

TWO RIVERS II

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Archeological excavations
at Two Rivers (23SH101)
Ozark National Scenic Riverways,
Shannon County, Missouri

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ABSTRACT

Archeological investigations in two areas considered as alternative locations for a proposed drain field at the Two Rivers site (23SH101) were conducted in September and October 1987 and in January and March 1988 for the Ozark National Scenic Riverways of the National Park Service. The work was accomplished by Historic Preservation Associates and the University of Missouri American Archaeology Division under the terms of Order No. PX-6115-6-0138. Controlled surface collections were taken, 99 posthole tests, five 1 m x 1 m test units, three 1 m x 2 m test units, one 1 m x 12 m trench and one 4 m x 4 m block was excavated at the site. As a result of this work, 23SH101, a Paleo-Indian, Archaic, Woodland, Emergent Mississippi and Historic period site, was found to contain relatively deep subsurface deposits in the Area B. Unusual mounded gravel features thought to be associated with the earliest inhabitants of the site were found in the 4 m x 4 m excavation block. A postmold radiocarbon dated to the Late Archaic period was also found in this block. Preservation of this area is recommended. In Area C cultural deposits were found to be lightly distributed and shallow. These results are also compared with results from a testing conducted in 1986 in Area A of this site.

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INTRODUCTION

BACKGROUND

The Midwest Archeological Center of the National Park Service (NPS) solicited proposals for archeological excavations at archeological site 23SH101 in the Ozark National Scenic Riverways (ONSR) in order to fulfill its obligations under the National Historic Preservation Act of 1966 (PL89-665), the National Environmental Policy Act of 1969 (PL91-190) Executive Order 11593 of 13 May 1971, the Archeological and Historic Preservation Act of 1974 (PL93-291), the Archaeological Resources Protection Act of 1979 (PL96-95) and the Procedures for the Protection of Historic and Cultural Properties (36CFR800). The Historic Preservation Associates (HPA) and University of Missouri American Archeology Division (UMAAD) proposal was submitted on 15 June 1987 and Contract No. CX6000-7-0019 was awarded on 22 July 1987. The Statement of Work (Appendix A) called for subsurface testing within proposed project areas at 23SH101 to evaluate the cultural resources at the site. A contract amendment for additional work at Two Rivers was issued on 7 December 1987.

The purpose of this report is to document archeological investigations conducted at 23SH101 that were intended to assess the nature, extent and significance of the deposits relative to National Register of Historic Places (NRHP) criteria. This report follows the guidelines and standards of fieldwork and reports contained in the *Guidelines for Reporting Phase II Testing of Archaeological Site Significance & Evaluation of National Register Eligibility* (Weichman 1987), the *Master Plan for Archaeological Resource Protection in Missouri* (Weston and Weichman 1987), McGimsey and Davis (1977:64-77) and Bense et al. (1986:52-62). All artifacts, records, notes, maps, drawings, photographs, photographic negatives and other materials generated as a result of this project will be curated by the Midwest Archeological Center.

PROJECT LOCATION, DESCRIPTION, SPONSOR AND PARTICIPANTS

Two Rivers (23SH101) is located in Shannon County of southeastern Missouri (Figure 1). This places the site in the Current Watershed (Figure 2) of the East White Study Unit (Weston and Weichman 1987:B-i-2). 23SH101 reportedly encompasses the area of the Two Rivers campgrounds, picnic area and store facility at the intersection of the Jacks Fork and Current River, partially in the S1/2, SW1/4, SE1/4 of Section 9 (from the southeast corner) and the N1/2, NW1/4, NE1/4 of Section 16 (from the northeast corner) of T29N, R3W (Figure 3; with UTM coordinates of northing 4117000 - 4117120 and easting 652980 - 653120) (Archaeological Survey of Missouri Site Form).

The sponsoring agency for this work is the Midwest Archeological Center of the NPS. The Contracting Officer is Gerald T. McClarnon and his authorized representative (COR) is Dr. Mark Lynott. Historic Preservation Associates in cooperation with the University of Missouri American Archaeology Division carried out the investigations. Dr. James E. Price and Mr. Timothy C. Klinger served as co-principal investigators. Mr. Richard P. Kandare directed the fieldwork and was assisted by Mr. David B. Board and Mr. Lawrence L.

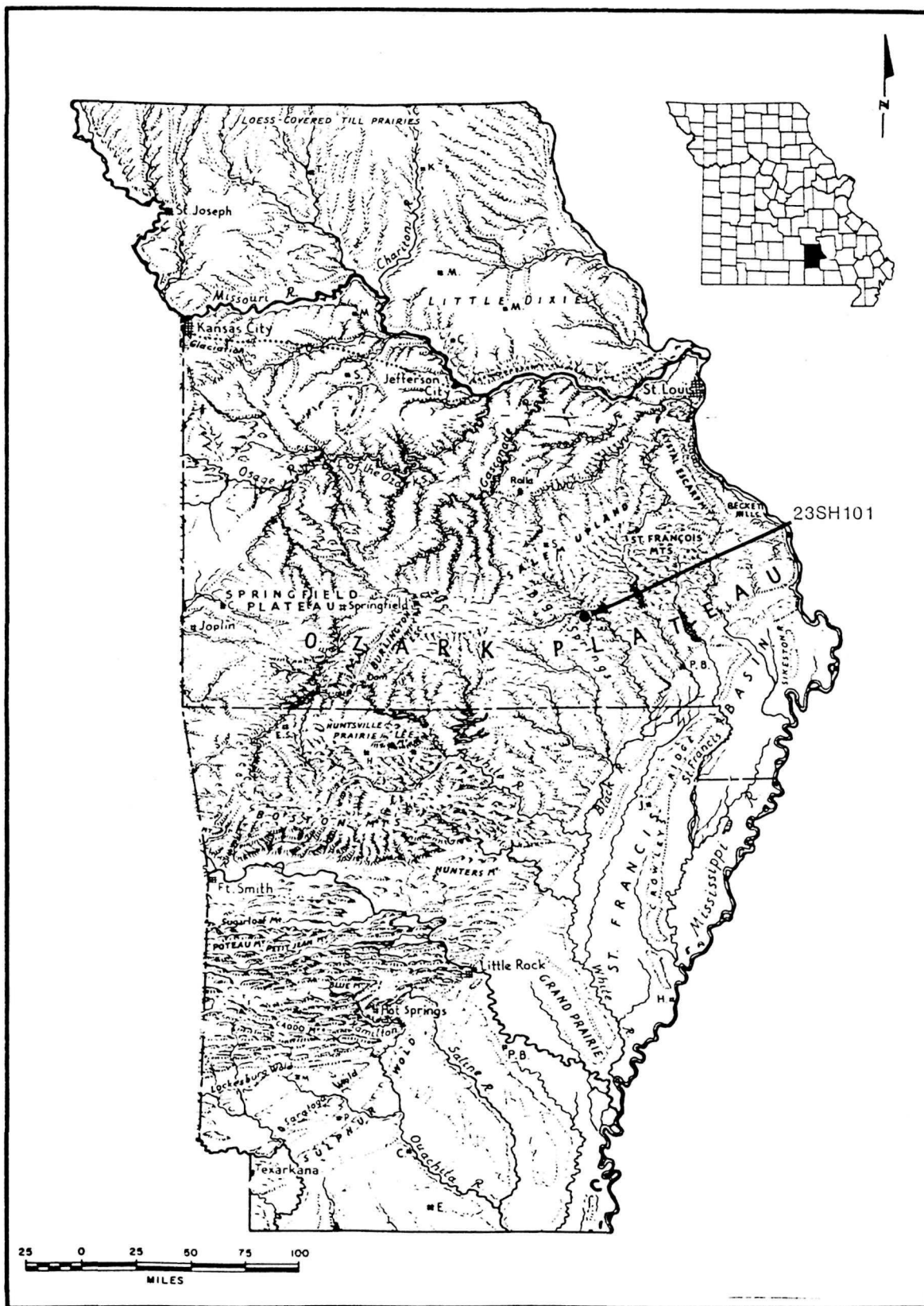


Figure 1. General location of 23SH101

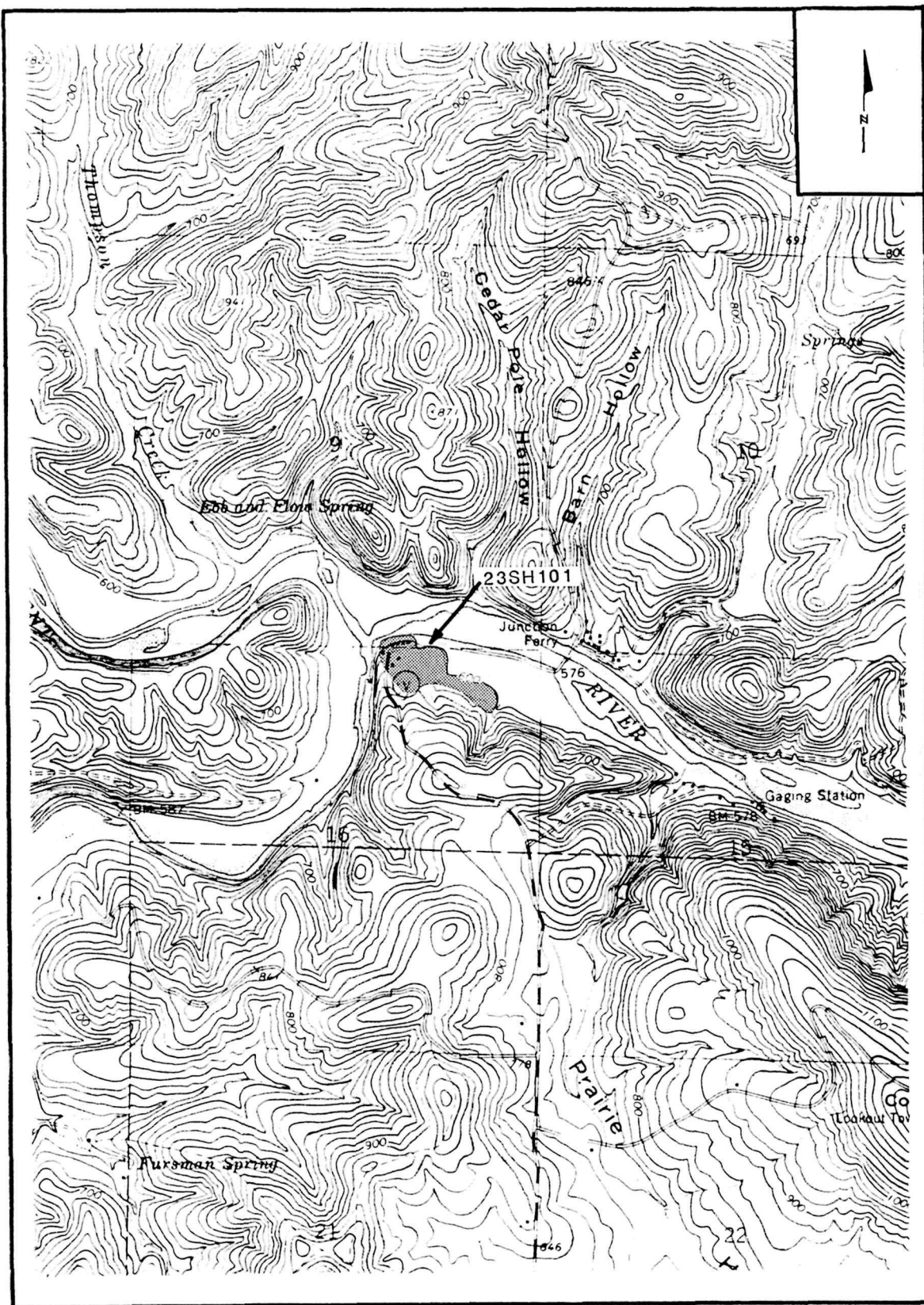


Figure 3. Location of 23SH101 [Eminence, MO. 7.5' quadrangle (1965)]

Ayres. Klinger and Kandare prepared the report with the assistance of Price and Saucier. The artifacts were processed by Board and were analyzed by Board and Kandare (Appendix B).

The construction project involved facility improvements at the Two Rivers campground. 23SH101 had been previously recorded in the existing campgrounds, picnic area and other developed areas of the park. Archeological investigations had been undertaken in a proposed drain field (Alternate #1 or Area A) located in a picnic area north of the gravel portion of Highway V (Klinger and Kandare 1987a:22) prior to the current study. An alternative area for the proposed drain field (Alternative #2 or Area B; Group Camp 1) was also investigated (Klinger and Kandare 1987a:5).

Archeological investigations initially focused on the second alternative (Area B). When significant cultural deposits were discovered in this area, an alternative (Area C) area located southeast of Area B was investigated (Figure 4). Direct impacts to the cultural resources anticipated as a result of the project include damage from heavy equipment movement, removal of soil and disturbance of the remaining soil in the proposed areas of construction for the comfort station and the drain field. Fieldwork was conducted on various days from 1 September - 9 October 1987, 5 - 15 January 1988 and 21 - 23 March 1988.

STATEMENT OF WORK AND PROJECT GOALS

STATEMENT OF WORK

The complete Statement of Work is included as Appendix A. Important specific conditions of the work include:

The study to be conducted consists of salvage excavations within site 23SH101 within the Two Rivers Campground area... This work is necessitated by planned installation of a leach field, and will be done to record information contained in the site deposits that will be destroyed as a result of the construction work...Excavations will be confined to the direct impact area of leach field construction...which includes an area about 20 meters by 70 meters [sic]. Within this impact zone, appropriate research methods will be directed to collect information relating to the following general concerns: 1. What is the cultural sequence represented at the site, and what are the ages of the various archeological components of the site? 2. What is the nature of the past occupations of the site, and how did the site function change through time? 3. How will the information contained in 23SH101 contribute to a better understanding of the archeology of the Upper Current River Valley and the Eastern Ozark Highland region?...This archeological investigation must be explicitly directed toward the general concerns expressed above, and analysis of the final results of the project must contribute to our understanding of current regional research problems or themes. These themes may relate to regional research concerns, culture-historical problems, or methodological approaches to archeological research.

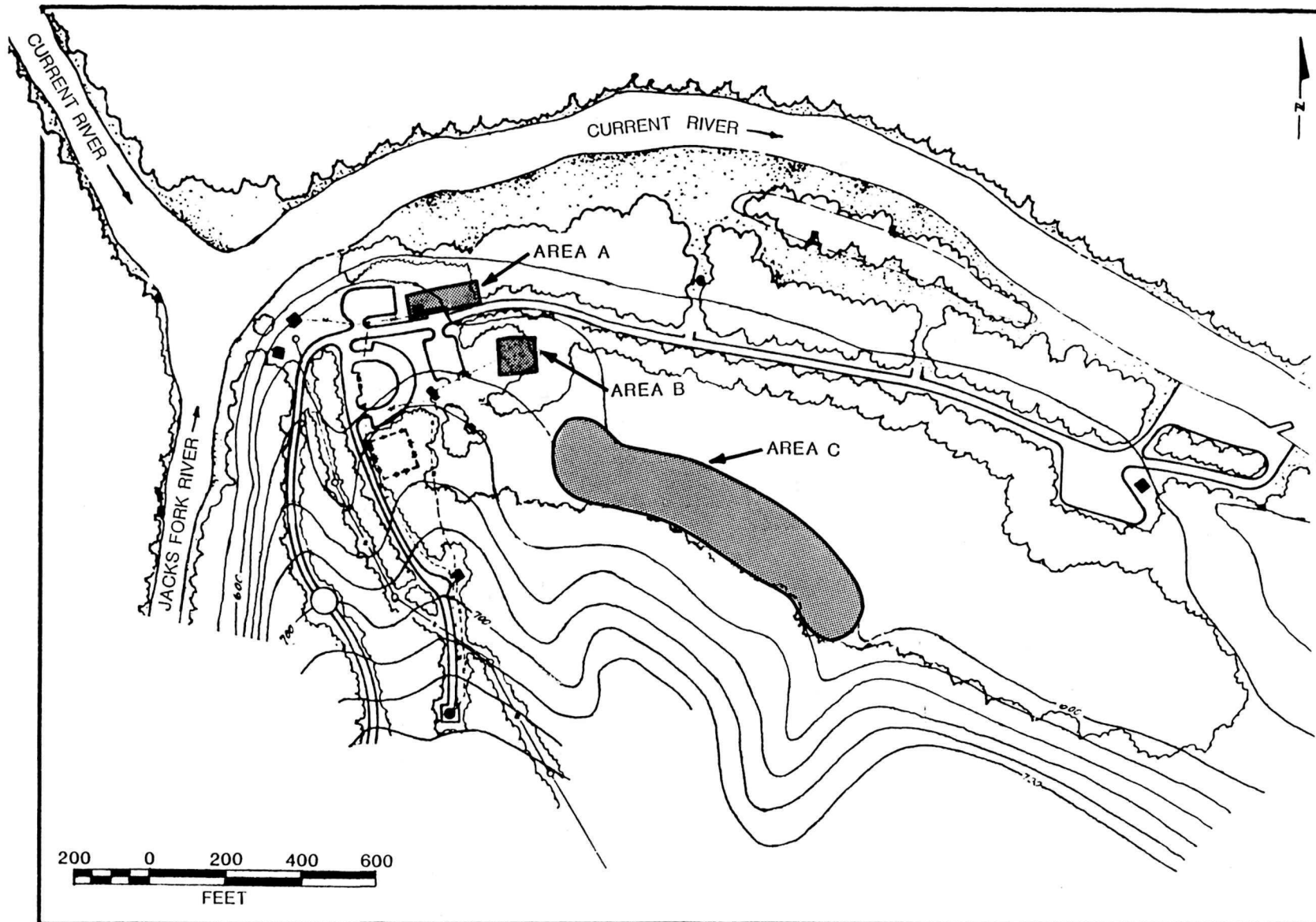


Figure 4. Location of Areas A, B and C at 23SH101

PROJECT GOALS

The purpose of the fieldwork was to conduct data recovery investigations in the area of the proposed alternative leach field (Area B). After significant cultural deposits were encountered in Area B, NPS modified the project to consider an alternative area. Additional work was conducted by HPA/UMAAD in the alternative proposed leach field (Area C).

Past examination of the site by J. Price revealed that it is multi-component in nature. Price has recovered Middle and Late Archaic artifacts from 23SH101. The Alan Banks collection (obtained from this site and from the nearby 23SH49) was photographed by J. Price in 1983 and includes early lanceolate points that are either Paleo-Indian or Early Archaic in origin, as well as Middle Archaic Jakie points, several large Late Archaic stemmed and corner notched points, small dart points (possibly Early and Middle Woodland) and several small Emergent Mississippian arrow points. Mr. Banks also allowed HPA to examine his collection from the site. The specimens suggest an early occupation at the site (Paleo-Indian and/or Early Archaic), as well as a Middle Archaic and Late Archaic components, a Early and/or Middle Woodland component(s) and an Emergent Mississippian component.

An historic component at the site was also identified by Price. Earthenware ceramics and square machine-cut nails dating to the nineteenth century have been found by J. Price and Cynthia R. Price during visits to the site over the past five years. At least two historic components were identified at 23SH101 including one dating from about 1830-1860 based on the nature of the ceramics and the presence of a clearing depicted on a 1841 GLO map of this location (Klinger and Kandare 1987a:6). The presence of a cellar pit and white ironstone ceramics indicates late nineteenth century activities as well.

HPA/UMAAD assessment work at the site in 1986 (Klinger and Kandare 1987a:22-23) identified the presence of a pre-Civil War blacksmith shop in the southeast corner of the proposed leach field (Area A). Although culturally diagnostic prehistoric materials were not recovered either on the surface or in test units excavated in this area, the depth of the deposits in the southeast part of the project area indicated the possibility of stratified deposits. Testing at the proposed comfort station and along the sewer line indicated shallow disturbed deposits in these areas. Posthole testing of an alternative location for the leach field (Area B) indicated cultural deposits were present to a depth of 60 cm in some places (Klinger and Kandare 1987a).

HPA/UMAAD work in areas B and C was guided by basic interests including the culture sequence represented at the site, the age of the components, the nature of the past occupations and site function. Another important question that guided the research was how the data recovered would contribute to a better understanding of Upper Current River Valley and Eastern Ozark Highland region archeology. Guidance was provided by specific research topics identified as being relevant for the area by the Ozark National Scenic Riverways Archaeological Project (ONSRAP) including those relating to Dalton, Late Archaic, Woodland, Mississippi and Historic occupation of the Current Watershed.

Extent and Nature of Dalton Occupation of the Current and Jacks Fork Valleys

While Dalton artifacts are relatively scarce in the ONSR compared to the Ozark Foothills and Mississippi Alluvial Valley to the east (J. Price and J.

Kraker 1975), they are present in sufficient quantities to conclude that human groups occupied the region during the Early Archaic. Most Early Archaic evidence is in the form of Dalton projectile points, adzes and scrapers. Since surface collections from 23SH101 include a Dalton projectile point there is a distinct possibility that deposits dating from the Early Archaic may be present. If such evidence is found, it would provide important new data on the occupation of the region by Dalton peoples and perhaps the kinds of activities associated with their habitation of 23SH101.

Late Archaic Period in the Current and Jacks Fork Valleys

A major objective has been assessing the nature and extent of Late Archaic occupations in the region. The Late Archaic component at 23SH101 should produce lithic material used by the Late Archaic populations. Extensive use of orthoquartzite and rhyolite was common for Late Archaic groups in the region.

Woodland Culture Areas in the Current and Jacks Fork Valleys

At least two Woodland occupations are present in the region and are represented by distinct ceramic types. There is an apparent Early to Middle Woodland occupation represented by the presence of sand tempered Pascola and Barnes pottery. These were replaced by limestone tempered wares in the Upper Current and Jacks Fork valleys and by shell tempered wares in the Middle and Lower Current River Valley. From about A.D. 650 to at least A.D. 1100, limestone tempered Woodland wares were used in the Upper Current River Valley and shell tempered Mississippian wares were common in the Middle and Lower reaches of this drainage. Excavations at Akers, Owls Bend and Shawnee Creek indicate that these wares are coeval.

Development of the Mississippian Lifeway in the Current and Jacks Fork Valleys

Test excavations over the past five years at Owls Bend, the Mouth of Rocky, Gooseneck, Culpepper, Shawnee Creek, Akers, Round Spring and Granite Quarry Cave, as well as examination of private collections and various pedestrian surveys have demonstrated the overwhelming presence of Emergent Mississippi populations in the region as early as A.D. 650 with a continuity in Mississippian lifeways to at least A.D. 1200. These investigations have demonstrated that Mississippian lifeways occurred in the Ozark Highland equally and parallel to those developments in the Mississippi Alluvial Valley -- the so-called heartland of Mississippian culture.

Nineteenth Century Euro-American Occupation of the Current and Jacks Fork Valleys

It is anticipated that data would be found evidencing nineteenth century use of 23SH101. Investigation and analysis has followed the research strategies pursued by Cynthia R. Price in the region including settlement patterns and systems, frontier models of Euro-American settlement and socioeconomic change during the nineteenth century. Data collected from

23SH101 that are relevant to the ongoing research will be applied to these models.

PHYSICAL ENVIRONMENT

A complete review of the natural environment is beyond the scope of this report. A number of detailed descriptions of the natural environment of the Eastern Ozarks and Current River Valley are available (see Born and Chapman 1972:5-17; Garrison et al. 1976:1-14; C. Price 1979c:14-27, 1981a:8-14; Lynott 1981:17-29).

Two Rivers is located in the Ozarks of Shannon County, Missouri on a high colluvial bank overlooking the confluence of the Jacks Fork and Current rivers (Figure 1). The Ozarks are the most conspicuous and extensive relief feature between the Appalachians to the east and the Cordilleras to the west (Steiermark 1963:xvi) and have been described as an elongated dome that extends from the Mississippi River to northern Arkansas and northwestern Oklahoma (Fenneman 1938).

Ozarks geology is dominated by sedimentary rocks deposited during much of the Paleozoic Era when relatively shallow seas often covered most or all of Missouri. The Ozarks have been the subject of repeated uplifts since the Precambrian having risen approximately 5,000 ft (1,524 m) since that time.

Post-depositional uplift and subsequent erosion have exposed the older rocks near the center of the Ozark dome, with progressively younger rocks outcropping around its flanks. Rocks of Canadian (Early Ordovician) age are at or near the surface over much of the Salem Plateau region (Vineyard 1967:17). The Early Ordovician rocks that have been exposed consist primarily of cherty dolomite and sandstone.

Outcrops of Precambrian rhyolite at Cardareva Mountain and in the Rocky Creek area are present in Shannon County (J. Price 1983:362). An outcrop of rhyolite overlooks the confluence of the Jacks Fork and Current rivers directly across the Current River from Two Rivers. Another nearby source of rhyolite is an impressive little canyon about 1.3 km southeast of the site where narrow 35 m high cliffs are present. Surface geology in the project area is represented by Cambrian age Eminence dolomite and Potosi dolomite (K. Anderson 1979). These parent rocks are not only responsible for the distribution and availability of lithic resources in the region but also contribute significantly to the nature of the soil, flora and fauna.

The Ozarks have been discussed in a number of subdivisions, subprovinces, subsections, regions, localities and study units by a variety of investigators. Sometimes the boundaries of these units overlap and in other cases they do not.

Bretz (1965) and Vineyard (1967:13) refer to the Two Rivers area as the Salem Plateau part of the Ozark Highlands. Sauer (1920:61-70) divides the Ozark Highland into eight geographic provinces and includes most of the Jacks Fork and all of the Current in the Courtois Hills province that represents the remnants of a mature, dissected, rolling surface into which streams with a more or less radial drainage pattern have cut deep valleys. Rafferty (1980:13) also includes the Two Rivers with the Courtois Hills. Nelson's (1985:3) study of terrestrial natural communities divided Missouri into six natural divisions with Shannon County included in the Lower Ozark section of the Ozark division.

Miller's (1981:6-7) ecological land classification terrestrial inventory system also calls this region the Lower Ozarks. He defines the Lower Ozarks

Subsection as having been derived from cherty dolomites and sandstones. Much of the area is highly dissected with some small areas of rolling hills and on upland plateaus. Chapman (1975:2-4) subdivides Missouri into his archeological-physiographic regions with Shannon County included with the Southwest Drainage Region. He also subdivided these areas into subregions or stream drainages with Shannon County included as part of the Current-Eleven Point Locality.

Since the 1970s the region became known to archaeologists working in the region as the Eastern Ozark Highland or Eastern Ozarks for short (Smith 1975:8; C. Price 1978c:6, 1979d). It is this distinction that we use throughout this report. In their *Master Plan for Archaeological Resource Protection in Missouri*, Weston and Weichman (1987:Part A) subdivide Missouri into study units based on 26 natural drainage basins and watersheds as delineated by the U.S.G.S. Within this framework, the project area lies within the Current Watershed of the East White study unit (Figure 2).

Specific soil types covering these landforms cannot be determined by the information at hand since there is no county-wide soil survey available for Shannon County. According to a general soils map of Missouri, the Current River Valley is covered with soils belonging to the Hartville-Ashton-Cedargap-Nolin Association. Soils in the immediate vicinity of Two Rivers belong to the Captina-Macedonia-Clarksville Association. These loamy upland soils usually have fragipans or are cherty throughout (Allgood and Persinger 1979). In other parts of Shannon County this association is used for timber, hay and pasture (Gott 1975:3). Bottomland and terrace soils suitable for agriculture are restricted in extent and generally are present in discontinuous tracts in the valley (C. Price 1981a:10). Arable soils, beside being located in isolated patches along the valleys, also occur at the mouths of small tributaries. Broad expanses of arable land in the Upper Current Valley are few and far between (C. Price 1986).

On 3 October 1987 Steve Walls, a technician with the Soil Conservation Service office in Eminence, examined the open excavations at 23SH101. Although not a soil scientist, Mr. Walls indicated that the soil in Area B appeared to be similar an Elsah silt loam or possibly an Ashton silt loam.

Elsah soils are usually dark brown and brown and are well to somewhat excessively drained. The upper 20 inches (51 cm) is normally silt loam and the lower layers are very gravelly silt loams. These soils occur most commonly in the flood plains of narrow valleys. The inherent fertility of this soil is moderate and the soil is usually strongly to medium acidic.

Ashton soils are found on second bottoms and characteristically have a dark brown silt loam surface and a brown moderately heavy subsoil. Permeability is moderate, runoff is slow, natural fertility is medium and the subsoil displays neutral to medium acidity. Both Elsah and Ashton soils if left alone support species of hardwoods, wild herbaceous plants, grasses and legumes.

What types of vegetation were supported by these and other types of soils in the region through time provides important clues to understanding cultural adaptations. Recent palynological investigations conducted in late-Quaternary lacustrine areas in the southeastern Missouri Ozarks by P. A. Delcourt, H. R. Delcourt and Smith (1984:266-278) have shed new light on the glacial to Holocene climatic transition and the change from boreal to temperate vegetation. A sequence of immigration and establishment of temperate tree taxa during the Holocene has been documented. They concluded that the succession in forest dominants began with spruce and oak followed by ash, hornbeam and oak, oak and hickory and finally by oak and shortleaf pine.

The ONSR region has a continental climate characterized by frequent and sometimes extreme weather changes. The summers are often hot and humid, and the winters can have very cold periods. In most years the temperature exceeds 100 degrees for several days in the summer and 0° for several days in the winter. Precipitation averaging more than 45.5 inches (1.1 m) is uniform throughout the year, although spring is the wettest season and autumn is the driest. Snowfall is usually less than 7 inches (17 cm) a year from three or four storms. Severe weather with hail, lightening and strong winds occurs almost every year in the area. Tornadoes are much rarer but have been documented (Wisner 1975:51-52). The last recorded tornado in Shannon County was in the fall of 1984 when a tornado cut a path through the Winona Ranger District of the Mark Twain National Forest (MTNF) destroying a turkey farm on Highway 60 and killing one person.

TERRESTRIAL LANDSCAPE

A useful system providing an overview of major terrestrial landscape types and their individual natural communities has recently been devised for Missouri (Nelson 1985). This system takes into account such features as present status of dominant and characteristic plants in an area, the estimated size of their prehistoric distribution, topography and various natural forces.

Prior to historic settlement Two Rivers was probably a mesic limestone/dolomite forest (Nelson 1985:28) characterized by gentle to moderately steep lower slopes. Soils are moderately well drained with limestone, dolomite or colluvium parent material.

Typical vegetation in this natural community is a mesic mixed deciduous forest with tall (90 ft - 140 ft; 27 m - 43 m) closed tree canopies having a tall well developed (75% - 100% cover) understory of undisturbed areas. Ground cover is characteristically dense (60% - 100%) mixed herbaceous plants with spring ephemerals. Dominant plants include northern red oak (*Quercus rubra*), white oak (*Q. alba*), sugar maple (*Acer sacharum*) and basswood (*Tilia americana*). Other plants include butternut (*Juglans cinerea*), black walnut (*J. nigra*), bladdernut (*Staphylea trifolia*), blue beech (*Carpinus caroliniana*), wahoo (*Euonymus atropurpureus*), elderberry (*Sambucus canadensis*), hop hornbeam (*Ostrya virginiana*), broadleaf goldenrod (*Solidago flexicaulis*), hepatica (*Hepatica nobilis*), false hellebore (*Veratrum woodii*), sedge (*Carex albursina*), wild ginger (*Asarum canadense*), harbinger-of-spring (*Erigenia bulbosa*), maidenhair fern (*Adiantum pedatum*), Virginia snakeroot (*Aristolochia serpentaria*), spikenard (*Aralia racemosa*), waterleaf (*Hydrophyllum* spp.), ginseng (*Panax quinquefolius*) and richweed (*Collinsonia canadensis*).

Another system developed for portions of Missouri is useful for classifying the different features of the landscape and their associated environmental communities. This system was developed by Miller (1981) for use in the MTNF of central and southern Missouri. It is similar in many respects to the classification devised by Nelson (1985) and uses many of the same concepts. This system considers soils, landtype or geomorphology and vegetation in describing a particular area.

Recent cultural resource surveys in the general area have found this system to be useful (Moffat, K. Moore, Conrad, Wagner and J. Moore 1985; Klinger and Kandare 1987a, 1987b, 1987c, 1987d, 1988a, 1988b). The fact that ONSR is surrounded by the forest makes this system very easily adaptable for use in the riverways area. MTNF ranger districts in the immediate area include the Salem District to the north, the Fredericktown District to the

northeast, the Poplar Bluff District to the southeast, the Van Buren and Winona districts to the south, the Willow Springs District to the southwest and the Houston Ranger District to the northwest. Both the general landtype association and the more specific ecological landtype concepts can be adapted to ONSR in general and to Two Rivers in particular.

Miller (1981:8) defines landtype associations (LTA) as large areas of land that are uniform in their surface, subsurface geological materials and features, patterns of soils and natural vegetation. 23SH101 lies within a landtype association called Oak-Pine Breaks (limestone) [OPB(1)]. Although this LTA is not listed by Miller (1981:28-54) as what one would expect in the Lower Ozarks, the OPB(1) LTA appears to best describe the Two Rivers area. Another more obvious anomaly to this system occurs about 1.3 km to the southeast of Two Rivers where there is a rhyolite canyon that is more similar to the St. Francois Subsection than the Lower Ozarks Subsection.

The OPB(1) LTA includes areas having oak-pine natural vegetation, breaks landform and limestone soil-forming materials. Oak-pine natural vegetation is defined as an oak-hickory-pine forest (*Quercus-Carya-Pinus*) that has a medium tall to tall forest of broadleaf deciduous and needleleaf evergreen trees. Dominating this forest are black oak (*Quercus velutina*), white oak (*Quercus alba*), post oak (*Quercus stellata*), hickory (*Carya* spp.) and shortleaf pine (*Pinus echinata*). Other components include northern red oak (*Quercus rubra*), southern red oak (*Quercus falcata*), scarlet oak (*Q. coccinea*), blackjack oak (*Q. marilandica*), shumard oak (*Q. shumardii*), blackgum (*Nyssa sylvatica*), flowering dogwood (*Cornus florida*) and persimmon (*Diospyros virginiana*). Breaks landforms include moderately steep to very steep, highly dissected lands adjacent to major streams. Valleys are deep and narrow with narrow and continuous ridge systems. Local relief is usually between 300 and 450 feet (91 m - 137 m) with maximum slope gradients of less than 30 percent. Limestone soil-forming materials indicate that the dominant soil parent material consists of interbedded cherty dolomitic limestone and sandstone.

Ecological landtypes (ELT) are reoccurring subdivisions of the more general associations. Landform, soils and vegetation are the major criteria used in defining ELT. It appears that 23SH101 is situated on ELT 3. This ELT is defined as being found on high floodplains/low terraces and are associated with Ashton, Secesh, Huntington, Gladden, Razort and Elk soils. ELT 3 supports a mesic bottomland forest. Two Rivers is located on a high terrace/high floodplain with associated Elsay soils.

Another method of characterizing the natural setting employs what are called environmental zones. In using this method the Two Rivers site, being located on a high bank overlooking the confluence of two large streams, is situated at the interface of two environmental zones (C. Price 1981d:11-14). The site encompasses part of the upland (ridge slope) zone and part of the stream and valley (stream terrace, gravel bar and stream) zone. Both would have provided a wide range of resources for human consumption and use.

Associated flora in these zones includes oaks, hickory, butternut, plums, wild strawberry, huckleberry, sumac, sassafras, grapes, grasses, waterlily, watercress, cane, walnut, persimmon, paw-paw, maple, catbrier and cherry. Oaks provided fire wood and the raw materials for mortars. White oaks were used in the construction of fish traps. The bark from white oaks was employed in covering houses. Dye was extracted from red oak bark and skins undergoing tanning were soaked in an infusion of this bark (Swanton 1946:247). Acorns were a commonly used foodstuff (Hilliard 1980). In many parts of the Eastern Woodlands, hickory was used in house frames, arrow shafts, in fishing crails and drags, as fire wood (Swanton 1946:245) and

medicine (Densmore 1928:290). Hickory nuts were also an important food source (Swanton 1946:244). Other parts of the diet of many Indians were plums, wild strawberry, huckleberries, grapes, walnuts, persimmons, cherries and cane seeds. Cane was an important raw material used in making baskets, mats, fish crails, fish traps, spears, flagolets, sieves, cradles, boxes, tubes, fanners, hampers, blowguns, blowgun arrows, rafts, drills and sometimes a section was used to adorn braided hair. Cane was used in beds, torches and later in stockades, fences, litters and arrows (Swanton 1946:244-245). Sassafras wood was used in house frames, fire sticks and sometimes for bows. It was also used to make a deep yellow dye (Swanton 1946:246).

It is interesting to note according to two local herbalists, Mr. Randy Rose and his mother Mrs. Ruby Rose, that many wild plants grow in the general vicinity of Two Rivers that are still in good demand. The Roses suggest that the Two Rivers area in prehistory would have supported a large number of plants, herbs, berries, roots and bark that have medicinal and other uses. Mrs. Rose is now her 60s and has collected herbs all of her life and had learned her craft from her mother who learned from her mother who was a Cherokee Indian.

Fauna in these environmental zones would have included opossum, fox, deer, bear, wolf, mountain lion, squirrel, bobcat, turkey, passenger pigeon, birds, fishes, mussels, turtles, water fowl, raccoon, otter, beaver, muskrat, mink, rabbit, woodchuck and badger. Another important resource associated with these environmental zones was fresh clean water of the Current and Jacks Fork rivers. These rivers provide a perennial source of water which were undoubtedly used for drinking, cooking and bathing. They also provided the occupants of Two Rivers with waterway routes of travel.

CURRENT AND JACKS FORK RIVERS

This part of the Eastern Ozarks is a land of rugged topography with streams flowing swiftly through deeply dissected valleys that are separated by steep and rocky interfluvies and divides. The lower Current River is crossed by one or two major roads (possibly developed over trails used in prehistoric times) that connected the Mississippi River on the east and Arkansas and Texas to the south and west. No pan-regional roads have been identified in the upper Current and in historic times local travel was often conducted by water (C. Price 1986). Both the Jacks Fork and Current River are spring fed perennial streams that are navigable by shallow draft watercraft.

Canoeing, john-boating and tubing on the Current and Jacks Fork rivers are the main focus of much of the tourist industry that this area enjoys. ONSR surveys have shown that of the total number of canoeists on the riverways in a given year, 17% canoe the rivers in the spring, 64% canoe in the summertime, 17% in the fall and 2% canoe in winter. The Current River is navigable for 52.5 mi (84.4 km) upstream from Two Rivers to Montauk State Park. It can be canoed year round as far upriver from the Two Rivers site as Welch Spring and Cave (38.8 mi, 62.4 km). It can be floated downstream for 116.5 mi (187.4 km) where it joins the Black River about 3 mi (4.8 km) east of Pocahontas, Arkansas. The Black River flows into the White River about 3.5 mi (5.6 km) northwest of Newport, Arkansas. The White River then empties into the Arkansas River, a major tributary of the Mississippi. The Current River enters the Western Lowlands of the Mississippi Alluvial Valley at the Missouri-Arkansas state line, about 84.8 mi (136.4 km) downstream from Two Rivers. No sections could properly be termed rapids and at normal water levels it is safe to canoe. From Montauk to Akers the gradient (i.e., the

number of feet per mile that it drops) is 8.7 ft (2.6 m); to the confluence of the Jacks Fork it is 5 ft (1.5 m); to Big Spring it is 3.8 ft (1.2 m); and to Doniphan it is 3.2 ft (1 m) (Hawksley 1981:93-100).

The Jacks Fork River is one of the wildest and most scenic rivers in the Missouri Ozarks. From Two Rivers to Alley Spring (13.6 mi, 21.8 km) it is canoeable all year. Upriver from Alley Spring it is floatable for 31 mi (49.9 km) to the junction of its north and south prongs. The upper section of the river flows through a deep valley or canyon with no bottomlands for the first 25 mi (40.2 km). The average gradient is 7.3 ft (2.2 m). From the Prongs to Highway 17 the gradient is 8.6 ft (2.6 m); to Bunker Hill it is 8 ft (2.4 m); to Alley Spring it is 7 ft (2.1 m); and at Two Rivers it is 6.3 ft (1.9 m).

Flooding of the Two Rivers area is rare but on several occasions in this century (Russell 1986) it has reached the 100 ft (30 m) elevation (Conway 1986). The most recent significant flood was in late 1985. Both rivers rarely freeze because the region experiences mild winters and hot summers.

GEOMORPHIC CONTEXT

Like all streams that drain the Salem Plateau of the Ozark Highlands, the Current River has a very narrow floodplain (averaging less than 300 m wide) bordered by steep valley walls that abruptly rise 60 m or more above the floodplain level. The tributary Hacks Fork Valley is narrower although the relief is comparable. While both streams are shallow at low stage and vertically constraining bedrock is often exposed in riffles in their beds, their channels are relatively free to migrate laterally between valley walls. There is ample evidence from comparative historic period surveys, abandoned channels and swales and other geomorphic features that lateral channel shifting is appreciable and is perhaps the most significant process in the formation of valley landforms.

Sediment load of the streams is primarily responsible for their lateral instability that is classified as inhibited meandering with a characteristic pattern of chute cutoffs in discrete sedimentation zones (Saucier 1983). Bed load of the rivers is naturally gravel (including cobble-sized material) and sand although the present very large amount of gravel being transported by the rivers is an artifact of early historic period erosion triggered by upland forest cutting and clearing. Gravel deposits occur as channel bars and islands with large gravel flats (point bars) being the result of recent stream channel movement and subsequent accretion. Suspended loads are significantly smaller in volume than bed loads and consist of mostly silts and fine sands with some clays. These materials are deposited beyond the active channel during floods and are derived from erosion of the thick upland residual soils that formed over millions of years by weathering of the dolomites, limestones and sandstones.

Landforms in the river valleys consist of a series of fluvial terraces and surfaces that are the products of hydrologic and sedimentologic processes. Although the terraces are discontinuous down the river valleys and are not paired (i.e., not present on both sides of the valley in any given reach), they nevertheless correlate with two discrete floodplain formation episodes. The highest terrace is designated T3 and the lowest is designated T2. The T3 terrace is relatively flat and with elevations of 6 m to 12 m above low water levels. This terrace generally reflects the flattest tracts in the region. The T2 terrace lies 3 m to 6 m above the low water level and often has 3 m or more relief on its surface.

The present floodplain surface (T0 and T1) is hummocky to undulating and lies as high as 3 m above the low water level. The T0 unit represents that part of the floodplain known to have been created by lateral movement of the rivers since the middle nineteenth century. The T1 unit is morphologically similar but represents deposition during an earlier period of unknown duration extending into prehistoric times.

The T3 terrace is a conspicuous bench about 120 m wide that merges with the upland formations south of the Current River. The terrace limit is indistinct on the upland side since the actual contact is obscured by a well developed alluvial apron. This important landform consists of deposits of eroded upland soils that have been laid down when sheet wash from the uplands encounters the flat surface of the terrace. Alluvial apron deposits actually veneer the terrace as illustrated by the progressively shallowing but conspicuous slope that extends from the uplands to the riverward edge of the terrace. The T2 terrace is adjacent to the T3 terrace at a distinctly lower elevation with the two being separated by a conspicuous linear scarp. The T2 terrace increases in width in a downstream direction along the Current River (Figure 5). The T3 terrace surface is undulating but has no discernible slope and is not veneered with alluvial apron deposits.

While no borings are available from Two Rivers, the archeological excavations plus the documented mode of consistent terrace formation as revealed in terraces elsewhere in the region attest that the T3 and T2 terraces are composed of two lithologic units. Both terraces have a basal graveliferous unit that represents rapid deposition of bed load on a bar. The deposition occurred adjacent to the active river channel, mainly during floods, by lateral accretion. Surfaces of the gravel layers are generally flat to gently undulating, sometimes with low, linear ridges oriented primarily parallel to the river channel.

Upper units of both terraces are composed of silty or sandy loams that have accumulated slowly and incrementally as a result of major floods. During floods the entire valleys are usually inundated with a drape of fine sediment left behind as flood waters recede. This primarily vertical accretion process began after the river channel had shifted away and the bar was no longer being reworked on a frequent basis and probably was becoming heavily vegetated.

Thickness of the upper fine-grained unit is a direct function of time and elevation. Once the local setting is such that deposition prevails, accumulation rates initially are relatively high. Surface elevations increase as sediments are added incrementally. As elevations increase, the frequency and duration of inundation decrease, thus the sedimentary increments become thinner and farther apart in time. The upper unit of the T3 terrace at Two Rivers varies from about 0.5 to 1.0 m in thickness whereas it is mostly absent on the T2 terrace.

The upper unit of the T3 terrace actually consists of a mixture of alluvium from the Current River and slope wash (alluvial apron deposits) from the uplands. Although the two types of deposits are not readily distinguishable, especially since they have been mixed by biogenic reworking, the percentage of slope wash should be significantly greater near the upland margin and in the more recent (shallower) part of the unit.

Sedimentation from both erosion of upland soils (slope wash) and flooding on the river are continuing processes. At least the lower (riverward) portions of the T3 terrace are inundated during major floods and some minor deposition has continued into historic times. It is possible that historic period land clearing and agriculture have resulted in proportionately more erosion than deposition because of the slope of the T3 terrace.

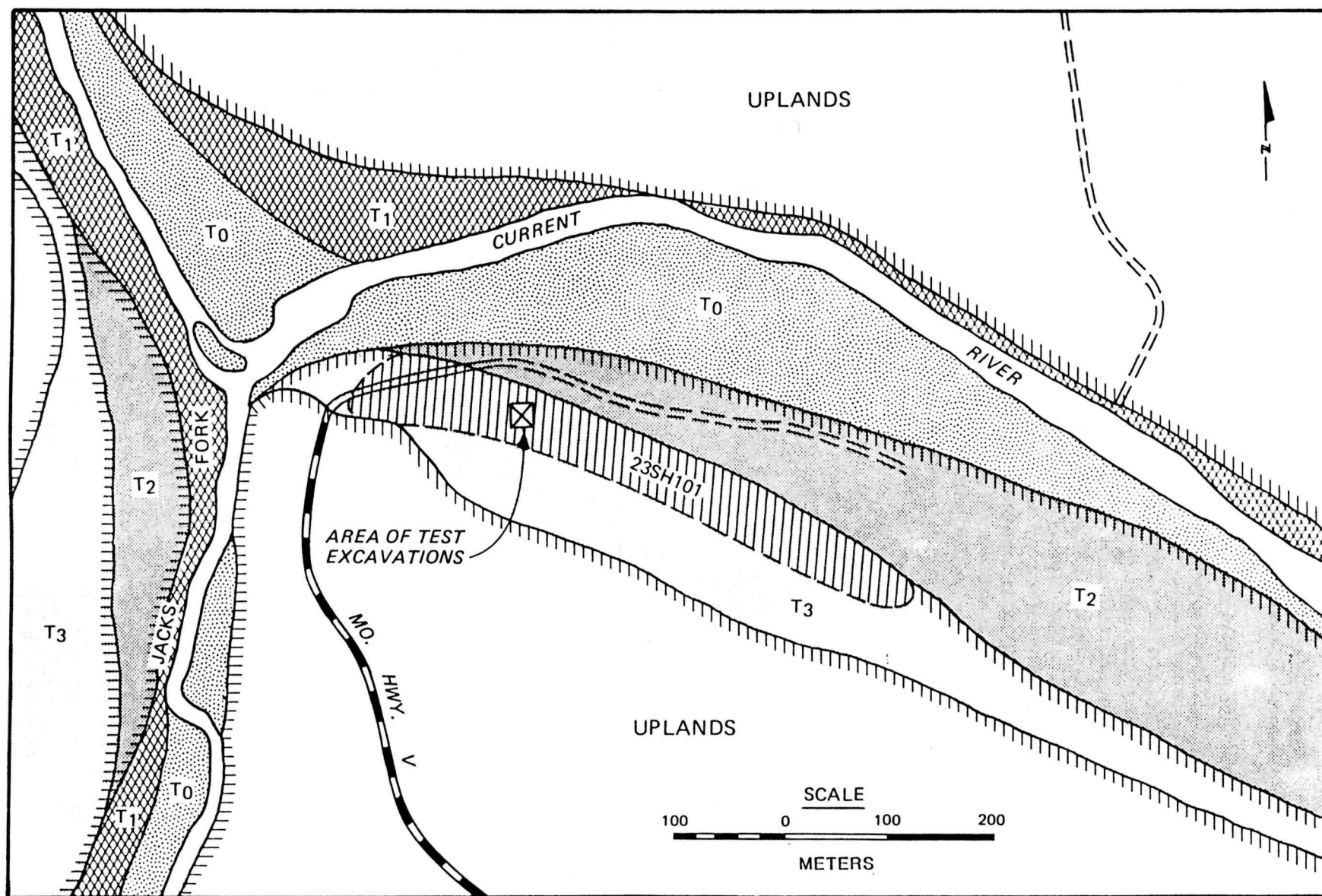


Figure 5. Geomorphic setting of 23SH101

As a result of the approximately 5 years of geomorphological investigations in the ONSR, a reasonably viable process model for landform development has materialized even though a viable, detailed chronology for major events has been elusive. It can be postulated with reasonable confidence how the present landscape evolved but not when individual landforms were created. There are unresolved conflicts between age estimates derived from geomorphic and archeological evidence and from radiocarbon and thermoluminescence dates (Saucier 1986). Observations of a purely geomorphic nature at Two Rivers did not contribute to unraveling the dilemma or to furthering our understanding of man/land relationships although the cultural stratigraphy of the site does help support the basic chronological framework.

The terrace formation process model is tied to changes in stream channel lateral stability as the primary causal mechanism. Stream stability is directly related to variations during the Late Wisconsin and Holocene (i.e., the last 25,000 years) in the frequency and intensity of storminess that produced changes in flood frequency and magnitude (Saucier 1986). Episodes of channel instability, coincident with relatively high precipitation intensity and increased flooding frequency result in times of widespread floodplain reworking and landform destruction. Episodes of channel stability are exactly the opposite.

Application of the model to the vicinity of Two Rivers suggests the following sequence of events. Prior to at least 35,000 years age, an episode of stream instability with a widely shifting channel caused the essentially complete reworking of all valley landforms and alluvial deposits. This probably occurred during the Early Wisconsin glaciation. During that time, the entire valley would have been a rather flat, gravelly surface without terraces. It would have been slightly higher in elevation than the present floodplain since the amount of coarse material in the valley was probably greater than at present. The river channel would have been on the north side of the valley near where it is today.

During a subsequent episode of relative stream stability, most of the comparatively low and young floodplain (a former T1 unit) except for the immediate active channel aggraded very slowly through the addition of fine sediments during infrequent floods. This episode probably lasted 5,000 to 10,000 years resulting in the deposition of a thin layer of silty/sandy alluvium over all but the higher knolls of the older gravelly surface.

Expansion of the Late Wisconsin glaciation between about 15,000 and 25,000 years ago probably was accompanied by increased precipitation that increased flooding and channel instability. During this interval, the river channel migrated laterally, cutting into the older deposits as far south as the escarpment separating the T3 and T2 levels (Figure 5). Deposits south of the escarpment were unaffected and formed the nucleus of the terrace. Since the increased lateral activity of the channel was accompanied by slight down cutting, this was also the beginning of the T3 terrace as a physiographic unit (i.e., the higher T0 bench-like surface adjacent to a lower one that then was the active floodplain).

From about 8,000 to 15,000 years ago there was a return of channel stability and flooding frequency. The active river channel shifted back toward the northern side of the valley and became relatively stable. Parts of what had been the active floodplain during the preceding episode were aggrading through the periodic addition of sediments during floods. This was the beginning of the formation of the T2 terrace. The T3 terrace was also aggrading but at a slower rate than the T2 terrace since it was higher in elevation and was inundated less frequently.

After about 8,000 years ago there was another episode of channel instability that resulted in a slight widening of the active floodplain. This caused erosion of parts of the T2 terrace and establishment of the escarpment at the north edge of the T2 terrace at its approximate present position.

The last several thousand years have been characterized by relative channel stability, although not to the extent of similar preceding episodes. This is due to changes brought about by the inadvertent introduction of large amounts of gravel during the early historic period. Areas designated T1 on Figure 5 date largely to the prehistoric phase of this episode while those designated T0 date to historic times.

As in past episodes of channel stability, the characteristic present sedimentation process is slow vertical accumulation of alluvium. It is important to note, however, that even during times of channel instability when erosion was the dominant valley-wide process there was continued build-up of terraces and inactive floodplain areas because of flooding. This means that the fine-grained upper units on each terrace may exhibit horizons representing varying rates of sedimentation. Significant regionally continuous hiatuses characterized by paleosol formation should not be present. Local incipient paleosols may be present due to peculiar site-specific situations, such as where the valley may be unusually wide and the river channel may have migrated a significant distance away.

It is also important to recognize that the terrace landforms are time-transgressive across appreciable time spans. Terraces along the Current River and Jacks Fork are unlike those on many streams where floodplains are abandoned rather quickly by down cutting streams and thereafter the relict floodplains receive no further sediment from flooding on the rivers. While it is not possible to estimate either precisely or accurately the ages of the terraces at Two Rivers, the lower graveliferous unit of the T3 terrace probably ceased to be an active floodplain surface more than 15,000 years ago. It is highly probable (and the excavations appear to substantiate this) that a combination of fine-grained alluvium and slope wash was already accumulating on the gravelly surface when the site was first occupied as early as 12,000 years ago. At that time, the T2 terrace was probably only beginning to form and the active river channel was about in its present location.

CULTURAL ENVIRONMENT

Table 1 outlines the prehistoric sequence in the project vicinity and is based on information presented by C. Price, J. Price and Spears (1982) along with new data offered by Lynott (1982a), Banks (1984), Lynott et al. (1984) and J. Price (1983, 1984a, 1984b, 1985a, 1985b).

PALEO-INDIAN PERIOD

This period provides the earliest evidence of human habitation of the Current River Valley. Quantities of Clovis points are the only evidence of Paleo-Indian activity thus far recovered in the ONSR. Only one of the four known specimens has provenience data. No specimens of the Folsom complex have been documented (C. Price 1983a:256-258). J. Price (1987:46) has suggested that the Paleo-Indian occupation in the Jacks Fork and Current Rivers was essentially nonexistent.

