THE CULTURAL HISTORICAL PLACE OF BURIED CITY IN THE SOUTHERN PLAINS: ARCHITECTURE BASED ON 41OC28 AND 41OC29 IN OCHILTREE COUNTY, TEXAS

A Research Project

By

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and the faculty of the of the Graduate School of
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in partial fulfillment of
the requirements for the degree of
Master of Arts

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I have examined the final copy of this project for form and content, and recommended that it be accepted in partial fulfillment of the requirement for the degree of Master of Arts.

_____
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DEDICATION

For my grandmother Maria Guadalupe “Lupe” Guerrero,
and Andrea Hopkins

Do one thing everyday that scares you
- Eleanor Roosevelt

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ABSTRACT

The Buried City complex and 41OC28 and 41OC29 are archaeological sites in Ochiltree County, Texas known since the early 1900s. The architecture to this area is unique in that it incorporates large caliche boulders as part of its foundation unlike those structures found at Antelope Creek proper that use vertical limestone slabs. The examination of current taxonomy will leave the Buried City on its own as a complex or place it with the Antelope Creek phase. Conducting a regional comparison of architecture in areas such as the Oklahoma Panhandle, western Oklahoma, and southeastern Texas Panhandle will provide this information.

The purpose of this project is to examine the taxonomy, the regional architecture and the architectural layout of 41OC28 and 41OC29, including interpretation of features, and depth of test units. By utilizing ArcGIS, it is plausible to place Buried City in its appropriate taxonomic classification.

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CHAPTER 1

INTRODUCTION

The Texas Panhandle has been an intriguing and perplexing area of study for many years going back to the turn of the twentieth century when T.L. Eyerly conducted the first official expedition on the Buried City of Ochiltree County, Texas. Many expeditions occurred in subsequent years wherein the ruins of the Buried City were included in the Antelope Creek focus and later in the Antelope Creek phase of the Upper Canark Variant. The taxonomic definition of Antelope Creek itself has gone through many transitions expanding its definition to such large proportions that it has become a hodgepodge encompassing not only the Texas and Oklahoma Panhandles, but also southern Kansas, western Oklahoma, northeastern New Mexico and southeast Colorado. This is because the Antelope Creek focus has become equated with the Panhandle Aspect an even more nebulous taxon. Previous cultural taxonomic systems employed in this region include the Southwestern Taxonomic System, Pecos Classification system, Gladwin & Gladwin Taxonomic system, the Midwestern Taxonomic System, and the Willey-Phillips Taxonomic System, and possibly others. Although these taxonomic systems fit well within their own regions, it appears that the Texas Panhandle sites do not fit within their parameters.

The architecture is unique in the Wolf Creek area of the Texas panhandle. Sites recorded in the Texas and Oklahoma panhandles do not display similar attributes found in the Wolf Creek area. The architecture of the Buried City exploits the use of caliche boulders instead of using vertical slabs like the other Antelope Creek phase houses. The dimensions of the houses are extremely large (40-90 square meters). Interior features recorded in the centrally depressed floor

channel are the four centrally roof support posts, a fire pit, benches against the north and south walls and against the west wall, an altar either extends out into the channel or is recessed into the west wall. An extended entryway faces east, bins are located on either side of the altar, a storage pit is usually near the corner of the east wall. Although one or more may be found in an Antelope Creek phase house, none of them display all traits like those discovered at Buried City. One question to ask is why Buried City is part of the Antelope Creek amalgamation, as it is its own entity as the Buried City complex. Examination of arguments for inclusion and against in the Buried City in the Antelope Creek phase will be discussed.

A major concern with Antelope Creek phase is the incorporation of any structure that has a stone foundation regardless of its location or method of construction. Another concern is some newer phases lack the architecture that is reminiscent of Antelope Creek and have been included in the phase. Is this due to their proximity to the Antelope Creek area or could it be because they are included in the Upper Canark Variant?

Where did the peoples of Buried City come from and where did they go to are two questions that have been asked for many years. Examination of the origin myths and migration paths of the Wichita and Pawnee will help in determining where they may have originated. Close examination of the types of houses that these cultural groups built may also hold answers as to who the peoples of Buried City were.

Background

In the Texas Panhandle, there are a numerous archaeological ruins situated on the ridges of Wolf Creek in Ochiltree, County. Many expeditions travelled through this region and yet no written formal reports had documented the area until the Canadian Academy sent T.L. Eyerly

and his crew to visit the region in 1907. Eyerly's formal report described twelve rectangular mounds; with the largest measuring forty-seven feet by thirty-seven feet, (14.33 x 11.23 meters). Eyerly also noticed that the mounds all aligned on an east-west axis with the exception of one, which was on a southwest northeast axis (Eyerly 1908:224). Two theories were circulating on the origin of the mounds that they were either Aztec in origin or the remains of Spanish campsites. Eyerly decided that neither one of these fit and instead suggested a Plains origin due to the similarity of traits in ceramics and lithics (Eyerly 1908:226).

Jesse Walter Fewkes reportedly visited the Wolf Creek area around 1915 or 1916. A landowner reported Fewkes had excavated a burial from one of the mounds at the Buried City. Warren K. Moorhead confirms this in his book, *Archaeology of the Arkansas River Valley*. Mr. Handley when being interviewed confirmed that Fewkes was in the area and did in fact excavate a burial from one of the mounds. Reports are missing regarding Fewkes's trip to the Handley Ruins/Buried City (Moorehead 1931:94).

Floyd V. Studer first became interested in the Buried City during excavation in 1907 when Studer was 15. He was a student of T. L. Eyerly and dedicated fifty years to the study of the Texas Panhandle. Although Studer did not have any formal training he dedicated much of his life to the archaeology of the Texas Panhandle and produced many of the maps, photographs, surveys and excavation data that is used today. By 1930, Studer located 110 major ruins and did test excavations at Saddleback Mesa. Studer used the Southwest taxonomic system to describe the dwelling he had discovered in the panhandle region (Lintz 1984:18).

W. K. Morehead was head of the Peabody Museum at Phillips Academy, a private preparatory school in Andover, Massachusetts. He began working with J.B. Thoburn of the Oklahoma Historical Society and together they explored along the lower Arkansas River. It was

also at this time that Moorehead began received letters from Floyd Studer in the hopes that Moorehead would include Buried City and the Canadian River sites in his explorations (Hughes, David T. 2004).

Although Moorhead held a prestigious post, he was a self-educated man. As a youth, he became obsessed with archaeology and the American Indians. He largely depended on wealthy East Coast patrons to support his work and when he did have funding, he hired assistants and sent them out to do the recording of the data. In 1917, he hired Fredrich H. Sterns, a Harvard-trained archeologist, to do some preliminary work and excavation at Buried City. Within a year Sterns and Moorehead had a falling out over who held the intellectual rights to the Buried City findings, and in court they fought over the field notes and artifacts. It is still unknown what happened to the notes and artifacts Sterns had in his possession. In 1919, Moorehead then hired C.B. Franklin an untrained archaeologist to retrace the footsteps of Sterns at Buried City and explore other areas of the Texas and Oklahoma panhandles (Hughes, David T. 2004).

