations.

The field investigations were supplemented with local informant interviews. Additionally, as a precaution following completion of the Phase II excavations, monitoring of the site areas was performed during the first month of road construction activities.

Analysis Methods

All artifacts were brought back to the TDOA lab where they were washed and sorted. The bulk soil samples were floated through a series of graduated sieves.

The initial lithic analysis sorted recovered materials by reduction and tool categories. Traits such as heat treatment, color, and material type were also noted. The analysis data was cataloged in dBASE III Plus files and saved on 5¼" floppy disks.

The only charred botanical remains from the Phase II project were recovered during flotation of the bulk soil samples. Botanical samples retrieved from the flotation samples were analyzed by sifting each sample through a graduated series of USA standard geological sieves with mesh sizes of 2.0 mm, 1.0 mm, and 0.2 mm. The contents of the 2.0 mm sieve were sorted, weighed, and identified using a variable power microscope. Charred wood, nutshell, and seeds were recovered from the 2.0 mm sieve. A maximum of 30 wood charcoal fragments were removed from each sample for identification. Charred material in the 1.0 mm and 0.25 mm sieves was examined with only seeds and fruits removed and counted. No charred botanical samples were sent for radiocarbon dating.

Lithic Reanalysis, Early 1990s

A partial reanalysis of the lithic assemblage by Mike Moore separated the recovered artifacts into 19 basic categories based on morphological and/or functional characteristics. Descriptions of tools found at each site (projectile points, scrapers, hammerstones, nutting stones, etc.) were also recorded. While the intent of the reanalysis was to eventually produce a report on the SR-42 project results, Moore was drawn away from this reanalysis to other projects.

Chipped Stone

- *Core* - Chert cobbles (and cobble sections) that display regular patterns of flake removal. The objective of reducing these cobbles is the production of flakes rather than working the cobble itself into a tool.
- *Test Cobble* - Chert cobble that usually has only one or two flake scars. It differs from a core that has three or more flake scars.
- *Thick Biface* - Chert cobbles that are bifacially worked and minimally shaped. They usually have large flake scars, sinuous edges, and thick cross-sections. Cortex is often still visible on these bifaces.
- *Thin Biface* - Bifaces that are the result of additional reduction and shaping of thick bifaces. They usually have much thinner cross-sections and less sinuous edges. Flake scars are also often smaller with little to no cortex still left on the biface.
- *Flakes* - Unmodified pieces created during the manufacturing and maintenance of chipped stone tools. They fall into one of three subcategories based on the amount of cortex still visible on the surface and the cobble reduction sequence. These subcategories are primary, secondary, and blank flake. *Primary flakes* have cortex over their entire dorsal surface, while *secondary flakes* have less than 90% cortex over

their dorsal surface. *Blank flakes* have no cortex at all, except for the occasional appearance on the striking platform.

- *Blocky Debris* - Angular and blocky fragments produced as a by-product of chipped stone manufacture and maintenance. They often occur as shatter during percussion flaking.
- *Modified/Utilized Flake* - Flakes that had intentional, consistent, and even flaking along one or more lateral edges were placed in this category. Three functional subcategories (scraper, cutting tools, and spokeshave) were identified based on morphological and wear characteristics. Scraping tools display steep, unifacial flaking along one or more edges with fine unifacial microflaking on the same edges. They differ from formal scrapers in that they have been less extensively chipped and shaped. Cutting tools are bifacially retouched flakes with fine bifacial microflaking along one or more edges. Spokeshaves exhibit a unifacially retouched concave edge/notch.
- *Projectile Point* - A functional category that includes notched and un-notched bifaces interpreted as dart and arrow points. The points are classified by morphological characteristics, with previously established type names used when possible (Cambron and Hulse 1964; Justice 1987).
- *Scraper* - Flakes unifacially worked along one edge for use in such activities as hideworking and woodworking. Scrapers may be classified as either an end or side scraper based on the particular worked location (distal end or long edge).
- *Knife* - Cutting tools, often lanceolate in shape, with one or more bifacially worked edges that make them well-suited for cutting meat and other materials. These edges also exhibit fine bifacial microflaking.
- *Blade* - Flakes at least twice as long as they are wide, with parallel edges and at least two ridges on the dorsal surface.
- *Drill* - slender, pencil-shaped sections comprising the bit. The bases varied considerably in shape and size.

Ground and Pecked Stone

- *Nutting Stone* - Roughly discoidal or amorphous stones that display flat surfaces with at least one small to large circular depression.
- *Hammerstone* - Rounded cobbles that exhibit extensive crushing and/or battering along one or more surfaces.

- *Metate* - Large, sandstone fragments that display at least one heavily ground surface used for grinding plant materials.
- *Unidentified Groundstone* - These items display ground surfaces but can't be assigned to a specific category as they are either broken, too small, and/or otherwise damaged.

Reanalysis and Completion, 2014-2015

In January 2014, State Archaeologist Mike Moore asked Sarah Levithol to finish the Algood artifact analysis as well as complete a final project report. The artifact analysis continued the same classification system initiated by Moore in the early 1990s. A decision was made to set aside the partial draft manuscript started by Spears and write a completely new final project report. Select portions of the draft manuscript were revised and included in this final product, specifically parts of the project methodology and site descriptions. However, this product includes new figures, maps, drawings, charts and tables, along with updated analyses of recovered materials and concluding remarks. All project records, files, and images have been digitally archived in the Division site file.

IV. SITES 40PM24 AND 40PM25

Site Descriptions

Both 40PM24 and 40PM25 were located in the southern portion of the project area immediately adjacent to one another on the same undulating bench (see Figure 1). They lie on the west side of Old State Highway 42 in a flat, narrow area between Black Bottom and Algood Mountain. Their close proximity to one another suggests these two sites actually comprise a single site.

Site 40PM24 occurs at the head of the Turkey Creek drainage at an elevation of 1,080 feet AMSL. Here the valley floor constricts between two large ridges just before merging into the higher elevations. The site was established at the foot of the western-most ridge on an irregular and undulating bench/terrace with a southeast-facing slope overlooking a narrow floodplain formed by springs and tributaries of Turkey Creek. The site was initially recorded in 1976 by lithic material in a road cut (DuVall 1976). The 1988 investigations determined the site area to be highly disturbed by a homestead and associated farming activities. The site area was covered in weeds and grasses along with two large oak trees. A light scatter of cultural lithic materials was evident in disturbed areas and along an old road cut on the west half of the site. This lithic scatter measured approximately 200 feet north-south by 150 feet east-west.

Site 40PM25 was immediately adjacent to the eastern edge of 40PM24, occupying the same undulating bench at an elevation of 1070 feet AMSL (Figure 10). The site area was also covered in pasture grasses and weeds, and had been subjected to substantial modern disturbances. A light scatter of lithic material approximately 200 feet north-south by 150 feet east-west defined the site boundaries. A small intermittent drainage, which originated at higher elevations to the north and west, bordered the northeastern edge of the site. The quadrangle map illustrates the drainage originally flowed down the slope and across Highway 42 to meet with Turkey Creek. Now the drainage has been dammed at its lower end (just short of the highway) and no longer reaches the floodplain. Red clay was used to construct an old road bed (parallel to Highway 42) that bisected the site. As a result of being dammed, the drainage has filled in with sheet wash and erosional materials from the upper slope. This fill contained a substantial number of chert cobbles and nodules, limestone, and some culturally modified lithic items. The drainage likely served as a prehistoric source to procure knappable material.

40PM24

The site was divided into east (Area D) and west (Area E) halves. A general surface collection of each area was made. Five backhoe trenches were excavated in promising areas (Figure 11). Trench floors as well as profiles were



Figure 10. View of 40PM25 before Phase II testing.

examined for features, with the trench fill trowel-sorted to retrieve artifacts. No intact deposits or features were observed. These trenches affirmed the site area had been substantially disturbed.

The Phase II investigations yielded a modest assemblage of chipped stone tools and debitage (Tables 3 and 4; Figure 12; Appendix A). All items (n=654) were made of local Ft. Payne and St. Louis cherts. The tools consisted of six projectile points (mostly fragments) and one end scraper. The only potentially identifiable specimen was a possible Kirk Corner-Notched dart point recovered from BHT 2 (Area D) in the northwest site area (see Figure 12). A large end scraper made on a bifacially worked flake was found during the initial surface collection of Area E.

40PM25

Site 40PM25 was apportioned into east (Area A), west (Area B), and north (Area C) sections prior to general surface collection. Based on the collection results, one 20x20 ft. unit (Strip Block 1) was excavated in Area B along the north edge of an old road cut (Figures 13 and 14). The strip block plowzone ranged from 5-7 inches deep to the north and one foot deep to the south. The trowel-

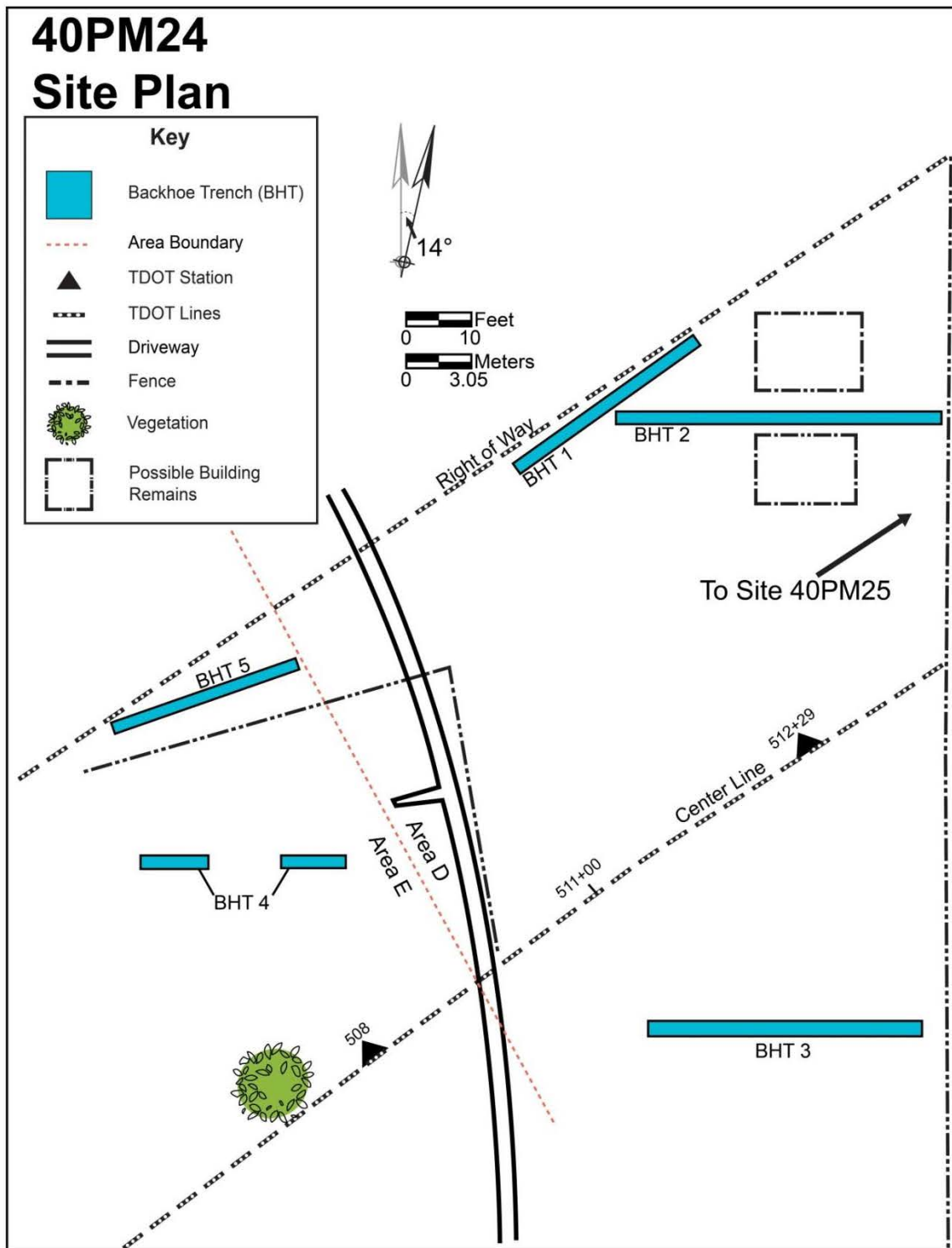


Figure 11. Plan map of site 40PM24.

Table 3. Provenience and Number of Lithic Artifacts from Site 40PM24.

Provenience	Core	Thick Biface	Thin Biface	Primary Flake	Secondary Flake	Blank Flake	Blocky Debris	Projectile Point	Scraper	Totals
Area D, General Surface		1			6	66	8			81
Area E, General Surface				1	7	20			1	29
Backhoe Trench 2		3	2	4	34	276	22	3		344
Backhoe Trench 3		1	1		6	58	4	1		71
Backhoe Trench 4					1	9				10
Backhoe Trench 5	2		2	1	23	82	7	1		118
General Surface								1		1
Totals	2	5	5	6	77	511	41	6	1	654
Percentages (%)	0.31%	0.76%	0.76%	0.92%	11.77%	78.13%	6.27%	0.92%	0.15%	

Table 4. Select Projectile Point Measurements (in mm) from Site 40PM24.

Point Type	Cultural Affiliation (Time Period)	Provenience	Maximum Length	Maximum Width	Maximum Thickness	Shoulder Width	Blade Length	Haft Length	Proximal Haft Width	Distal Haft Width
Kirk Corner Notched?	Early Archaic	Backhoe Trench 2	56.92	24.25	8.74	23.95	47.93	8.53	N/A	N/A



Figure 12. Projectile point recovered from BHT 2 at site 40PM24.



Figure 13. Excavation of Strip Block 1 at site 40PM25.

sorted fill yielded a sparse amount of cultural material. No intact deposits were present, and no features were present in the sterile red clay subsoil.

The west profile was subsequently extended further to the south by the excavation of BHT 6 (number continued from backhoe trench investigations at 40PM24) that began in the strip block's southwest corner and extended 80 feet south to the terrace edge. The plowzone was about a foot in most places with no intact deposits or features, but a few artifacts were found. This trench also revealed an area of re-deposited fill containing metal, glass, and plastic trash.

A comparable total of lithic tools and debitage ($n=608$) was recovered from the Phase II work at 40PM25 (Tables 5 and 6; Figures 15 and 16; Appendix A). As with the 40PM24 artifacts, all 40PM25 items were made from local chert sources.

The 40PM25 investigations did retrieve 12 projectile points. These points included one dart barb fragment along with two dart stem fragments, four dart blade fragments, and one unidentified fragment from BHT 6. Three recovered points were complete, with two assigned to previously defined types (Figure 15; Table 6). One Kirk Serrated dart point was found during the west area general surface collection and a Greenville point was recovered in BHT 6 (1.7 feet below

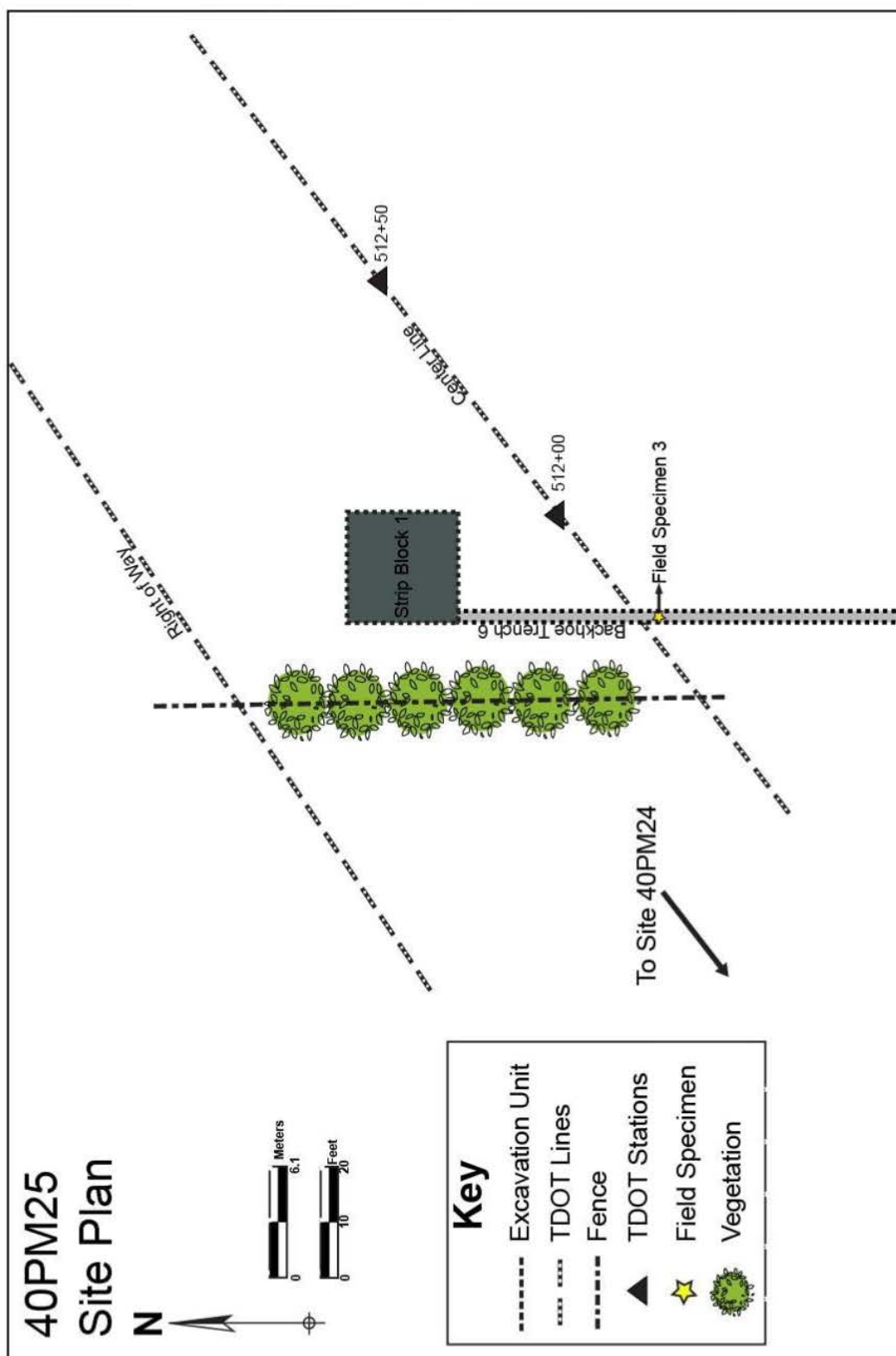


Figure 14. Plan map of site 40PM25.

ground surface). The third complete point was found in Strip Block 1 and has a small, straight to slightly contracting stem with a straight to slightly incurvate base. The blade is straight and has tapered shoulders.

Table 5. Provenience and Number of Lithic Artifacts from Site 40PM25.

Provenience	Core	Thick Biface	Thin Biface	Primary Flake	Secondary Flake	Blank Flake	Blocky Debris	Modified /Utilized Flake	Projectile Point	Scraper	Totals
Backhoe Trench 6	6	9	2	4	60	214	15	15	7	1	333
Backhoe Trench 6									1		1
Strip Block 1	1	3	1	2	30	101	7	15	3		163
General Surface, East Portion				1	15	60	1	1		1	79
General Surface, West Portion						20	3		1		24
General Surface, North Portion		1		1		5		1			8
Totals	7	13	3	8	105	400	26	32	12	2	608
Percentages (%)	1.15%	2.14%	0.49%	1.32%	17.27%	65.79%	4.28%	5.26%	1.97%	0.33%	



Figure 15. Select projectile points from 40PM25. Left to right: unidentified stemmed point from SB 1; Kirk Serrated from general surface collection; Greenville from BHT 6.

Table 6. Select Projectile Points and Measurements (in mm) from Site 40PM25.

Point Type	Cultural Affiliation (Time Period)	Provenience	Maximum Length	Maximum Width	Maximum Thickness	Shoulder Width	Blade Length	Haft Length	Proximal Haft Width	Distal Haft Width
Unidentified Stemmed point	(Early?) Archaic	Strip Block 1	24.04	18.45	4.53	18.41	18.9	5.81	12.05	12.44
Greenville	Middle Woodland	Backhoe Trench 6	41.61	18.98	7.05	18.56	N/A	N/A	N/A	N/A
Kirk Serrated	Early Archaic	General Surface, West Half	45	24.78	5.95	24.73	34.14	9.34	16.04	15.2

Two end scrapers were also recovered from the explorations (Figure 16). One “thumbnail” end scraper was made from a secondary flake and displayed two worked edges. This particular item was picked up during the general surface collection (east site area). A second end scraper made from a primary flake was discovered in BHT 6.



Figure 16. 40PM25 end scrapers: Left, general surface collection; Right, BHT 6.

40PM24 and 40PM25 Summary

The excavation unit with the highest concentration of artifacts at 40PM24 was BHT 2 with 344 specimens (53% of the site assemblage). Culturally sensitive material was scarce, although the one possible Kirk Corner-Notched dart point suggests site use during the Early Archaic period. No cultural features were found. A Kirk Serrated dart point from 40PM25 also supports an Early Archaic component, although similar to 40PM24, no cultural features were found. The Greenville point provides limited evidence for a later Middle to Late Woodland component. No evidence of a Mississippian component, as suggested by the initial 1976 survey (DuVall 1976), was retrieved during the course of the Phase II work.

All artifacts from both sites were recovered from surface or plowzone contexts. The Phase II testing documented these sites had been extensively disturbed, and that no intact deposits or features were present. Little else can be said other than the 40PM24 and 40PM25 site residents used local chert resources to manufacture or maintain their stone tools. Figure 17 illustrates the concentration of local chert available within the 40PM25 site area.



Figure 17. Raw chert distributed on the surface of site 40PM25.

V. SITE 40PM27

Site Description

Site 40PM27 was located in the central portion of the project area at what is now the intersection of Highway 42 and Officers Chapel Road. The site occurs on a north-south trending terrace along the west bank of Turkey Creek at an elevation of 1,020 feet AMSL. The terrace slopes gently to the east and south, but becomes steep at its point of contact with the narrow floodplain. Site boundaries measured approximately 325 feet north-south by 300 feet east-west. Culturally sensitive lithic material found during the 1976 Phase I survey indicated a Late Archaic to Early Woodland association (DuVall 1976).

This site had also undergone historic disturbances from a county road along the western site edge, as well as a 1960s house in the central site area (Figure 18). Excavations revealed substantial site disturbance by the house construction and removal, and a partially filled-in basement was visible as a large depression. These disturbances and natural erosion left very little topsoil on the northern half of the site except on the terrace crest. This area, formerly a garden plot, displayed a disturbed topsoil layer one foot thick.

A light to moderate lithic scatter was observed on the site surface, most notably in disturbed areas. Stratigraphic profiles showed that cultural materials were contained in a thin, gravely, brown clay lens just above the red clay subsoil. Red clay generated from digging the basement had been uniformly spread on top of the original ground surface containing the artifact scatter.



Figure 18. View of site 40PM27 and the removed house area.

Methodology

The site was initially divided into five areas, with each area surface collected as a distinct unit. Excavation units were then assigned based on the collection results. Five backhoe trenches (BHT A-E) were excavated across the site (Figures 19-21). BHT A and B were positioned parallel to each other in the front yard of the former residence, and intersected BHT C that ran across the southeast site area (see Figure 19). BHT D was established near the terrace crest, with BHT E and F located on the northwestern portion of the site (see Figure 20). Artifacts were collected by trowel-sorting the excavated fill.



Figure 19. Backhoe Trenches A, B and C, and Strip Block 1, site 40PM27.



Figure 20. View of Backhoe Trench D and Strip Block 2, site 40PM27.

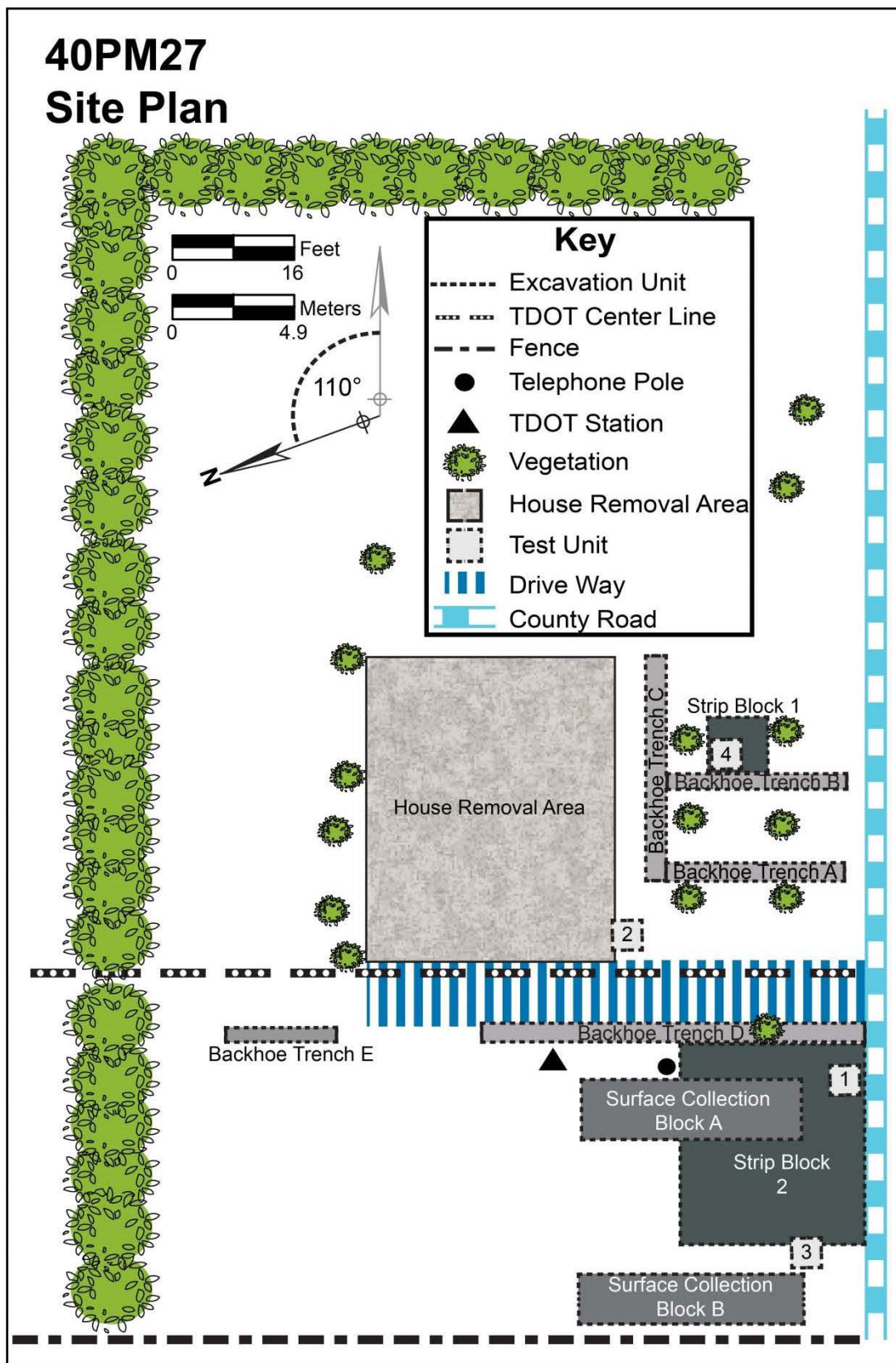


Figure 21. Plan map of site 40PM27 and excavation units.

Trench walls and floors were troweled and examined for potential features, but none were found. The profile drawing in Figures 22 denotes the high level of site disturbance.

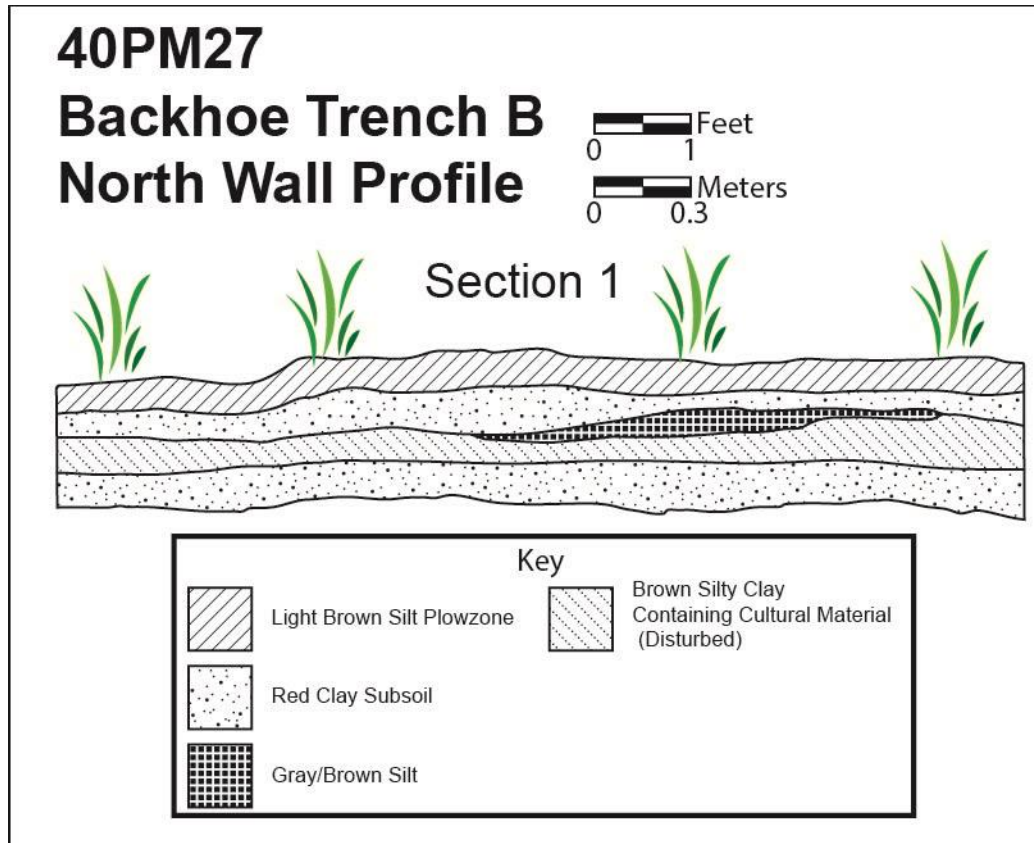


Figure 22. Profile of Backhoe Trench B, site 40PM27.

Several test units (TU) measuring 4x4 ft. square were also placed within the site (see Figure 21). These units were excavated by hand, with the fill screened through ¼-inch mesh. TU 1 contained a moderate to heavy amount of lithic flakes, and the beginnings of Feature 1 (Figures 23 and 24). TU 3 yielded a moderate amount of flakes (Figure 25). The results from these two unit excavations led to the placement of Strip Block 2.

TU 2 was placed towards the southwest corner of the house removal area but few flakes were found. Test Unit 4 was established in a location deemed very promising for intact deposits, and although many flakes were found, no intact deposits were identified (see Figure 25).

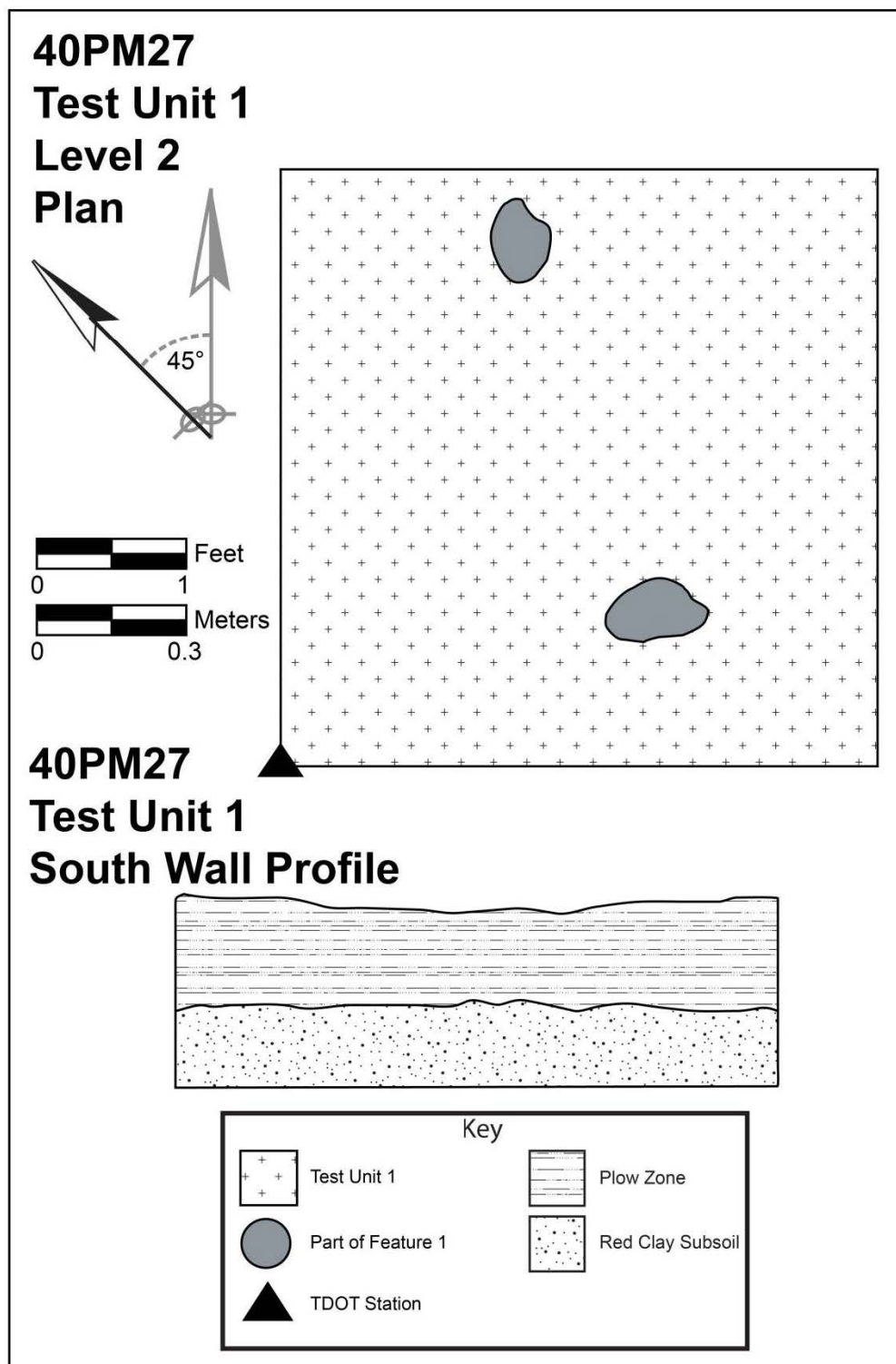


Figure 23. Plan and profile views of Test Unit 1, site 40PM27.