Table 1
General cultural sequence represented in the Eastern Ozark Highland
(after C. Price, J. Price and Spears 1982:42-43, 73)

Period	Dates	Known Phases	Selected Artifact Associations and Cultural Traits
Paleo-Indian	Pre-8000 B.C.		lanceolate forms, Clovis and Folsom-like, exotic cherts; isolated point finds
Archaic			
Early	8000-5000 B.C.		Dalton, Hardin, Graham Cave Rice-Lobed, lanceolate forms, steep unifacial scrapers, graters, adzes; exotic cherts
Middle	5000-3000 B.C.		Jakie, Table Rock and other notched points; very little information is available
Late	3000-500 B.C.		Large and small stemmed and notched points often crudely made, full grooved axes, winged bannerstones, use of quartzite
Woodland	500 B.C. - ?	Meramec Spring?	Limestone-tempered ceramics often cordmarked; contracting stemmed, stemmed, shallow side-notched points and scallorn-like arrow points
	500 B.C. - ?	Barnes?	Sand-tempered ceramics frequently cordmarked, large conical bottom vessels; contracting stemmed, stemmed and shallow side-notched points, hafted unifacial and retouched bifacial scrapers
	A.D. 750-900	Buckskull?	Shell, sand and limestone-tempered, simple stamped ceramics; small coconut-shaped bowls and flat bottomed cannister-shaped vessels; shallow side-notched points/knives
Mississippi/Woodland Transitional	A.D. 800?	Scatters?	Shell-tempered ceramics; cannister and flower pot shapes; shallow side-notched points/knives
Mississippi Developmental	A.D. 600-1000	Naylor	Shell-tempered ceramics, outflaring rims, no appendages, arrow points often unifacially worked; burial and temple mounds
	A.D. 700-1020	Owls Bend	Shell-tempered ceramics, flat bottomed vessels/ vertical rims, lithics similar to Naylor phase
Expansion	A.D. 1200-1350	Powers	Shell-tempered ceramics, strap-handled jars, bottles, bowls, effigy forms common; scallorn points; elbow pipes; Mill Creek hoes; temple mounds and fortified villages
Late/	A.D. 1450-?		Isolated Nodena points and thin Protohistoric A.D. 1650? triangular arrow points; area possibly used for resource extraction; no settlements or associated materials found
Historic Indian (Shawnee, Delaware)	Late 1700s-1820		Transitory, probably material complex like that of Early American with possible addition of bottle glass scrapers, silver, lead ornaments, and possibly native ceramics
(Osage)	? - 1820		Hunting, gun parts, ornaments
French, Spanish?	? - 1790s		Hunting, trapping, ?
American	1790s - 1830s		Hunter-squatter, permanent agricultural, trader, professional; English earthenware with pearlware predominant (possibly some creamware) with decorated blue transfer printed, annular, mocha, edge-decorated, blue and earthen colored handprinted designs; American-made earthenware and stoneware crocks and bowls; amber French chalcidony gunflints of British style; glass beads (faceted and seed most common); square-cut and hand forged nails.
Early 19th C			Permanent agricultural, trader, lumbering, professional; English earthenware with whiteware predominant, decorated types, multi-color transfer printing, annular, mocha, edge-decorated, sponged, stamped, brightly colored hand-painted, flow blue, undecorated; American-made salt-glazed stoneware crocks; percussion caps with some French chalcidony gun flints of British style; glass beads (faceted and seed), square-cut nails
Mid 19th C	1830s - 1860s		Permanent agricultural, trader, lumbering, professional; English earthenware with whiteware predominant, decorated types, multi-color transfer printing, annular, mocha, edge-decorated, sponged, stamped, brightly colored hand-painted, flow blue, undecorated; American-made salt-glazed stoneware crocks; percussion caps with some French chalcidony gun flints of British style; glass beads (faceted and seed), square-cut nails
Late 19th C	1870 - 1890		Permanent agricultural, lumbering, professional; English and American whiteware ceramics mostly undecorated; red and brown glazed crocks, bitters bottles, fruit jars, square-cut nails
Early 20th C	1890 - 1930		Agricultural, professional, lumbering; American whiteware and decorated ceramics, flow blue, gold rim banding, printed or decal forms with flowers in pale colors, transfer printing, Carnival and Depression glass, bottles, wire nails
Eastern European?	1880 - 1900		Permanent agricultural and professional?; material culture similar to American above. Eastern European settlement clustered in restricted locales.

ARCHAIC PERIOD

This period is defined as a set of adaptations to modern environmental conditions following the end of the Pleistocene (Garrison et al. 1976:16; J. Price and Krakker 1975) and is generally divided into Early, Middle and Late substages based principally on changes in artifact styles and assemblages. The settlement-subsistence systems were generally similar in all three substages with differences in the specific resources exploited or the proportions or seasonality thereof.

Archaic adaptation in the Ozarks was essentially riverine in orientation and represented a changing set of adaptations to the eastern Woodland environment during the Holocene. Archaic occupation has been identified in a wide variety of environmental zones and topographic situations (the range increasing from Early to Late Archaic time) suggesting exploitation of a broad resource base.

Throughout the Archaic populations are assumed to have been organized at the band level of social organization with subsistence based principally on hunting and gathering of non-domesticated resources. Models of Archaic settlement-subsistence systems have been proposed for other parts of the eastern Ozarks (e.g., J. Price and Krakker 1975; Klinger 1975; J. Price, C. Price and Harris 1976:112-119; House 1973; Klinger 1978). These models are generally similar in organizational aspects and are probably applicable to this part of the eastern Ozarks.

The models suggest a seasonal movement of population units throughout an area much like that reported for ethnographically known hunter-gatherer bands. Such groups move in social units of varying size as resources become available, both seasonally and geographically. The total band group comes together for only short periods of time, but is more often split into small social units, depending on the location and availability of specific resources in the area exploited. The nature of the combining and splitting of groups may be expected to differ from locale to locale based on locally specific resource configurations. Such a dispersal and nucleation of the social group in response to resource availability is a highly efficient hunting-gathering adaptation.

Based on such a system of seasonal movement, the models predict the presence of two basic settlement types -- seasonal base camps and limited activity loci. Two kinds of seasonal base camps are predicted with one occupied during summer and fall and the other during winter and spring. The model proposed by Klinger (1978:288-297) predicts that minimal band aggregates occupied the winter-spring base camps and that summer-fall base camps were occupied by nuclear family units. This suggests that the summer-fall base camps may show no midden accumulation and may show evidence of less intensive occupation than the winter-spring base camps. The J. Price and Krakker (1975) model, on the other hand, suggests that both winter-spring and summer-fall base camps were occupied by aggregates of nuclear families and that both should be similar in appearance and content.

The predicted limited activity loci are expected to have been occupied by small social groups, such as one or two nuclear families, or small groups of either males or females, the composition depending on the task at hand. These sites represent loci of resource procurement or processing, or perhaps loci of ceremonial function. The dichotomy between base camps and limited activity loci may be thought of as representing a distinction between sites at which maintenance and extractive activities occurred. A wide range of tasks would have been carried out at base camps, including processing and storage of

resources and tool manufacture and maintenance, while a narrower range of tasks would have been carried out at the limited activity sites. Base camps are expected to be located with respect to a number of considerations including space requirement of the group, occurrence of a number of critical resources in a small area and a source of fresh water and most often are expected to be located in a wide range of environmental zones where specific resources occur (e.g., deer, nuts, lithic materials).

The Early Archaic represents the first cultural adaptation to essentially modern post-Pleistocene environmental conditions. The Dalton complex is the earliest recognized Early Archaic expression in the eastern Ozarks. Dalton settlement-subsistence systems have been more intensively investigated in the eastern Ozark Border region in Ripley and Butler counties where the Ozark Escarpment and Western Lowland of the Mississippi Alluvial Valley meet (J. Price and Krakker 1975).

Site types associated with Dalton settlement there include large, intensively occupied base camps that are most often situated in larger stream valleys along the Escarpment and smaller limited activity loci that are most often characterized by the presence of only a few Dalton projectile points or perhaps a Dalton scraper or graver (J. Price and Krakker 1975). Dalton sites that may be of principally ceremonial function have also been reported from the Arkansas and Missouri lowlands (Morse 1973, 1975; unpublished data on file with the Center for Archaeological Research, Southeast Field Station).

Investigations of Dalton Period settlement in the Ozark Highland interior have not been intensively pursued, but a settlement-subsistence pattern generally similar to that in the Ozark Border may be expected. Base camps would be expected to occur in the larger stream valleys with limited activity loci in both valley and ridge locales.

Dalton projectile points have been recovered from the Current and Eleven Point drainages (J. Price and Krakker 1975:10-12; Jackson 1967:8; Banks 1978:3-4; C. Price 1978b:128-141) with most found in the Current and Eleven Point valleys. An example of a single component Dalton site reported in the Ozarks is 3SE192 in Searcy County, Arkansas (Klinger and Kandare 1984; Lafferty 1984). In most cases though, a few Dalton points were found on multi-component sites. No full tool assemblages (including graters, snub-nosed scrapers and adzes associated with Dalton occupation in the Ozark Border and Western Lowland) have been reported (J. Price and Krakker 1975). Data on Dalton occupation are generally scarce because of limited survey in this part of the Ozarks.

Other Early Archaic projectile points have also been recovered from these drainages and include Hardin Barbed, Searcy, Agate Basin-like, Rice Lobed and Graham Cave Side Notched (Banks 1978). Although the relationship of these forms to the Dalton is not clear, they may represent either temporal, functional or sociocultural variations.

The Middle Archaic is poorly known in the eastern Ozarks. Diagnostic projectile points (such as Jakie and Table Rock Stemmed) have been recovered from the Current River Valley (Banks 1978:9-10) and several, that may be associated with the Middle Archaic, have been recovered from the adjacent Eleven Point Valley (C. Price 1978b:124-128; Jackson 1967:8). No information is available on site location patterning, associated tool assemblages or subsistence.

Investigators in the western Ozarks along the Ozark-Prairie ecotone have suggested a shift in settlement-subsistence systems from the Early to Middle Archaic (Wood and McMillan 1976:224). Evidence from Rodgers Shelter suggests a shift from heavy reliance on hunting deer and other small game in Dalton

times to more diversified resource exploitation focusing on plant processing and hunting of small game with little emphasis on deer during Middle Archaic times (Wood and McMillan 1976:224-225). It is not clear whether this represents a true shift in the subsistence system and may be a response to changing environmental conditions that appear to correspond to Middle Archaic times (Wood and McMillan 1976:226-231) or whether it reflects simply a changing settlement pattern and a change in use of that shelter.

Whether such a shift in either the subsistence or settlement patterns may have also occurred in the eastern Ozarks is not known. The drier climatic conditions would be expected to have produced some changes in the local environment in the eastern Ozarks as well as in the western Ozarks and Mississippi Valley and may have produced an expansion of grassland areas on ridgetops or a change in the availability of specific floral or faunal resources. A change in cultural adaptation would be an expected response.

So little is yet known about the Middle Archaic and about prehistoric environmental conditions in the eastern Ozarks that they can be little more than hypothesized at this point. The problem in understanding the Middle Archaic may in part be due to classification (Garrison et al. 1976:17). Cultural stages and substages have traditionally been defined on the basis of diagnostic artifact styles that are generally constructs of the archeologist. It may be that our subdivision of the Archaic, based on lithic tool types and principally projectile point types that occur over a broad area, may not accurately reflect local adaptive changes. The current trend toward studies of changing adaptive mechanisms in the technological, social and subsistence systems in specific locales should be more productive in understanding the nature of the changes observed in the archeological record.

The Late Archaic is well represented in this part of the eastern Ozarks and numerous sites occupied during this substage have been reported from both the Current and Eleven Point drainages (Garrison et al. 1976; C. Price 1978a, 1978b; Born and Chapman 1972; Cooley and Fuller 1977). There again appears to have been a shift in the settlement-subsistence system. Aquatic resources (principally mussels) that were used very little during preceding substages, were heavily exploited during Late Archaic times (Wood and McMillan 1976:225-226) resulting in large shell midden sites in some locales in the eastern Ozarks (J. Price et al. 1975:50). Wood and McMillan (1976:225-226) also noted a return to heavy reliance on deer hunting.

Cultigens made their first appearance during the Late Archaic with squash and gourd having been found in Late Archaic deposits in the western Ozarks (Chomko and Crawford 1978). In a study of bone collagen extracted from human skeletal remains from archeological sites dating to the Archaic period through Euro-American settlement, evidence was found of the introduction of maize into regional subsistence patterns. Studies of stable carbon isotope ratios of samples from the eastern Ozarks and the Lower Mississippi Alluvial Valley have indicated that human populations living prior to ca A.D. 1000 consumed little or no corn, sugar cane, sorghum and grasses but, after this date, maize represented a significant part of the human diet (Lynott et al. 1986:51-65). Cultigens may have been used in the Late Archaic but their role was minor until the Expansion Mississippi substage.

Our area appears similar to other intensively investigated portions of the eastern Ozarks in patterns of Late Archaic settlement. Early and Middle Archaic occupations seem more restricted in extent when compared with Late Archaic activities. In some locales, there are extensive scatters of cultural materials associated with a Late Archaic occupation along stream terraces and levees and on ridgetops overlooking major stream valleys (C. Price 1978a,

1978b; C. Price, Girard and Harris 1979:151). The Late Archaic is almost always the most intensive and extensive occupation manifested in a given area. The Late Archaic settlement system appears to represent a dispersal of the population into previously little-used environmental zones, perhaps suggesting either a wider seasonal movement and/or population increase.

Although such a dispersal may be real, it may also be that what appears to more extensive use of the eastern Ozarks during Late Archaic times is a result of biases in data. The still unrefined diagnostic artifact sequence may result in the assignment of Woodland and/or Middle Archaic components to a Late Archaic affiliation and thus limited activity loci may not be recognized as fully associated with those other cultural stages.

There was a change in technology associated with the Late Archaic in the high development of the ground stone tool industry (beads, axes, bannerstones, plummets) and an extensive use of quartzite or orthoquartzite for chipped stone tools. The use of quartzite is a widespread phenomenon during this substage. A recent study in the Smoky Mountains of Tennessee indicated a substantial increase in the use of quartzite lithic resources during the Late Archaic (Bass 1978). Not so widespread is the use of rhyolite, that has been found in small amounts on sites with Late Archaic components throughout the Jacks Fork-Current River drainage and along the St. Francis River (Berry et al. 1940; Perttula 1982, 1984; Perttula and J. Price n.d.; C. Price 1980a; C. Price and J. Price 1980; J. Price and C. Price 1981; J. Price, C. Price, Saucier, Perttula 1983; Klinger and Kandare 1986, 1987b). The hill across the river from Two Rivers is said to have rhyolite outcrops (Lewis 1980:78).

WOODLAND PERIOD

The Woodland Period is generally defined by the first widespread use of ceramics and the practice of agriculture in the Southeast. During the Woodland Period is found regional developments with readily distinguishable and broadly localized ceramic traditions.

In the eastern Ozarks, the use of ceramics and the general clustering of large sites in stream valleys during the Woodland Period suggests increasing sedentism in settlement. Most of the larger Woodland sites in the Current Watershed have been reported from the major stream valley and most sites are situated on natural terraces or on the floodplains including what appears to be a lithic workshop and specialized activity area on a small tributary of the Current River (C. Price 1976). Recent excavations at the Culpepper site (23SH14/55) on the Current River have revealed a possible Early to Middle Woodland component (J. Price 1985b).

The Woodland cultural sequence is not well understood in the eastern Ozarks and a temporal sequence has not been satisfactorily established. A number of ceramic types present in the eastern Ozarks are also associated with cultural manifestations in surrounding areas. There is an interesting distribution of ceramic types in southeast Missouri. Sand-tempered ceramics (both plain and cord marked) associated with the Barnes series (Williams 1954; Phillips 1970:94-95) are prevalent in the Western Lowland and eastern Ozark Escarpment area. Both plain and cord-marked limestone-tempered ceramics associated with the Meramec Spring Focus (McMillan 1965) are prevalent in the Central Ozarks in the Meramec and Gasconade drainages. Both types of ceramics have been found in the Current and Eleven Point valleys (C. Price 1978a and 1978b). A clay-tempered ware has been reported by Garrison et al. (1976:32) from the Current River Valley. Clay-tempered ceramics are usually associated with the Mississippi Valley in southeast Missouri as well as with the extreme

eastern Ozark Escarpment area (where they are called Baytown and Korondo, respectively; Phillips 1970:47-57, 97, 137-138). Whether these wares represent chronological or cultural variation is not clear. It appears that this part of the eastern Ozarks was a zone of overlap or was receiving influences from several directions.

Clear temporal markers for the Early, Middle and Late Woodland manifestations are absent. The Early Woodland sand-tempered types such as Pascola (Phillips 1970:877-878) common in Western Lowland and eastern Escarpment area have not been reported from this part of the eastern Ozarks and sherds exhibiting Middle Woodland Hopewell-like influence are extremely rare (Banks 1978:17). There is evidence of Hopewellian influence in both the Missouri and the Mississippi valleys in Missouri (Williams 1954; Phillips 1970:886-887; C. Chapman and E. Chapman 1978:49-55). The predominance of plain and cord-marked wares is most often indicative of Late Woodland activities in the lowlands of southeast Missouri (Phillips 1970:902-904; Williams 1954). Whether these were common in the eastern Ozarks from Early through Late Woodland is not known.

Cultural developments during very Late Woodland times are not well understood. Recent investigations in the Eleven Point Valley have documented a ceramic type not well described in the literature on the eastern Ozarks (C. Price 1978b, 1978c). The ware is limestone and shell-tempered with no surface treatment other than smoothing. Similar sherds were also recovered from the Pigman Mound in the Eleven Point valley (A. Anderson n.d.) but have not been reported from any other eastern Ozarks locale. This artifact group appears most closely associated with either the Buckskull or Scatters phase defined for the eastern Ozark Border area (J. Price, C. Price and Harris 1976:41-46) and may represent a Late Woodland/Early Mississippi transition.

MISSISSIPPI PERIOD

The Mississippi Period is considered to be the highest cultural development in the southeastern United States and is characterized by a subsistence system based on maize agriculture, the use of shell-tempered ceramics and the development of a highly complex social, political and ceremonial system. This widespread development was similar in its expression throughout much of the Eastern Woodlands. Mississippian occupation of the eastern Ozarks appeared early but never expanded or reached the peak development seen in the Mississippi Valley where large fortified towns and temple mound complexes were common.

The earliest Mississippian manifestation in the Current River Valley is termed Developmental (C. Price 1978b, 1978c; A. Anderson n.d.; Lynott 1981, 1982; C. Price, J. Price and Spears 1982; J. Price 1984b, 1985b; Lynott, Monk and Price 1984; Banks 1984). Cultural materials are similar to those found in the northeast Arkansas lowlands (Big Lake Phase in northeastern Arkansas, D. Morse and P. Morse 1977; Hayti Phase in the Little River Lowland, Marshall 1965:76; Naylor Phase in the Western Lowland, J. Price, C. Price and Harris 1976:45-46; J. Price et al. 1975:51-57). The major difference exhibited among these phases is a wide range of experimentation with shell-tempering in the ceramics. Only one site in the eastern Ozarks (Pigman) contains a flat-topped, pyramidal mound and possibly an associated village and midden that is probably associated with an Early Mississippi Period occupation (A. Anderson n.d.; C. Price 1978b, 1978c; J. Price, C. Price and Spears 1982). The settlement-subsistence system was much like that of the Woodland Period with the population dispersed in small farmsteads or hamlets in the major

stream valleys. Limited activity areas were also established in a variety of locales.

The later Expansion Mississippi presents a marked contrast to the earlier cultures. Large sites were no longer commonly situated in the Ozark river valleys, but were confined almost exclusively to the neighboring Mississippi Valley lowlands. A thin scattering of material associated with this time has been found in the Upper Current and may represent short-term use of the highland.

During Late Mississippi times (represented by the Nodena and Armorel phases in the Mississippi Valley in southeast Missouri and northeast Arkansas; Phillips 1970:933-936) the eastern Ozarks appears to have been visited only sporadically. A Nodena point was found at 23SH36 near the mouth of the Jack Fork (Banks 1984:15).

HISTORIC PERIOD

The historic period in the Current River and Jacks Fork valleys has been discussed in detail by C. Price (1981a, 1983a:25-192, 1985a, 1986) and will not be reviewed here (Table 1). The earliest recorded Euro-American settlement in the ONSR area began sometime during the first or second decades of the nineteenth century. Early nineteenth century frontier period sites are numerous, reasonably well preserved and evidence a wide range of functions. The kinds of sites reported within the Upper Current and Jacks Fork valleys include pre-1860 settlements or residences and farms, historic Indian occupations, mills (pre-1870, post-1870 and undated), towns (pre-1870 and post-1870), communities (pre-1870 and post-1870), stores (pre-1870, post-1870 and undated), cemeteries, graves, Civil War associated sites, lumbering industry sites, schools (pre-1870 and post-1870), churches (post-1870), fish traps, copper mining, tannery/distillery, blacksmith shops, a powder mill, a commercial tobacco farm, quarries, tourist/resorts, standing structures, road/ferries and ethnic sites.

The Upper Current drainage was initially an agricultural frontier and a refuge from civilization for less ambitious backwoodsmen (James 1972; Schoolcraft 1821; Bek 1929; Flanders 1979; C. Price 1985b, 1986). The lumber industry quickly found the region to be profitable. Pine lumber was harvested in the Current River Valley on a commercial scale as early as about 1830 and the industry expanded until the Civil War (Sauer 1920). Differences in economic strategies as well as sociocultural homogeneity or heterogeneity still existed between the people inhabiting the Upper Current and the Lower Current throughout the nineteenth century due to the rugged nature of the terrain and limited areas of arable land upstream.

An 1841 GLO plat of T29N, R3W shows "Thompson's Field," a structure and a road located at Two Rivers (Klinger and Kandare 1987a:6). Reference to James Thompson has been found in the 1840 and 1850 U.S. Census records. He also is listed in the 1850 agricultural schedule. Because this area of Shannon County was incorporated within Ripley County before the latter was divided, Thompson is also listed in the Ripley County census of 1840. When this area became part of Shannon County, James Thompson appears in the 1850 census of Shannon County. Thompson was a farmer born in Tennessee who moved to Missouri in 1839 or slightly earlier. His daughter Sarah was 11 years old in 1850 and was born in Missouri (probably at Two Rivers since his farm is on the GLO 1841 plat; Klinger and Kandare 1987a:6). He died after 1855 or 1856 and before 1860 (based on the age of his daughter Adaline in the 1860 census) leaving his wife Rebecca and seven children. She apparently took a job as a

domestic servant to support her family. The Thompson's appear to have been typical subsistence farmers on the Missouri frontier based on the value of land and possessions.

William C. Shedd was born in 1800 in Reading, Vermont and operated a store at the Junction prior to the Civil War. Later he worked in the Provost Marshall's Office in Rolla, Missouri where he died in 1863 (Lewis 1980:78).

Most of the Civil War activity in the vicinity of Two Rivers was associated with both local patrols and scouts (more often than not of Union affiliation) as well as with actions of bushwhackers and local guerrilla bands (Lewis 1978, 1980). There were no major battles, forts, troop headquarters or long-term encampments in the area (C. Price 1983a:110-111). Brigadier General John Davidson marched his division from West Plains to Pilot Knob marched across Shannon County spent the night at the Junction before crossing the Current River on February 8, 1863 (Lewis 1980:78). Two renegades or state militia men were supposedly killed while camping at the Junction and were buried nearby. On August 14, 1863 a skirmish took place near Jacks Fork, Missouri and involved a Union patrol, under the command of Captain Richard Murphy and several Confederates with Union prisoners (U.S. War Department I-22:568-569). The Fiala and Haren (1861) map indicates the Jacks Fork settlement just above the confluence of the Jacks Fork and the Current.

After the war economic pursuits in the area focused on the timber industry. A water powered sawmill was constructed by John Hyer at the confluence around 1880. The mill was later sold to Galbraith and Fry who in turn sold it to the Current River Land and Cattle Company in 1887. Known as the Junction Mill, Galbraith Mill or the Galbraith and Fry Mill, the mill could saw as much as 40,000 feet a day. Our project area is variously known as the Junction, Jacks Fork, Two Rivers and Coot Bay (after Thomas "Coot" Chilton who lived a short distance downstream). Coot Bay has claimed at least two drowning victims (Lewis 1980:76). Beginning in 1913 a 32 foot 25 passenger motor boat regularly ran between Chilton to Coot Bay (Lewis 1980:78). By 1917 a post office was established at the small community of Jacks Fork. The first postmaster was August L. Williams followed by James H. Woodward, Carl R. Talbert, Wave D. Power, A. J. Deatherage, Mrs. Mollie Brawley, Mrs. Bertha Russel, Mrs. Helen K. Easton and Mrs. Lois C. Salisbury. The Jacks Fork Post Office was closed in 1954 (Lewis 1980:76).

The Eminence, MO. 7.5' quadrangle (1965) shows seven occupied buildings at the site of which only two are standing today. A clearing is depicted to the south and east of Highway V. An aerial photograph taken 25 October 1955 shows most of the Two Rivers site as a field. The terrace where areas B and C are located is shown as a large field. A structure (barn?) appears to the south of the northern section of Area C. Just to the north of the structure, in the northern extension of Area C, a shadow in the field indicates the presence of a small cultural improvement such as a covering over a well.

PREVIOUS INVESTIGATIONS

INVESTIGATIONS CONDUCTED IN SHANNON COUNTY

Archeological work in Shannon County began with Fowke's (1922) investigations of four caves. Afterwards, and prior to 1960, work was conducted by amateurs, most notably Leo Anderson (n.d.), A.A. Seamon and Alan Banks (1978, 1984, 1985). A considerable amount of work has been conducted in

the county in recent years by federal agencies such as the Forest Service in the MTNF and the NPS in the ONSR. Cultural resource management studies have also been conducted by local municipalities (Cooley and Gilmore 1977a, 1977b; S. Harris 1978).

Work in the MTNF has included archeological, historical and architectural literature reviews (C. Price 1979a, 1979b, 1979c; C. Price, J. Price and Spears 1982) and a number of cultural resource surveys of mineral exploration areas and exchange tracts reported by Harris (1978), Douthit et al. (1979), Douthit and Kelly (1980), C. Price (1979c, 1980b, 1980c, 1981b, 1981c, 1981d, 1981e, 1981f), J. Price and Harris (1979), J. Price (1979, 1980, 1982), J. Price and C. Price (1980), Perttula and C. Price (1981), Perttula and J. Price (1981), Perttula et al. (1982), C. Price, J. Price and Spears (1982), Purrington (1980a, 1980b, 1985), Moffat et al. (1985) and Klinger and Kandare (1986, 1987b).

Cultural resource management studies conducted in the portion of the ONSR in Shannon County include Chapman (1960), Brown (1969a, 1969b, 1969c), Graham (1972), Born and Chapman (1972), Garrison et al. (1976), Lynott (1981, 1982a, 1982b) and C. Price (1981a). For the past five years the Southwest Missouri State University Center for Archaeological Research has conducted a long-term research endeavor under the supervision of Dr. James E. Price centering around a series of regional research concerns for both the prehistoric and historic past. The aim of the program was to gather basic information about the number, location and nature of archeological resources in the park for NPS management purposes. A literature review of the historical data base was undertaken (C. Price 1983a, 1985c), several historic period sites were tested (C. Price 1984a, 1985d), selected areas were surveyed (C. Price 1983b, 1984b, 1985e), private collections were documented and analyzed (J. Price 1983, 1984a, 1985a), prehistoric sites were tested (J. Price 1984b, 1985b; Lynott, Monk and J. Price 1984) geomorphological studies were conducted (Saucier 1983, 1984, 1985) and palynological studies of Late-Quaternary lacustrine sites were undertaken (P. Delcourt, H. Delcourt and Smith 1984). All of these were done in an effort to study changing land use patterns over time and to tie the cultural history of the Jacks Fork and Current River drainages into general patterns of cultural change in the Ozarks and adjacent areas (J. Price, C. Price, Saucier and Perttula 1983; J. Price, C. Price, Saucier, P. Delcourt, H. Delcourt and Smith 1984; J. Price, C. Price and Saucier 1985).

NPS SURVEY AT 23SH101

Two Rivers was recorded by Dr. Mark Lynott of the Midwest Archeological Center in 1979 (Archaeological Survey of Missouri site form). The site was described by Lynott as a:

Lithic scatter, including 2 dart points and 1 biface. Site is located on terrace which includes picnic ground and campground. Site is located near the confluence of the Current and Jacks Fork River...Part of the site is included in campground, while other parts are located in grassy field. Artifacts exposed in gully areas and eroded areas of campground....A prehistoric site with an historic component. The site covers at least 200 m. x 50 m. on a terrace at the junction of Jacks Fork and Current River. Dart points, bifaces and lithic debris have been observed. The site appears to have been occupied during the Archaic period.

Lynott (ASM site form) noted a prehistoric and an historic component at 23SH101. The cultural affiliation of the prehistoric component was unknown. Site size was estimated to be about 200 m x 50 m. In reporting the results of his survey of ONSR development areas, Lynott (1981:70) notes the following about the Two Rivers area:

Two Rivers - This development includes terrace and floodplain deposits along the Current River at the mouth of the Jacks Fork. Terrace areas are used as a campground and concession facility, and are covered by regularly mowed grass. The lower landing and surrounding hillslopes are more heavily vegetated. Archeological survey of the terrace revealed the presence of a prehistoric site (23SH101) with an historic component. Heavy vegetation inhibited location of a second prehistoric site near the lower landing reported to the survey team by an amateur archeologist. Material collected from this yet to be recorded site indicative of the Early Archaic period.

ONSR LITERATURE REVIEW

C. Price (1983a:51) in her literature review and historical archaeological research of the ONSR makes mention of 23SH101 as "...producing 1830s-1860s materials...recorded at the mouth of the Jacks Fork where Thompson's Field and a house were indicated."

HPA/UMAAD INVESTIGATIONS AT 23SH101

Archeological investigations in areas to be disturbed by a proposed comfort station, sewer line and leach field (Area A) were conducted by HPA/UMAAD at Two Rivers in August and early September 1986 for NPS (Order No. PX-6115-6-0138; Klinger and Kandare 1987a). Controlled surface collections were made and five 1 m x 1 m test units were excavated. A private artifact collection of surface finds from the site was also reviewed. Archaic, Woodland and Historic Period were documented in the relatively deep leach field deposits. Deposits were shallow and somewhat disturbed by an existing parking lot in the area of the proposed comfort station and along the proposed sewer line. The site was considered eligible for the National Register and monitoring of the proposed construction by a professional archeologist was recommended along with complete avoidance of the proposed leach field.

Primary activities involved the collection of surface artifacts, the excavation of five 1 m x 1 m test units and 26 posthole tests (Klinger and Kandare 1987a:22 and 24). One test unit was excavated at the comfort station while the other four were excavated in the proposed location of the leach field. Of the 26 posthole test excavated in 1976, 8 were along the proposed sewer line, 6 were along an alternate sewer line route and 12 were in an alternate location of the leach field (Area B). A temporary three inch aluminum datum disk was nailed to a mature walnut tree (20 inches in diameter) in the southeast corner of the picnic area. Test units, posthole tests and surface finds were mapped in relation to the planned construction.

All prehistoric and historic artifacts on the surface of the proposed comfort station, sewer line and leach field (Area A) were plotted and collected. The area of the proposed comfort station was carefully examined. The narrow sewer line corridor was inspected in one transect. Four east-west

transects spaced 5 m apart were walked in the leach field. A general collection was made of artifacts exposed in the gravel road and elsewhere on the site. A general collection of prehistoric artifacts found at the site by a local collector was also reviewed and a surface examination of areas disturbed by construction activities was conducted but no collections were made.

Five 1 m x 1 m test units were excavated in arbitrary 10 cm levels, with vertical control maintained using a line level and metric tape. Once it was determined that the historic component overlaid the prehistoric component by as much as 30 cm (test unit 1 in the proposed leach field), levels 1 and 2 (0 cm - 20 cm) of test units 3 and 4 were removed and bagged together. The historic component extended to 30 cm in test unit 5 and, to expedite excavation of this unit, the first three levels (0 cm - 30 cm) were removed and the artifacts bagged together (Table 2). The soil proved to be difficult to excavate and screen through the required, inch mesh. Techniques such as shovel skimming or troweling could not be used with a pick-mattock and round point shovel needed to break up the soil. Plan views and profiles were drawn as needed but included at least one profile of each test unit after excavation was completed (Klinger and Kandare 1987a:24).

Test unit 2 was excavated at the comfort station in four levels to 30 cm. Level "0" was noted since the datum stake at the northeast corner was down slope and much lower than the southeast and southwest corners. At the base of the excavation unit a posthole was excavated an additional 20 cm.

At the proposed location of the leach field (Area A) were excavated test units 1, 3, 4 and 5 (Klinger and Kandare 1987a:22 and 24). Test unit 1 was excavated in 12 levels to 125 cm (level 12 extended from 110 cm - 125 cm). At the base of the last level a posthole test was excavated an additional 20 cm. Test unit 3 was excavated in seven levels (levels 1 and 2 were combined) to 70 cm. Level 7 was stepped down to 1 m x 50 cm in the northern half and at its base was excavated a posthole to 80 cm. Test unit 4 was excavated in five levels (levels 1 and 2 were combined) to 50 cm in the undisturbed southern half of the unit (47 cm in the disturbed northern half). A posthole test was then excavated to 70 cm. Test unit 5 was excavated in seven levels (levels 1, 2 and 3 were combined) to 70 cm where a posthole test was excavated to 80 cm. During the November 1986 fieldwork, 18 posthole tests were generally excavated in 20 cm levels to depths ranging from 45 cm to 60 cm. The 12 tests placed in the alternate leach field (Area B) were excavated on a 10 m grid while the 6 placed along the pipeline corridor were excavated at 10 m intervals.

Comfort Station

No cultural material was observed on the surface of the proposed comfort station area. Excavated materials were recovered only from the first 10 cm level in the test unit. The first level was designated as level 0 because the northeast corner of the unit where the datum was located was lower than the southern half (Klinger and Kandare 1987a:24). An interior flake and a piece of shatter were recovered from this level along with a cigarette filter, historic charcoal and two pieces of coal. Level 1 yielded three interior flakes, three pieces of shatter and one piece of glass. No diagnostic prehistoric tools, ceramics or features were found and no cultural stratigraphy was noted. Below a 1 cm thick brown to dark brown (10YR4/3) silt loam humus layer, the soil was a yellowish brown (10YR5/4) very gravely silt loam that sloped to the north and graded into a yellowish brown (10YR5/6) very gravely silt loam about 17 cm below the surface.

Table 2
Artifacts recovered at 23SH101 by HPA/UMAD in 1986
(After Klinger and Kandare 1986a)

Artifact Type	Count
<u>Prehistoric Artifacts</u>	
Cores	10
Primary Decort. Flakes	75
Secondary Decort. Flakes	293
Interior Flakes	952
Retouch Flakes	202
Modified Flakes	3
Shatter	437
Fire-Cracked Rock	33
Bifaces	30
Dart Points	16
Hammerstone	1
Tested Cobble	3
Subtotal	2064
<u>Historic Artifacts</u>	
Bottle Glass, Clear	14
Bottle Glass, Green	3
Bottle Glass, Amber	2
Whiteware, Plain	22
Whiteware, Transfer Print	2
Whiteware, Blue Shell Edge	1
Red Granite	1
Earthenware	5
Window Glass	2
Metal, Square nail	49
Metal, forged	46
Metal, Aluminum	3
Metal, Misc.	18
Nut frag.	3
Slag	1
Mortar	4
Coal	2
Cinders	25
Charcoal	26
Faunal	8
Plastic or Rubber	4
Asphalt	2
Cigarette Filter	1
Subtotal	244
Total	2308

Sewer Line

The proposed sewer line extends generally north from the proposed comfort station through the parking lot to the proposed leach field in the present picnic area (Klinger and Kandare 1987a:22; Table 2).

A fragment of transfer printed whiteware was collected from the surface of the narrow corridor of the proposed sewer line as redefined by Mr. Mike Hunter on 14 August 1986 (Klinger and Kandare 1987a:22). A dart point fragment found in the parking lot by a park visitor was in the vicinity of the proposed sewer line. Eight posthole tests were excavated along the sewer line route (Klinger and Kandare 1987a:22). Four of these were spaced 40 ft (12.2 m) apart, beginning near the proposed comfort station and ending near the proposed leach field. Four other tests were excavated 10 ft (3 m) apart in an area where J. Price had noted a suspicious scatter of square nails, nineteenth century ceramics and glass that suggested the possibility of an historic structure. The 1841 GLO plat shows a building located in the vicinity of the scatter (Klinger and Kandare 1987a:6). The shallow and gravely nature of the soils in the parking lot prohibited deep posthole testing. The depth of these posthole tests ranged from 30 cm to 70 cm.

Posthole test 1 yielded one transfer printed piece of whiteware along with an interior flake and a piece of shatter in the first 20 cm. Posthole test 2 contained a retouch flake and two pieces of shatter in the first 10 cm and a piece of shatter at 20 cm - 25 cm below the surface. Two pieces of shatter and a primary decortication flake were recovered 10 cm - 30 cm and an interior flake and a piece of shatter were recovered 30 cm - 50 cm in posthole test 3. An interior flake and a piece of shatter was found in the first 20 cm of posthole test 4 and at 25 cm - 35 cm a piece of shatter was recovered.

Two interior flakes were found in the first 30 cm, an interior flake, two pieces of shatter and a biface fragment were recovered from 30 cm - 50 cm and an interior flake was found 50 cm - 60 cm below the surface in posthole test 5. Posthole test 6 yielded a piece of shatter between 0 cm - 30 cm below the surface. Posthole test 7 contained two interior flakes and two pieces of shatter in the first 20 cm and one interior flake between 20 cm - 50 cm. A small fragment of an unidentifiable dart point was recovered from the first 20 cm in posthole test 8 along with a piece of shatter recovered between 20 cm - 40 cm. No features or other evidence of intact deposits were observed on the surface or detected below the surface as a result of the posthole testing in this area.

Leach Field (Area A)

Four 1 m x 1 m test units (1, 3, 4 and 5) were excavated in the proposed leach field (Klinger and Kandare 1987a:22 and 24; Table 2). This area is presently a picnic ground and includes an existing comfort station located in the southwest corner.

A controlled surface collection of the area was conducted along six east-west transects spaced about 10 ft (3 m) apart. Surface visibility was negligible (0% - 5%) on the grass lawn but fair to excellent (25% - 100%) around picnic tables, grills, pathways and at the bases of trees. Prehistoric artifacts collected include two cores, two primary decortication flakes, 14 secondary decortication flakes, 57 interior flakes, four retouch flakes, 15 pieces of shatter, five bifaces and an adze. All bifaces were piece plotted along with most of the lithic debitage (Klinger and Kandare 1987a:22).

Outside the proposed leach field area were five square nails on the surface of a gravel road near test unit 1 and a metal horse shoe fragment found on the same road where the blacktop pavement ends.

The slight slope leading to the edge of the bench is interrupted by an abrupt step in the extreme northern part of the project area (Klinger and Kandare 1987a:22). This terracing effect appears to be cultural and could represent the remains of an historic roadbed that may have followed the edge of the river bank since many early roads along the Current River usually followed the edges of river banks. The 1841 GLO plat shows a road following the south bank of the Current River north of Thompson's Field with the building shown next to the field (Klinger and Kandare 1987a:6). Test units 1, 3 and 5 were south of the road with test unit 4 placed partially in the roadbed (Klinger and Kandare 1987a:22; Table 2). Each unit contained numerous flakes but very few biface fragments and other tools. Historic material was recovered in all units along with small amounts of charcoal in the upper levels. Faunal material was found in levels 2 and 3 of test unit 1. Several units produced floral remains probably associated with either the modern or historic components.

Test unit 1 was located in the extreme southeast corner of the proposed leach field near a walnut tree. Four strata were identified (Klinger and Kandare 1987a:24). The topsoil was composed of a brown to dark brown (10YR4/3) silt loam with many small pebbles that extended to depths ranging from 35 cm to 37 cm (all of levels 1, 2, 3 and part of level 4). Below the topsoil was a thin stratum of yellowish brown (10YR5/4) silt loam, silty clay or silty clay loam mixed with a few pebbles extending to 49 cm to 53 cm (parts of levels 4, 5 and 6). An abrupt smooth boundary between the topsoil and the second stratum was evident. The third stratum was a very dry, strong brown (7.5YR4/6) clay fragipan with large water rolled cobbles and extended from a depth of 53 cm - 105 cm (levels 7, 8, 9, 10 and parts of 5, 6 and 11). A gradual smooth boundary was observed between this stratum and the stratum above it. Below stratum 3 was a culturally sterile layer of soil containing numerous water rolled gravels.

Historic artifacts were restricted to the topsoil. Historic artifacts comprise 23% of the total including five fragments of clear bottle glass (3%), three fragments of green bottle glass (2%), one piece of amber bottle glass, nine plain whiteware sherds (6%), three earthenware sherds (2%), 43 square nails (28%), 45 pieces of forged metal (30%), one miscellaneous piece of aluminum, 15 pieces of miscellaneous metal (10%), one piece of slag, two pieces of mortar (1%), 25 cinders or "clinkers" (16%), one piece of charcoal, four fragments of unidentified animal bones (2%) and one piece of plastic. One of the miscellaneous metal was a piece of babbitt used in area mills. Two other pieces of miscellaneous metal were shell casings labeled "U.M.C. 32 S&W".

Lithic debitage and broken tools were recovered in levels 1 - 11 (0 - 110 cm). This material included a hammerstone/anvilstone, primary decortication flakes, secondary decortication flakes, interior flakes, retouch flakes, broken flakes, shatter, a small number of biface fragments, fire-cracked rock and two projectile point fragments. The projectile point fragments included one side notched dart point fragment and one tip fragment. The siltstone hammerstone/anvilstone was pitted on both sides and weighed 394.1 grams. No prehistoric or historic features were observed in test unit 1. Two pieces of bone were recovered in level 2 and one in level 3.

Most (95%) of the prehistoric artifacts were found the first 80 cm. A single flake was found in the uppermost part of level 10. Approximately 64%

of the prehistoric material was recovered in the topsoil, 12% in stratum 2 and 24% in stratum 3. The lithic material recovered included locally available chert (90%), quartzite (5%), rhyolite (4%) and exotic cherts (1%). Artifacts of locally available chert were found throughout the excavation. Nine of the 10 biface fragments were made from locally available chert (6 in the topsoil and 4 in stratum 3).

One of the bifaces found in the uppermost stratum was made of quartzite. Other quartzite artifacts include eight (24%) interior flakes, six (18%) secondary decortication flakes and 18 (55%) pieces of shatter. Most (76%) of the quartzite debitage was found in the uppermost stratum with decreasing amounts in stratum 2 (15%) and stratum 3 (9%). Most (94%) of the rhyolite artifacts were recovered in the uppermost stratum (levels 3 and 4) with the remaining 6% found in stratum 2 (level 5). Rhyolite artifacts included two primary decortication flakes (10%), four secondary decortication flakes (20%), three interior flakes (15%), one flake with a modified working edge (5%), five retouch flakes (25%) and five pieces of shatter (25%). Artifacts made from exotic material included one retouch flake of Pitkin chert, one retouch flake and a piece of shatter of some other nonlocal black chert and a secondary decortication flake of oolitic chert (level 4). The flake of Pitkin chert was recovered from level 8 in stratum 3. The retouch flake and piece of shatter of some exotic black chert were found in level 3 of the topsoil.

Test unit 3 was located 65 ft (19.8 m) west of test unit 1, south of the wood steps and 65 ft (19.8 m) south of the wood steps leading to a gravel bar canoe landing. Four strata were identified but test unit 3 did not display the depth of soil development that was observed in test unit 1 (Klinger and Kandare 1987a:24). The uppermost stratum, as in test units 1 and 2, was composed of a brown to dark brown (10YR4/3) silt loam that extended to a depth of 18 cm to 20 cm below the surface (level 1 and nearly all of level 2). Widely scattered flecks of charcoal were observed within the matrix. The boundary between this stratum and the next was smooth and abrupt. Underlying the topsoil was a moist brown to dark brown (7.5YR4/4) silt loam that extended to a depth of 33 cm to 34 cm below the surface (level 3, part of level 4 and a very small part of level 2). The fragipan was composed of an extremely dry strong brown (7.5YR4/6) silt clay that extended to a depth varying between 65 cm and 68 cm (levels 5 and 6 and parts of 4 and 7). Below the fragipan was the culturally sterile gravely stratum identified as a strong brown (7.5YR4/6) silty clay with a high percentage of water rolled gravels in the matrix (part of level 7). At the base of level 7 was excavated a posthole test to 80 cm. No cultural features were observed although two apparent rodent burrows were noted in the uppermost part of the fragipan.

Historic artifacts in this test unit were restricted to levels 1 and 2 and suggest domestic activities. Items included three fragments of clear bottle glass (12%), one fragment of clear window glass (4%), seven plain whiteware sherds (27%), one blue shell edge whiteware sherd (4%), two earthenware sherds (8%), one nut fragment (4%), five pieces of charcoal (18%), four fragments of unidentified animal bone (15%) and two pieces of asphalt (8%). Prehistoric artifacts were found as deep as 65 cm at which point the gravel was encountered. No diagnostic prehistoric artifacts were recovered and no cultural features were observed. Material recovered included eight primary decortication flakes (2%), 95 secondary decortication flakes (23%), 182 interior flakes (45%), 57 retouch flakes (14%), 56 pieces of shatter (14%), four fire-cracked rocks (1%), four biface fragments (1%) and one tested cobble.

Thirteen (3%) of the recovered lithic artifacts were of nonlocally available chert. Eight were quartzite (62%), three rhyolite (22%), one Pitkin chert (8%) and one oolitic chert (8%). The quartzite items included a biface fragment (12.5%), six interior flakes (75%) and a secondary decortication flake (12.5%) all of which were found in the first three levels. The oolitic chert interior flake was recovered in the top soil. The Pitkin chert retouch flake was found in level 6 near the bottom of the fragipan.

Test Unit 4 was situated in the north central part of the proposed leach field. It was partly located on the possible historic road and encompassed the step-like slope that leads down to it. During the excavation a disturbance within the northern part of the unit was observed. At a depth of 40 cm - 50 cm was encountered a 4+ inch metal pipe in the extreme northern part of the unit. Four strata were identified in the undisturbed part of the test unit (Klinger and Kandare 1987a:24).

The topsoil was composed of a dark brown (10YR3/3) to dark yellowish brown (7.5YR4/4) silt loam that extended to 25 cm to 33 cm below surface. It was not observed in any of the other units and may represent a disturbed matrix. A gradual smooth boundary separated this stratum from the following brown to dark brown (7.5YR4/4) silty clay loam and extended to between 50 cm and 56 cm below surface. A similar stratum was recorded in test unit 3 as overlying the fragipan. The excavated posthole test at the base of level 5 found that the very dry strong brown (7.5YR4/6) silty clay fragipan was not as thick here as it was in test units 1 and 3. The posthole test also revealed that (as in the other units excavated in the leach field) the fragipan overlaid a strong brown (7.5YR4/6) silty clay with a high percentage of water rolled gravels.

Historic artifacts recovered include one fragment of clear bottle glass, one fragment of amber bottle glass, three plain whiteware sherds, one earthenware sherd, one fragment of clear window glass, a forged iron hammer head similar to those used by blacksmiths, a piece of miscellaneous aluminum, a piece of miscellaneous metal, two nut fragments, two pieces of mortar, 11 pieces of charcoal, four fragments of unidentified animal bone and three small pieces of rubber and plastic.

Lithic artifacts included five cores (1%), 20 primary decortication flakes (5%), 48 secondary decortication flakes (12%), 194 interior flakes (48%), 35 retouch flakes (9%), one flake with a modified working edge (less than 1%), 99 pieces of shatter (24%), four fragments of fire-cracked rock (1%), one biface fragment and a basal fragment of one straight stemmed dart point. Five percent of the lithics were of rhyolite, 5% were quartzite, less than 1% were oolitic chert with the remainder being of locally available chert. The rhyolite artifacts include one retouch flake, 11 interior flakes, six pieces of shatter and one biface fragment. The quartzite artifacts include two primary decortication flakes, one secondary decortication flake, seven interior flakes, one retouch flake and seven pieces of shatter. An interior flake and two cores were made from oolitic chert.

Test unit 5 was located in the northeast part of the proposed leach field. The three natural strata in this unit were unlike that observed in the three units excavated in the picnic area (Klinger and Kandare 1987a:24).

The topsoil consisted of a yellowish brown (10YR5/6) loamy silt or silt loam that extended to 51 cm below surface (levels 1, 2, 3, 4, 5 and only the extreme uppermost part of level 6) and was similar to that observed in the third stratum in test unit 2 except that it had few pebbles and was very deep. This stratum had a relatively high percentage of gravel near the surface but was near enough to the existing comfort station that this was probably the

result of maintenance activity. The topsoil overlaid a 16 cm strong brown (7.5YR5/6) silty clay fragipan that in turn was over a strong brown (7.5YR5/6) culturally sterile silty clay mixed with water rolled pebbles. Boundaries between all strata were abrupt and smooth.

Historic artifacts constituted less than 1% of the assemblage and were restricted to the first three levels in the upper part of the topsoil. Items included one fragment of clear bottle glass (6%), one plain whiteware sherd (6%), one angular fragment of red granite (6%), one .22 caliber short shell casing (6%) and 13 pieces of charcoal (76%).

Lithic artifacts were found in the topsoil and fragipan but were absent in the gravely stratum and included 11 primary decortication flakes (3%), 28 secondary decortication flakes (8%), 213 interior flakes (60%), 42 retouch flakes (12%), 57 pieces of shatter (16%), one biface fragment and one tested cobble. Most of the material (85%) was of locally available chert with the remainder of rhyolite and quartzite. Rhyolite artifacts included five secondary decortication flakes, 18 interior flakes, two retouch flakes, four pieces of shatter and one biface fragment. Quartzite artifacts included 16 interior flakes, three retouch flakes and two pieces of shatter.

Alternative Leach Field (Area B)

Posthole testing in 1986 concentrated on the alternate 20 m x 40 m leach field (Area B) and a 60 m long pipeline connecting it with the comfort station. Twelve tests were placed in a 10 m grid over the leach field and 6 more were excavated at 10 m intervals along the pipeline. All but four (10, 11, 12 and 16) were positive (Klinger and Kandare 1987a:23; Table 2). The positive tests are located in the southwest corner of the alternate leach field. Tests 17 and 18 contained artifacts to 40 cm and tests 9, 13, 14 and 20 yielded materials to 60 cm. One artifact was recovered at 55 cm below the surface in test 19 although a lack of stratigraphy in this unit suggested some type of disturbance. The deepest deposits in this part of the site are located in the northern and eastern parts of the alternate leach field. Cultural deposits elsewhere are shallow or entirely absent.

Collection Study

HPA was able to obtain a collection of lithic artifacts from a private collector who operates the Two River Canoe Rental, Inc. at Two Rivers. On a number of occasions Mrs. Darlene Devall collected prehistoric artifacts exposed on the surface at the site. Most were found near a trench excavated to repair a water line between her store and the existing comfort station. She found other items on the surface of the gravel road, in the cut banks beside it, from a small garden near the store and from the gravel bar below the picnic area. The Devall collection includes 13 dart points, 4 bifaces, a modified flake and an interior flake (Table 2).

Mrs. Devall gave the field crew her small collection and provided them with as much information on the provenience of the items as she was able to recall. The items had been kept in a container with specimens from at least one other site that is located on private property well outside the boundaries of the ONSR. Each item from the container was individually examined by Mrs. Devall and separated according to site. The material identified by her to be from 23SH101 was about 25% of her collection. Items about which she was unsure were not included in our review. All of the artifacts appear to have been made from locally available chert.

Only four of the 13 dart points are complete specimens. The rest are nearly whole except for two fragments that are too incomplete to classify. The most interesting projectile point/knife in the collection is a Dalton Serrated (Chapman 1975:245) diagnostic of the Hunter-Forager tradition in the Dalton Period and date to about 8500 B.C. - 6000 B.C. Goodyear (1982:382-395) has recently argued that the more correct chronological position of the Dalton horizon based on radiocarbon dates from Rodgers Shelter is the interval from 10,500 to 9,900 B.P. (8500 B.C. - 7900 B.C.). This specimen has a parallel pointed eared base, a parallel blade with beveled edges and an acute distal end. It is fluted on both sides with removal of three long flakes from one side to create the flute. The specimen measures 4.2 cm long x 2 cm wide x .5 cm thick and is plano-convex in cross section.

The Devall collection includes three Rice Side Notched points that according to Perino (1985:323; Marshall 1958) date to the Late Hopewell-Early Woodland period (A.D. 400 - A.D. 600). The first specimen has one shallow side notch with an expanded stem base. The stem and the base edge are incurvate. The blade is convex with rounded shoulders and a round distal end. Both blade edges are beveled. The specimen measures 3.2 cm long x 2.7 cm wide x .9 cm thick and is plano-convex in cross section. The second Rice Side Notched point is water worn, has shallow side notches, a slightly expanded stem, a straight basal edge and a resharpened tip. It may well be one of the specimens that Ms. Devall collected from the surface of the gravel bar and may represent a redeposited artifact. This artifact measures 3.5 cm long x 3 cm wide x 1 cm thick and is plano-convex in cross section. The third Rice Side Notched point displays only one a shallow side notch, has tapered shoulders, an expanded stem and a straight basal edge. The blade is asymmetrical with one excurvate and one straight edge. The tip of the point is missing. This artifact measures 5.7 cm long x 3 cm wide x .9 cm thick and is plano-convex in cross section.

A large fragment of a side notched, expanding stem point with a ground basal edge is also in the collection. The specimen is made of very poor quality chert, exhibits evidence of having been water rolled and probably is one of the redeposited artifacts collected from the surface of the gravel bar. This specimen does not resemble a known type, measures 4.3 cm long x 3 cm wide x 1.2 cm thick and is also plano-convex in cross section. The collection includes a fragment of a contracting stem dart point with a round bottom similar to that observed on Gary Stemmed and Burkett Stemmed points associated with the Forager and Prairie-Forest traditions. These types appear first during the Late Archaic and continue into the Middle Woodland (Chapman 1980:306, 308). Two edges of the biface exhibit impact fractures. The specimen measures 3.5 cm long x 3 cm wide x .8 cm thick and is flattened in cross section. Another dart point in the collection consists of a large fragment of a projectile point/knife with a missing distal end. The water rolled biface was found on the gravel bar below the picnic area and is probably redeposited. This artifact measures 5.3 cm long x 4.1 cm wide x 1.1 cm thick and is biconvex in cross section. No type assignment was attempted.

The Devall collection includes a corner notched point with expanded barbs or shoulders that, although missing its distal end and most of its blade, appears to be a Rice Lobed point. Points of this type first appear during Dalton times, are typical of the Early Archaic and last into the Middle Archaic (Chapman 1975:254) and were an integral part of the Early Archaic component at Rodgers Shelter in the Ozark Highland Region where estimated dates for this type range from 7500 B.C. - 5000 B.C. The specimen displays beveled blade edges and an expanded stem with a straight basal edge. The

fragment measures 4 cm long x 4.6 cm wide x 1 cm thick and is flattened in cross section. Another corner notched point fragment exhibits an expanding stem, a lobed basal edge, ground stem edges and is biconvex in cross section. The fragment measures 3.5 cm long x 3.7 cm x 1.1 cm thick. No type assignment was attempted.