Studer and Moorehead worked together in 1919 and 1920 at Antelope Creek, Buried City and other Plains Villager sites (Hughes, Jack T. 1991:3). Moorehead did not favor the origins of Antelope Creek ruins as Puebloan or Mississippian; instead, he designated the ruins as Canadian Valley or Texas Panhandle Culture. Moorhead suspected that the Texas Panhandle was the area where peoples from the Plains, the Pueblos and Texas congregated and combined their ideas of architecture and artifacts (Hughes, David T. 2004). Moorehead's work was short lived in the Texas Panhandle as his interests took him back east to Cahokia and the Illinois River Valley.

In the 1930s, several projects continued in large-scale proportions with the Federal Relief Administration (FERA) and the Works Projects Administration (WPA) adding new data to the Texas Panhandle. Another working during this era was W.C. "Curry" Holden, who led his

students from Texas Technical College, now Texas Tech University, through the ruins of the Texas Panhandle and into eastern New Mexico. Holden's excavations included Antelope Creek sites such as Tarbox Ruin, Antelope Creek 22, and Saddleback Ruin. Holden's main goal was to examine the relationship between the Southwest and the Plains (Indeck et al. 2004).

E.B. Sayles, a self-taught archeologist, visited the Panhandle in the summer of 1932 as part of a statewide reconnaissance for the Gila Pueblo, a private research foundation from Globe, Arizona. He visited 21 sites in the Panhandle and did excavations at Antelope Creek 22, Alibates 28, and Saddleback Ruin. He spent the most time at Antelope Creek 22, four days, and afterwards wrote a six-page manuscript that he never published. What Sayles recognized in the region was that many house ruins represented what he called the "Panhandle phase," an agricultural group found along the Canadian River. Sayles examined the ceramics Holden collected and estimated an age of A.D. 1350, an estimate that still falls directly within the Antelope Creek occupation (Indeck et al. 2004).

Due to World War II, many projects were abandoned did not resume until after the 1950s (Hughes, Jack T 1991:3). Alex Krieger continued to work and produced, *Culture Complexes and Chronology in Northern Texas*, in 1946. This was a synthesis of the northern Texas Panhandle region. In this book, Krieger defined the Antelope Creek focus as well as stating that the term the "…Panhandle Aspect may be used to include all the intimately related materials in the northern Texas Panhandle, together with whatever appears in neighboring areas (northeast New Mexico, southeast Colorado, western Oklahoma, etc.) to form a closely related series of foci. The "Panhandle Aspect" would serve the same general purpose as the present "panhandle Culture," with the advantage of being flexible enough to include any number of focal subdivisions (Krieger 1946:41)." Krieger defined the Antelope Creek focus based on

architectural features including artifacts from the Antelope Creek Ruin, Tarbox, Saddleback, Alibates, and Ruin 55, all single level multi-roomed dwellings (Krieger 1946:74). In the 1960s, due to explorations by F.E. Green, the Antelope Creek focus definition expanded to include single-roomed dwellings (Lintz 1984b:327).

Work had stopped on the Buried City after Moorehead left and it was not until the mid-1960s when Tom Ellzey became interested in the Buried City. Ellzey grew up in the Wolf Creek area and at was a graduate student at the University of Texas. His explorations at Handley Ruin and in the vicinity proved to be fruitful as he recorded many previously unrecorded sites. Unfortunately, the publication of his final report never happened (Hughes, David T. 2004).

Sam Handley (also spelled Handly), had owned the property the Buried City was on since his late teenage years. During the 1950s and 1960s is would open his ranch on the Wolf Creek to he public who would pay him a small fee to picnic, fish, hunt or dig for artifacts. Many of the artifacts were not just taken from the surface but also dug out of the houses themselves (Hughes, David T. 2004).

In the 1980s, Harold Courson, a Perryton resident and oil man purchased the Handley Ranch, that included the Buried City and other archaeological sites from the estate of Sam Handley. Mr. Courson was aware of the important archaeological history on the property and developed a plan that included archaeological investigations along with management of the animals (Hughes, David T. 2004).

David Hughes was contacted in 1985 by Kirk Courson on the salvaging of two Buried City sites that were eroding into Wolf Creek. Two field Schools were held in the summers of 1985 and 1986. In 1987 and 1988, the Courson family and David Hughes invited the Texas Archeological Society (TAS) to hold their field school at the Buried City. The TAS

investigations completed the work at Courson A, Courson B, the Kit Courson Site, Courson C and Courson D; including new explorations at "Eyerly's Temple," what Moorehead called Gould Ruin. In the summer of 1990, Hughes directed a three-month field school with the help of Wichita State University to evaluate Eyerly's Temple in the Buried City area. Analysis is continuing at Wichita State University who will return the reports, data and photographs upon completion to the Courson family (Hughes, David T. 2004).

In 2000, Scott Brosowske, a Ph.D. student at the University of Oklahoma, started new investigations at Buried City. The Courson family invited Brosowske to do some geophysical survey in the hopes of finding buried structural remains. In 2001, Brosowske was helped by avocational archeologists in sinking test pits in and around the anomalies the final result being that more testing needed to be done. In 2003, Brosowske and University Oklahoma Archeologist Susan C. Vehik returned with an archeological field school. Excavations revealed a deeply buried pithouse, work continues to this day (Hughes, David T. 2004).

For further description of the excavations at the Buried City and Antelope Creek, see Hughes and Hughes-Jones (1987), and Lintz (1984, 1986)

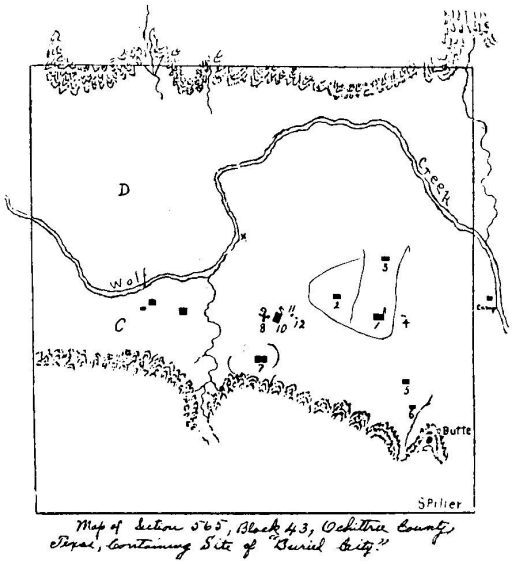

Figure 1. T.L. Eyerly's map of the Buried City (*Reproduced from "The Student," Bulletin of the Canadian Academy 1907).*

Taxonomy

In order to understand the various taxonomic systems used in the past on the Antelope Creek focus we must first understand the evolution of the theories during each period. Early nineteen century was a period of antiquarianism and pure speculation on archaeological sites and origins of the Native Americans. Explorers and settlers alike came across mounds in the eastern half of the United States questioning who built the mounds and where did they go? Credit for building the mounds was not given to the local Native Americans, as they were not from this continent. Instead, explanations for their existence described them as one of the Ten Lost Tribes of Israel as well as a population from the lost city of Atlantis. It was inconceivable to think that the local Native Americans could have produced such monumental structures. It was thought that another group of peoples with a higher intelligence had lived in the same region, built the mounds and then left the area without a trace. Cyrus Thomas proved the myth was wrong in his report to the Bureau of Ethnology. As for the origins of the Native Americans, one theory suggested that they were Asian in origin and crossed the Bering Straight into North America.