Figure 24. Photo of Test Unit 1, Level 2 with visible dark stains.



Figure 25. Test Unit 3 (left); Test Unit 4 (right), site 40PM27.

Two strip blocks were excavated based upon the test unit results. Strip block floors were shovel skimmed and troweled to expose potential features. Strip Block 1 was located in the front yard of the house, bordering the east wall of BHT B (Figure 26). No intact deposits were discovered in this block.



Figure 26. Strip Block 1 excavation, site 40PM27.

Strip Block 2 (Figure 27) was placed toward the southeast site corner. Plow scars were observed throughout the block. Several large flakes and crude preforms were recovered along with numerous other flakes and debitage. Five potential features were also recorded in this particular strip block (Figure 28).



Figure 27. Plan view of Strip Block 2, site 40PM27.

40PM27

Strip Block 2

Plan

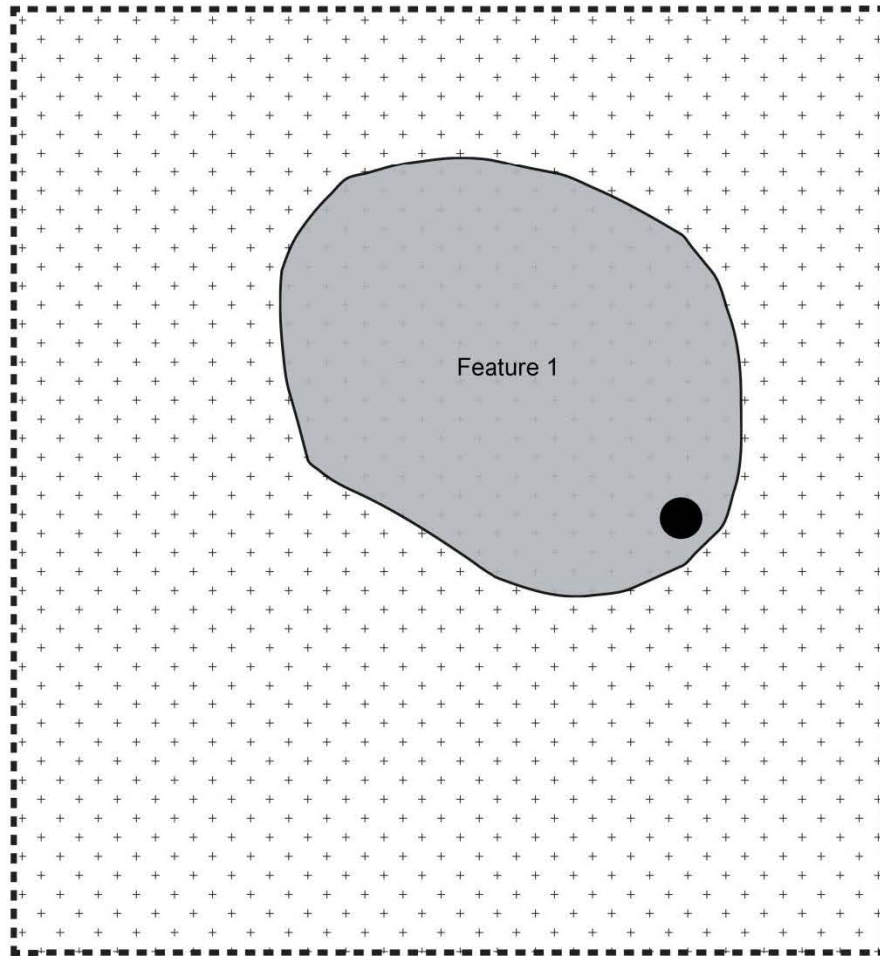
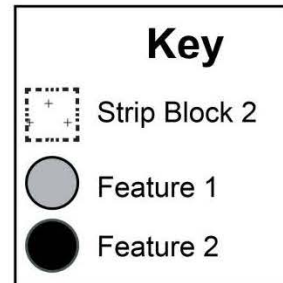
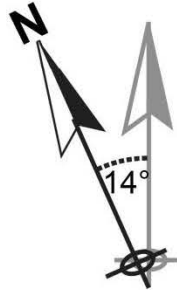
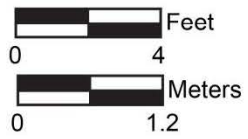


Figure 28. Plan drawing of Strip Block 2 features.

Features

The five potential features identified during the excavation of Strip Block 2 were bisected to help evaluate whether they were cultural or natural in origin. Features 1 and 2 were assessed as cultural features (see Figure 28); whereas additional evaluation determined Features 3-5 were modern rodent and/or tree roots. Fill from the cultural features was screened through 1/4-inch mesh with two-liter samples collected for flotation.

Feature 1

This somewhat circular area of compacted tan, silty loam was exposed in the northeast portion of Strip Block 2. Feature 1 measured 10.5 feet north-south by 11 feet east-west and yielded several bifaces along with numerous lithic items, suggesting a possible lithic manufacturing station.

Feature 2

Feature 2, detected within the southern portion of Feature 1 (see Figure 28), appeared as a circular stain measuring 1.3 feet north-south by 1.65 feet east-west and 1.5 feet deep. The fill comprised a dark brown soil with substantial amounts of fire-hardened clay (daub), charred wood and nut shell, and lithic debris. A narrow channel 0.35 feet below surface was likely a root or rodent intrusion. This feature has been tentatively defined as a posthole.

Lithic Materials

A moderate assemblage of chipped and ground stone artifacts (n=5,389) was recovered from the 40PM27 investigations (Table 7; Appendix A). The chipped stone items were made of locally available cherts.

Of the 35 projectile points defined in the assemblage, eight comprise complete or mostly complete projectile points that could be assigned to a specific point type (Figure 29; Table 8). One Big Sandy base fragment, one Ledbetter point missing the tip, one Kirk Serrated point, and one small unidentified stemmed point (with a triangular blade and slightly excurvate base) were found in Strip Block 1. In addition to these points, a Swan Lake point with some cortex still visible was recovered from Strip Block 2. A Kirk Corner-Notched fragment missing the distal tip was recovered from Test Unit 4, and another possible (heavily reworked) Kirk Corner-Notched variant with an incurvate base was found in Strip Block 1. One unidentified straight stemmed point was found in Backhoe Trench D, with another unidentified point recovered from the surface collection. The majority of points support an Early Archaic period use of the site area.

Table 7. Provenience and Number of Recovered Lithic Artifacts from 40PM27.

Provenience	Core	Hematite	Thick Biface	Thin Biface	Primary Flake	Secondary Flake	Blank Flake	Blocky Debris	Modified/ Utilized Flake	Projectile Point	Blades	Micro Blade	Knife	Drill	Scraper	Nutting Stone	Metate	Totals
General Surface, House Depression		1	10	1	6	42	126	17	1	3								207
General Surface, North of House Depression					3	15	57			1								76
General Surface, West of House Depression						5	10											15
Backhoe Trench B	3			3	3	28	137	10		2								186
Backhoe Trench C	3		2		5	18	64	13		1								106
Backhoe Trench D	2		4	2	12	71	431	32		5		1						560
Backhoe Trench E	1					1	7											9
Feature 2							21	3										24
Strip Block 1										1								1
Strip Block 1										1								1
Strip Block 1, Level 1			3		9	59	300	21	2	2								396
Strip Block 1, Level 2			2	3	9	100	504	44		7			2		1	1		673
Strip Block 2	4		5	2	18	172	710	56		8	2			1	1			980
Surface Collection Block A	3						12											15
Surface Collection Block B						4	2											6
Test Unit 1, Level 1				1	6	52	565	18	1	3		1			1			648
Test Unit 1, Level 2				1	2	3	80	5										91
Test Unit 2, Level 1						4	65	9										78
Test Unit 3, Level 1					14	135	903	63	2									1117
Test Unit 4, Level 1	1				2	26	161	7		1					2			200
Totals	17	1	26	13	89	735	4155	298	6	35	2	2	2	1	5	1	1	5389
Percentages (%)	0.32%	0.02%	0.48%	0.24%	1.65%	13.64%	77.10%	5.53%	0.11%	0.65%	0.04%	0.04%	0.04%	0.02%	0.09%	0.02%	0.02%	

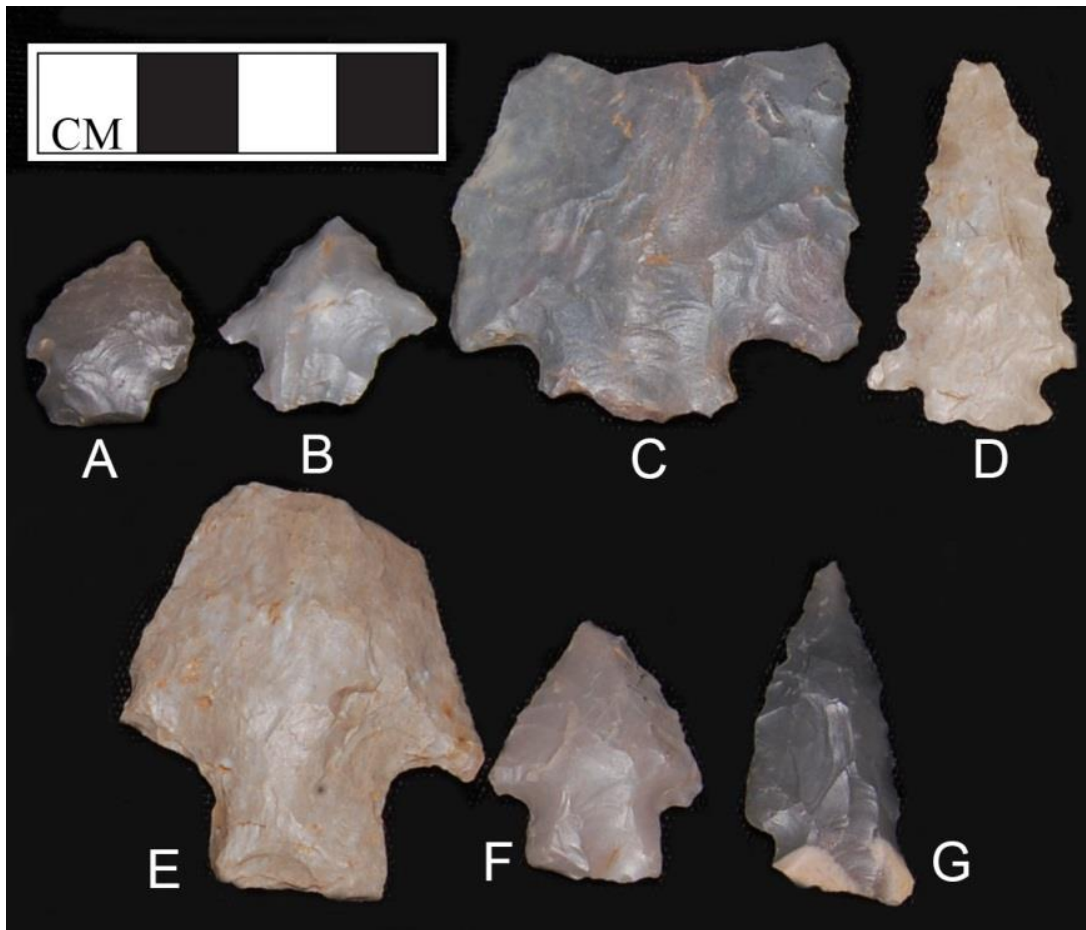


Figure 29. Projectile points from 40PM27: A, Undetermined, GSC; B, Kirk Variant?, SB 1; C, Kirk Corner Notched, TU 4; D, Kirk Serrated, SB 1; E, Ledbetter, SB 1; F, Undetermined, SB 1; G, Swan Lake, SB 2.

Additional chipped stone tools from the site excavations were five scrapers, two knives, six modified/utilized flakes, and one drill (Figures 30 and 31). One end scraper from Test Unit 1 displayed cortex along the striking platform. Two Test Unit 4 scrapers included one end scraper and a crude end scraper that still exhibited some cortex. An end scraper from Strip Block 1 comprised a side-notched dart point with a reworked distal end. A large and somewhat crude scraper fragment was discovered in Strip Block 2. Both knives were large lanceolate fragments from Strip Block 1 that displayed fine microflaking along their lateral edges.

The modified/utilized flakes consisted of five scraping tools and one cutting tool. Two of the scraping tools were found in Test Unit 3, and the cutting tool was found in Strip Block 1. One drill fragment found in Strip Block 2 comprised a contracting stem fragment with the bit missing.



Figure 30. Scrapers from 40PM27. Left to right: end scraper, TU 1; reworked dart point, SB 1.

Four blade-like flakes were retrieved during the site investigation (Figure 31). Two items from Strip Block 2 comprise one nearly complete specimen and one small midsection fragment. The other two specimens are possible microblades from Test Unit 1 and BHT D.

Ground/pecked stone tools from the site consisted of one nutting stone and one metate fragment. The nutting stone was recovered Strip Block 1 and exhibited an oval shape with a single depression measuring 21.1 mm in diameter (Figure 32). This tool, made of sandstone, measured 111.4 mm long, 84.4 mm wide, and 57.4 mm thick. A small metate fragment, discovered in Strip Block 2, consisted of a small, tabular, irregular-shaped fragment of reddish-brown sandstone with one flat, ground surface (Figure 33).

In addition to the previously mentioned artifacts from 40PM27, one small hematite fragment was recovered during the general surface collection. This piece is unworked and measures 39.72 mm long, 32.77 mm wide, and 12.74 mm thick. Whether this item derives from a cultural or natural origin remains unknown.

Table 8. Select Projectile Points Measurements (in mm) from 40PM27.

Point Type	Cultural Affiliation (Time Period)	Provenience	Maximum Length	Maximum Width	Maximum Thickness	Shoulder Width	Blade Length	Haft Length	Proximal Haft Width	Distal Haft Width
Big Sandy (Base Frag.)	Early Archaic	Strip Block 1, Level 2	N/A	N/A	5.39	22.35	N/A	7.19	24.27	19.6
Swan Lake	Archaic to Woodland	Strip Block 2	35.97	15.82	6.54	14.86	30.57	6.82	14.16	12.19
Unidentified point with Excavate Blade, Mucronate Tip, Excavate Stem										
(Early) Archaic		Strip Block 1, Level 2	19.84	16.49	5.62	16.67	15.5	6.3	11.8	11.31
Kirk Corner Notched Variant	Early Archaic	Strip Block 1	21.46	22.25	6.84	22.25	15.95	6.08	11.31	11.58
Kirk Corner Notched Fragment	Early Archaic	Test Unit 4	42.3	42.25	7.3	42.16	N/A	9.3	19.79	18.97
Ledbetter	Late Archaic	Strip Block 1, Level 2	43.45	35.75	10.87	36.81	N/A	12.22	17.74	17.16
Kirk Serrated	Early Archaic	Strip Block 1, Level 2	40.28	20.3	5.58	21.2	35.8	3.06	12.68	11.96
Unidentified point with Straight Stem and Slightly Excavate Base										
(Early) Archaic		Strip Block 1, Level 2	28.61	21.73	6.01	21.73	21.65	7.4	13.53	13.1

Botanical Analysis

A total of 52.3 grams of charcoal was analyzed from Feature 2 (Table 9). Wood charcoal consists of hickory (*Carya Sp.*), with one fragment of an asteraceae (Composite Family) seed head also identified.

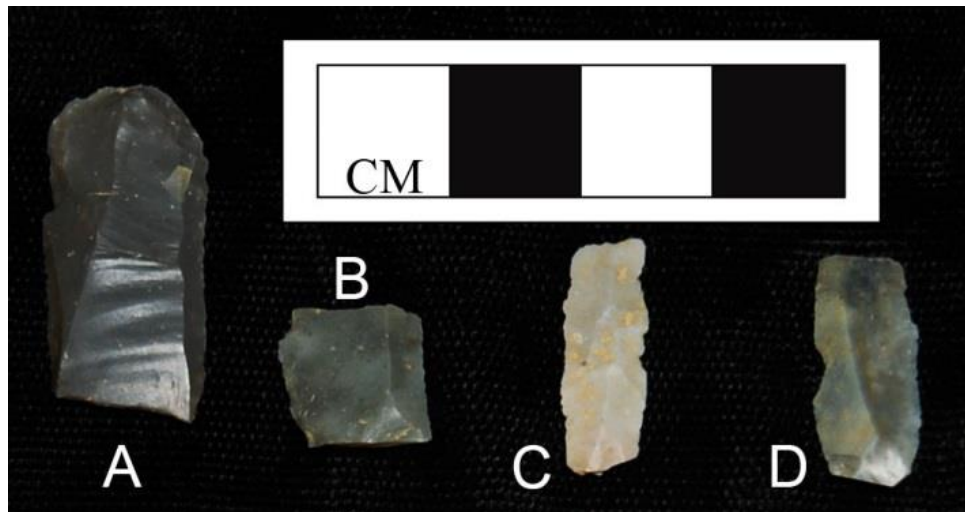


Figure 31. Blade-like flakes from 40PM27: A-B, SB 2; C, BHT D; D, TU 1.



Figure 32. Nutting stone from SB 1, site 40PM27.



Figure 33. Metate fragment from SB 2, site 40PM27.

Table 9. Botanical Analysis Results from 40PM27.

	Feature # 2
Total Sample Weight (g)	52.3
Sample Composition	
Wood	26.3
Seeds and Fruits	-0.1
Residual (1.0mm & 2.0mm Screen)	26
Wood Composition (No. Fragments)	
Carya SP. (Hickory)	30
Seeds and Fruit Composition (No. Fragments) (W=whole, F=Frag)	
Asteraceae (Composite Family)	1F

Summary

The 40PM27 site area includes an Early Archaic component as well as possible Late Archaic and Early Woodland occupations. The Phase II projectile point assemblage contains a number of Early Archaic points. Late Archaic and Early Woodland components are suggested by the 1976 Phase I survey results, as well as several points from the later study.

The Phase II investigation results successfully determined that modern housing and farming activities severely disturbed the site area. The Strip Block 2 area likely represents an area of more substantial site activity based upon the moderate amount and variety of cultural artifacts (including cores, thick and thin bifaces, projectile points, scrapers, a drill, flake tools, a metate fragment, and debitage) recovered during the explorations. But, of the five potential features recorded in Strip Block 2, only two were determined to be cultural. The size of Feature 1, along with the reported heavy concentration of lithic debitage and preforms found within it, lends support that this area may have been a lithic manufacturing and/or maintenance station. Feature 2 comprises a probable posthole found in the southern portion of Feature 1. A variety of cultural artifacts were recovered from this small feature, but its relationship to Feature 1 (if there is one) remains within the realm of speculation.

VI. SITE 40PM31

Site Description

Site 40PM31 occurs on the west bank of Turkey Creek at an elevation of 1,000 feet AMSL, and was established on a gentle, southeast facing slope at the base of the ridge that contained site 40PM32. The site was separated from both the ridge and 40PM32 by a small intermittent drainage along its northeastern edge. An abandoned county road bed crosses the site's western edge. Most of the site was covered in pasture grasses and secondary growth at the time of excavation. The site area was defined by a light to moderate lithic scatter measuring approximately 300 feet north-south by 350 feet east-west. The previous Phase I survey (DuVall 1976) had recovered stone artifacts suggesting a potential Middle Archaic cultural affiliation.

Methodology

A controlled surface collection was initiated by plowing two wide and two narrow strips on a north-south axis across the site. The wide strips (Plow Strips 1 and 2) were divided into 30x30 ft. square units (Figure 34). The narrow strips (Plow Strips 3 and 4) were collected as single units.

Lithic Materials

A total of 2,431 lithic specimens were recovered from the 40PM31 excavations (Table 10; Appendix A). As with previously discussed sites, all chipped stone artifacts derive from locally available cherts.

The 27 projectile points found across the site area included Early, Middle, and Late Archaic period styles (Table 11; Figure 35). In addition, one unidentified point with a straight stem and rounded shoulders was recovered from CSC 6, as well as an expanded stemmed point with tapered shoulders. One unidentified stemmed point and one unidentified side-notched point were found in CSC 5. Another unidentified side-notched point was discovered in CSC 8.

Other chipped stone tools from the investigation included four end scrapers, along with one crude knife and four modified flake tools (three scrapers and one cutting tool).

The only ground/pecked stone tool was a hammerstone found in Plow Strip 1 (CSC 2). This small chert cobble displayed considerable crushing along the lateral edges (Figure 36).

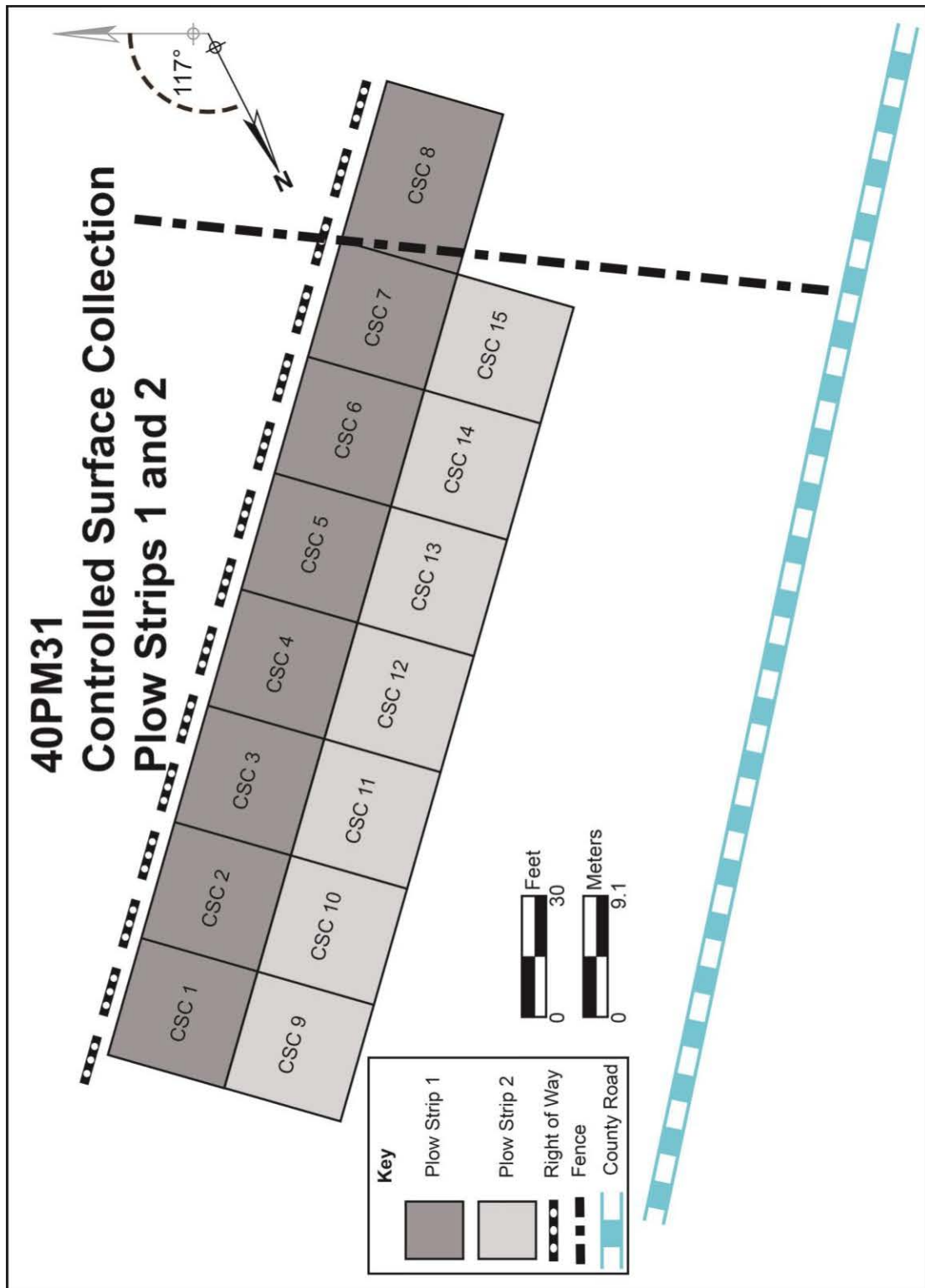


Figure 34. Map of 40PM31 excavations.

Table10. Provenience and Number of Recovered Lithic Artifacts from Site 40PM31.

Provenience	Core	Thick Biface	Thin Biface	Primary Flake	Secondary Flake	Blank Flake	Blocky Debris	Modified /Utilized Flake	Projectile Point	Knife	Scraper	Test Cobble	Hammer Stone	Totals
General Surface		3	3						2					8
CSC 1	2		2		15	25	10		2					56
CSC 2		3	1		6	56	3		1		2	1	1	74
CSC 3		1	3	1	4	42	5							56
CSC 4		3			9	125	10			1				148
CSC 5	1	2	3		34	146	16		3					205
CSC 6	1	2		2	23	172	22	1	5		1			229
CSC 7		2	1	3	35	255	34		2					332
CSC 8	7	3	4	7	46	287	36		5		1			396
CSC 9				2	4	12	2							20
CSC 10	1	3			3	33	4					1		45
CSC 11	1	3	2	3	11	48	12	1	1					82
CSC 12					9	40	6		1					56
CSC 13	2	2	1	3	12	72	14	2	2					110
CSC 14	7	2	6	2	49	258	20		3					347
CSC 15	1	2	1	1	47	197	18							267
Totals	23	31	27	24	307	1768	212	4	27	1	4	2	1	2431
Percent (%)	0.95%	1.28%	1.11%	0.99%	12.63%	72.73%	8.72%	0.16%	1.11%	0.04%	0.16%	0.08%	0.04%	

Table 11. Select Projectile Point Measurements (in mm) from Site 40PM31.

Point Type	Cultural Affiliation (Time Period)	Provenience	Maximum Length	Maximum Width	Maximum Thickness	Shoulder Width	Blade Length	Haft Length	Proximal Haft Width	Distal Haft Width
Mud Creek like (base fragment)	Late Archaic to Early Woodland	General Surface	28.82	23.17	7.63	22.91	N/A	6.67	18.66	16.97
Big Sandy	Early Archaic	General Surface	28.41	23.8	6.71	21.21	23.37	9.26	22.66	18.83
Unidentified Side Notched	Archaic to Woodland	CSC 8	57.26	21.69	9.9	19.3	49.3	5.64	13.62	13.2
Kirk Corner Notched Base Fragment	Early Archaic	CSC 8	32.62	24.83	5.86	24.83	N/A	6.85	20.64	17.23
Unidentified Side Notched	Archaic to Woodland	CSC 5	36.77	20.65	11.67	20.37	29.6	8.62	13.8	14.66
Unidentified Straight Stem with Rounded Shoulders Fragment	Archaic to Woodland	CSC 6	38.85	30.85	7.76	30.2	N/A	N/A	N/A	16.47
Big Sandy	Early Archaic	CSC 14	35.43	26.11	8.55	25.11	26.93	8.52	25.85	19
Ledbetter	Late Archaic	CSC 14	47.21	24.51	9.9	24.09	37.38	7.29	9.38	11.97

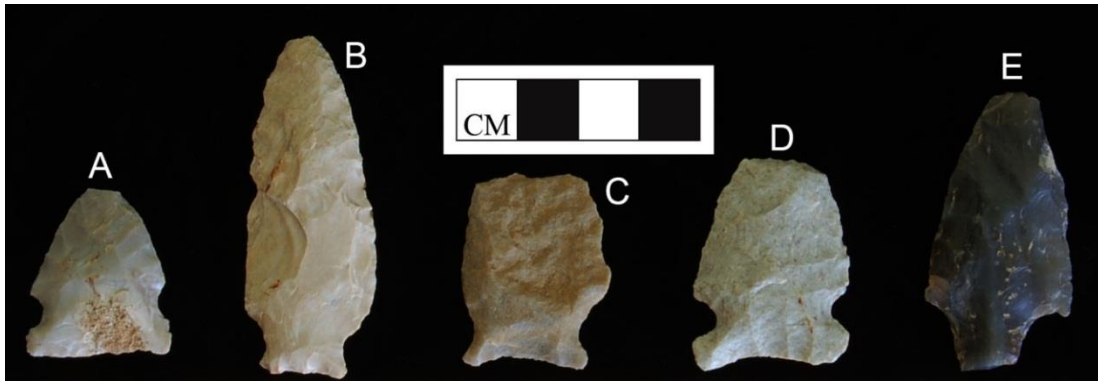


Figure 35. Sample of projectile points from 40PM31: A, Big Sandy; B, Unidentified; C, possible Kirk Corner Notched with heat altering; D, Big Sandy; E, Ledbetter.



Figure 36. Chert cobble hammerstone from 40PM31 (CSC 3).

Summary

Site 40PM31 represents a light lithic scatter with no evidence of intact cultural features. The area was disturbed by human activity as well as natural erosion. The vast majority of recovered artifacts (86%) were flakes, but temporally sensitive projectile points reveal Early through Late Archaic (and possibly Early Woodland) components. This site area was likely used as a lithic manufacturing and/or maintenance station due to the relatively numerous cores, bifaces, and flake debitage.

Another possibility to consider, however, is this could be a false site created by the wash of deposits from nearby 40PM32 located above 40PM31. Natural erosion, along with modern human actions (farming and residential clearing) could have forced the lithic material downslope from 40PM32.

VII. SITE 40PM32

Site Description

Site 40PM32 was defined within the central portion of the project area along an elongated ridge on the west bank of Turkey Creek at an elevation of 1,030 feet AMSL. The ridge comprised a bench that ran parallel to Turkey Creek that moderately sloped to the east and south toward the creek. Black Bottom Mountain, with an elevation of 1,520 feet AMSL, is located west of the site.

The ridge had been cleared for pasture prior to the Phase II work. While the ridge may have had dwellings or structures in the immediate vicinity, no substantial evidence remained when excavation began. Most of the site area was covered in grasses and secondary growth, and bordered by wooded areas (Figure 37). The road right-of-way traversed the length of the ridge along its crest on a northeast to southwest axis. A dense lithic scatter was apparent across the ridge line and extended well beyond the right-of-way edges. The site area within the project area measured approximately 1,000 feet northeast-southeast by 850 feet east-west, but the actual site boundaries were likely much larger.

Soil deposition varied across the site with surface outcrops of red subsoil apparent in some areas. The east slope of the ridge contained narrow terraces running parallel to the contours of its crest. Colluvial forces created increased soil deposition on these terraces, as well as a greater density of cultural materials.

Previous site investigations yielded a large amount of lithic debris. The site was suggested to be a lithic workshop and/or hunting camp used from the Early Archaic to Early Woodland periods (DuVall 1976).

Methodology

Initial surface collections revealed the site exhibited five dense lithic scatters (Figure 38). These locales were designated Areas A-E. Area B contained two distinct flake concentrations subsequently labeled Zones B-1 and B-2. These areas and zones were individually collected with temporally sensitive artifacts noted separately.

Red clay subsoil was visible at the surface in Area A and other site locations. Most of the Area A vegetation was removed by backhoe, but subsequent backhoe work was narrowed to a three-foot strip across Area B that continued along the ridge through Area E (see Figure 38). Exposed surfaces were shovel-skimmed and troweled to look for possible features.



Figure 37. Photo of 40PM32 site area.

A series of plow strips were also initiated across the long axis of the ridge (see Figure 38). These plow strips revealed a dense and homogeneous distribution of cultural materials across the site. Plow Strips 1 through 6 were collected as individual units. Plow Strips 7 and 8 were divided into 5x20 ft. units for a controlled surface collection. One 4x4 ft. test unit was excavated at the eastern edge of Plow Strip 1 on the southeast ridge slope. This unit, located within a particularly dense lithic scatter, yielded a plowzone level 0.92 ft. thick on top of sterile red clay subsoil. A large amount of lithic material was recovered from the test unit fill.

Following Test Unit 1, five strip blocks were established in areas that had dense amounts of lithic artifacts (see Figure 38). These units averaged 30x30 ft. square with Strip Block 1 in the central site area, Strip Block 2 just west of Strip Block 1, Strip Block 3 south of Strip Block 2, Strip Block 4 south of Strip Block 3, and Strip Block 5 at the north site edge (Figures 39-41). Excavations terminated at the junction of the plowzone base and red clay subsoil. Potential features were defined in Strip Blocks 1, 2, and 5 (Figure 42). Each strip block yielded a large amount of lithic artifacts that included projectile points, bifaces, flake debris, and hammerstones.