A corner notched artifact in the collection represents a scraper. It is asymmetrical in shape with a very broad distal end and has a base that is excurvate and ground. The biface measures 3.8 cm long x 3.2 cm wide x .9 cm thick and is plano-convex in cross section. Its shape appears to have been the result of extensive resharpener. This specimen does not seem to fit any of the presently known types for the region. Also in the collection is a slender, lanceolate point with a straight base. The stem edge appears to be beveled. The shape of the blade is somewhat recurvate with one edge ground while the other is beveled. The distal end is micronate in shape. The specimen is 6 cm long x 2.5 cm wide x 1 cm thick and is lenticular in cross section. This biface is similar to the Agate Basin Lanceolate type described by Chapman (1975:241-242) as being common to the Middle Archaic. Specimens of this type have been found in Middle Archaic components at Rice Shelter, Rodgers Shelter and at Arnold Research Cave. The last item in the collection is an end/side scraper made from a large flake. Steep retouch is apparent on all three sides with one side displaying a burin spall. Similar scrapers have been reported by Goodyear (1975:49-50) as being part of the Dalton assemblage at the Brand site in northeast Arkansas.

The Devall collection includes a probable Dalton point, three Rice Side notched points, a Gary or Burkett Stemmed point, two Rice Lobed points, an Agate Basin Lanceolate point, a Dalton scraper with a burin spall and two unidentified points. These diagnostics indicate that the site may have been recurrently occupied beginning in the Early Archaic Period up to and including the Middle Woodland Period with most of the activity occurring during the Early and Middle Archaic periods.

Mr. Mack Blackburn of Eminence, Missouri is another collector who was interviewed at the site after we were informed that he had just found a point eroding out of the bank below the Two Rivers Store. It appeared to be a Rice Side Notched point measuring 5.4 cm long x 3.2 cm wide x .9 cm thick and was made of locally available chert. The point was exposed by recent hard rains and that after similar rains in the past he has found numerous prehistoric artifacts on gravel bars downstream from 23SH101. He suspects that they washed up on these gravel bars after eroding out of the bank below the Two Rivers store. Blackburn said that until about five years ago there had been about an acre of land between the store and the confluence of the Jacks Fork and the Current. He says that drastic erosion has carved up this landform. Below the confluence he said was a 30 ft deep hole of water that is now gravel choked and very shallow. Blackburn mentioned that he had helped the previous landowner plant trees in the fields that are now the group camps (including areas B and C). He remembered seeing prehistoric lithic material in the holes dug for planting these trees. Blackburn is convinced that the washed away land contained the richest of the prehistoric archeological deposits from Two Rivers.

Informant Interviews

Mrs. Bertha Russell of Eminence, Missouri is a former owner of the property who was interviewed by HPA/UMAAD on 1 and 2 September 1986. Mr. Doug Conway is a Ranger with ONSR and a neighbor of Mrs. Russell and helped to

arrange the interview.

In 1912 when Mrs. Russell was six years old, her family moved to the community of Jacks Fork. Her father and mother (Ora and Ellan Hunt) rented the land for a few years before buying it. Her father farmed the fields using a horse drawn plow and planted corn, hay and clover in an area east of the present campground and around the present group camps. Her father built a big barn with cedar posts on top of an interfluvium and after discovering that all the waste from the farm animals was going into the Jacks Fork River he tore it down and rebuilt it at the head of a hollow (so that the waste would leach through the field). He told her that Indians had lived on their land because every time he plowed his fields he found "them white rocks."

In one of the fields was an old rock lined well that they cleaned out for their own use. Prior to this they got their drinking water out of the river. They always assumed that the well had been built and used by the people who operated the lumber mill and lived in the camp at Jacks Fork. She knew that there had been a lumber mill and associated saw mill shacks all down the fields to the present day parking lot from stories she had heard when she was small. She was told that water from the well was used to operate a steam engine at the mill. The only mill that she actually knew about in the immediate vicinity was a stave mill. The hand-made ties were rafted down to Chickopee below Van Buren. Wooden ties were piled where Two Rivers rental canoes are now stored.

Another well thought to have been built during the time the mill was operating was located about 15 ft north of the road and about 100 ft west of the first turnoff to the primitive river access. She pointed out the general location of the well but it was otherwise undetectable from the surface. Mrs. Russell was told that the large depression in the southeast corner of the campground at the edge of the parking lot was the cellar of a store that had been there before the Hunts and Russells occupied the land.

Bertha Hunt married a carpenter whose last name was Russell in 1925. In 1927 the Russells bought the property and built a house in the middle of what is now the campgrounds. The wood framed one-story house was built on pylons of concrete and rock, had three bedrooms, a dining room, a kitchen and front and back porches. All of the tall box elders that now shade the campground had been planted by Bertha Hunt. At the edge of the yard, in what is now the southeast part of the campground, they had built a smokehouse and cellar where hogs were butchered and meat was stored. Their privy was located where Highway V crosses the site.

They were instrumental in the construction of Highway V by securing the right-of-way for the road to connect with Highway 106. They then donated the land to the for the original road construction. The Works Progress Administration later upgraded it to a gravel road and much later it was paved from Highway 106 to the campground. Before the highway the only other route was a long wagon road that crossed "the river about six times" between Jacks Fork and Eminence.

She and her husband built six tourist cabins along the edge of the bank. All were constructed on pylon foundations of stacked rocks. Two of the cabins overlooked the Jacks Fork and the other four overlooked the Current. Half were wood frame structures and the others were two and three room log cabins. The first of the log cabins was built in 1935. A three room log cabin stood to the north and just outside the proposed leach field area (Area A) in the vicinity of test unit 4. These cabins did not have running water. Starting at the ditch near the present store, two log cabins and two frame cabins were spaced evenly along the bench. The Russells built their largest cabin that

was a duplex with two bedrooms on each side, a long porch with a shared kitchen and living room in the vicinity of the canoe storage area. The last cabin was situated where the road turns and begins to slope.

In 1935 the Russells also built a log structure in the vicinity of the intersection of the ditch and Highway V. This structure served the Jacks Fork community as a store and post office and Mrs. Russell served as the postmaster for 10 years. The Russells rented john boats and furnished float trips for tourists from Jacks Fork to Van Buren, as well as day trips from Round Spring to Jacks Fork and from Eminence to Jacks Fork. Her husband built his own motor and john boats and always had a john boat tied up on either side of the river as a ferry service for local customers.

Their fields were enclosed with split rail fences. During one flood they watched from the safety of their house as a large section of fence and a haystack washed away. Bertha Russell felt that the flood "was too close for comfort." In her day, the river was farther away from the bank than it is today. Below the present store was an area of rich river bottom that is now gone. All of the buildings constructed by the Russells were torn down and removed soon after the property was acquired by the NPS.

HPA/UMAAD 1987-1988 INVESTIGATIONS IN AREAS B AND C

FIELD AND LABORATORY METHODS

Field methods in Area B included a controlled collection of surface artifacts and the excavation of 70 posthole tests, three 1 m x 2 m test units, a 1 m x 12 m trench and a 4 m x 4 m block. All excavated soil was screened through , inch wire mesh. Soil samples from cultural levels or features were processed at the HPA laboratory using geological screens.

The hard, dry, compact nature of the soil produced some methodological problems involving its removal and screening. Shovel skimming was not possible. Some chunking with the shovel was effective for excavating the matrix although picks and pick-mattocks were found to be more useful. The soil was even harder to dry screen. If the matrix was not first pulverized it would not go through the screen. Even with all of the soil through the screen the task of removing the artifacts was not a simple one since the natural matrix contained a good percentage of naturally occurring chert. The moving of soil from the excavations to the screening area, the pulverizing of the clogs and the almost daily repair of the screens required a support staff of local laborers to assist the archeological field crew. We were also assisted by local amateurs (Alan Banks, Joshua Perry, David Dix and Steve Walls) who volunteered to help and be a part of the investigation.

All artifacts were washed, numbered and placed in museum storage boxes after being brought in from the field. The artifacts were then sorted, counted and each analytical unit assigned a catalog number and bagged separately. The prehistoric materials were sorted into analytical categories established previously (Klinger, Imhoff and Cochran 1983:101-110). Lithics were assigned to appropriate tool types and waste flakes were sorted into categories that reflect a sequence of reduction from raw materials to finished tools. The historic materials were sorted into categories such as bottle glass, ceramics, metal and various kinds of building materials.

Soil samples collected in the field were processed through geological screens. Artifacts recovered from these samples were bagged, sorted and analyzed separately. Charcoal collected from obvious cultural features were submitted for radiocarbon processing.

AREA B SURFACE COLLECTION AND POSTHOLE TESTS

Area B is located in the Group Camp 1 part of Two Rivers. Group Camp 1 is one of two camps south of Highway V and east of the parking lot. Both camps are maintained by the NPS and each has a fire grill, picnic tables, garbage cans and shared chemical toilets.

The direct impact area of leach field construction encompasses an area 20 m (66 ft) x 70 m (230 ft) in Group Camp 1. Attachment 2 of the Statement of Work shows this area to measure 200 ft (61 m) north-south x 60 ft (18 m) east-west. The project area was marked on the ground with wooden stakes and orange flagging tape and appeared different than that shown in Attachment 2 of the Statement of Work.

A meeting with Mr. Mike Hunter, ONSR Maintenance Chief and Dr. Mark Lynott, NPS Supervisory Archeologist from the Midwest Archeological Center, was arranged on 1 September 1987 at Akers Ferry in the ONSR to help resolve these discrepancies. NPS officials determined that the Alternative B project area would consist of two septic fields lying side by side each measuring 90 ft (27.4 m) east-west x 30 ft (9.1 m) north-south separated by a 12 ft (3.7 m) corridor. The total proposed project includes an area measuring 21.6 m north-south x 27.4 m east-west. The exact location of the proposed direct impact area as well as the location of the siphoning box was pointed out by Mr. Hunter.

A detailed drawing of the proposed project area was provided to HPA on 15 September 1987. The size, shape and location of the proposed leach field matched that pointed out to us by Mr. Hunter. The location of the proposed siphoning box is shown in a slightly different location than that shown by Mr. Hunter who indicated that, if constructed, the siphoning box would be where he had shown the field crew.

Only 15 artifacts (all prehistoric) were found on the surface of Area B (Table 3). The low density of artifacts observed and collected in this was due in part to the poor ground surface visibility in this area.

Seventy posthole tests were excavated in Area B with four excavated around the proposed siphoning box, 18 at 5 m intervals around the perimeter of the proposed project area and 48 at 3 m intervals inside the proposed leach field. All but three of the posthole tests were positive. The three culturally sterile tests were at 74N/25E, 59N/16E and 59N/20E. The positive tests produced 563 artifacts including 561 (99%) prehistoric artifacts and 2 (1%) historic artifacts (Table 3). Material was recovered as deep as 80 cm below surface.

A moderate to dense lithic scatter appears to be distributed almost uniformly across the area based on an average of 8 artifacts per positive posthole test and 96% of the posthole tests yielding positive results. Depth of the posthole tests ranged between 25 cm - 85 cm and averaged 60 cm. The depth of each of the posthole tests indicates where the graveliferous subsoil was encountered.

The typical soil profile revealed in the posthole tests reflected a dark yellowish brown (10YR4/4) silt loam plowzone from the surface to 20 cm followed by a brown to dark brown (7.5YR4/4) compact silt loam extending to an average depth of 40 cm, a very dry, very hard, very compact strong brown (7.5YR5/6) silt loam to an average depth of 60 cm where the strong brown (7.5YR4/6) graveliferous silt loam or clay loam was encountered.

This soil profile was not uniform across this area and variations were noted along each of the posthole test lines. The variation in soil

Table 3
Artifacts recovered from investigations at Alternative B, 23SH101

Artifact Type	Surface Lithic type					Posthole tests Lithic type					Test units Lithic type					C R Q E O Ct.				
	C	R	Q	E	O	Ct.	C	R	Q	E	O	Ct.	C	R	Q	E	O	Ct.		
<u>Prehistoric Artifacts</u>																				
Arrow points/fragments						0						0							0	
Bifaces/fragments						0						10						23		23
Bifacial drill frag.						0						0							0	
Bifacial end scraper	1					1						0							0	
Core						0						3						6		6
Dart points/fragments						0						2							0	
Edge-ground cobble						0						0							1	
Fire-cracked rock						0						9	4	1				156	6	236
Flake graver						0						1							0	
Flake knife						0						1						2		2
Flake scraper						0						0							0	
Interior flake	9					9						311	4	9	1			876	16	912
Limestone pebble						0						0							0	
Pitted cobble						1						0							0	
Preform						0						0						1		1
Primary decort. flake						0						13		1				47		47
Retouch flake						0						7						55	1	58
Sec. decort. flake	2					2						83	2	2				282	1	283
Shatter	2					2						96	2					235	2	242
Tested cobble						0						0							0	
Unifacial side scraper						0						0							0	
Unmod. chippable stone						0						0						1		1
Subtotal	14	0	0	0	1	15						536	8	16	0	3		1684	26	1812
<u>Historic Artifacts</u>																				
Cinder																				
Clear bottle glass																				
Fiberglass																				
Misc. metal																			1	
Mortar																				
Plain whiteware																			1	
Plastic																				2
Shell casing																				
Window glass																			1	
Subtotal						0														4
Total						15														1816
<u>Prehistoric Artifacts</u>																				
Arrow points/fragments	1					1						2						3	0	3
Biface/fragments	82	1		1		85						150	2	3	1			265	3	275
Bifacial drill frag.						0						2						2	0	2
Bifacial end scraper	1					1						1						3	0	3
Core	16					16						28						53	0	53
Dart points/fragments	14					14						18	1	1	1			34	1	37
Edge-ground cobble						0						0						0	0	1
Fire-cracked rock	374	9		71		454						440	18	110				979	33	1272
Flake graver						0						0						1	0	1
Flake knife	15					15						4						22	0	23
Flake scraper						0						4						4	0	4
Interior flake	2297	65		54	1	2428						4204	93	97	13			7697	178	8081
Limestone pebble						0						1						0	0	1
Pitted cobble						0						0						0	0	1
Preform	2					2						8		1				11	0	12
Primary decort. flake	173	1		3		179						205	1	4	1			438	2	451
Retouch flake	225	1				227						221		2	1			508	2	516
Sec. decort. flake	890	10		7		912						1520	16	18	8			2777	29	2846
Shatter	533	8		7		559						576	6	8	4			1442	18	1495
Tested cobble						0						4						4	0	4
Unifacial side scraper	1					1						1						2	0	2
Unmod. chippable stone						0						0						1	0	1
Subtotal	1	4624	95	143	2	4894						7388	137	244	2	29		14246	266	15084
<u>Historic Artifacts</u>																				
Cinder																				1
Clear bottle glass																				1
Fiberglass						1														1
Misc. metal						1														14
Mortar																				1
Plain whiteware						3														9
Plastic																				3
Shell casing																				1
Window glass																				6
Subtotal						5														37
Total						4899														15121

stratigraphy observed in the posthole tests probably results from a number of factors including the undulating nature of the graveliferous subsoil. The slope of the land suggests colluvial deposition to be the major soil formation process at work in this part of the site. Variation in the thickness and sometimes the absence of the plowzone is probably related to the slope of the land and erosional forces associated with runoff. This area was planted in crops as early as the first half of the nineteenth century. An 1841 GLO plat of T29N/R3W shows a "Thompson's Field" in the vicinity of Alternative B (Klinger and Kandare 1987a:6) and Bertha Russell said that this area had been used as a hay field. An aerial photograph shows that as late as 1955 Area B was in a field. Local informants indicated that trees were planted in the field (a basin shaped soil anomaly noticed in test unit 67N/18E extending from the plowzone into the subsoil may have been the result of this activity) prior to federal acquisition. The most recent impact that this part of the site has suffered has been from modern campers. Soil compaction in the plowzone in the grassy area of Group Camp 1 contrasted with the looseness of the plowzone soil observed in the wooded portion of Area B. The stepped appearance of the lower portion of the project area combined with the degree of soil compaction and absence of a plowzone in the northwest corner of Area B suggests the possible presence of a former roadbed.

AREA B TEST UNITS

One 1 m x 2 m test unit were excavated in each of the four quadrants of Area B with 76N/18E in the northwest quadrant, 76N/33E in the northeast quadrant, 67N/18E in the southwest quadrant and 64N/33E in the southeast quadrant (Figure 6). The first three were oriented 1 m north-south x 2 m east-west; the fourth was oriented 2 m north-south x 1 m east-west. Test units 76N/18E, 76N/33E and 67N/18E were in the approximate center of each quadrant with 64N/33E (later expanded to a 4 m x 4 m block) placed inside the woods on the edge of a stepped slope. A 1 m x 1 m test unit at 76N/19E was also excavated.

Some 1,816 artifacts were recovered in the test units including 1,812 (99%) prehistoric and four historic artifacts (Table 3) (excluding 64N/33E, the results of which are included in the block excavation). Depth of deposit in test units 76N/18E and 76N/19E was 40 cm, in 67N/18E was 50 cm, in 76N/33E was 60 cm and in 64N/33E was 120 cm.

76N/18E

76N/18E was a 1 m north-south x 2 m east-west unit excavated to a depth of 50 cm (Figure 7). Plowzone in this unit varied between 10 cm - 17 cm thick. Below the plowzone was a strong brown (7.5YR5/6) silt loam that extended to 30 cm - 36 cm below surface. Underlying this was a strong brown (7.5YR4/6) graveliferous silt loam or clay loam.

76N/19E

76N/19E was a 1 m x 1 m test unit located east of 76N/18E resulting in a 1 m north-south x 3 m east-west excavation. This 1 m x 1 m extension was excavated to a depth of 40 cm.

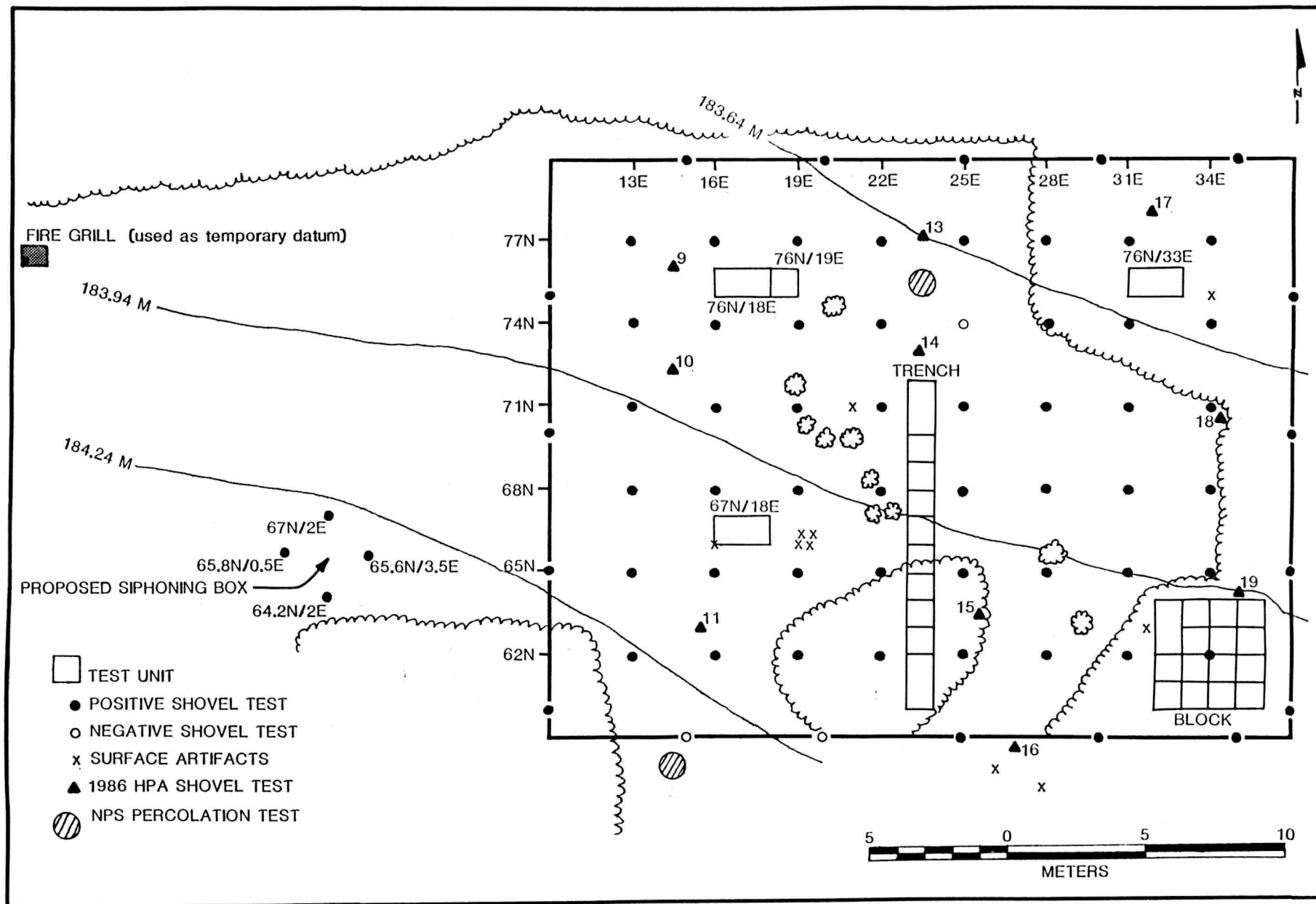


Figure 6. Location of investigations in Area B

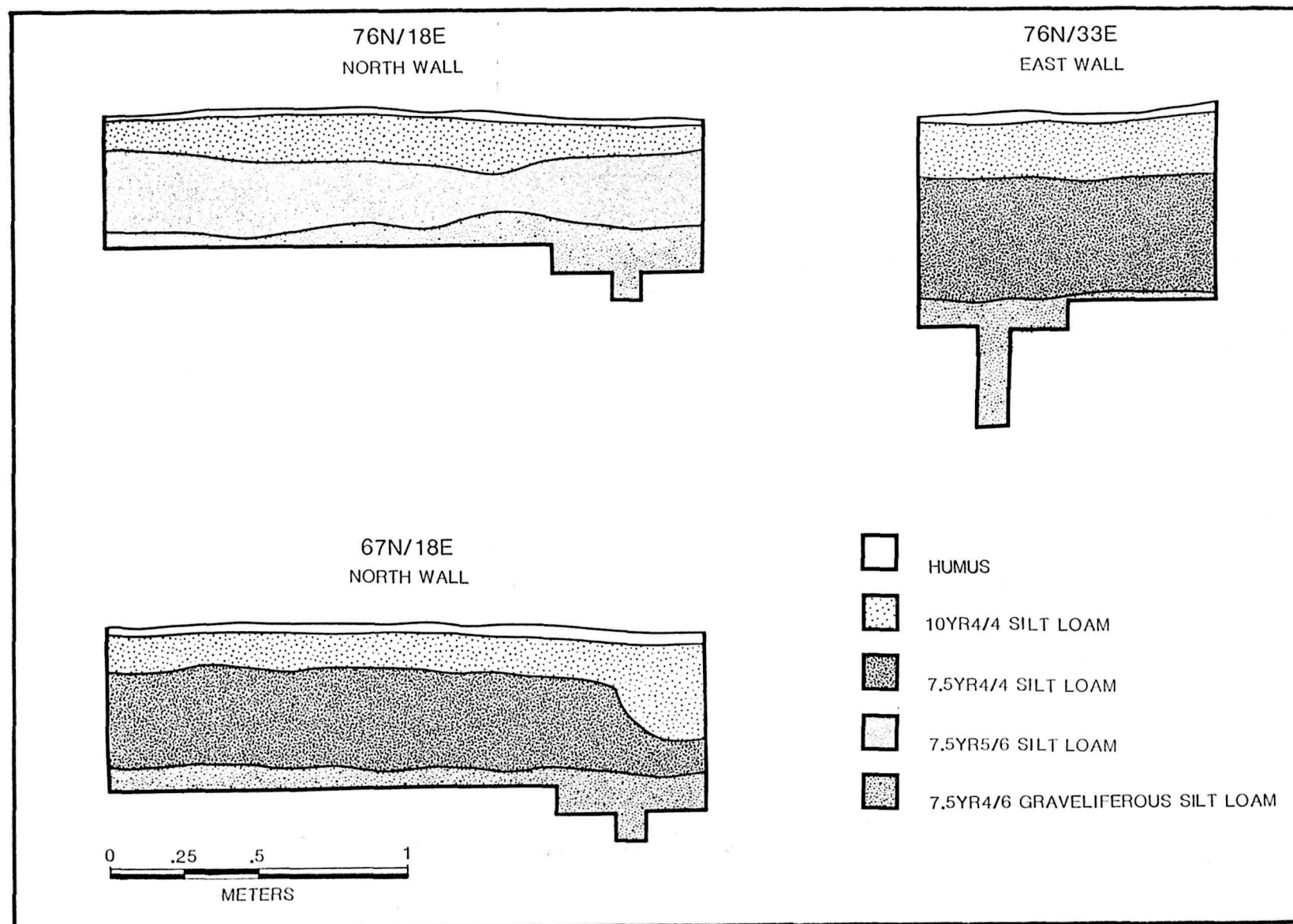


Figure 7. Profiles of test units 76N/18E, 76N/33E and 67N/18E in Area B

76N/33E

76N/33E was a 1 m north-south x 2 m east-west unit (Figure 7). Three strata were observed including a yellowish brown (10YR5/4) or dark yellowish brown (10YR4/4) silt loam plowzone with some naturally occurring gravel that extended to an average depth of 20 cm below surface. Below this was a fragipan-like stratum of a strong brown (7.5YR5/6) dry, hard and compact silt loam with some naturally occurring gravel. The density of gravel increased with depth. The entire unit became dense with gravel at about 55 cm below surface and at 58 cm - 60 cm below surface the soil graded into the underlying graveliferous silt loam or clay loam. The excavation was stepped down at this point to a 50 cm x 50 cm quadrant in the northeast corner of the unit where it was excavated to 70 cm below the surface. A posthole test was then excavated to 102 cm.

67N/18E

67N/18E was a 1 m north-south x 2 m east-west test unit excavated to a depth of 60 cm below surface (Figure 7). The brown to dark brown (10YR4/4) plowzone in this unit averaged 15 cm thick but in the northeast corner of the unit it dipped to 35 cm. The anomaly is a modern disturbance possibly representing a hole dug in association with the tree planting activities mentioned by several informants. Below this was a stratum of strong brown (7.5YR5/6 or 4/6) silt loam that extended from 42 cm - 48 cm. Underlying this was the graveliferous silt or clay loam, at the base of which was excavated a 50 cm x 50 cm block in the northeast corner of the unit followed by a posthole test to 70 cm.

64N/33E

64N/33E was a 2 m north-south x 1 m east-west test unit located in the southeast quadrant located on a level area upslope in the woods in the most promising location for deep cultural deposits in light of results of the posthole testing, the topography and the thick secondary growth that probably discouraged modern campers from disturbing this part of the project area.

The soil profile was found to be different than that observed in the other three units. The dark yellowish brown (10YR4/4) silt loam plowzone was present and extended to depths varying from 17 cm - 30 cm. The undulating boundary between the plowzone and the next stratum suggests that contour plowing may have been practiced. Below this was a brown to dark brown (7.5YR4/4) dry, hard and compact silt loam extending 40 cm - 55 cm. Underlying this was a strong brown (7.5YR5/6) very hard, very dry, very compact silt loam to about 1 m, with the exception of the southern part of the unit where the strong brown (7.5YR5/6) graveliferous silt loam or clay loam was encountered at 40 cm and directly below the brown to dark brown (7.5YR4/4) dry, hard and compact silt loam. Instead of gradually sloping in the direction of the slope, the gravel sloped sharply giving a mounded appearance in the southern part of the unit. The break between the strong brown (7.5YR5/6) very hard, very dry, very compact silt loam and the strong brown (7.5YR4/6) graveliferous silt or clay loam was otherwise horizontal at about 115 cm. Charcoal flecks and small pieces of charcoal were observed in the 30 cm - 40 cm level

AREA B TRENCH

The trench measured 12 m north-south x 1 m east-west and extended from 72N/24E to 60N/24E in the middle of Area B (Figures 6 and 8). At either end of the trench a 2 m north-south x 1 m east-west test unit (72N/24E and 62N/24E) was excavated in 10 cm arbitrary levels below the plowzone that was removed as a natural soil stratum. Between these two units was a series of eight 1 m x 1 m test units (70N/24E, 69N/24E, 68N/24E, 67N/24E, 66N/24E, 65N/24E, 64N/24E and 63N/24E) were excavated in natural soil strata.

A total of 4,889 artifacts were recovered from the trench including 4,884 (99%) prehistoric and five (1%) historic artifacts (Table 3). Material was recovered from the surface to the top of the graveliferous stratum that itself was culturally sterile.

72N/24E

72N/24E was a 2 m north-south x 1 m east-west unit excavated to a depth of 90 cm. The plowzone was a dark yellowish brown (10YR4/4) silt loam that extended to an average depth of 20 cm. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam that subtly graded into a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam. The difference between these two strata was more evident in texture than in color or hue. The lower stratum was much harder to excavate than the upper stratum. An undulating boundary between 40 cm - 45 cm separated the two strata. The distinction was so subtle that it was not recognized during the excavation of this unit and unit 70N/24E. It was only after more of the trench was opened when the difference was identified. The graveliferous subsoil was encountered at 70 cm.

70N/24E

70N/24E was a 1 m x 1 m unit excavated to 80 cm. The plowzone was a dark yellowish brown (10YR4/4) silt loam that extended to an average depth of 20 cm, although it dipped to 35 cm. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam that varied in depth from 32 cm to 45 cm. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam that extended to 70 cm where the graveliferous substratum began.

69N/24E

69N/24E was a 1 m x 1 m unit excavated to 80 cm. The dark yellowish brown (10YR4/4) silt loam plowzone varied in depth between 35 cm in the northern part of the unit to 25 cm in the southern part. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam that was present to about 45 cm where it seemed to grade into a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam. The graveliferous subsoil was encountered at 70 cm.

68N/24E

68N/24E was a 1 m x 1 m unit excavated in to 80 cm. The dark yellowish brown (10YR4/4) silt loam plowzone extended to an average depth of 24 cm below surface. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact

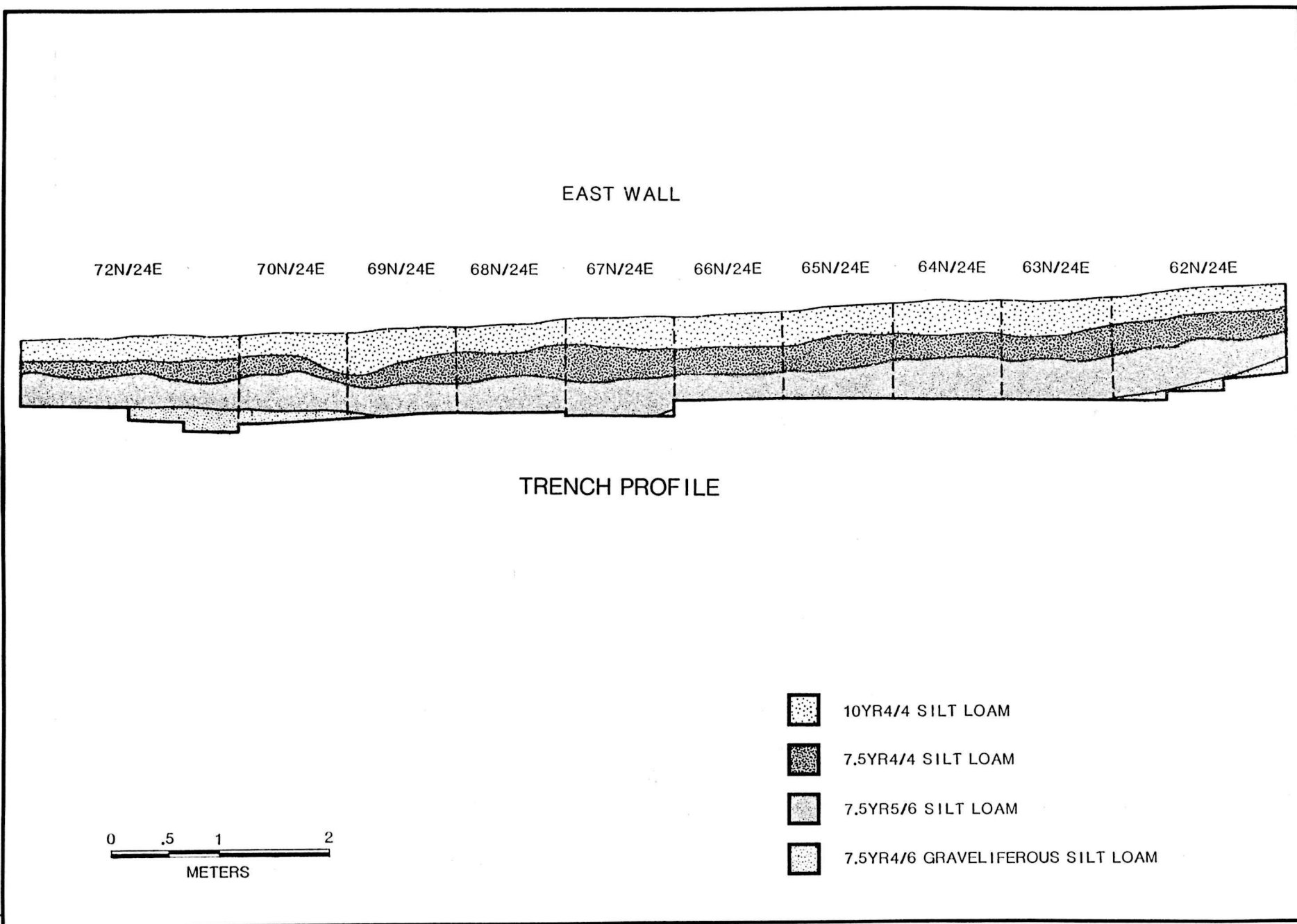


Figure 8. Profiles of the trench in Area B

silt loam that extended to 50 cm where it graded into a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam. The top of the graveliferous stratum was evident at 80 cm.

67N/24E

67N/24E was a 1 m x 1 m unit excavated in natural levels to 90 cm. The dark yellowish brown (10YR4/4) silt loam plowzone extended to an average depth of 30 cm. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam that extended to an average depth of 50 cm. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam. The graveliferous subsoil was encountered in the southern part of the unit at 85 cm.

66N/24E

66N/24E was a 1 m x 1 m unit excavated in natural levels to 80 cm. The plowzone was a dark yellowish brown (10YR4/4) silt loam that extended to an average depth of 30 cm. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam that extended to an average depth of 50 cm. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam. The top of the graveliferous substratum was reached at 80 cm.

65N/24E

65N/24E was a 1 m x 1 m unit excavated in natural levels to 80 cm. The dark yellowish brown (10YR4/4) silt loam plowzone extended to an average depth of 30 cm. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam that extended to 50 cm. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam. The top of the graveliferous substratum was reached at 80 cm.

64N/24E

64N/24E was a 1 m x 1 m unit excavated in natural levels to 85 cm. The plowzone was a dark yellowish brown (10YR4/4) silt loam that extended to 28 cm. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam that extended to an average depth of 50 cm. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam to 85 cm where the top of the graveliferous substratum was reached.

63N/24E

63N/24E was a 1 m x 1 m unit excavated in natural levels to 85 cm. The dark yellowish brown (10YR4/4) silt loam plowzone extended to an average depth of 30 cm. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam to 50 cm. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam. The top of the graveliferous substratum was reached at 85 cm.

62N/24E

62N/24E was a 1 m x 2 m unit excavated in 10 cm arbitrary levels below the plowzone to 90 cm. The dark yellowish brown (10YR4/4) silt loam plowzone

extended to 24 cm. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam that extended to an average depth of 50 cm. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam that extended to 90 cm in the northern part of the unit and to 70 cm in the southern part. The graveliferous subsoil appears to have a somewhat moderate slope in this unit.

AREA B BLOCK

Based on the results of the posthole testing, test unit and trench excavations, a large block excavation in the southeast part of the project area was opened in an attempt to uncover features or clear cultural levels (Figures 6 and 9). The area immediately adjacent to the east and south of test unit 64N/33E was chosen because of the depth of deposit that this unit displayed and the fact that being located in the woods and on a slightly higher elevation presented the best conditions for finding undisturbed deposits. Although 64N/33E produced evidence of relatively deep cultural deposits, posthole test 62N/34E (gravel at 60 cm) and our 1986 posthole test #19 (recovered an artifact at 55 cm but lack of stratigraphy suggested some type of disturbance) were not as promising. A 4 m x 4 m block excavation in this area centered on posthole test 62N/34E, just to the south of posthole test #19.

The block was divided into 14 1 m x 1 m test units (not including the 2 m north-south x 1 m east-west test unit at 64N/33E) including 64N/34E, 64N/35E, 64N/36E, 63N/34E, 63N/35E, 63N/36E, 62N/33E, 62N/34E, 62N/35E, 62N/36E, 61N/33E, 61N/34E, 61N/35E and 61N/36E. Horizontal controls were maintained by chaining pins placed at 1 m intervals around the perimeter of the block. Each of the units in the block was marked for excavation by dropping a plumb bob between north-south and east-west lines. Using a trowel the plumb lines were inscribed, then were maintained by a stepped excavation process and periodically checked. Vertical control was maintained by using coordinate point at 60N/34E. At ground level a cotton string line was stretched from this point, trued by spirit level with all vertical proveniences measured from this datum.

Similar field methods to those used in the trench were employed in the block. The plowzone was removed as one level in each unit. Below the plowzone in the 10 units representing the perimeter of the block (64N/34E, 64N/35E, 64N/36E, 63N/36E, 62N/33E, 62N/36E, 61N/33E, 61N/34E, 61N/35E and 61N/36E) the excavations proceeded by natural strata. The four units in the center of the block (63N/34E, 63N/35E, 62N/34E and 62N/35E) were excavated by in 10 cm arbitrary levels.

The block yielded a total of 7,826 artifacts including 7,800 (99%) that were prehistoric and 26 (<1%) that were historic (Table 3). Depth of deposit varied but was as deep as 160 cm in 62N/35E. These data indicate a moderate to dense lithic scatter and deep cultural deposits.

64N/33E

64N/33E evidenced four soil strata in the trench and in the block. The dark yellowish brown (10YR4/4) silt loam plowzone extended to between 20 cm - 30 cm. Below this was a brown to dark brown (7.5YR4/) hard, dry compact silt loam to 50 cm. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam that extended to different depths in different

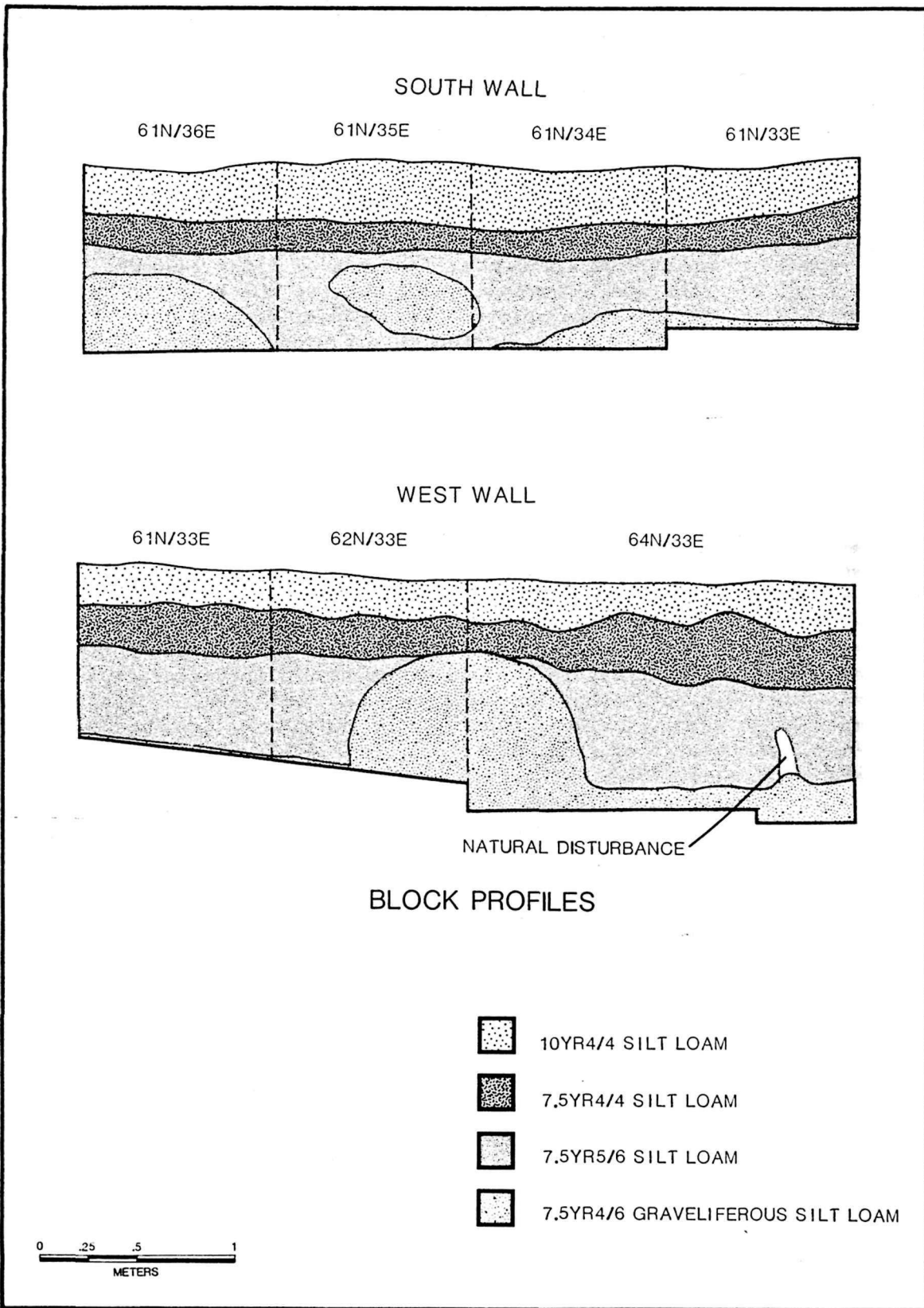


Figure 9. Profiles of the block in Area B

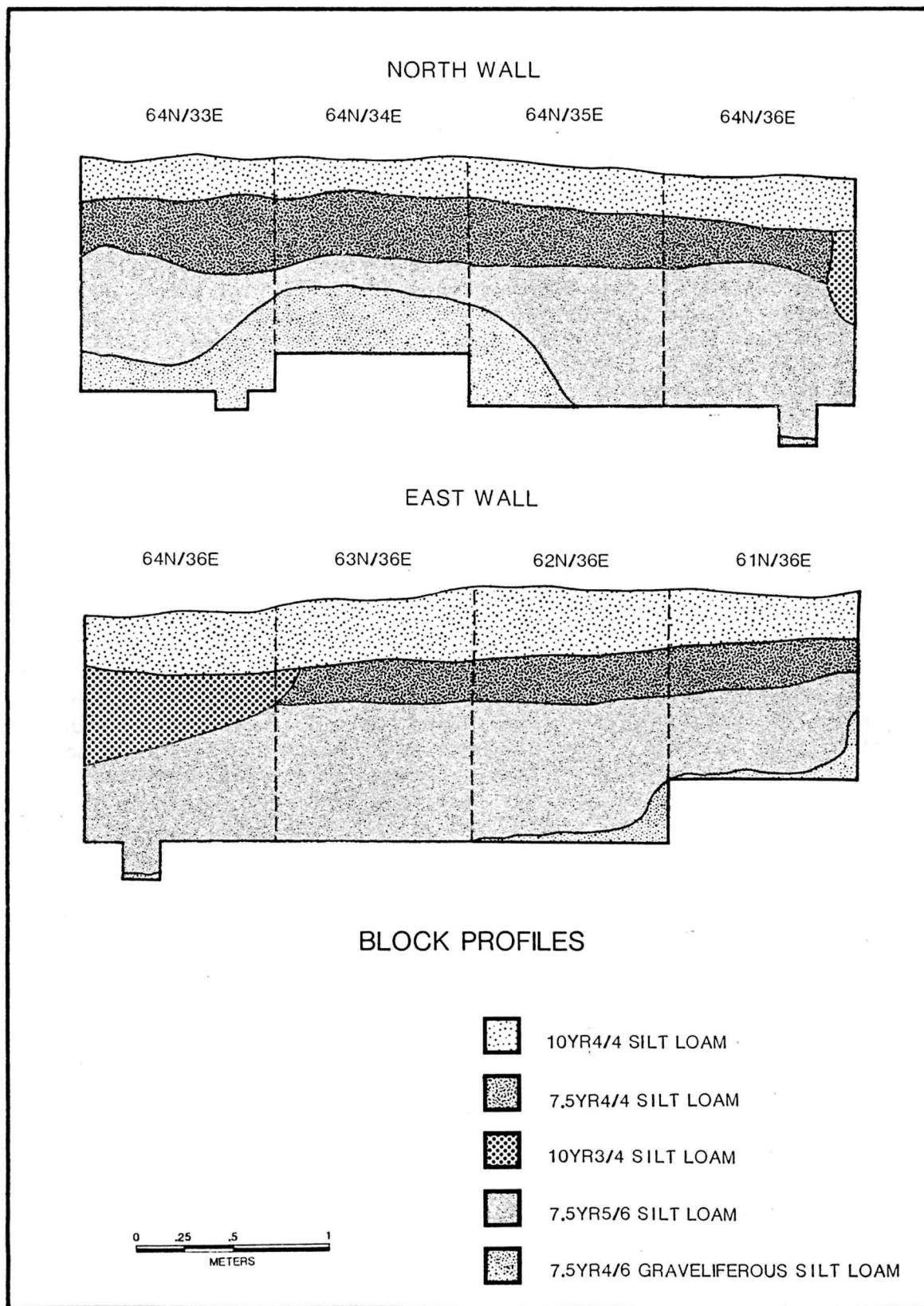


Figure 9. Continued

parts of the block. The gravel was not present at a uniform level throughout and in various parts of the block it was mounded.

64N/34E

64N/34E had four strata although the graveliferous layer was not recognized as such until about 30 cm of it had been excavated. The unit was excavated in three levels including 0 cm - 30 cm, 30 cm - 50 cm and 50 cm - 100 cm. No features were observed. The dark yellowish brown (10YR4/4) silt loam plowzone extended to 20 cm in the northern part of the unit and as deep as 30 cm in the southeastern part. The undulation of the floor of this layer was suggestive of plow scars. The dip in the southeast corner was either a natural disturbance or a deep plowzone caused by colluvial wash. In the southwest corner of the unit at the base of the topsoil was a thin sand lens that may have been deposited by an historic flooding episode. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam that extended to 50 cm - 53 cm. Insect burrows and some roots were noted. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam that extended to 70 cm. Below this was the strong brown (7.5YR5/6) graveliferous silt loam or clay loam.

64N/35E

64N/35E had four strata and was excavated in four levels (0 cm - 30 cm, 30 cm - 50 cm, 50 cm - 100 cm and 100 cm - 130 cm). The dark yellowish brown (10YR4/4) silt loam plowzone extended between 20 cm - 30 cm. Within this stratum were many roots and several small tree stumps. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam that extended to 50 cm. Some roots, rootlets and insect burrows were noted. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam that in the west half of the unit it was encountered at 80 cm and in the eastern half it was never reached (a posthole test excavated in 64N/36E indicated that the top of the graveliferous stratum was less than 15 cm below the floor). Strong brown (7.5YR5/6) graveliferous silt loam or clay loam drops sharply from the west to the east side of the unit. When the graveliferous stratum was not reached at 100 cm, the excavation of this unit was continued another 30 cm with the cultural material collected separately (100 cm - 130 cm).

64N/36E

64N/36E had four strata and was excavated in four levels (0 cm - 30 cm, 30 cm - 50 cm, 50 cm - 100 cm and 100 cm - 130 cm where a posthole test was excavated to 150 cm). The dark yellowish brown (10YR4/4) silt loam plowzone extended between 20 cm - 30 cm below surface and it contained many tree roots, rootlets and other disturbances. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam that extended to an average depth of 50 cm. This stratum also contained many tree roots and rootlets but otherwise appeared to have good integrity. In the northeast and extreme eastern part of the unit was observed a soil discoloration in both the north and east walls. It was after excavation of the unit that the discoloration was noticed. The anomaly is truncated by the base of the plowzone, but extends through the brown to dark brown (7.5YR4/4), hard, dry, compact silt and into the very hard, very dry, very compact silt loam. The anomaly consists of dark yellowish brown (10YR3/4) loose silt loam and is somewhat basin-shaped. The

anomaly may represent a feature of unknown function. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam that extended to 145 cm where the strong brown (7.5YR5/6) graveliferous silt loam or clay loam was encountered.

63N/36E

63N/36E had four strata and was excavated in three levels (0 cm - 30 cm, 30 cm - 50 cm and 50 cm - 130 cm). The dark yellowish brown (10YR4/4) silt loam plowzone extended to between 30 cm - 35 cm. Besides being disturbed by plowing, the topsoil had a number of tree roots, rootlets and insect burrows. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam that extended to 51 cm - 60 cm. Except for some roots, rootlets and insect burrows this stratum appeared to be relatively undisturbed. The soil discoloration in 64N/36E of dark yellowish brown (10YR3/4) loose silt loam extended into the extreme northeast corner of 63N/36E. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam that varied in depth. This stratum was undisturbed except for minor natural disturbances from insect burrows and krotovina. The strong brown (7.5YR5/6) graveliferous silt loam or clay loam was encountered in the southern part of this unit at 130 cm. Given that the graveliferous stratum in 62N/36E was sloping to the north, and given its presence in 64N/36E at 145 cm it is clear that the excavation of this unit terminated at the base of the strong brown (7.5YR5/6) very dry, very hard, very compact silt loam subsoil.

62N/36E

62N/36E had four strata and was excavated in four levels (0 cm - 30 cm, 30 cm - 50 cm, 50 cm - 100 cm and 100 cm - 130 cm). The plowzone was a dark yellowish brown (10YR4/4) silt loam that extended between 31 cm - 43 cm below surface. Plow scars, tree roots and rootlets were noted. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam that extended to 55 cm - 60 cm. This stratum was disturbed except for some roots, rootlets and insect burrows. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam that extended to varying depths in different parts of the unit. In the extreme southern part it was about 40 cm thick and in the northern part it was 70 cm thick. The strong brown (7.5YR5/6) graveliferous silt loam or clay loam was encountered at 100 cm in the southern part of the unit and in the northern part it was encountered at 129 cm. Between these two points the slope was stepped with a sharp dip of 25 cm in the southern part of the unit.

61N/36E

61N/36E had four strata and was excavated in three levels (0 cm - 30 cm, 30 cm - 50 cm and 50 cm - 100 cm). The dark yellowish brown (10YR4/4) silt loam plowzone extended to between 23 cm - 30 cm. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam that extended to depths varying between 42 cm - 55 cm. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam that extended to depths varying between 65 cm - 100 cm. The top of the strong brown (7.5YR5/6) graveliferous soil layer was relatively even through the most of the unit although in the extreme southeastern corner there was a sharp break of almost 90 degrees and in the southwestern corner it sloped to the west at a 45 degree angle. The

east wall profile of 62N/36E and 61N/36E show the gravel to be stepped. The south wall profile shows the gravel as mounded.

61N/35E

61N/35E had four strata and was excavated in three levels (0 cm - 30 cm, 30 cm - 50 cm and 50 cm - 100 cm). The dark yellowish brown (10YR4/4) silt loam plowzone extended from the surface to about 30 cm. Like other units in this block the plowzone here contained tree roots, rootlets and several stumps. Below this was a relatively thin stratum of brown to dark brown (7.5YR4/4) hard, dry, compact silt loam that varied in thickness from 11 cm to 18 cm. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam that, as the profile of the south wall illustrates, surrounds a portion of the strong brown (7.5YR5/6) graveliferous silt loam or clay loam. We believe that this signifies that in this part of the block the gravel subsoil had been dug up and then placed over the very compact silt loam after the latter had already begun to be deposited on this landform. Although the graveliferous subsoil below the very compact silt loam was not encountered at the base of this unit, if the presence of the gravel layer in adjacent units 61N/36E and 61N/34E are any indicator, it appears that the excavation of this unit terminated at or very near the top of the gravel layer. The dramatic increase in amount of gravel in the matrix at 95 cm - 100 cm supports this conclusion.

61N/34E

61N/34E had four strata and was excavated in three levels (0 cm - 30 cm, 30 cm - 50 cm and 50 cm - 100 cm). The dark yellowish brown (10YR4/4) silt loam plowzone extended to between 30 cm - 35 cm. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam that extended to about 55 cm - 60 cm. This stratum showed few signs of disturbances. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam that extended to 80 cm - 100 cm. Part of the gravel piled up on top of the compact silt loam in 61N/35E extended into 61N/34E. The strong brown (7.5YR5/6) graveliferous silt loam or clay loam encountered near the bottom of this excavation unit had an undulating surface.

61N/33E

61N/33E had four strata and was excavated in three levels (0 cm - 30 cm, 30 cm - 50 cm and 50 cm - 100 cm). The dark yellowish brown (10YR4/4) silt loam plowzone extended to between 20 cm - 30 cm. This stratum contained several tree stumps, roots and rootlets. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam that varied between 15 cm - 30 cm thick. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam that varied in thickness from 30 cm in the southeast corner to 54 cm in the northwest corner. The strong brown (7.5YR5/6) graveliferous silt loam or clay loam at its highest point was in the southeastern corner of the unit where it was first encountered at 70 cm. In the northern part it dipped to 95 cm. In this unit the gravel layer slopes at a mild rate to the north.

62N/33E

62N/33E had four strata and was excavated in three levels (0 cm - 20 cm, 20 cm - 40 cm and 40 cm - 100 cm). The dark yellowish brown (10YR4/4) silt loam plowzone extended to 30 cm. Below this was a brown to dark brown (7.5YR4/4) hard, dry, compact silt loam that extended to 45 cm - 50 cm. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam that extended to 98 cm in the southern part of the unit. In the northern part of the unit it was replaced with the strong brown (7.5YR5/6) graveliferous silt loam or clay loam at 50 cm. The profile of the west walls of 62N/33E and 64N/33E shows a definite mounding of the gravel.