Through the years, thought processes changed as well as theoretical perspectives. By employing the stratigraphic method, seriation, typology, and classification archaeologists were able to construct a chronology, A. V. Kidder was the first to do this on Southwestern pottery (Willey & Sabloff 1992:103). It was during this time that archaeologists wanted to chronologically order cultures in the Southwest. The result was the Pecos Classification System modeled after Kidder's earlier work. The Midwestern Taxonomic Method or McKern Classification System by W.C. McKern mostly ignored time and space, but similarities would reflect a common cultural origins and cultural history. The direct-historical approach focused on

Native American known habitation areas in prehistoric time to be able to associate artifacts with known tribes or ethnic groups (Willey & Sabloff 1992:122-126).

Finding a taxonomic system to place Antelope Creek sites into over the years has been complicated at best. Some have focused on certain traits and many others ignored to fit Antelope Creek into a taxonomic system that does not give a justifiable definition. This section will discuss terminology, past and present taxonomic systems utilized throughout the years.

The Pecos Classification System was created during an archaeological conference for the Southwest in 1927, where an entire session of the conference was spent discussing the taxonomy of the Southwest. *Basket Maker I/Early Basket Maker, Basket Maker II/Basket Maker* and finally *Lake Basket Maker/Basket Maker III/Post Basket Maker* refer to a population whose skulls were deformed but not through the practice of skull deformation. The next five stages refer to village life, the archaeological record, and evidence of pottery. They are as follows: 1) *Pueblo I/Proto-Pueblo* cranial deformation practiced, ceramics exhibiting corrugation on ceramic vessel neck, dwellings were rectangular utilizing masonry. 2) *Pueblo II* small villages are now beginning to span over a larger geographic area, corrugating on vessels has now expanded to the entire pot surface. 3) *Pueblo III/Great Period* marked by much larger villages, development of art and local specialization. 4) *Pueblo IV/Proto-Historic* villages are contracting, corrugation on pottery disappears, and overall a cultural decline. 5) *Pueblo V/Historic* period from 1600 A.D. to the present (Kidder 1927:490).

The Pecos Classification System influenced choice of terminology archaeologists used in their reports to describe the artifacts and architecture in the Texas and Oklahoma Panhandles (Studer 1931, 1934; Holden 1930; Moorehead 1920, 1921), and even incorporated into the definition of Antelope Creek focus.

The pueblo as an architectural type defined by Kidder as, "A pueblo is an agglomeration of essentially rectangular living rooms of adobe or masonry construction, generally flat-roofed and built above ground (1927:490)." We can see why this definition did apply to Antelope Creek sites as the construction is of masonry and many are multi-roomed contiguous room blocks.

The Midwest Taxonomic System or McKern Taxonomic System has five categories with only three in use today. These categories distinguish culturally between local specialization, general and broad influences (McKern 1939:307). A *Focus* describes the cultural characteristics and usually refers to a local tribe in ethnology. An *Aspect* is a group of *foci*, which share similar traits, or show variation between groups of *foci*. The *Phase* is a generalized category and determined by similar a*spects* that have traits shared by all aspects within a particular phase. For example, *phases* may be characterized by a burial practice, pottery design, house architecture or features (McKern 1939:308).

In the 1960s, archaeologists began to use the Willey and Phillips taxonomic system. Willey and Phillips have combined content, space, and time to come up with "spatial divisions," "basic archaeological units," "temporal series," and "integrative units. These divide into smaller descriptive units within each section. Spatial divisions divide into four sub-divisions: the *Site*, the smallest unit that an archaeologist has to work with. The *Locality* describes a geographical space that has cultural homogeneity, i.e. the Wolf Creek Buried City complexes. A *Region* has a larger geographical space than the locality and as Willey and Phillips state, "…it is a geographical space in which, at a given time, a high degree of cultural homogeneity may be expected but not counted on." Finally the *Area* is a geographical unit that is largest of the three previous described. An *area* can sometimes be associated with a culture area that an

ethnographer has studied and at times can coincide with the physical location, i.e. the American Southwest (Willey & Philips1958:17-20).

Basic Archaeological Units, are divided into two sections, the first being the *Component*, first defined by W. C. McKern as the representation of a "focus" at a specific site (Willey & Phillips 1958:21; McKern 1939:308). Willey and Phillips do not believe that McKern's "component" is a taxonomic unit. Instead, they feel that "…the basic unit of classification is the focus, comprising of a number of components and the same may be said of what we designate as a "phase" (Willey & Philips 1958:21)."

Willey and Phillips used the definition of a *phase* proposed by Kidder in 1946, but have modified it slightly. It states that a *phase* can represent a site with limited occupation of various cultures and civilizations or it may represent numerous sites spread out geographically who may have a lengthy occupation at the same site (Willey & Philips 1958:22).

The *Temporal Series* divides into two sections, *local sequence* and the *regional sequence.* These are defined as phases with subphases arranged chronologically within their own geographical limits in their region (Willey & Philips 1958:27). *Integrative units* include the concepts of *horizon* and *tradition*, both of these terms originated from South American archaeology. Willey and Phillips have defined *horizon* as "a primarily spatial continuity represented by cultural traits and assemblages whose nature and mode of occurrence permit the assumption of a broad and rapid spread (Willey & Philips 1958:33)." A *tradition* is, "…an archaeological tradition is a (primarily) temporal continuity represented by persistent configurations in single technologies or other systems of related forms (Willey & Philips 1958:37)."

Plains Village Tradition proposed by Lehmer distinguishes number of late prehistoric plains adaptations from others in by the following diagnostic traits. The following is a summary: subsistence is based equally on hunting and horticulture; people lived in semi-permanent villages; villages are located adjacent to large floodplains; houses are semisubterranean with entryways; the cache pits have straight walls or are bell-shaped and are located in and between houses; pottery is grit-tempered with paddle-markings on the body and cord or tool impressed decorations; small projectile points; end scrapers; scapula hoes'; bone tools to work with hides (Lehmer 1954: 139-140)

In the 1980s, Christopher Lintz proposed an alternative taxonomic system, a revised version of Willey and Phillips. Spatial units used are site, locality, region, sub-area, and area; the temporal units are component, subphase/phase and variant (Lintz: 1984:40). Temporally the Buried City falls into the Plains Village Tradition, sub-divided into the Southern Plains (subarea) Tradition, divided into the Upper Canark Regional Variant, finally divides into the Antelope Creek Phase and finally the High Plains/Canadian River Locality (Lintz 1984:37).

CHAPTER 2

DATA ON COURSON SITES

Data collection began as early as 1907 by T. L. Eyerly on the Buried City. The Canadian Baptist Academy sent Eyerly to conduct the first official visit and to write the first ever report on the area. At the Buried City, Eyerly documented stone slabs were placed vertically forming the outline of the dwellings. Eyerly's main concern for his expedition was to determine where the people came from and to whom the ruins belonged to, his results published in 1907, 1908, and 1912. The first expeditions of the 20th century began with Eyerly 1907, Moorehead 1917, 1919 and 1920, and Thomas S. Ellzey in 1966 (Hughes & Hughes-Jones 1987:8).