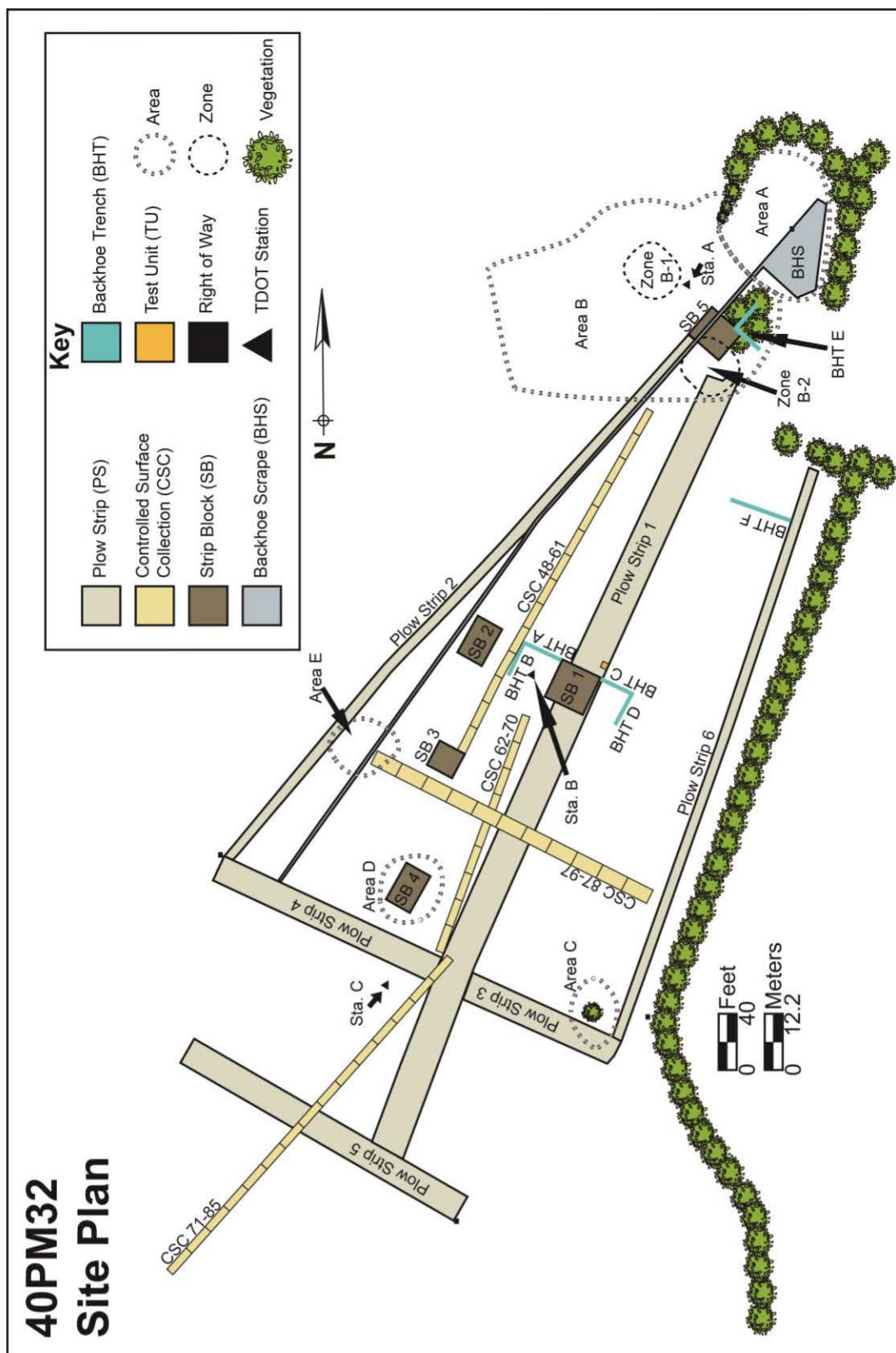


Figure 38. Plan map of 40PM32 explorations.



Figure 39. Strip Block 1, 40PM32.



Figure 40. Strip Block 2, 40PM32.



Figure 41. Strip Block 5, 40PM32.

Finally, six backhoe trenches (BHT A-F) were dug in areas of high artifact density, with excavated fill trowel-sorted for artifacts. These trenches were positioned parallel and perpendicular to the ridge. Stratigraphic profiles were troweled, mapped, and photographed (Figure 43). Trench depths extended to contact with the red clay subsoil. Depths ranged from 0.6 feet below surface in BHT A to 5.5 feet below surface in BHT F.

Features

Eleven potential features were identified during the excavations, with seven in Strip Block 1 (see Figure 42), one in Strip Block 2, and three in Strip Block 5. Additional explorations determined that Features 1, 3, 5, 6, 9, and 10 were cultural features. Features 2, 4, 7, and 8 were defined as modern rodent burrows and/or tree disturbances. Feature 11 presented as an irregular, undulating area (about 8x5 ft.) of compact soil containing artifacts. This particular feature likely represents a natural gully or depression filled with eroded soil and artifacts.

Feature 1

Detected in Strip Block 2 at 1.4 feet below surface, Feature 1 consisted of a dense concentration of lithic flakes along with a small, shallow basin pit at the

40PM32

Strip Block 1

Floor Plan 1 foot below surface

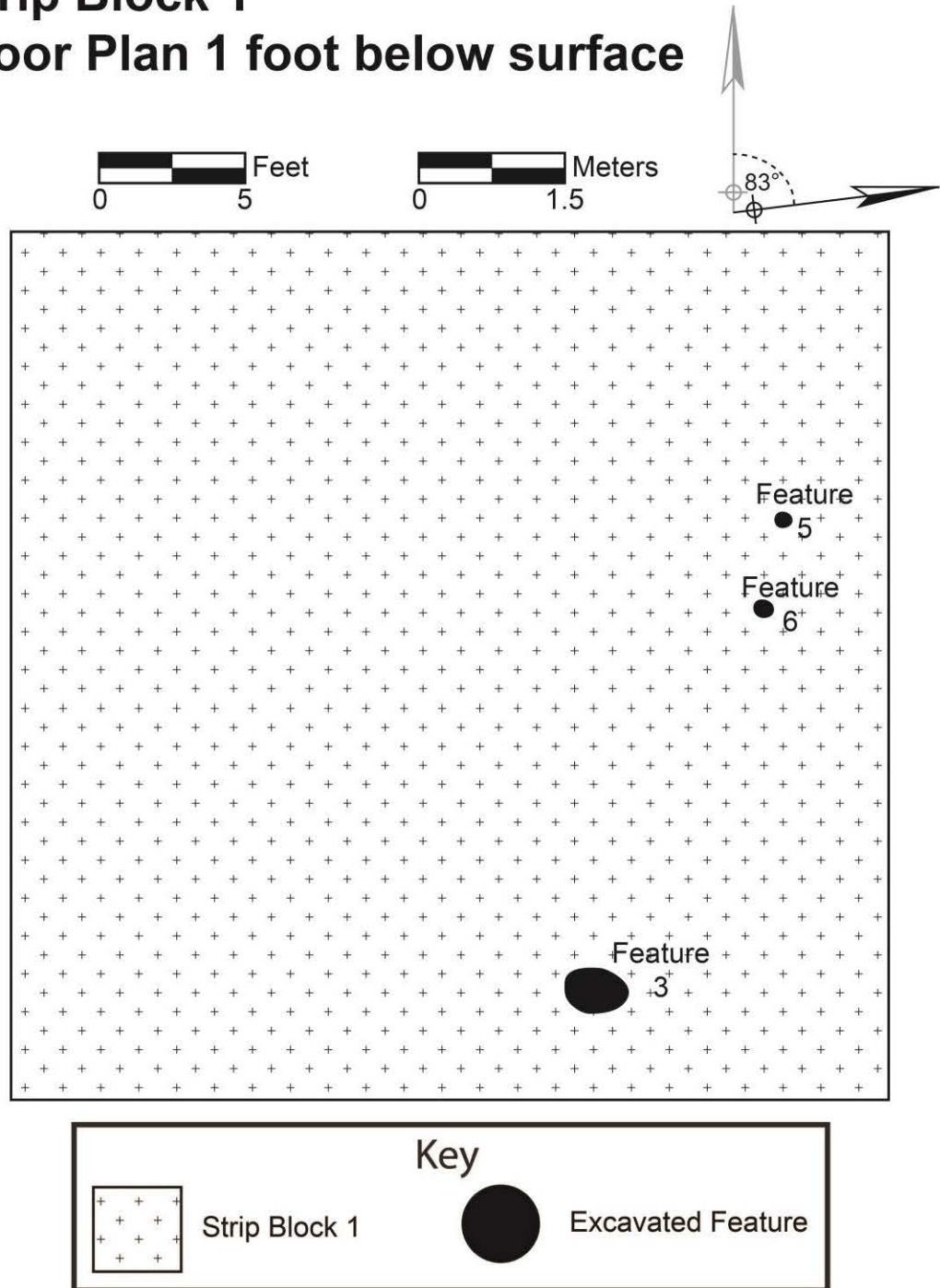


Figure 42. Plan drawing of Strip Block 1 with potential features.

northern edge of the flake concentration (Figure 44). The boundaries of the oval flake concentration measured 5.9 feet east-west by 3.9 feet north-south. The depth varied from 0.2 to 0.5 feet. The round shallow basin that accompanied the flake concentration measured two feet in diameter and 0.66 feet deep.

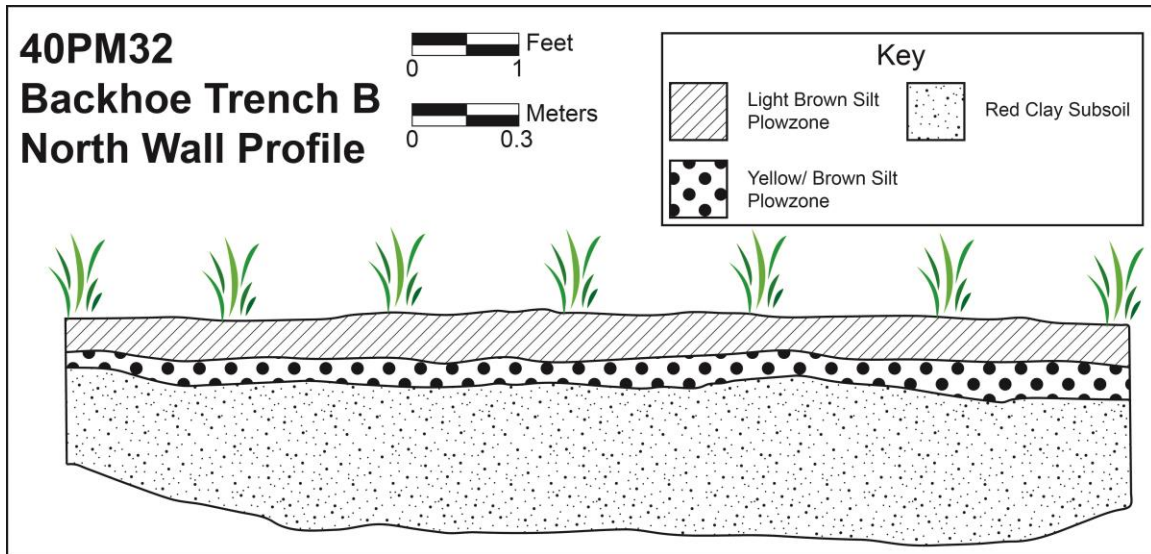


Figure 43. Profile drawing of Backhoe Trench B, 40PM32.

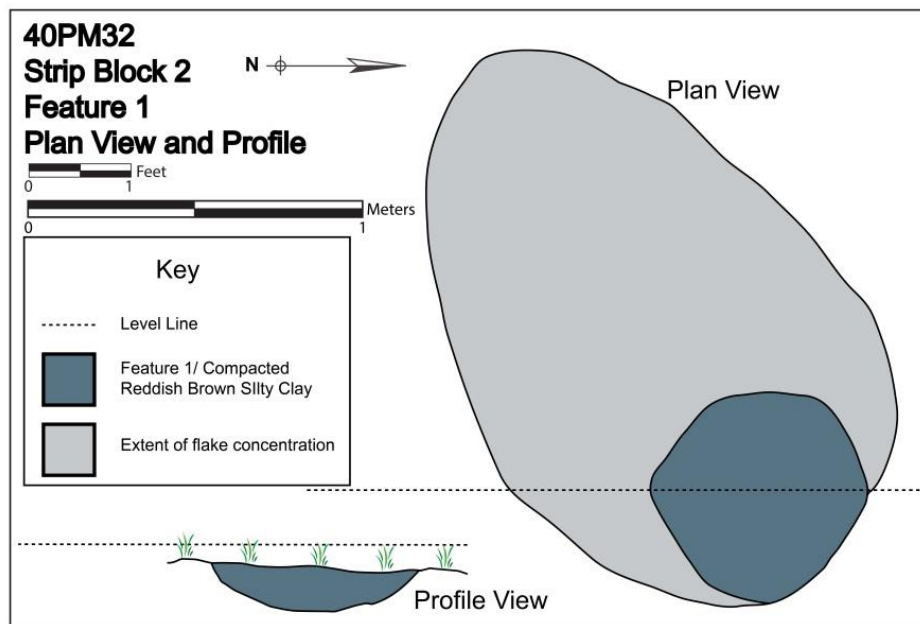


Figure 44. Plan and profile drawings of Feature 1, 40PM32.

The flake concentration and pit were the same color and consistency as the surrounding matrix of compacted, reddish brown, silty clay. The lithic debris likely originated from the shallow pit but had been scattered by plowing or other modern disturbance. The feature's lithic assemblage consisted of several different chert types but was predominately Ft. Payne. All reduction stages were represented by the feature material, supporting its association with a lithic reduction station. Two of the three bifaces recovered from this feature displayed lateral fractures and were potentially broken during production. Some of the flakes had also been heated.

Feature 3

This oval basin in Strip Block 1 measured 1.7 feet north-south by 1.5 feet east-west, with a maximum depth of 0.35 feet (see Figure 42). The feature contained larger flakes found near the top and smaller debitage around the feature edges (Figure 45).

Feature 5

Feature 5 in Strip Block 1 was a posthole measuring 0.4 feet in diameter (see Figure 42). The fill was dark brown, loosely compacted, silty clay with flakes found in the upper half. The feature walls were straight and tapered to the bottom, and extended into the subsoil 1.3 feet below the point of detection.

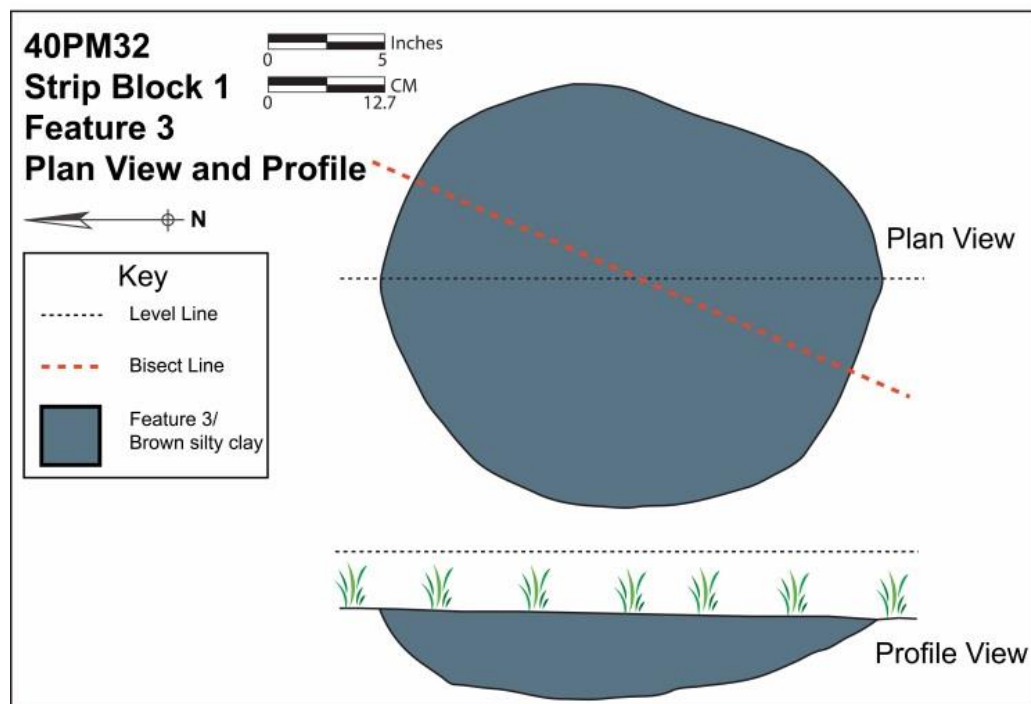


Figure 45. Plan and profile drawings of Feature 3, 40PM32.

Feature 6

Feature 6 in Strip Block 1 represents a probable posthole that measured 0.6 feet in diameter (see Figure 42). The fill contained a few lithic flakes. Feature walls were straight and tapered to the bottom at a depth of 1.25 feet below its point of detection.

Feature 9

This feature was defined at the north end of Plow Strip 2 within the area that would become Strip Block 5 (see Figure 38). This feature comprised an oval concentration of lithic flakes and other debris that measured 6.0 feet north-south by 2.5 feet east-west. The flake concentration was exposed in red clay subsoil 0.6 to 0.8 feet below the plowzone. No pit boundaries or soil discolorations were observed. Lithic materials from the feature were predominately medium to light grey Ft. Payne chert. A Kirk Serrated projectile point was found (distal end down) on the western edge of the feature (Figure 46). All lithic reduction stages were represented in the feature that likely represents a lithic manufacturing and/or maintenance station.

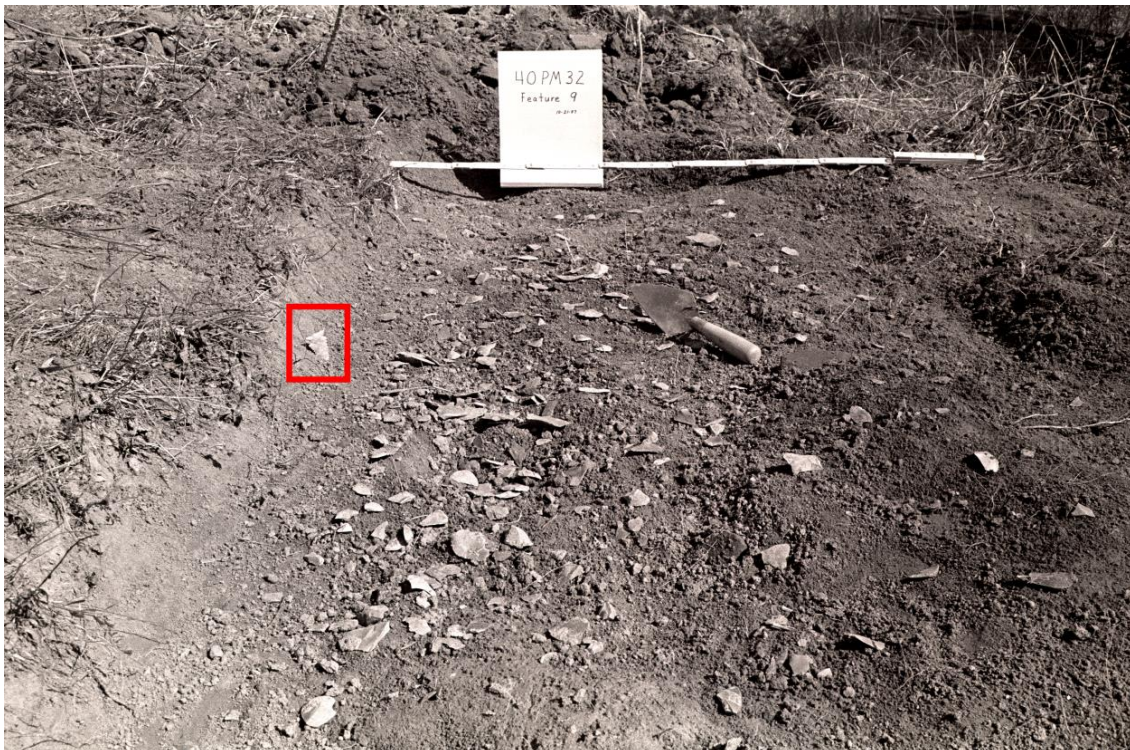


Figure 46. Feature 9, note Kirk Serrated dart point to left side of photo.

Feature 10

Feature 10 in Strip Block 5 consisted of a moderately dense concentration of lithic debris within an oval area that measured 2.6 feet north-south by 1.9 feet east-west (see Figure 38). No pit boundaries or soil discoloration was apparent. As with previously mentioned features, the flakes were within the subsoil (0.2 feet below the plowzone). All lithic reduction stages were represented, suggesting this feature was also a lithic maintenance and/or manufacturing station.

Lithic Materials

Site 40PM32 yielded the largest number of lithic items (n=31,385) from the Phase II investigations (Table 12; Appendix A). The total accounts for just over one-half of all lithic material recovered during the SR-42 project.

Flakes comprise 89.3% of the lithic assemblage. Twelve items comprise blade-like flakes made from local cherts (Figure 47). Nearly one-half (n=4) of these specimens derived from Strip Block 5 with another concentration (n=3) from the northeast site surface.

The modest sample of modified (n=62) and utilized flakes (n=28) were made from local cherts. Modified flakes comprised 22 scrapers, eight cutting tools, 29 spokeshaves, and three perforators/gravers. The utilized flakes were also used for scraping, cutting, and perforating actions.

Over 180 (n=183) projectile points were recovered from the site, with roughly one-third (n=62) comprising mostly complete to complete artifacts (Figures 48 and 49; Table 13; Appendix A). The remaining sample comprised various distal, midsection, base, and barb fragments. Identified types included Dalton/Beaver Lake, Kirk Corner-Notched, Kirk Serrated, Big Sandy, Gary, McIntire, McFarland/Copena, Hamilton, and Madison.

Other chipped stone tools retrieved from the Phase II investigations include 22 knives, 20 scrapers (13 end, four side), and two drill bit fragments (Figure 50). One knife midsection fragment from Strip Block 1 was made from non-local Dover chert. Seven of the end scrapers were dart points with reworked distal ends.

Table 12. Provenience and Number of Recovered Lithic Artifacts from Site 40PM32.

Provenience	Core	Thick Blade	Thin Blade	Primary Flake	Secondary Flake	Blank Flake	Blocky Debris	Modified/Utili- zed Flake	Modified/ Utilized Flake Perforators	Projectile Point	Knife	Drill	Scaper	Blade	Test Cobble	Nutting Stone	Unidentified Ground Stone	Hammer Stone	Totals
Area A, General Surface	5	1	2	16	82	85	30	2	1					3					227
Area A,																			
Area A,																			
Area B, General Surface	9	3	3	19	79	513	51	5											682
Area B, Zone 1, General Surface	1	3	2	8	41	210	19	2										1	285
Area B, Zone 2, General Surface	1	2	1	18	63	287	37	1							1				411
Area B, Zone 2,																			
Area B, Zone 2,																			
Backhoe Scrape																			
Backhoe Trench A																			
Backhoe Trench C	12	23	5	60	239	773	101	1											63
Backhoe Trench D	1	2	2	10	91	451	31	2						1				5	1295
Backhoe Trench F	5	3	2	10	54	191	8	2	1										590
Row Strip 1	92	75	35	119	749	2934	255	2					3		6	1		5	279
Row Strip 1																			4320
Row Strip 1																			3
Row Strip 1																			1
Row Strip 1	12	19	13	18	173	649	48	2	1				2	1					945
Row Strip 2																			
Row Strip 3																			
Row Strip 4	21	6	5	8	32	122	12	7					4					1	25
Row Strip 4																			
Row Strip 4	3	6	3	11	42	142	20	3											225
Row Strip 7, CSC 48																			
Row Strip 7, CSC 48																			165
Row Strip 7, CSC 48	1	6	1	6	10	31	20						1						165
Row Strip 7, CSC 49																			
Row Strip 7, CSC 49																			19
Row Strip 7, CSC 49																			7
Row Strip 7, CSC 51																			
Row Strip 7, CSC 51																			13
Row Strip 7, CSC 52																			
Row Strip 7, CSC 52	1																		38
Row Strip 7, CSC 53																			
Row Strip 7, CSC 53																			156
Row Strip 7, CSC 54																			153
Row Strip 7, CSC 54	3	2		3	30	97	16	1											53
Row Strip 7, CSC 55																			
Row Strip 7, CSC 55	1	3	1	1	13	60	8												88
Row Strip 7, CSC 57																			
Row Strip 7, CSC 57	1	3	3	1	37	414	5												439
Row Strip 7, CSC 58																			
Row Strip 7, CSC 58	2	4	5	5	32	142	12												196
Row Strip 7, CSC 60																			
Row Strip 7, CSC 60	2	4	3	33	92	10	1												146
Row Strip 7, CSC 61																			
Row Strip 7, CSC 61	7	3	2	3	16	124	17	1											172
Row Strip 7, CSC 62																			
Row Strip 7, CSC 62																			9
Row Strip 7, CSC 63																			
Row Strip 7, CSC 63																			7
Row Strip 7, CSC 64																			
Row Strip 7, CSC 64																			16
Row Strip 7, CSC 65																			
Row Strip 7, CSC 65																			14
Row Strip 7, CSC 66																			
Row Strip 7, CSC 66																			6
Row Strip 7, CSC 67																			
Row Strip 7, CSC 67																			9
Row Strip 7, CSC 68																			
Row Strip 7, CSC 68																			15
Row Strip 7, CSC 69																			
Row Strip 7, CSC 69																			7
Row Strip 7, CSC 70																			
Row Strip 7, CSC 70																			4
Row Strip 7, CSC 71																			
Row Strip 7, CSC 71																			52
Row Strip 7, CSC 72	1																		
Row Strip 7, CSC 72																			50
Row Strip 7, CSC 73																			
Row Strip 7, CSC 73	1																		19
Row Strip 7, CSC 74																			
Row Strip 7, CSC 74	1																		31
Row Strip 7, CSC 75																			
Row Strip 7, CSC 75																			13
Row Strip 7, CSC 76																			
Row Strip 7, CSC 76	1																		7
Row Strip 7, CSC 77																			
Row Strip 7, CSC 77																			4
Row Strip 7, CSC 78																			
Row Strip 7, CSC 78																			4
Row Strip 7, CSC 79																			
Row Strip 7, CSC 79																			8
Row Strip 7, CSC 80																			
Row Strip 7, CSC 80																			11
Row Strip 7, CSC 81																			
Row Strip 7, CSC 81																			9
Row Strip 7, CSC 82																			
Row Strip 7, CSC 82																			12
Row Strip 7, CSC 83																			
Row Strip 7, CSC 83																			14
Row Strip 7, CSC 84																			
Row Strip 7, CSC 84	2																		5
Row Strip 7, CSC 85																			
Row Strip 7, CSC 85																			19
Row Strip 8	1	1	1	1	19	150	9												
Row Strip 8																			
Row Strip 8	1	6	2	10	44	289	21						1					2	182
Row Strip 8, CSC 86																			
Row Strip 8, CSC 86	1	1	2	1	40	341	42	2											373
Row Strip 8, CSC 87																			
Row Strip 8, CSC 87	2	1	1	5	15	123	9								1				241
Row Strip 8, CSC 89																			
Row Strip 8, CSC 89																			159
Row Strip 8, CSC 90																			
Row Strip 8, CSC 90																			25
Row Strip 8, CSC 92	4	1	1	9	26	269	23	3											339
Row Strip 8, CSC 93	2	3	4	8	57	455	58	1											590
Row Strip 8, CSC 94	4	1	4	5	45	405	56	1											517
Row Strip 8, CSC 95	9	8	13	53	61	53	61	1											146
Row Strip 8, CSC 96																			
Row Strip 8, CSC 96	2	2	2	5	26	185	22	1					1					1	245
Row Strip 8, CSC 97	7	1	2	6	17	143	19	1					1		1				204

Table 12. Provenience and Number of Recovered Lithic Artifacts from Site 40PM32.
(continued).

Provenience	Core	Thick Biface	Thin Biface	Primary Flake	Secondary Flake	Blank Flake	Blocky Debris	Modified/Utilized Flake	Modified/Utilized Flake	Perforators	Projectile Point	Knife	Drill	Scraper	Blade	Test Cobble	Nutting Stone	Unidentified Ground Stone	Hammer Stone	Totals
Strip Block 1, Surface	1	9	2	37	113	640	80	3			3	1			1	1		1		892
Strip Block 1	24	17	2	81	521	1944	389	11		1	11	3			1					3005
Strip Block 1, Feature 2						158	7													170
Strip Block 1, Feature 3					5															112
Strip Block 2	17	22	5	57	322	1190	121	8		1	21	3						1		1768
Strip Block 2, Feature 1		2	1	49	172	1237	102													1563
Strip Block 3	29	19	14	58	277	1242	158	4			15	2		2	1		1		1	1823
Strip Block 4	11	10	6	29	204	1286	162				17	1		3						1730
Strip Block 5, West Half	3	17	3	17	193	132														367
Strip Block 5, East Half	9	8	6	14	154	576	40	3		1	4			1		1				817
Strip Block 5, Feature 9		2	1	13	76	241	12	1			1				1					348
Strip Block 5, Feature 10				7	27	49	2								1					86
Test Unit 1, Level 1	4	3	2	73	297	2335		15			4	2		1				1		2737
Test Unit 1, Level 2		1		16	93	846	108				1			1						1066
Test Unit 1, Level 3				4	8	65	4													81
General Surface Collection		4	8		8	33														53
Totals	313	308	144	849	4739	22445	2217	84	6	183	22	2	2	20	12	17	2	4	18	31385
Percentages (%)	1.00%	0.88%	0.46%	2.71%	15.10%	71.52%	7.08%	0.27%	0.02%	0.58%	0.07%	0.01%	0.01%	0.06%	0.04%	0.05%	0.01%	0.01%	0.06%	



Figure 47. 40PM32 blade-like flakes.

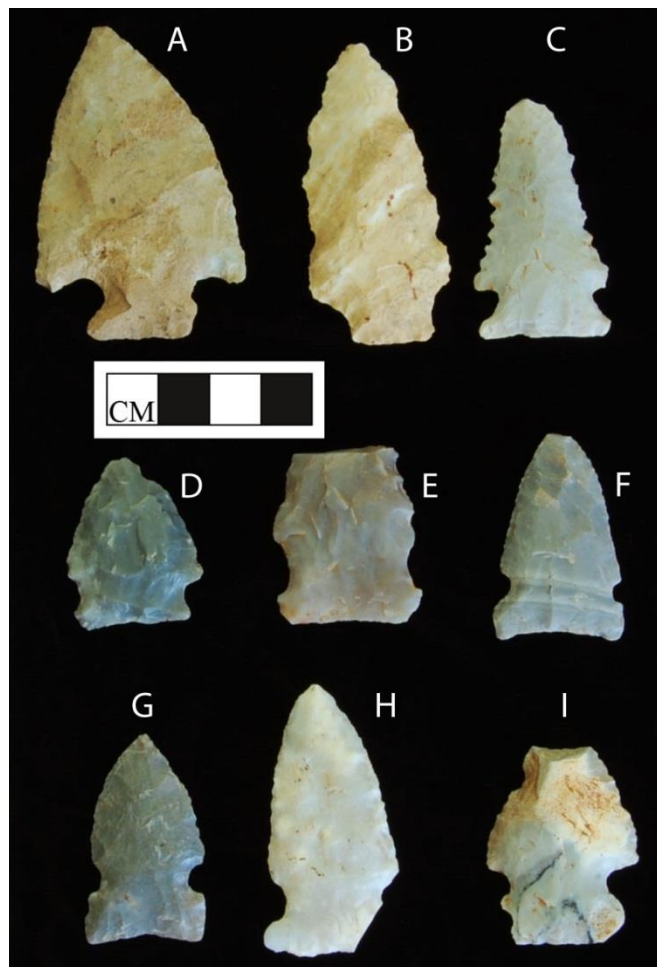


Figure 48. Archaic projectile points: A, Kirk Corner Notched; B, Kirk Serrated; C, Kirk Serrated; D, Kirk variant; E, Greenbrier; F, Big Sandy; G, Big Sandy; H, chalcedony Big Sandy; I, heated Big Sandy.

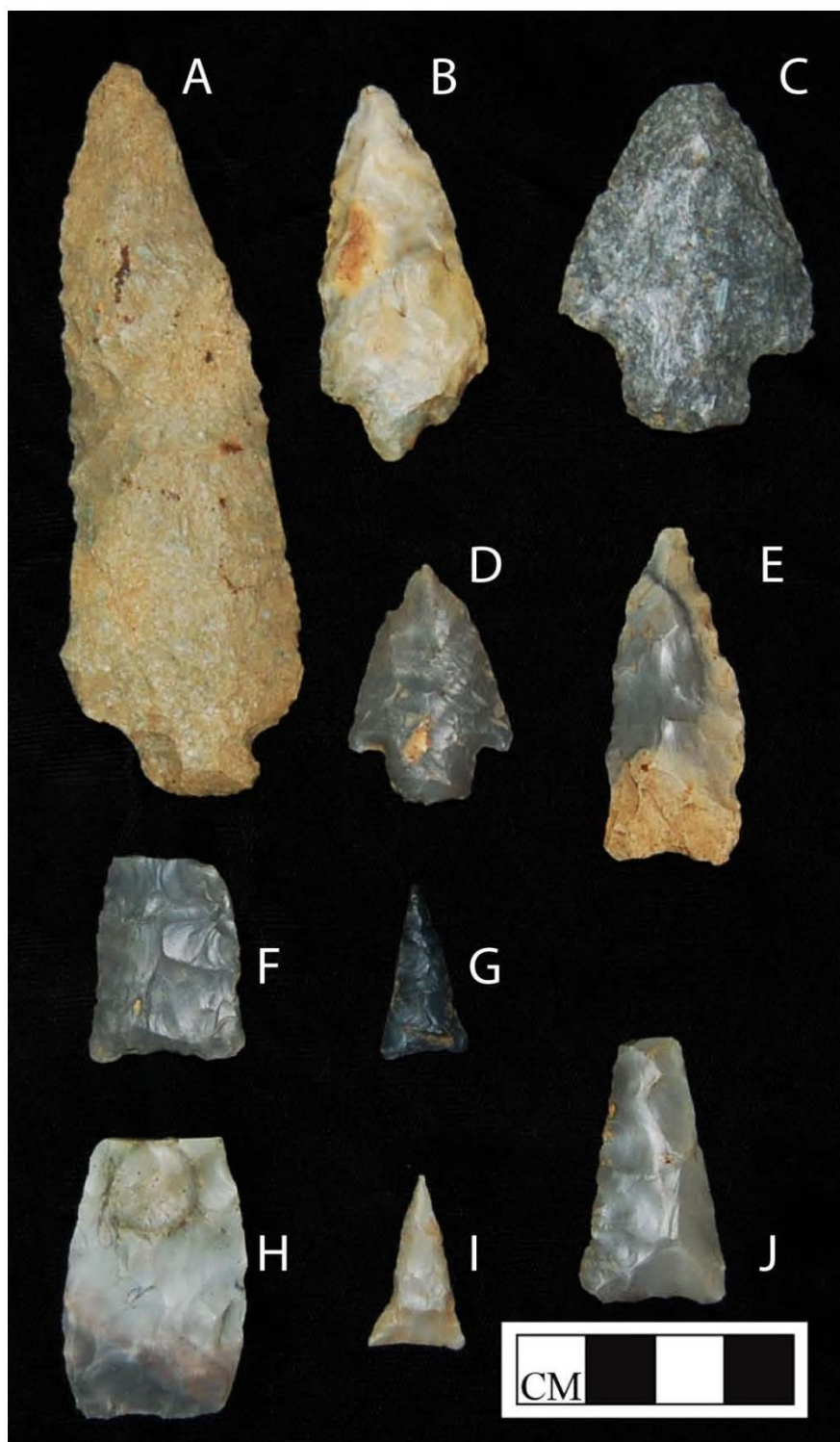


Figure 49. Archaic and Woodland points: A, Unidentified; B, Gary Contracting Stem; C, Cotaco Creek; D, Wade(?); E, Camp Creek(?); F, McFarland/Copena; G, Hamilton; H, McFarland/Copena; I, Hamilton; J, Madison.