Five units within the block were excavated in 10 cm arbitrary levels beneath the plowzone including 63N/33E, 63N/34E, 63N/35E, 62N/35E and 63N/35E (Figures 6 and 9). The first of these represents the 1 m x 2 m unit excavated in the southeast quadrant. The others are four 1 m x 1 m units in the center of the block.

64N/33E

64N/33E is one of four 1 m x 2 m units excavated in each quadrant of the project area. After the plowzone was removed (0 cm - 20 cm) the unit was excavated in 10 cm arbitrary levels to a depth of 120 cm (the last level was a 1 m x 50 cm level). At the base of the last level a posthole test was excavated to 130 cm. Four strata were present in this unit. The dark yellowish brown (10YR4/4) silt loam plowzone extended to 30 cm and contained tree roots and rootlets. Another disturbance was posthole test 64N/33E that extended to 60 cm. Below this was a brown to dark brown (7.5YR4/4) hard, dry, compact silt loam that varied in depth from 40 cm - 60 cm. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam in the southern part of the unit. Except where there was mounded gravel as in the southern and northeastern parts of the unit, the very compact silt loam stratum generally extended from about 60 cm to about 120 cm. Tree roots and molds were present but as a whole this layer appeared to be relatively undisturbed.

63N/34E

63N/34E had four strata and was excavated to 120 cm. This 1 m x 1 m unit was excavated in 10 cm arbitrary levels after plowzone removal. The dark yellowish brown (10YR4/4) silt loam plowzone extended to a depth of about 20 cm and contained tree stumps, roots and rootlets. Another disturbance was posthole test 63N/34E that extended to 60 cm. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam that extended to an average depth of 50 cm. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam. The strong brown (7.5YR4/6) graveliferous silt loam was encountered at 60 cm in the eastern half of the unit. The mounded gravel in the eastern part of the unit extended from about 60 cm to about 110 cm.

63N/35E

63N/35E had four strata and was excavated to 120 cm. This 1 m x 1 m unit was excavated in 10 cm arbitrary levels after plowzone removal. The dark yellowish brown (10YR4/4) silt loam plowzone extended to about 20 cm and

contained tree stumps, roots and rootlets. Below this was a brown to dark brown (7.5YR4/4) hard, dry compact silt loam that extended to a depth of about 50 cm. Some roots and rootlets were present in this layer. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam. The strong brown (7.5YR4/6) graveliferous silt loam was encountered at 60 cm in the western half of the unit. Except where there was mounded gravel in the western half of the unit, the very compact silt loam stratum generally extended from about 60 cm to about 120 cm.

62N/35E

62N/35E had four strata and was excavated to 150 cm (the last level measured 1 m x 2 m). This 1 m x 2 m unit was excavated in 10 cm arbitrary levels after plowzone removal. The dark yellowish brown (10YR4/4) silt loam plowzone extended to about 20 cm and contained tree stumps, roots and rootlets. Another disturbance was posthole test 62N/35E that extended to 60 cm. Below this was a brown to dark brown (7.5YR4/4) hard, dry, compact silt loam that extended to 50 cm. Some roots and rootlets were present in this layer. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam. The strong brown (7.5YR4/6) graveliferous silt loam was encountered at 60 cm in the western half of the unit. Except where there was mounded gravel in the western part of the unit, the very compact silt loam stratum generally extended from 50 cm to 130 cm.

62N/34E

62N/34E had four strata and was excavated to 100 cm. This 1 m x 1 m unit was excavated in 10 cm arbitrary levels after plowzone removal. The dark yellowish brown (10YR4/4) silt loam plowzone extended to 20 cm and contained tree stumps, roots and rootlets. Another disturbance was posthole test 62N/34E that extended to a depth of 60 cm. Below this was a brown to dark brown (7.5YR4/4) hard, dry, compact silt loam that extended to 50 cm. Some roots and rootlets were present in this layer. Underlying this was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam. The strong brown (7.5YR4/6) graveliferous silt loam was encountered at 60 cm in the eastern half of the unit. Except where the gravel was mounded in the eastern part of the unit, the very compact silt loam stratum generally extended from about 60 cm to 90 cm.

AREA B ARTIFACTS

The investigations in Area B resulted in the recovery of 15,193 artifacts including 15,120 prehistoric artifacts and 73 historic artifacts (Table 3). Except for a small quantity of charcoal and ash (?) all of the prehistoric artifacts consisted of lithics.

Among the prehistoric artifacts were four arrow points or fragments, 36 dart points or fragments, 279 bifacial tools or tool fragments, 27 flake tools and two unifacial scrapers. No prehistoric ceramics were found.

Dart Points

A fragment of a Clovis point (Figure 10u, catalog no. 254-11) was recovered in the block at 64N/36E within the natural 50 cm - 120 cm stratum excavated as a unit. This small, narrow lanceolate fragment measures 1.8 cm

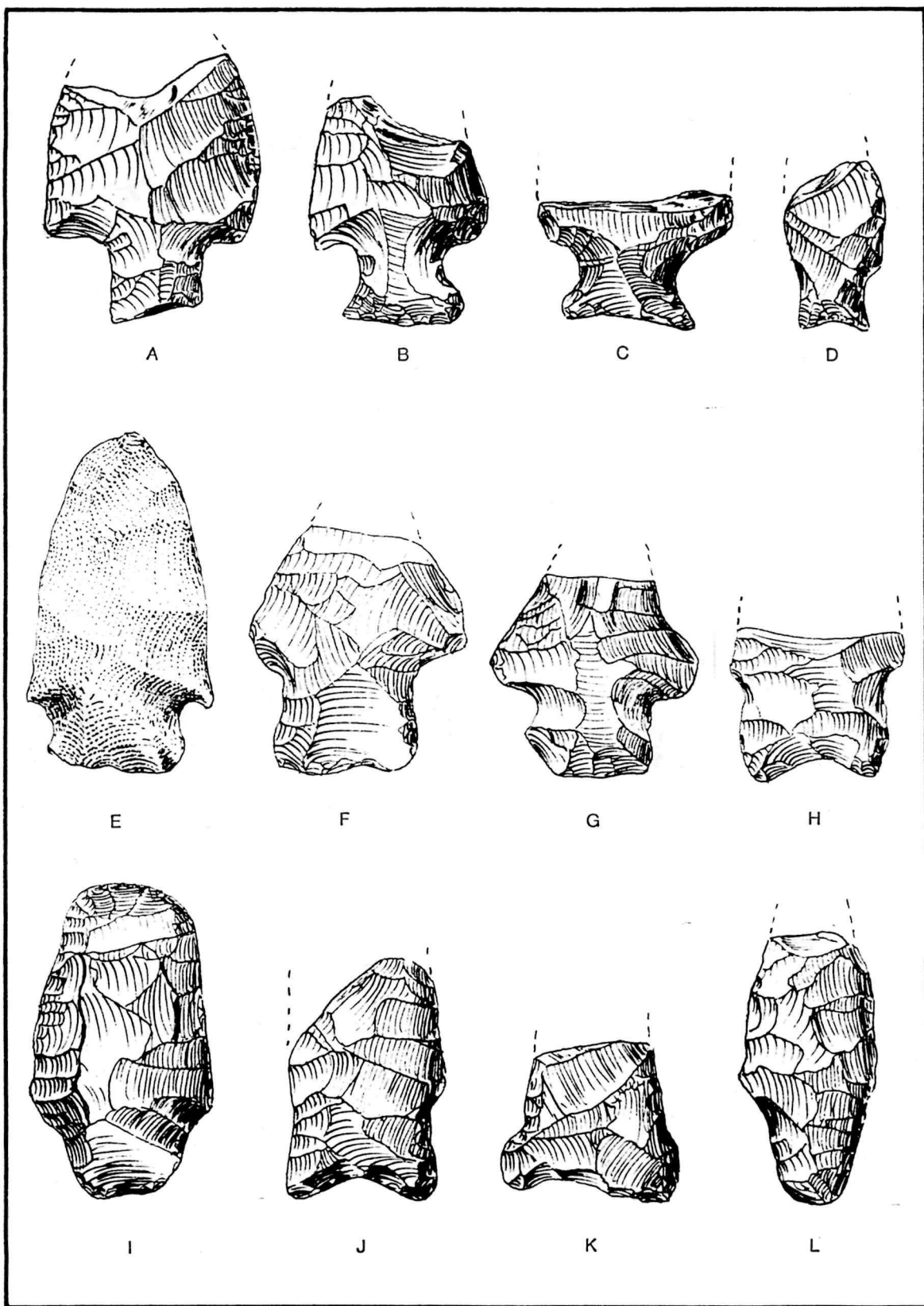


Figure 10. Lithic tools recovered in Areas B and C

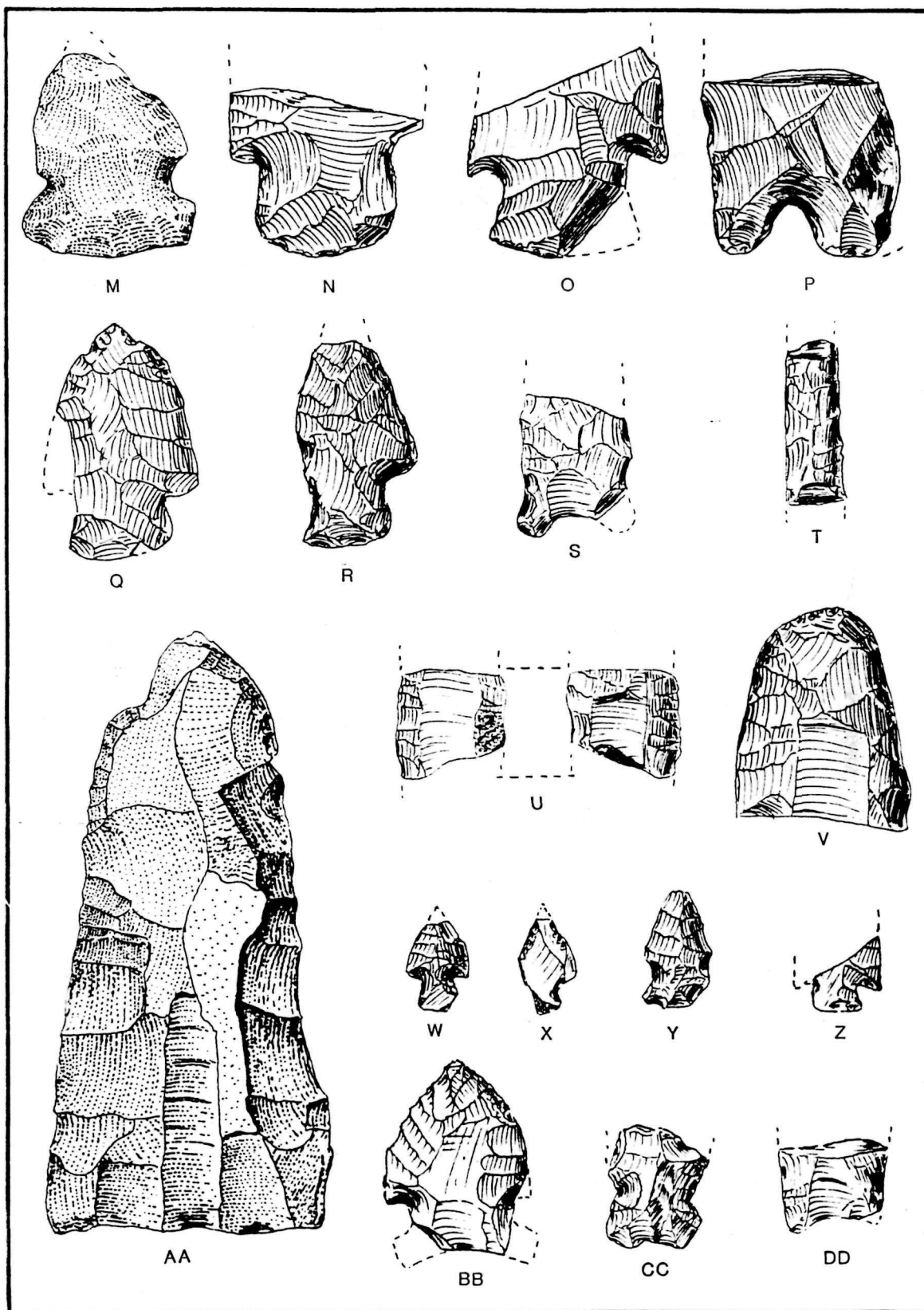


Figure 10. Continued

long (3.5 cm estimated length) x 2 cm wide x .5 cm thick and is fluted in cross section. Although missing both its distal end and its hafting area, each of the two faces on the specimen exhibit a .9 cm wide flute. On one side, the flute extends across the entire length of the fragment and on the other side, the flute extends three-fourths of the length. The point is made from a very dark gray (almost black) exotic chert. J. Price noted that the material appears to be similar to certain chert outcrops in Alabama. Both J. Price and Alan Banks consider the specimen to represent what Chapman (1975:243-244) refers to as a Clovis Fluted.

Clovis points are a diagnostic tool of the Paleo-Indian Period. Points of this type have been dated between 9500 and 9000 B.C. elsewhere in North America. At Rodgers shelter, points of this type were radiocarbon dated at 8580-8250 B.C. The type is associated with the Llano complex in the southwestern United States and Great Plains and Chapman's Early Hunter Tradition in Missouri (Chapman 1975:60-94).

Other dart point fragments recovered provide additional evidence for the presence of a later, but still early, occupation of the site. The Dalton point (Figure 10s, catalog no. 254-12) is indisputably later than Clovis in age, but definitely older than other Early Archaic points and the Middle Archaic, Late Archaic, Woodland and Mississippi points that follow. Chapman (1975:95-126) calls points of this type Dalton Serrated and sees them as being diagnostic of the Hunter-Forager tradition of the Dalton Period (i.e., a transitional period between Paleo-Indian and Early Archaic). J. Price and C. Price (1983:258-260) place the Dalton tool kit with Early Archaic assemblages. Prior to these investigations, points of this type have only been collected on the surface of sites in the Current and Jacks Fork drainages.

The Dalton point was found in the 50 cm - 120 cm level that was excavated as a natural stratum in 64N/36E. The specimen represents a basal fragment of a hafted biface made of very light tan chert. Its weathered surface suggests that it was either water rolled or was exposed on the surface for a very long time. The fragment measures 2.5 cm long (estimated length 4.6 cm) x 1.7 cm (estimated width at tangs 1.8 cm) x .5 cm thick and is missing a tang, its distal end and parts of both blades. The specimen appears plano-convex in cross section. Although fragmentary, enough of the specimen is present to have allowed J. Price and Alan Banks to identify it as being what Chapman (1975:245-246) refers to as a Dalton Serrated. Points of this type date from 8500 to 6000 B.C. and possibly as late as 5000 B.C. Goodyear (1982:382-395) has argued that the more correct chronological position of the Dalton horizon based on radiocarbon dates from Rogers Shelter is the interval from 8500 B.C. - 7900 B.C. The form is characteristic of the Dalton or Early Archaic periods but also appears in the Paleo-Indian Period and may have lasted until the early part of the Middle Archaic.

Another Early Archaic dart point fragment (Figure 10h, catalog no. 271-7) was recovered in the block in 62N/33E (that was also excavated by natural soil strata of 50 cm - 100 cm). The crudely manufactured specimen is made of white chert, measures 2.5 cm long (estimated) x 3 cm wide x .5 cm thick and is flattened in cross section. The hafting area exhibits a parallel rounded base. Although not enough of the specimen is present to type it, the shape of the basal fragment suggests that it may relate to Early Archaic activities.

Another point (Figure 10k, catalog no. 231-8) that may indicate an Early or possibly Middle Archaic component at the site was recovered in the 67N/24E trench excavation in the 30 cm - 50 cm level. The specimen exhibits two laterally projecting lobes on either side of a straight to slightly concave

base. The hafted point is made of white chert, is missing its distal end, measures 2.7 cm long (4.2 cm estimated length) x 3 cm long x .8 cm thick and is flattened in cross section. The fragmentary point appears similar to that described by Bray (1956:128, 131), Chapman (1975:254) and Perino (1985:322) as a Rice Lobed. Chapman lists this point as typical of the Early Archaic although it lasts into the Middle Archaic. Estimated dates are 7500 B.C. - 5000 B.C.

Three of the dart points recovered in Area B suggest the presence of a Middle Archaic component in this part of the site. The first of these consists of a basal fragment of a dart point found in the trench plowzone (0 cm - 23 cm) at 72N/24E. This point (Figure 10dd, catalog no. 215-9) is made of white chert, measures 1.8 cm wide x 1.4 cm long x .6 thick and displays a concave base with some evidence of grinding. It is plano-convex in cross section and exhibits thinning on both sides. One face of one of the blade edges shows a small area of cortex. The specimen represents a fragment of a Jakie point. Such points are sometimes basally thinned on one or both sides. There is no evidence for nipple preparation or any of the hallmarks of fluting typical of Paleo-Indian points. Chapman (1975:250-251) dates Jakie Stemmed (Provisional) points to 5000 B.C. - 3000 B.C. and associates them with the Middle Archaic Period.

The second Middle Archaic point is a Jakie Stemmed that was recovered in the 50 cm - 140 cm level (excavated in natural soil strata) of 63N/36E. This dart point (Figure 10j, catalog no. 264-10) is made of white chert, was found 45 cm from the north wall, 36 cm from the west wall of the block and 59 cm. It is missing its distal end and more than half of each of its two blades, measures 4 cm long (estimated original length 6 cm) x 2.5 cm wide x .7 cm thick and is plano-convex in cross section. Its hafting area displays an expanded rounded base.

The third Middle Archaic point was recovered at 30 cm with the 20 cm - 50 cm level of 62N/33E. This side notched dart point (Figure 10cc, catalog no. 270-10) is made of white chert and measures 3.2 cm long x 2.3 cm wide and is .6 cm thick. It has an acute distal end, relatively straight sides, horizontal shoulders and is biconvex in cross section. The specimen is similar to Graham Cave Side-Notched and Big Sandy points. Similar points are common along the Ozark Border but are not often found in the ONSR.

A point style popular through the Middle Archaic and Late Archaic periods was also recovered in the block excavation. The Stone Square Stemmed point was recovered was made from pink orthoquartzite or sugar quartz that suggests that it probably dates to the Late Archaic Period. It was recovered at 121 cm in the 100 cm - 140 cm level of 62N/36E. The specimen (Figure 10e, catalog no. 268-6) measures 5.7 cm long x 3.2 cm wide x 1 cm thick and is biconvex in cross section. It displays relatively straight blade edges for most of its length. Its shoulders are pronounced with one barbed and the other being horizontal. The relatively broad stem has straight edges and a generally straight base. Chapman (1975:257) places Stone Square Stemmed points in the Middle Archaic - Late Archaic periods from about 5000 B.C. to about 1000 B.C.

Of the 21 diagnostic dart points recovered in Area B, 38% (8) were diagnostic of the Late Archaic Period. Five of these dart points are Table Rock Stemmed (catalog nos. 240-10, 260-9, 263-8 and 423-3), one is a Smith Basal Notched (catalog no. 230-7) and two (216-8 and 272-7) are untyped but are considered by J. Price to be similar in appearance to other points associated with Late Archaic components in the Eastern Ozarks. All of the Late Archaic dart points were found no deeper than 50 cm below the surface.

The first Table Rock Stemmed point was recovered in the plowzone (0 cm - 20 cm) of posthole test 75N/37E. This dart point fragment (Figure 10a, catalog no. 423-3) is made of white to light pink chert, measures 4.7 cm long (6 cm estimated length) x 3.5 cm wide x 1 cm thick and is nearly complete except for missing its distal end and part of its base. The specimen exhibits an excurvate blade shape, inversely tapered shoulders, a slightly expanding stem, a straight base and is flattened in cross section. Chapman (1975:257-258) estimates the date for these points at 3000 B.C. - 1000 B.C. and notes that they are associated with Late Archaic sites in the Table Rock Reservoir area. Chapman (1956:37) originally placed these points in Early or Middle Archaic contexts.

The second Table Rock Stemmed point was recovered in the trench excavation in the 30 cm - 50 cm level of 64N/24E (excavated in natural levels). This dart point fragment (Figure 10f, catalog no. 240-10) is missing its distal end and measures 4 cm long (5 cm estimated length) x 3.5 cm wide x .6 cm thick. The specimen exhibits round shoulders tapering down to an expanding stem, a seemingly straight base edge and is flattened in cross section.

The third Table Rock Stemmed point was recovered in the plowzone (0 cm - 23 cm) of trench excavation unit 69N/24E. This dart point fragment (catalog no. 224-9) is made from white, heat treated chert and measures 3.8 cm long x 2.9 cm wide x .9 cm thick. It is biconvex in cross section and is missing its distal end and most of one of its two blades. Evidence of reworking is present along the edge of the fracture nearest the base. The steep (70 degree) beveled edge suggests that it may have functioned as some sort of scraper except for the presence of small graver in this area. The specimen appears to be a reworked Table Rock Stemmed given its tapered shoulder, slightly expanding stem and evidence of grinding on its base.

The fourth Table Rock Stemmed point (Figure 10r, catalog no. 260-9) was recovered in the block excavation at 30 cm - 50 cm in 64N/34E (excavated in natural levels). This dart point is made of a mottled tan colored chert, measures 3.5 cm long x 2 cm wide x .7 cm thick and displays an expanding stem and rounded base with some evidence of grinding. The specimen is missing one of its shoulders along with its extreme distal end. The distal end appears to have been reworked. The remaining shoulder is rounded and the specimen is biconvex in cross section.

The remaining Table Rock Stemmed point (catalog no. 263-8) was recovered in the 20 cm - 50 cm level of block unit 63N/36E (excavated in natural levels). This dart point fragment consists of a blade and stem, is made from a white colored chert and displays a horizontal shoulder and expanding stem.

The fragment of a Smith Basal Notched point (Figure 10p, catalog no. 230-7) was recovered in the plowzone (0 cm - 30 cm) of trench excavation unit 67N/24E. The fragment includes part of one blade, one basal notch and part of the stem, is made of white chert with gray mottling and measures 4 cm long (estimated length 7 cm) x 4 cm wide (estimated width 4.7 cm) x 1 cm thick. Enough of the specimen is present to suggest to J. Price and Alan Banks that it represents what Chapman (1975:256) refers to as a Smith Basal Notched, a cutting tool in use during the Late Archaic Period.

Of the two untyped dart points, one was a dart point fragment (catalog no. 216-8) recovered in the 23 cm - 30 cm level of trench unit 72N/24E. The specimen is made of light pink poor quality chert, measures 3 cm long x 2 cm wide and is .4 cm thick and displays a rounded shoulder and straight stem. The dart point was probably much thicker during the initial reduction sequence, but during its manufacture the point fractured between the blade

faces and production of the biface was abandoned. Stemmed projectile point/knives are found in association with Late Archaic assemblages in the region.

The other untyped point was recovered in the plowzone (0 cm - 20 cm) of block excavation unit 61N/36E. This corner notched point (Figure 10o, catalog no. 272-7) is made of white chert, exhibits barbed shoulders, an expanding stem and convex base. J. Price has found similar points associated with Late Archaic components in the Eastern Ozarks.

Four dart points recovered in Area B represent point types that were used throughout the Late Archaic and Woodland periods. One is a Gary Stemmed and the others are untyped. The Gary Stemmed (Figure 10l, catalog no. 287-8) was recovered in the 40 cm - 50 cm level of block excavation unit 64N/33E. It is a nearly complete specimen missing only its distal end. The specimen is made of white and light pink chert, measures 4.5 cm long (5 cm estimated length) x 2.4 cm wide x .8 cm thick, is biconvex in cross section, exhibits a straight blade shape, tapered shoulders and a stem that contracts strongly to a rounded base. The specimen fits Chapman's (1980:308) general description of the Gary Stemmed type that appears as early as the Late Archaic Period and continues throughout the Woodland Period.

The first (catalog no. 222-11) of the three untyped points was recovered in the plowzone (0 cm - 20 cm) of trench excavation unit 70N/24E. This dart point fragment measuring 2.4 cm x 2.4 cm was made of white chert. Although not enough of the specimen is present to determine its similarity to established types, the somewhat deep corner notch suggests association with Late Archaic and/or Woodland assemblages.

The second (Figure 10q, catalog no. 223-8) of the untyped points was recovered in the 20 cm - 90 cm level of trench excavation unit 70N/24E. This corner notched dart point fragment is made from pink banded chert and is missing one shoulder and part of its base. The fracture plane of the break along the base appears to have been reworked to form a straight unifacial scraper with a steep 50 degree edge angle. Two small subtle notches on the blade edges on either side of the distal end may have allowed the tip to function as some sort of perforator. The blade edge is missing its shoulder and displays a small burin at the point of the break. This tool appears to be multi-functional and could have been used in scraping, perforating and engraving hides, bone or wood. The specimen is 3.7 cm long x 2.4 cm wide x .7 cm thick and is plano-convex in cross section. Not enough of the specimen is present to assign it to established types although corner notched points have been found in Late Archaic as well as Woodland assemblages.

The third untyped specimen (Figure 10g, catalog no. 305-6) was recovered at 50 cm of block excavation unit 63N/35E. This corner notched point was made from white chert, is missing its distal end and measures 3.2 cm long (5.5 cm estimated length) x 3.3 cm wide x .6 cm thick. It is plano-convex in cross-section and exhibits an incurvate blade shape, expanded shoulders, an expanded stem and a beveled stem edge. The specimen is similar to other corner notched dart points found in the Eastern Ozarks in use from the Late Archaic throughout the Woodland Period.

Two Kings Corner Notched points (catalog nos. 284-8 and 267-11) were recovered in Area B. The name of the point was suggested by Richard A. Marshall (1958:125) for the Kings River in Missouri and Arkansas. According to Chapman (1980:309), points of this type have been found elsewhere in Missouri, Arkansas and Oklahoma associated with the Woodland Period, although they appeared in the Archaic Period and may have continued into Mississippi times. Perino (1985:205) simply calls points of this type Kings and says that

they occur from the Middle Archaic through the Woodland Period, but that in eastern Missouri and West-central Illinois the points date to the Early Woodland Period.

The first Kings point (catalog no. 284-8) was recovered from the plowzone (0 cm - 20 cm) of block excavation unit 64N/33E. This corner notched dart point is made of light tan chert and measures 2.3 cm long x 2.1 cm wide x .6 cm thick. The specimen exhibits an obtuse distal end, slightly excurvate blade edges, one rounded shoulder, one tapered shoulder, a straight base and in cross section is more elliptical than flattened. It displays a blunt tip and thick, dull blade edges.

The other Kings point (Figure 10b, catalog no. 267-11) was recovered in the 50 cm - 100 cm level of block excavation unit 62N/36E. This specimen is made of a pink and light brown colored chert, is missing its distal end (apparently broken as a result of an impact fracture) and measures 3.5 cm long (4.7 cm estimated length) x 3 cm wide x .8 cm thick. One of its shoulders is barbed and the other one is rounded. It displays a straight stem with a beveled edge and is median ridged in cross section.

Thirteen dart points (catalog nos. 224-8, 236-8, 237-11, 239-6, 239-10, 242-8, 246-7, 264-9, 267-10, 270-9, 279-10, 289-4 and 325-5) that were too fragmentary to type and/or did not fall into any diagnostic category were also recovered in Area B. One of these point fragments (catalog no. 224-8) was recovered in the plowzone (0 cm - 23 cm) of trench excavation unit 69N/24E. This point fragment measures 3.8 cm long x 3.5 cm wide x .8 cm thick and was made of tan colored chert speckled with tiny brown inclusions. Although displaying a single notch, not enough of the specimen is present to determine whether it represents a side, corner or basal notch. The specimen is plano-convex in cross section.

The most complete specimen of this group (Figure 10d, catalog no. 236-8) was recovered in the plowzone (0 cm - 30 cm) of trench excavation unit 65N/24E. This expanding stem hafted biface was made of white chert and measures 2.9 cm long x 1.8 cm wide x .6 cm thick. The specimen exhibits an expanded pointed base, beveled blade edges, a blunt obtuse distal end and is biconvex in cross section.

A small dart point fragment (catalog no. 237-11) was recovered in the 30 cm - 50 cm level of test unit 65N/24E. The fragment represents part of a straight stem and was made of pink chert.

Two dart point fragments were recovered in the plowzone (0 cm - 30 cm) of test unit 64N/24E. One (Figure 10c, catalog no. 239-6) is made of banded white, gray and dark gray chert and measures 1.9 cm long x 3.2 cm wide x .7 cm thick. It is flattened in cross section and is missing its distal end and most of both blades. The specimen exhibits an expanded stem, tapered shoulders, deep side notches near the base and a grounded base. The other partial dart point is a basal fragment (catalog no. 239-10) made of light pink chert. This specimen displays incurvate stem side edges and a straight ground base.

A dart point fragment (catalog no. 242-8) was recovered from the plowzone (0 cm - 30 cm) in trench test unit 63N/24E. This crudely chipped specimen made from a light pink colored chert is missing its distal end and measures 2.1 cm long x 1.7 cm wide x .6 cm thick. It exhibits shallow side notches, an expanded rounded hafting area, a beveled base and is median ridged in cross section. A dart point fragment (catalog no. 246-7) was found in the 17 cm - 30 cm level of trench test unit 62N/24E. This small fragment displays a possible side notch.

A basal fragment of a large dart point (Figure 10n, catalog no. 254-13) was recovered in the 50 cm - 120 cm level of block excavation unit 64N/36E. The specimen is missing its distal end and most of its two blades, is made of white colored chert and measures 2.5 cm long (7.5 cm estimated length) x 3.1 cm wide x .6 cm thick. One shoulder is partially missing and the other displays a horizontal shoulder. The specimen exhibits a straight to slightly expanding stem and a rounded base. A very small fragment of an expanding stem dart point (catalog no. 264-9) made of light gray colored chert was recovered in the 50 cm - 140 cm level of block excavation unit 63N/36E.

An expanding stem basal fragment of a small dart point/hafted cutting tool (catalog no. 267-10) made of pink colored chert was recovered in the 50 cm - 100 cm level of block excavation unit 62N/36E. The stem has a beveled edge. Also too fragmentary to type is a dart point fragment (catalog no. 270-9) that was recovered in the 20 cm - 50 cm level of block excavation unit 62N/33E. This specimen was made out of white chert with some gray mottling. A dart point fragment (catalog no. 279-10) made of reddish brown rhyolite was recovered in the 20 cm - 50 cm level of block excavation unit 61N/34E. The specimen missing is its base, exhibits an obtuse distal end, a straight blade shape and blade edges that are beveled on two edges.

A dart point fragment (catalog no. 289-4) was found in Feature 4 between 45 cm - 50 cm in block excavation unit 64N/33E. This specimen was made from white chert and consists of a small part of a blade and part of a corner notch. A dart point fragment (catalog no. 325-5) was found in the 60 cm - 70 cm level of block excavation unit 63N/34E. The basal fragment is made of white chert and exhibits an expanding stem and rounded base.

Arrow Points

Four arrow points were recovered at Two Rivers with three (catalog nos. 246-8, 278-8 and 282-9) found in Area B and one (catalog no. 379-1) found in Area C. All are untyped. Similar arrow points have been recovered on sites up and down the Current and Jacks Fork rivers for years (Banks 1978:26-28, 60, 62, 66-67, 70, 72-74, 77-78, 80-85; J. Price and C. Price 1983:272). J. Price and C. Price (1983:272-273) suggest that the majority of these points are associated with the Emergent Mississippi while the remainder date to the Late Woodland Period.

The first (Figure 10x, catalog no. 246-8) was recovered in the 17 cm - 30 cm level of trench excavation unit 62N/24E. This small arrow point was made from a flake of light tan colored chert and measures 1.6 cm long x .8 cm wide x .2 cm thick. The specimen exhibits straight blades, rounded shoulders, a slightly expanded stem, a rounded base and is flattened in cross section. The second arrow point (Figure 10z, catalog no. 279-8) was recovered in the 20 cm - 50 cm level of block excavation unit 61N/34E. This corner notched specimen is made of white chert with a simple barb, expanded stem and straight base. The third arrow point (Figure 10w, catalog no. 282-9) was recovered in the 25 cm - 40 cm level of block excavation unit 61N/33E. This specimen is made of white chert, measures 1.4 cm long x 1 cm wide x .4 cm thick and has an expanding stem, straight base and is biconvex cross section.

Other Tools

Among the other tools recovered is a fragment of a fluted end scraper (Figure 10v, catalog no. 205-11) that was found in the plowzone (0 cm - 24 cm) of test unit 76N/33E. This fragment is made of white heat-treated chert, is

missing the base and measures 3.6 cm long x 3 cm wide x 1 cm thick. The specimen displays a steep angle (70 degrees) working edge on its distal end and a deep broad flute (1.5 cm long x 1.3 wide x .2 deep) on its dorsal side. Because the scraper is missing its base there is the possibility that the channel flake could have been struck as a result of the fracture. This seems unlikely, however, given that the length, width, depth and almost perfect symmetry of the channel flake would have required skillful removal. Frison and Bradley 1982:209) note that fluting was a process that "required an extensive knowledge of the properties of the stone flaking materials, the necessary tool assemblage, and a considerable amount of skill on the part of the flint knapper."

While it is not clearly known how the flutes were produced, an elk antler artifact recovered from the Folsom level at the Agate Basin site in Wyoming may provide some clues. Through the use of a copy of the antler tool and experimenting with various forms of leverage, Frison and Bradley devised a simple leverage device that they say proved effective as a Folsom preform fluting tool. It is entirely possible that such a device or something similar may have been used to manufacture Clovis points and other fluted artifacts such as the Two Rivers end scraper. We are not aware of any other similar tool being documented (Chapman 1975:60-94; Reagan 1981; Biggs, Stoutamire and Vehik 1970; Shippee 1964; Frison and Stanford 1982; Frison and Bradley 1980; Judge 1973; Newman and Salwen 1977). The flute suggests that the scraper may be associated with the Paleo-Indian activities at the site.

A snub-nosed end scraper was recovered from the surface of the road just below the high bench in the vicinity of Area B. This artifact (Figure 10i, catalog no. 2-1) was made from a light tan chert and has a working edge with a steep 60 degree angle at its distal end. The specimen may represent a reworked projectile point/knife with tapered shoulders, a contracting stem and a straight base. A hafted unifacial side scraper (Figure 10m, catalog no. 286-8) was recovered in the 30 cm - 40 cm level of block excavation unit 64N/31E. The scraper was made of pink quartzite and measures 3.3 cm thick x 2.9 cm wide x .8 cm thick. It is triangular with a deeply beveled blade edge, a short broad stem with round corners, a slightly convex base and a plano-convex cross section. The artifact is probably a reworked side notched dart point of an undetermined type.

A scraper (catalog no. 222-10) was recovered in the plowzone (0 cm - 20 cm) of trench excavation unit 70N/24E. This specimen is a modified piece of fire-cracked rock unifacially worked with a series of retouch flakes along one edge that together produced an edge angle of 80 degrees. The irregular shape of the tool makes it almost impossible to use when held in the left hand but when held in the right hand the tool rests comfortably and the working edge can easily be manipulated with the first digit.

The only drill fragment (Figure 10t, catalog no. 299-5) found at the site was recovered at 100 cm - 110 cm in the upper part of the graveliferous stratum in block excavation unit 64N/33E. The drill is made of white and pink colored chert and is 2.6 cm long x .8 cm wide x .7 cm thick. The fragment includes only the midsection of the drill with its distal and proximal ends missing. Of particular interest is the position of the tool in the graveliferous stratum which suggests that the initial occupation of the site occurred when the landform was a gravel bar.

Among the preforms recovered at the site was one made of quartzite (Figure 10aa, catalog no. 301-6). The specimen was found in the plowzone (0 cm - 20 cm) of block excavation unit 63N/35E and measures 10 cm long x 4.5 cm wide x 2 cm thick.

AREA B PREHISTORIC FEATURES

Seven prehistoric features were documented during the 1987-1988 investigations at 23SH101. All were found in the block excavation in Area B. Other soil anomalies were also excavated at the site. All noted anomalies were treated as cultural features until further examination determined their true origin. As the excavations progressed and the first few anomalies investigated were found not to represent prehistoric cultural features, tentative feature numbers were assigned according to test unit grid coordinates. Upon completion of the excavations, all of the anomalies that in our judgment represented cultural features were then assigned consecutive feature numbers.

Feature 1

This soil discoloration (Figure 11) was first noted at 60 cm in test unit 62N/34E. When first encountered, the feature consisted of a somewhat oval-shaped ring of a very dark grayish brown (10YR5/6) or strong brown (10YR4/2) silt loam encircling an area of yellowish brown (10YR5/6) or strong brown (7.5YR5/6) silt loam (that also happens to be the same as the surrounding matrix) and a pale brown (10YR6/3) silt loam on the west side. The pale brown silt loam was elliptical-shaped in plan view and in cross section was somewhat pointed. The outside ring in cross section appeared almost basin-shaped, although it appeared to be irregular in shape in the three plan views drawn at 60 cm, 70 cm and at 80 cm. The feature extended to a depth of 85 cm.

Feature 1 contained 50 artifacts (Appendix B) including three flakes of primary decortication, eight secondary decortication flakes, 27 interior flakes, three retouch flakes, seven pieces of fire-cracked rock and two pieces of shatter. Of these, 60% (30) were recovered from fine screened soil samples processed in the laboratory. That cultural material was present throughout the matrix of the feature is evident by examining the results of the three 10 cm levels (60 cm - 70 cm, 70 cm - 80 cm and 80 cm - 90 cm) used in its controlled excavation. The 60 cm - 70 cm level contained 16 (32%) artifacts, the 70 cm - 80 cm level contained 26 (52%) artifacts and eight (160%) artifacts were recovered in the 80 cm - 90 cm level. Although no culturally diagnostic artifacts were found in association with the feature, the quartzite and rhyolite artifacts found in the feature may suggest a Late Archaic affiliation (Perttula 1984; J. Price 1983:261-262). An analysis of the lithic material indicates that chert artifacts comprise 84% (42) of the total with 10% (5) being quartzite and 6% (3) being rhyolite. It is difficult to determine the function of the feature although it may represent some sort of storage pit.

Feature 2

Feature 2 (Figure 11) was a postmold first noticed at 90 cm in test unit 63N/35E as an amorphous stain containing some charcoal. At 95 cm a definite circular stain 20 cm in diameter was observed. Soil in the feature was a dark grayish brown (10YR4/2) silt loam with charcoal flecks and chunks throughout the matrix. Soil surrounding the feature was a yellowish brown (10YR5/6) or strong brown (7.5YR5/6) silt loam. In cross section the feature was long and

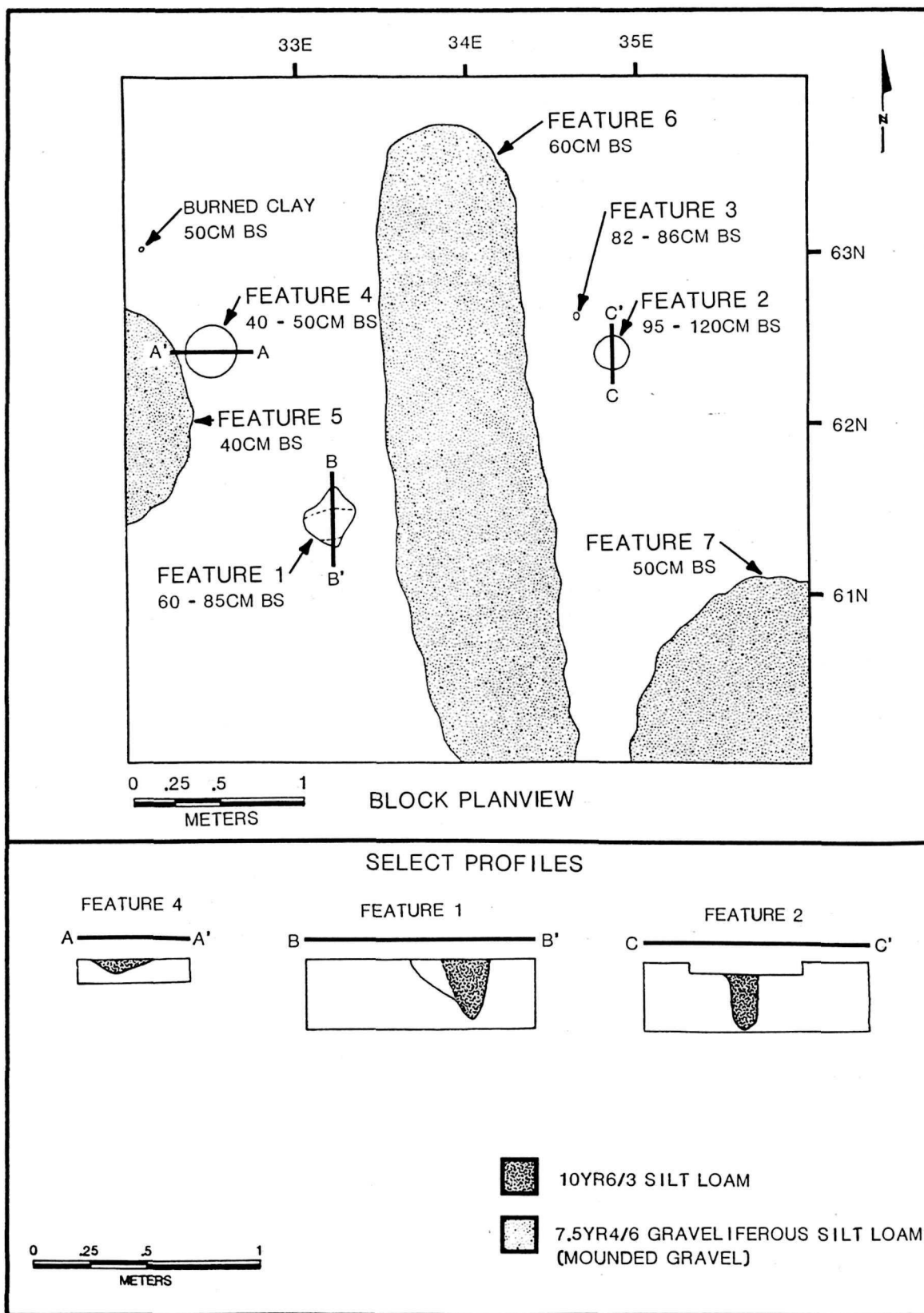


Figure 11. Area B Block planview

narrow with parallel sides that converged to a point where it terminated at 120 cm.

Feature 2 yielded 55 artifacts (Appendix B) including two flakes of primary decortication, 11 secondary decortication flakes, 32 interior flakes, seven pieces of fire-cracked rock and three pieces of shatter. All but two of these artifacts were recovered from fine screened soil samples processed in the laboratory. All of the artifacts were made of chert except for one quartzite interior flake. The 95 cm - 100 cm level produced seven (13%) artifacts, the 100 cm - 110 cm level contained 19 (35%) artifacts and 29 (52%) artifacts were recovered in the 110 cm - 120 cm level.

Although no culturally diagnostic artifacts were found in association with the feature, 25.59 grams of charcoal was recovered. The charcoal from Feature 2 yielded a radiocarbon date of 2670 +/- 60 years BP or 720 B.C. (Beta-25755). This date indicates that the feature is associated with the terminal Late Archaic Period that in this region spans from about 3000 B.C. - 500 B.C.

Feature 3

Feature 3 was a small concentration of ash (?) in block excavation unit 63N/35E (Figure 11) first noticed at 82 cm and extending to 86 cm. It was circular in plan view and was only 2.5 cm in diameter. The ash was a light gray (10YR7/1) and was very distinct from the surrounding matrix that was a strong brown (7.5YR5/6) very dry, very hard, very compact silt loam. The circular concentration extended straight down before terminating abruptly in a slightly rounded base. Feature 3 was located about 35 cm east of the elongated area of mounded gravel mapped as feature 6. The 7.5 grams of ash was sent to Beta Analytic (Beta-25754) who found it to contain insufficient carbon for analysis. The function of this feature is unknown.

Thirty-nine artifacts were recovered from the soil part of this unit (the other being the gravel of feature 6) in the 80 cm - 90 cm level. All artifacts were lithic debitage including one primary decortication flake made of quartzite, 10 secondary decortication flakes made of chert, 15 interior flakes made of chert and one made of rhyolite, two chert retouch flakes, five pieces of chert shatter and five pieces of fire-cracked rock including one chert and four quartzite for a total of 33 (85%) chert artifacts, five (13%) quartzite artifacts and one (2%) rhyolite artifact.

Feature 4

Feature 4 (Figure 11) was first noted at 40 cm in the 1 m (east-west) x 2 m (north-south) test unit 64N/33E (later expanded into the 4 m x 4 m block excavation). When first encountered, the feature consisted of an amorphous area of charcoal flecks with some chunks of charcoal and lithic debitage. Soil was a dark grayish brown (10YR4/2) silt loam. Surrounding soil matrix was a brown to dark brown (7.5YR4/4) dry, hard, compact silt loam. Feature 4 extended to a maximum depth of 48 cm. At 42 cm the feature was circular in shape with a diameter of 30 cm. An east-west profile shows the feature to be basin-shaped and the north-south profile reveals a more undulating configuration at the base.

Feature 4 yielded 2.6 grams of charcoal along with 35 artifacts (note that the 50 cm - 55 cm and 55 cm - 60 cm levels labeled feature 4 in Appendix B represent the material recovered from the pedestaled matrix directly below Feature 4). Artifacts from the 40 cm - 45 cm and the 45 cm - 50 cm levels

included one dart point fragment (catalog no. 289-4), two flakes of primary decortication, six secondary decortication flakes, 21 interior flakes, two pieces of fire-cracked rock and three pieces of shatter, 34 (97%) that were made from chert and one (3%) was made of quartzite. Of these, 69% (24) were recovered from fine screened soil samples processed in the laboratory. The corner-notched dart point fragment recovered in the matrix suggests that the feature may date to the Archaic or Woodland periods. At the 40 cm - 50 cm level in the same unit was found a Gary-like dart point (Figure 10i; catalog no. 2-1) nearby. Points of this type appear as early as the Late Archaic Period and continue through the Woodland Period (Chapman 1980:308). The presence of charcoal and a nearby tiny piece of burned clay (disintegrated and discarded) suggests that feature 4 may have been a hearth.

Feature 5

Feature 5 (Figure 11) is an area of mounded gravel observed in the southwest part of test unit 64N/33E and the northern part of test unit 62N/33E beginning at about 40 cm and continuing to about 110 cm where the top of the strong brown (7.5YR4/6) graveliferous silt loam or clay loam was encountered. The west wall profile of the block excavation (Figure 9) shows the abrupt sides of the mound. The area of mounded gravel was circular in the block but because it continued into the west wall of the block its exact configuration was not established.

It was initially thought that the mounded gravel represented the remains of an ancient tree tip-up and was treated as a natural phenomenon. After two more such features (Features 6 and 7) were uncovered in the block excavation and when one of these (Feature 6) was observed to be overlaying some of the soil that in other parts of the site overlaid the graveliferous silt loam, it was judged to represent a cultural feature. Because it was not thought to have been cultural at the time of its excavation, any artifacts that were recovered from the gravel were not collected separately from the rest of the unit. It was our impression that the gravel appeared to contain few, if any, artifacts.

Feature 6

Feature 6 (Figure 11) represents another mounded gravel feature that was first encountered at about 60 cm and extended to 90 cm in the south wall and to 130 cm in the north wall. The feature at its lowest levels was found to extend from the north wall of the block to the south wall of the block (Figure 9). This feature was first thought to represent an ancient tree tip-up.

As the four units in the center of the block (63N/35E, 63N/34E, 62N/35E and 62N/34E) were being excavated we decided to keep separate those artifacts recovered from the strong brown (7.5YR5/6) very dry, very hard, very compact silt loam (soil) from the strong brown (7.5YR4/6) graveliferous silt loam or clay loam (gravel). This was begun at 80 cm - 90 cm and continued to 130 cm in 63N/35E; at 80 cm - 90 cm and continued to 160 cm in 62N/35E; at 83 cm - 90 cm and continued to 110 cm in 63N/34E; and at 70 cm - 80 cm and continuing to 110 cm in 62N/34E.

The 21 levels in the four units in the center of the block were excavated by first removing the soil side of the unit, screening the matrix, bagging the artifacts and then doing the same with the gravel side. All levels produced artifacts from the soil side of their respective units. Twelve gravel levels yielded artifacts with the other 9 found to be culturally

sterile (in 63N/35E levels 100 cm - 110 cm and 120 -130 cm; the 90 cm - 100 cm level in 63N/34E; and the 70 cm - 80 cm, 90 cm - 100 cm, 110 cm - 120 cm, 130 cm - 140 cm, 140 cm - 150 cm and 150 cm - 160 cm levels in 62N/34E).

Feature 6 yielded 102 artifacts including two biface fragments made of chert and one made of rhyolite, four chert primary decortication flakes, 19 chert secondary decortication flakes, 59 chert interior flakes, one chert retouch flake, five pieces of chert shatter, one piece of quartzite shatter, eight pieces of chert fire-cracked rock and two pieces of quartzite fire-cracked rock. Of the total, 98 (96%) were made of chert, three (3%) were made of quartzite and one (1%) was of rhyolite. None were culturally diagnostic.

Feature 7

Feature 7 (Figure 11) is an area of mounded gravel observed in test unit 61N/36E and part of 62N/36E beginning at about 50 cm and continuing to about 100 cm where the top of the strong brown (7.5YR4/6) graveliferous silt or clay loam was encountered. The south wall profile of the block excavation shows the abrupt slope of the west side of the mound while the east wall profile shows a stepped appearance (Figure 9). The area of mounded gravel was circular in the block but because it continued into the south and east walls its exact configuration was not established.

It was first thought that the mounded gravel represented the remains of an ancient tree tip-up and was treated as a natural phenomenon. Because it was not considered cultural at the time of its excavation, any artifacts that were recovered from the gravel were not collected separately from the rest of the unit. This feature contained few (if any) artifacts.

Interpretation of Features 5, 6 and 7

The stratum designated a 7.5YR4/6 graveliferous silt loam that was encountered in the test excavations appears to be a former active floodplain surface. The size range and angularity of the gravels do not appear to have been derived from erosion of the upland slope immediately south of the site that would be the only other potential source of such materials.

Although the surface of the gravel layer in the trench and in other test units (Figures 7, 8 and 9) is what would be expected for a relict Current River floodplain originating as probable point bar accretion, the appreciable and extraordinary relief of the surface as exposed in the block excavation (Figure 9) is unexplainable in terms of natural fluvial processes. Suggested natural causes such as tree uprooting are unlikely.

Eight observations relate to the origin of the mound or ridge-like feature encountered in the block excavation -- all of which favor a cultural origin:

1. Test units and shovel tests over an area of about 570 sq m indicate the feature is restricted to less than 7% of this area (largely in the area of the block excavation). We would not expect the feature to be so areally restricted were the feature a natural mound or ridge caused by scour and fill from irregular stream flow across a bar.

2. Orientation of the ridge in the block is basically north-south which is essentially perpendicular to the direction of

steam flow. Most natural scour and fill features on bars are oriented parallel to the direction of flow.

3. Side slopes on the features are exceptionally steep. Such slopes could not have been maintained without supporting fill that only could have been culturally placed. Natural slopes of scour and fill features are considerably lower in a fresh state and become progressively lower as exposed surfaces are modified by erosion and biotic agents. Gravel deposits displaced by tree uprooting likewise become subdued, rounded masses as the roots decay and the holes are refilled with the displaced materials.

4. Gravel bars and features deposited by fluvial processes usually contain a matrix of sand with smaller gravel and exhibit an armouring of larger gravel due to winnowing as flood waters recede. The feature in the block does not exhibit this type of sorting.

5. The matrix associated with the gravel feature is a silt loam. This material is characteristic of the fine-grained upper terrace unit and not the graveliferous lower unit. Such a mixture is difficult to explain in terms of natural processes.

6. There is no evidence of former concentrated runoff from the upland slope south of the site that means that secondary channelization and disturbance of a river bar by upland flow is not a factor.

7. At least one part of the graveliferous silt loam feature is physically separated (in whole or in part) from the continuous stratum encountered near the base of the excavation (Figure 9). Being isolated from the main stratum by deposits of the upper fine-grained terrace unit, the gravelly pocket therefore cannot be causally related to deposition of a natural gravel bar.

8. Although culturally diagnostic artifacts were not isolated in collections from materials found in nongraveliferous deposits at the same depth, the presence of artifacts (low density) were present in the matrix of a good deal of the gravel that was screened separately from the nongravel matrix in 64N/33E, 63N/35E, 63N/34E and 62N/35E. The presence of these artifacts presents strong evidence for a cultural origin. The probability of encountering more than an isolated artifact that was eroded from another location and deposited by natural processes in a fluvial setting is low.

Although these considerations suggest that the feature is cultural and not natural, it is not possible on the basis of observed stratigraphic relationships to definitively establish their age in the absence of diagnostic artifacts. While they could be intrusive features related to any of the overlying strata, it is logical to assume they are related to the deeper and older cultural components. It is difficult to determine exactly what sort of function a small mound of gravel would have served prehistoric occupants of 23SH101. Perhaps these features may have functioned as some sort of primitive windbreak.

Historic Artifacts

The 73 historic artifacts recovered in Area B include one cinder, 10 pieces of clear bottle glass, one piece of earthenware, one piece of fiberglass, two pieces of green bottle glass, 15 pieces of miscellaneous metal, one piece of milk glass, one piece of mortar, one cut nail, 14 pieces of plain whiteware, three pieces of plastic, one piece of purpled bottle glass, one shell casing and 20 pieces of clear window glass. The shell casing is a .38 caliber shell cartridge whose top is sheared off (probably from a plow) and which was center fired and suggests that it dates to the 1940s or 1950s.

AREA C POSTHOLE TESTS

The third alternative for the proposed leach field (Area C) is a linear shaped area measuring about 290 m northwest-southeast x 60 m northeast that is situated about 45 m southeast of Area B (Figures 6 and 12). Area C lies at the base of the ridge slope along the southern edge of the bench that was covered by secondary growth. Vegetation in portions of the project area were cleared prior to our investigations.

Twenty-nine posthole tests were excavated in a 30 m grid across Area C (Figure 12). All but two (118S/233E and 178S/233E) were excavated to 60 cm where regolith was encountered. Posthole tests at 118S/233E and 178S/233E were excavated to 20 cm and 40 cm respectively. Soil stratigraphy in the posthole tests was generally uniform although some variability was observed. Topsoil observed in all but one of the posthole tests (88S/263E) was a dark brown (10YR3/3) silt that extended to 20 cm - 40 cm. Below this for the most part was a yellowish brown (10YR5/6) silt loam except in 28S/53E, 28S/83E, 58S/53E, 58N/83E, 58S/113E and 148S/233E where a brown to dark brown (7.5YR4/4) clay loam was observed directly below the plowzone. Elsewhere this brown to dark brown (7.5YR4/4) clay loam was found below the yellowish brown silt loam. Soil development in this area appears to be colluvial in origin and the variability in stratigraphy is clearly related to the slope of the land.