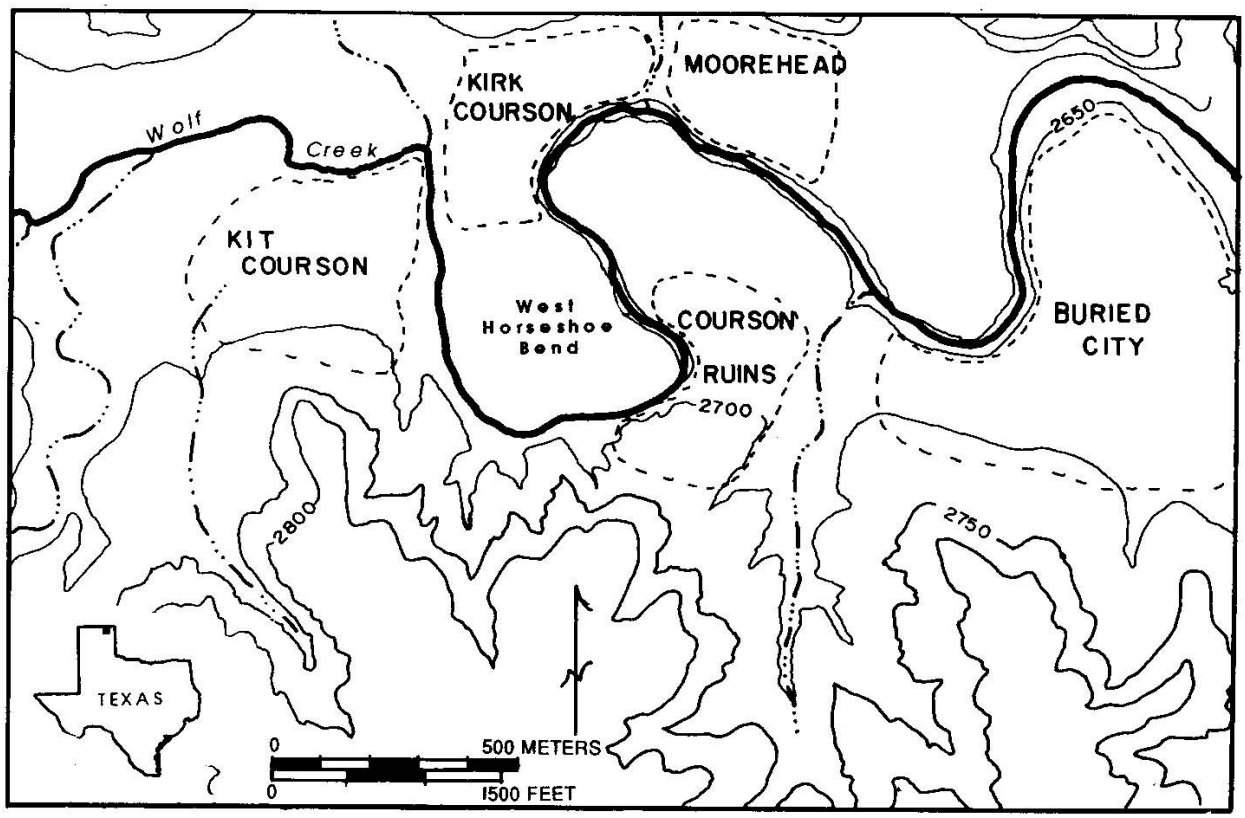

Figure 2. Topographic map of archaeological sites in Wolf Creek, Ochiltree County, Texas (*Reproduced from Hughes, D.T 1991:109)*

Buried City Complex A.D. 1260-1350

The Buried City complex consists of the Handley Ruins group (old Buried City area proper), sites Courson B, C, and D in the Courson Ruins Group and the Kit Courson Group. All houses exhibit 60 or more square meters of floor space. The structures are square or rectangular with the east and west walls oriented to the north. A central floor channel runs through the middle cutting the structure into equal thirds. The depth of the central floor channel is approximately 30 cm down from the top of the bench. The elevated benches run east west along the north and south walls and reach approximately two meters towards the center. Towards the back of the structure, along the west wall there is a small platform that is separated from the north and south walls by a shallow trench that joins the central floor channel. Four main roof support posts are located in the central channel as well as a hearth that is close to 50 cm deep and 50 cm in diameter, may be clay or caliche lined. The entryway is located in the center of the east wall, and is occasionally stone lined and measures one meter wide and two to three meters long. A fan-shaped sill is at the entrance where the entryway and floor meet. The bases of the walls are very different from others in the region because of the use of massive caliche boulders. Roof construction is thought to be made of thatch due to the lack of daub and other associated materials (Hughes & Hughes-Jones 1987:101-102).

Excavations at Courson A (41OC26) indicated what might be one of the earlier houses in the Texas Panhandle dating to around A.D. 1200. The house is square with a central fire pit, southeast entryway, post wall and an unplastered floor. Two cache pits were recorded at the site, a human burial, and several irregular post molds belonging to an earlier structure. Artifacts recovered include charred corn, a canid maxilla, and stone tools (Hughes, David T. 1991:117-118). Two features and a large piece of pottery that was corncob impressed is thought to be a

piece of a "paint pot," similar to those found in the Washita River phase. A later excavation exposed a house floor (Hughes & Hughes-Jones 1987:54).

Courson B (41OC27) is located south of Horseshoe Bend downstream approximately 500 meters from Courson A. This site is visibly disturbed along a wall on the east, north and west sides. Artifacts recovered include chipped stone tools, ground stone tools, bone tools, shell and pottery (Hughes & Hughes-Jones 1987:67). A cairn burial in the southeast corner of the structure was built using the rocks that formed the east and southern walls (Hughes, David T 1991:118; Hughes & Hughes-Jones 1987:80, 82). Directly underneath this burial a small square structure that also contained a stone and post foundation base that dated later than the main ruin (Hughes & Hughes-Jones 1987:94).