Table 13. Select Projectile Point Measurements (in mm) from Site 40PM32.

Point Type	Cultural Affiliation (Time Period)	Provenience	Maximum Length	Maximum Width	Maximum Thickness	Shoulder Width	Blade Length	Haft Length	Proximal Haft Width	Distal Haft Width
Corner Notched (Kirk?)	Early Archaic	Backhoe Scrape	62.8	40.92	9.05	40.92	53.07	9.86	19.45	17.72
Stemless Triangular (Copena?)	Early to Mid Woodland	Test Unit 1, Level 1	33.71	23.75	5.73	N/A	N/A	N/A	N/A	N/A
Big Sandy	Early to Mid Archaic	Test Unit 1, Level 2	51.28	24.39	7.87	24.39	37.49	8.23	N/A	18.46
Side Notched with Incurvate Base	Archaic	Strip Block 1	37.88	25.9	7.16	25.3	29.369	7.83	21.85	20.63
Cotaco Creek	Late Archaic to Early Woodland	Plow Strip 1	52.08	36.68	10.61	36.68	41.35	11.05	18.86	18.69
Side Notched with Excurvate Base	Late Archaic to Early Woodland	Plow Strip 1	37.61	21.56	5.96	21.56	30.64	5.93	12.39	11.99
Hamilton	Late Woodland to Early Mississippian	Backhoe Trench C	22.95	12.18	2.47	N/A	N/A	N/A	N/A	N/A
Corner Notched Kirk Variant	Early Archaic	Backhoe Trench C	32.21	25.73	7.41	25.49	27.51	4.82	20.76	19.63
Corner Notched Serrated	Early Archaic	Backhoe Trench C	56.75	27.49	11.37	27.49	47.29	7.03	20.45	17.73
Kirk Corner Notched Variant	Early Archaic	Strip Block 2	35.32	21.86	6.9	20.8	26.65	8.13	19.43	14.93
Kirk Corner Notched Variant	Early Archaic	Backhoe Trench C	36.44	23.21	6.26	23.21	30.5	4.92	18.56	17.76
Kirk Serrated	Early Archaic	Strip Block 2	59.74	27.61	9.83	27.61	52.02	6.88	14.83	16.25
Stemless Triangular with Incurvate Base	Woodland	Strip Block 2	26.63	25.33	4.81	N/A	N/A	N/A	N/A	N/A
McFarland/Copena	Mid Woodland	Plow Strip 8, CSC 89	28.75	19.49	7.39	19.27	N/A	N/A	N/A	N/A
McFarland/Copena	Mid Woodland	Plow Strip 7, CSC 57	30.05	22.62	6.68	22.55	N/A	N/A	N/A	N/A
McFarland/Copena	Mid Woodland	Strip Block 4	31.48	22.5	8.97	N/A	N/A	N/A	N/A	N/A
McFarland	Mid Woodland	Strip Block 2	33.43	19.7	6.17	N/A	N/A	N/A	N/A	N/A
Madison	Mississippian	Strip Block 2	21.87	16.48	3.87	N/A	N/A	N/A	N/A	N/A
Hamilton	Late Woodland to Early Mississippian	Backhoe Trench D	15.99	17.61	2.81	N/A	N/A	N/A	N/A	N/A
McFarland/Copena	Mid Woodland	Backhoe Trench C	39.78	22.25	7.42	21.44	N/A	N/A	N/A	N/A
Mud Creek	Late Archaic to Early Woodland	Plow Strip 1	23.66	23.18	7.53	22.6	N/A	9.32	16.28	13.84
Broad Side Notched with Bifurcate Base and Straight Blade	Archaic- Woodland	Plow Strip 1	39.014	23.54	6.95	23.54	29.4	8.95	19.74	17.74
Straight Stem	Late Archaic to Early Woodland	Plow Strip 8, CSC 89	41.38	26.86	9.31	25.22	N/A	10.39	12.58	13.14
Pine Tree (Kirk Cluster)	Early Archaic	Plow Strip 1	45.97	26.36	7.07	26.36	N/A	7.23	21	17.57
Madison	Mississippian	Plow Strip 1	37.94	21	6.65	21	N/A	N/A	N/A	N/A
Madison	Mississippian	Plow Strip 1	29.85	22.26	7.41	22.26	N/A	N/A	N/A	N/A
Hamilton	Late Woodland to Early Mississippian	Plow Strip 1	19.73	15.5	4.44	15.5	N/A	N/A	N/A	N/A
Side Notched/ Big Sandy	Early to Mid Archaic	Plow Strip 1	39.75	25.26	6.13	23.36	30.93	6.58	24.42	19.55
Side Notched/ Big Sandy	Early to Mid Archaic	Plow Strip 1	39.47	24.23	6.41	22.26	31.18	11.05	23.23	17.46
Side Notched/ Big Sandy	Early to Mid Archaic	Plow Strip 1	41.71	25.88	7.23	N/A	30.31	11.1	N/A	N/A
Expanded Stem/ McIntire	Mid to Late Archaic	Plow Strip 1	57.02	36.12	10.62	36.12	47.15	10.24	21.39	20.14
Expanded Stem with Excurvate Base	Mid to Late Archaic	Plow Strip 1	43.21	34.08	7.12	34.08	32.47	11.3	20.89	18.54
Corner Notched, Straight Stem with Excurvate Base	Archaic	Plow Strip 1	48.37	35.2	11.67	35.21	N/A	11.83	18.89	19.12
Expanded Stem with Straight Base	Late Archaic to Early Woodland	Plow Strip 1	47.82	30.81	11	29.15	37	10.12	21.11	20.27
Gary Contracting Stem	Late Archaic to Early Woodland	Plow Strip 1	56.65	25.06	9.5	24.19	48.52	9.15	3.52	10.15
Side Notched with Excurvate Base	Late Archaic to Early Woodland	Plow Strip 1	109.63	35.35	9.36	33.11	97.25	8.97	15.76	16.35
Stemless Triangular (Copena?)	Woodland	Backhoe Scrape	34.11	19.94	6.69	N/A	N/A	N/A	N/A	N/A
Stemless with Expanded Ariculated Base (Camp Creek?)	Late Archaic to Early Woodland	Strip Block 3	48.33	20.23	7.6	N/A	N/A	N/A	N/A	N/A
Kirk Serrated	Early Archaic	Strip Block 5	47.67	26.77	6.53	26.77	40.31	6.32	25.14	18.64
Late Archaic Stemmed	Late Archaic	Plow Strip 1, FS 44	68.42	25.14	8.78	25	56.77	8.49	14.31	14.85
Big Sandy Broad Base	Mid Archaic	Plow Strip 7, CSC 50	39.43	22.89	6.36	21.41	27.02	12	21.47	16.44
Big Sandy Broad Base	Mid Archaic	Plow Strip 7, CSC 59	35.36	31.58	7.26	23.58	26.93	11.77	30.61	20.73
Hamilton	Late Woodland to Early Mississippian	Plow Strip 8, CSC 89	24.85	12.57	3.26	N/A	N/A	N/A	N/A	N/A
Big Sandy	Early to Mid Archaic	Plow Strip 8, CSC 90	44.31	28.47	9.03	28.47	32.37	9.48	27.87	19.84
Late Archaic Straight Stemmed	Late Archaic	Plow Strip 8, CSC 97	52.76	29.81	13.02	29.14	43.9	8.77	18.63	18.59
Possible Wade	Late Archaic to Early Woodland	Strip Block 3	34.92	23.7	6.66	23.7	27.88	7.3	11.68	13.03

Ground/pecked artifacts included 18 hammerstones and two nutting stones (Figure 51). Most of the hammerstones were made of local cherts except for one quartzite specimen found in Plow Strip 1. Also found in Plow Strip 1 was an oval, cherty limestone cobble with one circular pit pecked into the center of a flat surface. This nutting stone measures 85.97 mm long, 62.58 mm wide and 42.38 mm thick. Another nutting stone from Strip Block 3 consisted of a rectangular sandstone slab with one broad ground surface and a circular depression in the center. The other broad side does not appear to have been worked. This nutting stone measures 86.85 mm long, 64.02 mm wide and 31.6 mm thick.

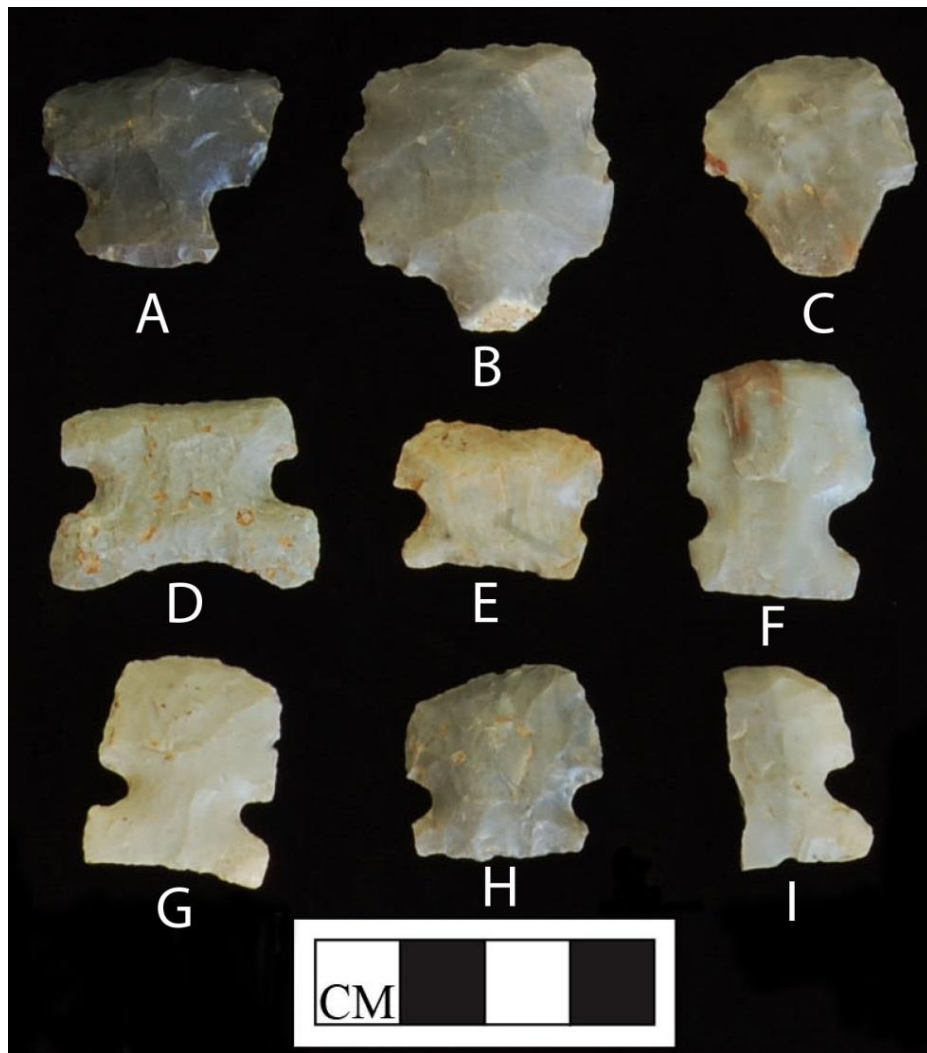


Figure 50. Select projectile points reworked into scrapers. A is from PS 1; B is from PS 2; C is from TU 1; D is from SB 2; E is from SB 4; F is from PS 7; G is from SB 3; H is from PS 8; and I is from SB 1.



Figure 51. Nutting stones from 40PM32. Left, PS 1; Right, SB 3.

Several sandstone items (n=4) exhibited ground surfaces but could not be definitively assigned to a specific tool type due to their fragmented nature. Three of these generally tabular items were possibly metate fragments. The fourth specimen (from Strip Block 2) has rounded edges and may be a mano fragment.

Botanical Analysis

Eight feature samples (2, 3, 4, 5, 6, 7, 8) were analyzed, but Features 2, 4, 7, and 8 were deemed modern rather than cultural features (Table 14). Wood charcoal constituted about half of the total sample weight with fragments of oak wood being identified. Some hickory nutshell remains were also identified.

Table 14. Botanical Analysis Results from 40PM32.

	Feature #			Total
	3	5	6	
* Field Specimen				
Total Sample Weight (g)	-0.1	0.1	0.4	0.4
Sample Composition				
Wood	-0.1	-0.1	0.2	0.2
Nustshell	-0.1	-0.1	0.1	0.1
Residual (1.0mm & 2.0mm Screen)		0.1	0.1	0.2
Nutshell Composition				
Carya Sp. (Thick Shelled Hickory)	-0.1	-0.1	0.1	0.1
Wood Composition (No. Fragments)				
Quercus SP. (oak)	1	4		5
Bark			30	30

Summary

The 40PM32 exploration results defined a massive concentration of lithic materials along the ridge overlooking Turkey Creek. Mechanical and surface investigations yielded artifacts across a 1,000x850 ft. area on the ridge, with the true site boundaries likely extending further out. Modern activities (clearing, farming, construction), along with erosion, have severely disturbed the site area.

All backhoe trenches, strip blocks, and the test unit defined an upper disturbed (plowzone) level ranging from 0.6 to 1.4 feet below ground surface. No intact midden was observed, as this disturbed level was in direct contact with the red subsoil. Eleven potential features were recorded within Strip Blocks 1, 2, and 5, but further assessment determined that only six (1, 3, 5, 6, 9, and 10) were cultural in origin. Three cultural features (1, 9, and 10) were interpreted as lithic reduction stations, with the other three defined as postholes.

Artifacts recovered from the site comprised chipped and ground/pecked stone tools and debris representative of all lithic manufacturing/maintenance stages. The amount of material from 40PM32 comprised nearly one-half of the artifact total recovered during the entire Phase II project, and was nearly double the next highest site total (40PM34, n=17,411). An abundance of local chert deposits was present within and adjacent to the site area.

The identified projectile point sample denoted long-term use of the site area from the Early Archaic through Mississippian periods. Most temporally sensitive specimens were recovered from disturbed contexts, but one Kirk Serrated point was found in Feature 9.

VIII. SITE 40PM33

Site Description

Site 40PM33 was defined by a very light lithic scatter just northeast of 40PM32 along the same ridge overlooking Turkey Creek. The site occurs on an east-facing slope at an elevation of 1,020 feet AMSL, and measured approximately 150 feet north-south by 160 feet east-west. The site area was covered in grasses and secondary growth at the time of investigation. The previous Phase I survey observed this site to have a high density of lithic material and suggested a Woodland period occupation (DuVall 1976).

Methodology

A general surface collection was performed but yielded few artifacts. Two backhoe trenches (BHT 1 and 2) were dug, with the fill trowel-sorted for cultural materials. A 10x10 ft. block was excavated by hand to evaluate suspicious depressions near the site surface, and a long plow strip was extended across the site's western edge to assess the extent of cultural materials. The site area was deemed heavily disturbed, with no intact deposits observed during the work.

Lithic Materials

The site investigations found a sparse (n=52) assemblage of lithic items (Table 15; Appendix A). Recovered tools were one small point tip, one knife midsection, one modified flake cutting tool, and one hammerstone.

Table 15. Provenience and Number of Recovered Lithic Artifacts from 40PM33.

Provenience	Thick Biface	Thin Biface	Primary Flake	Secondary Flake	Blank Flake	Blocky Debris	Modified /Utilized Flake	Projectile Point	Knife	Hammer Stone	Totals
General Surface	1										1
Backhoe Trench A				1	3			1			5
Strip Block 1	2	2	2	3	29	5	1		1	1	46
Totals	3	2	2	4	32	5	1	1	1	1	52
Percentages (%)	5.77%	3.85%	3.85%	7.69%	61.54%	9.62%	1.92%	1.92%	1.92%	1.92%	

Summary

The light lithic assemblage from the Phase II work is not consistent with the high density of material noted from the initial Phase I survey results (DuVall 1976). Also, the lack of temporally sensitive specimens hinders any additional insights into time of occupation.

IX. SITE 40PM34

Site Description

Site 40PM34 occurs in the central portion of the project area at the junction of Turkey Creek and Black Bottom Branch. The site was established on an undulating, southeast-facing slope (elevation 1,010 feet AMSL) that merged into a narrow floodplain to the east. The site area had been previously cultivated but reverted to pasture prior to the Phase II work.

The site area is bounded by Lyles Cemetery to the northwest, Turkey Creek to the east, and a wooded area to the west and south (Figure 52). A moderate to dense lithic scatter visible on the surface measured approximately 500 feet north-south by 400 feet east-west. However, cultural materials were visible beyond the right-of-way to the east and south.

Previous clearing and farming activities had substantially disturbed the site area. Red clay subsoil was exposed in the northwest and northeast site areas.



Figure 52. Photo of 40PM34 during investigation.

Methodology

Most of the site area was plowed, with three plow areas (2, 3, and 7) divided into controlled surface collection units (Figure 53). Figures 54 and 55 present piece-plotted tools within these collection units. Two backhoe trenches (BHT A and B) were excavated between Plow Areas 2 and 3, with the excavated fill trowel-sorted for artifacts.

Three strip blocks (Strip Blocks 1-3) were established in areas of higher artifact density in the northern defined site area (Figures 56 and 57). All block fill was trowel-sorted. The excavation of Strip Block 1 yielded six potential features along with a dense concentration of artifacts that included projectile points, scrapers, bifaces, and hammerstones (Figure 58). Also, a 4x4 ft. test unit was excavated by hand in the southeast corner of Strip Block 1.

Features

No intact midden was defined by the mechanical work, but six potential features were identified within Strip Block 1 about 1.7 feet below surface (see Figure 58). Additional inspection deemed all six features to be of cultural origin.

Feature 1

Feature 1 was defined in the northwest portion of Strip Block 1 as an oblong pit with slightly irregular edges and walls. This pit displayed a basin-shaped profile, and measured 2.3 feet east-west, 1.7 feet north-south, and 1.7 feet deep (Figure 59). The pit fill was black, loosely compacted silt that contained a biface, flakes, and charred nutshell. Probable tree root or rodent disturbances were noted along the base and east edge.

Feature 2

This feature, exposed in the north-central portion of Strip Block 1, comprised an oval, basin-shaped pit with irregular edges and walls. Feature 2 measured 2.5 feet east-west by 1.9 feet north-south, and 2.2 feet deep. The fill was also black, loosely compacted silt with charcoal, flakes, and burned sandstone cobble fragments. Probable tree root or rodent disturbances were noted on the pit side and base.

Feature 3

Feature 3 was an oval, basin-shaped pit (near Feature 2) measuring 1.7 feet east-west by 1.1 feet north-south, and 0.55 feet deep. The fill was loosely compact, brown/black silt containing projectile points, flakes, charcoal, and a burned sandstone cobble. Tree root or rodent disturbances were noted along the pit's east edge.

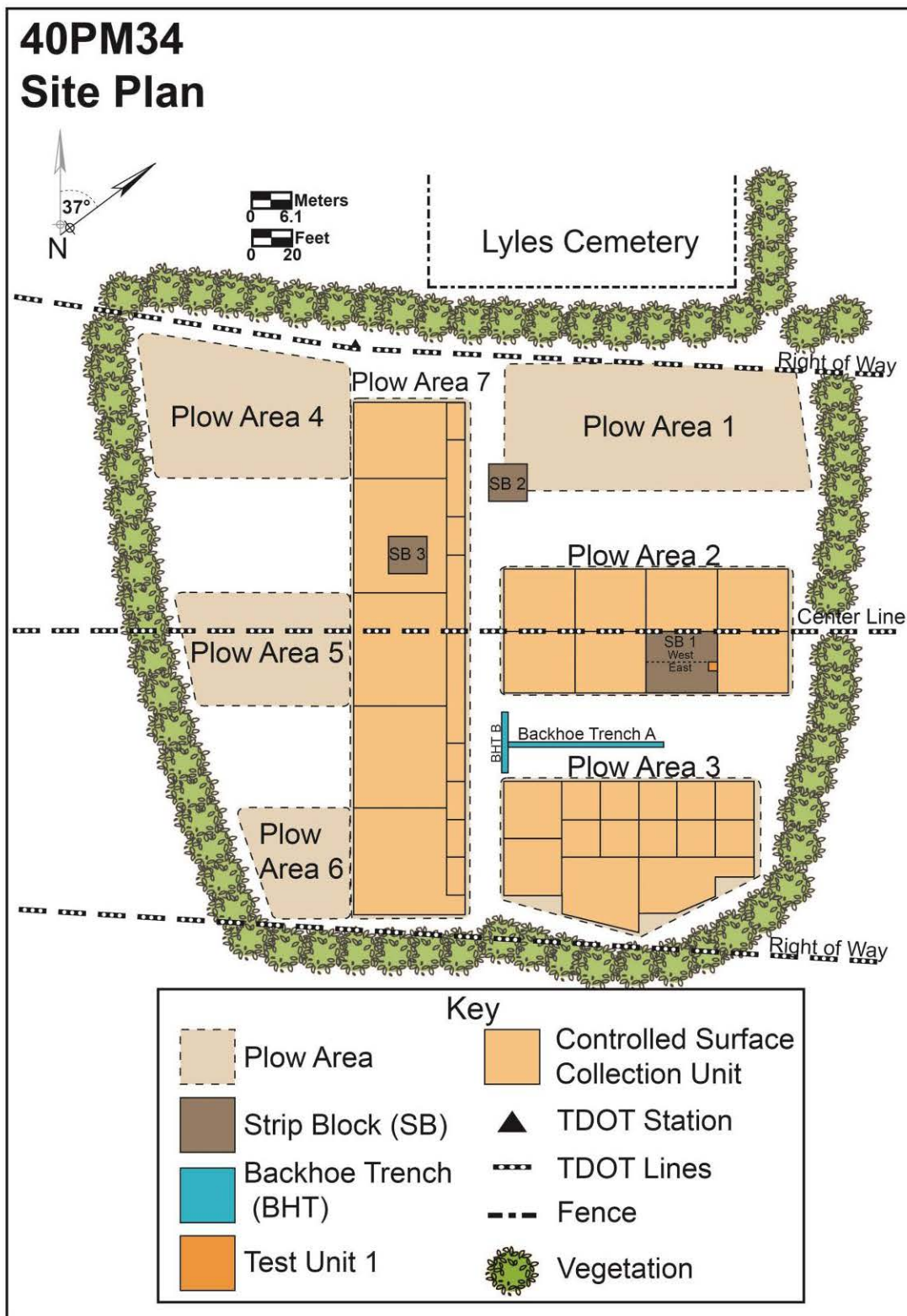


Figure 53. Plan map of excavations, site 40PM34.

40PM34 **Plow Area 2** **Controlled Surface Collection** **Plan View**

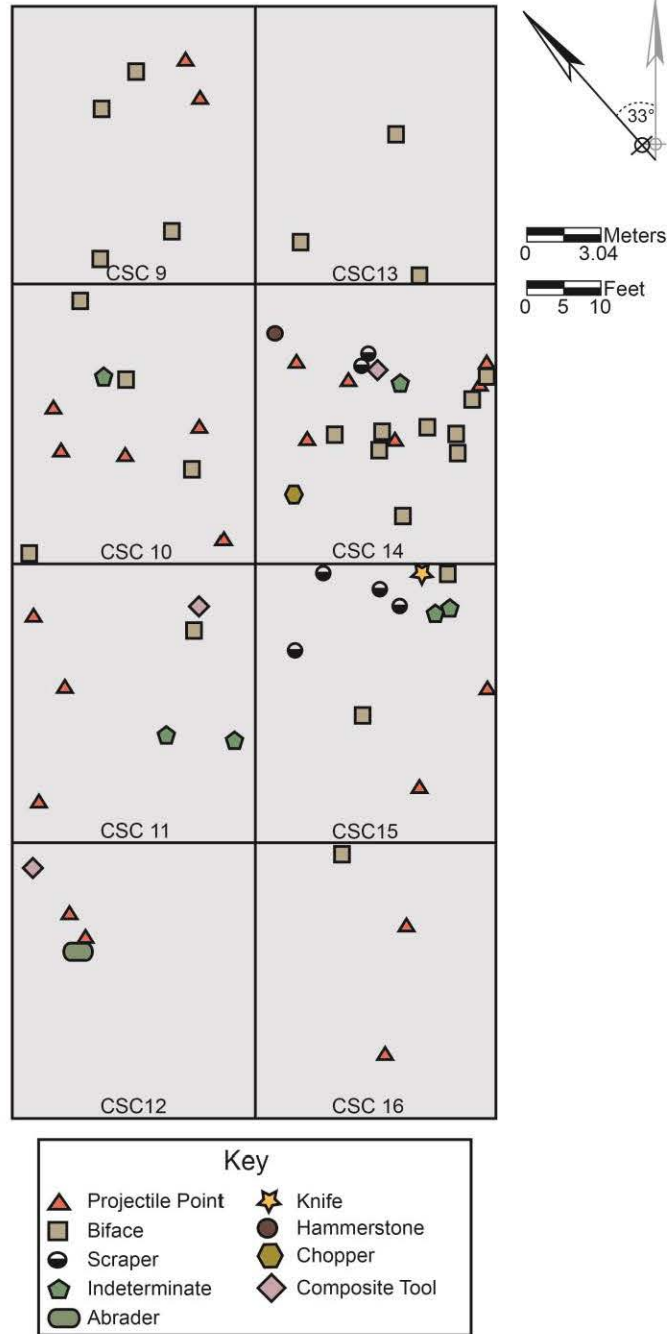


Figure 54. Piece-plot map of Plow Area 2, site 40PM34.

40PM34 **Plow Area 3** **Controlled Surface Collection** **Plan View**

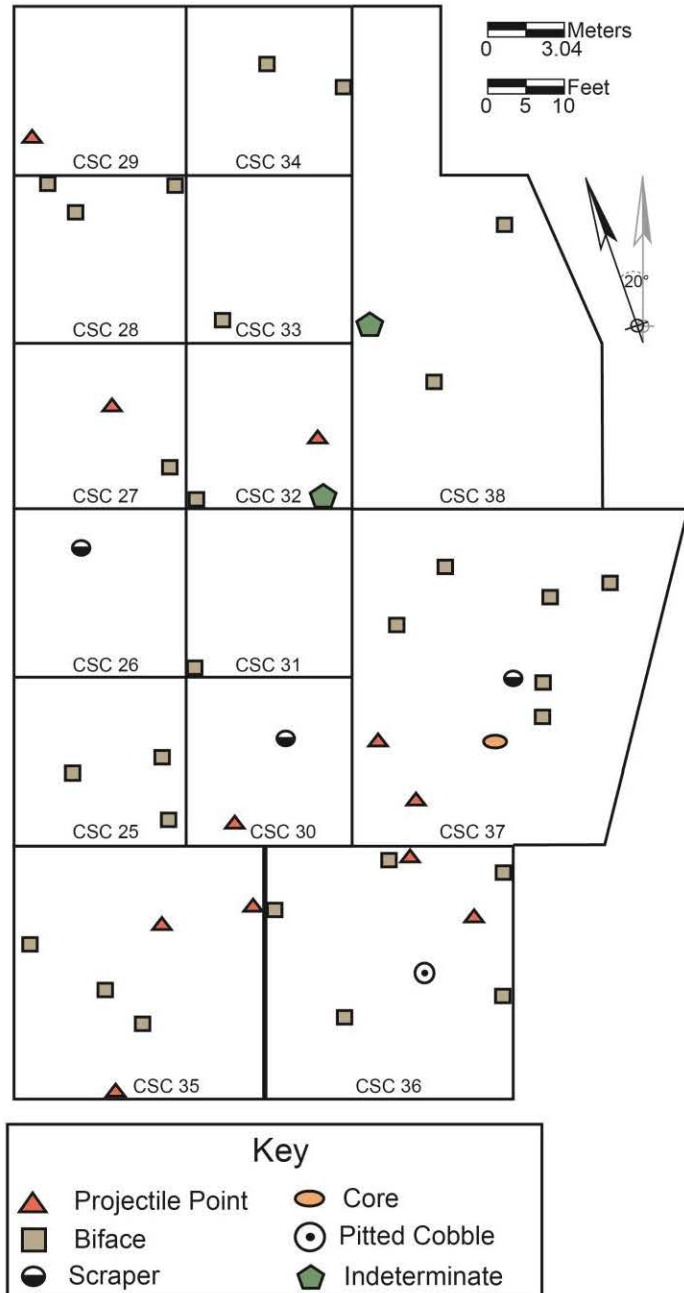


Figure 55. Piece-plot map of Plow Area 3, site 40PM34.



Figure 56. Photo of Strip Block 1, site 40PM34.



Figure 57. Photo of Strip Block 2, site 40PM34.

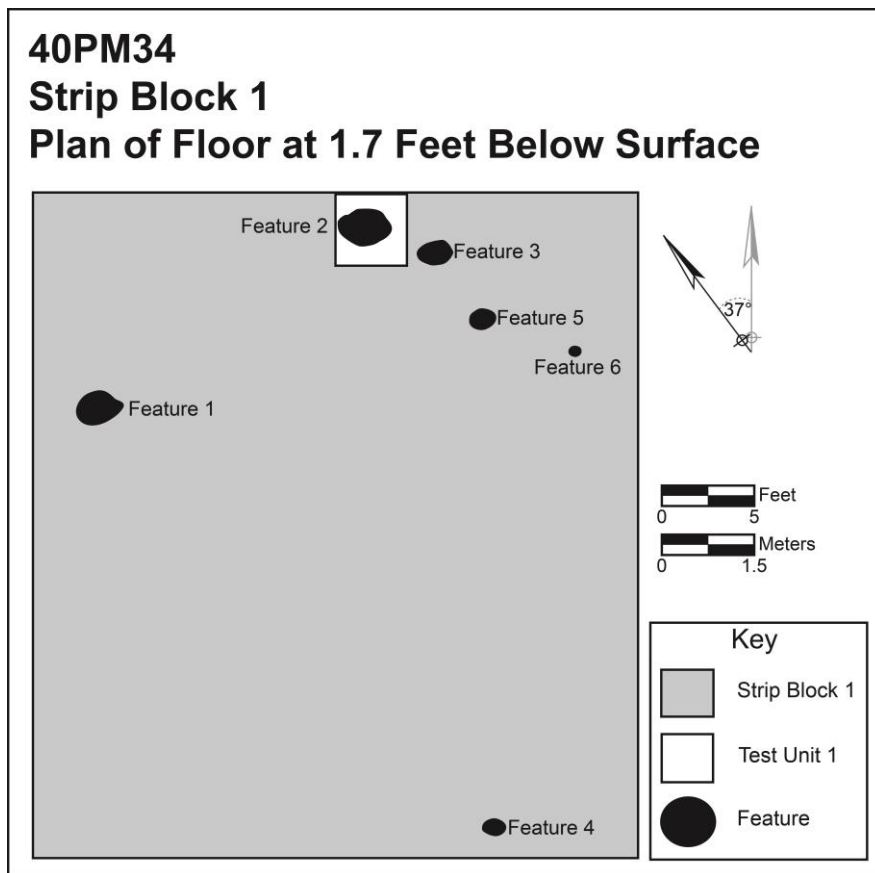


Figure 58. Plan map of Strip Block 1 with features, site 40PM34.

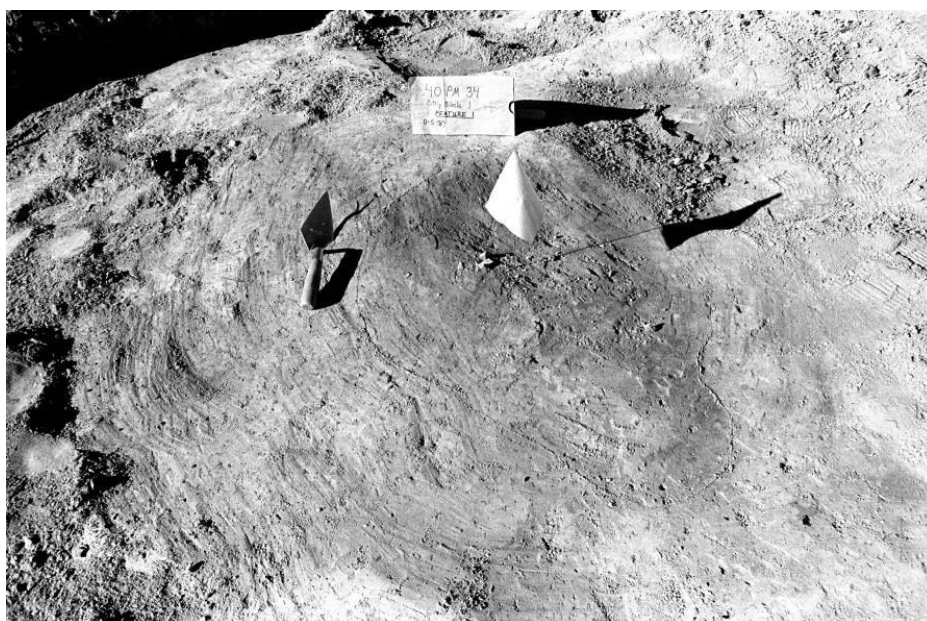


Figure 59. Plan photo of Feature 1, site 40PM34.