Thirteen of the postholes contained artifacts (Table 4). Only 1 (28S/83E) produced both prehistoric and historic artifacts. Two (28S/53E and 58S/83E) produced only historic materials. Ten tests (2N/53E, 2N/83E, 28S/113E, 58S/143E, 58S/233E, 88S/233E, 118S/203E, 148S/293E, 178S/233E and 178S/293E) yielded prehistoric artifacts. The remaining 16 posthole tests (58S/53E, 58S/113E, 58S/173E, 58S/203E, 88S/113E, 88S/143E, 88S/173E, 88S/203E, 88S/263E, 118S/173E, 118S/233E, 118S/263E, 118S/293E, 148S/233E, 148S/263E and 178S/263E) were culturally sterile. More than half (7 or 54%) of the positive tests were in the northwest part of Area C.

AREA C TEST UNITS

Four tests units were excavated in Area C (Figures 12 and 13) at 68S/123E (A), 73S/173E (B), 32S/79E (C) and 118S/270E (D). Although placement of the units was arbitrary each was spaced far enough apart to give adequate coverage along the entire linear project area. Only 49 artifacts including 21 prehistoric (43%) and 28 (57%) historic were recovered in the Area C test units (Table 4).

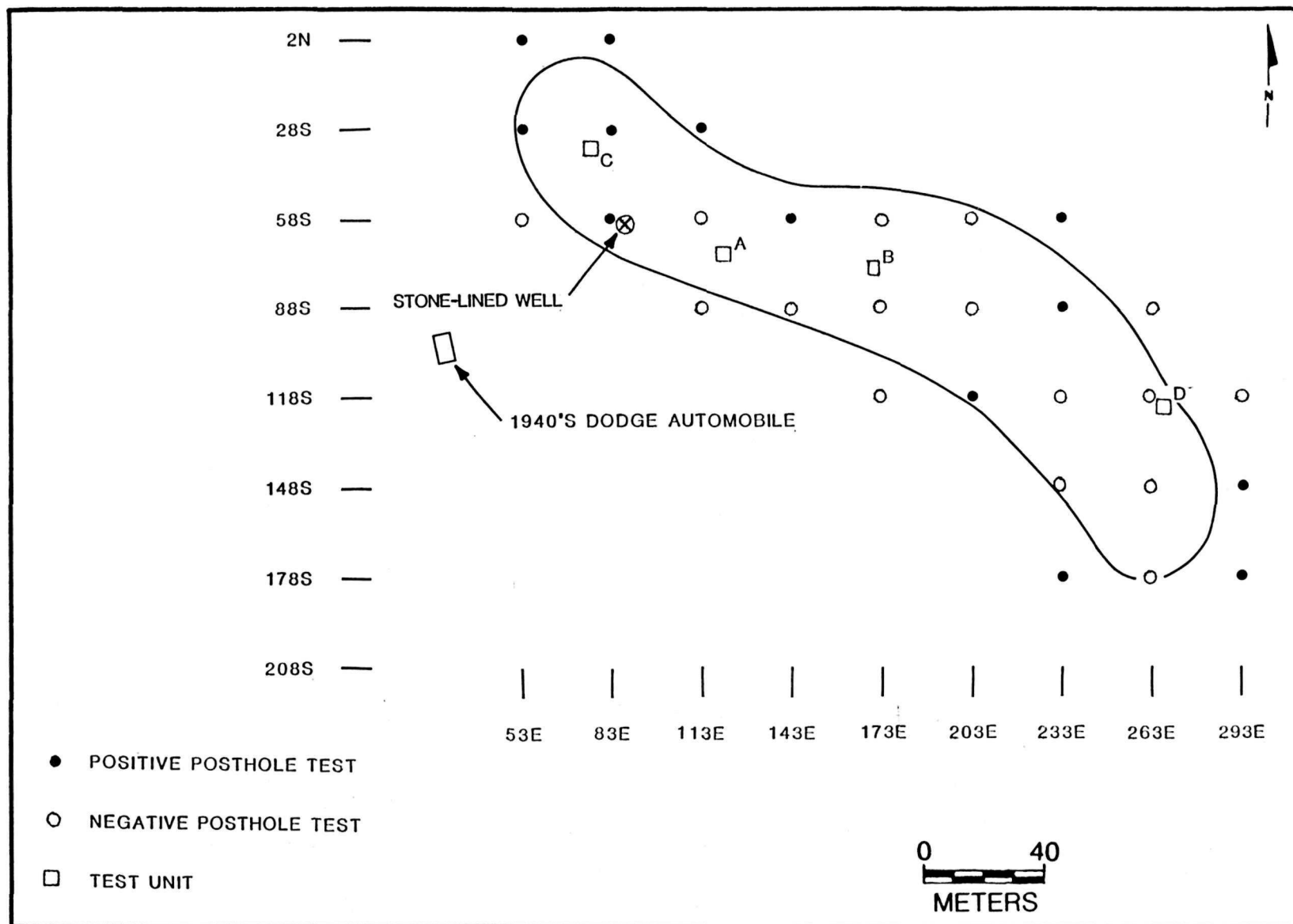


Figure 12. Location of investigations in Area C

68S/123E (A)

Test unit A (68S/123E) was a 1 m x 1 m unit oriented with magnetic north and excavated in 10 cm arbitrary levels to a depth of 60 cm at which point a 50 cm deep posthole test was excavated in the middle of the unit for a total depth of 110 cm (Figure 13). Soil observed in the unit included a 30 cm plowzone of dark brown (10YR3/3) silt containing many rocks. Below this was a brown to dark brown (7.5YR4/4) clay loam that also contained many rocks. No features were detected. The five historic artifacts found in the unit were restricted to the plowzone.

73S/173E (B)

Test unit B (73S/173E) was a 1 m x 1 m unit oriented with magnetic north and excavated in 10 cm arbitrary levels to a depth of 60 cm at which point a 50 cm deep posthole test was excavated in the middle of the unit for a total depth of 110 cm (Figure 13). Soil observed in the unit included a 40 cm plowzone of dark brown (10YR3/3) silt containing many rocks. Below this was a brown to dark brown (7.5YR4/4) clay loam that also contained many rocks. Test unit B was culturally sterile.

32S/79E (C)

Test unit C (32S/79E) was a 1 m x 1 m unit oriented with magnetic north and excavated in 10 cm arbitrary levels to a depth of 60 cm at which point a 50 cm deep posthole test was excavated in the middle of the unit for a total depth of 110 cm (Figure 13). Soil observed in the unit included a 16 cm plowzone of dark brown (10YR3/3) silt containing many rocks. Below this was yellowish brown (10YR5/6) silt loam that also had contained rocks. This soil extended to a depth of about 45 cm where it graded into a brown to dark brown (7.5YR4/4) clay loam that also contained many rocks. Of the 37 artifacts that were recovered in this unit, 14 were prehistoric and 23 were historic. All of the artifacts were found in the upper 30 cm. No features were detected.

118S/270E (D)

Test unit D (118S/270E) was a 1 m x 1 m unit oriented with magnetic north and excavated in 10 cm arbitrary levels to 60 cm at which point a 50 cm deep posthole test was excavated in the middle of the unit for a total depth of 110 cm (Figure 13). Soil observed in the unit included a 30 cm plowzone of dark brown (10YR3/3) silt that unlike the other three units did not contain many rocks. Below this was yellowish brown (10YR5/6) silt loam with a few rocks. This soil extended to a depth of about 95 cm where a dark grayish brown (10YR4/2) clay was encountered. The eight prehistoric artifacts recovered from this unit were restricted to the upper 40 cm. One Emergent Mississippi arrow point was found. No features were observed in the unit.

AREA C ARTIFACTS

A total of 65 artifacts were recovered (Table 4) in Area C including 34 (52%) prehistoric in origin and 31 (48%) historic specimens. Of these, 26 (40%) were recovered in the posthole tests including 23 prehistoric and three historic artifacts. The remainder (49; 60%) were recovered in the test units including 21 prehistoric and 28 historic artifacts. The prehistoric artifacts

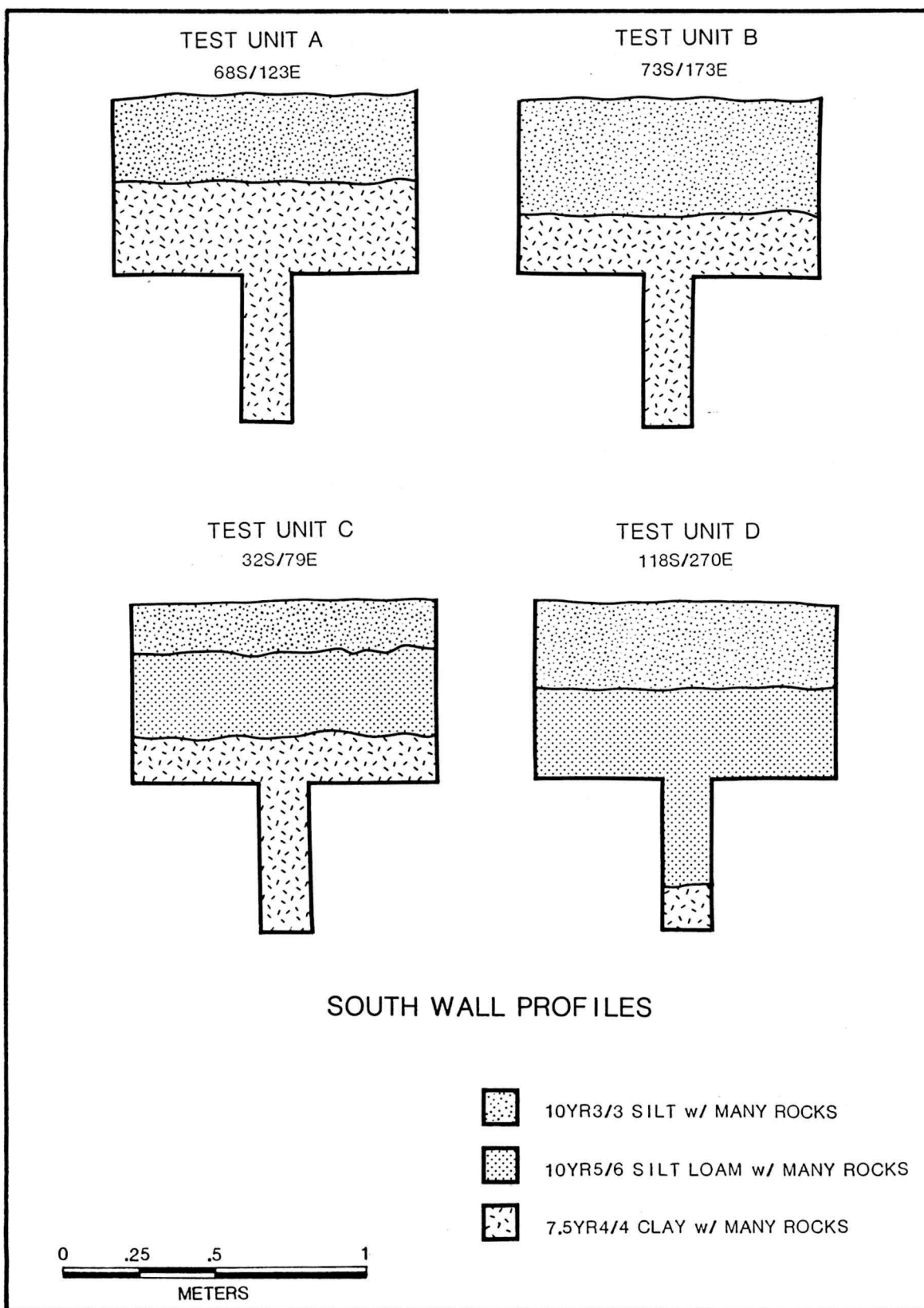


Figure 13. Profiles of test units 68S/123E, 73S/173E, 32S/79E and 118S/270E in Area C

Table 4
Artifacts recovered from investigations at Alternative C, 23SH101

Artifact Type	Posthole tests						Test units						Total					
	Lithic type						Lithic type						Lithic type					
	C	R	Q	E	O	Ct.	C	R	Q	E	O	Ct.	C	R	Q	E	O	Ct.
<u>Prehistoric Artifacts</u>																		
Arrow point						0						1						1
Core	3					3						0						3
Interior flake	1					1						6						7
Primary decort. flake	1					1						2						3
Retouch flake						0						2						2
Secondary decort. flake	2					2						0						2
Shatter	16					16						10						26
Subtotal	23	0	0	0	0	23	21	0	0	0	0	21	44	0	0	0	0	44
<u>Historic Artifacts</u>																		
Clear bottle glass	1					1						8						9
Green bottle glass						0						2						2
Misc. metal						0						2						2
Milk glass						0						1						1
Nail, cut						0						1						1
Plain whiteware						0						5						5
Purpled bottle glass	1					1						0						1
Window glass	1					1						9						10
Subtotal	3	0	0	0	0	3	28	0	0	0	0	28	31	0	0	0	0	31
Total	26	0	0	0	0	26	49	0	0	0	0	49	75	0	0	0	0	75

included one (3%) arrow point fragment, three (9%) cores, three (9%) primary decortication flakes, two (6%) secondary decortication flakes, seven (20%) interior flakes, two (6%) retouch flakes and 16 pieces of shatter (47%). All were made of locally available chert.

The arrow point fragment (Figure 10y, catalog no. 379-1) was recovered in the 10 cm - 20 cm level of 118S/270E. The point measures 2 cm long x 1.1 cm wide x .4 cm thick and is missing its base. Made from salmon colored chert, this fragmentary arrow point exhibits a micronate distal end, a somewhat straight blade shape, shallow side notches and is plano-convex in cross section. One blade edge is beveled on two edges while the other is beveled on one side. Arrow points of this style in this region date to the Emergent Mississippi Period.

AREA C FEATURES

No features were observed in any of the Area C excavations. A rock-filled stone-lined well was observed in this area (Figure 12). No artifacts were found associated with the well. The well appears to have been constructed around 1900 and may be the well that was used by Mrs. Russell and her family in the early part of this century. It may also correspond to the small shadow appearing in the open field in this area on the 1955 aerial photo.

RESEARCH TOPICS RELEVANT TO ARCHAEOLOGICAL EXCAVATIONS AT 23SH101

The HPA/UMAAD 1987-1988 investigations 23SH101 were directed toward three general questions:

1. What is the cultural sequence represented at the site and what are the ages of the various archaeological components?
2. What is the nature of the past occupations of the site and how did the site function through time?
3. How will the information contained in 23SH101 contribute to a better understanding of the archeology in the Upper Current River Valley and the Eastern Ozark Highland?

CULTURAL PERIODS REPRESENTED

We found no diagnostic prehistoric artifacts in Area A. Some idea of the possible prehistoric occupation of this part of the site is evident from an amateur collection made from the surface of disturbed areas inside and in the immediate vicinity of Area A and from the gravel bar below Area A. The collection includes a probable Dalton point, three Rice Side Notched points, a Gary or Burkett Stemmed point, two Rice Lobed points, an Agate Basin Lanceolate point and a Dalton scraper with burin spall which together suggest that this area may have been occupied from Early Archaic through Early Woodland and possibly Middle Woodland times. Most of the prehistoric activity appears to have occurred during the Early and Middle Archaic periods.

Area B appears to have been occupied at various times during the Paleo-Indian, Early Archaic, Middle Archaic, Late Archaic, Woodland and

Emergent Mississippi periods. Diagnostic lithics suggest that the area may have been used at various times by small groups of people beginning with the Paleo-Indian and ending sometime during the Emergent Mississippi Period. The number of Late Archaic diagnostics seems to indicate that the major occupation of the site occurred during this period (Figure 14). The Feature 2 postmold (Figure 11) yielded a radiocarbon date of 720 B.C. (Beta-25755) that is within the Late Archaic time frame. Only a light distribution of prehistoric artifacts was found in this area suggesting that only a limited amount of activities occurred in Area C in the past. The Emergent Mississippi arrow point (Figure 10y; catalog no. 379-1) was the only diagnostic artifact found in this area.

Historic artifacts recovered evidence a continuous occupation of the site since the 1840s. The kinds and quantity of historic artifacts recovered in test unit 1 suggest the presence of a blacksmith shop that may have been in operation prior to the Civil War. No evidence of the Civil War skirmish was detected during our investigations. Test unit 1 yielded a piece of babbitt (bearing or bushing) used in mill machinery along with nineteenth century ceramics (C. Price 1979d). Evidence of twentieth century use of the site was found everywhere. An extremely low density of historic artifacts was recovered in Area B. No evidence of pre-Civil War activity, Civil War military activity or nineteenth century activity was found. A light distribution of historic artifacts in Area C suggests that a limited range of historic activities took place here in the past. The stone-lined well in this area may be the same one used by Mrs. Russell in the early part of this century when she and her husband owned and operated the tourist ranch at Two Rivers.

SITE FUNCTION

In prehistoric times Area A appears to have functioned as a limited activity location. The absence of midden deposits, storage pits, pottery and structural evidence, along with a low to moderate density of lithic material suggest short term ephemeral use. A very limited amount of knapping activity is in evidence based on the presence of a light lithic scatter found at the proposed comfort station and along the sewer line. The density and variety of lithic debitage recovered in Area A suggest that knapping was the primary activity. Interior flakes constitute 60% of the 1,799 lithic artifacts. If retouch flakes (3.8%) and secondary decortication flakes (21.1%) are included then 84.9% of the total assemblage is accounted for (Figure 15). Tested cobbles and cores comprise less than 1% of the assemblage. These data suggest that chert knapping focused on maintenance/manufacture rather than primary manufacture.

This area may have functioned as a recurrently used rest area and/or campsite or as a summer-fall base camp occupied by either nuclear family units or aggregates of nuclear families. Given the proximity to navigable water, the ruggedness of the surrounding terrain, its location at the confluence of two waterways and the fact that indirect evidence of canoe use is present in the southeast as early as Dalton times (Morse 1975b:116; Kandare 1983:92) it is possible that the site was occupied by prehistoric canoeists.

Area B reflected an almost even horizontal distribution of prehistoric material across the area. The amount of material and types of diagnostic artifacts recovered in Area B suggests that this part of the site was favored throughout most of prehistory (Table 3 and Figures 10 and 14). The density and variety of lithic debitage suggest that knapping was a major activity

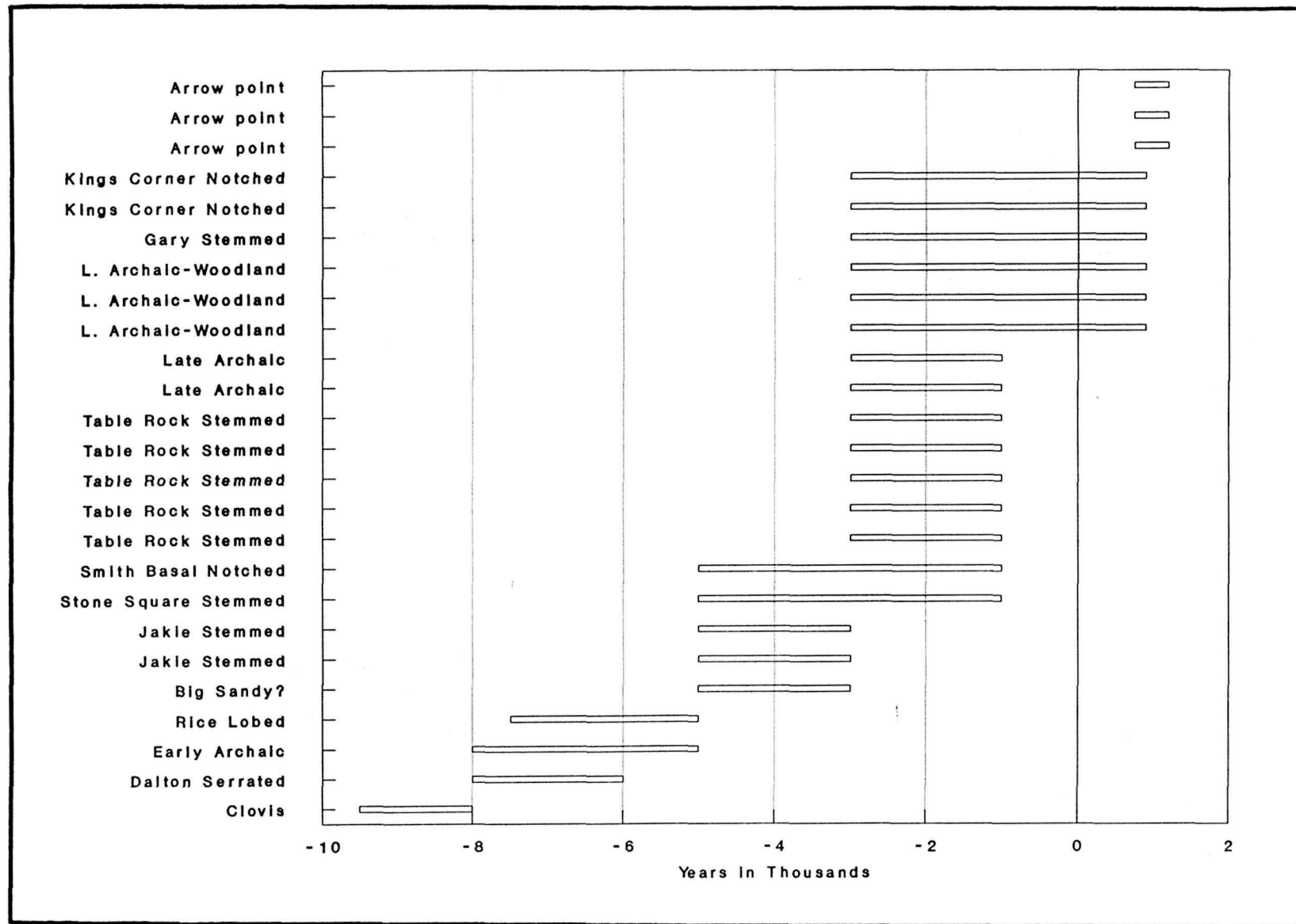
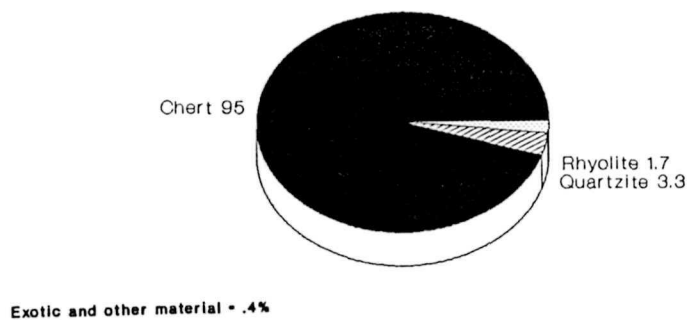
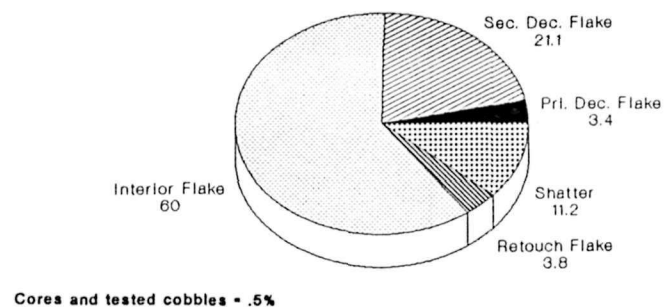


Figure 14. Cultural sequence as indicated by diagnostic artifacts recovered in Area B

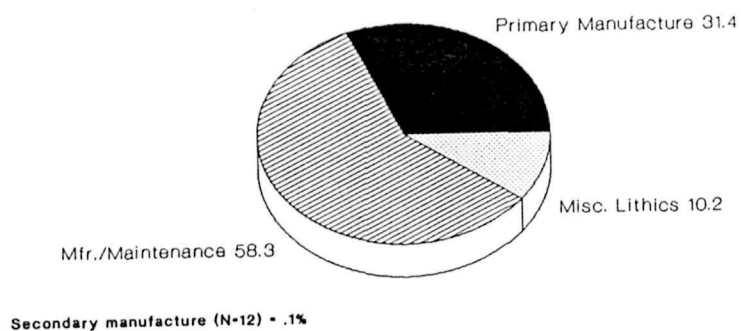
Lithic Material



Lithic Debitage



Functional Analysis of lithic debitage



Activities Represented by Tools

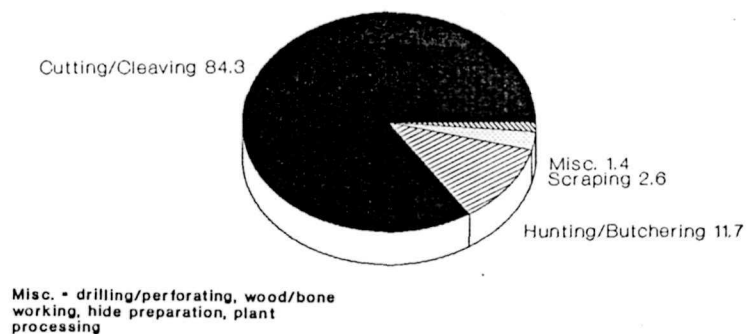


Figure 15. Analysis of lithic artifacts recovered from 23SH101

(Figure 15). A functional analysis of the debitage shows that manufacture (31.4%) and maintenance (58.3%) of tools was a significant activity in this part of the site (Figure 15). Evidence of primary reduction dominates the area with evidence of secondary manufacture virtually absent.

Tools recovered in Area B indicate that cutting/cleaving (84.3%), hunting/butchering (11.7%) and scraping (2.6%) were major activities conducted in the area (Figure 15). Other activities represented include drilling, perforating, wood and bone working, hide preparation and plant processing. Although the majority of these activities evidence use of faunal resources, without faunal remains, it is difficult to determine resource selection, seasonality, scheduling and the settlement cycle. If the scheduling in the exploitation of animal populations in the Middle Mississippi period is any indication of earlier procurement strategies, then we would expect the primary seasons of exploitation to include bear from the beginning of November to the end of March, squirrels from the beginning of October until the end of February, opossum from mid-December to the end of February, beaver from the beginning of October until the end of March, deer from the middle of October until the middle of February or mid-April, wild turkey from the end of October until the end of February, raccoon from the beginning of October to about the first few weeks of March, rabbits from the beginning of November until the end of January and from the end of February until the end of June, waterfowl from the beginning of October to the first few weeks of April, turtles from the beginning of June until the end of September and fish from the first of April until the end of September (Smith 1975:123). If these procurement strategies remained relatively constant through time, then the available evidence suggests that the site was seasonally occupied in the summer and fall.

The presence of features suggests a more than ephemeral prehistoric use of this locus. Seven cultural features including a postmold, two pits or small hearths, a concentration of ash (?) and three areas of mounded gravel were identified in the block excavation. The postmold and the mounded gravel features (that may have functioned as some sort of crude windbreak) may imply some degree of permanence in the prehistoric occupation. We have concluded that Area B functioned as a summer-fall base camp that was occupied by either nuclear family units or aggregates of nuclear families who used the landform as a base to among other things, harvest local animal resources and reduce locally available chert. The low density of prehistoric artifacts recovered in Area C suggests that this part of the site was the scene of very limited unknown specialized activities.

The number of forged metal artifacts, cinders, square nails and other miscellaneous historic items recovered from test unit 1 suggest the presence of a blacksmith shop in Area A. Documentary data indicate that the site was occupied as early as 1840 and the material recovered in this unit suggests that the blacksmith shop may date to this period. Just south and slightly west of the unit is a small mound that may be connected with the blacksmith shop. A domestic farming operation is well documented in the historic record for the two decades preceding the Civil War. The 1841 GLO plat shows a structure in "Thompson's Field." Artifacts recovered in the leach field area, such as the blue shell edge sherd and the blue transfer print sherd date to this period and demonstrate the conduct of domestic activities in this part of the site. Construction material such as window glass, hand cut nails, coal and mortar recovered in this area also provide evidence of a former structure.

Other historic material including ceramics, bottle glass and metal date to a late nineteenth - early twentieth century occupation. Of particular interest in this regard is the piece of babbitt that may be associated with

the late nineteenth century lumber mill probably is located outside the project areas. Mrs. Russell recalled that shacks associated with the lumber mill, a stave mill, two wells, a turn of the century store, a 1920s barn, a 1930s house, three 1930s tourist log cabins, three 1930s frame cabins and a 1930s store were also located outside the areas of investigation. Prior to 1860 the site functioned as a farm community (Jacks Fork) and blacksmith shop. After the Civil War, the lumbering industry (if not already established) expanded and the mill became the centerpiece of the community that also supported a store by the turn of the century. The primary economic pursuit of the occupants was subsistence farming between 1910 and 1920. A shift in economic emphasis occurred during the depression with the construction of tourist cabins and a store. But this time the community was sufficiently viable to have its own post office and postmaster. The light distribution of historic artifacts in Area B is consistent with that expected for what was used as an agricultural field as late as the late 1950s and early 1960s. During the earliest period of historic occupation, this area in all probability represents "Thompson's Field" as depicted on the 1841 GLO plat. Area C reflects a light distribution of historic artifacts consistent with an agricultural use from about 1841 - 1960s. The well identified in this area is probably the same well that Bertha Russell used in the early part of this century.

INTEGRITY OF THE DEPOSITS

We concluded that the integrity of the deposits in Area A ranges from poor to very good. The area in the immediate vicinity of the existing comfort station is greatly disturbed by the present facility, underground utility and pipe lines and a sewer line running from the existing comfort station to the northeast across the proposed leach field to an existing leach field located outside the project area. Several of the projectile points from the Devall collection were recovered from the surface of these disturbances. Other natural disturbances were also noted including tree roots, root molds and rodent burrows.

The integrity of the deposits in Area B ranges from poor to excellent. Deposits in the northwest part of Area B were shallow, showed signs of being impacted by soil deflation, erosion and compaction as a result of former vehicle traffic and from modern camping activities. Past use of this landform as an agricultural field has damaged the upper 20 cm - 40 cm of the deposit by cultivation. The integrity of the cultural deposits below the plowzone in the southeast part of Area B were excellent. The block excavation revealed deep, intact cultural deposits.

Cultural deposits in Area C were shallow and for the most part appear to be restricted to the plowzone. Since the area located on the same landform as Area B there is a possibility that there may be localized deep, intact deposits that were not revealed in these investigations because of the limited nature of the testing.

HORIZONTAL AND VERTICAL EXTENT

Direct evidence documenting the horizontal extent of the entire site could not be obtained because our investigations were limited to specific project areas. The documented distribution of surface artifacts was directly related to surface visibility. Artifacts were found only in those areas where pedestrian traffic or other activities has caused erosion. A thick covering

of grass effectively blanketed the surface in some areas, while in other areas secondary growth made ground surface visibility negligible. Background studies in combination with informal field observations and data obtained from local informants indicate that the site extends beyond the areas investigated.

The four test units excavated in Area A were evenly distributed. The southwest corner of this area was not tested due to the obvious disturbances there and because of the buried utility lines associated with the existing comfort station. Subsurface testing indicated relatively deep undisturbed deposits in the eastern part of Area A. The deepest deposits were observed in test unit 1 where artifacts were found as deep as 1.1 m. The depth of the deposit suggests the possibility of cultural stratification. Human occupation of this area appears to have begun soon after colluvial and possibly alluvial deposition was initiated. The historic component in test units 1, 3 and 5 was restricted to the first 40 cm.

Subsurface testing in Area B revealed relatively deep undisturbed deposits in the southeastern portion of this area. The deepest deposits were observed in the block excavation where artifacts were found as deep as 1.6 m suggesting the possibility of cultural stratification. Historic artifacts were primarily restricted to the plowzone. Subsurface testing in Area C indicated relatively shallow cultural deposits where the deepest deposits were found 40 cm below the surface. The prehistoric and historic components were primarily restricted to the plowzone.

CONTRIBUTIONS TO KNOWLEDGE

Several of the original research problems that were formulated at the onset of the ONSRAP are relevant to these investigations. The archeological excavations, analysis and interpretation of the recovered information provide substantive data relevant to these research problems.

Extent and Nature of Paleo-Indian Occupation of the Current and Jacks Fork Valleys

According to the Master Plan for Archaeological Resource Protection in Missouri:

The term Paleo-Indian refers to a distinct cultural tradition in Missouri between 12,000 and 8,000 B.C. It is identified by the presence of fluted points and is probably the earliest well-established American cultural complex. The cultural adaptations which occurred at this time developed during the terminal portion of the Late Pleistocene. Subsistence strategies included some hunting of Pleistocene herd mammals and a gradually developing emphasis on smaller mammalian forms (Stephenson 1965). Social groups probably consisted of small nomadic bands or family groups. For this reason, the campsites were probably very small with little remaining evidence. What little evidence may have been present probably has been seriously disturbed or rendered virtually invisible by erosional and depositional processes (Chapman 1980).... [A] considerable effort has been made to identify the distribution of fluted point finds (not actual sites, however) in Missouri on a county by county basis. As a result, the distribution of fluted points is the best information we currently

have for the extent of Paleo-Indian occupations in the state (Wright 1987:C-2-1).

Few fluted points have been found in the Eastern Ozarks. Until 1975 (Chapman 1975:Figure 4-3), Shannon County and the surrounding counties of Reynolds, Dent, Texas and Howell had not yielded fluted specimens. To the south and southwest of Shannon County, Oregon County yielded one fluted point and Carter County produced 3 such points. The recently completed 5-year ONSRAP had also encountered very little evidence of a Paleo-Indian occupation of the Current and Jacks Fork Valleys:

After 5 years of intensive research in the study area it can be stated that there is very little evidence of Paleo-Indian occupation there. Only a single classic Clovis point was documented. Other points with concave bases and minor fluting are present but also in very small numbers. The investigators are confident that if there had been significant Paleo-Indian occupation in the region, private collections obtained when much of the valleys in the study area were under cultivation would contain numerous specimens. Based on the current data base it appears the Paleo-Indian occupation in the study area was essentially nonexistent (J. Price 1987:46).

The Clovis point fragment (Figure 10u) found in the block excavation and a fragment of a fluted end scraper (Figure 10v) found in 76N/33E are important discoveries both in the ONSR and in the Eastern Ozarks as a whole. The Paleo-Indian artifacts found at Two Rivers represents the first time tools dating to this period have been found in controlled excavations in the Current and Jacks Fork drainages. These data provide new clues as to the Paleo-Indian occupation of the East White Study Area.

The fact that the Clovis point fragment is made from an exotic chert from Alabama suggests long distance travel. In 1928 W. E. Myer (1928:735) pointed out that there was far more travel among the Indians in the Eastern Woodlands than is usually supposed. Myer notes that Indians making trips covering 1,000 to 2,000 miles (1,609 km - 3,218 km) were reported by several early historic travelers. The journey from Alabama to Two Rivers could only be accomplished by crossing the Mississippi River by using watercraft. The river would not have been a barrier but rather would have served as an avenue of travel as it was in later prehistoric times (Kandare 1983, 1986).

This brings up a question about the introduction of watercraft transportation in the Eastern Woodlands. How long ago Indians used dugout canoes is of interest (Bullen and Brooks 1968:106). A model developed by Kandare (1983:90-97) dealing with the introduction and use of dugout canoe transportation in the Southeast does not include provisions for dugout canoe use for long distance travel by Paleo-Indians:

The experimental stage [Paleo-Indian] of dugout canoe development represents the period when floating log craft of limited dependability and safety may have been utilized for only short distances on local waterways by only a few inventive members of society.... It is theorized that, if indeed Paleo-Indians used watercraft it would have been to ford streams or for downstream travel. If used, watercraft were disposed of after usage. The Dalton adze provides indirect technological evidence of the

possible construction of dugout canoes at the terminal end of this period (Morse 1975:116). To date, there have been no watercraft related to the Paleo-Indian period [found] in the Southeast. If found, these dugouts are expected to be very poorly preserved, small craft.

The discovery of the point made of exotic material from a source located 250 miles (402 km) away and across the Mississippi River may be enough to suggest that long distance watercraft travel may have been conducted at a much earlier date than was considered above. The discovery lends support to Chapman's thought that long distance watercraft use was as old as the first wave of people coming to America (1975:37):

Watercraft are undoubtedly an old cultural trait and probably were a part of the cultural technology of the first migrants to America. It is postulated that the earliest American explorers and settlers were "canoe nomads" dependent primarily upon ocean resources for their subsistence.

Although he attributes a knowledge of watercraft to early man, Chapman (1975, 1980) does not discuss the possible use of watercraft by successive cultures in his synthesis of Missouri archeology despite the fact that there appears to be a clear association between prehistoric sites and bodies of water that are navigable by shallow draft watercraft. Chapman (1975:67) reported that the results of the fluted point survey showed a concentration of Clovis Fluted points along the main stems of both the Missouri and Mississippi rivers near their junction (like Two Rivers). The presence of Paleo-Indian sites along rivers and river junctions may suggest early use of watercraft.

We are unaware of any tool similar to the fluted end scraper as ever being found either in Missouri (Chapman 1975:60-94; Reagan 1981; Biggs, Stoutamire and Vehik 1970; Shippee 1964) or elsewhere in North America (Frison and Stanford 1982; Frison and Bradley 1980; Judge 1973; Newman and Salwen 1977). The scraper was found in the disturbed plowzone context. The Clovis point fragment was recovered from the layer above the graveliferous soil stratum. Features 5, 6 and 7 represent areas of culturally modified mounds of gravel and may date to Paleo-Indian activities based on the depths at which these features appear. None of the early sites on record have produced similar structural evidence dating to this period.

Extent and Nature of Dalton/Early Archaic Occupation of the Current and Jacks Fork Valleys

While Dalton artifacts are relatively scarce in the ONSR compared to the Ozark Foothills and Mississippi Alluvial Valley to the east (J. Price and Krakker 1975) they are present in sufficient quantities to conclude that people occupied the region during the Early Archaic. Most evidence of this is in the form of Dalton projectile points, adzes and scrapers.

The Dalton point found in the block excavation suggests a buried Dalton component. The presence of a Dalton occupation at 23SH101 was first established by surface evidence (Klinger and Kandare 1987a:34-36). Prior to our investigations the only reported discovery of Dalton material in controlled excavations within the Current and Jacks Fork valleys occurred at Akers Ferry where NPS investigators recovered a complete Dalton point along with four Dalton point fragments. The areas of mounded gravel may date to the

Early Archaic. The depth at which these features occur make it logical to assume that they are related to the deeper and older components.

Extent and Nature of Middle Archaic Occupation of the Current and Jacks Fork Valleys

Little is known about the Middle Archaic in the region. It was during this time (which corresponds with the hypsithermal) that the climate was much drier than preceding and succeeding periods. Although buried deposits representing Middle Archaic activities were recovered in Area B, this component cannot be separated from the material assemblages of earlier and later cultures found in this part of the site.

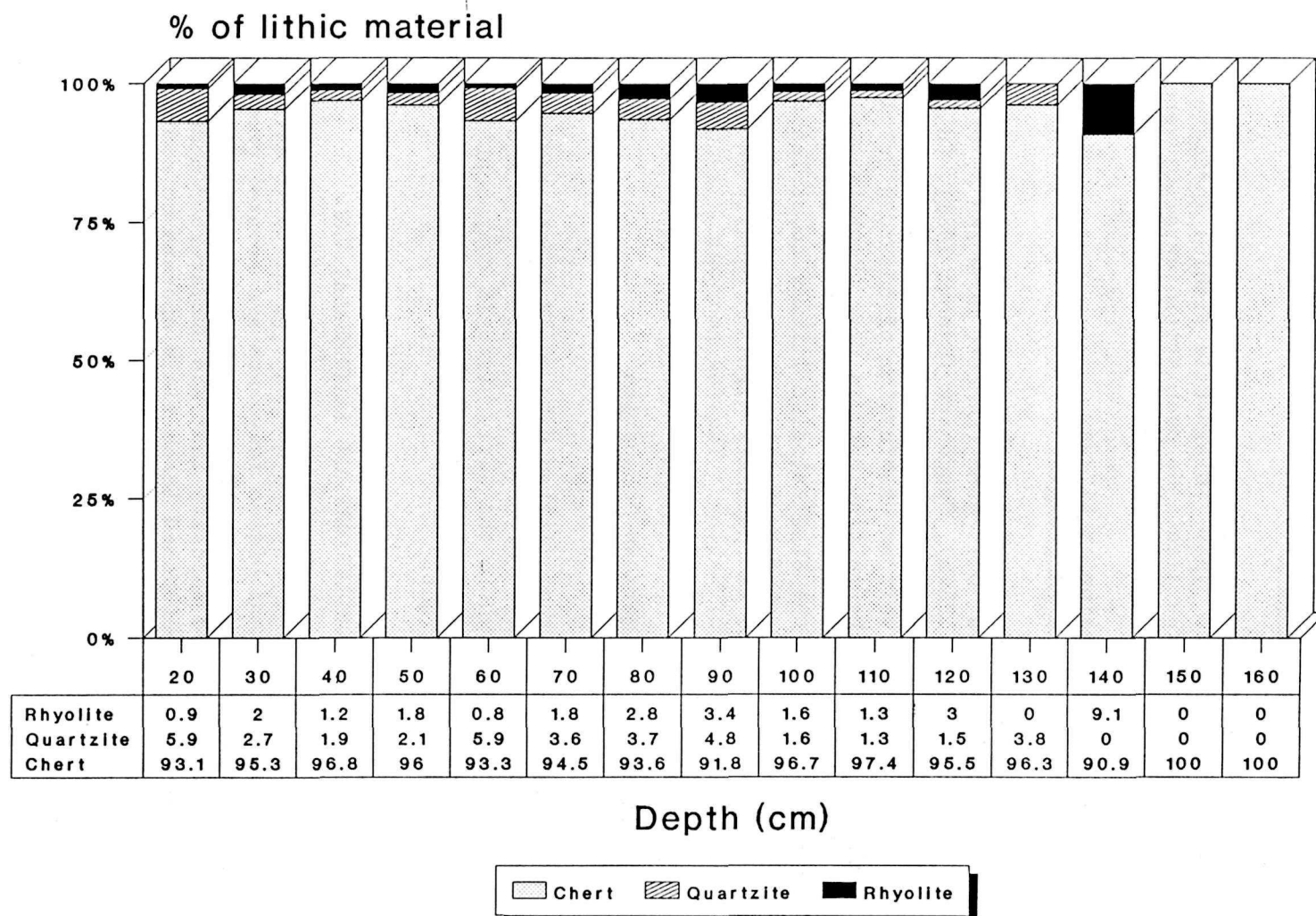
The Late Archaic Period in the Current and Jacks Fork Valleys

A major research objective has been determining the nature and extent of Late Archaic occupations in the region. Since a Late Archaic component is present at 23SH101 it was anticipated that materials of this substage would be recovered. Feature 2 (Figure 11) yielded a radiocarbon date of 720 B.C. (Beta-25755) suggesting that the Late Archaic occupation may have occurred toward the terminal end of this substage. Research focused on lithic resources used during the Late Archaic. At that time there was extensive use of orthoquartzite and rhyolite (Perttula 1984). Less than 2% of the lithic material recovered in Area B were made of rhyolite and slightly over 3% were made of quartzite (Figure 15). No artifacts made of rhyolite or quartzite were found in Area C.

Few tools were recovered that were made of quartzite or rhyolite. The only quartzite diagnostic tool that was recovered was a Stone Square Stemmed found in the block excavation. Projectile points of this type reportedly date from the Middle Archaic to Late Archaic periods (Chapman 1975:257). Also made of quartzite was a side notched side scraper that was recovered in the block excavation.

Of the 2,984 lithic artifacts recovered in these test units, 2,827 (95%) were made of locally available chert, 100 (3.3%) were made of quartzite, 50 (1.7%) were made of rhyolite, one (<1%) was made of exotic material and six (<1%) were made of jasper (Figure 15, Appendix B). If Perttula (1984:3, 11 and 13) is correct about rhyolite and quartzite being associated with Late Archaic components, then we would expect to find the vertical distribution of rhyolite to be discontinuous throughout the vertical profile and concentrated between 40 cm - 100 cm. This interval was chosen because a Gary point was recovered in test unit 64N/33E and the top of the postmold at 95 cm.

The law of superposition (E. Harris 1979:125) would suggest that if rhyolite use was strictly associated with Late Archaic groups and that if the Late Archaic occupation was between earlier and later occupations, then this relationship should appear in the percentage of the material found at the various depths of the excavation. It does not. Figure 16 shows the percentage of lithic material recovered by depth in the test units to be consistent throughout the vertical scale. This leads to the conclusion that either rhyolite and quartzite use is not as culturally diagnostic as was thought, or perhaps the rhyolite and quartzite artifacts found at the greater depths represent artifacts that are out of context. The formation of strata over gravel features displaying sharp breaks probably introduced a degree of complexity to the archeological stratigraphy that may account for some



Units 62N/34E, 62N/35E, 63N/34E, 63N/35E
and 64N/33E

Figure 16. Percent of lithic raw material recovered by depth in the block in Area B

infiltration. Another possibility is that the gravel features are Late Archaic and that their construction disturbed earlier cultural deposits.

Woodland Culture Areas in the Current and Jacks Fork Valleys

At least two Woodland occupations are present in the region and are represented by two ceramic types. Diagnostic lithics indicate the presence of a Woodland component at the site. No prehistoric ceramics were recovered at the site that help answer questions regarding ceramics.

Development of the Mississippian Lifeway in the Current and Jacks Fork Valleys

Research by J. Price and NPS archeologists involving test excavations over the past five years at Owls Bend (Lynott, Monk and J. Price 1984), the Mouth of Rocky (J. Price 1984b), Gooseneck (Lynott 1982), Culpepper (J. Price 1985), Shawnee Creek (J. Price 1986a), Akers, Round Spring and Granite Quarry Cave (J. Price 1986b) as well as examination of numerous private collections and personally conducted pedestrian surveys have demonstrated the clear presence of Emergent Mississippian populations in the region as early as A.D. 650 with a continuity in the Mississippian lifeway to at least A.D. 1200. This research has demonstrated that the emergence and ascension of this complex lifeway took place in the Ozark Highland equally to those developments in the Mississippi Alluvial Valley. The few Emergent Mississippi arrow points found at Two Rivers does little to advance our knowledge of this period.

Nineteenth Century Euro-American Occupation of the Current and Jacks Fork Valleys

It was anticipated that limited data would be generated on the nineteenth century occupation of the site. Both areas A and B apparently were located outside the area where the early historic component is present. Both areas may have been part of "Thompson's Field" in which case artifact density would be expected to be light.

CONCLUSIONS AND RECOMMENDATIONS

Excavations in Area A produced abundant prehistoric lithic debitage along with a small number of biface fragments and several projectile point/knife fragments. The depth of the prehistoric deposits suggests multi-component stratified deposits that are undisturbed underneath the historic component. The proposed leach field appears to contain data that has the potential to answer questions about the Archaic and possibly Woodland periods in the Jacks Fork and Current valleys. Contributions to knowledge can be made in terms of better understanding the cultural sequence and changing cultural adaptations during this time span in prehistory in the region. The early historic component discovered in this part of the site evidences a blacksmith shop that has the potential to yield important information on nineteenth century Euro-American occupation of the Current and Jacks Fork valleys. It is our opinion that this area is likely to yield information important in prehistory and meets the minimum criteria for inclusion in the National Register of Historic Places. If constructed in this location the

leach field would adversely affect the cultural resources by destroying the horizontal and vertical context of the deposits.

Testing adequate to document the potential significance of the alternate leach field has not yet been conducted. Posthole testing conducted by HPA in November 1986 indicates that archeological deposits over much of the area are sufficiently deep that undisturbed, potentially significant data may exist. Prior to undertaking any construction activities in this part of the site, additional testing should be conducted to document the nature and extent of the archeological deposits (Klinger and Kandare 1987a:45-46).

Investigations conducted in the alternative leach field (Area B) identified another area of significant cultural deposits. In this area we recovered diagnostic artifacts dating as early as the Paleo-Indian Period. The potential Paleo-Indian component makes this site unique among those known in the Current-Jacks Fork drainage and it has far reaching implications beyond the boundaries of these watersheds. Also found in this area were artifacts diagnostic of the Early Archaic period. The unique areas of mounded gravel were recorded in the block excavation. Geomorphological analysis of these features negated the possibility that they were formed naturally. Who mounded the gravel and why did they modified the graveliferous subsoil to create the undulations remain to be answered. Other diagnostic artifacts recovered in this area indicate that this part of the site was also periodically occupied during the Early Archaic, Middle Archaic, Late Archaic, Woodland and Emergent Mississippi periods with an excavated postmold that yielded a radiocarbon date of 720 B.C.

These discoveries were noted by ONSR and NPS officials who began considering other alternatives for the placement of the leach field. Area C was then proposed and tested. A light distribution of prehistoric and historic material was found in this area.

Based on these discontinuous testing results it is apparent that the site occupies a very large area. Surface indications of the prehistoric component do not reflect the actual site size which is presently unknown. Lynott (1981:122) was restricted to judging site size by the horizontal extent of surface artifacts. Because of the dense secondary growth surrounding existing facilities, the site estimate appears to correspond with the area of good surface visibility and Lynott (1981:122) warned that the "site covers at least 200 m x 50 m on a terrace at the junction of Jacks Fork and Current River." If the site occupies the whole terrace, then the actual horizontal extent may be closer to being 500 m northwest-southeast x 100 m northeast-southwest.

The larger than expected archeological site containing prehistoric components representing the span of prehistoric time and an historic component spanning historic occupation in the region presents researchers with an interesting area for study while for planners it presents obvious difficulties. The question is where should the leach field be installed.

On 23 March 1988 a meeting was held at Two Rivers to discuss this problem. Participants included the Park Superintendent Art Sullivan, park historian Jim Corless, landscape architect Craig Stubblefield, NPS supervisory archeologist Dr. Mark Lynott, co-principal investigator Dr. James E. Price and archeologists Richard P. Kandare and David B. Board of HPA. All three leach field alternatives were discussed at length.

It is clear that in various parts of the site there exist significant cultural deposits. The decision was made to avoid impacting these resources and decided against even considering Area B as a viable alternative for the proposed leach field. Less than significant cultural deposits were found in

Area C and we would not object if ONSR decides to install the leach field in this area provided that the construction is monitored by a professional archeologist. If intact cultural deposits are discovered during construction, work should be stopped and the State Historic Preservation Officer contacted.

When viewed in light of the information that was gathered from Area B, most of the cultural deposits in Area A appear to be quite shallow. In fact the shallowest units located in the vicinity of the present comfort station exhibit modern disturbances. The only unit displaying comparable depth with some of those excavated in Area B is test unit 1 located in the extreme southeast corner of the project area and much of our earlier recommendations were based upon the data recovered in this test unit. Artifacts associated with a pre-Civil War blacksmith shop as well as the discovery of relatively deep prehistoric cultural deposits below the pre-Civil War artifacts in this same unit that led to the recognition that the site had the potential to produce significant data.

One of the points brought up in the meeting was that the actual size of the proposed leach field is much smaller than the area encompassed by Area A. The leach field could be placed in part of Area A near the existing Comfort Station where test units indicated that cultural deposits were shallow and disturbed. If this alternative is chosen we recommend monitoring of the construction by a professional archeologist. If intact cultural deposits are discovered during construction, work should be stopped and the State Historic Preservation Officer contacted.

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ATTACHMENT A

STATEMENT OF WORK

ARCHEOLOGICAL EXCAVATIONS AT SITE 23SH101 WITHIN
OZARK NATIONAL SCENIC RIVERWAYS, MISSOURI

NATIONAL PARK SERVICE

MIDWEST REGION

RFP-MWR-7-0024

I. Introduction

The United States Government, acting by and through the National Park Service, Midwest Regional Office, is soliciting proposals for the purpose of entering into a negotiated, cost-reimbursement type contract for the purpose of conducting archeological excavations at site 23SH101 in the Two Rivers Campground within Ozark National Scenic Riverways, Shannon County, Missouri.

A cost contract is contemplated if awarded to a non-profit organization, or a cost-plus-fixed-fee contract if awarded to a commercial organization.

The estimated cost for this study is under \$50,000.

This investigation cannot be initiated until compliance with Section 106 of the National Historic Preservation Act has been completed. Compliance procedures are now underway. Although it is anticipated that they will be completed prior to award of contract, some delay in their completion may ensue due to factors beyond the control of the Contracting Officer. Accordingly, performance of work must commence within ten days of receipt of a Notice to Proceed from the National Park Service.

II. Research Background and Requirements

A. Project Background

The Ozark National Scenic Riverways is located in the Eastern Ozark Highland region of southeastern Missouri. The park consists of 80,788 acres encompassing major stretches of the Current and Jacks Fork Rivers. The Two Rivers Campground is located in Shannon County approximately seven miles from Eminence, Missouri. Existing campground facilities consist of a concession store, vault comfort station, and picnic facilities. The park is generally described in Attachment 1.

B. Project Scope

The study to be conducted consists of salvage excavations within site 23SH101 within the Two Rivers Campground area (see Attachment 2). This work is necessitated by planned installation of a leach field, and will be done to record information contained in the site deposits that will be destroyed as a result of the construction work.

Excavations will be confined to the direct impact area of leachfield construction (see attachment 2), which includes an area about 20 meters by 70 meters. Within this impact zone, appropriate research methods will be directed to collect information relating to the following general concerns:

1. What is the cultural sequence represented at the site, and what are the ages of the various archeological components of the site?

2. What is the nature of the past occupations of the site, and how did site function change through time?

3. How will the information contained in 23SH101 contribute to a better understanding of the archeology in the Upper Current River valley and the Eastern Ozark Highland region?

This archeological investigation must be explicitly directed toward the general concerns expressed above, and analysis of the final results of the project must contribute to our understanding of current regional research problems or themes. These themes may relate to regional research concerns, culture-historical problems, or methodological approaches to archeological research.

All temporally diagnostic artifacts and artifacts of exhibit quality recovered during the excavations at these four structures must be treated by standard and accepted museum stabilization/conservation techniques to arrest or retard further deterioration of their substance. Formal records of their condition prior to treatment and the techniques applied to them are to be created and incorporated within the corpus of records relating to the entire project.

C. Previous Archeological Research

The presence of archeological remains at site 23SH101 was first identified during a survey of minor development areas within Ozark National Scenic Riverways (Lynott 1981). In 1986, plans to construct a comfort station and leachfield to serve the campground and picnic area led the National Park Service to contract for an evaluation of the significance of site 23SH101. Testing by Historic Preservation Associates (Klinger and Board 1986; Klinger and Kandare 1987) revealed the presence of stratified archeological deposits. Surface artifacts from the site indicate the location was occupied from the Early Archaic through the Early Woodland periods. More recent archeological remains relating to an 1840s farmstead and blacksmith shop are also present.