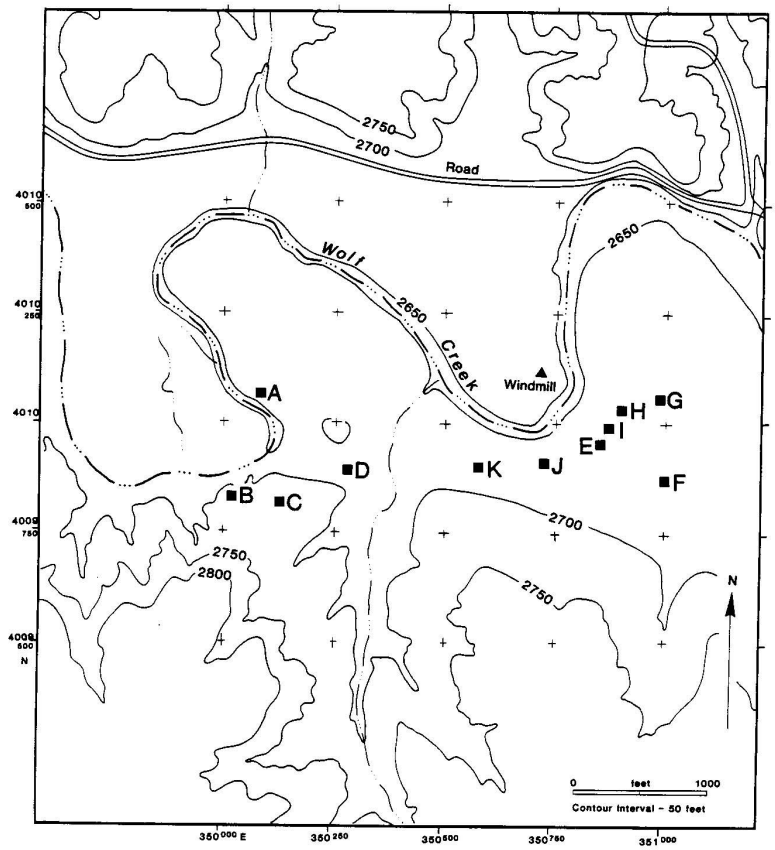

Figure 3. Sites A-D of Courson Ruins. Sites E-K Buried City Ruins (*Reproduced from Hughes, D.T. 1987:32)*

During excavations, a floor was partially exposed as well as the walls of the structure that revealed massive walls made of caliche boulders placed in an adobe mud base. This base was completely unlike the typical Antelope Creek phase houses that have vertically placed stone slabs. The walls of this structure measured more than one meter thick and its size is approximately 80 to 100 square meters. The structure is not completely square it is at an angle approximately eight degrees south of east. It is thought that the east and west walls were intentionally aligned to the north and that the structure is aligned with an equinox. The center of the floor was covered in plaster as would be the remainder of the floor and walls (Hughes & Hughes-Jones 1987:88). The final occupation of 41OC27 is a campsite as evidenced by a midden (Hughes & Hughes-Jones 1987:92).

Courson C (41OC28) did not produce many artifacts or debris. A large trench represents a looters excavation or a previous undocumented excavation, crossing from north to south across the center of the site. Concentrations of shell, bone and flakes may be a part of an earlier excavation as well. A double depression in the subsoil revealed two parallel trenches that may represent the northernmost wall of the house. This unique feature is also at 41OC29. David T. Hughes, suggests (personal communication 2009) that a wide, deep trench was dug for the outline of the house, then a double row of posts placed inside and outside the structure, 50 to 80 cm apart. The trench was then backfilled, and rocks placed on top of the posts, finally a wickerwall was woven the wall would not move. The double pen-wicker wall with vertical uprights is unique to the Buried City area only. See figure 16 for example in ArcMap.

At Courson D (41OC29), three areas were investigated areas A, B, and C. Area A is the main site and is a house that has been disturbed numerous times due to reconstructions. The central hearth is a flat surface of burned soil that is planed smooth and it appears that there are no

benches or a depressed floor channel (Hughes, David T. 1991:126).This may be due to the reconstruction or to the damage to the structure caused by the looters.

Area B is located north and east and is on the edge of the hill of Courson D. One juvenile burial with no grave goods or funerary objects. No dates are available due to the amount of rodent disturbance. Area C has large concentrations of cultural debris due to rodent activity or by the digging of a well for servicing the site (Hughes, David T. 1991:128).

The Kit Courson House Site (41OC43)

The Kit Courson site is located approximately one kilometer west of Courson B (41OC27), on the south side of Wolf Creek. Excavations concentrated on prior damage caused by locals who placed a trench along the west wall inside the structure (Hughes & Hughes-Jones 1987:97).

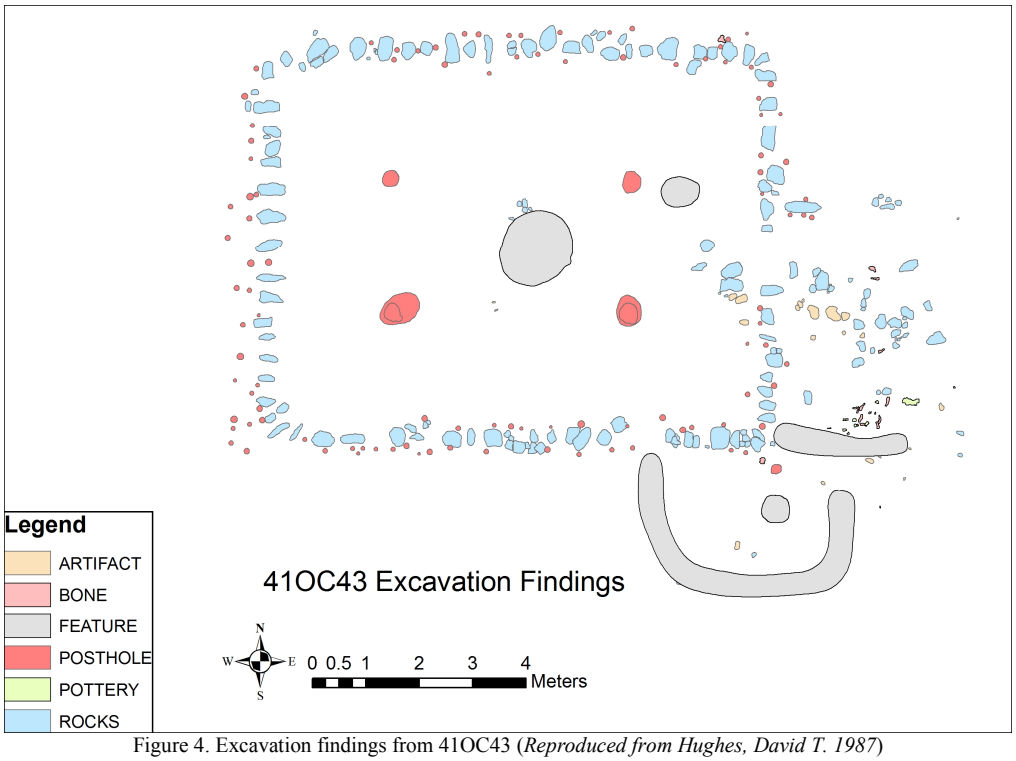

Figure 4. Excavation findings from 41OC43 (*Reproduced from Hughes, David T. 1987*)

The house measured approximately nine meters east-west and seven meters north-south. Orientation of the house is 15 degrees east of true north and the shape is square. The north and south benches extended approximately two meters out from the north and south walls. There was a layer of plaster covering the benches and the vertical face dropped approximately 20 cm to the central floor channel. Plaster covers the west bench that extends into the center and is separated from the north and south benches by minor trenches. The main support posts were in identical positions to those found at Courson B. The hearth is a clay-lined straight-sided pit, 35-40 cm deep and 35-40 cm in diameter (Hughes & Hughes-Jones 1987: 97). The walls measured 50 cm to 1 meter thick, the doorway was distinguished by the compact soil and a break in the rock on the east side of the wall (Hughes, David T. 1991:133). During the 1986 excavations, small post molds found on either side of the rock wall bases supported the theory of the houses having stone foundations with woven wicker walls (Hughes, David T. 1991:133).