Feature 4

Discovered in the southeast corner of Strip Block 1, Feature 4 appeared as a small, circular dark stain measuring 0.95 feet in diameter. This feature exhibited straight sides and a flat bottom. The dark brown fill extended to a depth of 0.65 feet at which point the fill mixed with clay and extended another 0.2 feet. This feature yielded a projectile point, an end scraper from a reworked dart point, bifaces, flakes, and charcoal. Feature 4 is interpreted as a posthole.

Feature 5

Feature 5, detected in the northeast corner of Strip Block 1, was circular in plan-view and exhibited vertical sides and a flat bottom. This posthole measured 1.0 ft. deep, and the dark brown silt fill contained flakes and bits of charcoal.

Feature 6

The northwest corner of Strip Block 1 contained a circular feature with straight walls and a flat bottom. Feature 6 represents a posthole measuring 0.5 feet in diameter and 0.65 feet deep.

Lithic Materials

Numerous lithic artifacts (n=17,411) were recovered during the Phase II investigations (Table 16; Appendix A). All appear to be made from locally available resources. Nearly 90% of the assemblage was composed of flakes. Seven specimens comprised blade-like flakes that originated from Plow Areas 2, 3, and 7 (Figure 60). Another 22 flakes were modified as scrapers, cutting tools, and spokeshaves. One additional flake had been utilized as a scraping tool.



Figure 60. Blade-like flakes recovered from site 40PM34.

Over 210 (n=214) projectile points were present in the site assemblage, with a substantial percentage (63.6%, n=136) comprising various base, midsection, distal, and barb fragments. Identified types from the point sample include Quad, Kirk Corner-Notched, Kirk Serrated, Big Sandy, Kanawha, Decatur, Crawford, Kays, Mulberry Creek, Wade, Motley, Hamilton, and Madison (Figures 61 and 62; Table 17).

Additional chipped stone tools include 15 knives, 16 scrapers, and five drills. The scraper sample consists of 13 end and three side scrapers (Figure 63). Several end scrapers originated as dart points with subsequent unifacial retouch along their distal ends. The drills were mostly bit fragments with diamond-shaped cross-sections, although one fragmented specimen made from a flake displayed a bulbous base and minimally worked bit.

The ground/pecked stone assemblage included six (generally fragmented) nutting stones and seven hammerstones (Figures 64 and 65). Five nutting stones were made of sandstone, with one made from a rectangular block of chert. While most nutting stones exhibited a single pecked depression, one specimen did display three depressions. The hammerstone sample consisted of generally ovoid to circular chert cobble fragments with battered edges and surfaces. One large, semi-hemispherical chert cobble with a convex, lateral edge also exhibited substantial crushing.

Six groundstone specimens could not be confidently assigned to an identified type due to their fragmented nature. Most of these sandstone and limestone items likely comprise metate and mano fragments. One small fragment of greenish-brown shale from Plow Area 3 displayed two highly polished areas and could be part of a celt.

Botanical Analysis

A total of 192.7 grams of charcoal was analyzed from Features 1, 2, 3, 4, and 6 (Table 18). Charred wood constituted 37.9% of the total sample weight with hickory found in all samples. A small amount of honey locust was found in Feature 1. Nutshell remains comprised 2% of the total sample weight with hickory recovered from all samples and walnut/butternut from Feature 1. Seed and fruits represented <0.1% of the total sample weight and were present in Features 1 and 2. Asteraceae, bedstraw, honey locust, hop hornbeam, sumac, blackberry, and grape were identified in the seeds and fruit sample. All seeds with the exception of hop hornbeam represent plants that could have been exploited for food and medicinal purposes.

Table 16. Provenience and Number of Lithic Artifacts from Site 40PM34.

Provenience	Core	Thick Biface	Thin Biface	Primary Flake	Secondary Flake	Blank Flake	Blocky Debris	Modified /Utilized Flake	Blade	Projectile Point	Knife	Drill	Scraper	Nutting Stone	Unidentified Ground Stone	Test Cobble	Hammer Stone	Totals
Backhoe Trench A	3	2	2	4	36	191	7	1										246
Backhoe Trench B	3	2		7	49	232	28	1		7								329
Feature 1			1		9	63	7											80
Feature 2					2	41									1			44
Feature 3					5	42				2					1			50
Feature 4		2	1	2	7	18	2			1			1					34
Feature 5					4	18	2											24
General Surface	2	19	16	1	19	22		1		31			2					113
General Surface, Monitoring		2	2							4								6
Plow Strip 1	1		2	3	41	139	9					1	1					197
Plow Area 2										1								1
Plow Area 2										1								1
Plow Area 2										1								1
Plow Area 2, CSC 9	9	5	9	21	146	461	39	3		5								698
Plow Area 2, CSC 9										1								1
Plow Area 2, CSC 9										1								1
Plow Area 2, CSC 10	7	6	7	20	139	665	48	2		4								898
Plow Area 2, CSC 10										1								1
Plow Area 2, CSC 10										1								1
Plow Area 2, CSC 10										1								1
Plow Area 2, CSC 10										1								1
Plow Area 2, CSC 10										1								1
Plow Area 2, CSC 10	6	1	2	19	91	493	38	1	2	4								657
Plow Area 2, CSC 11										1								1
Plow Area 2, CSC 11										1								1
Plow Area 2, CSC 12	3	5	2	7	44	204	20			2			1					288
Plow Area 2, CSC 12										1								1
Plow Area 2, CSC 12										1								1
Plow Area 2, CSC 13	8	6	7	12	41	212	11	1		2								300
Plow Area 2, CSC 14	10	6	7	20	131	737	42			5				1		2		959
Plow Area 2, CSC 14										1								1
Plow Area 2, CSC 14										1								1
Plow Area 2, CSC 14										1								1
Plow Area 2, CSC 14										1								1
Plow Area 2, CSC 14										1								1
Plow Area 2, CSC 14										1								1
Plow Area 2, CSC 14										1								1
Plow Area 2, CSC 15	11	2	2	9	58	452	52	1		3			1			2		591
Plow Area 2, CSC 15										1								1
Plow Area 2, CSC 15										1								1
Plow Area 2, CSC 15										1								1
Plow Area 2, CSC 16	1	1		6	59	223	21			2								313
Plow Area 2, CSC 16										1								1
Plow Area 2, CSC 16										1								1
Plow Area 2, CSC 16										1								1
Plow Area 2, CSC 16										1								1
Plow Area 3										1								1
Plow Area 3										1								1
Plow Area 3										1								1
Plow Area 3	3	2	2	2	26	64	9			2	1							112
Plow Area 3, CSC 25	1	4	1	3	26	59	6		1	2	2							103
Plow Area 3, CSC 26	2	3	2	1	23	128	12											171
Plow Area 3, CSC 27										1								1
Plow Area 3, CSC 28		3		3	11	109	9			2	2					2		139

Table 16. Provenience and Number of Lithic Artifacts from 40PM34. (continued).

[illegible]

Table 16. Provenience and Number of Lithic Artifacts from 40PM34. (continued).

Provenience	Core	Thick Biface	Thin Biface	Primary Flake	Secondary Flake	Blank Flake	Blocky Debris	Modified /Utilized Flake	Blade	Projectile Point	Knife	Drill	Scraper	Nutting Stone	Unidentified Ground Stone	Test Cobble	Hammer Stone	Totals
Strip Block 1 East Half										1								1
Strip Block 2	1				5	56	4			1								67
Strip Block 3	1	2	2	2	39	224	11	1		2		1					1	286
Test Unit 1	2	5	5	43	263	2230	133	1		18				2				2702
Totals	147	143	143	318	2308	9975	832	20	7	189	15	5	16	4	6	7	7	17412
Percentages (%)	0.84%	0.82%	0.82%	1.83%	13.26%	57.29%	4.78%	0.11%	0.04%	1.09%	0.09%	0.03%	0.09%	0.02%	0.03%	0.04%	0.04%	

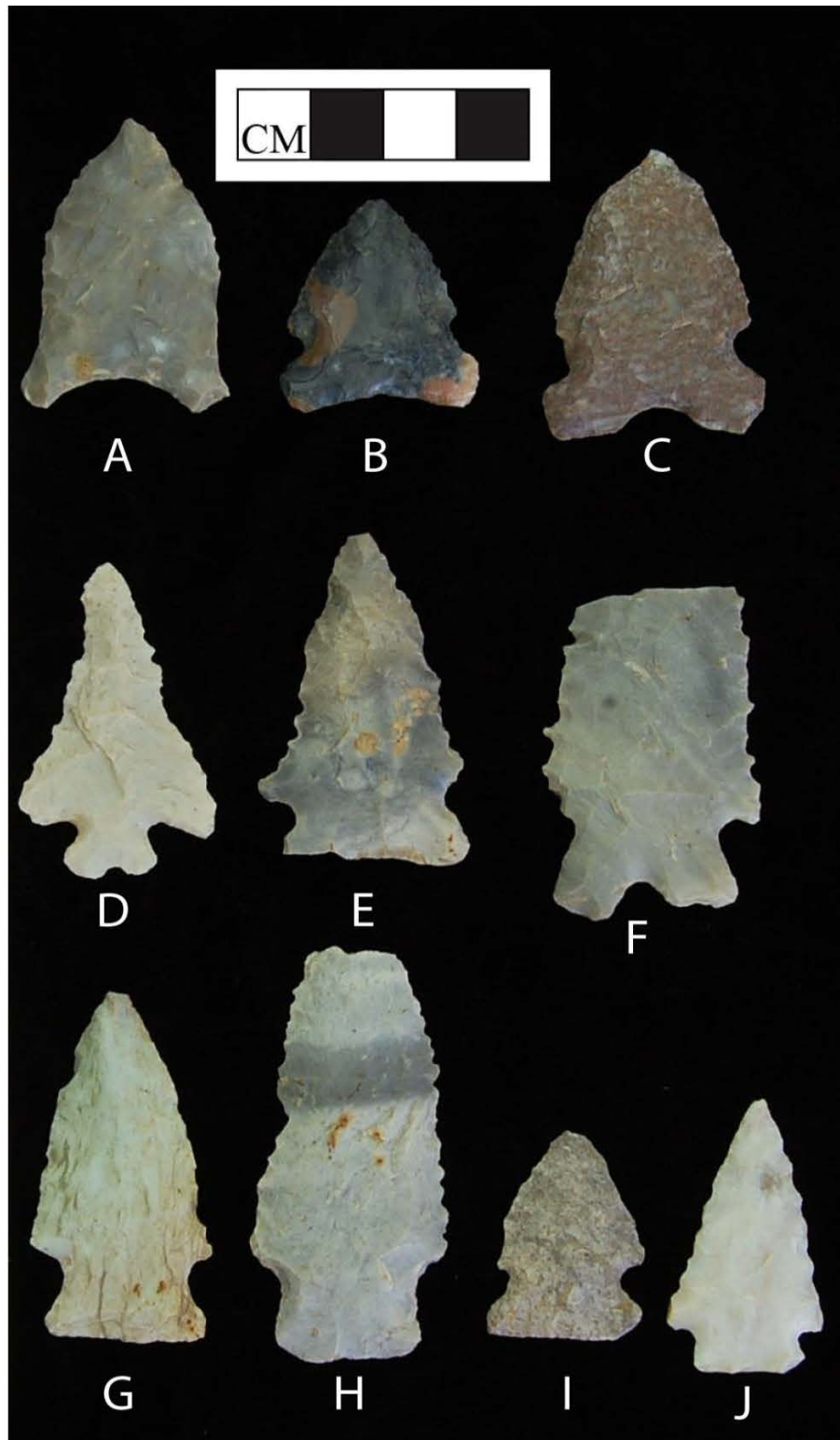


Figure 61. Paleoindian to Late Archaic points: A, Quad; B-C, Big Sandy; D, Kanawha; E, Decatur; F, St. Albans; G, Kirk Corner Notched; H, Kirk Serrated; I, Palmer?; J: Crawford Creek.

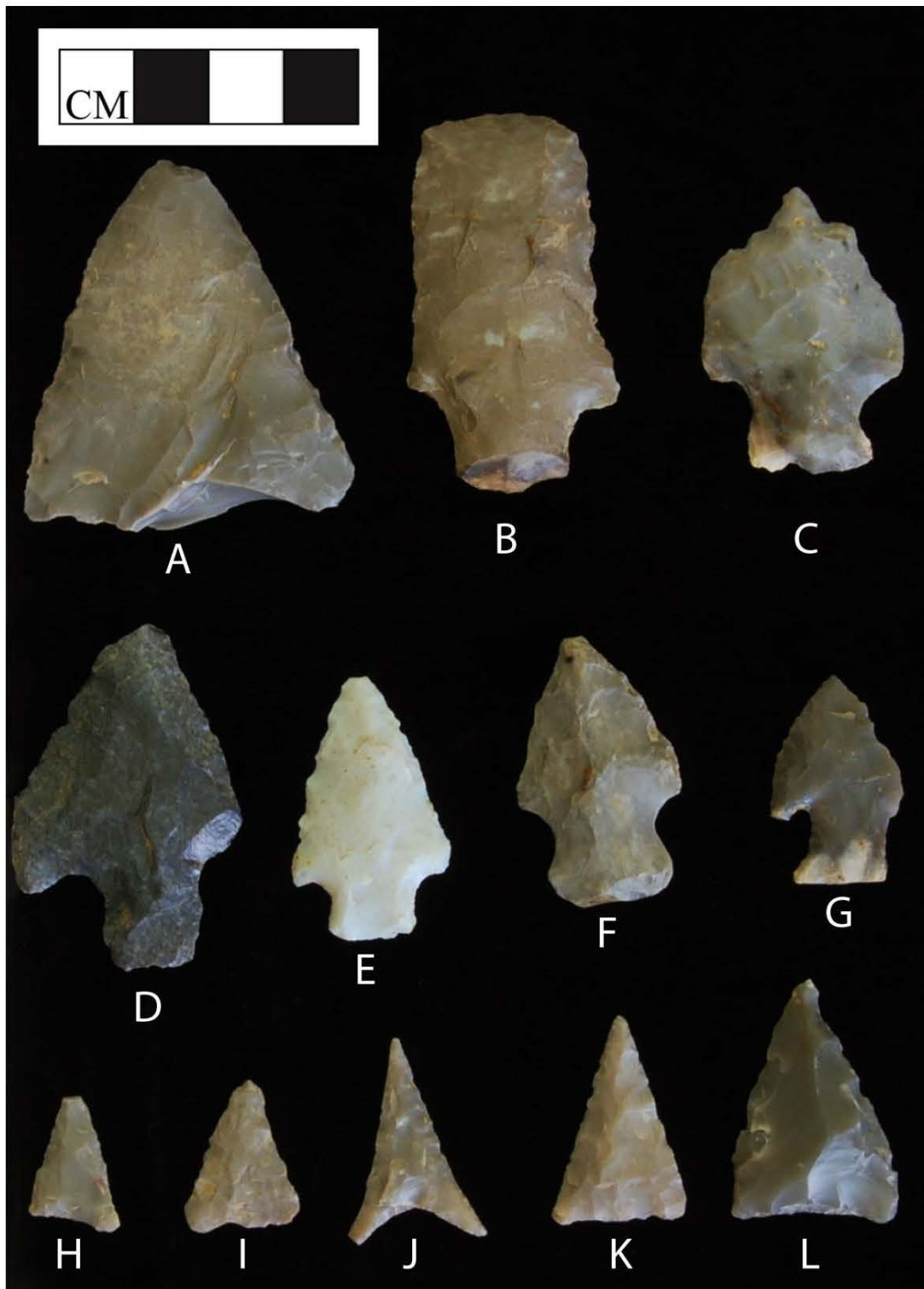


Figure 62. Late Archaic to Late Woodland/Mississippian points: A, Cotaco Creek-like; B, Possible Pickwick; C, Motley/Lowe cluster; D, Wade; E, Possible Flint Creek; F, Mud Creek-like; G, Jack's Reef Corner Notched; H-I, Madison; J-K, Hamilton; L, Possible Greenville.

Table 17. Select Projectile Point Measurements (in mm) from Site 40PM34.

Point Type	Cultural Affiliation (Time Period)	Provenience	Maximum Length	Maximum Width	Maximum Thickness	Shoulder Width	Blade Length	Haft Length	Proximal Haft Width	Distal Haft Width
Motley	Late Archaic-Early Woodland	Plow Area 3	37.21	26.6	7.6	26.65	29.63	10.7	15.72	13.8
Kirk Cluster	Early Archaic	Strip Block 1, East Half	30.03	19.33	5.38	19.61	21.07	8.37	14.36	13.2
Wade	Late Archaic-Early Woodland	General Surface	44.48	29.96	8.18	29.96	31.7	11.33	10.86	12.19
Big Sandy	Early Archaic	General Surface	30.25	27.56	6.75	23.46	22.9	10.31	27.08	20.19
Big Sandy	Early Archaic	General Surface	40.85	30.88	7.94	27.09	30.29	11.15	30.23	22.62
Mulberry Creek	Late Archaic	General Surface	35.9	28.6	9.43	28.6	26.98	10.15	15.07	16.21
Kay's?	Late Archaic-Early Woodland	General Surface	54.44	36.9	9.91	35.3	46.38	15.47	21.82	23.37
		General surface, construction monitoring								
Pickwick?	Late Archaic		50.67	27.9	28.93	27.9	40	9.6	15	16.56
Hamilton	Late Woodland to Early Mississippian	Plow Area 7, CSC 60	25.77	17.66	3.64	N/A	N/A	N/A	N/A	N/A
Hamilton	Late Woodland to Early Mississippian	Plow Area 7, CSC 57	20.73	18.67	3.34	N/A	N/A	N/A	N/A	N/A
Corner Notched	Archaic-Woodland	Plow Area 5 (entire)	32.44	22.37	6	22.37	25.65	7.6	11.42	11.21
Corner Notched/ Kirk Stemmed	Early Archaic	Plow Area 3, CSC 35	37.22	25.22	6.12	25.18	30.49	8.89	N/A	11.79
Greenville?	Late Woodland	Strip Block 1, East Half	30.5	21.11	9	N/A	N/A	N/A	N/A	N/A
Side Notched	Archaic	Plow Area 3, CSC 30	37.95	28.5	5.5	28.5	30.63	7.79	16.19	15.2
Big Sandy Like	Early Archaic	Plow Area 3, CSC 27	46.65	20.19	6.9	19.15	36.86	8.55	18.9	13.09
Mud Creek Like	Late Archaic-Early Woodland	Test Unit 1	34.33	21.01	7.01	20.93	23.55	9.76	15.63	12.76
Jacks Reef Corner Notched	Middle Woodland	Test Unit 1	26.73	18.92	4.43	19.73	17.97	8.39	12.02	9.56
Kanawha	Early Archaic	Strip Block 1, East Half	44.79	26.91	5.74	26.91	37.4	6.2	12.73	9.47
Kirk Serrated	Early Archaic	Strip Block 1, East Half	46.11	30.83	7.05	30.83	36.14	10.75	19.15	19.06
Quad	Late Paleoindian	Plow Area 2, CSC 11	42.1	29.14	7.11	N/A	N/A	N/A	N/A	N/A
Kirk Serrated	Early Archaic	Strip Block 1, East Half	52.09	24.97	8.1	22.83	45.96	6.74	17.41	15.1
Kirk Serrated	Early Archaic	Strip Block 1, East Half	57	26.57	7.78	26.57	43.61	10.58	19.29	18.34
Kirk Cluster	Early Archaic	Strip Block 1, East Half	47.8	24.59	6.29	24.33	37.64	11.02	21.47	16.51
Decatur	Early Archaic	Plow Area 2, CSC 16	46.003	28.15	7.76	28.15	39.89	10.08	25.18	20.7
Madison	Mississippian	Plow Area 2, CSC 12	15.97	11.74	3.26	N/A	N/A	N/A	N/A	N/A
Kirk Cluster (Palmer?)	Early Archaic	Plow Area 2, CSC 10	28.67	20.78	5.99	19.61	20.8	8.65	20.78	14.78
Flint Creek?	Late Archaic	Plow Area 2, CSC 10	33.86	19.95	6.14	19.95	27.55	6.31	11.16	10.41
Madison	Mississippian	Plow Area 2, CSC 10	18.75	14.53	3.04	N/A	N/A	N/A	N/A	N/A
Stemless Triangular	Late Woodland	Plow Area 2, CSC 9	38.45	19.58	8.51	N/A	N/A	N/A	N/A	N/A
Excavate Blade with Contracting Stem	Archaic-Woodland	Plow Area 2	45.96	25.75	9.19	25.75	36.22	11.5	17.1	18.54
Crawford Creek	Mid-Late Archaic	Plow Area 2	37.62	20.98	5.26	20.98	33.73	5.24	14.9	13.81



Figure 63. Select scrapers, 40PM34.

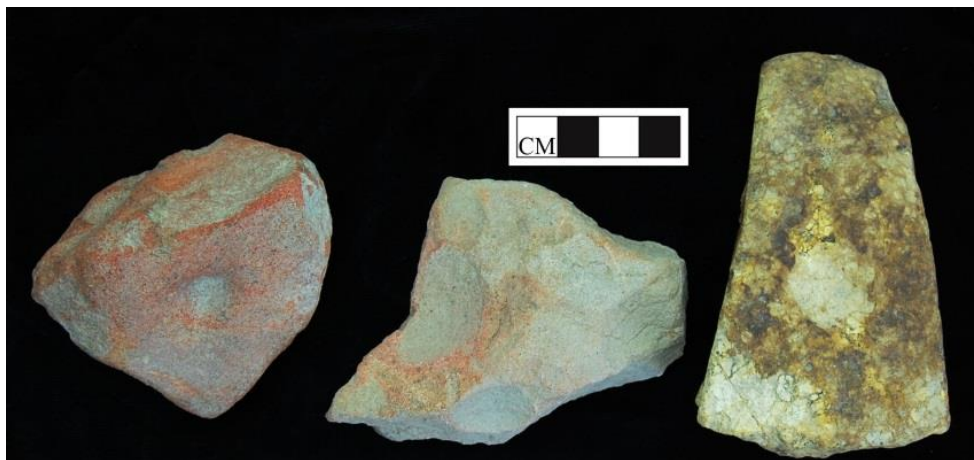


Figure 64. Select nutting stones, 40PM34.



Figure 65. Select hammerstones, 40PM34.

Table 18. Botanical Analysis Results, Site 40PM34.

*50% Analyzed	Feature #					Total
	1	2*	3 (north half)	4	6	
Total Sample Weight (g)	79.7	103.6	2.4	6.9	0.1	192.7
Sample Composition						
Wood	34.6	34	1.3	3	0.1	73 (37.9%)
Nutshell	2.7	0.5	0.5	0.1	-0.1	3.8 (2%)
Seeds and Fruits	-0.1	0.1				0.1 (-0.1%)
Residual (1.0mm & 2.0mm Screen)	42.4	69	0.6	3.8		115.8 (60.1%)
Nutshell Composition						
Carya Sp. (Thick Shelled Hickory)	2.3	0.5	0.5	0.1	-0.1	3.4
Juglans Sp. (Walnut/Butternut)	0.4					0.4
Wood Composition (No. Fragments)						
Carya Sp. (Hickory)	28	30	30	30	2	120
Gleditsia Triacanthos (Honey Locust)	1					1
Diffuse/ Porous	1					1
Unidentifiable						
Seeds and Fruit Composition (No. Fragments)						30
(W=whole, F=Frag)						
Asteraceae (Composite Family)		1F				1F
Galium Sp. (Bedstraw)	1W					1W
Gleditsia Triacanthos (Honey Locust)		1F				1F
Ostrya Virginiana (Hop Hornbeam)		1W				1W
Rhus Sp. (Sumac)		24W				24W
Rubus Sp. (Blackberry)		2W				2W
Vitis Sp. (Grape)	1F	1F				2F

Asteraceae flower heads, roots, and leaves can be used to make a tea for food and medicine and are available from mid-summer through fall (Coon 1974). Bedstraw seeds can be dried and roasted for a beverage and are available from summer through fall (Fernald and Kinsey 1958). Honey locust pods are available from fall through winter and contain a sweet pulp that can be dried and ground for a sweetener and beverage (Fernald and Kinsey 1958). Bruised sumac fruits can be steeped in water for a beverage and are available from summer through winter (Fernald and Kinsey 1958). Blackberries can be procured from mid to late summer, and grapes are available from summer through fall.

Summary

Site 40PM34 was initially classified as an undetermined prehistoric site during the 1976 Phase I survey. Fortunately the Phase II investigation results provided a much deeper understanding of the site's occupation and use. For example, the Quad projectile point from Plow Area 2 represents the oldest evidence for prehistoric occupation in the SR-42 project area as well as Putnam County, going back to the Middle to Late Paleoindian period (9,500 BC- 8,000

BC). Prehistoric Native Americans continued to use this site throughout prehistory as numerous projectile points representative of the Early Archaic through Mississippian periods were also present.

No intact midden deposits were discovered at this site, as the test explorations revealed a plowzone level of variable depth directly on top of the red clay subsoil. The extensive range of prehistoric occupation represented at this site was discovered within this disturbed level. The modest number of intact pit features and postholes in Strip Block 1 indicate some level of (at least temporary) occupation within the site area, perhaps during the Archaic period as denoted by the corner-notched projectile point reworked into an end scraper that was found in Feature 3. This is tenuous evidence at best, however.

The manufacture and maintenance of stone tools was (obviously) a primary activity at 40PM34. Artifacts indicative of the entire range of lithic reduction stages were recovered across the site. Interestingly, Strip Block 1 within Plow Area 2 had the highest concentration of material of any investigated unit (30% of total site assemblage). Hunting and processing of animals was most certainly another important site activity, but the absence of faunal remains (likely due to the very acidic area soils) and substantial processing features (likely due to modern site disturbances) renders discussion of these particular activities problematic.

The presence of nutting stones and other groundstone items (metates and manos?) indicate site residents were also involved in plant processing/cooking activities. The botanical remains indicate site residents burned hickory and likely walnut/butternut, perhaps for heating and/or cooking purposes during an early fall to winter occupation as suggested by the recovered edible plant remains (see Table 18).

X. SITES 40PM37 AND 40PM77

Site Descriptions

The proposed right-of-way bisected a long rectangular pasture (cultivated in corn during the initial survey) along the east bank of Turkey Creek towards the Overton County line (Figure 66). This clearing had a narrow floodplain with low knolls and terraces that rose gently to the east. A light scattering of lithic material was observed the length of the field (approximately 2,050 feet) and within the entire right-of-way (325 feet). A series of plow strips established across the field resulted in the discovery of site 40PM77 at the southern end.

40PM37 resides in the northern pasture area adjacent to the Overton County line (Figure 67). The site was initially recorded along a low terrace of Turkey Creek (elevation 990 feet AMSL) by a light lithic scatter extending 250 feet north-south by 250 feet east-west. A lone sycamore tree stood in the northern portion and marked the location of 40PM37.

Site 40PM77 was defined about 1,000 feet southwest of 40PM37 along the same low terrace at 990 feet AMSL. The site had a moderate to dense lithic scatter that measured 200 feet north-south by 130 feet east-west.



Figure 66. Photo of field in northern project area.



Figure 67. Photo of site 40PM37 with sycamore tree.

40PM37

Four 3x3 ft. test units were dug in the northeast site area near a sycamore tree (Figure 68). These units were excavated by hand in half-foot arbitrary levels with all fill screened through 1/4-inch mesh. An 8-10 inch plowzone on top of sterile, red clay subsoil was denoted in these units, with no evidence of intact midden deposits. A small amount of cultural material was recovered from the screened unit fill (Table 19). A series of plow strips were subsequently established across the field, revealing site 40PM77 at the southern end.

Table 19. Provenience and Number of Recovered Lithic Artifacts from 40PM37.

Provenience	Thick Biface	Primary Flake	Secondary Flake	Blank Flake	Blocky Debris	Blade	Projectile Point	Totals
Test Unit 1	1		1	25				27
Test Unit 2		1	3	42	4	1		51
Test Unit 3		1	3	11				15
Test Unit 4				10				10
General Surface	2			1			1	4
Totals	3	2	7	89	4	1	1	107
Percentages (%)	2.80%	1.87%	6.54%	83.18%	3.74%	0.93%	0.93%	

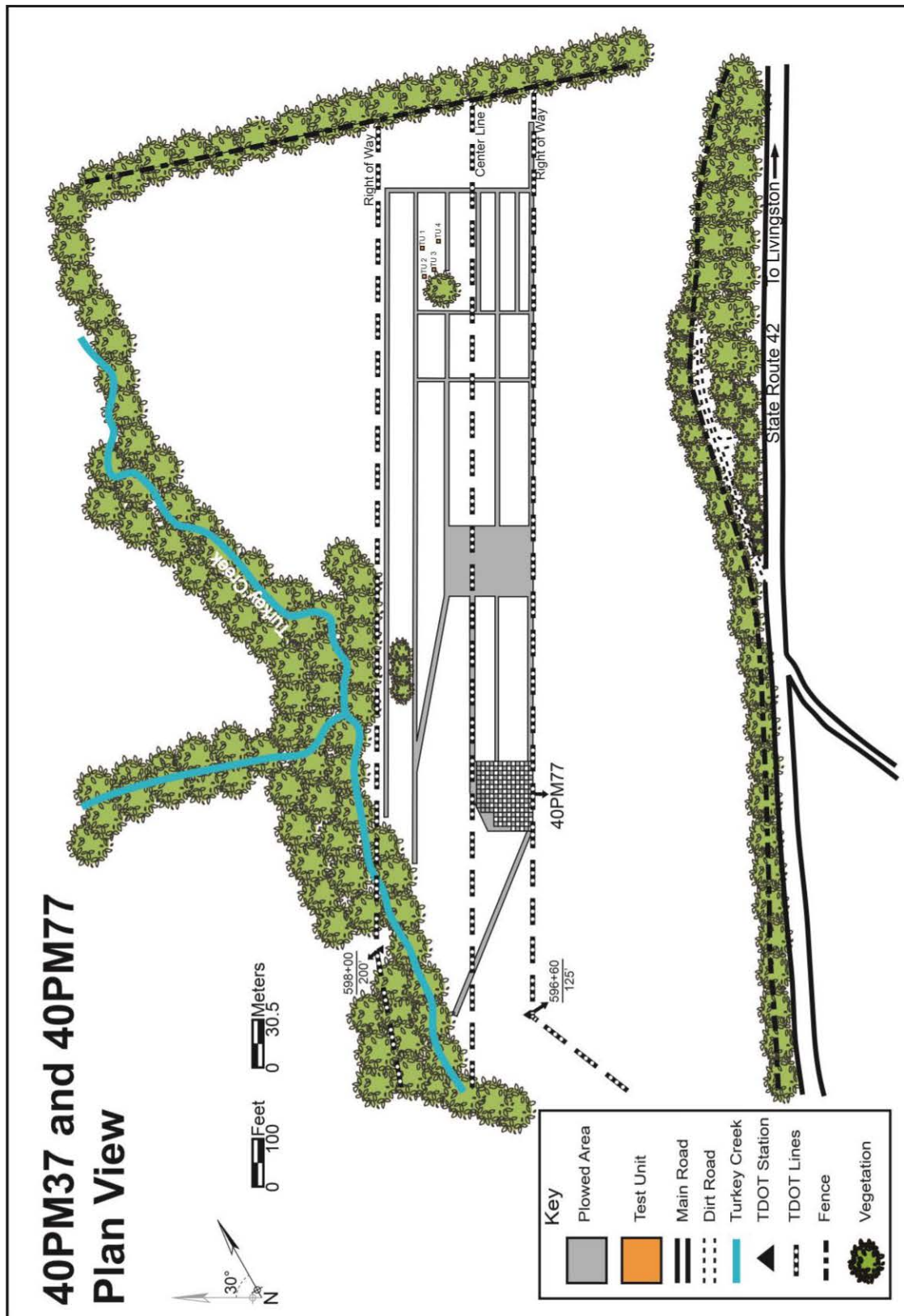


Figure 68. Plan map of 40PM37 and 40PM77 investigations.

A rather small number of lithic artifacts were recovered from the Phase II investigations (see Table 19). Flakes comprised the vast majority of items found, including one blade-like flake from Test Unit 2. A surface collection of the plow strips yielded a possible Kirk Serrated point (see Figure 69; Table 20).

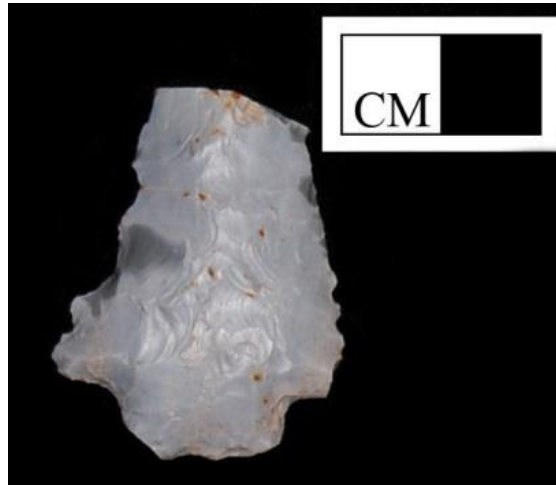


Figure 69. Possible Kirk Serrated point from site 40PM37.

Table 20. Measurements of Possible Kirk Serrated Point from Site 40PM37.

Point Type	Cultural Affiliation (Time Period)	Provenience	Maximum Length	Maximum Width	Maximum Thickness	Shoulder Width	Blade Length	Haft Length	Proximal Haft Width	Distal Haft Width
Kirk Serrated	Early Archaic	General Surface	38.92	29.87	6.56	29.01	N/A	5.5	15.28	17.96

40PM77

This site was defined after a series of plow strips were established in the large field during the 40PM37 investigation. The density of material in this area was the deciding factor in designating a separate site number from the previously recorded site 40PM37. The 40PM77 site area was plowed and divided into 10x10 ft. units (n=158) for a controlled surface collection (see Figure 68; Figure 70).