Recognizing the importance of the archeological remains in the area of the proposed septic leachfield (planning alternative a), the National Park Service developed plans to construct the leachfield in a different area (alternative b). Interval post hole excavations in the area of alternative b were performed by Historic Preservation Associates. Although no temporally diagnostic artifacts were collected from the post hole excavations, the site deposits extend to at least 60 centimeters below surface, and are likely to contain evidence of prehistoric and historic occupation at Two Rivers.

References:

Klinger, Timothy C., and David Board
1986 Testing and Evaluation of Areas to be Disturbed by

a Proposed Leach Field and Pipeline at Two Rivers (23SH101), Ozark National Scenic Riverways Area, Shannon County, Missouri. Preliminary report prepared for the National Park Service, Midwest Archeological Center.

Klinger, Timothy C., and Richard P. Kandare
1987 Archaeological Testing and Assessment Conducted in Areas to be Disturbed by a Proposed Comfort Station, Sewer Line, and Drain Field at the Two Rivers Site, 23SH101, Ozark National Scenic Riverways Area, Shannon County, Missouri. Report prepared for the National Park Service, Midwest Archeological Center.

Lynott, Mark J.
1981 Archeological Survey of Development Areas, Ozark National Scenic Riverways. Manuscript report on file, National Park Service, Midwest Archeological Center.

D. Products of the Study

The products resulting from this study will be as follow:

1. Draft and final versions of the technical report that fully describes in detail the methods, objectives, and results of all aspects of the study.
2. A preliminary report, in letter form, which will briefly summarize the extent and tentative results of the completed field work. This preliminary report will be submitted to the Contracting Officer's Representative within two weeks of the completion of the field investigation.
3. Written progress reports are to be submitted to the Contracting Officer's Representative once weekly during the period of field investigations (commencing on the first Friday after the initiation of work) and once monthly during the subsequent period of analysis and report preparation (commencing on the last workday of the first month in which this phase of the work is initiated). Each of these progress reports is to state the estimated percentage of completion of the entire project. Progress of the study to date must also be summarized, and any problems encountered or anticipated must be stated.
4. All artifacts and specimens, notes, records, maps, drawings, photographs, negatives, slides, and other documentation acquired during the course of this research are the property of the United States Government and shall be transmitted to the Midwest Archeological Center at a date no later than that on which the final version of the technical report is submitted to the Center.

E. Project Schedule

Performance must commence within ten days of the contractor's receipt of a Notice to Proceed from the Contracting Officer. All field investigations must be completed as soon as possible after commencement of performance.

F. Proposal Requirements and Endorsement.

(See also section L.5 of this Request for Proposal.)

1. Proposals offered in response to this Request for Proposal must consist of two parts:

a. A technical proposal which clearly demonstrates the contractor's understanding of the need for and nature of the investigations to be performed, and which clearly explicates the objectives, methods, techniques, and schedule of the proposed research and the stabilization/conservation treatment to be applied to the recovered artifacts. The technical proposal must also document the qualifications of the proposed Principal Investigator and other key project personnel to undertake this research. The technical proposal must be submitted as physically separate from the budget part of the proposal, as discussed below.

b. A budget proposal which identifies cost categories and amounts of personnel effort to be devoted to each of the research tasks identified in the technical proposal. This information will be used to evaluate the allowability of proposed costs and the adequacy of proposed work effort allocations and scheduling for the accomplishment of research goals stated in the technical proposal. It will also furnish the Service with a basis to negotiate price, if necessary. This portion of the proposal must be submitted separately from the technical aspects of the proposal, and must be in a sealed envelope labeled "Budget Proposal." The budget proposal should identify all direct and indirect costs, the salary levels of all personnel categories, and the amounts of time to be devoted to specific research tasks by all personnel categories. Institutional/organizational overhead charges should be fully explained.

The budget proposal should show amounts of time and money to be allocated to the various research tasks proposed in the technical proposal. The specifics of salary and other costs, expressed in quantified terms, are to be shown along with pay rates and duration of work to yield a total product figure. Salary levels are to be governed by current base salary pay rate for that individual when not otherwise employed on the research project.

2. Proposals must bear the signature endorsement of the proposed Principal Investigator and an official representative of the organization submitting the proposal who is empowered to commit the organization to such an undertaking.

3. Proposals must be submitted in one original and three copies.

III. Other Requirements

A. Research Orientation and Methods

As indicated above, this study will be conducted to meet legislative compliance needs with respect to the impact of leach field construction on archeological site 23SH101, but it must also be designed in such a way as to contribute to the understanding of significant problems in archeological method and theory and/or to the resolution of culture-historical problems relating to the park. In preparing proposals, potential contractors should identify problems or problem domains to which the 1987 archeological excavations at site 23SH101 can contribute. Proposals should also explicate the theoretical/methodological approach to be used in interpreting data resulting from the project.

B. Documentation and Report Standards

The Principal Investigator will be responsible for the timeliness of work performance and the validity and accuracy of the information presented in the progress reports, the preliminary reports, and the final technical report, as well as all field records and other documentation prepared for this study. These materials and the associated collection of artifacts and specimens resulting from these investigations are the property of the United States Government. Prior to the approval and acceptance of the final technical report by the National Park Service, no portion of the study, its conclusions, recommendations, drawings, renderings, perspectives, sketches, photographs, or pricing data may be released to any outside party or otherwise publicized in any form without the prior written consent of the Contracting Officer's Representative.

The final technical report of these investigations will detail the operations and results of all work performed under this contract. It must be typed on standard 8 1/2 x 11 white paper, and the original copy must be in camera-ready form for further duplication by the National Park Service. All pages must be numbered, and photographs, plans, maps, drawings, and text must be clean, clear, and suitable for publication (technically and professionally) and prepared in the format employed by the Society for American Archaeology in its journal, American Antiquity. In addition, the report must contain the following:

1. If a report has been authored by someone other than the named Principal Investigator:

a. The cover and title page of the report must bear the inscription, Prepared Under the Supervision of (name), Principal Investigator; and

b. The Principal Investigator must also prepare, as a minimum, a Foreword describing the overall research context of

the report, the significance of the work and any other related background circumstances relating to the manner in which the work was undertaken.

2. The title page of the report must bear an appropriate inscription indicating the number of the contract under which the reported work was conducted, and identifying the National Park Service as the contracting bureau.

3. The report must contain an abstract, not exceeding two pages in length, which describes the nature of the investigation and summarizes the major results of the research.

4. The presentation of basic data description, including metrics and provenience information, will be required both in support of the arguments and conclusions presented by the researcher, and as a contribution to basic data that may find wider application by other archeologists.

C. Safety Requirements

The project must be conducted in a manner that will not pose any safety or health hazards to project personnel, park staff, or the visiting public.

At least some of this work may take place in proximity to heavy equipment and in conjunction with construction activities that may pose a safety hazard to project personnel. The archeological contractor shall comply with all applicable local, state, and Federal safety standards and rules pertinent to his operations under this contract.

Hard hats will be worn at all times by the archeological contractor's personnel while they are at the work site. These must be provided by the contractor.

D. Coordination

All work performed in the park by the contractor must be coordinated in advance with the Superintendent of Ozark National Scenic Riverways, or his designated representative.

The archeological contractor will be expected to work closely with National Park Service personnel and to keep the Contracting Officer's Representative and the park Superintendent and his staff fully informed of the progress and preliminary results of the work. The contractor's personnel must courteously share oral information about the project with inquisitive visitors.

National Park Service interpreters and cultural resource specialists will have considerable interest in this work. The contractor must be prepared to cooperate and share specific information requested by the Superintendent or his designated representative.

IV. Professional and Organizational Requirements

A. Personnel Standards

Agencies, institutions, corporations, associations, or individuals will be considered qualified when they meet the minimum criteria given below. A contract proposal must include professional vitae for the Principal Investigator and main supervisory personnel in support of their academic and experiential qualifications for the research.

The Government may make inquiry of provided references or other parties with respect to such matters as timeliness of report completion, adequacy of reports, compliance with contract or grant stipulations, etc. in order to evaluate the past performance of prospective project personnel.

1. Archeological Project Directors or Principal Investigators (PI)

Principal Investigators are expected to be responsible for all aspects of the proposed research. In addition to meeting the appropriate standards for Project Archeologist as specified below, the PI must have a Ph.D. or equivalent in anthropology with a concentration in archeology from an accredited university and no fewer than two full years of problem-oriented archeological field work. Experience in field work and laboratory analysis is to be demonstrated through publications, preferably refereed. A level of experience equivalent to a Ph.D. degree is acceptable and may be evidenced by a publication and/or manuscript production record that demonstrates a Ph.D. level of proficiency in archeological research formulation and conduct of field research. It is expected that these publications will reflect education and experience beyond that required of a Project Archeologist and demonstrate an understanding of current theory and a substantive knowledge of the issues. Suitable professional referees may also be consulted to obtain estimates regarding the adequacy of prior work. If prior projects were of a sort not ordinarily resulting in a published report, a narrative should be included detailing the proposed PI's experience, orientation, and positive research results. These may also be refereed.

In addition, the proposed Principal Investigator must meet the qualification requirements for a permit under the Archeological Resources Protection Act as stated below.

The qualifications of the proposed Principal Investigator must be documented in a professional vita which is part of the offered technical proposal.

2. Project Archeologist (PA)

Although the overall responsibility for design, guidance, completion, and quality of this research project lies with the

Principal Investigator, the Principal Investigator may be assisted by one or more Project Archeologists who perform key work tasks in support of the project. Project Archeologists are expected to meet or exceed the minimum professional qualifications in archeology as published in the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (Federal Register, vol. 48, no. 190, pp. 44738-44739):

"The minimum professional qualifications in archeology are a graduate degree in archeology, anthropology, or closely related field plus:

1. At least one year of full-time professional experience or equivalent specialized training in archeological research, administration or management;
2. At least four months of supervised field and analytic experience in general North American archeology; and
3. Demonstrated ability to carry research to completion.

In addition to these minimum qualifications, a professional in prehistoric archeology shall have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the prehistoric period. A professional in historic archeology shall have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the historic period."

The qualifications of proposed Project Archeologists must be documented in professional vitae which are part of the offered technical proposal. Proof of certification in Field Research by the Society of Professional Archeologists may be submitted in lieu of this documentation.

B. Standards for Consultants

Personnel hired or subcontracted for their special knowledge and expertise must carry academic and experiential qualifications in their own fields of competence. Such qualifications are to be documented by means of vitae attached to the proposal.

C. Institutional or Corporation Qualifications

Any institution, organization, etc. awarded this contract and sponsoring the Principal Investigator meeting the previously given requirements, must also provide or demonstrate access to the following:

1. Adequate field and laboratory equipment necessary to conduct whatever operations are required in this Request for Proposal.
2. Adequate laboratory and office space, facilities, and equipment necessary for proper treatment, analysis, curation, and

storage for artifacts, specimens and records likely to result from the project. These facilities do not necessarily have to include specialized capabilities for pollen, geochemical, or radiological analyses, but must include facilities sufficient to properly preserve or stabilize specimens for subsequent analysis and long-term storage.

V. Additional Requirements

A. Submission Schedule for the Technical Report

1. Two (2) copies of the draft version of the final technical report required by the contract, typed and double-spaced, detailing the objectives, methods, and results of the research, will be submitted to the National Park Service by March 15, 1988. The draft copies will include all maps, tables, illustrations, and lists of references that will appear in the final version. The draft report will be reviewed by the Midwest Archeological Center for contract sufficiency and professional quality, and one copy will be returned within 60 calendar days to the contractor with comments and requests for changes, if necessary or desired. During the period of draft revision, the contractor will make the changes requested by the National Park Service.

2. After written acceptance of the draft report, a final technical report that meets current professional and scientific standards, that is suitable for publication, and that details the research and its results will be submitted, accompanied by an abstract suitable for publication in an abstract journal. The final report will be submitted in one camera-ready original and 30 copies within 45 calendar days after the contractor receives the Service's comments on the draft version.

B. Disposition of Data

All data and specimens removed from lands owned or administered by the National Park Service are the property of the United States Government and shall be stored and curated by the National Park Service. All recovered specimens and artifacts, together with all accompanying notes, records, maps, drawings, photographs, negatives, slides, and other documentation acquired during the course of this research shall be submitted to the Midwest Archeological Center at a date no later than that on which the final report is submitted to the Center.

C. Permits

The contractor for this work is considered an agent of the Federal Government and will not be required to apply for a permit under the Archeological Resources Protection Act of 1979. However, the contractor must meet the qualifications for permits issued under the authority of that Act. These qualifications are stated in the Final Uniform Regulations for the Archeological Resources Protection Act of 1979 as published in the Federal

As stated in Part 1312.8 of the Final Uniform Regulations, applicants for permits under the Act must be "appropriately qualified, as evidenced by training, education, and/or experience, and possess demonstrable competence in archaeological theory and methods, and in collecting, handling, analyzing, evaluating, and reporting archaeological data, relative to the type and scope of the work proposed, and also meet the following minimum qualifications:

1. A graduate degree in anthropology or archaeology, or equivalent training and experience;
2. The demonstrated ability to plan, equip, staff, organize, and supervise activity of the type and scope proposed;
3. The demonstrated ability to carry research to completion, as evidenced by timely completion of theses, research reports, or similar documents;
4. Completion of at least 16 months of professional experience and/or specialized training in archaeological field, laboratory, or library research, administration, or management, including at least 4 months experience and/or specialized training in the kind of activity the individual proposes to conduct under authority of a permit; and
5. Applicants proposing to engage in historical archaeology should have had at least one year of experience in research concerning the archaeological resources of the historic period. Applicants proposing to engage in prehistoric archaeology should have had at least one year of experience in research concerning archaeological resources of the prehistoric period."

The offered proposal must demonstrate that the proposed Principal Investigator meets these requirements.

It is the responsibility of the contractor to obtain any and all State or local permits applicable to this work.

VI. Payments

Cost reimbursement will be made on appropriate billings of up to seventy-five percent (75%) of the maximum amount obligated to the contract. Invoices for payment must be accompanied by supporting documentation of the expenditures, broken down by cost categories that appear in the budget portion of the proposal. Twenty-five percent (25%) will be withheld until satisfaction of all contract requirements. Invoices will be sent to the Contracting Officer's Representative, Midwest Archeological Center, Federal Building, Room 474, 100 Centennial Mall North, Lincoln, Nebraska 68508-3873. Approval of the final payment will be withheld until satisfaction of all contract requirements and receipt of a properly-executed Release of Claims.

VII. Schedule for Performance

The following is the completion schedule for this study:

1. Commencement of performance: within ten days after receipt of the Notice to Proceed from the Contracting Officer. The field investigations will not be initiated until all procedures for compliance with Section 106 of the National Historic Preservation Act have been completed. The field investigation must be initiated within ten days of the contractor's receipt of a Notice to Proceed from the Contracting Officer. The Notice to Proceed will be issued to the contractor as soon as possible after award of contract and completion of Section 106 compliance procedures. The field investigation must be completed as soon as possible after commencement of performance.
2. Submission of progress reports to the National Park Service: once weekly during the period of field investigations, commencing on the first Friday after initiation of work; and once monthly during the period of analysis and report preparation, commencing on the last workday of the first month in which this phase of the work is initiated.
3. Submission of preliminary report on the nature and extent of field investigations: within two weeks of the completion of field investigations.
4. Submission to the National Park Service of two copies of the draft version of the final technical report: March 15, 1988.
5. Submission to the contractor of the National Park Service's review comments on the draft version of the final technical report: within 60 days after receipt of two copies of the draft final report by the Service.
6. Submission to the National Park Service of one camera-ready original and 30 copies of the final version of the final technical report together with the accompanying specimens and artifacts, notes, records, maps, drawings, photographs, negatives, slides and other documentation generated or acquired during this research: within 45 days after receipt by the contractor of the National Park Service's review comments on the draft version of the final technical report.

VIII. EVALUATION FACTORS

(See also section M.3 of this Request for Proposal.)

Responses to this Request for Proposal will be evaluated by a Technical Proposal Evaluation Committee at the Midwest Archeological Center. The Committee will be comprised of Center

archeologists, but outside (i.e. other agency or non-Federal, archeologists may be utilized as review consultants.

Proposals will be evaluated on the basis of technical merit also and in accordance with the factors identified below:

1. Adequacy and appropriateness of proposed research methods for defining and dating the cultural sequence at the site (30 of 100 points).
2. Adequacy and appropriateness of proposed research methods for defining and explicating the nature of past occupations at the site, as well as changes in site function through time (30 of 100 points).
3. Demonstrated knowledge of Eastern Ozark archeology, including a demonstrated knowledge of current regional research problems and concerns (40 of 100 points).

Evaluations will be based on a total of 100 points. A proposal which does nothing more than reiterate the information contained in this Request for Proposal or which only weakly or vaguely develops discussion of proposed work tasks will be considered a non-responsive offer. Budget information will be independently evaluated to determine allowability and adequacy of work and cost distributions to accomplish stated objectives. In the event that two or more proposals are judged to be of approximately equally high quality on technical considerations only, the proposed price will be considered as a factor in award. Proposals whose price is in excess of the estimated range of price for this study may not be considered if it is judged that reduction of price cannot be accomplished without seriously diminishing the technical merit of the proposal. An additional factor that may be considered in selecting the successful proposal may be the performance record (timeliness in meeting requirements, quality of product, etc.) of the offeror or its proposed project personnel in the establishment of previous contracted research. The contract for this work may be awarded on the basis of initial offer received, and without discussion of such offers. Accordingly, each initial offer should be submitted on the most favorable terms, from a price and technical standpoint, which the offeror can submit to the Government. Proposals should be complete and technically adequate when submitted.

APPENDIX B
Artifacts Recovered from Two Rivers (23SH101)
During the 1987 Data Recovery

Cat. No.	Horiz. Prov.	Depth Fea. (cm)	Artifact Description	Ct.	Wt.	Comments
1-1	63.00N/32.00E	0-0	0 Interior flake	1	0.0	
2-1	0.00 /0.00	0-0	0 Bifacial end scraper	1	0.0	This hafted biface, made from a light tan colored chert, exhibits a working edge with a steep angle (60 degrees) at the distal end of the biface. This working edge appears to be a snub-nosed end scraper. The specimen may represent a reworked projectile point/knife with tapered shoulders, a contracting stem, and a straight base.
3-1	66.00N/16.00E	0-0	0 Interior flake	1	0.0	
4-1	66.00N/19.00E	0-0	0 Interior flake	2	0.0	
5-1	76.00N/30.80E	0-0	0 Interior flake	1	0.0	
6-1	76.00N/31.50E	0-0	0 Interior flake	1	0.0	
7-1	0.00 /0.00	0-0	0 Pitted cobble (U-shaped)	1	0.0	sandstone nutting stone?
8-1	58.00N/26.50E	0-0	0 Interior flake	1	0.0	
9-1	75.00N/34.00E	0-0	0 Shatter	2	0.0	
10-1	62.00N/29.00E	0-0	0 Interior flake	2	0.0	
11-1	57.00N/28.00E	0-0	0 Secondary decort. flake	1	0.0	
12-1	71.00N/20.00E	0-0	0 Secondary decort. flake	1	0.0	
13-1	80.00N/30.00E	0-0	0 Secondary decort. flake	1	0.0	
13-2	80.00N/30.00E	0-0	0 Shatter	1	0.0	
14-1	80.00N/15.00E	0-20	0 Secondary decort. flake	1	0.0	
14-2	80.00N/15.00E	0-20	0 Secondary decort. flake	3	0.0	
15-1	80.00N/15.00E	20-40	0 Interior flake	2	0.0	
16-1	80.00N/15.00E	40-60	0 Interior flake	1	0.0	
17-1	80.00N/15.00E	60-70	0 Secondary decort. flake	1	0.0	
17-2	80.00N/15.00E	60-70	0 Shatter	1	0.0	
18-1	80.00N/20.00E	0-20	0 Interior flake	1	0.0	
18-2	80.00N/20.00E	0-20	0 Retouch flake	1	0.0	
18-3	80.00N/20.00E	0-20	0 Shatter	1	0.0	
19-1	80.00N/20.00E	20-40	0 Interior flake	1	0.0	
19-2	80.00N/20.00E	20-40	0 Shatter	2	0.0	
20-1	80.00N/20.00E	40-50	0 Shatter	1	0.0	
21-1	80.00N/25.00E	0-20	0 Secondary decort. flake	1	0.0	
21-2	80.00N/25.00E	0-20	0 Interior flake	2	0.0	
21-3	80.00N/25.00E	0-20	0 Shatter	1	0.0	
22-1	80.00N/25.00E	20-40	0 Interior flake	2	0.0	
22-2	80.00N/25.00E	20-40	0 Fire-cracked rock	1	0.0	
23-1	80.00N/25.00E	40-60	0 Interior flake	3	0.0	
23-2	80.00N/25.00E	40-60	0 Shatter	1	0.0	
24-1	80.00N/30.00E	0-20	0 Secondary decort. flake	2	0.0	
24-2	80.00N/30.00E	0-20	0 Interior flake	1	0.0	
25-1	80.00N/13.00E	20-40	0 Shatter	2	0.0	
26-1	80.00N/35.00E	0-20	0 Interior flake	3	0.0	
26-2	80.00N/35.00E	0-20	0 Retouch flake	1	0.0	
26-3	80.00N/35.00E	0-20	0 Shatter	1	0.0	
26-4	80.00N/35.00E	0-20	0 Biface fragment	1	0.0	
27-1	80.00N/35.00E	0-20	0 Interior flake	3	0.0	
27-2	80.00N/35.00E	0-20	0 Shatter	1	0.0	
28-1	80.00N/36.00E	20-40	0 Interior flake	5	0.0	1 quartzite
29-1	80.00N/35.00E	40-60	0 Interior flake	1	0.0	
30-1	77.00N/13.00E	0-50	0 Secondary decort. flake	1	0.0	
30-2	77.00N/13.00E	0-50	0 Interior flake	3	0.0	
31-1	77.00N/16.00E	0-20	0 Secondary decort. flake	2	0.0	1 rhyolite
32-1	77.00N/19.00E	20-40	0 Secondary decort. flake	1	0.0	
32-2	77.00N/19.00E	20-40	0 Interior flake	1	0.0	
32-3	77.00N/19.00E	20-40	0 Fire-cracked rock	1	0.0	
33-1	77.00N/19.00E	40-60	0 Interior flake	1	0.0	
34-1	77.00N/22.00E	20-40	0 Primary decort. flake	1	0.0	
34-2	77.00N/22.00E	20-40	0 Interior flake	1	0.0	
34-3	77.00N/22.00E	20-40	0 Fire-cracked rock	1	0.0	
35-1	77.00N/25.00E	0-20	0 Interior flake	1	0.0	
36-1	77.00N/28.00E	0-20	0 Interior flake	2	0.0	
36-2	77.00N/28.00E	0-20	0 Shatter	1	0.0	

APPENDIX B
Artifacts Recovered from Two Rivers (23SH101)
During the 1987 Data Recovery

Cat. No.	Horiz. Prov.	Depth (cm)	Fea.	Artifact Description	Ct.	Wt.	Comments
37-1	77.00N/13.00E	50-60	0	Secondary decort. flake	1	0.0	
37-2	77.00N/13.00E	50-60	0	Interior flake	2	0.0	
37-3	77.00N/13.00E	50-60	0	Fire-cracked rock	1	0.0	
38-1	77.00N/16.00E	40-60	0	Interior flake	3	0.0	
39-1	77.00N/19.00E	0-20	0	Secondary decort. flake	1	0.0	
39-2	77.00N/19.00E	0-20	0	Interior flake	1	0.0	
39-3	77.00N/19.00E	0-20	0	Shatter	1	0.0	
40-1	77.00N/23.00E	20-40	0	Secondary decort. flake	1	0.0	
41-1	77.00N/28.00E	20-32	0	Interior flake	2	0.0	
42-1	77.00N/28.00E	32-50	0	Primary decort. flake	1	0.0	
42-2	77.00N/28.00E	32-50	0	Interior flake	1	0.0	
43-1	77.00N/28.00E	50-59	0	Interior flake	1	0.0	
44-1	77.00N/31.00E	0-20	0	Core	1	0.0	
44-2	77.00N/31.00E	0-20	0	Interior flake	1	0.0	
45-1	77.00N/31.00E	20-33	0	Secondary decort. flake	1	0.0	
45-2	77.00N/31.00E	20-33	0	Interior flake	1	0.0	
45-3	77.00N/31.00E	20-33	0	Fire-cracked rock	1	0.0	
46-1	77.00N/31.00E	33-50	0	Fire-cracked rock	1	0.0	
46-2	77.00N/31.00E	33-50	0	Shatter	1	0.0	
47-1	77.00N/31.00E	50-70	0	Interior flake	1	0.0	
48-1	77.00N/31.00E	70-72	0	Interior flake	1	0.0	
49-1	77.00N/32.00E	0-20	0	Secondary decort. flake	1	0.0	
49-2	77.00N/32.00E	0-20	0	Interior flake	1	0.0	
50-1	77.00N/34.00E	0-20	0	Secondary decort. flake	1	0.0	
50-2	77.00N/34.00E	0-20	0	Interior flake	1	0.0	
51-1	77.00N/34.00E	20-35	0	Secondary decort. flake	1	0.0	
51-2	77.00N/34.00E	20-35	0	Interior flake	1	0.0	
52-1	77.00N/34.00E	35-50	0	Interior flake	1	0.0	
52-2	77.00N/34.00E	35-50	0	Fire-cracked rock	1	0.0	
53-1	75.00N/10.00E	0-20	0	Interior flake	2	0.0	
53-2	75.00N/10.00E	0-20	0	Shatter	1	0.0	
54-1	75.00N/37.00E	20-40	0	Biface fragment	1	0.0	
55-1	75.00N/37.00E	40-60	0	Secondary decort. flake	1	0.0	
56-1	74.00N/13.00E	0-20	0	Interior flake	1	0.0	
57-1	74.00N/16.00E	0-20	0	Shatter	1	0.0	
58-1	74.00N/19.00E	0-20	0	Interior flake	2	0.0	
58-2	74.00N/19.00E	0-20	0	Plastic	1	0.0	
59-1	74.00N/19.00E	20-40	0	Interior flake	1	0.0	
60-1	74.00N/22.00E	0-20	0	Shatter	1	0.0	
61-1	74.00N/28.00E	0-30	0	Secondary decort. flake	2	0.0	
61-2	74.00N/28.00E	0-20	0	Interior flake	1	0.0	
62-1	74.00N/28.00E	30-60	0	Secondary decort. flake	2	0.0	
62-2	74.00N/28.00E	30-60	0	Interior flake	2	0.0	
62-3	74.00N/28.00E	30-60	0	Shatter	1	0.0	
63-1	74.00N/34.00E	0-20	0	Interior flake	1	0.0	
63-2	74.00N/34.00E	0-20	0	Shatter	1	0.0	
64-1	74.00N/34.00E	50-65	0	Interior flake	2	0.0	
65-1	71.00N/13.00E	0-20	0	Interior flake	1	0.0	
66-1	71.00N/13.00E	40-53	0	Secondary decort. flake	1	0.0	
66-2	71.00N/13.00E	40-53	0	Interior flake	3	0.0	
67-1	71.00N/16.00E	0-24	0	Interior flake	1	0.0	
68-1	71.00N/16.00E	50-70	0	Primary decort. flake	1	0.0	
68-2	71.00N/16.00E	50-70	0	Primary decort. flake	1	0.0	
69-1	71.00N/16.00E	70-80	0	Interior flake	1	0.0	
70-1	71.00N/19.00E	0-20	0	Secondary decort. flake	1	0.0	
70-2	71.00N/19.00E	0-20	0	Interior flake	1	0.0	
70-3	71.00N/19.00E	0-20	0	Biface fragment	1	0.0	
71-1	71.00N/19.00E	20-30	0	Secondary decort. flake	1	0.0	
72-1	71.00N/22.00E	0-20	0	Secondary decort. flake	1	0.0	
72-2	71.00N/22.00E	0-20	0	Interior flake	3	0.0	
73-1	71.00N/22.00E	20-24	0	Interior flake	1	0.0	
74-1	71.00N/22.00E	40-60	0	Interior flake	1	0.0	
75-1	71.00N/25.00E	0-20	0	Secondary decort. flake	1	0.0	
75-2	71.00N/25.00E	0-20	0	Interior flake	1	0.0	
75-3	71.00N/25.00E	0-20	0	Shatter	1	0.0	
76-1	71.00N/25.00E	20-30	0	Interior flake	1	0.0	

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Cat. No.	Horiz. Prov.	Depth (cm)	Fea.	Artifact Description	Ct.	Wt.	Comments
77-1	71.00N/28.00E	0-20	0	Interior flake	3	0.0	
77-2	71.00N/28.00E	0-20	0	Shatter	1	0.0	
78-1	71.00N/28.00E	20-30	0	Interior flake	1	0.0	
79-1	71.00N/31.00E	20-25	0	Secondary decort. flake	1	0.0	
79-2	71.00N/31.00E	20-25	0	Interior flake	1	0.0	
80-1	71.00N/31.00E	25-60	0	Secondary decort. flake	1	0.0	
80-2	71.00N/31.00E	25-60	0	Retouch flake	1	0.0	
80-3	71.00N/31.00E	25-60	0	Shatter	1	0.0	
81-1	71.00N/34.00E	0-20	0	Interior flake	1	0.0	
82-1	71.00N/34.00E	50-70	0	Secondary decort. flake	1	0.0	
83-1	71.00N/34.00E	70-75	0	Interior flake	1	0.0	
84-1	70.00N/10.00E	0-20	0	Interior flake	3	0.0	
85-1	70.00N/10.00E	20-40	0	Secondary decort. flake	1	0.0	
85-2	70.00N/10.00E	20-40	0	Interior flake	2	0.0	
86-1	70.00N/10.00E	40-60	0	Interior flake	1	0.0	broken flake in two pieces
87-1	70.00N/37.00E	0-20	0	Primary decort. flake	1	0.0	
88-1	70.00N/37.00E	20-40	0	Secondary decort. flake	3	0.0	
88-2	70.00N/37.00E	20-40	0	Interior flake	1	0.0	
88-3	70.00N/37.00E	20-40	0	Shatter	1	0.0	
89-1	70.00N/37.00E	40-60	0	Interior flake	2	0.0	
90-1	68.00N/13.00E	0-20	0	Primary decort. flake	1	0.0	
90-2	68.00N/13.00E	0-20	0	Interior flake	3	0.0	
90-3	68.00N/13.00E	0-20	0	Shatter	4	0.0	
91-1	68.00N/13.00E	20-28	0	Interior flake	1	0.0	
92-1	68.00N/13.00E	28-50	0	Shatter	3	0.0	
93-1	68.00N/13.00E	50-70	0	Interior flake	1	0.0	
94-1	68.00N/13.00E	70-75	0	Interior flake	1	0.0	
95-1	68.00N/16.00E	0-20	0	Interior flake	2	0.0	
95-2	68.00N/16.00E	0-20	0	Flake graver	1	0.0	
96-1	68.00N/16.00E	20-31	0	Interior flake	2	0.0	
97-1	68.00N/16.00E	31-50	0	Secondary decort. flake	1	0.0	
97-2	68.00N/16.00E	31-50	0	Interior flake	1	0.0	
97-3	68.00N/16.00E	31-50	0	Shatter	1	0.0	
98-1	68.00N/19.00E	0-20	0	Interior flake	1	0.0	
99-1	68.00N/19.00E	30-50	0	Interior flake	2	0.0	
100-1	68.00N/19.00E	50-60	0	Shatter	2	0.0	
101-1	68.00N/16.00E	50-70	0	Interior flake	1	0.0	
102-1	68.00N/22.00E	0-20	0	Secondary decort. flake	1	0.0	
102-2	68.00N/22.00E	0-20	0	Interior flake	2	0.0	Other: jasper?
103-1	68.00N/22.00E	20-40	0	Primary decort. flake	1	0.0	
103-2	68.00N/22.00E	20-40	0	Secondary decort. flake	1	0.0	
103-3	68.00N/22.00E	20-40	0	Interior flake	1	0.0	
103-4	68.00N/22.00E	20-40	0	Flake knife	1	0.0	
104-1	68.00N/22.00E	40-60	0	Interior flake	1	0.0	
104-2	68.00N/22.00E	40-60	0	Fire-cracked rock	1	0.0	potlid fracture
105-1	68.00N/22.00E	60-80	0	Interior flake	3	0.0	
106-1	68.00N/25.00E	0-20	0	Interior flake	2	0.0	
106-2	68.00N/25.00E	0-20	0	Shatter	1	0.0	
106-3	68.00N/25.00E	0-20	0	Biface fragment	1	0.0	
107-1	68.00N/25.00E	20-28	0	Secondary decort. flake	1	0.0	
107-2	68.00N/25.00E	20-28	0	Interior flake	2	0.0	
107-3	68.00N/25.00E	20-28	0	Shatter	4	0.0	
108-1	68.00N/25.00E	28-50	0	Primary decort. flake	1	0.0	
108-2	68.00N/25.00E	28-50	0	Secondary decort. flake	2	0.0	
108-3	68.00N/25.00E	28-50	0	Interior flake	3	0.0	
108-4	68.00N/25.00E	28-50	0	Shatter	1	0.0	
108-5	68.00N/25.00E	28-50	0	Fire-cracked rock	1	0.0	
109-1	68.00N/25.00E	50-70	0	Interior flake	2	0.0	
109-2	68.00N/25.00E	50-70	0	Retouch flake	1	0.0	
110-1	68.00N/25.00E	70-85	0	Interior flake	2	0.0	
111-1	68.00N/28.00E	0-20	0	Secondary decort. flake	1	0.0	
111-2	68.00N/28.00E	0-20	0	Interior flake	3	0.0	
111-3	68.00N/28.00E	0-20	0	Shatter	1	0.0	
112-1	68.00N/28.00E	20-24	0	Interior flake	1	0.0	
112-2	68.00N/28.00E	20-34	0	Shatter	1	0.0	
113-1	68.00N/28.00E	34-50	0	Interior flake	3	0.0	

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Cat. No.	Horiz. Prov.	Depth (cm)	Fea.	Artifact Description	Ct.	Wt.	Comments
114-1	68.00N/28.00E	50-70	0	Interior flake	1	0.0	
115-1	68.00N/31.00E	0-20	0	Secondary decort. flake	2	0.0	
115-2	68.00N/31.00E	0-20	0	Interior flake	2	0.0	
116-1	68.00N/31.00E	20-37	0	Secondary decort. flake	1	0.0	
116-2	68.00N/31.00E	20-37	0	Interior flake	1	0.0	
116-3	68.00N/31.00E	20-37	0	Shatter	1	0.0	
117-1	62.00N/31.00E	37-60	0	Interior flake	4	0.0	
117-2	68.00N/31.00E	37-60	0	Shatter	2	0.0	
118-1	68.00N/34.00E	0-20	0	Interior flake	4	0.0	
118-2	68.00N/34.00E	0-20	0	Shatter	1	0.0	
119-1	68.00N/34.00E	20-37	0	Interior flake	4	0.0	
119-2	68.00N/34.00E	20-37	0	Shatter	1	0.0	
120-1	68.00N/34.00E	37-60	0	Primary decort. flake	1	0.0	
120-2	68.00N/34.00E	37-60	0	Secondary decort. flake	1	0.0	
120-3	68.00N/34.00E	37-60	0	Interior flake	3	0.0	
121-1	68.00N/34.00E	60-85	0	Secondary decort. flake	1	0.0	
122-1	65.00N/10.00E	0-20	0	Secondary decort. flake	1	0.0	
123-1	65.00N/10.00E	20-40	0	Interior flake	4	0.0	
124-1	65.00N/10.00E	40-60	0	Interior flake	1	0.0	
125-1	65.00N/13.00E	0-25	0	Core	1	0.0	
125-2	65.00N/13.00E	0-25	0	Interior flake	2	0.0	
126-1	65.00N/13.00E	25-50	0	Interior flake	2	0.0	
127-1	65.00N/16.00E	0-20	0	Secondary decort. flake	1	0.0	
127-2	65.00N/16.00E	0-30	0	Interior flake	3	0.0	
127-3	65.00N/16.00E	0-20	0	Biface fragment	1	0.0	
127-4	65.00N/16.00E	0-20	0	Dart point stem/base	1	0.0	Made of white chert, this fragmentary specimen consists of part of a
128-1	65.00N/19.00E	0-20	0	Secondary decort. flake	1	0.0	
128-2	65.00N/19.00E	0-20	0	Interior flake	5	0.0	
128-3	65.00N/19.00E	0-20	0	Shatter	1	0.0	
129-1	65.00N/19.00E	20-40	0	Interior flake	1	0.0	
130-1	65.00N/19.00E	40-73	0	Interior flake	1	0.0	
130-2	65.00N/19.00E	40-73	0	Shatter	1	0.0	
131-1	65.00N/22.00E	0-20	0	Secondary decort. flake	2	0.0	
131-2	65.00N/22.00E	0-20	0	Interior flake	3	0.0	
132-1	65.00N/22.00E	20-40	0	Interior flake	3	0.0	
133-1	65.00N/22.00E	40-60	0	Secondary decort. flake	1	0.0	
133-2	65.00N/22.00E	40-60	0	Shatter	3	0.0	
134-1	65.00N/25.00E	0-20	0	Secondary decort. flake	1	0.0	
134-2	65.00N/25.00E	0-20	0	Interior flake	2	0.0	
134-3	65.00N/25.00E	0-20	0	Shatter	1	0.0	
135-1	65.00N/25.00E	20-50	0	Interior flake	5	0.0	
135-2	65.00N/25.00E	20-50	0	Shatter	1	0.0	
136-1	65.00N/25.00E	50-65	0	Core	1	0.0	
137-1	65.00N/28.00E	0-20	0	Interior flake	3	0.0	
138-1	65.00N/28.00E	20-40	0	Primary decort. flake	1	0.0	
138-2	65.00N/28.00E	20-40	0	Interior flake	3	0.0	
138-3	65.00N/28.00E	20-40	0	Shatter	2	0.0	
139-1	65.00N/28.00E	40-60	0	Secondary decort. flake	1	0.0	
139-2	65.00N/28.00E	40-60	0	Interior flake	1	0.0	
140-1	65.00N/31.00E	0-20	0	Secondary decort. flake	3	0.0	
140-2	65.00N/31.00E	0-20	0	Interior flake	3	0.0	
140-3	65.00N/31.00E	0-20	0	Shatter	1	0.0	
141-1	65.00N/31.00E	20-30	0	Interior flake	2	0.0	
142-1	65.00N/31.00E	30-50	0	Interior flake	6	0.0	
142-2	65.00N/31.00E	30-50	0	Shatter	3	0.0	
143-1	65.00N/31.00E	50-80	0	Interior flake	4	0.0	
144-1	65.00N/34.00E	0-20	0	Interior flake	4	0.0	
145-1	65.00N/34.00E	20-30	0	Secondary decort. flake	2	0.0	
145-2	65.00N/34.00E	20-30	0	Interior flake	4	0.0	
146-1	65.00N/34.00E	30-50	0	Interior flake	4	0.0	
147-1	65.00N/34.00E	50-70	0	Secondary decort. flake	2	0.0	
148-1	65.00N/37.00E	0-20	0	Interior flake	1	0.0	
148-2	65.00N/37.00E	0-20	0	Biface fragment	2	0.0	
149-1	65.00N/37.00E	20-40	0	Interior flake	5	0.0	
149-2	65.00N/37.00E	20-40	0	Shatter	3	0.0	

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Cat. No.	Horiz. Prov.	Depth Fea. (cm)	Artifact Description	Ct.	Wt.	Comments
150-1	65.00N/37.00E	40-60	0 Secondary decort. flake	2	0.0	
150-2	65.00N/37.00E	40-60	0 Interior flake	5	0.0	
150-3	65.00N/37.00E	40-60	0 Shatter	1	0.0	
151-1	62.00N/13.00E	0-20	0 Interior flake	4	0.0	
151-2	62.00N/13.00E	0-20	0 Fire-cracked rock	1	0.0	
152-1	62.00N/13.00E	20-30	0 Interior flake	3	0.0	
152-2	62.00N/13.00E	20-30	0 Shatter	1	0.0	
153-1	62.00N/13.00E	30-50	0 Secondary decort. flake	1	0.0	
153-2	62.00N/13.00E	30-50	0 Interior flake	1	0.0	
154-1	62.00N/13.00E	50-65	0 Interior flake	1	0.0	
155-1	62.00N/16.00E	0-20	0 Secondary decort. flake	2	0.0	
155-2	62.00N/16.00E	0-20	0 Interior flake	5	0.0	
155-3	62.00N/16.00E	0-20	0 Shatter	2	0.0	
156-1	62.00N/16.00E	20-30	0 Secondary decort. flake	1	0.0	
156-2	62.00N/16.00E	20-30	0 Fire-cracked rock	1	0.0	
157-1	62.00N/16.00E	30-50	0 Secondary decort. flake	1	0.0	
157-2	62.00N/16.00E	30-50	0 Fire-cracked rock	1	0.0	
158-1	62.00N/19.00E	0-20	0 Secondary decort. flake	2	0.0	
158-2	62.00N/19.00E	0-20	0 Interior flake	4	0.0	
158-3	62.00N/19.00E	0-20	0 Shatter	1	0.0	
159-1	62.00N/31.00E	0-20	0 Secondary decort. flake	1	0.0	
159-2	62.00N/31.00E	0-20	0 Interior flake	1	0.0	
159-3	62.00N/31.00E	0-20	0 Shatter	1	0.0	
160-1	62.00N/19.00E	30-50	0 Interior flake	1	0.0	
160-2	62.00N/19.00E	30-50	0 Shatter	1	0.0	
161-1	62.00N/22.00E	0-20	0 Primary decort. flake	1	0.0	
161-2	62.00N/22.00E	0-20	0 Interior flake	3	0.0	
161-3	62.00N/22.00E	0-20	0 Shatter	1	0.0	
162-1	62.00N/22.00E	20-32	0 Interior flake	3	0.0	
163-1	62.00N/22.00E	32-50	0 Interior flake	2	0.0	
163-2	62.00N/22.00E	32-50	0 Shatter	2	0.0	
164-1	62.00N/22.00E	50-70	0 Interior flake	1	0.0	
165-1	62.00N/25.00E	0-20	0 Primary decort. flake	1	0.0	
165-2	62.00N/25.00E	0-20	0 Secondary decort. flake	2	0.0	
165-3	62.00N/25.00E	0-20	0 Interior flake	3	0.0	
165-4	62.00N/25.00E	0-20	0 Shatter	3	0.0	
166-1	62.00N/25.00E	20-30	0 Interior flake	2	0.0	
166-2	62.00N/25.00E	20-30	0 Shatter	1	0.0	
167-1	62.00N/25.00E	30-50	0 Interior flake	2	0.0	
168-1	63.00N/25.00E	50-70	0 Shatter	1	0.0	
169-1	62.00N/28.00E	0-20	0 Interior flake	1	0.0	
169-2	62.00N/28.00E	0-20	0 Shatter	2	0.0	
170-1	62.00N/28.00E	20-32	0 Secondary decort. flake	2	0.0	
171-1	62.00N/28.00E	32-60	0 Interior flake	5	0.0	
171-2	62.00N/28.00E	32-60	0 Shatter	2	0.0	
171-3	62.00N/28.00E	32-60	0 Fire-cracked rock	1	0.0	
171-4	62.00N/28.00E	32-60	0 Biface fragment	1	0.0	
172-1	62.00N/31.00E	20-30	0 Primary decort. flake	1	0.0	
172-2	62.00N/31.00E	20-30	0 Interior flake	1	0.0	
172-3	62.00N/31.00E	20-30	0 Shatter	2	0.0	
173-1	62.00N/31.00E	30-50	0 Secondary decort. flake	1	0.0	
173-2	62.00N/31.00E	30-50	0 Interior flake	2	0.0	
173-3	62.00N/31.00E	30-50	0 Shatter	2	0.0	
173-4	62.00N/31.00E	30-50	0 Biface fragment	1	0.0	
174-1	62.00N/34.00E	0-20	0 Interior flake	3	0.0	
175-1	62.00N/34.00E	20-28	0 Interior flake	2	0.0	
175-2	62.00N/34.00E	20-28	0 Shatter	2	0.0	
176-1	62.00N/34.00E	28-50	0 Secondary decort. flake	1	0.0	
176-2	62.00N/34.00E	28-50	0 Interior flake	1	0.0	
177-1	62.00N/34.00E	50-60	0 Shatter	1	0.0	
178-1	62.00N/37.00E	40-60	0 Interior flake	1	0.0	
179-1	62.00N/37.00E	60-70	0 Interior flake	1	0.0	
180-1	60.00N/10.00E	0-20	0 Interior flake	3	0.0	
181-1	60.00N/10.00E	20-40	0 Interior flake	5	0.0	
181-2	60.00N/10.00E	20-40	0 Shatter	2	0.0	
182-1	60.00N/10.00E	40-60	0 Interior flake	1	0.0	
183-1	60.00N/37.00E	0-20	0 Interior flake	2	0.0	

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183-2	60.00N/37.00E	0-20	0 Shatter	1	0.0	
184-1	60.00N/37.00E	20-40	0 Interior flake	1	0.0	
185-1	59.00N/25.00E	0-20	0 Interior flake	1	0.0	
186-1	59.00N/25.00E	20-40	0 Interior flake	1	0.0	
187-1	59.00N/30.00E	0-20	0 Interior flake	1	0.0	
188-1	59.00N/30.00E	20-40	0 Secondary decort. flake	1	0.0	
188-2	59.00N/30.00E	20-40	0 Interior flake	3	0.0	
189-1	59.00N/35.00E	0-20	0 Secondary decort. flake	1	0.0	
189-2	59.00N/35.00E	0-20	0 Interior flake	1	0.0	
190-1	59.00N/35.00E	20-40	0 Interior flake	2	0.0	
191-1	59.00N/35.00E	40-60	0 Secondary decort. flake	1	0.0	
192-1	67.00N/2.00E	0-30	0 Secondary decort. flake	1	0.0	
192-2	67.00N/2.00E	0-30	0 Interior flake	4	0.0	
192-3	67.00N/2.00E	0-30	0 Shatter	3	0.0	
193-1	67.00N/2.00E	30-50	0 Interior flake	2	0.0	
194-1	67.00N/2.00E	50-60	0 Interior flake	2	0.0	
195-1	65.80N/0.50E	0-30	0 Secondary decort. flake	3	0.0	
195-2	65.80N/0.50E	0-30	0 Interior flake	2	0.0	
195-3	65.80N/0.50E	0-30	0 Window glass	1	0.0	
196-1	64.20N/2.00E	0-30	0 Interior flake	3	0.0	potlid fracture
196-2	64.20N/2.00E	0-30	0 Retouch flake	2	0.0	potlid fracture
196-3	64.20N/2.00E	0-30	0 Shatter	1	0.0	
197-1	64.20N/2.00E	0-40	0 Interior flake	8	0.0	
198-1	64.20N/2.00E	0-40	0 Shatter	2	0.0	
199-1	64.20N/2.00E	45-60	0 Retouch flake	1	0.0	
200-1	76.00N/18.00E	0-20	0 Core	3	0.0	
200-2	76.00N/18.00E	0-20	0 Primary decort. flake	14	0.0	
200-3	76.00N/18.00E	0-20	0 Secondary decort. flake	84	0.0	
200-4	76.00N/18.00E	0-20	0 Interior flake	193	0.0	
200-5	76.00N/18.00E	0-20	0 Retouch flake	15	0.0	
200-6	76.00N/18.00E	0-20	0 Flake knife	1	0.0	
200-7	76.00N/18.00E	0-20	0 Shatter	51	0.0	
200-8	76.00N/18.00E	0-20	0 Fire-cracked rock	76	0.0	
200-9	76.00N/18.00E	0-20	0 Biface fragment	3	0.0	
200-10	76.00N/18.00E	0-20	0 Plastic	2	0.0	includes 1 tent stake fragment; both items discarded
201-1	76.00N/18.00E	20-30	0 Primary decort. flake	1	0.0	
201-2	76.00N/18.00E	20-30	0 Secondary decort. flake	6	0.0	
201-3	76.00N/18.00E	20-30	0 Interior flake	15	0.0	
201-4	76.00N/18.00E	20-30	0 Retouch flake	2	0.0	
201-5	76.00N/18.00E	20-30	0 Shatter	3	0.0	
201-6	76.00N/18.00E	20-30	0 Fire-cracked rock	1	0.0	
202-1	76.00N/18.00E	30-40	0 Interior flake	5	0.0	
203-1	76.00N/19.00E	0-20	0 Primary decort. flake	5	0.0	
203-2	76.00N/19.00E	0-20	0 Secondary decort. flake	31	0.0	
203-3	76.00N/19.00E	0-20	0 Interior flake	79	0.0	
203-4	76.00N/19.00E	0-20	0 Retouch flake	7	0.0	
203-5	76.00N/19.00E	0-20	0 Shatter	30	0.0	
203-6	76.00N/19.00E	0-20	0 Fire-cracked rock	40	0.0	
203-7	76.00N/19.00E	0-20	0 Biface fragment	2	0.0	
204-1	76.00N/19.00E	20-40	0 Secondary decort. flake	9	0.0	
204-2	76.00N/19.00E	20-40	0 Interior flake	40	0.0	
204-3	76.00N/19.00E	20-40	0 Shatter	1	0.0	
204-4	76.00N/19.00E	20-40	0 Fire-cracked rock	12	0.0	
204-5	76.00N/19.00E	20-40	0 Retouch flake	2	0.0	
205-1	76.00N/33.00E	0-24	0 Core	1	0.0	
205-2	76.00N/33.00E	0-24	0 Primary decort. flake	6	0.0	
205-3	76.00N/33.00E	0-24	0 Secondary decort. flake	49	0.0	
205-4	76.00N/33.00E	0-24	0 Interior flake	160	0.0	
205-5	76.00N/33.00E	0-24	0 Retouch flake	12	0.0	
205-6	76.00N/33.00E	0-24	0 Shatter	26	0.0	
205-7	76.00N/33.00E	0-24	0 Fire-cracked rock	31	0.0	
205-8	76.00N/33.00E	0-24	0 Biface fragment	3	0.0	
205-9	76.00N/33.00E	0-24	0 Edge-ground cobble	1	0.0	sandstone
206-1	76.00N/33.00E	24-30	0 Secondary decort. flake	3	0.0	
206-2	76.00N/33.00E	24-30	0 Interior flake	8	0.0	
206-3	76.00N/33.00E	24-30	0 Retouch flake	4	0.0	

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206-4	76.00N/33.00E	24-30	0	Shatter	4	0.0	
206-5	76.00N/33.00E	24-30	0	Fire-cracked rock	5	0.0	
206-6	76.00N/33.00E	24-30	0	Biface fragment	1	0.0	dart point fragment?
207-1	76.00N/33.00E	30-40	0	Secondary decort. flake	11	0.0	
207-2	76.00N/33.00E	30-40	0	Interior flake	49	0.0	
207-3	76.00N/33.00E	30-40	0	Shatter	3	0.0	
207-4	76.00N/33.00E	30-40	0	Fire-cracked rock	9	0.0	
207-5	76.00N/33.00E	30-40	0	Biface fragment	4	0.0	
208-1	76.00N/33.00E	40-50	0	Secondary decort. flake	6	0.0	
208-1	76.00N/33.00E	40-50	0	Secondary decort. flake	6	0.0	
208-2	76.00N/33.00E	40-50	0	Interior flake	38	0.0	
208-3	76.00N/33.00E	40-50	0	Retouch flake	5	0.0	
208-4	76.00N/33.00E	40-50	0	Shatter	8	0.0	
208-5	76.00N/33.00E	40-50	0	Fire-cracked rock	6	0.0	
208-6	76.00N/33.00E	40-50	0	Biface fragment	1	0.0	
209-1	76.00N/33.00E	50-60	0	Primary decort. flake	1	0.0	
209-2	76.00N/33.00E	50-60	0	Secondary decort. flake	1	0.0	
209-3	76.00N/33.00E	50-60	0	Interior flake	9	0.0	
209-4	76.00N/33.00E	50-60	0	Fire-cracked rock	1	0.0	
210-1	76.00N/33.00E	24-35	0	Secondary decort. flake	4	0.0	50 cm x 50 cm control column in NE quadrant of unit
211-1	67.00N/18.00E	0-26	0	Core	2	0.0	
211-2	67.00N/18.00E	0-26	0	Primary decort. flake	18	0.0	
211-3	67.00N/18.00E	0-26	0	Secondary decort. flake	55	0.0	
211-4	67.00N/18.00E	0-26	0	Interior flake	280	0.0	exotic: 1 jasper, 1 novaculite?
211-5	67.00N/18.00E	0-26	0	Retouch flake	9	0.0	
211-6	67.00N/18.00E	0-26	0	Shatter	99	0.0	
211-7	67.00N/18.00E	0-26	0	Fire-cracked rock	34	0.0	
211-8	67.00N/18.00E	0-26	0	Biface fragment	8	0.0	
211-9	67.00N/18.00E	0-26	0	Preform (whole)	1	0.0	
211-10	67.00N/18.00E	0-26	0	Plain whiteware	1	0.0	
211-11	67.00N/18.00E	0-26	0	Metal, misc. unidentified	1	0.0	
211-12	67.00N/18.00E	0-26	0	Unmod. chippable stone	1	0.0	polished pebble
212-1	67.00N/18.00E	20-30	0	Secondary decort. flake	11	0.0	
212-2	67.00N/18.00E	20-30	0	Interior flake	14	0.0	
212-3	67.00N/18.00E	20-30	0	Retouch flake	1	0.0	
212-4	67.00N/18.00E	20-30	0	Shatter	3	0.0	
212-5	67.00N/18.00E	20-30	0	Fire-cracked rock	9	0.0	
212-6	67.00N/18.00E	20-30	0	Biface fragment	1	0.0	
213-1	67.00N/18.00E	30-40	0	Primary decort. flake	2	0.0	
213-2	67.00N/18.00E	30-40	0	Secondary decort. flake	5	0.0	
213-3	67.00N/18.00E	30-40	0	Interior flake	19	0.0	
213-4	67.00N/18.00E	30-40	0	Shatter	13	0.0	
213-5	67.00N/18.00E	30-40	0	Flake knife	1	0.0	
213-6	67.00N/18.00E	30-40	0	Fire-cracked rock	12	0.0	
214-1	67.00N/18.00E	40-50	0	Secondary decort. flake	2	0.0	
214-2	67.00N/18.00E	40-50	0	Interior flake	3	0.0	
214-3	67.00N/18.00E	40-50	0	Retouch flake	1	0.0	
214-4	67.00N/18.00E	40-50	0	Shatter	1	0.0	
215-1	72.00N/24.00E	0-23	0	Core	2	0.0	
215-2	72.00N/24.00E	0-23	0	Primary decort. flake	4	0.0	
215-3	72.00N/24.00E	0-23	0	Secondary decort. flake	58	0.0	
215-4	72.00N/24.00E	0-23	0	Interior flake	139	0.0	other: fossiliferous
215-5	72.00N/24.00E	0-23	0	Retouch flake	8	0.0	
215-6	72.00N/24.00E	0-23	0	Shatter	33	0.0	
215-7	72.00N/24.00E	0-23	0	Fire-cracked rock	36	0.0	
215-8	72.00N/24.00E	0-23	0	Biface fragment	5	0.0	
215-9	72.00N/24.00E	0-23	0	Dart point stem/base	1	0.0	Specimen is a basal fragment of a dart point made of white chert, measuring 1.8 cm wide and is 1.4 cm long. The stemless point has a concave base which displays some evidence of grinding. In cross section, it is plano-convex and appears to be .6 cm thick. One side of the parallel rounded auriculated base exhibits a shallow