On this particular house there was an additional smaller structure added to the southeast corner. Its construction was of rocks and posts and it had its own clay-lined fire pit. The floor of the structure was relatively clean of debris with the exception of the two large broken pots found inside the western side of the structure. Between the north wall of this smaller structure and the extended entryway of the main structure was an area used for processing foods and other materials (Hughes, David T. 1991:133, 135).

41OC1 – Temple Ruin

The Texas Archeological Society further investigated Temple /Gould Ruin (41OC1), and Area A (41OC1A). The excavations conducted by the Texas Archeological Society proved to be a success as several floor features encountered were in good condition (Hughes, David T.

1991:137). Post molds discovered at approximately 50 cm from the base of the rocks and on the insides of the east and west walls are thought to be a part of a structural wall that runs along the inside of the stone base. One large central support post and part of a central hearth, to the southeast of the hearth, a cache pit was found and the well defined trench dug prior by Moorehead in 1920 running through the center of the house north to south. A sample of clay was taken from the fire pit rim and dated using archaeomagnetic dating. The results indicated a date of A.D. 1250 to A.D. 1375 (Hughes, David T. 1991:137)

In 1990, Wichita State University held a field school at the Temple site. The structure as a single room without partitions, three fire pits that included a large central hearth approximately 1 meter in diameter and one located at each of the north and south ends of the structure. The north wall ran at an oblique angle from the west wall giving it an unusual shape, the south wall was not located and it is suspected that it may have been removed during prehistoric times (Hughes, David T. 1991:139).

Settlement Pattern

The basic settlement pattern for the Buried City includes single-room dwellings with no wall partitions, with the one exception, Gould Ruin. The distance between each ruin is approximately between 100 to 200 meters, and the spacing between each group of ruins is approximately 500 meters to 1 kilometer. Occupation of the structures remains unknown. Were they were all occupied at the same time by extended family members or if the structures were occupied individually periodically (Hughes & Hughes-Jones 1987:103).

House Pattern

The house pattern reveals a large, almost square house measuring approximately 8 x 8 meters or 64 square meters. The large caliche boulders help form the bases of the walls which are placed on a mud footing, in some instances evidence of a double pen-wicker wall is exhibited. North and south benches extend the entire length of the structure and are approximately 35 cm above the central channel. Against the west wall is another small bench sometimes referred to as an altar or platform, separated by shallow narrow trenches from the north and south benches. This pattern is different from other Panhandle sites the altar is usually separated from the north and south benches by the large central channel (Hughes & Hughes-Jones 1987:94).

Field Notes of 41OC28 and 41OC29

Latest investigations of Buried City occurred during the 1987 and 1988 field seasons with Dr. David T. Hughes as the Principle Investigator, Dr. A. Alicia Hughes-Jones as the Lab Director, Dr. E Mott Davis and Joan Few as the supervisors and volunteers from the Texas Archeological Society (TAS).

Dr. E. Mott Davis was in charge of 41OC28 during both the 1987 and 1988 field seasons. Twelve days of total excavation for both 1987 and 1988 field seasons, producing sixty excavated squares, see Figure 5 for recorded depths. Field notes express little to no artifacts with context therefore any artifact analysis will not contribute to our understanding of the site. By the final day of excavation in 1987, final notes state there were six days of sterile digging and the rocks they did find were in pilasters. Dr. David T. Hughes used a soil auger on this final day of excavation and discovered that the pot hunters fill was more than one meter deep.

According to level records in unit 41N/194E, a dark stain approximately 50-60 cm long and 10-15 cm wide against the west wall, see Figure 6 for recorded features. Level record suggests this may be the house entrance, the profile for the west wall indicates adobe material in the wall suggesting a "melted adobe wall." It may be possible that this is the entrance to the dwelling as it does face east. In unit 41N/193E a limestone metate and what was a plaster floor turned out to be ant galleries. In unit 40N/193E there are two mottled patches of soil light tan in color with splotches, they are located on the east and west walls and are separated by approximately 35 cm. A bone fragment was located in the east mottled patch.

The excavation of 1988, again Dr. E. Mott Davis was the supervisor of 41OC28 and not much changed during the 1988 field season. One feature noted a foundation of a trench wall in square 46N/187E and a double wall trench in 48N/190E. Final notes state that in unit 46N/184E the wall trench was at the bottom of the unit coming from the east side and ending with a rounded end. In unit 45N/194E, the southern edge of the trench was excavated until it ended abruptly. The northeast corner of the structure was finally uncovered the last day. The tables below represent artifacts from 1987/1988.

Table 1. 41OC28 - Stone

Stone	Total	Primary	Secondary	Tertiary
Alibates	115	1	1	113
Chalcedony	1			1
Obsidian	14			14
Quartzite	3			3
Tecovas Jasper	1			1
Unidentified Chert	5			5
Lithographic Limestone	1			1

Table 2. 41OC28 - Stone tools

	Alibates	Quartzite	Florence Chert	Obsidian	Unidentified Green Chert
Projectile Point	1				
Bifaces/Knives	1	1			
Unifaces/ Scrapers	3				
Retouched/Edge Damaged Flakes	19		1	1	1

Table 3. 41OC28 - Ceramics

Sherd Type	Surface Finish	Frequency
Body	Cordmarked	1
Body	Cordmarked	1
Shoulder	Cordmarked	2
	Smooth	1
	Indeterminate	3
Body	Cordmarked Smooth	1
Body	Cordmarked Smooth	1

Table 4 41OC28 - Bone

	Tortoise/ Turtle	Rodent/Small Mammal	Deer	Bison	Unidentified Scrap Bone
Carapace	2				
Pelvis		1			
Teeth		2			
Mandible		1			
Long bone		1			
Innominate		2			
Ulna		1			
Rib			1		
Carpal				1	
Horn Core					
Scapula				9	
Phalange				1	
Unidentified Bone					713