Over 3000 (n=3,093) chipped and ground stone items were retrieved from the controlled surface collection (Figures 71 and 72; Tables 21 and 22; Appendix A). Chipped stone tools included 17 projectile points, two knives, and one end scraper. Five points could be assigned to a specific type, including one Motley, a possible Jacks Reef, two Hamilton, and one Madison. A dart comparable to Morrow Mountain was also found (Figure 71). Nine points were unidentified fragments that included three tips, one base, and two midsections. Several modified flake tools (three scrapers, one cutting tool, and three spokeshaves) along with two flakes used as scraping implements were also found.

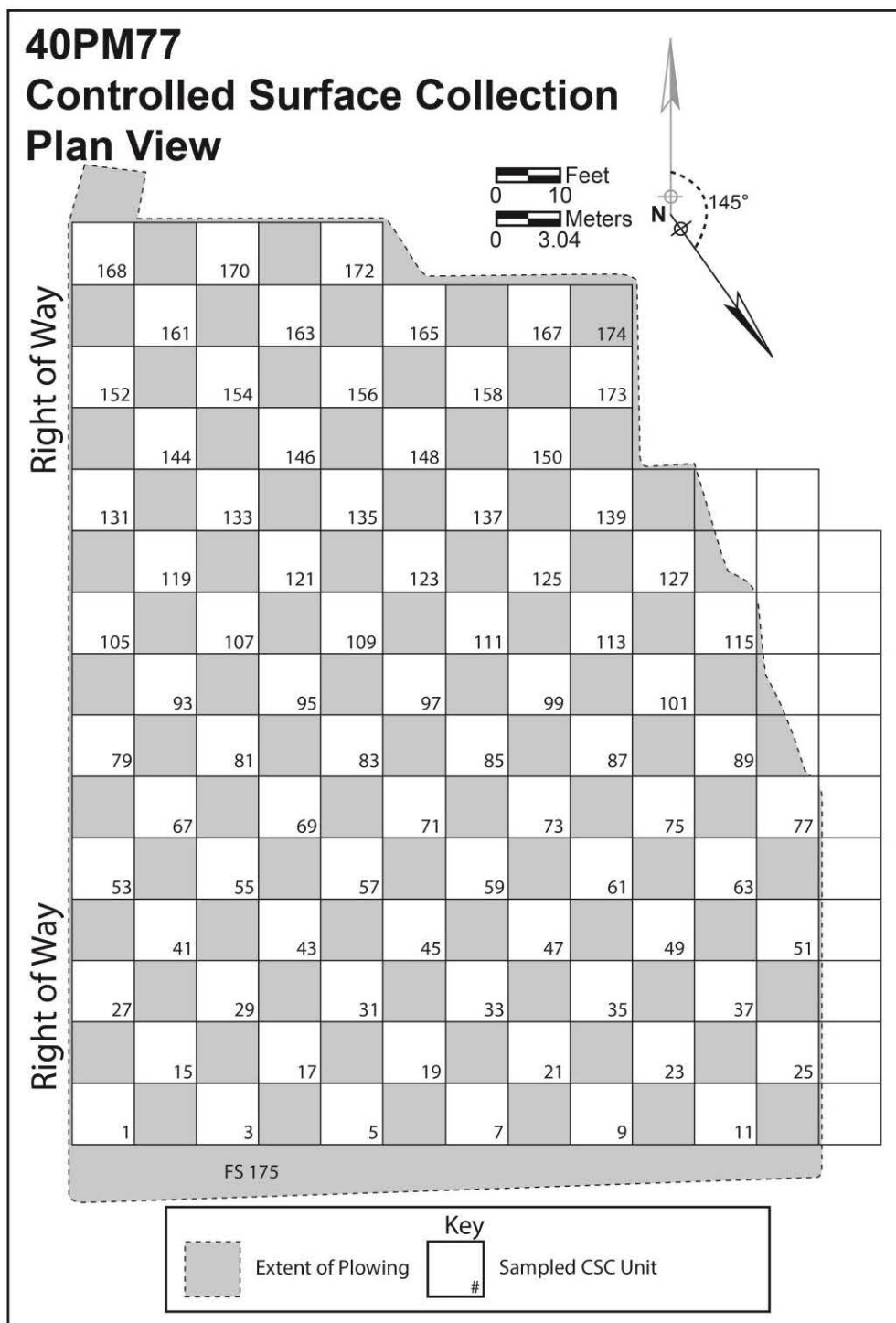


Figure 70. Plan map of controlled surface collection units at site 40PM77.

Table 21. Provenience and Number of Recovered Lithic Artifacts, Site 40PM77.

Provenience	Core	Thick Biface	Thin Biface	Primary Flake	Secondary Flake	Blank Flake	Blocky Debris	Modified /Utilized Flake	Blade	Projectile Point	Knife	Scraper	Test Cobble	Nutting Stone	Metates	Hammer Stone	Totals
General Surface	1	4		3	26	70		1		1							106
CSC 1	1	1			3	1	2			2							10
CSC 2				1		3				2							6
CSC 3		2		1	6	11	2										22
CSC 4				1		3				1							5
CSC 5					8	8	3			1							20
CSC 6				1	6	9	2			1							19
CSC 7		1			13	14	2										30
CSC 8		1		4	5	11	2			1							24
CSC 9	1				6	7	1			1							16
CSC 10				1	1	8	4										14
CSC 11			1		3	3											7
CSC 12					3	2	3										8
CSC 14	2				3	10	2										17
CSC 15					1	14		1									16
CSC 16		1			4	5	2										12
CSC 17					1	5	2										8
CSC 18					1	6											7
CSC 19					6	10	1										17
CSC 20					8	19	4										31
CSC 21					11	20	2	2									35
CSC 22				1	7	14	1										23
CSC 23				1	5	11	1			1							19
CSC 24					4	5	2										11
CSC 25				1	3	10	3										17
CSC 27	2				4	9											15
CSC 28	1				1	7											9
CSC 29			1		2	7											10
CSC 30	1			1	1	17	3										23
CSC 31				1	1	19	2										23
CSC 32					2	11											13
CSC 33				2	11	15	4										32
CSC 34	1			1	13	16	2										33
CSC 35	1			1	6	22	1			1							32
CSC 36	2			1	10	17	3					1					34
CSC 37				1	3	10		1									15
CSC 38	1		1	1	6	12											21
CSC 40					5	7	1						1				14
CSC 41					2	4	1										7
CSC 42					3	27	3										33
CSC 43					4	28				1							33
CSC 44					3	7	2										12
CSC 45					6	17	2										25

Table 21. Provenience and Number of Recovered Lithic Artifacts, Site 40PM77 (continued).

Provenience	Core	Thick Biface	Thin Biface	Primary Flake	Secondary Flake	Blank Flake	Blocky Debris	Modified /Utilized Flake	Blade	Projectile Point	Knife	Scraper	Test Cobble	Nutting Stone	Metates	Hammer Stone	Totals
CSC46				2	6	20	1										29
CSC47					7	18	2										27
CSC48						4											4
CSC49	2				2	3											7
CSC50					4	2	2										8
CSC51					4	16	3							1			24
CSC53					3	7											10
CSC54				1		14											15
CSC55					8	36	4										48
CSC56				2	6	10											18
CSC57				1	6	22	6			1							36
CSC58					1	6											7
CSC59		1			8	28	3										40
CSC60				2	3	17											22
CSC61			1		3	9	3										16
CSC62	3				11	12											26
CSC63			1		3	13	1										18
CSC66					1	4											5
CSC67				1	5	11	1										18
CSC68						17	1										18
CSC69		1			3	27	3										34
CSC70		1			8	14	2										25
CSC71			1		5	22	3				1						32
CSC72	1					6	1										8
CSC73			1		5	12	1										19
CSC74	1		1		1	9	1										13
CSC75				1	4	37	1										43
CSC76	1				4	14	3										22
CSC77					3	7				1							11
CSC79					5	6							1				12
CSC80				1	3	1	1										6
CSC81					7	18	3	1									29
CSC82					2	10											12
CSC83					2	19											21
CSC84				1	23	2											26
CSC85					3	13											16
CSC86	2				2	8											12
CSC87	1				1	4	1										7
CSC88					4	17											21
CSC89		1		2	11	30											44
CSC90					1	2											3
CSC92	1				1	8											10
CSC93				1		15	1		1								18
CSC94				1	7	23	4										35
CSC95				1	4	19	2										26

Table 21. Provenience and Number of Recovered Lithic Artifacts, Site 40PM77 (continued).

Provenience	Core	Thick Biface	Thin Biface	Primary Flake	Secondary Flake	Blank Flake	Blocky Debris	Modified /Utilized Flake	Blade	Projectile Point	Knife	Scraper	Test Cobble	Nutting Stone	Metates	Hammer Stone	Totals
CSC 96	1	1			6	20	2										30
CSC 97				1	3	23	1										28
CSC 98	2				2	4											8
CSC 99	1				2	6											9
CSC 100		1				4	10	1									16
CSC 101					12	48	2										62
CSC 102					6	14	2										22
CSC 105					1	6											7
CSC 106				1	2	16											19
CSC 107					6	12	6										24
CSC 108	1			1	2	9											13
CSC 109				2	3	32											37
CSC 110				1	3	10	3										17
CSC 111					4	21											25
CSC 112					5	14	1										20
CSC 113		1		2	7	23	3	1									37
CSC 114	1			1	11	61	12									1	87
CSC 115	1	3			4	11											19
CSC 118					2	4											6
CSC 119		1			3	4	1										9
CSC 120					10	2											12
CSC 121					3	13	1										17
CSC 122		1			5	25											31
CSC 123					1	5											6
CSC 124		1			2	11		1									15
CSC 125	6	1			9	26				1							43
CSC 126	1		1	1	8	42	2										55
CSC 127		2		1	6	27	1										37
CSC 131			1														1
CSC 132				1		4											5
CSC 133					1	15											16
CSC 134						4											4
CSC 135		1			4	13											18
CSC 136	1	2	3	3	21	64	1	1			1						97
CSC 137					2	19	1										22
CSC 138			1		2	9											12
CSC 139					3	9											12
CSC 140	1				3	2											6
CSC 144			1		3	2											3
CSC 145			1		2	12											15
CSC 146					1	18	4										23
CSC 147					2	17											19
CSC 148		1		1	2	8	3										15
CSC 149					4	3							1				8
CSC 150					1	10	2										13
CSC 151					4		1										5

Table 21. Provenience and Number of Recovered Lithic Artifacts, Site 40PM77 (continued).

Provenience	Core	Thick Biface	Thin Biface	Primary Flake	Secondary Flake	Blank Flake	Blocky Debris	Modified /Utilized Flake	Blade	Projectile Point	Knife	Scraper	Test Cobble	Nutting Stone	Metates	Hammer Stone	Totals
CSC 154				1	1	7	1										10
CSC 155				1		9											10
CSC 156					2	14	1										17
CSC 157	1		1		2	12	4										20
CSC 158					4	11				1							16
CSC 159						3	1										4
CSC 160					1	7											8
CSC 161				1		5							1				7
CSC 162					1	2									1		4
CSC 163					4	15	1										20
CSC 164					2	9											11
CSC 165				1	4	11											16
CSC 166		1	1		1	4	1										8
CSC 167				1	4	8											13
CSC 168					1	1											2
CSC 170					2	11											13
CSC 171			1		2	13											16
CSC 172		1				6				1							8
CSC 173						5	1										6
CSC 174		1				1											2
CSC 175				4	23	60	5										92
Totals	43	33	19	66	645	2065	184	9	1	18	2	1	4	1	1	1	3093
Percentages (%)	1.39%	1.07%	0.61%	2.13%	20.85%	66.76%	5.95%	0.29%	0.03%	0.58%	0.06%	0.03%	0.13%	0.03%	0.03%	0.03%	

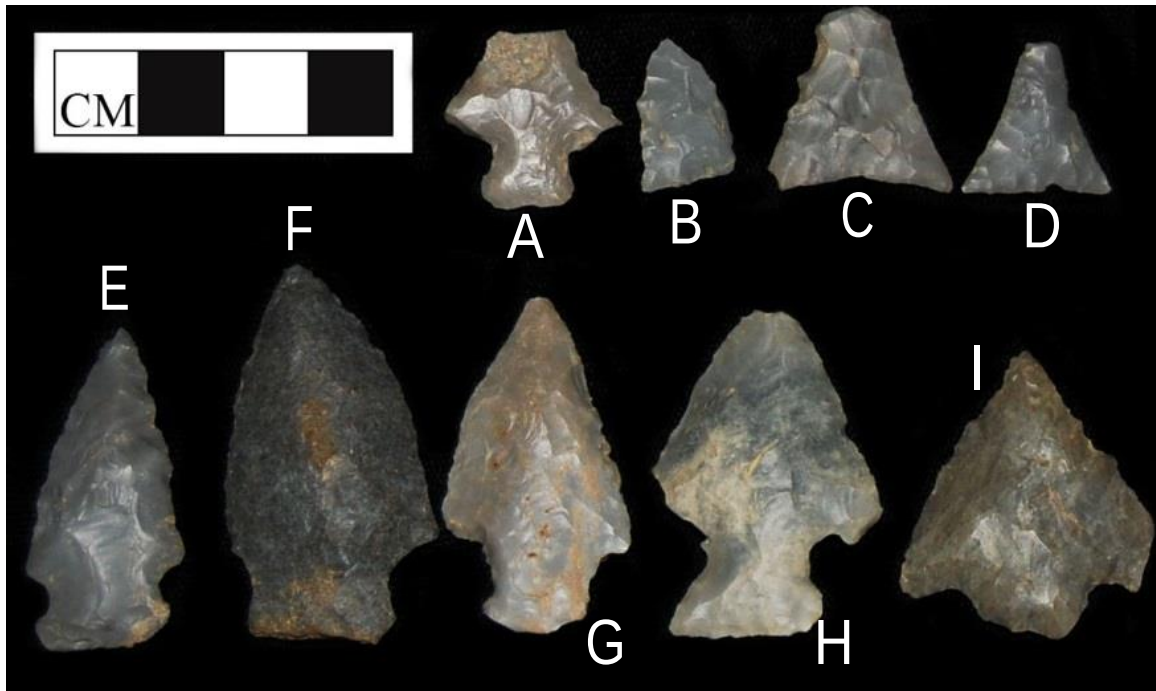


Figure 71. Projectile points: A, possible Jack's Reef; B, Madison; C, Hamilton; D, Hamilton; E, side notched; F, side notched; G, Undetermined; H, Motley; I, possible Morrow Mountain.

Table 22. Select Projectile Point Measurements (in mm) from Site 40PM77.

Point Type	Cultural Affiliation (Time Period)	Provenience	Maximum Length	Maximum Width	Maximum Thickness	Shoulder Width	Blade Length	Haft Length	Proximal Haft Width	Distal Haft Width
Unidentified Woodland Stemmed	Woodland	CSC 1	42.51	22.93	7.96	22.61	31.56	12.46	12.87	12.23
Hamilton	Late Woodland to Early Mississippian	CSC 43	19.14	18.72	2.75	18.72	N/A	N/A	N/A	N/A
Motley	Late Archaic to Early Woodland	CSC 2	41.02	28.36	9.58	25.28	23.78	11	18.57	12.56
Madison	Mississippian	CSC 125	18.37	12.44	4.37	N/A	N/A	N/A	N/A	N/A
Jacks Reef	Middle to Late Woodland	CSC 57	22.03	21.91	4.55	21.91	N/A	5.76	11.21	9.14
Morrow Mountain ?	Middle Archaic	CSC 172	34.3	29.51	7.04	29.6	30.75	4.8	13.59	N/A
Unidentified Side Notched	(Early) Archaic	CSC 4	39.87	19.02	7.88	19.02	33.21	6.92	16.51	13.38
Hamilton	Late Woodland to Early Mississippian	CSC 23	23.03	22.66	4.11	N/A	N/A	N/A	N/A	N/A
Unidentified Side Notched	(Late) Archaic	CSC 35	46.71	24.82	10.49	24.71	37.64	8.23	17.98	16.51

The ground/pecked stone tools comprised one nutting stone, one probable metate fragment, and one chert cobble hammerstone (Figure 72). The nutting stone, made of reddish-brown sandstone, measured 80.9 mm long, 51.3 mm wide and 52.2 mm thick. The brown sandstone metate section displayed one ground surface and measured 70.8 mm long, 43.0 mm wide and 31.7 mm thick.



Figure 72. Ground/pecked stone tools from site 40PM77. Left, nutting stone; Right, metate fragment.

40PM37 and 40PM77 Summary

The Phase II investigations of 40PM37 recovered a modest amount of cultural material from a relatively shallow (8-10 inches depth) plow zone of tan, silty soil that lay above the red clay subsoil. No intact features were defined. The available evidence suggest the site area, while sizeable at 250 feet by 250 feet, was the location of short-term visits to maintain lithic tools.

Site 40PM77 was defined during the 40PM32 exploration by a more dense concentration of material within an area measuring 200 feet by 130 feet. However, as with 40PM37, all artifacts were limited to the tan, silty soil plowzone level (10-12 inch depth) that lay directly above red clay subsoil. In addition, no intact features were observed. The 40PM77 assemblage of 3,093 items was mostly debitage from the manufacture and/or maintenance of chipped stone tools, with several pecked and ground stone tools also present. The nutting stone and probable metate section define plant processing as an additional site activity. The recovered projectile points support site occupations from the Early to Middle Archaic through Mississippian periods.

XI. CONCLUDING REMARKS

This report has presented the results of Phase II archaeological explorations at nine prehistoric sites (40PM24, 40PM25, 40PM27, 40PM31, 40PM32, 40PM33, 40PM34, 40PM37, and 40PM77) by the Tennessee Division of Archaeology between September 1 and November 1, 1988. This work was performed for the Tennessee Department of Transportation (TDOT) prior to relocation of a segment of State Route 42. The evaluated right-of-way measured 325 feet wide and extended 2.58 miles from the extant Algood By-pass to the Overton County line. Upon completion of the archaeological investigations, none of these sites were deemed eligible for the National Register of Historic Places due to their poor state of preservation. A high level of disturbance by natural erosion and human activities (agricultural and domestic) was observed at all sites. Also, there was an absence of intact midden deposits at all sites along with a general absence of subsurface cultural features. A summary table of the sites investigated is shown below (Table 23).

The relative size of the investigated sites varied greatly. 40PM33 was the smallest at 24,000 ft² and produced the least amount of lithics with just 52 specimens. Site 40PM32 was the largest site (850,000 ft²) and was noted to extend further beyond the right-of-way boundaries. This particular site yielded the highest number of lithic artifacts with 31,385 specimens. The general size of each site, however, does not necessarily have a correlation with the quantity of intact features or artifacts recovered. For example, 40PM27 at 97,500 ft² had two cultural features and a higher number of artifacts (n=5,389) than the larger 40PM31 (105,000 ft²) with 2,431 lithic specimens and no intact features.

The SR-42 project resulted in the recovery of 61,135 lithic specimens. Artifact totals for each site are presented in Figure 73. Site 40PM32 accounts for more than half of all recovered lithic items during the project, and was also the largest investigated site. Figure 74 presents the number of lithic artifacts by category. Blank flakes comprise the majority of the total lithic assemblage (roughly 72%), and flakes in general (primary, secondary, and blank) account for nearly 90% of the recovered stone artifacts. This is hardly a surprising result, and the project's lithic assemblage suggests that stone tool production and maintenance were primary activities at all sites. About one-half of the evaluated sites (40PM27, 40PM32, 40PM34, 40PM77) also yielded tools associated with food processing activities.

Projectile points represent the most numerous lithic tool retrieved during the project. Twenty percent (n=100) of the project point sample (n=497) was temporally sensitive indicating site use from the Paleoindian/Early Archaic periods (ca. 6,000- 8,000 BC) through the Late Woodland/ Mississippian periods (roughly AD 700-1400) (Figure 75; Table 24). The most abundant points were Early Archaic, Late Archaic/Early Woodland, and Late Woodland/Mississippian

Table 23. Summary Table of Sites Investigated during the Phase II Project.

Site #	Size (ft ²)	# of Lithics	Identifiable Point Types	Cultural Affiliation(s)	Cultural Features	Comments
40PM24	30,000	654	Kirk Corner Notched	Early Archaic	0	Highly disturbed.
40PM25	30,000	608	Kirk Serrated; Greenville; Undetermined Archaic Point	Early Archaic, Middle to Late Woodland	0	Also disturbed. 40PM25 and 40PM24 were probably the same site. High concentration of raw chert seen on the surface.
40PM27	97,500	5,389	Big Sandy, Ledbetter, Kirk Serrated, Kirk Corner Notched, Swan Lake	Early Archaic, Late Archaic-Early Woodland	2 (1 lithic manufacturing area, 1 posthole)	Modern disturbance noted throughout the site. Was a former house site and farm.
40PM31	105,000	2,431	Mud Creek like, Big Sandy, Kirk Corner Notched, Ledbetter	Early Archaic through Early Woodland	0	Disturbed by human activity. Likely used as a lithic manufacturing/maintenance station. Could also be a false site created by wash deposits from 40PM32, which is located above 40PM31.
40PM32	850,000	31,385	Dalton/Beaver Lake, Kirk Corner Notched, Kirk Serrated, Big Sandy, Gary, McIntire, Cotaco Creek, Mud Creek, McFarland/Copena, Hamilton, Madison	Early Archaic through Mississippian	6 (3 lithic manufacturing areas, 3 postholes)	Located on an elongated ridge, which had been disturbed by modern activities. The site extended beyond the project right-of-way.
40PM33	24,000	52	None	None	0	Disturbed by modern activity.
40PM34	200,000	17,411	Quad, Kirk Corner Notched, Kirk Serrated, Big Sandy, Kanawha, Decatur, Crawford, Kay's, Jacks Reef Corner Notched, Mulberry Creek, Wade, Motley, Hamilton, Madison	Middle/Late Paleoindian through Mississippian	6 (6 postholes)	Disturbed by modern activity. The site extended beyond the right of way. Likely used primarily as a lithic production/maintenance area. Some evidence of domestic activity as well in the form of postholes, seeds, and plant processing tools.
40PM37	62,500	107	Kirk Serrated	Early Archaic	0	Disturbed by modern activity.
40PM77	26,000	3,093	Motley, Jacks Reef Corner Notched, Hamilton, Madison	through Mississippian	0	Disturbed by modern activity.

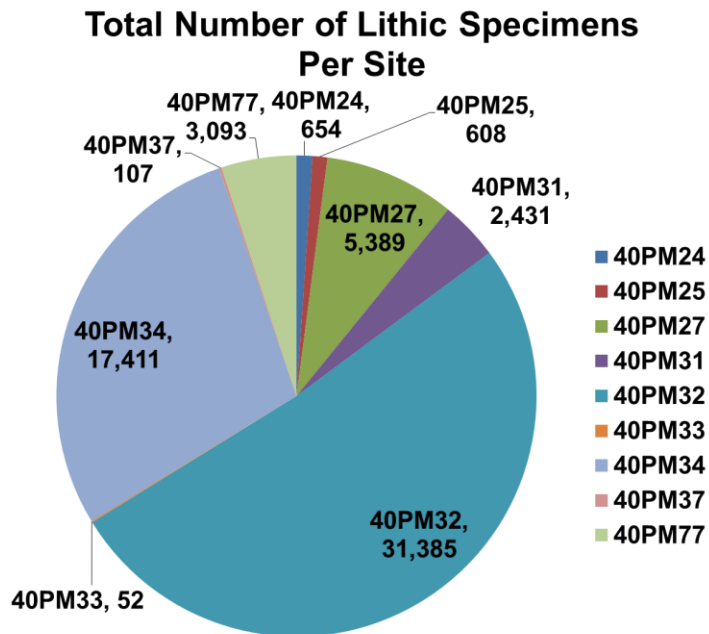


Figure 73. Number of lithic assemblages from each site.

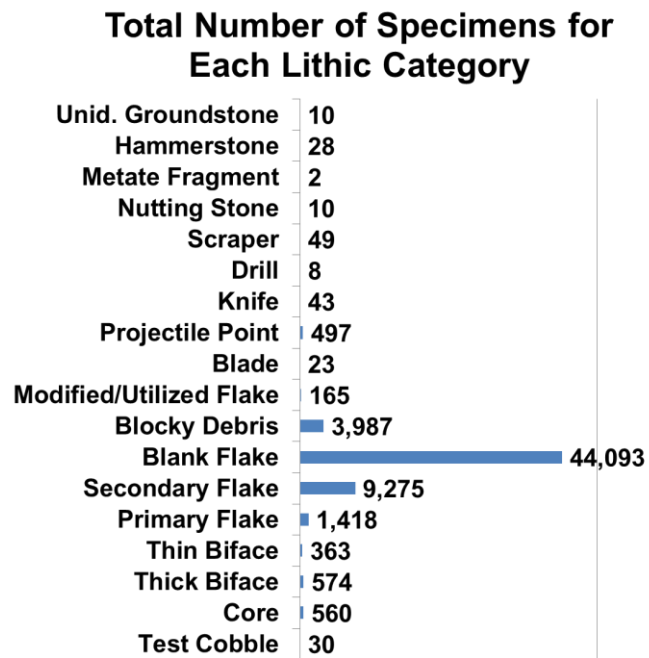


Figure 74. Number of lithic specimens per category.

types, perhaps suggesting heavier use of the project area during those periods. Point types representing the Early Archaic period were overwhelmingly the most numerous, with Kirk cluster points and Big Sandy points among the most common types.

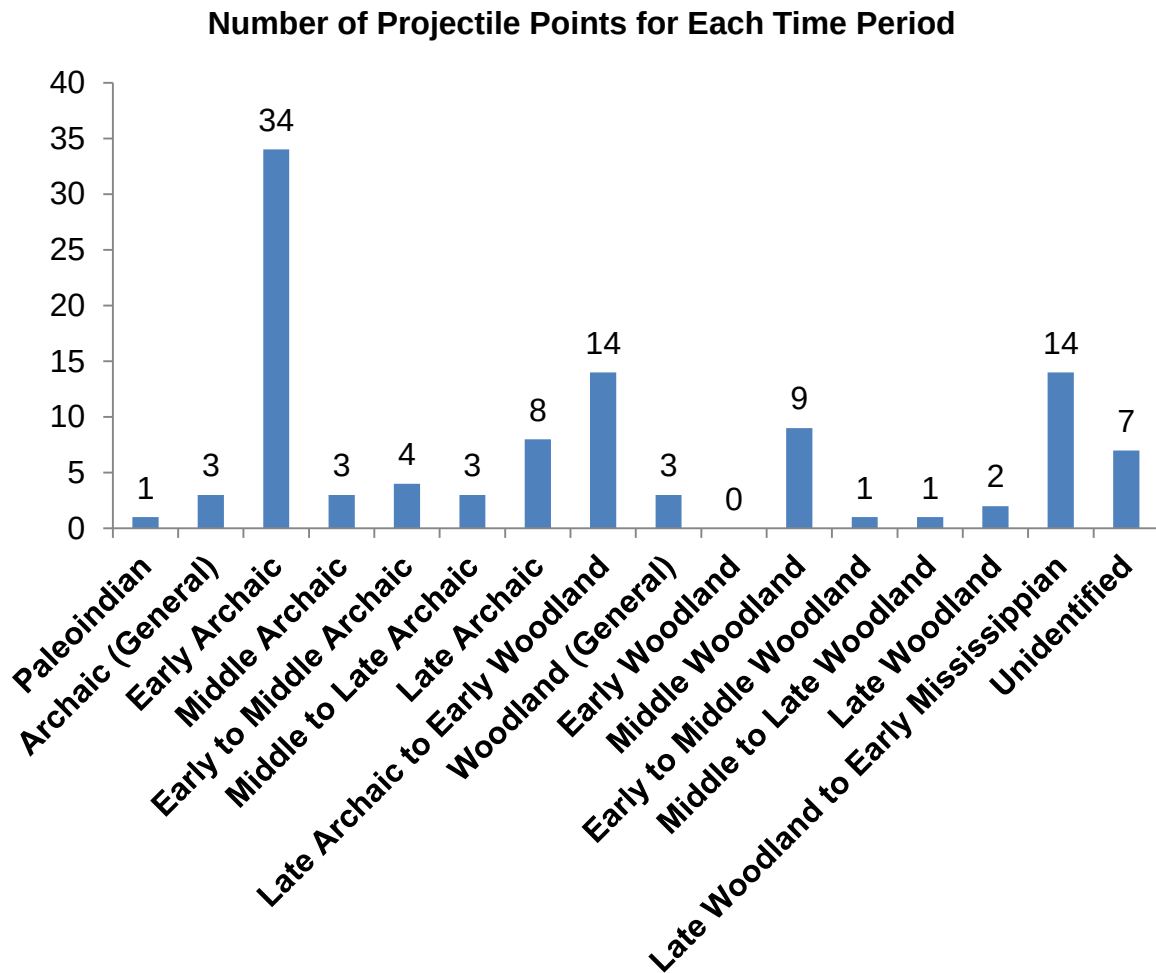


Figure 75. Totals of temporally sensitive projectile points recovered from the Phase II investigations.

Table 24. Identified Projectile Points by Site.

Site	# of Each Point Type (Time Period)
40PM24	1 Kirk Corner Notched (Early Archaic)
40PM25	1 Kirk Serrated (Early Archaic) 1 Greenville (Middle Woodland)
40PM27	1 Kirk Serrated (Early Archaic) 2 Kirk Corner Notched (Early Archaic) 1 Big Sandy (Early Archaic) 1 Ledbetter (Late Archaic) 1 Swan Lake (Archaic to Woodland)
40PM31	1 Kirk Corner Notched (Early Archaic) 2 Big Sandy (Early Archaic) 1 Ledbetter (Late Archaic) 1 Mud Creek like (Late Archaic to Early Woodland)
40PM32	4 Kirk Corner Notched (Early Archaic) 3 Kirk Serrated (Early Archaic) 5 Big Sandy (early Archaic) 1 Pine Tree (early Archaic) 2 Big Sandy Broad Base (Middle Archaic) 1 McIntire (Middle to Late Archaic) 1 Wade (Late Archaic to Early Woodland) 1 Gary (Late Archaic to Early Woodland) 1 Mud Creek (Late Archaic to Early Woodland) 1 Cotaco Creek (Late Archaic to Early Woodland) 1 Camp Creek (Late Archaic to Early Woodland) 7 McFarland/Copena (Middle Woodland) 4 Hamilton (Late Woodland to Early Mississippian) 2 Madison (Mississippian)
40PM34	1 Quad Late Paleoindian 5 Kirk Cluster (Early Archaic) 3 Kirk Serrated (Early Archaic) 3 Big Sandy (Early Archaic) 1 Kanawha (Early Archaic) 1 Decatur (Early Archaic) 1 Crawford Creek (Middle to Late Archaic) 1 Flint Creek (Late Archaic) 1 Pickwick (Late Archaic) 1 Mulberry Creek (Late Archaic) 1 Wade (Late Archaic to Early Woodland) 1 Kays (Late Archaic to Early Woodland) 1 Motley (Late Archaic to Early Woodland) 1 Mud Creek (Late Archaic to Early Woodland) 1 Jacks Reef Corner Notched (Middle Woodland) 1 Greenville (Late Woodland) 2 Hamilton (Late Woodland to Early Mississippian) 2 Madison (Mississippian)
40PM37	1 Kirk Serrated (Early Archaic)
40PM77	1 Morrow Mountain (Middle Archaic) 1 Motley (Late Archaic to Early Woodland) 1 Jacks Reef Corner Notched (Middle Woodland) 2 Hamilton (Late Woodland to Early Mississippian) 1 Madison (Mississippian)

A modest number of potential features (n=22) were exposed at three sites (40PM27, 40PM32, and 40PM34), with 14 deemed cultural (Table 25). Each feature had experienced some level of disturbance. The majority of features (n=10) appear to be postholes, although no structure footprints could be defined. These postholes may be evidence of other construction such as a lean-to or rack. While interesting to ponder, any additional discussion of this possibility would be mere speculation. The other four features (at 40PM27 and 40PM32) were relatively circular and classified as lithic manufacturing areas due to the high concentration of lithic items. These lithic concentrations contained every stage of reduction from core to completed stone tool.

Three cultural features contained temporally sensitive projectile points. Feature 9 (40PM32) contained a Kirk Serrated dart point dating to the Early Archaic period. Feature 3 (40PM34) had a point base fragment dating to Late Woodland/Mississippian. Feature 4 (also 40PM34) yielded an Archaic corner-notched dart point reworked into an end scraper. Several features (40PM27, 40PM32, and 40PM34) also contained charred botanical remains such as hickory and walnut nutshell along with seeds of *Asteraceae*, bed straw, honey locust, hop hornbeam, sumac, blackberry, and grape (Table 26). Nut crops available for fall exploitation were undoubtedly stored for winter use. Recovered seeds and fruits could be exploited from mid-summer through winter. Wood constitutes the largest percentage of recovered charred material. Hickory and oak grow in all topographic zones (upland, slopes, terraces, and floodplains), with honey locust available within floodplain and terrace settings.

Table 25. Summary of Project Cultural Features.

Site	Feature #	Feature Type
40PM27	1	Lithic Chipping Station
40PM27	2	Hearth or Posthole
40PM32	1	Lithic Chipping Station
40PM32	3	Lithic Chipping Station
40PM32	5	Posthole or Disturbance
40PM32	6	Posthole or Disturbance
40PM32	9	Lithic Chipping Station
40PM32	10	Lithic Chipping Station
40PM34	1	Hearth or Posthole
40PM34	2	Hearth or Posthole
40PM34	3	Posthole
40PM34	4	Posthole
40PM34	5	Posthole
40PM34	6	Posthole

Table 26. Botanical Analysis Summary from Project Sites.

Site	Wood (g)	Nutshell (g)	Seeds and Fruit (g)	Residual (g)	Type of Wood	Type of Nutshell	Type of Seeds and Fruit	Total Weight of Sample (g)
40PM27	26.3	0	0.1	26	Hickory	N/A	Asteraceae	52.3
40PM32	0.2	0.1	N/A	0.2	Oak	Hickory	N/A	0.5
40PM34	73	3.8	0.1	115.8	Hickory, Honey Locust	Walnut, Hickory	Asteraceae, Bedstraw, Honey Locust, Hop Hornbeam, Sumac, Blackberry, Grape	192.7

Information recovered from the SR-42 work supports the presence of a series of open habitations representing temporary/seasonal camps. These camps were likely used as hunting stations where the native occupants procured raw chert materials to make new stone tools, or to refurbish existing tools as needed. All recovered lithic artifacts were made from local sources (generally Ft. Payne and St. Louis) except for a few Dover specimens (a knife midsection fragment and flakes) from site 40PM32.