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						channel flute 1 cm long; whereas, the other side of the dart point fragment simply displays some thinning. One face of one of the blade edges shows a small area of cortex. This dart point fragment is similar to what Chapman (1975:250-251) refers to as a Jakie Stemmed.
215-10	72.00N/24.00E	0-23	0 Fiberglass	1	0.0	
215-10	72.00N/24.00E	0-23	0 Biface fragment	4	0.0	
215-11	72.00N/24.00E	0-24	0 Plain whiteware	1	0.0	
216-1	72.00N/24.00E	23-30	0 Primary decort. flake	1	0.0	
216-2	72.00N/24.00E	23-30	0 Secondary decort. flake	16	0.0	
216-3	72.00N/24.00E	23-30	0 Interior flake	38	0.0	
216-4	72.00N/24.00E	23-30	0 Retouch flake	3	0.0	
216-5	72.00N/24.00E	23-30	0 Shatter	5	0.0	
216-6	72.00N/24.00E	23-30	0 Fire-cracked rock	6	0.0	
216-7	72.00N/24.00E	23-30	0 Biface fragment	1	0.0	
216-8	72.00N/24.00E	23-30	0 Dart point stem/base	1	0.0	Made of light pinkish poor quality chert, the dart point fragment displays a rounded shoulder and straight stem. The fragment measures 3 cm long x 2 cm wide and is only .4 cm thick. It probably was much thicker during the initial reduction sequence; however, during its manufacture the point fractured between blade faces. Consequently, production of the biface was abandoned and the aborted point was discarded. Not enough of the specimen is present to type it. The fact that stemmed projectile point/knives are found to be present in Late Archaic assemblages in the region may suggest a similar temporal placement of this specimen.
217-1	72.00N/24.00E	30-40	0 Primary decort. flake	2	0.0	
217-2	72.00N/24.00E	30-40	0 Secondary decort. flake	17	0.0	
217-3	72.00N/24.00E	30-40	0 Interior flake	48	0.0	
217-4	72.00N/24.00E	30-40	0 Flake knife	1	0.0	
217-5	72.00N/24.00E	30-40	0 Shatter	5	0.0	
217-6	72.00N/24.00E	30-40	0 Fire-cracked rock	17	0.0	
217-7	72.00N/24.00E	30-40	0 Biface fragment	1	0.0	
218-1	72.00N/24.00E	40-50	0 Primary decort. flake	6	0.0	
218-2	72.00N/24.00E	40-50	0 Secondary decort. flake	18	0.0	
218-3	72.00N/24.00E	40-50	0 Interior flake	46	0.0	
218-4	72.00N/24.00E	40-50	0 Retouch flake	5	0.0	
218-5	72.00N/24.00E	40-50	0 Shatter	13	0.0	
219-1	72.00N/24.00E	50-60	0 Core	2	0.0	
219-2	72.00N/24.00E	50-60	0 Secondary decort. flake	7	0.0	
219-3	72.00N/24.00E	50-60	0 Interior flake	10	0.0	
219-4	72.00N/24.00E	50-60	0 Shatter	2	0.0	
219-5	72.00N/24.00E	50-60	0 Primary decort. flake	3	0.0	
220-1	72.00N/24.00E	60-70	0 Interior flake	2	0.0	
221-1	72.00N/24.00E	70-80	0 Secondary decort. flake	2	0.0	
222-1	70.00N/24.00E	0-20	0 Primary decort. flake	4	0.0	
222-2	70.00N/24.00E	0-20	0 Secondary decort. flake	40	0.0	
222-3	70.00N/24.00E	0-20	0 Interior flake	82	0.0	
222-4	70.00N/24.00E	0-20	0 Retouch flake	2	0.0	
222-5	70.00N/24.00E	0-20	0 Flake knife	1	0.0	
222-6	70.00N/24.00E	0-20	0 Shatter	10	0.0	1 jasper
222-7	70.00N/24.00E	0-20	0 Fire-cracked rock	14	0.0	
222-8	70.00N/24.00E	0-20	0 Biface	1	0.0	
222-9	70.00N/24.00E	0-20	0 Biface fragment	5	0.0	

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222-10	70.00N/24.00E	0-20	0 Unifacial side scraper	1	0.0	This specimen is actually a modified piece of fire cracked rock which is unifacially flaked with a series of retouch flakes along one edge. This flaking produced an edge angle of 80 degrees. The steep angle suggests that the tool functioned as a scraper. What's more, the irregular shape of the piece of chert cannot comfortably be manipulated in the left hand to utilize the working edge; however, when held in the right hand it not only is a comfortable fit, the working edge of the tool can easily be manipulated with the first digit. This assuming that the break where the digit would have rested on was an intentional or fortuitous break..
222-11	70.00N/24.00E	0-20	0 Dart point stem/base	1	0.0	This dart point fragment, made of white chert, exhibits a somewhat deep corner notch. Not enough of the specimen is present to determine its similarity ot established types. The fragment measures 2.4 cm x 2.4 cm. Corner notched points in this area are often found associated with Late Archaic as well as with Woodland assemblages.
223-1	70.00N/24.00E	20-90	0 Primary decort. flake	11	0.0	
223-2	70.00N/24.00E	20-90	0 Secondary decort. flake	50	0.0	
223-3	70.00N/24.00E	20-90	0 Interior flake	83	0.0	1 ajasper
223-4	70.00N/24.00E	20-90	0 Retouch flake	3	0.0	
223-5	70.00N/24.00E	20-90	0 Shatter	12	0.0	
223-6	70.00N/24.00E	20-90	0 Fire-cracked rock	14	0.0	
223-7	70.00N/24.00E	20-90	0 Biface fragment	2	0.0	
223-8	70.00N/24.00E	20-90	0 Dart point stem/base	1	0.0	This corner notched dart point fragment of pink banded chert is missing one of its shoulders and part of its base. The fracture plane of the break along the base appears to have been reworked to form a straight unifacial scraper with a steep (50 degrees) edge angle. On the opposite end of the specimen, two small subtle notches on the blade edges on either side of the distal end were perhaps made to allow the tip to function as some sort of perforator. In addition, the blade edge which is missing its shoulder displays a small burin at the point of the break. As a result, this tool appears to be multi-functional and could have been used in scraping, perforating and engraving hides, bone or wood. The specimen is 3.7 cm long x 2.4 cm wide x .7 cm thick and is plano convex in cross section. Not enough of the specimen is present to assign it to established types. As mentioned above, corner notched points have been found in Late Archaic as well

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Cat. No.	Horiz. Prov.	Depth (cm)	Fea.	Artifact Description	Ct.	Wt.	Comments
							as Woodland assemblages.
224-1	69.00N/24.00E	0-23	0	Primary decort. flake	3	0.0	
224-2	69.00N/24.00E	0-23	0	Secondary decort. flake	28	0.0	
224-3	69.00N/24.00E	0-23	0	Interior flake	73	0.0	
224-4	69.00N/24.00E	0-23	0	Flake knife	1	0.0	
224-5	69.00N/24.00E	0-23	0	Shatter	10	0.0	
224-6	69.00N/24.00E	0-23	0	Fire-cracked rock	10	0.0	
224-7	69.00N/24.00E	0-23	0	Biface fragment	5	0.0	
224-8	69.00N/24.00E	0-23	0	Dart point stem/base	1	0.0	This dart point fragment, made of tan colored chert speckled with tiny brown inclusions, displays a single notch. Although measuring 3.8 cm x 3.5 cm, not enough of the specimen is present to determine whether the notch represents a side, corner or basal notch. In cross section, the specimen is plano-convex in shape and is .8 cm thick. Not enough of the specimen is present to compare it with established point typologies.
224-9	69.00N/24.00E	0-23	0	Dart point stem/base	1	0.0	This dart point fragment made from white, heat treated chert measures 3.8 cm long x 2.9 cm wide x .9 cm thick and appears biconvex in cross section. Missing from the specimen is its distal end and most of one of its two blades. Along the edge of the fracture nearest to the base, evidence of reworking is present. This reworking produced an edge angle of 70 degrees. The steep beveled edge suggests it may have functioned as some sort of scraper except for the presence of small graver in this area. The dart point, prior to reworking, may have been a Table Rock Stemmed point (Chapman 1975:257-258) given the tapered shoulder, slightly expanding stem and evidence of grinding on its base. Points of this type, according to Chapman, date to the Archaic Period.
225-1	69.00N/24.00E	20-50	0	Core	1	0.0	
225-2	69.00N/24.00E	20-50	0	Primary decort. flake	12	0.0	
225-3	69.00N/24.00E	20-50	0	Secondary decort. flake	57	0.0	
225-4	69.00N/24.00E	20-50	0	Interior flake	105	0.0	
225-5	69.00N/24.00E	20-50	0	Retouch flake	20	0.0	
225-6	69.00N/24.00E	20-50	0	Flake knife	2	0.0	
225-7	69.00N/24.00E	20-50	0	Shatter	43	0.0	
225-8	69.00N/24.00E	20-50	0	Fire-cracked rock	49	0.0	
225-9	69.00N/24.00E	20-50	0	Biface fragment	5	0.0	
226-1	69.00N/24.00E	50-80	0	Core	1	0.0	
226-2	69.00N/24.00E	50-80	0	Primary decort. flake	6	0.0	
226-3	69.00N/24.00E	50-80	0	Secondary decort. flake	11	0.0	
226-4	69.00N/24.00E	50-80	0	Interior flake	41	0.0	
226-5	69.00N/24.00E	50-80	0	Retouch flake	5	0.0	
226-6	69.00N/24.00E	50-80	0	Shatter	13	0.0	
226-7	69.00N/24.00E	50-80	0	Fire-cracked rock	3	0.0	
226-8	69.00N/24.00E	50-80	0	Biface fragment	1	0.0	
227-1	68.00N/24.00E	0-20	0	Core	2	0.0	
227-2	68.00N/24.00E	0-20	0	Primary decort. flake	3	0.0	
227-3	68.00N/24.00E	0-20	0	Secondary decort. flake	37	0.0	1 jasper
227-4	68.00N/24.00E	0-20	0	Interior flake	101	0.0	
227-5	68.00N/24.00E	0-20	0	Shatter	17	0.0	
227-6	68.00N/24.00E	0-20	0	Fire-cracked rock	17	0.0	
227-7	68.00N/24.00E	0-20	0	Biface fragment	3	0.0	

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Cat. No.	Horiz. Prov.	Depth Fea. (cm)	Artifact Description	Ct.	Wt.	Comments
227-8	68.00N/24.00E	0-20	0 Preform (whole)	1	0.0	
227-9	68.00N/24.00E	0-20	0 Plain whiteware	1	0.0	
227-10	68.00N/24.00E	0-20	0 Metal, misc. unidentified	1	0.0	
228-1	68.00N/24.00E	20-50	0 Primary decort. flake	8	0.0	
228-2	68.00N/24.00E	20-50	0 Secondary decort. flake	56	0.0	
228-3	68.00N/24.00E	20-50	0 Interior flake	157	0.0	
228-4	68.00N/24.00E	20-50	0 Retouch flake	16	0.0	
228-5	68.00N/24.00E	20-50	0 Flake knife	4	0.0	
228-6	68.00N/24.00E	20-50	0 Shatter	35	0.0	
228-7	68.00N/24.00E	20-50	0 Fire-cracked rock	32	0.0	
228-8	68.00N/24.00E	20-50	0 Biface fragment	8	0.0	
229-1	68.00N/24.00E	50-80	0 Core	3	0.0	
229-2	68.00N/24.00E	50-80	0 Primary decort. flake	8	0.0	
229-3	68.00N/24.00E	50-80	0 Secondary decort. flake	16	0.0	
229-4	68.00N/24.00E	50-80	0 Interior flake	48	0.0	
229-5	68.00N/24.00E	50-80	0 Retouch flake	10	0.0	
229-6	68.00N/24.00E	50-80	0 Shatter	19	0.0	
229-7	68.00N/24.00E	50-80	0 Fire-cracked rock	4	0.0	
229-8	68.00N/24.00E	50-80	0 Biface fragment	2	0.0	
230-1	68.00N/24.00E	0-30	0 Primary decort. flake	2	0.0	Burned clay F
230-2	67.00N/24.00E	0-30	0 Secondary decort. flake	27	0.0	
230-3	67.00N/24.00E	0-30	0 Interior flake	78	0.0	
230-4	67.00N/24.00E	0-30	0 Shatter	5	0.0	
230-5	67.00N/24.00E	0-30	0 Fire-cracked rock	2	0.0	
230-6	67.00N/24.00E	0-30	0 Biface fragment	1	0.0	
230-7	67.00N/24.00E	0-30	0 Dart point stem/base	1	0.0	All that remains of this basal notched dart point is part of one blade, one basal notch, and part of the stem. The fragment, made of white chert with grey mottling, measures 4 cm long (estimated length 7 cm) x 4 cm wide (estimated width 4.7 cm) x 1 cm thick. Although fragmentary, enough of the specimen is present to suggest to Dr. Price and Alan Banks that it represents a part of what Chapman (1975:256) refers to as a Smith Basal Notched. This cutting tool is considered to have been in use during the Late Archaic period around 5000-1000 B.C.
231-1	67.00N/24.00E	30-60	0 Primary decort. flake	12	0.0	
231-2	67.00N/24.00E	30-60	0 Secondary decort. flake	64	0.0	
231-3	67.00N/24.00E	30-60	0 Interior flake	162	0.0	
231-4	67.00N/24.00E	30-60	0 Retouch flake	23	0.0	
231-5	67.00N/24.00E	30-60	0 Shatter	49	0.0	
231-6	67.00N/24.00E	30-60	0 Fire-cracked rock	30	0.0	
231-7	67.00N/24.00E	30-60	0 Biface fragment	2	0.0	
231-8	67.00N/24.00E	30-60	0 Dart point stem/base	1	0.0	The specimen exhibits two laterally projecting lobes on either side of a straight to slightly concave base. This point, made of white chert and missing its distal end, measures 2.7 cm long (4.2 cm estimated length) x 3 cm long and is .8 cm thick. In cross section the hafted biface appears to be flattened. Although fragmentary, the point appears similar to that described by Bray (1956:128, 131), Chapman (1975:254) and Perino (1985:322) as a Rice Lobed. According to Chapman, this point is typical of the Early Archaic although it lasts into the Middle Archaic. Estimated dates are

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Cat. No.	Horiz. Prov.	Depth (cm)	Fea.	Artifact Description	Ct.	Wt.	Comments
7500-5000 B.C.							
232-1	67.00N/24.00E	60-90	0	Secondary decort. flake	14	0.0	
232-2	67.00N/24.00E	60-90	0	Interior flake	24	0.0	
232-3	67.00N/24.00E	60-90	0	Retouch flake	4	0.0	
232-4	67.00N/24.00E	60-90	0	Shatter	5	0.0	
232-5	67.00N/24.00E	60-90	0	Fire-cracked rock	1	0.0	
233-1	66.00N/24.00E	0-30	0	Core	1	0.0	
233-2	66.00N/24.00E	0-30	0	Primary decort. flake	1	0.0	
233-3	66.00N/24.00E	0-30	0	Secondary decort. flake	28	0.0	
233-4	66.00N/24.00E	0-30	0	Interior flake	74	0.0	
233-5	66.00N/24.00E	0-30	0	Retouch flake	6	0.0	
233-6	66.00N/24.00E	0-30	0	Shatter	7	0.0	
233-7	66.00N/24.00E	0-30	0	Fire-cracked rock	8	0.0	
233-8	66.00N/24.00E	0-30	0	Biface fragment	4	0.0	
234-1	66.00N/24.00E	30-50	0	Primary decort. flake	9	0.0	
234-2	66.00N/24.00E	30-50	0	Secondary decort. flake	61	0.0	
234-3	66.00N/24.00E	30-50	0	Interior flake	130	0.0	
234-4	66.00N/24.00E	30-50	0	Retouch flake	10	0.0	
234-5	66.00N/24.00E	30-50	0	Shatter	30	0.0	
234-6	66.00N/24.00E	30-50	0	Fire-cracked rock	30	0.0	
234-7	66.00N/24.00E	30-50	0	Biface fragment	2	0.0	
235-1	66.00N/24.00E	50-80	0	Primary decort. flake	3	0.0	
235-2	66.00N/24.00E	50-80	0	Secondary decort. flake	12	0.0	
235-3	66.00N/24.00E	50-80	0	Interior flake	21	0.0	
235-4	66.00N/24.00E	50-80	0	Retouch flake	11	0.0	1 jasper
235-5	66.00N/24.00E	50-80	0	Shatter	4	0.0	
236-1	65.00N/24.00E	0-30	0	Primary decort. flake	20	0.0	2 jasper
236-2	65.00N/24.00E	0-30	0	Secondary decort. flake	32	0.0	
236-3	65.00N/24.00E	0-30	0	Interior flake	112	0.0	1 gray banded exotic(?)
236-4	65.00N/24.00E	0-30	0	Retouch flake	8	0.0	
236-5	65.00N/24.00E	0-30	0	Shatter	20	0.0	
236-6	65.00N/24.00E	0-30	0	Fire-cracked rock	7	0.0	
236-7	65.00N/24.00E	0-30	0	Biface fragment	3	0.0	
236-8	65.00N/24.00E	0-30	0	Dart point	1	0.0	This expanding stem hafted biface made of white chert is 2.9 cm long x 1.8 cm wide x .6 cm thick and is biconvex in cross section. The specimen exhibits an expanded pointed auriculated base, beveled blade edges, and a blunt obtuse distal end. Somewhat similar points have been recovered at the Riverton site (J. Price personal communication 1987).
237-1	65.00N/24.00E	30-50	0	Core	1	0.0	
237-2	65.00N/24.00E	30-50	0	Primary decort. flake	5	0.0	
237-3	65.00N/24.00E	3-50	0	Secondary decort. flake	38	0.0	
237-4	65.00N/24.00E	30-50	0	Interior flake	103	0.0	
237-5	65.00N/24.00E	30-50	0	Retouch flake	14	0.0	
237-6	65.00N/24.00E	30-50	0	Flake knife	2	0.0	
237-7	65.00N/24.00E	30-50	0	Shatter	10	0.0	
237-8	65.00N/24.00E	30-50	0	Fire-cracked rock	19	0.0	
237-9	65.00N/24.00E	30-50	0	Biface fragment	1	0.0	
237-10	65.00N/24.00E	30-50	0	Biface fragment	5	0.0	
237-11	65.00N/24.00E	30-50	0	Dart point stem/base	1	0.0	The specimen is a very small piece of a dart point made of pink chert. The fragment represents part of a straight stem. Not enough of the specimen is present to attempt to type it.
238-1	65.00N/24.00E	50-85	0	Primary decort. flake	3	0.0	
238-2	65.00N/24.00E	50-85	0	Secondary decort. flake	5	0.0	
238-3	65.00N/24.00E	50-85	0	Interior flake	10	0.0	
238-4	65.00N/24.00E	50-85	0	Retouch flake	5	0.0	
238-5	65.00N/24.00E	50-85	0	Shatter	6	0.0	
238-6	65.00N/24.00E	50-85	0	Preform (whole)	1	0.0	
239-1	64.00N/24.00E	0-30	0	Primary decort. flake	6	0.0	
239-2	64.00N/24.00E	0-30	0	Secondary decort. flake	18	0.0	

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Cat. No.	Horiz. Prov.	Depth (cm)	Fea.	Artifact Description	Ct.	Wt.	Comments
239-3	64.00N/24.00E	0-30	0	Interior flake	49	0.0	
239-4	64.00N/24.00E	0-30	0	Shatter	20	0.0	
239-5	64.00N/24.00E	0-30	0	Fire-cracked rock	12	0.0	
239-6	64.00N/24.00E	0-30	0	Dart point stem/base	1	0.0	This dart point fragment, missing both blades and its distal end, consists of expanded stem base, deep side notches near the base, and tapered shoulders. Made of banded white, grey, and dark grey chert, the specimen is flattened in cross section and measures 1.9 cm long x 3.2 cm wide and is .7 cm thick. The base appears to have been ground. Not enough of the specimen is present to attempt to type it.
239-7	64.00N/24.00E	0-30	0	Retouch flake	1	0.0	
239-8	64.00N/24.00E	0-30	0	Biface fragment	1	0.0	
239-9	64.00N/24.00E	0-30	0	Plain whiteware	1	0.0	
239-10	64.00N/24.00E	0-30	0	Dart point stem/base	1	0.0	This basal fragment of a dart point displays incurvate stem sideedges and a straight base that is ground. Made of light pink colored chert, not enough of the specimen is present to type it.
240-1	64.00N/24.00E	30-50	0	Core	2	0.0	
240-2	64.00N/24.00E	30-50	0	Primary decort. flake	7	0.0	
240-3	64.00N/24.00E	30-50	0	Secondary decort. flake	68	0.0	2 jasper
240-4	64.00N/24.00E	30-50	0	Interior flake	161	0.0	1 jasper
240-5	64.00N/24.00E	30-50	0	Retouch flake	17	0.0	
240-6	64.00N/24.00E	30-50	0	Flake knife	1	0.0	
240-7	64.00N/24.00E	30-50	0	Shatter	39	0.0	
240-8	64.00N/24.00E	30-50	0	Fire-cracked rock	54	0.0	
240-9	64.00N/24.00E	30-50	0	Biface fragment	5	0.0	
240-10	64.00N/24.00E	30-50	0	Dart point stem/base	1	0.0	This dart point fragment, missing just its distal end, measures 4 cm long (5 cm estimated length) x 3.5 cm wide x .6 cm thick. The specimen exhibits round shoulders tapering down to an expanding stem and a seemingly straight base edge and displays a flattened shape when viewed in cross section. From all appearances the specimen is similar to what Chapman (1975:257-258) refers to as a Table Rock Stemmed. Points of this type have been associated with aggregates from the Late Archaic period in the Table Rock Reservoir area of Missouri. Estimated dates for these points is 3000-1000 B.C.
241-1	64.00N/24.00E	50-85	0	Core	1	0.0	
241-2	64.00N/24.00E	50-85	0	Primary decort. flake	3	0.0	
241-3	64.00N/24.00E	50-85	0	Secondary decort. flake	8	0.0	
241-4	64.00N/24.00E	50-85	0	Interior flake	35	0.0	1 jasper
241-5	64.00N/24.00E	50-85	0	Retouch flake	6	0.0	
241-6	64.00N/24.00E	50-85	0	Shatter	11	0.0	
241-7	64.00N/24.00E	50-85	0	Fire-cracked rock	3	0.0	
242-1	63.00N/24.00E	0-30	0	Primary decort. flake	2	0.0	
242-2	63.00N/24.00E	0-30	0	Secondary decort. flake	20	0.0	
242-3	63.00N/24.00E	0-30	0	Interior flake	79	0.0	2 jasper
242-4	63.00N/24.00E	0-30	0	Retouch flake	2	0.0	
242-5	63.00N/24.00E	0-30	0	Shatter	2	0.0	
242-6	63.00N/24.00E	0-30	0	Fire-cracked rock	14	0.0	
242-7	63.00N/24.00E	0-30	0	Biface fragment	2	0.0	

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Cat. No.	Horiz. Prov.	Depth (cm)	Fea.	Artifact Description	Ct.	Wt.	Comments
242-8	63.00N/24.00E	0-30	0	Dart point	1	0.0	The distal end of this specimen appears to have fratured off and is missing. As is, the specimen measures 2.1 cm long x 1.7 cm wide x .6 cm thick. Made from a light pink colored chert, the point is crudely chipped. The dart point exhibits shallow side notches, an expanded rounded auriculated hafting area, and a beveled base. In cross section it displays a median ridged shape. It does not appear to resemble any of the point types that have been established in this area.
243-1	63.00N/24.00E	30-50	0	Primary decort. flake	5	0.0	
243-2	63.00N/24.00E	30-50	0	Secondary decort. flake	27	0.0	
243-3	63.00N/24.00E	30-50	0	Interior flake	113	0.0	1 fossiliferous
243-4	63.00N/24.00E	30-50	0	Retouch flake	7	0.0	
243-5	63.00N/24.00E	30-50	0	Flake knife	3	0.0	
243-6	63.00N/24.00E	30-50	0	Shatter	36	0.0	
243-7	63.00N/24.00E	30-50	0	Fire-cracked rock	24	0.0	
243-8	63.00N/24.00E	30-50	0	Biface fragment	4	0.0	
244-1	63.00N/24.00E	50-85	0	Primary decort. flake	6	0.0	
244-2	63.00N/24.00E	50-85	0	Secondary decort. flake	14	0.0	
244-3	63.00N/24.00E	50-85	0	Interior flake	4	0.0	
244-4	63.00N/24.00E	50-85	0	Retouch flake	4	0.0	
244-5	63.00N/24.00E	50-85	0	Shatter	18	0.0	
244-6	63.00N/24.00E	50-85	0	Fire-cracked rock	13	0.0	
244-7	63.00N/24.00E	50-85	0	Biface fragment	1	0.0	
244-8	63.00N/24.00E	50-85	0	Bifacial end scraper	1	0.0	
245-1	62.00N/24.00E	0-17	0	Primary decort. flake	9	0.0	
245-2	62.00N/24.00E	0-17	0	Secondary decort. flake	7	0.0	
245-3	62.00N/24.00E	0-17	0	Interior flake	122	0.0	1 banded chert
245-4	62.00N/24.00E	0-17	0	Retouch flake	7	0.0	
245-5	62.00N/24.00E	0-17	0	Shatter	12	0.0	
245-6	62.00N/24.00E	0-17	0	Fire-cracked rock	8	0.0	
245-7	62.00N/24.00E	0-17	0	Biface fragment	2	0.0	
245-8	62.00N/24.00E	0-17	0	Biface fragment	6	0.0	
246-1	62.00N/24.00E	17-30	0	Primary decort. flake	2	0.0	
246-2	62.00N/24.00E	17-30	0	Secondary decort. flake	14	0.0	
246-3	62.00N/24.00E	17-30	0	Interior flake	61	0.0	
246-4	62.00N/24.00E	17-30	0	Retouch flake	12	0.0	
246-5	62.00N/24.00E	17-30	0	Shatter	16	0.0	
246-6	62.00N/24.00E	17-30	0	Fire-cracked rock	2	0.0	
246-7	62.00N/24.00E	17-30	0	Biface fragment	3	0.0	1 possible side notched hafted biface
246-8	62.00N/24.00E	17-30	0	Arrow point	1	0.0	This small untyped arrow point, made from a flake of light tan colored chert, exhibits straight blades, rounded shoulders, a slightly expanded stem, and a rounded base. The specimen, measuring 1.6 cm long x .8 cm wide x .2 cm thick, is flattened in cross section. Although untyped, similar points have been found associated with Emergent Mississippi components in this area (J. Price personal communication 1987) and Late Woodland assemblages (Alan Banks personal communication 1987).
247-1	62.00N/24.00E	30-40	0	Primary decort. flake	7	0.0	
247-2	62.00N/24.00E	30-40	0	Secondary decort. flake	19	0.0	
247-3	62.00N/24.00E	30-40	0	Interior flake	48	0.0	
247-4	62.00N/24.00E	30-40	0	Retouch flake	6	0.0	
247-5	62.00N/24.00E	30-40	0	Shatter	13	0.0	

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Cat. No.	Horiz. Prov.	Depth Fea. (cm)	Artifact Description	Ct.	Wt.	Comments
247-6	62.00N/24.00E	30-40	0 Fire-cracked rock	8	0.0	
248-1	62.00N/24.00E	40-50	0 Primary decort. flake	5	0.0	
248-2	62.00N/24.00E	40-50	0 Secondary decort. flake	18	0.0	
248-3	62.00N/24.00E	40-50	0 Interior flake	39	0.0	
248-4	62.00N/24.00E	40-50	0 Retouch flake	6	0.0	
248-5	62.00N/24.00E	40-50	0 Shatter	15	0.0	
248-6	62.00N/24.00E	40-50	0 Fire-cracked rock	10	0.0	
249-1	62.00N/24.00E	50-60	0 Primary decort. flake	1	0.0	
249-2	62.00N/24.00E	50-60	0 Secondary decort. flake	5	0.0	
249-3	62.00N/24.00E	50-60	0 Interior flake	13	0.0	
249-4	62.00N/24.00E	50-60	0 Retouch flake	3	0.0	
249-5	62.00N/24.00E	50-60	0 Shatter	7	0.0	
249-6	62.00N/24.00E	50-60	0 Fire-cracked rock	7	0.0	
250-1	62.00N/24.00E	60-70	0 Interior flake	15	0.0	
250-2	62.00N/24.00E	60-70	0 Retouch flake	3	0.0	
250-3	62.00N/24.00E	60-70	0 Shatter	7	0.0	
251-1	62.00N/24.00E	70-80	0 Interior flake	2	0.0	
252-1	64.00N/36.00E	0-30	0 Secondary decort. flake	23	0.0	
252-2	64.00N/36.00E	0-30	0 Interior flake	57	0.0	
252-3	64.00N/36.00E	0-30	0 Shatter	8	0.0	
252-4	64.00N/36.00E	0-30	0 Fire-cracked rock	8	0.0	
252-5	64.00N/36.00E	0-30	0 Biface fragment	3	0.0	
252-6	64.00N/36.00E	0-30	0 Window glass	1	0.0	
252-7	64.00N/36.00E	0-30	0 Earthenware	1	0.0	lead glaze?
253-1	64.00N/36.00E	30-50	0 Primary decort. flake	2	0.0	
253-2	64.00N/36.00E	30-50	0 Secondary decort. flake	29	0.0	
253-3	64.00N/36.00E	30-50	0 Interior flake	84	0.0	
253-4	64.00N/36.00E	30-50	0 Retouch flake	3	0.0	
253-5	64.00N/36.00E	30-50	0 Shatter	11	0.0	
253-6	64.00N/36.00E	30-50	0 Fire-cracked rock	4	0.0	
253-7	64.00N/36.00E	30-50	0 Biface fragment	1	0.0	
253-8	64.00N/36.00E	30-50	0 Window glass	1	0.0	
254-1	64.00N/36.00E	50-130	0 Core	2	0.0	
254-2	64.00N/36.00E	50-130	0 Primary decort. flake	8	0.0	
254-3	64.00N/36.00E	50-130	0 Secondary decort. flake	91	0.0	
254-4	64.00N/36.00E	50-130	0 Interior flake	299	0.0	1 jasper
254-5	64.00N/36.00E	50-130	0 Retouch flake	14	0.0	
254-6	64.00N/36.00E	50-130	0 Shatter	41	0.0	1 jasper
254-7	64.00N/36.00E	50-130	0 Fire-cracked rock	49	0.0	
254-8	64.00N/36.00E	50-130	0 Preform (whole)	1	0.0	
254-9	64.00N/36.00E	50-130	0 Biface fragment	3	0.0	
254-10	64.00N/36.00E	50-130	0 Charcoal	1	0.0	
254-11	64.00N/36.00E	50-130	0 Dart point midsection	1	0.0	This small, narrow lanceolate point fragment, measuring 1.8 cm long (3.5 cm estimated length) x 2 cm wide x .5 cm thick, is fluted in cross section. Although missing both its distal end and its hafting area, each of the two faces on the specimen exhibit a wide (.9 cm) flute. On one side, the flute extends across the entire length of the fragment; on the other side, the flute extends three-fourths of the length of the fragment. The specimen is made from a very dark grey (almost black) exotic chert. According to J. Price, the material appears to be similar to certain chert outcrops that he is aware of in Alabama. Both J. Price and Alan Banks consider the specimen to represent what Chapman (1975:243-244) refers to as a Clovis Fluted. Points of this type have been dated between 9500 and 9000 B.C. elsewhere in North

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							America. At Rodgers shelter it was radiocarbon dated at 8580-8250 B.C. The type is associated with the Llano complex in the southwestern United States and Great Plains. Clovis points are a diagnostic tool of the Paleo-Indian period.
254-12	64.00N/36.00E	50-130	0	Dart point stem/base	1	0.0	This basal fragment of a hafted biface made of very light tan chert is very worn and weathered suggesting that it was either water rolled or was exposed on the surface for a very long time. Missing a tang (or auricle) along with its distal end and distal parts of both blades, the dart point fragment measures 2.5 cm long (estimated length 4.6 cm) x 1.7 cm (estimated width at auricles 1.8 cm) x .5 cm thick. In cross section, the specimen appears plano-convex in shape. Although fragmentary, enough of the specimen is present to have allowed Dr. Price and Alan Banks to identify the point as being what Chapman (1975:245-246) refers to as a Dalton Serrated. Points of this type date from 8500 to 6000 B.C. and possibly as late as 5000 B.C. The form is characteristic of the Dalton and Early Archaic periods but also appears in the Paleo-Indian period and may have lasted until the early part of the Middle archaic period.
254-13	64.00N/36.00E	50-130	0	Dart point stem/base	1	0.0	This is a basal fragment of a large dart point. Missing are its distal end and most of its two blades. Made of white colored chert, the fragment measure 2.5 cm long (7.5 cm estimated length) x 3.1 cm wide and is .6 cm thick at its thickest part. One shoulder is partially missing; the other displays a horizontal shoulder style. The specimen exhibits a straight to slightly expanding stem and a rounded base. Not enough of the specimen is present to allow for typological placement.
255-1	64.00N/35.00E	0-20	0	Core	1	0.0	
255-2	64.00N/35.00E	0-20	0	Primary decort. flake	2	0.0	
255-3	64.00N/35.00E	0-20	0	Secondary decort. flake	16	0.0	
255-4	64.00N/35.00E	0-20	0	Interior flake	43	0.0	
255-5	64.00N/35.00E	0-20	0	Retouch flake	4	0.0	
255-6	64.00N/35.00E	0-20	0	Flake knife	1	0.0	
255-7	64.00N/35.00E	0-20	0	Shatter	10	0.0	
255-8	64.00N/35.00E	0-20	0	Shatter	4	0.0	
255-9	64.00N/35.00E	0-20	0	Window glass	1	0.0	
256-1	64.00N/35.00E	20-50	0	Primary decort. flake	4	0.0	
256-2	64.00N/35.00E	20-50	0	Secondary decort. flake	43	0.0	1 jasper
256-3	64.00N/35.00E	20-50	0	Interior flake	123	0.0	1 jasper
256-4	64.00N/35.00E	20-50	0	Retouch flake	4	0.0	
256-5	64.00N/35.00E	20-50	0	Shatter	14	0.0	
256-6	64.00N/35.00E	20-50	0	Fire-cracked rock	18	0.0	
256-7	64.00N/35.00E	20-50	0	Biface fragment	4	0.0	

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Cat. No.	Horiz. Prov.	Depth Fea. (cm)	Artifact Description	Ct.	Wt.	Comments
257-1	64.00N/35.00E	50-100	0 Primary decort. flake	4	0.0	
257-2	64.00N/35.00E	50-100	0 Secondary decort. flake	43	0.0	
257-3	64.00N/35.00E	50-100	0 Interior flake	120	0.0	
257-4	64.00N/35.00E	50-100	0 Retouch flake	4	0.0	
257-5	64.00N/35.00E	50-100	0 Shatter	19	0.0	
257-6	64.00N/35.00E	50-100	0 Fire-cracked rock	23	0.0	
257-7	64.00N/35.00E	50-100	0 Biface fragment	10	0.0	
257-8	64.00N/35.00E	50-100	0 Preform (whole)	1	0.0	
258-1	64.00N/35.00E	100-130	0 Primary decort. flake	1	0.0	
258-2	64.00N/35.00E	100-130	0 Secondary decort. flake	1	0.0	
258-3	64.00N/35.00E	100-130	0 Interior flake	10	0.0	
258-4	64.00N/35.00E	100-130	0 Retouch flake	2	0.0	
258-5	64.00N/35.00E	100-130	0 Shatter	1	0.0	
258-6	64.00N/35.00E	100-130	0 Fire-cracked rock	2	0.0	
258-7	64.00N/35.00E	100-130	0 Biface fragment	1	0.0	
259-1	64.00N/34.00E	0-30	0 Primary decort. flake	3	0.0	
259-2	64.00N/34.00E	0-30	0 Secondary decort. flake	15	0.0	
259-3	64.00N/34.00E	0-30	0 Interior flake	85	0.0	
259-4	64.00N/34.00E	0-30	0 Shatter	11	0.0	
259-5	64.00N/34.00E	0-30	0 Fire-cracked rock	7	0.0	
259-6	64.00N/34.00E	0-30	0 Biface fragment	1	0.0	
259-7	64.00N/34.00E	0-30	0 Preform (whole)	1	0.0	
259-8	64.00N/34.00E	0-30	0 Window glass	1	0.0	
259-9	64.00N/34.00E	0-30	0 Shell casing, .38 cal	1	0.0	
260-1	64.00N/34.00E	30-50	0 Core	2	0.0	
260-2	64.00N/34.00E	30-50	0 Primary decort. flake	8	0.0	
260-3	64.00N/34.00E	30-50	0 Secondary decort. flake	69	0.0	
260-4	64.00N/34.00E	30-50	0 Interior flake	120	0.0	
260-5	64.00N/34.00E	30-50	0 Retouch flake	5	0.0	
260-6	64.00N/34.00E	30-50	0 Shatter	7	0.0	
260-7	64.00N/34.00E	30-50	0 Fire-cracked rock	31	0.0	
260-8	64.00N/34.00E	30-50	0 Biface fragment	9	0.0	
260-9	64.00N/34.00E	30-50	0 Dart point stem/base	1	0.0	Made of a mottled tan colored chert, this dart point with an expanding stem and rounded base is missing one of its shoulders and its extreme distal end. The distal end appears to have been reworked. The remaining shoulder is rounded. The specimen measures 3.5 cm long x 2 cm wide x .7 cm thick and is biconvex in cross section. The edge of the base displays evidence of grinding. The point is similar in appearance to what Chapman (1975:257-258) refers to as Table Rock Stemmed. Estimated date for points of this type is 3000-1000 B.C. Originally (Chapman 1956:37) considered to be Early or Middle Archaic, the type has been associated with aggregates from the Late Archaic period in the Table Rock Reservoir area, Missouri and a Late Archaic context in Pohly rock shelter, Oklahoma.
260-10	64.00N/34.00E	30-50	0 Plain whiteware	1	0.0	
261-1	64.00N/34.00E	50-100	0 Primary decort. flake	2	0.0	
261-2	64.00N/34.00E	50-100	0 Secondary decort. flake	37	0.0	
261-3	64.00N/34.00E	50-100	0 Interior flake	80	0.0	
261-4	64.00N/34.00E	50-100	0 Retouch flake	1	0.0	
261-5	64.00N/34.00E	50-100	0 Shatter	12	0.0	
261-6	64.00N/34.00E	50-100	0 Fire-cracked rock	11	0.0	
261-7	64.00N/34.00E	50-100	0 Biface fragment	2	0.0	
262-1	63.00N/36.00E	0-20	0 Primary decort. flake	1	0.0	
262-2	63.00N/36.00E	0-20	0 Secondary decort. flake	13	0.0	
262-3	63.00N/36.00E	0-20	0 Secondary decort. flake	27	0.0	

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Cat. No.	Horiz. Prov.	Depth (cm)	Fea.	Artifact Description	Ct.	Wt.	Comments
262-4	63.00N/36.00E	0-20	0	Shatter	2	0.0	
262-5	63.00N/36.00E	0-20	0	Fire-cracked rock	2	0.0	
262-6	63.00N/36.00E	0-20	0	Biface fragment	1	0.0	1 jasper
263-1	63.00N/36.00E	20-50	0	Primary decort. flake	5	0.0	
263-2	63.00N/36.00E	20-50	0	Secondary decort. flake	18	0.0	
263-3	63.00N/36.00E	20-50	0	Interior flake	77	0.0	
263-4	63.00N/36.00E	20-50	0	Retouch flake	3	0.0	
263-5	63.00N/36.00E	20-50	0	Shatter	15	0.0	
263-6	63.00N/36.00E	20-50	0	Fire-cracked rock	5	0.0	
263-7	63.00N/36.00E	20-50	0	Biface fragment	1	0.0	
263-8	63.00N/36.00E	20-50	0	Dart point stem/base	1	0.0	This dart point fragment, consisting of a blade and stem, is made from a white colored chert. The displays a horizontal shoulder and expanding stem. Although fragmentary, it appears to resemble that described above for Table Rock Stemmed point type.
264-1	63.00N/36.00E	50-140	0	Core	5	0.0	
264-2	63.00N/36.00E	50-140	0	Secondary decort. flake	13	0.0	
264-3	63.00N/36.00E	50-140	0	Secondary decort. flake	92	0.0	
264-4	63.00N/36.00E	50-140	0	Interior flake	285	0.0	2 jasper
264-5	63.00N/36.00E	50-140	0	Retouch flake	17	0.0	
264-6	63.00N/36.00E	50-140	0	Shatter	31	0.0	
264-7	63.00N/36.00E	50-140	0	Fire-cracked rock	49	0.0	
264-8	63.00N/36.00E	50-140	0	Biface fragment	12	0.0	
264-9	63.00N/36.00E	50-140	0	Dart point stem/base	1	0.0	Made of light grey colored chert, this specimen consists of only a very small fragment of an expanding stem dart point. Not enough of the specimen is present with which to type it.
264-10	63.00N/36.00E	50-140	0	Dart point stem/base	1	0.0	This dart point, made of white colored chert, was found 45 cm from the north wall, 36 cm from the west wall of the block and 59 cm below datum. The specimen appears to be missing its distal end and more than half of each of its two blades. Measuring 4 cm long (estimated original length 6 cm) x 2.5 cm wide x .7 cm thick, the point is plano-convex in cross section. The hafting area displays an expanded rounded auriculated base. This hafted biface closely resembles that described by Chapman (1975:250-251) as Jackie Stemmed (Provisional). Points of this type are estimated to date from 5000-3000 B.C. and are considered to be associated with the Middle Archaic period.
264-11	63.00N/36.00E	50-140	0	Preform (whole)	1	0.0	
265-1	62.00N/36.00E	0-20	0	Primary decort. flake	1	0.0	
265-2	62.00N/36.00E	0-20	0	Secondary decort. flake	8	0.0	
265-3	62.00N/36.00E	0-20	0	Interior flake	26	0.0	
265-4	62.00N/36.00E	0-20	0	Shatter	4	0.0	
265-5	62.00N/36.00E	0-20	0	Fire-cracked rock	4	0.0	
266-1	62.00N/36.00E	20-50	0	Core	1	0.0	
266-2	62.00N/36.00E	20-50	0	Primary decort. flake	5	0.0	
266-3	62.00N/36.00E	20-50	0	Secondary decort. flake	48	0.0	
266-4	62.00N/36.00E	20-50	0	Interior flake	99	0.0	
266-5	62.00N/36.00E	20-50	0	Retouch flake	8	0.0	
266-6	62.00N/36.00E	20-50	0	Shatter	20	0.0	
266-7	62.00N/36.00E	20-50	0	Fire-cracked rock	14	0.0	
266-8	62.00N/36.00E	20-50	0	Biface fragment	1	0.0	

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267-1	62.00N/36.00E	50-100	0	Tested cobble	1	0.0	
267-2	62.00N/36.00E	50-100	0	Core	1	0.0	
267-3	62.00N/36.00E	50-100	0	Primary decort. flake	12	0.0	
267-4	62.00N/36.00E	50-100	0	Secondary decort. flake	72	0.0	1 jasper
267-5	62.00N/36.00E	50-100	0	Interior flake	231	0.0	1 jasper and 1 banded chert
267-6	62.00N/36.00E	50-100	0	Retouch flake	15	0.0	
267-7	62.00N/36.00E	50-100	0	Shatter	28	0.0	1 jasper
267-8	62.00N/36.00E	50-100	0	Fire-cracked rock	35	0.0	
267-9	62.00N/36.00E	50-100	0	Biface fragment	8	0.0	
267-10	62.00N/36.00E	50-100	0	Dart point stem/base	1	0.0	This specimen consists solely of an expanding stem basal fragment of a small dart point/hafted cutting tool made of pink colored chert. The stem features a beveled edge. The specimen is much too fragmentary to type.
267-11	62.00N/36.00E	50-100	0	Dart point stem/base	1	0.0	This corner-notched hafted biface, made of a pink and light brown colored chert, is missing its distal end -- apparently broken as a result of an impact fracture (judging by the appearance of the break). The specimen, measuring 3.5 cm long (4.7 cm estimated length) x 3 cm wide x .8 cm thick, appears median ridged in cross section. One shoulder is rounded; the other is barbed. The straight stem displays a beveled edge. Similar points, called Kings Corner Notched (Chapman 1980:309), have been found elsewhere in Missouri, Arkansas and Oklahoma. Points of this type seem to be associated with the Woodland period, although they appeared in the Archaic period and may have continued into the Mississippian period.
268-1	62.00N/36.00E	100-130	0	Primary decort. flake	1	0.0	
268-2	62.00N/36.00E	100-130	0	Secondary decort. flake	4	0.0	
268-3	62.00N/36.00E	100-130	0	Interior flake	9	0.0	
268-4	62.00N/36.00E	100-130	0	Retouch flake	1	0.0	
268-5	62.00N/36.00E	100-130	0	Fire-cracked rock	3	0.0	
268-6	62.00N/36.00E	100-130	0	Dart point	1	0.0	Made from pink orthoquartzite or sugar quartz, this projectile point found at 121 cm bd measures 5.7 cm long x 3.2 cm wide x 1 cm thick and is biconvex in cross section. The blade has straight edges for most of its length. Shoulders are pronounced: one is barbed; the other is horizontal. The relatively broad stem has straight edges and a generally straight base. The specimen is similar to points described by Chapman (1975:257) as Stone Square Stemmed. These are Middle Archaic - Late Archaic points dating from about 5000 B.C. to about 1000 B.C.
269-1	62.00N/33.00E	0-20	0	Secondary decort. flake	15	0.0	
269-2	62.00N/33.00E	0-20	0	Interior flake	30	0.0	
269-3	62.00N/33.00E	0-20	0	Shatter	8	0.0	
269-4	62.00N/33.00E	0-20	0	Fire-cracked rock	1	0.0	
269-5	62.00N/33.00E	0-20	0	Biface fragment	1	0.0	
270-1	62.00N/33.00E	20-50	0	Core	2	0.0	
270-2	62.00N/33.00E	20-50	0	Primary decort. flake	8	0.0	1 jasper

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Cat. No.	Horiz. Prov.	Depth (cm)	Fea.	Artifact Description	Ct.	Wt.	Comments
270-3	62.00N/33.00E	20-50	0	Secondary decort. flake	46	0.0	1 jasper
270-4	62.00N/33.00E	20-50	0	Interior flake	84	0.0	
270-5	62.00N/33.00E	20-50	0	Retouch flake	4	0.0	
270-6	62.00N/33.00E	20-50	0	Metal, misc. unidentified	11	0.0	
270-7	62.00N/33.00E	20-50	0	Fire-cracked rock	16	0.0	
270-8	62.00N/33.00E	20-50	0	Biface fragment	6	0.0	
270-9	62.00N/33.00E	20-50	0	Dart point stem/base	1	0.0	Made of white chert mottled with some grey, the specimen is too fragmentary to type.
270-10	62.00N/33.00E	20-50	0	Dart point	1	0.0	Found at 30 cm bd, this side notched dart point measures 3.2 cm long x 2.3 cm wide and is .6 cm. The specimen, made of white chert, is biconvex in cross section. The point has an acute distal end, relatively straight sides and horizontal shoulders. According to J. Price (personal communication 1987) similar points have been recovered from Middle Archaic components in the Eastern Ozarks. This specimen most closely resembles the Graham Cave Side Notched or Big Sandy (Chapman 1975:242, 248-249).
271-1	62.00N/33.00E	50-100	0	Primary decort. flake	2	0.0	
271-2	62.00N/33.00E	50-100	0	Secondary decort. flake	31	0.0	1 jasper
271-3	62.00N/33.00E	50-100	0	Interior flake	71	0.0	
271-4	62.00N/33.00E	50-100	0	Shatter	3	0.0	
271-5	62.00N/33.00E	50-100	0	Fire-cracked rock	8	0.0	
271-6	62.00N/33.00E	50-100	0	Biface fragment	4	0.0	
271-7	62.00N/33.00E	50-100	0	Dart point stem/base	1	0.0	Made of white chert, the specimen measures 2.5 cm long (? estimated length) x 3 cm wide x .5 cm thick and is flattened in cross section. Crudely manufactured, the hafting area exhibits an parallel rounded auriculated base. Although not enough of the specimen is present to type it, the shape of the basal fragment suggests that it may be from an early (Early Archaic?) type of point.
271-8	62.00N/33.00E	50-100	0	Retouch flake	1	0.0	
272-1	61.00N/36.00E	0-20	0	Secondary decort. flake	12	0.0	
272-2	61.00N/36.00E	0-20	0	Interior flake	25	0.0	
272-3	61.00N/36.00E	0-20	0	Retouch flake	2	0.0	
272-4	61.00N/36.00E	0-20	0	Shatter	8	0.0	
272-5	61.00N/36.00E	0-20	0	Fire-cracked rock	3	0.0	
272-6	61.00N/36.00E	0-20	0	Biface fragment	1	0.0	
272-7	61.00N/36.00E	0-20	0	Dart point stem/base	1	0.0	This corner notched point, made of white chert, exhibits barbed shoulders, an expanding stem and convex base. According to J. Price (personal communication 1987) similar points have been found associated with Late Archaic components in the Eastern Ozarks.
273-1	61.00N/36.00E	20-50	0	Core	1	0.0	
273-2	61.00N/36.00E	20-50	0	Primary decort. flake	3	0.0	
273-3	61.00N/36.00E	20-50	0	Secondary decort. flake	24	0.0	
273-4	61.00N/36.00E	20-50	0	Interior flake	43	0.0	
273-5	61.00N/36.00E	20-50	0	Retouch flake	6	0.0	
273-6	61.00N/36.00E	20-50	0	Flake knife	1	0.0	
273-7	61.00N/36.00E	20-50	0	Shatter	18	0.0	
273-8	61.00N/36.00E	20-50	0	Fire-cracked rock	22	0.0	
273-9	61.00N/36.00E	20-50	0	Biface fragment	4	0.0	

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Cat. No.	Horiz. Prov.	Depth (cm)	Fea.	Artifact Description	Ct.	Wt.	Comments
274-1	61.00N/36.00E	50-90	0	Core	1	0.0	
274-2	61.00N/36.00E	50-90	0	Primary decort. flake	5	0.0	
274-3	61.00N/36.00E	50-90	0	Secondary decort. flake	16	0.0	1 jasper
274-4	61.00N/36.00E	50-90	0	Interior flake	38	0.0	
274-5	61.00N/36.00E	50-90	0	Retouch flake	7	0.0	
274-6	61.00N/36.00E	50-90	0	Shatter	5	0.0	
274-7	61.00N/36.00E	50-90	0	Fire-cracked rock	3	0.0	
274-8	61.00N/36.00E	50-90	0	Biface fragment	5	0.0	
275-1	61.00N/35.00E	0-20	0	Secondary decort. flake	17	0.0	
275-2	61.00N/35.00E	0-20	0	Interior flake	52	0.0	
275-3	61.00N/35.00E	0-20	0	Retouch flake	1	0.0	
275-4	61.00N/35.00E	0-20	0	Shatter	4	0.0	
275-5	61.00N/35.00E	0-20	0	Fire-cracked rock	2	0.0	
275-6	61.00N/35.00E	0-20	0	Biface fragment	1	0.0	
276-1	61.00N/35.00E	20-50	0	Core	2	0.0	
276-2	61.00N/35.00E	20-50	0	Primary decort. flake	4	0.0	
276-3	61.00N/35.00E	20-50	0	Secondary decort. flake	38	0.0	
276-4	61.00N/35.00E	20-50	0	Interior flake	127	0.0	
276-5	61.00N/35.00E	20-50	0	Retouch flake	10	0.0	
276-6	61.00N/35.00E	20-50	0	Shatter	18	0.0	2 jasper
276-7	61.00N/35.00E	20-50	0	Fire-cracked rock	18	0.0	
276-8	61.00N/35.00E	20-50	0	Preform (whole)	1	0.0	
276-9	61.00N/35.00E	20-50	0	Metal, misc. unidentified	1	0.0	
277-1	61.00N/35.00E	50-90	0	Primary decort. flake	1	0.0	
277-2	61.00N/35.00E	50-90	0	Secondary decort. flake	2	0.0	
277-3	61.00N/35.00E	50-90	0	Interior flake	11	0.0	
278-1	61.00N/34.00E	0-20	0	Core	1	0.0	
278-2	61.00N/34.00E	0-20	0	Primary decort. flake	3	0.0	
278-3	61.00N/34.00E	0-20	0	Secondary decort. flake	19	0.0	
278-4	61.00N/34.00E	0-20	0	Interior flake	51	0.0	2 jasper
278-5	61.00N/34.00E	0-20	0	Retouch flake	5	0.0	1 jasper
278-6	61.00N/34.00E	0-20	0	Shatter	11	0.0	
278-7	61.00N/34.00E	0-20	0	Fire-cracked rock	9	0.0	
278-8	61.00N/34.00E	0-20	0	Biface fragment	1	0.0	
279-1	61.00N/34.00E	20-50	0	Core	1	0.0	
279-2	61.00N/34.00E	20-50	0	Primary decort. flake	3	0.0	
279-3	61.00N/34.00E	20-50	0	Secondary decort. flake	38	0.0	
279-4	61.00N/34.00E	20-50	0	Interior flake	125	0.0	1 jasper
279-5	61.00N/34.00E	20-50	0	Retouch flake	12	0.0	
279-6	61.00N/34.00E	20-50	0	Shatter	13	0.0	
279-7	61.00N/34.00E	20-50	0	Fire-cracked rock	12	0.0	
279-8	61.00N/34.00E	20-50	0	Arrow point stem/base	1	0.0	Made of white chert, this corner notched arrow point fragment exhibits a simple barb, expanded stem and straight base. Although fragmentary, the specimen appears similar to points found in the eastern Ozarks associated with Late Woodland/Emergent Mississippi aggregates.
279-9	61.00N/34.00E	20-50	0	Biface fragment	10	0.0	
279-10	61.00N/34.00E	20-50	0	Dart point tip	1	0.0	Made of reddish brown rhyolite, the specimen exhibits an obtuse distal end, a straight blade shape and blade edges which are beveled on two edges.
279-11	61.00N/34.00E	20-50	0	Clear bottle glass	1	0.0	
280-1	61.00N/34.00E	50-90	0	Secondary decort. flake	16	0.0	
280-2	61.00N/34.00E	50-90	0	Interior flake	65	0.0	1 jasper
280-3	61.00N/34.00E	50-90	0	Retouch flake	2	0.0	
280-4	61.00N/34.00E	50-90	0	Flake knife	1	0.0	
280-5	61.00N/34.00E	50-90	0	Shatter	7	0.0	
280-6	61.00N/34.00E	50-90	0	Fire-cracked rock	3	0.0	
280-7	61.00N/34.00E	50-90	0	Biface fragment	2	0.0	
280-8	61.00N/34.00E	50-90	0	Preform (whole)	1	0.0	
281-1	61.00N/33.00E	0-25	0	Core	1	0.0	
281-2	61.00N/33.00E	0-25	0	Primary decort. flake	4	0.0	