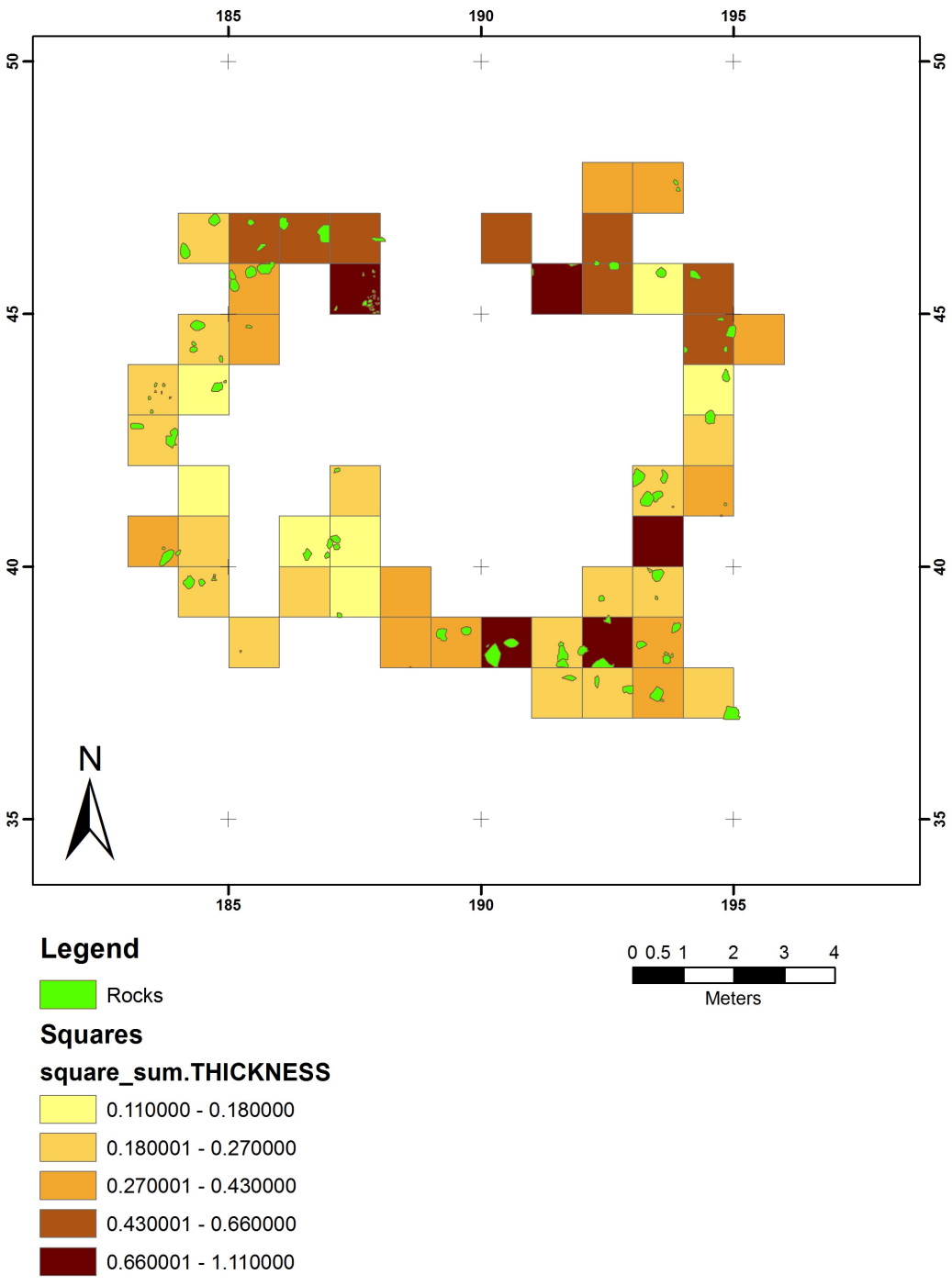

Figure 5. 41OC28 Unit Square Depths

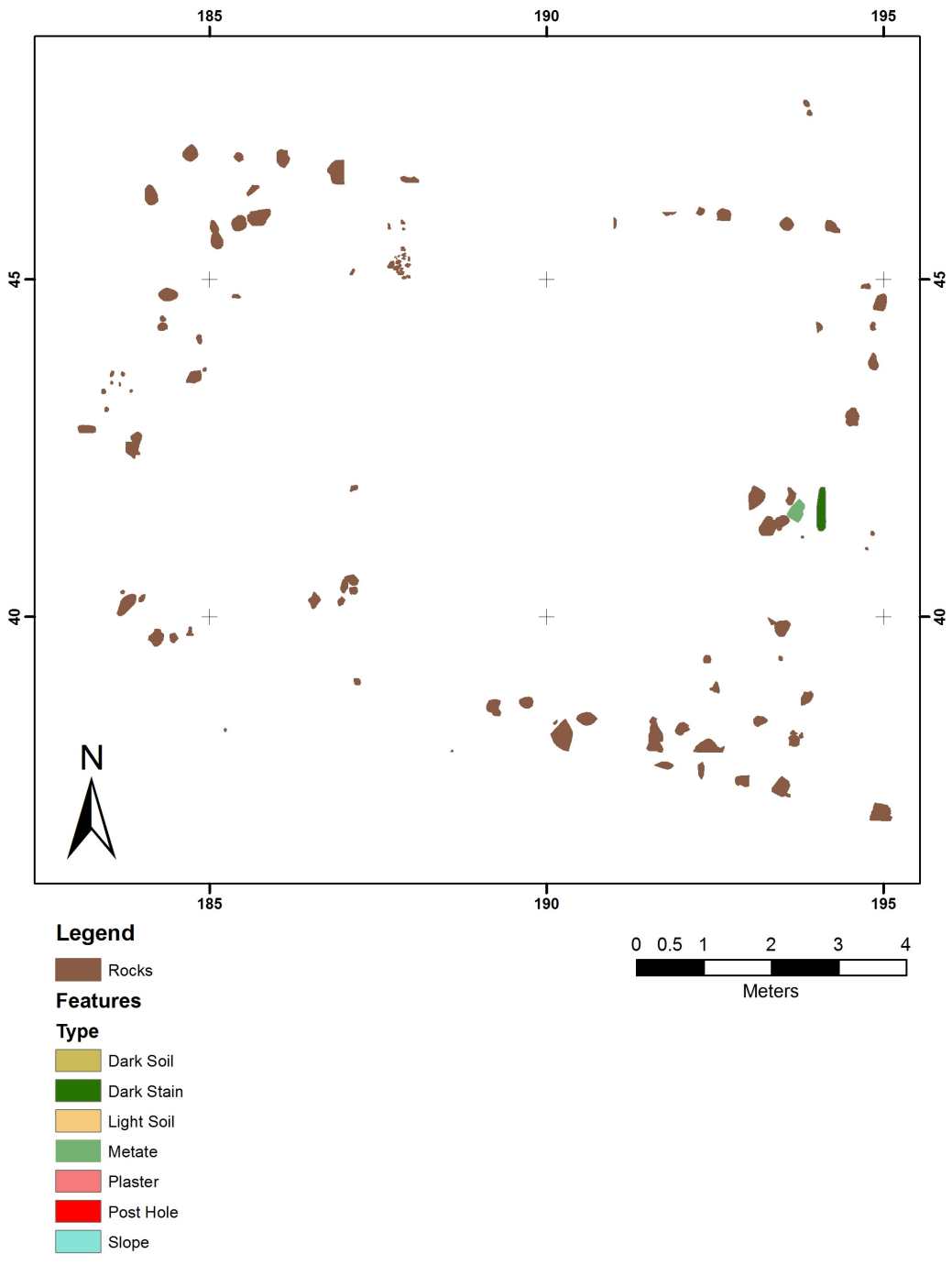

Figure 6. 41OC28 Recorded Features

Examination of 41OC28 in ArcMap reveals a square to rectangular structure, see Figure 7. There is the possibility of an entrance on the east side of the structure as observed by the dark soil stain. Directly to the west of the soil stain in unit 41N/193E a fragment of a limestone metate is visible. Only one retouched flake is marked on the map with few pieces of bone. A possible wall trench in the northwestern portion of the map is in unit's 46N/187E and 46N/186E. No other features noted. This site was mostly destroyed by looters therefore very few artifacts recovered. The map shows an outline of what the structure should have looked like.