The Algood project results are comparable with other investigated sites in the Eastern Highland Rim and Cumberland Plateau. For example, the Forbus site (40FN122) in Fentress County was determined to be a small camp used for short periods of time during the Early Archaic to Mississippian periods for hunting, butchering, tool maintenance and manufacture, and woodworking activities (Bentz et al. 1997). The project results mesh well with other previously suggested patterns of upland areas used as specialized camps that were occupied seasonally to take advantage of such available resources as nuts and deer (Chapman 1985; Hollenbach 2009).

To conclude, this report presents previously unpublished site information regarding prehistoric Native American occupations within Putnam County. The SR-42 artifact assemblage demonstrated these sites were continually used over thousands of years. These occupations were likely for short periods of time as no evidence was recovered to support substantial, long term settlements.

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APPENDIX A

DESCRIPTIONS OF LITHIC TOOLS FOUND

Appendix A presents descriptions, provenience and quantity of all lithic tools recovered from the nine sites evaluated during the SR-42 Algood Project.

40PM24

Tool Category	Provenience	Heated	Quantity	Description
Projectile Point	Backhoe Trench 2	No	1	1 fragment of a possible Kirk Corner Notched point
Projectile Point	Backhoe Trench 2	No	2	2 midsection fragments
Projectile Point	Backhoe Trench 3	No	1	1 Tip Fragment
Projectile Point	Backhoe Trench 5	No	1	1 Tip Fragment
Projectile Point	General Surface	No	1	1 midsection with some base fragment
Scraper	General Surface, Area E	No	1	1 large end scraper made from a bifacially worked flake

40PM25

Tool Category	Provenience	Heated	Quantity	Description
Projectile Point	Backhoe Trench 6	No	4	4 blade fragments
Projectile Point	Backhoe Trench 6	No	2	2 stem fragments
Projectile Point	Backhoe Trench 6	No	2	1 Greenville point, 1 unidentified fragment
Projectile Point	General Surface, West Half	No	1	1 Kirk Serrated Point
Projectile Point	Strip Block 1	No	1	1 possible Kirk Corner Notched variant with a small stem, tapered shoulders, straight blade, straight to slightly contracting stem, and straight to slightly incurvate base
Projectile Point	Strip Block 1	No	1	1 barb fragment
Projectile Point	Strip Block 1	No	1	1 stem fragment
Scraper	Backhoe Trench 6	No	1	1 Thumbnail end scraper made from a primary flake
Scraper	General Surface, East Half	No	1	1 end scraper made from a secondary flake that has 2 worked edges

40PM27

Tool Category	Provenience	Heated	Quantity	Description
Blade	Strip Block 2	No	1	1 nearly complete specimen
Blade	Strip Block 2	No	1	1 small midsection fragment
Drill	Strip Block 2	No	1	1 large, contracting stem fragment with most of bit missing. Base is flat but unworked. Exhibits cortex.
Knives	Strip Block 1, Level 2	No	2	2 large, triangular lanceolate midsection fragments. Both have fine bifacial microflaking on the lateral edges.
Microblade	Backhoe Trench D	No	1	1 small fragment
Microblade	Test Unit 1, Level 1	No	1	1 small fragment
Modified Flake	General Surface, House Depression	No	1	1 scraper from a secondary flake
Modified Flake	General Surface, North of Depression	No	1	1 scraper from a blank flake
Modified Flake	Strip Block 1, Level 1	No	1	1 scraper fragment, a blank flake, 1 cutting tool
Modified Flake	Test Unit 3, Level 1	No	2	2 scrapers
Projectile Point	Backhoe Trench B	No	1	1 distal tip fragment
Projectile Point	Backhoe Trench B	No	1	1 midsection fragment
Projectile Point	Backhoe Trench C	No	1	1 base fragment with a slight side notch
Projectile Point	Backhoe Trench D	No	2	2 base fragments
Projectile Point	Backhoe Trench D	No	1	1 midsection fragment
Projectile Point	Backhoe Trench D	No	1	1 tip and midsection fragment
Projectile Point	Backhoe Trench D	No	5	1 unidentified straight stem dart,
Projectile Point	General Surface, House Depression	No	1	1 small point with an excruciate blade, mucronate tip, and excruciate stem
Projectile Point	General Surface, House Depression	No	1	1 distal tip fragment
Projectile Point	General Surface, House Depression	No	1	1 unidentified point missing the distal tip
Projectile Point	General Surface, North of Depression	No	1	1 unidentified fragment
Projectile Point	Strip Block 1	no	1	1 base fragment with expanded shoulder and straight stem
Projectile Point	Strip Block 1	No	1	1 possible Kirk Corner Notched variant. Small size, heavily reworked, beveled, side notch, incurvate base
Projectile Point	Strip Block 1, Level 1	No	2	2 midsection fragments
Projectile Point	Strip Block 1, Level 2	No	1	1 unidentified small point with straight stem, triangular blade and slightly excruciate base
Projectile Point	Strip Block 1, Level 2	No	1	1 Big Sandy base fragment
Projectile Point	Strip Block 1, Level 2	No	3	3 distal tip fragments
Projectile Point	Strip Block 1, Level 2	No	1	1 Ledbetter missing the distal tip
Projectile Point	Strip Block 1, Level 2	No	1	1 Kirk Serrated
Projectile Point	Strip Block 2	No	8	1 Swan Lake point with some cortex
Projectile Point	Strip Block 2	No	4	4 distal tip fragments
Projectile Point	Strip Block 2	No	1	1 midsection fragment
Projectile Point	Strip Block 2	No	1	1 base fragment
Projectile Point	Strip Block 2	No	1	1 midsection with some base fragment
Projectile Point	Test Unit 1, Level 1	No	1	1 base fragment
Projectile Point	Test Unit 1, Level 1	No	2	2 midsection fragments
Projectile Point	Test Unit 4, Level 1	No	1	1 Kirk Corner Notched missing distal end with a wide blade, thin corner notch, expanding stem, excruciate base
Scraper	Strip Block 1, Level 2	No	1	End scraper made from the base of a projectile point, possibly a Big Sandy
Scraper	Strip Block 2	No	1	1 large, somewhat crude and unifacially flaked fragment of unknown variety.
Scraper	Test Unit 1, Level 1	No	1	1 bifacially worked end scraper with some cortex. Worked on two edges, base is unworked and still has the striking platform. May also be a crude knife.
Scraper	Test Unit 4, Level 1	No	1	1 small thumbnail end scraper with unifacial flaking,
Scraper	Test Unit 4, Level 1	No	1	1 larger end scraper bifacially worked that is somewhat crude and has some visible cortex.
Hematite	General Surface, House Depression	No	1	Unworked. Measures 39.72 by 32.77 by 12.74 (thick) mm.
Metate	Strip Block 2	Maybe	1	Tabular, irregularly shape fragment of reddish brown (burned) sandstone with one flat ground surface. Max diameter is 127.2 mm, max
Nutting Stone	Strip Block 1, Level 2	No	1	Moderate size. Oval sandstone cobble with a single circular depression 21.1 mm in diameter on one broad surface. Measures 111.4 mm long, 84.4 mm wide and 57.4 mm thick

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Tool Category	Provenience	Heated	Quantity	Description
Knives	CSC 4	No	1	1 knife with two notches (possibly originally intended to be a point?) and tree used edges.
Modified/Utilized Flake	CSC 6	No	1	1 Small thumbnail utilized flake scraper
Modified/Utilized Flake	CSC 11	No	1	1 utilized flake scraper
Modified/Utilized Flake	CSC 13	No	1	1 modified primary flake scraper worked on both edges
Modified/Utilized Flake	CSC 13	No	1	1 utilized flake cutting tool made from a blank flake with unifacial flaking on one edge and grinding on another edge.
Projectile Point	General Surface	No	1	1 Big Sandy
Projectile Point	General Surface	No	1	1 base fragment possibly Mud Creek type
Projectile Point	CSC 1	No	1	1 distal tip fragment
Projectile Point	CSC 1	No	1	1 unidentified fractured point (possibly stemmed)
Projectile Point	CSC 2	No	1	1 base fragment
Projectile Point	CSC 5	No	1	1 stemmed point
Projectile Point	CSC 5	No	1	1 unidentified side notched point
Projectile Point	CSC 5	No	3	1 midsection fragment
Projectile Point	CSC 6	No	1	1 distal tip fragment
Projectile Point	CSC 6	No	1	1 midsection with some base fragment. Side notched
Projectile Point	CSC 6	No	1	1 almost complete straight stemmed point with rounded shoulders
Projectile Point	CSC 6	No	1	1 midsection fragment
Projectile Point	CSC 6	No	1	1 unidentified point with an expanded stem and tapered shoulders
Projectile Point	CSC 7	No	1	1 distal tip fragment
Projectile Point	CSC 7	No	1	1 midsection fragment
Projectile Point	CSC 8	No	1	1 unidentified side notched point
Projectile Point	CSC 8	No	1	1 possible Kirk Corner Notched base fragment
Projectile Point	CSC 8	No	3	3 midsection fragments
Projectile Point	CSC 11	No	1	1 base fragment from a small stemmed point
Projectile Point	CSC 12	No	1	1 distal tip fragment
Projectile Point	CSC 13	No	2	2 base fragments, both with an expanded stem, side notch and slightly excurvate base. Some grinding on base.
Projectile Point	CSC 14	No	1	1 unidentified side notch with expanded stem
Projectile Point	CSC 14	No	1	1 Big Sandy with evidence of reworking at the distal tip
Projectile Point	CSC 14	No	1	1 Ledbetter/Gary point with part of the base missing
Scrapers	CSC 2	no	1	1 end scraper
Scrapers	CSC 2	Yes	2	1 scraper with evidence of heating
Scrapers	CSC 6	No	1	1 scraper with cortex on distal end and evidence of working on all edges except the base
Scrapers	CSC 8	No	1	1 thumbnail end scraper that is somewhat crude and has steep unifacial flaking on the distal end
Hammerstone	CSC 2	No	1	Has some flakes removed. May be reused core.

40PM32

Tool Category	Provenience	Heated	Quantity	Description
Blade	Area A, General Surface	No	3	3 small fragments
Blade	Backhoe Trench C	No	1	small blade with some cortex visible on the platform
Blade	Feature 9	No	1	1 larger blade with microflaking on one edge
Blade	Feature 10	No	1	1 small fragment with microflaking on one edge
Blade	Plow Strip 2	No	1	1 small fragment
Blade	Strip Block 1, Surface	No	1	1 small fragment
Blade	Strip Block 1, Level 1	No	1	1 fragment of a Dover chert lanceolate tool (midsection piece) that is bifacially flaked with extreme bifacial retouch along blade edge.
Blade	Strip Block 3	No	1	1 wide blade with microflaking and a platform
Blade	Strip Block 5, West Half	No	2	2 blade fragments
Drills	Plow Strip 1	No	1	1 distal fragment. Distal end is ground down and there is microflaking on both lateral edges.
Drills	Plow Strip 2	No	1	1 lanceolate blade of chert, heavily worked with a slightly ground base, triangular cross section and one end of the base broken off.
Knife	Backhoe Trench C	No	1	1 thin, broad midsection fragment from a large, well made knife. It is bifacially worked with bifacial microflaking on blade edges. It may not be local chert.
Knife	Plow Strip 1	No	1	1 is a secondary flake that was crudely made and exhibits bifacial microflaking on both lateral edges
Knife	Plow Strip 1	No	1	1 is a blank flake that is well formed with bifacial microflaking on the tip and both lateral edges
Knife	Plow Strip 1	No	1	1 is a blank flake with a pointed distal tip and has bifacial flaking on the lateral edges and microflaking on one lateral edge
Knife	Plow Strip 1	Yes	1	1 large lanceolate bit fragment with slightly contracting lateral edges and a diamond shaped cross section made of local chert that was heated (grey to white to blue mottling)
Knife	Plow Strip 1	No	1	1 rectangular chert fragment with a base and on lateral edge of cortex.
Knife	Plow Strip 4	No	1	1 distal end of a thin, bifacially worked knife with bifacial microflaking.
Knife	Plow Strip 8, CSC 92	No	1	1 broad, relatively thin, bifacially worked fragment with bifacial microflaking.
Knife	Plow Strip 8, CSC 95	No	1	1 triangular knife (Stemless point?)
Knife	Plow Strip 8, CSC 97	No	1	1 fragment of thin, bifacially worked chert with bifacial microflaking along the broken edge. Possible straight based point.
Knife	Strip Block 1, Surface	No	1	1 thin, triangular chert fragment that is bifacially worked with one lateral edge having bifacial microflaking.
Knife	Strip Block 1, Level 1	No	1	1 thin bifacially worked blade sections with lateral edges exhibiting bifacial microflaking and evidence of heating (waxy luster)
Knife	Strip Block 1, Level 1	No	1	1 broad, rectangular, thin, bifacially worked fragment with a straight base and bifacial retouch on one blade edge.
Knife	Strip Block 2	No	1	1 large, oval shaped, bifacially worked knife
Knife	Strip Block 2	No	1	1 medium, circular shaped with some cortex and 1 bifacially worked edge
Knife	Strip Block 2	No	1	1 small half oval with distal and both lateral edges bifacially worked.
Knife	Strip Block 3	Yes (1)	2	2 thin, bifacially worked fragments with bifacial microflaking along blade edges. Well crafted, original shape unknown. One was heated.
Knife	Strip Block 4	No	1	1 with bifacial microflaking on lateral edges.
Knife	Test Unit 1, Level 1	No	2	Both are bifacially worked fragments with broad blades that have fine bifacial microflaking
Modified/Utilized Flake	Area A, General Surface	No	1	1 Utilized flake side scraper on a blank flake with microflaking on one edge
Modified/Utilized Flake	Area A, General Surface	No	1	1 modified spokeshave made from a secondary flake with two, lunate, uniaxially worked notches
Modified/Utilized Flake	Area B, General Surface	No	1	1 modified spokeshave made from a secondary flake with one "I" shaped notched worked uniaxially and a bulb of force visible
Modified/Utilized Flake	Area B, General Surface	No	1	1 modified flake scraper made from a blank flake with one side worked uniaxially
Modified/Utilized Flake	Area B, General Surface	No	3	3 utilized flake scraper- 1 made from a secondary flake with bifacial microflaking on one edge, 1 thumbnail side scraper made from a blank flake with uniaxial working, and 1 narrow blank flake side scraper with side and end uniaxially worked and bulb of force visible.
Modified/Utilized Flake	Area B, Zone 1	No	1	1 modified flake spokeshave made from a secondary flake with a small lunate notch uniaxially worked
Modified/Utilized Flake	Area B, Zone 1	No	1	1 utilized flake spokeshave made from a blank flake with a somewhat wide notch with uniaxial microflaking.
Modified/Utilized Flake	Area B, Zone 2	No	1	1 modified flake scraper made from a blank flake with one side having uniaxial microflaking
Modified/Utilized Flake	Backhoe Trench C	Yes	1	1 modified flake spokeshave made from a secondary flake with evidence of heat altering
Modified/Utilized Flake	Backhoe Trench C	No	1	1 modified flake side scraper made from a primary flake with uniaxial working on one lateral edge and the distal edge.
Modified/Utilized Flake	Backhoe Trench F	No	2	2 modified flake spokeshaves both small (1 blank and 1 secondary flakes)
Modified/Utilized Flake	Backhoe Trench F	No	1	1 utilized flake perforator made from a blank flake with one side worked into a bifacial tip.

Modified/Utilized Flake	Plow Strip 1	No		1 modified flake spokeshave with a worked side and a wide, unifacially worked notch
Modified/Utilized Flake	Plow Strip 1	No		1 utilized flake spokeshave made from a blank flake with only one possible notch (may not be a spokeshave)
Modified/Utilized Flake	Plow Strip 2	No		1 modified flake perforator made from a blank flake that has a small notch and two sharp points
Modified/Utilized Flake	Plow Strip 2	No		2 modified flake spokeshaves- 1 on a thumbnail sized blank flake with a unifacially worked notch, 1 larger blank flake with a wide, unifacially worked notch.
Modified/Utilized Flake	Plow Strip 4	No		4 modified flake scrapers (1 primary flake end scraper, 1 blank flake side scraper, 1 primary flake side scraper, 1 secondary flake side scraper)
Modified/Utilized Flake	Plow Strip 4	No		2 utilized flake scrapers (1 secondary flake scraper, 1 blank flake side scraper)
Modified/Utilized Flake	Plow Strip 4	No		1 utilized flake cutting tool made from a primary flake with bifacial microflaking along one edge
Modified/Utilized Flake	Plow Strip 4	No		1 utilized flake spokeshave made from a secondary flake with one unifacially worked notch.
Modified/Utilized Flake	Plow Strip 6	No		1 utilized flake cutting tool made from a secondary flake
Modified/Utilized Flake	Plow Strip 6	No		2 modified flake scrapers (1 secondary flake side scraper, 1 blank flake side scraper)
Modified/Utilized Flake	Plow Strip 7, CSC 55	No		1 modified flake spokeshave made from a blank flake with 1 wide notch on one edge and 1 small notch on the other edge.
Modified/Utilized Flake	Plow Strip 7, CSC 60	No		1 modified flake spokeshave made from a secondary flake with one small notch
Modified/Utilized Flake	Plow Strip 8, CSC 89	No		1 modified flake end scraper of thumbnail size made from a secondary flake
Modified/Utilized Flake	Plow Strip 8, CSC 89	No		1 modified flake spokeshave made from a blank flake with one small notch
Modified/Utilized Flake	Plow Strip 8, CSC 91	No		1 utilized flake side scraper made from a blank flake.
Modified/Utilized Flake	Plow Strip 8, CSC 92	No		1 modified flake spokeshave made from a secondary flake with two notches (1 is wide and on one edge, the other is small and on the other edge)
Modified/Utilized Flake	Plow Strip 8, CSC 92	No		2 modified flake scrapers (1 blank flake end scraper of thumbnail size, 1 secondary flake side scraper with both lateral edges unifacially worked.
Modified/Utilized Flake	Plow Strip 8, CSC 93	No		1 modified flake spokeshave made from a blank flake
Modified/Utilized Flake	Plow Strip 8, CSC 94	No		1 modified flake cutting tool that is well made from a blank flake and is bifacially worked on 3 edges.
Modified/Utilized Flake	Plow Strip 8, CSC 97	No		1 modified flake cutting tool that is rectangular in shape and has bifacial flaking on both lateral edges.
Modified/Utilized Flake	Strip Block 1, Surface	No		1 thumbnail sized modified flake scraper made from a secondary flake
Modified/Utilized Flake	Strip Block 1, Surface	No		1 modified flake cutting tool of thumbnail size made from a blank flake with one edge having bifacial microflaking
Modified/Utilized Flake	Strip Block 1, Surface	No		1 modified flake spokeshave of thumbnail size made from a blank flake with one wide, unifacially worked notch.
Modified/Utilized Flake	Strip Block 1, Level 1	No		1 utilized flake cutting tool made from a secondary flake
Modified/Utilized Flake	Strip Block 1, Level 1	No		1 utilized flake graver/perforator made from a blank flake that is worked into a small mucronate tip
Modified/Utilized Flake	Strip Block 1, Level 1	No		2 modified flake scrapers (1 secondary flake side scraper, 1 secondary flake side scraper worked on both edges)
Modified/Utilized Flake	Strip Block 1, Level 1	No		1 utilized flake side scraper made from a secondary flake that is large and unifacially worked
Modified/Utilized Flake	Strip Block 1, Level 1	No		4 modified flake spokeshaves made from blank flakes
Modified/Utilized Flake	Strip Block 1, Level 1	No		2 utilized flake spokeshaves made from secondary flakes.
Modified/Utilized Flake	Strip Block 2	No		1 modified flake spokeshave made from a blank flake with one small notch
Modified/Utilized Flake	Strip Block 2	No		4 utilized flake scrapers made from blank flakes (3 side scrapers, 1 end/side scraper)
Modified/Utilized Flake	Strip Block 2	No		1 modified flake graver/perforator of a thumbnail size worked into a small mucronate tip
Modified/Utilized Flake	Strip Block 2	No		3 modified flake cutting tools of large sizes with bifacial flaking on at least one edge (2 blank flakes and one secondary flake).
Modified/Utilized Flake	Strip Block 3	No		1 modified flake cutting tool bifacially worked on three edges.
Modified/Utilized Flake	Strip Block 3	No		3 modified flake scrapers (1 secondary flake side scraper, 1 secondary flake end scraper, 1 thumbnail sized blank flake side scraper)
Modified/Utilized Flake	Strip Block 5, West Half	No		1 modified flake spokeshave made from a secondary flake

Modified/Utilized Flake	Strip Block 5, East Half	No	1	1 modified flake scraper made from a blank flake with unifacial working on both lateral edges
Modified/Utilized Flake	Strip Block 5, East Half	No	1	1 modified flake perforator made from a blank flake with one small tip
Modified/Utilized Flake	Strip Block 5, East Half	No	1	1 modified flake spokeshave made from a secondary flake with one notch.
Modified/Utilized Flake	Strip Block 5, Feature 9	No	1	1 modified flake spokeshave made from a secondary flake with one small notch
Modified/Utilized Flake	Test Unit 1, Level 1	No	5	5 utilized flake scrapers made from blank flakes (4 side scrapers, 1 undetermined, and 1 side scraper has a notch like a spokeshave)
Modified/Utilized Flake	Test Unit 1, Level 1	No	6	6 modified flake spokeshaves made from secondary flakes
Modified/Utilized Flake	Test Unit 1, Level 1	No	1	1 modified flake cutting tool made from a secondary flake with bifacially flaking.
Projectile Point	Area B, Zone 2	Yes	1	1 possible Flint Creek point. Has straight to slightly expanded stem with one rounded, slightly tapered shoulder and one horizontal pointed shoulder. Late Archaic-Early Woodland. Missing tip. Breakage at distal end shows evidence of being heat altered
Projectile Point	Backhoe Scrape	No	1	1 Big Sandy with the base and some midsection
Projectile Point	Backhoe Scrape	No	1	1 expanded stem, straight base fragment with base and midsection (McIntire?)
Projectile Point	Backhoe Scrape	No	1	1 stemless point base fragment probably of Greenville type
Projectile Point	Backhoe Scrape	No	1	1 stemless triangular probably a Copena
Projectile Point	Backhoe Scrape	No	1	1 undetermined stemless triangular (Madison?)
Projectile Point	Backhoe Scrape	No	1	1 corner notch with expanded stem and blade (Kirk?).
Projectile Point	Backhoe Trench C	No	1	1 base fragment from a corner notched point
Projectile Point	Backhoe Trench C	No	1	1 small point missing the distal tip and base below the shoulders
Projectile Point	Backhoe Trench C	No	1	1 Hamilton point
Projectile Point	Backhoe Trench C	No	1	1 corner notched with slightly incurvate and ground base (Kirk variant?)
Projectile Point	Backhoe Trench C	No	1	1 corner notched with ground base and slightly serrated blade (Kirk variant?)
Projectile Point	Backhoe Trench C	Yes	1	1 corner notched with ground base and evidence of heating
Projectile Point	Backhoe Trench C	No	1	1 Copena/McFarland missing the distal tip.
Projectile Point	Backhoe Trench C	No	5	5 distal tip fragments
Projectile Point	Backhoe Trench C	No	2	2 midsection fragments
Projectile Point	Backhoe Trench D	No	2	1 Hamilton; 1 midsection fragment
Projectile Point	Backhoe Trench F	No	1	1 distal tip fragment
Projectile Point	Backhoe Trench F	No	1	1 midsection fragment
Projectile Point	Backhoe Trench F	No	1	1 point fragment with an expanded blade that exhibits some notching/serrated and a straight base with some slight corner notching (Flint Creek?).
Projectile Point	Plow Strip 1	No	1	1 stemmed point with slightly excurvate blade, tapered shoulders and straight stem (Little Bear Creek like).
Projectile Point	Plow Strip 1	No	1	1 Big Sandy made of chalcedony and missing a third lengthwise
Projectile Point	Plow Strip 1	No	1	1 undetermined point missing the distal tip and most of the base
Projectile Point	Plow Strip 1	No	1	1 small side notched point with slightly excurvate base (Big Sandy variant?)
Projectile Point	Plow Strip 1	No	1	1 straight to slightly expanded stemmed point with straight blade and slightly excurvate base (Cotaco Creek?)
Projectile Point	Plow Strip 1	No	1	1 Pine Tree/Kirk Corner Notched missing the tip
Projectile Point	Plow Strip 1	No	2	2 Madison points (one with slightly incurvate base missing the tip, one with a straight base missing the tip and some midsection)
Projectile Point	Plow Strip 1	No	1	1 very small Hamilton point with incurvate base
Projectile Point	Plow Strip 1	yes (1)	5	5 side notched points of the Big Sandy variety (1 complete with shallow side notches and excurvate base, 1 with excurvate blade and deep side notches, 1 almost complete with evidence of heating that broke of the base, 2 base fragments)
Projectile Point	Plow Strip 1	No	1	1 unidentified point with expanded stem, straight base, inversely tapered shoulders and slightly excurvate blade (could be McIntire)
Projectile Point	Plow Strip 1	No	1	1 unidentified point with expanded shoulders, incurvate blade, expanded stem and slightly excurvate base (Abbey?)
Projectile Point	Plow Strip 1	No	1	1 unidentified straight stem with corner notches, excurvate base and a reworked tip
Projectile Point	Plow Strip 1	No	1	1 unidentified point with slightly excurvate blade, expanded stem, straight base, one tapered shoulder and one corner notched shoulder
Projectile Point	Plow Strip 1	No	1	1 possible Gary Contracting stem
Projectile Point	Plow Strip 1	No	3	3 side notched points with straight to slightly expanded stem base fragments
Projectile Point	Plow Strip 1	No	4	4 midsection fragments
Projectile Point	Plow Strip 1	No	5	5 distal tip fragments
Projectile Point	Plow Strip 1	No	1	1 unidentified fragment
Projectile Point	Plow Strip 1	No	2	2 undetermined points

Projectile Point	Plow Strip 1	No	1	1 small fragment of a triangular point
Projectile Point	Plow Strip 1	yes	1	1 base fragment from a Mud Creek with evidence of heating
Projectile Point	Plow Strip 1	No	1	1 Copena fragment
Projectile Point	Plow Strip 1	No	1	1 medium sized corner notched with a straight base
Projectile Point	Plow Strip 1	No	1	1 medium sized expanding stem with slightly convex base and straight blade
Projectile Point	Plow Strip 1	No	1	1 medium sized point with broad side notch, slightly bifurcate base and straight blade
Projectile Point	Plow Strip 2	No	1	1 midsection fragment
Projectile Point	Plow Strip 2	No	1	1 distal tip fragment
Projectile Point	Plow Strip 2	No	4	4 base fragments (1 stemless triangular/Madison, ? 1 straight stem and excurve base/Kay's?, 1 stemless with slightly excurve blade, 1 side notched with expanded stem/ Cotaco Creek?)
Projectile Point	Plow Strip 4	No	1	1 base fragment of a probable Kirk Corner Notched
Projectile Point	Plow Strip 4	No	1	1 base fragment from an expanded stem with pointed base (Beaver Lake? Dalton?)
Projectile Point	Plow Strip 4	No	1	1 midsection fragment from a possible straight stem.
Projectile Point	Plow Strip 6	No	1	1 midsection fragment
Projectile Point	Plow Strip 7, CSC 50	No	1	1 Big Sandy
Projectile Point	Plow Strip 7, CSC 54	No	1	1 distal tip fragment
Projectile Point	Plow Strip 7, CSC 55	No	1	1 unidentified point that is a possible side notch. It seems unfinished on 1 lateral edge.
Projectile Point	Plow Strip 7, CSC 57	No	1	1 McFarland/Copena missing the tip
Projectile Point	Plow Strip 7, CSC 57	Yes	1	1 midsection fragment with evidence of heating;
Projectile Point	Plow Strip 7, CSC 59	No	1	1 Big Sandy with a rounded tip (turned into end scraper?)
Projectile Point	Plow Strip 7, CSC 60	No	1	1 distal tip fragment
Projectile Point	Plow Strip 7, CSC 71	No	1	1 midsection fragment
Projectile Point	Plow Strip 7, CSC 85	No	1	1 midsection fragment
Projectile Point	Plow Strip 8, CSC 87	No	1	1 McFarland/Copena missing the tip
Projectile Point	Plow Strip 8, CSC 87	No	4	4 midsection fragments (1 side notch, 1 rounded stem, 1 articulated base so maybe Copena)
Projectile Point	Plow Strip 8, CSC 88	No	1	1 midsection fragment
Projectile Point	Plow Strip 8, CSC 88	No	1	1 distal tip fragment
Projectile Point	Plow Strip 8, CSC 89	No	1	1 Hamilton
Projectile Point	Plow Strip 8, CSC 90	Yes	1	1 Big Sandy with evidence of heating
Projectile Point	Plow Strip 8, CSC 90	Yes	1	1 unidentified side notched fragment that was burned heavily
Projectile Point	Plow Strip 8, CSC 91	Yes	1	1 probable Big Sandy missing the distal tip and half of the base.
Projectile Point	Plow Strip 8, CSC 92	No	1	1 midsection with the distal tip fragment
Projectile Point	Plow Strip 8, CSC 92	No	1	1 base with some midsection fragment from a Morrow Mountain
Projectile Point	Plow Strip 8, CSC 93	No	1	1 unidentified fragment
Projectile Point	Plow Strip 8, CSC 97	No	1	1 Big Sandy missing part of the base
Projectile Point	Plow Strip 8, CSC 97	No	1	1 straight stemmed point with straight blade and base and horizontal shoulders
Projectile Point	Plow Strip 8, CSC 97	No	1	1 base fragment from a side notched point made of quartzite
Projectile Point	Strip Block 1, Surface	No	1	1 base fragment
Projectile Point	Strip Block 1, Surface	No	1	1 tip with midsection fragment
Projectile Point	Strip Block 1, Surface	No	1	1 midsection fragment
Projectile Point	Strip Block 1, Level 1	No	1	1 Big Sandy base fragment
Projectile Point	Strip Block 1, Level 1	No	1	1 Big Sandy bipolar fractured fragment with heavily reworked distal end (maybe turned into an end scraper)
Projectile Point	Strip Block 1, Level 1	No	1	1 side notched with expanded stem, excurve blade and slightly incurvate base point;
Projectile Point	Strip Block 1, Level 1	No	5	5 distal tip fragments
Projectile Point	Strip Block 1, Level 1	No	3	3 midsection fragments

Projectile Point	Strip Block 2	No		1 straight to contracting stem point with excurvate base and some cortex, 1 excurvate blade and tapered shoulders, missing distal tip
Projectile Point	Strip Block 2	No		1 Greenville base fragment
Projectile Point	Strip Block 2	No		1 undetermined stemless triangular with slightly incurvate base (Hamilton?)
Projectile Point	Strip Block 2	No		1 Kirk Serrated
Projectile Point	Strip Block 2	No		1 Kirk Corner Notched variant
Projectile Point	Strip Block 2	No		1 undetermined straight stem and blade point with tapered shoulders, missing the distal tip
Projectile Point	Strip Block 2	No		1 Madison missing the distal tip
Projectile Point	Strip Block 2	No		1 McFarland missing the tip
Projectile Point	Strip Block 2	No		2 base fragments (1 Big Sandy possibly made into end scraper, 1 probable Flint Creek)
Projectile Point	Strip Block 2	No		33 distal tip fragments
Projectile Point	Strip Block 2	No		2 2 base fragments
Projectile Point	Strip Block 2	No		66 midsection fragments (1 is quartzite)
Projectile Point	Strip Block 3	No		1 Hamilton missing the distal tip
Projectile Point	Strip Block 3	No		1 stemless point with slightly excurvate blade and articulated base (Camp Creek?)
Projectile Point	Strip Block 3	No		7 midsection fragments
Projectile Point	Strip Block 3	Maybe		5 base fragments (1 side notched broad base with incurvate base made of reddish (heated?) limestone, 1 Kirk Corner Notched, 1 Big Sandy, 1 expanded stem and excurvate base crudely made, 1 Big Sandy turned into a scraper)
Projectile Point	Strip Block 4	No		1 base fragment with shallow side notch and ground base that is slightly incurvate and made of chaledony (Greenbrier?)
Projectile Point	Strip Block 4	No		2 undetermined small side notched points with ground bases and evidence of re-sharpening
Projectile Point	Strip Block 4	No		1 McFarland/Copena base
Projectile Point	Strip Block 4	No		1 incomplete stemmed dart of undetermined type
Projectile Point	Strip Block 4	No		6 6 midsection fragments
Projectile Point	Strip Block 4	No		22 distal tip fragments
Projectile Point	Strip Block 4	No		22 barb fragments
Projectile Point	Strip Block 4	No		22 base fragments (1 has bifurcate stem)
Projectile Point	Strip Block 5, West Half	Yes		1 base fragment from an expanded stem with evidence of heating
Projectile Point	Strip Block 5, West Half	No		22 midsection fragments
Projectile Point	Strip Block 5, West Half	No		2 2 distal tip fragments
Projectile Point	Strip Block 5, East Half	No		22 midsection fragments
Projectile Point	Strip Block 5, East Half	No		2 base fragments (1 side notched with straight blade, 1 straight stem with wide parallel blade and one barbed shoulder (Ledbetter?);
Projectile Point	Strip Block 5, Feature 9	No		1 Kirk Serrated
Projectile Point	Test Unit 1, Level 1	No		1 Big Sandy base fragment
Projectile Point	Test Unit 1, Level 1	No		1 stemless triangular missing the distal tip (Copena?)
Projectile Point	Test Unit 1, Level 1	No		1 base fragment
Projectile Point	Test Unit 1, Level 1	No		1 distal tip fragment
Projectile Point	Test Unit 1, Level 2	No		1 Big Sandy made of chaledony that is missing part of the base
Scraper	Plow Strip 1	No		1 uniface, squarish, broad side scraper
Scraper	Plow Strip 1	Yes		1 end scraper that is small and triangular in shape and has been heated
Scraper	Plow Strip 1	No		1 end scraper that was a projectile point, but the distal end broke off and was uniafacially microflaked into a scraper, the stem may also have served as a scraping edge as it has also been microflaked; ;
Scraper	Plow Strip 2	No		1 end scraper made from a reworked, uniafacial point
Scraper	Plow Strip 2	No		1 squarish, uniafacially worked fragment.
Scraper	Plow Strip 4	No		1 crude end scraper
Scraper	Plow Strip 4	No		1 large, thick primary flake with the distal end uniafacially worked and with flakes crudely removed
Scraper	Plow Strip 4	No		22 block fragments with crude uniafacial flaking and worked areas broken.
Scraper	Plow Strip 7, CSC 48	No		1 end scraper made from a side notched point with microflaking on the distal edge.
Scraper	Plow Strip 8, CSC 88	No		1 end scraper made from a side notched point with bifacial microflaking on the distal end
Scraper	Plow Strip 8, CSC 97	No		1 end scraper made from an unidentified side notched point with the broken distal end made into the scraper bit.
Scraper	Strip Block 2	No		1 fragment of a possible side scraper. Uniafacial retouch is visible along both lateral edges, although one is more extensively worked than the other.
Scraper	Strip Block 3	No		1 end scraper. It is large, and plano-convex with a somewhat elongated body. The bit end is fractured. It is a secondary flake that is bifacially worked on the lateral and distal edges (possible knife).
Scraper	Strip Block 4	No		1 end scraper made from a corner notched point
Scraper	Strip Block 4	No		1 end scraper that is crudely made from a secondary flake with the distal and lateral edges having uniafacial working.