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Cat. No.	Horiz. Prov.	Depth Fea. (cm)	Artifact Description	Ct.	Wt.	Comments
281-3	61.00N/33.00E	0-25	0 Secondary decort. flake	33	0.0	1 jasper
281-4	61.00N/33.00E	0-25	0 Interior flake	34	0.0	
281-5	61.00N/33.00E	0-25	0 Shatter	11	0.0	
281-6	61.00N/33.00E	0-25	0 Fire-cracked rock	9	0.0	
281-7	61.00N/33.00E	0-25	0 Bifacial drill frag.	1	0.0	
281-8	61.00N/33.00E	0-25	0 Window glass	1	0.0	
281-9	61.00N/33.00E	0-25	0 Plain whiteware	2	0.0	one has partial blk maker's mark "FEN"
282-1	61.00N/33.00E	25-40	0 Primary decort. flake	6	0.0	
282-2	61.00N/33.00E	25-40	0 Secondary decort. flake	42	0.0	
282-3	61.00N/33.00E	25-40	0 Interior flake	105	0.0	
282-4	61.00N/33.00E	25-40	0 Retouch flake	4	0.0	
282-5	61.00N/33.00E	25-40	0 Shatter	21	0.0	
282-6	61.00N/33.00E	25-40	0 Fire-cracked rock	16	0.0	
282-7	61.00N/33.00E	25-40	0 Biface fragment	1	0.0	
282-8	61.00N/33.00E	25-40	0 Unifacial scraper	1	0.0	
282-9	61.00N/33.00E	25-40	0 Arrow point	1	0.0	Made of white chert and measuring 1.4 cm long x 1 cm wide x .4 cm thick, this corner notched arrow point exhibits an expanding stem, straight base and is biconvex in cross section. According to J. Price (personal communication 1987), similar points have been found within Emergent Mississippi assemblages in the Eastern Ozarks.
283-1	61.00N/33.00E	40-100	0 Primary decort. flake	6	0.0	
283-2	61.00N/33.00E	40-100	0 Secondary decort. flake	14	0.0	
283-3	61.00N/33.00E	40-100	0 Interior flake	33	0.0	
283-4	61.00N/33.00E	40-100	0 Retouch flake	4	0.0	
283-5	61.00N/33.00E	40-100	0 Shatter	3	0.0	
283-6	61.00N/33.00E	40-100	0 Fire-cracked rock	6	0.0	
284-1	64.00N/33.00E	0-20	0 Core	2	0.0	
284-2	64.00N/33.00E	0-20	0 Primary decort. flake	5	0.0	
284-3	64.00N/33.00E	0-20	0 Secondary decort. flake	34	0.0	
284-4	64.00N/33.00E	0-20	0 Interior flake	75	0.0	
284-5	64.00N/33.00E	0-20	0 Shatter	13	0.0	
284-6	64.00N/33.00E	0-20	0 Fire-cracked rock	13	0.0	
284-7	64.00N/33.00E	0-20	0 Biface fragment	3	0.0	
284-8	64.00N/33.00E	0-20	0 Dart point	1	0.0	Made of light tan chert, this corner notched dart exhibits an obtuse distal end, slightly excurvate blade edges, one rounded shoulder, one tapered shoulder, and a straight base. Measuring 2.3 cm long x 2.1 cm wide x .6 cm thick, the specimen appears to be a small, crudely made Kings Corner Notched (Chapman 1975:309). In cross section, the hafted biface is not so much flattened as it is elliptical. Having a blunt tip along with blade edges that are thick and dull indicate that it would have performed poorly if used as a projectile point, cutting tool, or scraper.
285-1	64.00N/33.00E	20-30	0 Primary decort. flake	5	0.0	
285-2	64.00N/33.00E	20-30	0 Interior flake	42	0.0	
285-3	64.00N/33.00E	20-30	0 Interior flake	145	0.0	
285-4	64.00N/33.00E	20-30	0 Retouch flake	11	0.0	
285-5	64.00N/33.00E	20-30	0 Shatter	13	0.0	
285-6	64.00N/33.00E	20-30	0 Fire-cracked rock	9	0.0	
285-7	64.00N/33.00E	20-30	0 Biface fragment	9	0.0	grey chert
285-8	64.00N/33.00E	20-30	0 Flake scraper	1	0.0	
286-1	64.00N/33.00E	30-40	0 Primary decort. flake	8	0.0	
286-2	64.00N/33.00E	30-40	0 Secondary decort. flake	37	0.0	

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Cat. No.	Horiz. Prov.	Depth (cm)	Fea.	Artifact Description	Ct.	Wt.	Comments
286-3	64.00N/33.00E	30-40	0	Interior flake	81	0.0	
286-4	64.00N/33.00E	30-40	0	Retouch flake	2	0.0	
286-5	64.00N/33.00E	30-40	0	Shatter	16	0.0	
286-6	64.00N/33.00E	30-40	0	Fire-cracked rock	5	0.0	
286-7	64.00N/33.00E	30-40	0	Biface fragment	2	0.0	
286-8	64.00N/31.00E	30-40	0	Bifacial side scraper	1	0.0	Actually, this is a hafted unifacial side scraper. Made of pink quartzite, this side notched scraper has a deeply beveled blade edge, a short broad stem with round corners, and a slightly convex base. Measuring 3.3 cm long x 2.9 cm wide x .8 cm thick, the artifact is plano-convex in cross section and is roughly triangular in shape. Most probably, the hafted side scraper represents a reworked side notched dart point.
287-1	64.00N/33.00E	40-50	0	Primary decort. flake	4	0.0	
287-2	64.00N/33.00E	40-50	0	Secondary decort. flake	21	0.0	
287-3	64.00N/33.00E	40-50	0	Interior flake	56	0.0	
287-4	64.00N/33.00E	40-50	0	Retouch flake	4	0.0	
287-5	64.00N/33.00E	40-50	0	Shatter	5	0.0	
287-6	64.00N/33.00E	40-50	0	Fire-cracked rock	11	0.0	
287-7	64.00N/33.00E	40-50	0	Biface fragment	2	0.0	
287-8	64.00N/33.00E	40-50	0	Dart point stem/base	1	0.0	Made of white and light pink chert, this dart point is nearly a complete specimen and is only missing its distal end. Measuring 4.5 cm long (5 cm estimated length) x 2.4 cm wide x .8 cm thick, the hafted biface is biconvex in cross section. The specimen exhibits a straight blade shape, tapered shoulders, and a stem which contracts strongly to a rounded base. The specimen fits the description of the Gary Stemmed type of projectile point/knife provided by Chapman (1980:308). Points of this type appear as early as the Late Archaic period and continue throughout the Woodland period.
288-1	64.00N/33.00E	40-45	4	Secondary decort. flake	1	0.0	from feature 4
288-2	64.00N/33.00E	40-45	4	Interior flake	4	0.0	from fea. 4
288-3	64.00N/33.00E	40-45	4	Fire-cracked rock	1	0.0	from feature 4
289-1	64.00N/33.00E	45-50	4	Secondary decort. flake	1	0.0	from feature 4
289-2	64.00N/33.00E	45-50	4	Interior flake	2	0.0	from feature 4
289-3	64.00N/33.00E	45-50	4	Fire-cracked rock	1	0.0	from feature 4
289-4	64.00N/33.00E	45-50	4	Dart point midsection	1	0.0	This fragment of a dart point made from white chert consists of a small part of its blade and part of one corner notch. Not enough of the specimen is present to determine what type of point it represents. The dart point fragment was recovered within feature 4 in 64N/33E.
290-1	64.00N/33.00E	40-45	4	Primary decort. flake	1	0.0	fine screen sample from feature 4
290-2	64.00N/33.00E	40-45	4	Secondary decort. flake	2	0.0	fine screen sample from fea. 4
290-3	64.00N/33.00E	40-45	4	Interior flake	7	0.0	fine screen sample from fea. 4
290-4	64.00N/33.00E	40-45	4	Shatter	2	0.0	fine screen sample from fea. 4
291-1	64.00N/33.00E	45-50	4	Primary decort. flake	1	0.0	fine screen sample from fea. 4
291-2	64.00N/33.00E	45-50	4	Secondary decort. flake	2	0.0	fine screen sample from fea. 4
291-3	64.00N/33.00E	45-50	4	Interior flake	8	0.0	fine screen sample from fea. 4
291-4	64.00N/33.00E	45-50	4	Shatter	1	0.0	fine screen sample from fea. 4

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Cat. No.	Horiz. Prov.	Depth Fea. (cm)	Artifact Description	Ct.	Wt.	Comments
292-1	64.00N/33.00E	50-60	0 Primary decort. flake	3	0.0	
292-2	64.00N/33.00E	50-60	0 Secondary decort. flake	10	0.0	
292-3	64.00N/33.00E	50-60	0 Interior flake	62	0.0	
292-4	64.00N/33.00E	50-60	0 Shatter	6	0.0	
292-5	64.00N/33.00E	50-60	0 Fire-cracked rock	6	0.0	
292-6	64.00N/33.00E	50-60	0 Biface fragment	2	0.0	
293-1	64.00N/33.00E	50-55	0 Secondary decort. flake	1	0.0	area of fea. 2 in 64N/33E
293-2	64.00N/33.00E	50-55	0 Interior flake	2	0.0	from area of fea. 2 in 64N/33E
293-3	64.00N/33.00E	50-55	0 Shatter	1	0.0	area of fea. 2 in 64N/33E
294-1	64.00N/33.00E	55-60	0 Secondary decort. flake	2	0.0	from area of fea. 2 in 64N/33E
294-2	64.00N/33.00E	55-60	0 Interior flake	1	0.0	area of fea. 2 in 64N/33E
295-1	64.00N/33.00E	60-70	0 Core	3	0.0	
295-2	64.00N/33.00E	60-70	0 Primary decort. flake	1	0.0	
295-3	64.00N/33.00E	60-70	0 Secondary decort. flake	11	0.0	
295-4	64.00N/33.00E	60-70	0 Interior flake	17	0.0	
295-5	64.00N/33.00E	60-70	0 Retouch flake	1	0.0	
295-6	64.00N/33.00E	60-70	0 Fire-cracked rock	2	0.0	
296-1	64.00N/33.00E	70-80	0 Primary decort. flake	2	0.0	
296-2	64.00N/33.00E	70-80	0 Secondary decort. flake	2	0.0	
296-3	64.00N/33.00E	70-80	0 Interior flake	22	0.0	
296-4	64.00N/33.00E	70-80	0 Retouch flake	1	0.0	
296-5	64.00N/33.00E	70-80	0 Fire-cracked rock	1	0.0	
297-1	64.00N/33.00E	80-90	0 Primary decort. flake	2	0.0	
297-2	64.00N/33.00E	80-90	0 Secondary decort. flake	16	0.0	
297-3	64.00N/33.00E	80-90	0 Interior flake	16	0.0	
297-4	64.00N/33.00E	80-90	0 Retouch flake	4	0.0	
297-5	64.00N/33.00E	80-90	0 Shatter	3	0.0	
297-6	64.00N/33.00E	80-90	0 Fire-cracked rock	3	0.0	
297-7	64.00N/33.00E	80-90	0 Biface fragment	1	0.0	
298-1	64.00N/33.00E	90-100	0 Primary decort. flake	1	0.0	
298-2	64.00N/33.00E	90-100	0 Secondary decort. flake	5	0.0	
298-3	64.00N/33.00E	90-100	0 Interior flake	18	0.0	
298-4	64.00N/33.00E	90-100	0 Biface fragment	1	0.0	
299-1	64.00N/33.00E	100-110	0 Primary decort. flake	3	0.0	
299-2	64.00N/33.00E	100-110	0 Secondary decort. flake	3	0.0	
299-3	64.00N/33.00E	100-110	0 Interior flake	2	0.0	
299-4	64.00N/33.00E	100-110	0 Fire-cracked rock	1	0.0	
299-5	64.00N/33.00E	100-110	0 Bifacial drill frag.	1	0.0	
300-1	64.00N/33.00E	110-120	0 Shatter	1	0.0	
301-1	63.00N/35.00E	0-20	0 Primary decort. flake	2	0.0	
301-2	63.00N/35.00E	0-20	0 Secondary decort. flake	10	0.0	
301-3	63.00N/35.00E	0-20	0 Interior flake	27	0.0	
301-4	63.00N/35.00E	0-20	0 Shatter	7	0.0	
301-5	63.00N/35.00E	0-20	0 Fire-cracked rock	2	0.0	
301-6	63.00N/35.00E	0-20	0 Preform (whole)	1	0.0	
302-1	63.00N/35.00E	20-30	0 Secondary decort. flake	5	0.0	
302-2	63.00N/35.00E	20-30	0 Interior flake	24	0.0	
302-3	63.00N/35.00E	20-30	0 Shatter	2	0.0	
302-4	63.00N/35.00E	20-30	0 Fire-cracked rock	1	0.0	
302-5	63.00N/35.00E	20-30	0 Biface fragment	1	0.0	
303-1	63.00N/35.00E	30-40	0 Primary decort. flake	1	0.0	
303-2	63.00N/35.00E	30-40	0 Secondary decort. flake	18	0.0	
303-3	63.00N/35.00E	30-40	0 Interior flake	48	0.0	
303-4	63.00N/35.00E	30-40	0 Retouch flake	1	0.0	
303-5	63.00N/35.00E	30-40	0 Shatter	7	0.0	
303-6	63.00N/35.00E	30-40	0 Fire-cracked rock	5	0.0	
303-7	63.00N/35.00E	30-40	0 Biface fragment	1	0.0	
304-1	63.00N/35.00E	40-50	0 Primary decort. flake	5	0.0	
304-2	63.00N/35.00E	40-50	0 Secondary decort. flake	22	0.0	
304-3	63.00N/35.00E	40-50	0 Interior flake	76	0.0	
304-4	63.00N/35.00E	40-50	0 Retouch flake	5	0.0	
304-5	63.00N/35.00E	40-50	0 Flake knife	1	0.0	
304-6	63.00N/35.00E	40-50	0 Shatter	6	0.0	
304-7	63.00N/35.00E	40-50	0 Fire-cracked rock	6	0.0	
304-8	63.00N/35.00E	40-50	0 Biface fragment	5	0.0	
305-1	63.00N/35.00E	50-60	0 Primary decort. flake	7	0.0	
305-2	63.00N/35.00E	50-60	0 Secondary decort. flake	18	0.0	

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Cat. No.	Horiz. Prov.	Depth Fea. (cm)	Artifact Description	Ct.	Wt.	Comments
305-3	63.00N/35.00E	50-60	0 Interior flake	67	0.0	
305-4	63.00N/35.00E	50-60	0 Shatter	6	0.0	
305-5	63.00N/35.00E	50-60	0 Shatter	4	0.0	
305-6	63.00N/35.00E	50-60	0 Dart point stem/base	1	0.0	Missing its distal end, this corner notched point made of white chert measures 3.2 cm long (5.5 cm estimated length) x 3.3 cm wide x .6 cm thick and is plano-convex in cross section. The specimen exhibits an incurvate blade shape, expanded shoulders, an expanded stem, and features a beveled stem edge. Found at 50 cm below datum, the specimen displays morphological similarities with other corner notched dart points found in the Eastern Ozarks in use from the Late Archaic period and throughout the Woodland period; this according to J. Price (personal communication 1987).
306-1	63.00N/35.00E	60-70	0 Primary decort. flake	1	0.0	
306-2	63.00N/35.00E	60-70	0 Secondary decort. flake	2	0.0	
306-3	63.00N/35.00E	60-70	0 Interior flake	5	0.0	
306-4	63.00N/35.00E	60-70	0 Retouch flake	1	0.0	
306-5	63.00N/35.00E	60-70	0 Shatter	1	0.0	
307-1	63.00N/35.00E	70-80	0 Primary decort. flake	1	0.0	
307-2	63.00N/35.00E	70-80	0 Secondary decort. flake	2	0.0	
307-3	63.00N/35.00E	70-80	0 Interior flake	11	0.0	
307-4	63.00N/35.00E	70-80	0 Fire-cracked rock	2	0.0	
307-5	63.00N/35.00E	70-80	0 Biface fragment	1	0.0	
308-1	63.00N/35.00E	80-90	0 Primary decort. flake	1	0.0 soil	
308-2	63.00N/35.00E	80-90	0 Secondary decort. flake	10	0.0 soil	
308-3	63.00N/35.00E	80-90	0 Interior flake	13	0.0 soil	
308-4	63.00N/35.00E	80-90	0 Retouch flake	6	0.0 soil	
308-5	63.00N/35.00E	80-90	0 Shatter	5	0.0 soil	
308-6	63.00N/35.00E	80-90	0 Fire-cracked rock	5	0.0 soil	
309-1	63.00N/35.00E	80-90	6 Interior flake	2	0.0 gravel	
309-2	63.00N/35.00E	80-90	6 Fire-cracked rock	2	0.0 gravel	
310-1	63.00N/35.00E	90-100	6 Secondary decort. flake	1	0.0 gravel	
310-2	63.00N/35.00E	90-100	6 Interior flake	3	0.0 gravel	
310-3	63.00N/35.00E	90-100	6 Shatter	1	0.0	
311-1	63.00N/35.00E	90-100	0 Primary decort. flake	2	0.0 soil	
311-2	63.00N/35.00E	90-100	0 Secondary decort. flake	4	0.0 soil	
311-3	63.00N/35.00E	90-100	0 Interior flake	9	0.0 soil	
311-4	63.00N/35.00E	90-100	0 Retouch flake	1	0.0 soil	
311-5	63.00N/35.00E	90-100	0 Fire-cracked rock	3	0.0 soil	
312-1	63.00N/35.00E	93-100	2 Secondary decort. flake	1	0.0 fill from feature 2	
312-2	63.00N/35.00E	93-100	2 Interior flake	1	0.0 fill from feature 2	
313-1	63.00N/35.00E	95-100	2 Interior flake	4	0.0 feature 2 fine screened fill	
313-2	63.00N/35.00E	95-100	2 Fire-cracked rock	1	0.0 fill fine screened from feature 2	
314-1	63.00N/35.00E	100-110	0 Secondary decort. flake	2	0.0 soil	
314-2	63.00N/35.00E	100-110	0 Interior flake	4	0.0 soil	
314-3	63.00N/35.00E	100-110	0 Shatter	1	0.0 soil	
315-1	63.00N/35.00E	100-110	6 No cultural material	0	0.0 gravel part of unit culturally sterile	
316-1	63.00N/35.00E	100-110	2 Primary decort. flake	1	0.0 fine screened fill from feature 2	
316-2	63.00N/35.00E	100-110	2 Secondary decort. flake	2	0.0 fine screened fill from feature 2	
316-3	63.00N/35.00E	100-110	2 Interior flake	10	0.0 fine screened fill from feature 2	
316-4	63.00N/35.00E	100-110	2 Shatter	3	0.0 fine screened fill from feature 2	
316-5	63.00N/35.00E	100-110	2 Fire-cracked rock	3	0.0 fine screened fill from feature 2	
317-1	63.00N/35.00E	110-120	6 Secondary decort. flake	2	0.0 gravel	
317-2	63.00N/35.00E	110-120	6 Interior flake	4	0.0 gravel	
317-3	63.00N/35.00E	110-120	6 Retouch flake	1	0.0 gravel	
317-4	63.00N/35.00E	110-120	6 Fire-cracked rock	2	0.0 gravel	
317-5	63.00N/35.00E	110-120	6 Biface fragment	1	0.0 gravel	

APPENDIX B
Artifacts Recovered from Two Rivers (23SH101)
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Cat. No.	Horiz. Prov.	Depth Fea. (cm)	Artifact Description	Ct.	Wt.	Comments
318-1	63.00N/35.00E	110-120	0 Interior flake	4	0.0	soil
318-2	63.00N/35.00E	110-120	0 Shatter	2	0.0	soil
318-3	63.00N/35.00E	110-120	0 Biface fragment	1	0.0	soil
319-1	63.00N/35.00E	110-120	2 Primary decort. flake	1	0.0	fine screened fill from feature 2
319-2	63.00N/35.00E	110-120	2 Secondary decort. flake	8	0.0	fine screened fill from feature 2
319-3	63.00N/35.00E	110-120	2 Interior flake	17	0.0	fine screened fill from feature 2
319-4	63.00N/35.00E	110-120	2 Fire-cracked rock	3	0.0	
320-1	63.00N/34.00E	0-20	0 Secondary decort. flake	25	0.0	
320-2	63.00N/34.00E	0-20	0 Interior flake	53	0.0	
320-3	63.00N/34.00E	0-20	0 Retouch flake	5	0.0	
320-4	63.00N/34.00E	0-20	0 Shatter	13	0.0	
320-5	63.00N/34.00E	0-20	0 Fire-cracked rock	8	0.0	
320-6	63.00N/34.00E	0-20	0 Biface fragment	3	0.0	
320-7	63.00N/34.00E	0-20	0 Preform (whole)	1	0.0	
320-8	63.00N/34.00E	0-20	0 Cinder	1	0.0	
321-1	63.00N/34.00E	20-30	0 Primary decort. flake	2	0.0	
321-2	63.00N/34.00E	20-30	0 Secondary decort. flake	10	0.0	
321-3	63.00N/34.00E	20-30	0 Interior flake	39	0.0	
321-4	63.00N/34.00E	20-30	0 Retouch flake	2	0.0	
321-5	63.00N/34.00E	20-30	0 Shatter	3	0.0	
321-6	63.00N/34.00E	20-30	0 Fire-cracked rock	1	0.0	
321-7	63.00N/34.00E	20-30	0 Biface fragment	1	0.0	
322-1	63.00N/34.00E	30-40	0 Primary decort. flake	1	0.0	
322-2	63.00N/34.00E	30-40	0 Secondary decort. flake	7	0.0	
322-3	63.00N/34.00E	30-40	0 Interior flake	24	0.0	
322-4	63.00N/34.00E	30-40	0 Shatter	1	0.0	
322-4	63.00N/34.00E	30-40	0 Shatter	1	0.0	
322-5	63.00N/34.00E	30-40	0 Fire-cracked rock	2	0.0	
322-5	63.00N/34.00E	30-40	0 Fire-cracked rock	2	0.0	
323-1	63.00N/34.00E	40-50	0 Primary decort. flake	5	0.0	
323-1	63.00N/34.00E	40-50	0 Primary decort. flake	5	0.0	
323-2	63.00N/34.00E	40-50	0 Secondary decort. flake	25	0.0	
323-2	63.00N/34.00E	40-50	0 Secondary decort. flake	25	0.0	
323-3	63.00N/34.00E	40-50	0 Interior flake	68	0.0	
323-3	63.00N/34.00E	40-50	0 Interior flake	71	0.0	
323-4	63.00N/34.00E	40-50	0 Retouch flake	5	0.0	
323-4	63.00N/34.00E	40-50	0 Retouch flake	6	0.0	
323-5	63.00N/34.00E	40-50	0 Shatter	4	0.0	
323-5	63.00N/34.00E	40-50	0 Shatter	4	0.0	
323-6	63.00N/34.00E	40-50	0 Fire-cracked rock	2	0.0	
323-6	63.00N/34.00E	40-50	0 Fire-cracked rock	2	0.0	
323-7	63.00N/34.00E	40-50	0 Biface fragment	4	0.0	
323-7	63.00N/34.00E	40-50	0 Biface fragment	4	0.0	
323-8	63.00N/34.00E	40-50	0 Mortar	1	0.0	
323-8	63.00N/34.00E	40-50	0 Limestone pebble	1	0.0	
324-1	63.00N/34.00E	50-60	0 Secondary decort. flake	3	0.0	
324-2	63.00N/34.00E	50-60	0 Shatter	1	0.0	
324-3	63.00N/34.00E	50-60	0 Fire-cracked rock	1	0.0	
325-1	63.00N/34.00E	60-70	0 Primary decort. flake	11	0.0	
325-2	63.00N/34.00E	60-70	0 Interior flake	12	0.0	
325-3	63.00N/34.00E	60-70	0 Shatter	1	0.0	
325-4	63.00N/34.00E	60-70	0 Fire-cracked rock	3	0.0	
325-5	63.00N/34.00E	60-70	0 Dart point stem/base	1	0.0	Made of white chert, this basal fragment of dart exhibits an expanding stem and a rounded base. Not enough of the specimen is present to type it.
326-1	63.00N/34.00E	70-80	0 Secondary decort. flake	5	0.0	
326-2	63.00N/34.00E	70-80	0 Interior flake	5	0.0	
326-3	63.00N/34.00E	70-80	0 Fire-cracked rock	1	0.0	
326-4	63.00N/34.00E	70-80	0 Biface fragment	2	0.0	
327-1	63.00N/34.00E	80-83	0 Secondary decort. flake	4	0.0	
327-2	63.00N/34.00E	80-83	0 Interior flake	6	0.0	
327-3	63.00N/34.00E	80-83	0 Retouch flake	1	0.0	
327-4	63.00N/34.00E	80-83	0 Shatter	2	0.0	
327-5	63.00N/34.00E	80-83	0 Fire-cracked rock	1	0.0	
327-6	63.00N/34.00E	80-83	0 Biface fragment	1	0.0	

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Artifacts Recovered from Two Rivers (23SH101)
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Cat. No.	Horiz. Prov.	Depth (cm)	Fea.	Artifact Description	Ct.	Wt.	Comments
328-1	63.00N/34.00E	83-90	6	Biface fragment	1	0.0	gravel
329-1	63.00N/34.00E	83-90	0	Primary decort. flake	3	0.0	soil
329-2	63.00N/34.00E	83-90	0	Secondary decort. flake	9	0.0	soil
329-3	63.00N/34.00E	83-90	0	Interior flake	37	0.0	soil
329-4	63.00N/34.00E	83-90	0	Retouch flake	5	0.0	soil
329-5	63.00N/34.00E	83-90	0	Shatter	2	0.0	soil
329-6	63.00N/34.00E	83-90	0	Fire-cracked rock	2	0.0	soil
329-7	63.00N/34.00E	83-90	0	Biface fragment	2	0.0	soil
330-1	63.00N/34.00E	83-90	6	No cultural material	0	0.0	gravel in this level was culturally sterile
331-1	63.00N/34.00E	90-100	0	Secondary decort. flake	3	0.0	soil
331-2	63.00N/34.00E	90-100	0	Interior flake	8	0.0	soil
332-1	63.00N/34.00E	100-110	6	Secondary decort. flake	2	0.0	gravel
332-2	63.00N/34.00E	100-110	6	Interior flake	6	0.0	gravel
332-3	63.00N/34.00E	100-110	6	Fire-cracked rock	3	0.0	gravel
333-1	63.00N/34.00E	100-110	0	Secondary decort. flake	2	0.0	soil
333-2	63.00N/34.00E	100-110	0	Interior flake	7	0.0	soil
333-3	63.00N/34.00E	100-110	0	Fire-cracked rock	1	0.0	soil
334-1	63.00N/34.00E	110-120	0	Interior flake	6	0.0	
334-2	63.00N/34.00E	110-120	0	Fire-cracked rock	1	0.0	
335-1	62.00N/35.00E	0-20	0	Secondary decort. flake	11	0.0	
335-2	62.00N/35.00E	0-20	0	Interior flake	32	0.0	
335-3	62.00N/35.00E	0-20	0	Shatter	5	0.0	
335-4	62.00N/35.00E	0-20	0	Fire-cracked rock	6	0.0	
335-5	62.00N/35.00E	0-20	0	Biface fragment	2	0.0	
335-6	62.00N/35.00E	0-20	0	Plain whiteware	1	0.0	cobalt glaze?
336-1	62.00N/35.00E	20-30	0	Secondary decort. flake	10	0.0	
336-2	62.00N/35.00E	20-30	0	Interior flake	24	0.0	
336-3	62.00N/35.00E	20-30	0	Retouch flake	1	0.0	
336-4	62.00N/35.00E	20-30	0	Shatter	5	0.0	
336-5	62.00N/35.00E	20-30	0	Biface fragment	2	0.0	
337-1	62.00N/35.00E	30-40	0	Primary decort. flake	1	0.0	
337-2	62.00N/35.00E	30-40	0	Secondary decort. flake	17	0.0	
337-3	62.00N/35.00E	30-40	0	Interior flake	35	0.0	
337-4	62.00N/35.00E	30-40	0	Retouch flake	3	0.0	
337-5	62.00N/35.00E	30-40	0	Shatter	3	0.0	
337-6	62.00N/35.00E	30-40	0	Fire-cracked rock	8	0.0	
337-7	62.00N/35.00E	30-40	0	Biface fragment	1	0.0	
337-8	62.00N/35.00E	30-40	0	Preform (whole)	1	0.0	
338-1	62.00N/35.00E	40-50	0	Primary decort. flake	1	0.0	
338-2	62.00N/35.00E	40-50	0	Secondary decort. flake	17	0.0	
338-3	62.00N/35.00E	40-50	0	Interior flake	57	0.0	
338-4	62.00N/35.00E	40-50	0	Fire-cracked rock	2	0.0	
338-5	62.00N/35.00E	40-50	0	Biface fragment	1	0.0	
338-6	62.00N/35.00E	40-50	0	Tested cobble	1	0.0	
338-7	62.00N/35.00E	40-50	0	Plain whiteware	1	0.0	
339-1	62.00N/35.00E	50-60	0	Primary decort. flake	1	0.0	
339-2	62.00N/35.00E	50-60	0	Secondary decort. flake	7	0.0	
339-3	62.00N/35.00E	50-60	0	Interior flake	18	0.0	
339-4	62.00N/35.00E	50-60	0	Shatter	1	0.0	
340-1	62.00N/35.00E	60-70	0	Secondary decort. flake	2	0.0	
340-2	62.00N/35.00E	60-70	0	Interior flake	8	0.0	
340-3	62.00N/35.00E	60-70	0	Retouch flake	1	0.0	
340-4	62.00N/35.00E	60-70	0	Shatter	1	0.0	
341-1	62.00N/35.00E	70-80	6	No cultural material	0	0.0	gravel part of this unit was culturally sterile
342-1	62.00N/35.00E	70-80	0	Core	1	0.0	soil
342-2	62.00N/35.00E	70-80	0	Primary decort. flake	1	0.0	soil
342-3	62.00N/35.00E	70-80	0	Secondary decort. flake	4	0.0	soil
342-4	62.00N/35.00E	70-80	0	Interior flake	10	0.0	soil
342-5	62.00N/35.00E	70-80	0	Fire-cracked rock	2	0.0	soil
343-1	62.00N/35.00E	80-90	6	Secondary decort. flake	1	0.0	gravel
344-1	62.00N/35.00E	80-90	0	Retouch flake	1	0.0	soil
345-1	62.00N/35.00E	90-100	0	Primary decort. flake	2	0.0	gravel part of unit culturally sterile
345-2	62.00N/35.00E	90-100	0	Secondary decort. flake	1	0.0	
345-3	62.00N/35.00E	90-100	0	Interior flake	10	0.0	1 jasper

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Cat. No.	Horiz. Prov.	Depth (cm)	Fea.	Artifact Description	Ct.	Wt.	Comments
345-4	62.00N/35.00E	90-100	0	Retouch flake	1	0.0	
345-5	62.00N/35.00E	90-100	0	Shatter	1	0.0	
345-6	62.00N/35.00E	90-100	0	Biface fragment	1	0.0	
346-1	62.00N/35.00E	100-110	6	Primary decort. flake	1	0.0	gravel
346-2	62.00N/35.00E	100-110	6	Secondary decort. flake	1	0.0	gravel
346-3	62.00N/35.00E	100-110	6	Interior flake	1	0.0	gravel
347-1	62.00N/35.00E	100-110	0	Interior flake	8	0.0	soil
347-2	62.00N/35.00E	100-110	0	Fire-cracked rock	1	0.0	soil
348-1	62.00N/35.00E	110-120	6	No cultural material	0	0.0	gravel part of unit culturally sterile
349-1	62.00N/35.00E	110-120	0	Secondary decort. flake	2	0.0	soil
349-2	62.00N/35.00E	110-120	0	Interior flake	2	0.0	home
350-1	62.00N/35.00E	120-130	6	Primary decort. flake	2	0.0	gravel
350-2	62.00N/35.00E	120-130	6	Secondary decort. flake	6	0.0	gravel
350-3	62.00N/35.00E	120-130	6	Interior flake	24	0.0	gravel
350-4	62.00N/35.00E	120-130	6	Shatter	1	0.0	gravel
350-5	62.00N/35.00E	120-130	6	Fire-cracked rock	1	0.0	gravel
351-1	62.00N/35.00E	120-130	0	Secondary decort. flake	5	0.0	soil
351-2	62.00N/35.00E	120-130	0	Interior flake	8	0.0	soil
352-1	62.00N/35.00E	130-140	0	Secondary decort. flake	2	0.0	soil
352-2	62.00N/35.00E	130-140	0	Interior flake	9	0.0	soil
353-1	62.00N/35.00E	140-150	0	Interior flake	4	0.0	soil
353-2	62.00N/35.00E	140-150	0	Fire-cracked rock	1	0.0	soil
354-1	62.00N/35.00E	150-160	0	Secondary decort. flake	1	0.0	soil
354-2	62.00N/35.00E	150-160	0	Interior flake	1	0.0	soil
355-1	62.00N/34.00E	0-20	0	Primary decort. flake	1	0.0	
355-2	62.00N/34.00E	0-20	0	Secondary decort. flake	13	0.0	
355-3	62.00N/34.00E	0-20	0	Interior flake	35	0.0	
355-4	62.00N/34.00E	0-20	0	Retouch flake	4	0.0	
355-5	62.00N/34.00E	0-20	0	Shatter	5	0.0	
355-6	62.00N/34.00E	0-20	0	Fire-cracked rock	2	0.0	
355-7	62.00N/34.00E	0-20	0	Biface fragment	1	0.0	
356-1	62.00N/34.00E	20-30	0	Primary decort. flake	1	0.0	
356-2	62.00N/34.00E	20-30	0	Secondary decort. flake	13	0.0	
356-3	62.00N/34.00E	20-30	0	Interior flake	51	0.0	
356-4	62.00N/34.00E	20-30	0	Shatter	8	0.0	
356-5	62.00N/34.00E	20-30	0	Fire-cracked rock	12	0.0	
356-6	62.00N/34.00E	20-30	0	Biface fragment	2	0.0	
357-1	62.00N/34.00E	30-40	0	Primary decort. flake	3	0.0	
357-2	62.00N/34.00E	30-40	0	Secondary decort. flake	14	0.0	
357-3	62.00N/34.00E	30-40	0	Interior flake	43	0.0	
357-4	62.00N/34.00E	30-40	0	Retouch flake	1	0.0	
357-5	62.00N/34.00E	30-40	0	Shatter	7	0.0	
357-6	62.00N/34.00E	30-40	0	Fire-cracked rock	3	0.0	
357-7	62.00N/34.00E	30-40	0	Biface fragment	2	0.0	
358-2	62.00N/34.00E	40-50	0	Secondary decort. flake	9	0.0	
358-3	62.00N/34.00E	40-50	0	Interior flake	52	0.0	
358-4	62.00N/34.00E	40-50	0	Retouch flake	2	0.0	
358-5	62.00N/34.00E	40-50	0	Shatter	7	0.0	
358-6	62.00N/34.00E	40-50	0	Fire-cracked rock	3	0.0	
358-7	62.00N/34.00E	40-50	0	Biface fragment	1	0.0	
358-26	62.00N/34.00E	40-50	0	Primary decort. flake	2	0.0	
359-1	62.00N/34.00E	50-60	0	Secondary decort. flake	5	0.0	1 jasper
359-2	62.00N/34.00E	50-60	0	Interior flake	13	0.0	
359-3	62.00N/34.00E	50-60	0	Retouch flake	1	0.0	
359-4	62.00N/34.00E	50-60	0	Shatter	1	0.0	
359-5	62.00N/34.00E	50-60	0	Fire-cracked rock	1	0.0	
360-1	62.00N/34.00E	60-70	6	Secondary decort. flake	1	0.0	gravel
360-2	62.00N/34.00E	60-70	6	Interior flake	2	0.0	gravel
360-3	62.00N/34.00E	60-70	6	Shatter	1	0.0	gravel
360-4	62.00N/34.00E	60-70	6	Fire-cracked rock	1	0.0	gravel
360-5	62.00N/34.00E	60-70	6	Biface fragment	1	0.0	gravel
361-1	62.00N/34.00E	60-70	0	Interior flake	3	0.0	soil
362-1	62.00N/34.00E	60-70	1	Primary decort. flake	1	0.0	fill from feature 1
362-2	62.00N/34.00E	60-70	1	Secondary decort. flake	1	0.0	fill from feature 1
362-3	62.00N/34.00E	60-70	1	Fire-cracked rock	2	0.0	fill from feature 1
363-1	62.00N/34.00E	60-70	1	Secondary decort. flake	2	0.0	fine screened fill from feature 1

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Cat. No.	Horiz. Prov.	Depth Fea. (cm)	Artifact Description	Ct.	Wt.	Comments
363-2	62.00N/34.00E	60-70	1 Interior flake	8	0.0	fine screened fill from feature 1
363-3	62.00N/34.00E	60-70	1 Shatter	1	0.0	fine screen fill from feature 1
363-4	62.00N/34.00E	60-70	1 Fire-cracked rock	1	0.0	fine screen fill from feature 1
364-1	62.00N/34.00E	70-80	6 Interior flake	4	0.0	gravel
364-2	62.00N/34.00E	70-80	6 Shatter	1	0.0	gravel
365-1	62.00N/34.00E	70-80	0 Secondary decort. flake	1	0.0	soil
365-2	62.00N/34.00E	70-80	0 Fire-cracked rock	1	0.0	soil
366-1	62.00N/34.00E	70-80	1 Secondary decort. flake	2	0.0	fill from feature 1
366-2	62.00N/34.00E	70-80	1 Interior flake	4	0.0	fill from feature 1
366-3	62.00N/34.00E	70-80	1 Retouch flake	1	0.0	fill from feature 1
366-4	62.00N/34.00E	70-80	1 Fire-cracked rock	3	0.0	fill from feature 1
367-1	62.00N/34.00E	70-80	1 Primary decort. flake	2	0.0	fine screened fill from feature 1
367-2	62.00N/34.00E	70-80	1 Secondary decort. flake	2	0.0	fine screened fill from feature 1
367-3	62.00N/34.00E	70-80	1 Interior flake	12	0.0	fine screened fill from feature 1
368-1	62.00N/34.00E	80-90	6 Secondary decort. flake	1	0.0	gravel
368-2	62.00N/34.00E	80-90	6 Interior flake	4	0.0	gravel
368-3	62.00N/34.00E	80-90	6 Shatter	1	0.0	gravel
369-1	62.00N/34.00E	80-90	0 Tested cobble	1	0.0	soil
369-2	62.00N/34.00E	80-90	0 Core	1	0.0	soil
369-3	62.00N/34.00E	80-90	0 Secondary decort. flake	4	0.0	soil
369-4	62.00N/34.00E	80-90	0 Interior flake	13	0.0	soil
369-5	62.00N/34.00E	80-90	0 Retouch flake	1	0.0	soil
369-6	62.00N/34.00E	80-90	0 Fire-cracked rock	2	0.0	soil
369-7	62.00N/34.00E	80-90	0 Flake scraper	1	0.0	soil
370-1	62.00N/34.00E	80-90	1 Secondary decort. flake	1	0.0	fill from feature 1
370-2	62.00N/34.00E	80-90	1 Interior flake	2	0.0	fill from feature 1
370-3	62.00N/34.00E	80-90	1 Retouch flake	2	0.0	fill from feature 1
370-4	62.00N/34.00E	80-90	1 Shatter	1	0.0	fill from feature 1
371-1	62.00N/34.00E	80-90	1 Interior flake	1	0.0	fine screened fill from feature 1
371-2	62.00N/34.00E	80-90	1 Fire-cracked rock	1	0.0	fine screened fill from feature 1
372-1	62.00N/34.00E	90-100	6 Primary decort. flake	1	0.0	gravel
372-2	62.00N/34.00E	90-100	6 Secondary decort. flake	4	0.0	gravel
372-3	62.00N/34.00E	90-100	6 Interior flake	9	0.0	gravel
372-4	62.00N/34.00E	90-100	6 Shatter	1	0.0	gravel
372-5	62.00N/34.00E	90-100	6 Fire-cracked rock	1	0.0	gravel
373-1	62.00N/34.00E	90-100	0 Interior flake	6	0.0	soil
373-2	62.00N/34.00E	90-100	0 Retouch flake	1	0.0	soil
373-3	62.00N/34.00E	90-100	0 Biface fragment	1	0.0	soil
373-4	62.00N/34.00E	90-100	0 Fire-cracked rock	1	0.0	
374-1	68.00S/123.00E	10-20	0 Window glass	1	0.0	
374-2	68.00S/123.00E	10-20	0 Clear bottle glass	1	0.0	
375-1	68.00S/123.00E	20-30	0 Clear bottle glass	1	0.0	
375-2	68.00S/123.00E	20-30	0 Window glass	1	0.0	
375-3	68.00S/123.00E	20-30	0 Plain whiteware	1	0.0	
376-1	32.00S/79.00E	20-30	0 Retouch flake	2	0.0	
376-2	32.00S/79.00E	20-30	0 Window glass	1	0.0	
376-3	32.00S/79.00E	20-30	0 Nail, cut	1	0.0	
377-1	32.00S/79.00E	0-10	0 Interior flake	1	0.0	
377-2	32.00S/79.00E	0-10	0 Shatter	1	0.0	
377-3	32.00S/79.00E	0-10	0 Clear bottle glass	4	0.0	
377-4	32.00S/79.00E	0-10	0 Green bottle glass	1	0.0	
377-5	32.00S/79.00E	0-10	0 Window glass	1	0.0	
377-6	32.00S/79.00E	0-10	0 Plain whiteware	1	0.0	
378-1	32.00S/79.00E	10-20	0 Primary decort. flake	2	0.0	
378-2	32.00S/79.00E	10-20	0 Interior flake	3	0.0	
378-3	32.00S/79.00E	10-20	0 Shatter	5	0.0	
378-4	32.00S/79.00E	10-20	0 Clear bottle glass	2	0.0	
378-5	32.00S/79.00E	10-20	0 Green bottle glass	1	0.0	
378-6	32.00S/79.00E	10-20	0 Window glass	5	0.0	
378-7	32.00S/79.00E	10-20	0 Milk glass	1	0.0	
378-8	32.00S/79.00E	10-20	0 Plain whiteware	3	0.0	
378-9	32.00S/79.00E	10-20	0 Misc. metal	2	0.0	1 plowshare fragment and 1 rivet
379-1	118.00S/270.00E	10-20	0 Arrow point	1	0.0	Made of salmon colored chert, this fragmentary arrow point, missing its base, measures 2 cm long x 1.1 cm wide x .4 cm thick and is plano-convex in cross section. The

APPENDIX B
Artifacts Recovered from Two Rivers (23SH101)
During the 1987 Data Recovery

Cat. No.	Horiz. Prov.	Depth Fea. (cm)	Artifact Description	Ct.	Wt.	Comments
						specimen exhibits a mucronate distal end, a somewhat straight blade shape, and shallow side notches. One blade edge is beveled on two edges; the other is beveled on one side. Not enough of the specimen is present to type it.
379-2	118.00S/270.00E	10-20	0 Interior flake	1	0.0	
379-3	118.00S/270.00E	10-20	0 Shatter	4	0.0	
380-1	118.00S/270.00E	20-30	0 Interior flake	1	0.0	
381-1	118.00S/270.00E	30-40	0 Interior flake	1	0.0	
382-1	178.00S/293.00E	0-20	0 Interior flake	1	0.0	lost
383-1	178.00S/293.00E	20-40	0 Shatter	1	0.0	
384-1	178.00S/233.00E	0-20	0 Shatter	1	0.0	
385-1	148.00S/293.00E	20-40	0 Secondary decort. flake	1	0.0	
385-2	148.00S/293.00E	20-40	0 Shatter	1	0.0	
386-1	118.00S/203.00E	20-40	0 Shatter	3	0.0	
387-1	118.00S/203.00E	0-20	0 Shatter	4	0.0	
387-2	118.00S/203.00E	0-20	0 Core	1	0.0	
388-1	88.00S/233.00E	0-20	0 Shatter	1	0.0	
389-1	58.00S/233.00E	0-20	0 Interior flake	1	0.0	
390-1	58.00S/143.00E	0-20	0 Shatter	1	0.0	
391-1	58.00S/83.00E	20-40	0 Clear bottle glass	1	0.0	
392-1	58.00S/83.00E	0-20	0 Window glass	2	0.0	
392-2	58.00S/83.00E	0-20	0 Window glass	1	0.0	
393-1	28.00S/113.00E	0-20	0 Core	1	0.0	
394-1	28.00S/83.00E	20-40	0 Interior flake	2	0.0	
395-1	28.00S/83.00E	0-20	0 Purpled bottle glass	1	0.0	
395-2	28.00S/83.00E	0-20	0 Window glass	1	0.0	
396-1	28.00S/53.00E	0-20	0 Window glass	1	0.0	
397-1	2.00N/83.00E	40-60	0 Shatter	1	0.0	
398-1	2.00N/83.00E	20-40	0 Shatter	1	0.0	
399-1	2.00N/83.00E	0-20	0 Interior flake	1	0.0	
399-2	2.00N/83.00E	0-20	0 Shatter	1	0.0	
400-1	2.00N/53.00E	20-40	0 Primary decort. flake	1	0.0	
400-2	2.00N/53.00E	20-40	0 Core	1	0.0	
401-1	2.00N/53.00E	0-20	0 Secondary decort. flake	1	0.0	
401-2	2.00N/53.00E	0-20	0 Shatter	1	0.0	
402-1	76.00N/18.00E	20-30	0 Unidentified charcoal	0	3.1	
403-1	76.00N/19.00E	0-20	0 Unidentified charcoal	0	1.7	
404-1	64.00N/33.00E	40-45	4 Unidentified charcoal	0	1.1	charcoal sample from feature 4
405-1	64.00N/33.00E	40-45	4 Unidentified charcoal	0	0.7	from fine screen sample from feature 4
406-1	64.00N/33.00E	50-55	4 Unidentified charcoal	0	0.6	from feature 4
407-1	64.00N/33.00E	55-60	4 Unidentified charcoal	0	0.2	from feature 4
408-1	63.00N/35.00E	80-90	3 Ash	0	7.5	from feature 3
409-1	63.00N/35.00E	80-90	2 Unidentified charcoal	0	2.3	from feature of this unit
410-1	63.00N/35.00E	80-90	0 Unidentified charcoal	0	6.0	
411-1	63.00N/35.00E	95-100	2 Unidentified charcoal	0	2.1	from feature 2 in this unit
412-1	63.00N/35.00E	80-90	2 Unidentified charcoal	0	3.5	from feature 2 in this unit
413-1	63.00N/35.00E	100-110	2 Unidentified charcoal	0	6.9	charcoal from feature 2 in this unit
414-1	63.00N/35.00E	110-120	2 Unidentified charcoal	0	11.1	from feature 2 in this unit
415-1	62.00N/34.00E	60-70	1 Unidentified charcoal	0	0.1	from feature 1 in this unit
416-1	62.00N/34.00E	70-80	1 Unidentified charcoal	0	0.4	from feature 1 in this test unit
417-1	62.00N/35.00E	130-140	0 Unidentified charcoal	0	1.7	
418-1	63.00N/35.00E	80-90	0 Shatter	4	0.0	soil
419-1	63.00N/35.00E	90-100	0 Interior flake	7	0.0	soil
419-2	63.00N/35.00E	90-100	0 Shatter	9	0.0	soil
420-1	63.00N/35.00E	100-110	0 Interior flake	3	0.0	soil
420-2	63.00N/35.00E	100-110	0 Shatter	5	0.0	soil
420-3	63.00N/35.00E	100-110	0 Unidentified charcoal	0	1.2	soil
421-1	63.00N/35.00E	110-120	0 Tested cobble	1	0.0	soil
421-2	63.00N/35.00E	110-120	0 Secondary decort. flake	1	0.0	soil
421-3	63.00N/35.00E	110-120	0 Interior flake	2	0.0	soil
421-4	63.00N/35.00E	110-120	0 Retouch flake	1	0.0	soil
421-5	63.00N/35.00E	110-120	0 Shatter	3	0.0	soil
421-6	63.00N/35.00E	110-120	0 Flake scraper	1	0.0	soil

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Cat. No.	Horiz. Prov.	Depth Fea. (cm)	Artifact Description	Ct.	Wt.	Comments
421-7	63.00N/35.00E	110-120	0 Unidentified charcoal	0	0.9 soil	
422-1	63.00N/35.00E	120-130	0 Primary decort. flake	2	0.0 soil	
422-2	63.00N/35.00E	120-130	0 Secondary decort. flake	1	0.0 soil	
422-3	63.00N/35.00E	120-130	0 Interior flake	9	0.0 soil	
422-4	63.00N/35.00E	120-130	0 Flake scraper	1	0.0 soil	
422-5	63.00N/35.00E	120-130	0 Retouch flake	2	0.0 soil	
422-6	63.00N/35.00E	120-130	0 Shatter	16	0.0 1 novaculite; soil	
422-7	63.00N/35.00E	120-130	0 Fire-cracked rock	2	0.0 soil	
422-8	63.00N/35.00E	120-130	0 Unidentified charcoal	0	2.1 soil	
423-1	75.00N/37.00E	0-20	0 Primary decort. flake	1	0.0	
423-2	75.00N/37.00E	0-20	0 Biface fragment	1	0.0	
423-3	75.00N/37.00E	0-20	0 Dart point stem/base	1	0.0	Made white to light pink chert, this dart point fragment is nearly a complete specimen except for missing its distal end and part of its base. The specimen exhibits an excurvate blade shape, inversely tapered shoulders, a slightly expanding stem, and a straight base. This hafted biface, flattened in cross section, measures 4.7 cm long (6 cm estimated length) x 3.5 cm wide x 1 cm thick. According to J. Price (personal communication 1987) the specimen appears to be a Table Rock Stemmed point. According to Chapman (1975:258), the estimated date of this type of point is 3000-1000 B.C. and is considered to be associated with Late Archaic sites in the Table Rock Reservoir area. Originally (Chapman 1956:37) this point style was thought to be Early or Middle Archaic.
205-10	76.00N/33.00E	0-24	0 Whiteware, transfer print	1	0.0	Green colored (1840 - present)
205-11	76.00N/33.00E	0-24	0 Bifacial end scraper	1	0.0	Made of white heat treated chert, this end scraper displays a steep angle (70 degrees) working edge on its distal end. Although missing its distal end, the specimen exhibits a deep and broad flute on its dorsal side. The flute or channel flake measures 1.5 cm long x 1.3 cm wide x .2 cm deep. Although possible, it is highly improbable that the channel flake was caused by the break; more likely, it appears to be a deliberate and skillful removal of a large flake. This end scraper fragment measures 3.6 cm long x 3 cm wide x 1 cm thick. The presence of the flute suggests that the specimen dates to the Paleoindian Period (pre-8000 B.C.) or Early Archaic Period (8000-6000 B.C.).

APPENDIX C
Project Participants

CHARLES ATCHISON assisted the field crew.

LAWRENCE L. AYRES was a member of the field crew. Mr. Ayres received an M.A. in anthropology from the University of Arkansas in 1988.

ALAN BANKS was a field crew volunteer. Mr. Banks is a noted amateur archeologist and a Trustte of the Missouri Archaeological Society.

DAVID BARTON assisted the field crew.

DAVID B. BOARD conducted the field work in Area C and was a member of the field crew in Area B. Mr. Board received a B.A. in anthropology from the University of Tennessee in 1986.

JUSTIN COUNTS assisted the field crew.

SHANE COUNTS assisted the field crew.

DAVID DIX was a field crew volunteer.

RICHARD P. KANDARE directed the fieldwork in Area B and wrote various portions of the technical report. Mr. Kandare received an M.A. in anthropology from the University of Arkansas in 1983 and is a member of the Society of Professional Archeologists.

TIMOTHY C. KLINGER served as Co-Principal Investigator and wrote various portions of the technical report. Mr. Klinger received an M.A. in anthropology from the University of Arkansas in 1977 and a J.D. from the University of Arkansas School of Law in 1982. Mr. Klinger is a member of the Society of Professional Archeologists and is an attorney at law licensed by the State of Arkansas.

GEORGE PERRY assisted the field crew.

JOSHUA PERRY was a field crew volunteer.

JAMES E. PRICE served as Co-Principal Investigator and assisted in the preparation of the technical report. Dr. Price received a Ph.D. in anthropology from the University of Michigan in 1973 and has conducted research in southeast Missouri for over 20 years.

RANDY ROSE assisted the field crew.

ROGER SAUCIER wrote various geomorphology portions of the technical report. Dr. Saucier received a Ph.D. in physical geography from Louisiana State University in 1968 and is a physical scientist for the U.S. Army Corps of Engineer Waterways Experiment Station, Vicksburg.

STEVE WALLS provided information on soils at the site. Mr. Walls is a soils technician with the Soils Conservation Service.

KLINGER, KANDARE, PRICE and SAUCIER

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