Scraper	Strip Block 5, East Half	Yes		1 end scraper that was heated and fractured on both dorsal surfaces. Made from a blank flake.
Scraper	Test Unit 1, Level 1	No		1 side scraper made from a crude piece of tabular chert. It is a secondary flake with fine micro flaking.
Scraper	Test Unit 1, Level 2	No		1 end scraper made from a projectile point with bifacial microflaking along the distal edge.
Hammerstone	Area B, Zone 1, Surface	No		1 blocky chert cobble initially used as a core with one edge displaying extreme battering and crushing.
Hammerstone	Backhoe Trench C	No		1 large chert cobble with one bifacially worked edge that is extremely battered
Hammerstone	Backhoe Trench C	No		4 chert cobble fragments with battered bifacially worked edges.
Hammerstone	Plow Strip 1	No		1 quartzite fragment with one end battered
Hammerstone	Plow Strip 1	No		2 ovoid chert cobbles with extensively battered lateral edges
Hammerstone	Plow Strip 1	No		1 ovoid chert cobble with slight crushing on one lateral edge section
Hammerstone	Plow Strip 1	No		1 ovoid cobble with extensive battering on its rounded side.
Hammerstone	Plow Strip 4	No		1 end fragment of a chert cobble with extreme battering on the exterior surface.
Hammerstone	Plow Strip 6	No		1 expended core with battering and crushing marks along a bifacially worked edge
Hammerstone	Plow Strip 8, CSC 87	No		1 large, blocky cobble of chert with lateral corners crushed and pitted
Hammerstone	Plow Strip 8, CSC 87	No		1 small chert cobble with battered lateral edges.
Hammerstone	Plow Strip 8, CSC 93	No		1 bifacially worked, moderate sized chert cobble with the bifacial edge exhibiting severe battering and crushing.
Hammerstone	Plow Strip 8, CSC 95	No		1 end fragment of a moderate to large sized chert cobble that is somewhat rounded and has evidence of extensive battering. It is disk shaped.
Hammerstone	Strip Block 3	No		2 medium to large, squarish chert cobbles with heavily battered lateral edges.
Nutting Stone	Plow Strip 1	No		1 oval cherty limestone cobble with one circular pit pecked in the center of flat surface. Measure 85.97mm long, 62.58mm wide, and 42.38mm thick.
Nutting Stone	Strip Block 3	No		1 complete, moderate sized, rectangular slab of sandstone with one broad ground surface and a circular depression in the center of the surface. The opposite broad side is not worked. It measures 86.85mm long, 64.02mm wide, and 31.6mm thick.
Unidentified Groundstone	Strip Block 1, Surface	No		1 large block of sandstone with one flat ground surface. It could be part of a large mano or metate. It measures 64.29mm long, 60.54mm wide and 53.93mm thick.
Unidentified Groundstone	Strip Block 2	No		1 a rounded fragment with round edges. It could be a mano fragment.
Unidentified Groundstone	Strip Block 2	No		1 tabular fragment of sandstone with one heavily ground broad, flat surface. Could be a Metate fragment. It measures 87.79mm long, 67.05mm wide and 21.4mm thick.
Unidentified Groundstone	Test Unit 1, Level 1	No		1 tabular fragment of sandstone with both flat surfaces exhibiting grinding. Could be a metate fragment.

40PM33

Tool Category	Provenience	Heated	Quantity	Description
Knife	Strip Block 1	No	1	1 potential knife midsection fragment
Modified/Utilized Flake	Strip Block 1	No	1	1 modified cutting tool made from a secondary flake. It is small with one edge bifacially worked.
Projectile Point	Backhoe Trench A	No	1	1 distal tip fragment
Hammerstone	Strip Block 1	No	1	1 potential hammerstone fragment with flakes removed. Could be a repurposed core.

40PM34

Tool Category	Provenience	Heated	Quantity	Description
Blades	Plow Area 2, CSC 11	No	2	2 small fragments. 1 is thin and narrow and the other is broad.
Blades	Plow Area 3, CSC 26	No	1	1 small , narrow fragment
Blades	Plow Area 3, CSC 35	No	1	1 microblade
Blades	Plow Area 7, CSC 59	No	1	1 small fragment
Blades	Strip Block 1, West Half	No	1	1 small fragment
Blades	Strip Block 1, East Half	No	1	1 wide, small fragment
Drill	Plow Area 1	No	1	1 moderate to large bit fragment with an expanded, flat stem base. The bit has a diamond cross section.
Drill	Strip Block 3	No	1	1 bit fragment with a somewhat diamond shaped cross section
Drill	Plow Area 5	No	1	1 bit fragment with a diamond cross section
Drill	Strip Block 1, East Half	No	1	1 small bit fragment section with a diamond cross section
Drill	Strip Block 1, East Half	No	1	1 flake with a bulbous base and a minimally flaked bit fragment.
Knife	Plow Area 3	No	1	1 fragment of a somewhat teardrop shaped thin biface. One lateral edge is straight and exhibits fine bifacial microflaking.
Knife	Plow Area 3, CSC 25	No	1	1 unifacially flaked, triangular shaped fragment
Knife	Plow Area 3, CSC 25	No	1	1 triangular bifacially worked piece (edges have been nicked)
Knife	Plow Area 3, CSC 28	No	2	2 broad, thin, bifacially worked fragments with bifacial microflaking on the lateral edges.
Knife	Plow Area 3, CSC 34	No	1	1 lanceolate, thin biface fragment with a straight base and lateral edges that are slightly expanded from the base.
Knife	Plow Area 3, CSC 34	No	1	1 small, thin, somewhat triangular biface with a straight base. Size appears to be due to re-sharpening of the lateral edges. The triangular appearance is due to reworking the lateral edges as the lateral edges near the base appear perpendicular to the base.
Knife	Plow Area 6	No	1	1 midsection and base fragment of a large, triangular, thin biface with bifacial microflaking visible on the lateral edges.
Knife	Plow Area 7, CSC 58	No	1	1 large, bifacially worked midsection fragment
Knife	Plow Area 7, CSC 59	No	1	1 rectangular piece with the distal and lateral edges flaked.
Knife	Strip Block 1, West Half	No	3	3 triangular biface tip fragments
Knife	Strip Block 1, West Half	No	2	2 large, thin biface midsection fragments with fine bifacial microflaking along lateral blade edges.
Modified/Utilized Flakes	Backhoe Trench A	No	1	1 modified flake cutting tool made from a blank flake and exhibiting unifacial flaking on one lateral edge, which is also serrated.
Modified/Utilized Flakes	Backhoe Trench B	Yes	1	1 modified flake cutting tool made from a secondary flake with bifacial flaking on both lateral edges. It was heated and may have been a fragment of a biface.
Modified/Utilized Flakes	General Surface	No	1	1 triangular modified flake scraper made from a secondary flake with both lateral edges exhibiting microflaking
Modified/Utilized Flakes	Plowed Area 2, CSC 9	No	1	1 larger modified flake side scraper made from a secondary flake with bifacial working on one edge
Modified/Utilized Flakes	Plowed Area 2, CSC 9	No	1	1 small modified fake side scraper made from a blank flake with bifacial microflaking on both lateral edges
Modified/Utilized Flakes	Plowed Area 2, CSC 9	No	1	1 small modified flake side scraper made from a blank flake with one lateral edge exhibiting microflaking.

Modified/Utilized Flakes	Plowed Area 2, CSC 10	No		1 utilized flake side scraper made from a blank flake with one edge having microflaking
Modified/Utilized Flakes	Plowed Area 2, CSC 10	No		1 modified flake end scraper that has serrated lateral edges and is a somewhat bulky secondary flake.
Modified/Utilized Flakes	Plow Area 2, CSC 11	No		1 modified flake scraper made from a blank flake. Both the distal and one lateral edge have fine unifacial microflaking
Modified/Utilized Flakes	Plow Area 2, CSC 13	No		1 modified flake spokeshave made from a secondary flake and having one broad notch
Modified/Utilized Flakes	Plow Area 2, CSC 15	No		1 modified flake end scraper made from an oval primary flake with one uniaxially worked end.
Modified/Utilized Flakes	Plow Area 3, CSC 30	No		1 modified flake spokeshave made from a very small secondary flake with one small uniaxially worked notch.
Modified/Utilized Flakes	Plow Area 3, CSC 37	No		1 modified flake scraper made from a blank flake. It is triangular in shape and has bifacial microflaking on both lateral edges.
Modified/Utilized Flakes	Plow Area 3, CSC 38	No		1 modified flake scraper made from a blank flake. It is of thumbnail size and has one edge uniaxially worked.
Modified/Utilized Flakes	Plow Area 4	No		1 modified flake cutting tool that is thumbnail in size and has microflaking on the distal end. It is made from a blank flake.
Modified/Utilized Flakes	Plow Area 5	No		1 modified flake side scraper made from a secondary flake with uniaxially working on two edges and some microflaking.
Modified/Utilized Flakes	Plow Area 6	No		1 modified flake scraper made from a primary flake. The lateral and distal edges are microflaked.
Modified/Utilized Flakes	Plow Area 7, CSC 56	No		1 modified flake scraper made from a blank flake with the lateral and distal edges uniaxially worked.
Modified/Utilized Flakes	Strip Block 1, East Half	No		1 modified flake cutting tool made from a secondary flake. Both lateral edges are uniaxially worked.
Modified/Utilized Flakes	Strip Block 1, West Half	No		1 large, crude, triangular modified flake scraper made from a secondary flake with all edges worked
Modified/Utilized Flakes	Strip Block 1, West Half	No		1 small modified flake side scraper made from a blank flake with uniaxial microflaking
Modified/Utilized Flakes	Strip Block 3	No		1 modified flake side scraper made from a blank flake of Chalcedony that is uniaxially worked on one edge.
Modified/Utilized Flakes	Test Unit 1	No		1 modified flake cutting tool made from a blank flake with the distal and one lateral edge exhibiting bifacial microflaking.
Projectile Point	Backhoe Trench B	No		1 Hamilton missing the distal tip
Projectile Point	Backhoe Trench B	No		1 unidentified midsection with the base fragment
Projectile Point	Backhoe Trench B	No		2 midsection fragments
Projectile Point	Backhoe Trench B	No		2 distal tip fragments
Projectile Point	Backhoe Trench B	Yes		1 undetermined shallow side notched point fragment with a straight blade and evidence of having been heavily heated
Projectile Point	Feature 3	No		1 unidentified frag.
Projectile Point	Feature 3	No		1 unidentified base fragment of small size. From a triangular point typical of the Late Woodland to Early Mississippian periods.
Projectile Point	Feature 4	No		1 midsection fragment
Projectile Point	General Surface, Monitoring	Yes		1 heat altered base fragment

Projectile Point	General Surface, Monitoring	No		1	1 base fragment from a side notched point
Projectile Point	General Surface, Monitoring	No		1	1 incomplete shallow side notched point
Projectile Point	General Surface, Monitoring	No		1	1 possible Pickwick point with recurvate blade, contracting stem, and convex base that is missing the distal tip and which has been rounded and reworked.
Projectile Point	General Surface	No		5	5 Big Sandy points
Projectile Point	General Surface	No		1	1 Wade point
Projectile Point	General Surface	No		2	2 Kay's like
Projectile Point	General Surface	No		4	4 Mulberry Creek points
Projectile Point	General Surface	No		6	6 unidentified points (2 stemmed; 2 corner notched; 2 side notched)
Projectile Point	General Surface	No		5	5 distal tip with some midsection fragments
Projectile Point	General Surface	No		2	2 midsection fragments
Projectile Point	General Surface	No		6	6 distal tip fragments
Projectile Point	Plow Area 2	No		1	1 Crawford Creek Point
Projectile Point	Plow Area 2	No		1	1 excurvate blade point with horizontal to slightly tapered shoulders, contracted stem, and straight base. The base is unfinished.
Projectile Point	Plow Area 2	No		1	1 fragment from a medium side notched point with a parallel blade that is missing the distal tip, part of its midsection, and one side of the base.
Projectile Point	Plow Area 2	No		1	1 distal tip fragment
Projectile Point	Plow Area 2, CSC 9	No		1	1 base fragment possibly from a Hamilton point
Projectile Point	Plow Area 2, CSC 9	No		2	2 undetermined base fragments
Projectile Point	Plow Area 2, CSC 9	No		1	1 midsection fragment
Projectile Point	Plow Area 2, CSC 9	No		1	1 barb fragment
Projectile Point	Plow Area 2, CSC 9	Yes		1	1 stemless triangular point that was heated Possible Copena.
Projectile Point	Plow Area 2, CSC 9	No		1	1 stemless triangular with the base removed. Possible Copena.
Projectile Point	Plow Area 2, CSC 10	No		1	1 Madison point
Projectile Point	Plow Area 2, CSC 10	No		2	2 midsection fragments
Projectile Point	Plow Area 2, CSC 10	No		1	1 tip fragment
Projectile Point	Plow Area 2, CSC 10	No		1	1 base fragment
Projectile Point	Plow Area 2, CSC 10	No		1	1 possible Flint Creek point. It is a corner notched with an expanded stem, straight base, straight blade and some evidence of serrated blade edges.
Projectile Point	Plow Area 2, CSC 10	No		1	1 base fragment probably from a Late Archaic stemmed point
Projectile Point	Plow Area 2, CSC 10	No		1	1 possible Palmer point. It is a corner notched with a slightly excurvate blade, straight base and lightly serrated blade edges.
Projectile Point	Plow Area 2, CSC 10	No		1	1 possible Kirk Serrated point that is missing the base and barb tips. It has a straight base with finely serrated blade edges.
Projectile Point	Plow Area 2, CSC 11	No		1	1 Hamilton point fragment
Projectile Point	Plow Area 2, CSC 11	No		2	2 stem fragments
Projectile Point	Plow Area 2, CSC 11	No		1	1 distal tip fragment
Projectile Point	Plow Area 2, CSC 11	No		1	1 Quad point (Paleo)
Projectile Point	Plow Area 2, CSC 11	No		1	1 Hamilton point
Projectile Point	Plow Area 2, CSC 12	No		1	1 base fragment (possibly from a Hamilton point)
Projectile Point	Plow Area 2, CSC 12	No		1	1 stem fragment
Projectile Point	Plow Area 2, CSC 12	No		1	1 very small Madison point

Projectile Point	Plow Area 2, CSC 12	No	1	1 possible Greenville point. It is a stemless triangular.
Projectile Point	Plow Area 2, CSC 13	Yes	1	1 base fragment from a wide, straight stemmed point with a ground base and evidence of being heated
Projectile Point	Plow Area 2, CSC 13	No	1	1 midsection fragment
Projectile Point	Plow Area 2, CSC 14	No	4	4 distal tip fragments
Projectile Point	Plow Area 2, CSC 14	No	1	1 midsection fragment
Projectile Point	Plow Area 2, CSC 14	Yes	1	1 side notched point with an expanded stem, straight blade, and a straight base that is ground. It shows evidence of being heated and the distal tip if missing.
Projectile Point	Plow Area 2, CSC 14	No	1	1 base fragment from a stemless triangular point
Projectile Point	Plow Area 2, CSC 14	Yes	1	1 base fragment from a side notched, expanded stemmed point with a slightly excurvate blade and evidence of heating. Possibly a Flint Creek.
Projectile Point	Plow Area 2, CSC 14	Yes	1	1 base fragment with evidence of heating
Projectile Point	Plow Area 2, CSC 15	No	1	1 distal tip with some midsection fragment
Projectile Point	Plow Area 2, CSC 15	No	2	2 distal tip fragments
Projectile Point	Plow Area 2, CSC 15	Yes	1	1 undetermined straight stemmed point with ground stem edges and evidence of heating
Projectile Point	Plow Area 2, CSC 15	Yes	1	1 base fragment, probably from a Motley point, with evidence of heating
Projectile Point	Plow Area 2, CSC 16	No	1	1 midsection fragment
Projectile Point	Plow Area 2, CSC 16	No	1	1 unidentified frag
Projectile Point	Plow Area 2, CSC 16	Yes	1	1 partial base fragment from a corner notched point that was heated
Projectile Point	Plow Area 2, CSC 16	No	1	1 Decatur point
Projectile Point	Plow Area 3	No	1	1 Motley like point
Projectile Point	Plow Area 3	No	1	A small to medium shallow side notched point with a bifurcate base and a slightly serrated blade. Possible St. Albans. It is missing the distal tip.
Projectile Point	Plow Area 3	No	1	1 base fragment from a medium sized corner notched point with a ground base and straight blade. Possible Kirk cluster point.
Projectile Point	Plow Area 3, CSC 25	No	1	1 distal tip fragment
Projectile Point	Plow Area 3, CSC 25	No	1	1 base fragment probably from a Hamilton point
Projectile Point	Plow Area 3, CSC 26	No	1	1 midsection fragment
Projectile Point	Plow Area 3, CSC 26	No	1	1 stem fragment
Projectile Point	Plow Area 3, CSC 27	Yes	1	1 probable Big Sandy
Projectile Point	Plow Area 3, CSC 28	Yes	1	1 burned unidentified point
Projectile Point	Plow Area 3, CSC 28	No	1	1 stem fragment
Projectile Point	Plow Area 3, CSC 29	No	2	2 base fragments
Projectile Point	Plow Area 3, CSC 30	No	1	1 distal tip fragment
Projectile Point	Plow Area 3, CSC 30	No	1	1 undetermined side notched point with a straight, ground base
Projectile Point	Plow Area 3, CSC 32	No	1	1 Madison point
Projectile Point	Plow Area 3, CSC 32	No	2	2 midsection fragments
Projectile Point	Plow Area 3, CSC 32	Yes	1	1 base fragment from a straight stemmed point with an incurvate base, weak shoulders and shows evidence of heating;
Projectile Point	Plow Area 3, CSC 32	No	1	1 base fragment from a side notched point
Projectile Point	Plow Area 3, CSC 33	No	1	1 stem fragment
Projectile Point	Plow Area 3, CSC 34	No	1	1 distal tip fragment
Projectile Point	Plow Area 3, CSC 35	No	1	1 base fragment from a bifurcate point
Projectile Point	Plow Area 3, CSC 35	No	1	1 Hamilton base fragment
Projectile Point	Plow Area 3, CSC 35	No	2	2 distal tip fragments
Projectile Point	Plow Area 3, CSC 35	No	1	1 undetermined small triangular with a contracting stem, straight base, long barbs and a straight to slightly incurvate base

Projectile Point	Plow Area 3, CSC 35	No	1	1 alt beveled edge point midsection fragment
Projectile Point	Plow Area 3, CSC 35	No	1	1 base fragment from a corner notched point (Pine Tree?)
Projectile Point	Plow Area 3, CSC 35	No	1	1 base fragment from a possible Mud Creek.
Projectile Point	Plow Area 3, CSC 36	No	1	1 midsection fragment
Projectile Point	Plow Area 3, CSC 36	No	1	1 base fragment
Projectile Point	Plow Area 3, CSC 36	No	1	1 distal tip fragment
Projectile Point	Plow Area 3, CSC 37	Yes	1	1 base fragment from an expanded stemmed point that was heated
Projectile Point	Plow Area 3, CSC 37	No	1	1 fragment from a medium lanceolate point with shallow side notches and a slightly incurvate base made from chalcedony
Projectile Point	Plow Area 3, CSC 37	Yes	1	1 fragment of a broad triangular point with a straight stem that was heated (Cotaco Creek).
Projectile Point	Plow Area 3, CSC 37	No	2	2 undetermined fragments
Projectile Point	Plow Area 3, CSC 37	No	1	1 midsection fragment
Projectile Point	Plow Area 3, CSC 38	No	2	2 midsection fragments
Projectile Point	Plow Area 5	No	1	1 distal tip fragment
Projectile Point	Plow Area 5	No	1	1 undetermined small triangular stemmed point with an incurvate base, short barbs, corner notched and a beveled serrated blade
Projectile Point	Plow Area 7, CSC 45	No	1	1 undetermined small, stemmed point with a rounded tip.
Projectile Point	Plow Area 7, CSC 51	No	1	1 midsection fragment with a straight blade.
Projectile Point	Plow Area 7, CSC 51	Yes	1	1 midsection fragment with evidence of heating;
Projectile Point	Plow Area 7, CSC 54	No	1	1 unidentified small triangular point fragment
Projectile Point	Plow Area 7, CSC 55	No	1	1 midsection fragment
Projectile Point	Plow Area 7, CSC 57	No	1	1 Hamilton
Projectile Point	Plow Area 7, CSC 57	No	1	1 distal tip fragment
Projectile Point	Plow Area 7, CSC 57	No	1	1 base fragment
Projectile Point	Plow Area 7, CSC 59	No	1	1 midsection fragment
Projectile Point	Plow Area 7, CSC 59	No	1	1 undetermined straight to slightly excurvate blade point with corner notches, and an excurvate and beveled base that is missing the distal tip and part of the base (Flint Creek?)
Projectile Point	Plow Area 7, CSC 60	No	1	1 Hamilton
Projectile Point	Strip Block 1, East Half	Yes	1	1 fragment from a stemmed point with heat altering
Projectile Point	Strip Block 1, East Half	No	1	1 very small side notched point that is unfinished (22mm by 15mm)
Projectile Point	Strip Block 1, East Half	No	1	1 fragment from a side notched point (Big Sandy?)
Projectile Point	Strip Block 1, East Half	Yes	1	1 straight to contacted stemmed point with a straight blade and evidence of heating
Projectile Point	Strip Block 1, East Half	No	1	1 possible Greenville point
Projectile Point	Strip Block 1, East Half	No	1	1 Hamilton point missing the distal tip
Projectile Point	Strip Block 1, East Half	No	2	2 undetermined moderated sized triangular points
Projectile Point	Strip Block 1, East Half	No	1	1 Kirk Cluster point
Projectile Point	Strip Block 1, East Half	No	2	2 small undetermined arrow points

Projectile Point	Strip Block 1, East Half	No		4 4 distal tip fragments
Projectile Point	Strip Block 1, East Half	No		3 3 midsection fragments
Projectile Point	Strip Block 1, East Half	No		1 1 base fragment.
Projectile Point	Strip Block 1, East Half	No		1 blade fragment from a wide and straight blade point that is missing the base (Cotaco Creek?)
Projectile Point	Strip Block 1, West Half	No		4 4 Hamilton base fragments
Projectile Point	Strip Block 1, West Half	Yes		1 1 Hamilton with heat altering
Projectile Point	Strip Block 1, West Half	Yes		1 base fragment from a straight stemmed point with an excurve base and heat altering (Cotaco Creek)
Projectile Point	Strip Block 1, West Half	No		1 base fragment from a straight to slightly expanded stem point with an incurvate base
Projectile Point	Strip Block 1, West Half	Yes		1 base fragment from a side notched point with a ground base and heat altering
Projectile Point	Strip Block 1, West Half	No		1 1 Kirk Cluster point
Projectile Point	Strip Block 1, West Half	Yes (1)		3 probable Kirk Serrated points all missing the distal tip (1 with evidence of heating)
Projectile Point	Strip Block 1, West Half	Yes		1 straight to slightly contracting stemmed point that was heated (Little Bear Creek?)
Projectile Point	Strip Block 1, West Half	No		1 1 Kanawha point
Projectile Point	Strip Block 1, West Half	No		7 7 tip fragments
Projectile Point	Strip Block 1, West Half	No		2 2 midsection fragments
Projectile Point	Strip Block 1, West Half	No		24 1 moderate sized triangular point base fragment.
Projectile Point	Strip Block 2	No		1 1 blade fragment
Projectile Point	Strip Block 3	No		2 2 midsection fragments
Projectile Point	Test Unit 1	No		2 2 base fragments probably from Hamilton points
Projectile Point	Test Unit 1	No		1 1 corner notched base fragment
Projectile Point	Test Unit 1	Yes (1)		2 fragments from possible Jack's Reef Corner Notched point (1 was heated)
Projectile Point	Test Unit 1	No		1 Mud Creek like point with an excurve blade, tapered shoulders, expanded stem, and excurve base
Projectile Point	Test Unit 1	No		7 7 distal tip fragments
Projectile Point	Test Unit 1	No		5 5 midsection fragments.
Scraper	Feature 4	No		1 end scraper made from a corner notched point that has an incurvate base. Microflaking is seen on the distal end.
Scraper	General Surface	No		1 1 end scraper made from a reworked Big Sandy point
Scraper	General Surface	No		1 end scraper made from a reworked unidentified expanded stem point exhibiting steep unifacial retouch.
Scraper	Plow Area 1	No		1 very nice specimen that is a complete, triangular end scraper. It is bifacially worked with a steep, unifacially flaked distal end.
Scraper	Plow Area 2, CSC 12	No		1 1 complete, somewhat crude end scraper
Scraper	Plow Area 2, CSC 15	No		1 small, somewhat rectangular biface with one convex, steeply retouched end. It is an end scraper.
Scraper	Plow Area 3, CSC 30	No		1 well-made end scraper with fine bifacial microflaking on one end. It is tear drop shaped.
Scraper	Plow Area 3, CSC 32	No		1 1 probable end scraper fragment
Scraper	Plow Area 3, CSC 34	No		1 1 complete, classic end scraper
Scraper	Plow Area 3, CSC 37	No		1 oval shaped side scraper made from a primary flake with two worked edges that exhibit microflaking
Scraper	Plow Area 7, CSC 60	No		1 1 roughly square fragment with steep unifacial flaking

Scraper	Strip Block 1, West Half	No	1	1 nearly complete, moderate to large, oval shaped end scraper
Scraper	Strip Block 1, West Half	No	1	1 thin, small to moderate sized end scraper fragment that is bifacially worked with steep unifacial flaking on the bit
Scraper	Strip Block 1, West Half	No	1	1 reworked side notched point with the distal end worked into a steep, unifacially flaked end scraper.
Scraper	Strip Block 1, East Half	Yes	1	1 burned fragment of a crudely shaped end scraper
Scraper	Strip Block 1, East Half	No	1	1 fragment of a side scraper with unifacial flaking on one lateral edge.
Hammerstone	Plow Area 3, CSC 37	No	1	1 oval chert cobble with one end heavily battered
Hammerstone	Plow Area 5	No	1	1 large, semi-hemispherical chert cobble with a convex lateral edge exhibiting substantial crushing and pitting.
Hammerstone	Strip Block 1, East Half	No	1	1 round chert cobble fragment with one edge showing severe crushing and battering
Hammerstone	Strip Block 1, West Half	No	3	all 3 are oval to circular chert cobble fragments with battered lateral edges.
Hammerstone	Strip Block 3	No	1	1 circular chert cobble with extensively battered lateral edges.
Nutting Stone	Plow Area 2, CSC 14	No	1	1 irregular block of reddish brown sandstone with one flat ground surface. The surface contains one small, but somewhat deep depression in the center of the block. It measures 66.77mm long, 57.7mm wide, and 41.45mm thick.
Nutting Stone	Plow Area 3, CSC 36	No	1	1 rectangular block of chert with one circular hole pecked near the center on one broad surface. It measures 99.45mm long, 57.76mm wide and 38.41mm thick.
Nutting Stone	Plow Area 5	No	1	1 squarish, tabular piece of reddish brown sandstone with a shallow, circular depression pecked in one flat, broad surface. It measures 76.04mm long, 72.95mm wide and 26.84mm thick.
Nutting Stone	Plow Area 7, CSC 60	No	1	1 ovate sandstone end fragment of a nutting stone or possibly a mano.
Nutting Stone	Test Unit 1	No	1	1 irregularly shaped, tabular sandstone fragment with three circular depressions on one broad surface, measuring 91.48mm long, 62.01mm wide and 29.72mm thick
Nutting Stone	Test Unit 1	No	1	1 somewhat square, tabular sandstone block with one shallow, circular depression on one broad surface, measuring 104.71mm long, 89.44mm wide and 34.59mm thick.
Unidentified Groundstone	Feature 2	Yes		burned sandstone cobble fragments
Unidentified Groundstone	Feature 3	Yes		burned sandstone cobble fragments
Unidentified Groundstone	Plow Area 3, CSC 30	No	1	Small, triangular piece brown sandstone. One surface is very smooth and slightly curved. Possibly a polishing stone.
Unidentified Groundstone	Plow Area 3, CSC 34	No	1	1 small fragment of greenish-brown shale with two area that are highly polished. Possibly a celt fragment.
Unidentified Groundstone	Plow Area 3, CSC 38	No	1	1 tabular fragment of brown sandstone with broad, flat surfaces ground smooth. Probably a mano.
Unidentified Groundstone	Strip Block 1, East Half	No	1	possible metate section. It is a small, tabular fragment of grey limestone with one broad ground surface. It measures 73.44m long, 48.03mm wide and 25.25mm thick.

40PM37

Tool Category	Provenience	Heated	Quantity	Description
Projectile Point	General Surface	No	1	1 possible Kirk Serrated point missing the distal tip.

40PM77

Tool Category	Provenience	Heated	Quantity	Description
Blade	CSC 93	No	1	1 small blade fragment
Knife	CSC 71	No	1	1 fragment of a thin, well made chert biface with fine bifacial microflaking along the edge.
Knife	CSC 136	No	1	1 fragment of a thin, bifacially flaked tool with fine bifacial microflaking along the lateral edges. The tool was probably triangular in shape originally.
Modified/Utilized Flakes	General Surface	No	1	1 Modified flake spokeshave made from a blank flake with unifacial flaking on the lateral edges.
Modified/Utilized Flakes	CSC 15	No	1	1 utilized flake scraper made from a blank flake and thumbnail in size
Modified/Utilized Flakes	CSC 21	No	1	1 modified flake end scraper thumbnail in size made from a secondary flake
Modified/Utilized Flakes	CSC 21	No	1	1 larger modified flake end scraper made from a secondary flake that is unifacially worked.
Modified/Utilized Flakes	CSC 37	No	1	1 utilized flake end scraper worked on two edges and made from a blank flake.
Modified/Utilized Flakes	CSC 81	No	1	1 modified flake side scraper made from a blank flake and worked on both lateral edges.
Modified/Utilized Flakes	CSC 113	No	1	1 modified flake spokeshave made from a blank flake
Modified/Utilized Flakes	CSC 124	No	1	1 modified flake spokeshave made from a secondary flake
Modified/Utilized Flakes	CSC 136	No	1	1 modified flake cutting tool, oval in shape with evidence of working on all but part of the basal edge. It is made from a blank flake and is bifacially worked in some places.
Projectile Point	General Surface	No	1	1 fragment from a corner notched point
Projectile Point	CSC 1	No	1	1 distal tip fragment
Projectile Point	CSC 1	No	1	1 unidentified contracted stem point with incurvate edges and an asymmetrical blade and shoulders.
Projectile Point	CSC 2	No	1	1 Motley point
Projectile Point	CSC 2	No	1	1 midsection fragment
Projectile Point	CSC 4	No	1	1 unidentified side notched point with a triangular blade and incurvate stem.
Projectile Point	CSC 5	No	1	1 base fragment
Projectile Point	CSC 6	No	1	1 unidentified distal tip fragment
Projectile Point	CSC 8	No	1	1 distal tip fragment
Projectile Point	CSC 9	No	1	1 undetermined point fragment
Projectile Point	CSC 23	No	1	1 Hamilton point that has an impact fracture and a secondary use edge with deep serrated edges
Projectile Point	CSC 35	No	1	1 unidentified side notched point with an unfinished base and incurvate stem.
Projectile Point	CSC 43	No	1	1 Hamilton point missing the distal tip
Projectile Point	CSC 57	No	1	1 possible Jacks reef point with an incurvate base and missing the distal tip.
Projectile Point	CSC 77	No	1	1 midsection fragment
Projectile Point	CSC 125	No	1	1 Madison point
Projectile Point	CSC 158	No	1	1 unidentified point fragment
Projectile Point	CSC 172	No	1	1 possible Morrow Mountain straight base or a Kirk Corner Notched variant. It has a short, somewhat pointed stem.
Scarper	CSC 36	No	1	1 primary flake end scraper that is circular in plan view and has steep unifacial retouch.
Hammerstone	CSC 114	No	1	1 moderate to large oval chert cobble with extensive battering and crushing along one rounded edge.
Mano/Metate	CSC 162	No	1	1 possible metate fragment of light brown sandstone with one broad surface that is extensively ground. It measures 70.84mm long, 42.99mm wide and 31.7mm thick.
Nutting Stone	CSC 51	Maybe	1	1 somewhat rectangular, thick cobble of reddish brown sandstone with a shallow, circular depression on the opposing surface. It measures 80.87mm long, 51.33mm wide, and 52.16mm thick.