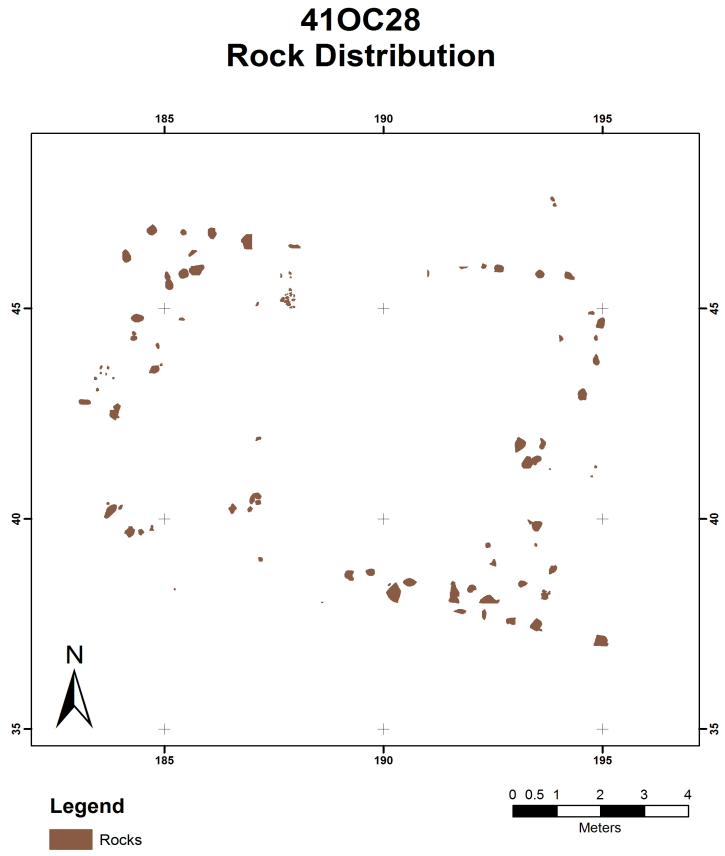

Figure 7. 41OC28 House Outline

Joan Few was the supervisor for 41OC29A during the 1987/1988 field seasons for a total of twelve days with fifty-nine units excavated, see Figure 9 for depth totals. The 1987 field notes discuss appearance of site surface as a large house like those previously excavated.

The structure itself lies within the units of 133N/287, 130N/298E (NW corner), 123N/296E (SE corner), 130N/298E (NE corner) and 125N/287E (SW corner). As excavations continue, more rocks appear in alignment forming the walls of the structure. In unit 125N/297E, a large cairn is within the southeast wall. The perimeter of the structure was measured 12 meters (E-W) by 8 meters (N-S) or approximately 100 square meters. In the northwest section of the site, unit 122N/296E, there is a clearly defined northwest corner with a posthole and plaster. Rocks around the posthole are leaning towards it as if giving the post support. Unit 127N/287E shows a trench fill between the rear platform and the sidewall platforms. As excavations continue, plaster benches are located as well as definition of the walls of the structure.

In the center of the site, pothunters have produced more damage than originally thought. A hole goes straight down the unit 129N/292E. The reopening of unit 130N/297E was to examine the "rock filled" trench in the west wall for further clarification and to expose the plaster bench in the area. In unit 126N/297E, the eastern passageway or doorsill may be located here. According to the end of week supervisor's notes, the house faces east at 93 degrees and is a parallelogram with a west wall trench that is parallel to the eastern entrance. Artifacts and the rock indicate that activities occurred along the north wall at the eastern end of the structure.

From the 1988 excavations, the following notes are from the supervisor's log.
In unit 129N/287E, the exposed plaster looks like it is part of a sloping bench. A rock cairn inside the southeastern corner is part of the southeastern wall. Two very large rocks identified as

Rock #C and Rock X were found in the cairn and are thought by J. Few to have been the anchoring stones for the entryway, and a doorsill may have been exposed in unit N125/297E.

Feature 88-2 is a clay-plastered floor (hard, level, yellow and red clay). Where the apparent entryway is located just south, a wall trench is situated above a line of plaster. Unit's 125N/297E and 124N/397E indicate several plaster lines below the rock line of the east wall. There is also evidence of renovation and/or multiple non-consecutive occupations or both. The center trench units are still removing the pothunter's soil where a possible hearth may be located.

Feature 88-3 is a hearth found in the center of the unit, 127N/292E on a line between the northwest corner and southeast corner. Along the east wall, the door ramp is off center by 10 cm to the south. The door ramp does not align with the fire hearth and the back wall.

The final day of notes indicate that feature 88-1, the cairn, is not a burial, however, it may have been an infant or premature infant burial as there were small human bones present plus small animal bones and scapula fragment. Another suggestion is that it could be the result of trash pit fill used as wall fill and the scapula used as a digging stick. Another discovery is the doorsill is not real. 127N/292E is the excavated hearth area, 127N/293E is the hearth, and 128N/292E is an ash line and rock that may indicate a pot cooking area.

Artifact lists are below, as there were minimal artifacts there is no context and any analysis will not contribute to our understanding of this site.

Table 5. 41OC29 - Stone Tools

	Alibates	Niobrara Jasper	Unidentified Chert	Obsidian	Opalite	Tecovas Jasper
Projectile Points	10	1	1			
Bifaces, Knives And Drills	6					
Unifaces and Scrapers	1					
Retouched or Trimmed Flakes	47			1	3	1
Total	64	1	1	1	3	1

Table 6. 41Oc29 - Ceramics

	Body	Rim	Neck/Shoulder	Indeterminate	Spalls	Total
Cordmarked	218	3	3	35		259
Smoothed Over Cordmarked	45	1	1	21		68
Plainware/Smooth Surfaced	44	4	3	11		62
Indeterminate Surface Finish	23	1		27	2	53

Table 7. 41OC29 - Lithic Debris

	Primary Flake	Secondary Flake	Tertiary Flake	Blocky Debris	Cores	Flaked Cobbles	Undetermined
Alibates		24	2009	18		1	
Chalcedony			56	17	4	2	
Conglomerate			1				
Dakota Quartzite			6				
Dionite						1	
Jasper		2	2				
Niobrara Jasper	1	7	51	1			
Obsidian			15				2
Opalite			406	29			
Opalitic Chalcedony					4		
Quartz Crystal	1		7	1			
Quartzite	4	9	34	8		1	
Sandstone			1				
Tecovas Jasper		1	21				
Unidentified Chert		3	62	3			
Unknown Material		1	18	1			

Table 8. 41OC29 - Bone debris

	Awls & Piercers	Burned Bone Scrap	Other Modified Bone	Unmodified Bone	Fish, Reptile, & Amphibian	Non-Mammalian
Deer	1			45		
Bison				55		
Coyote				3		
Mussel				2		
Fish					1	
Snake					35	
Turtle					85	
Unidentified	1	5		98		
Other			3	5421		3
Total	2	534	3	5624	121	3

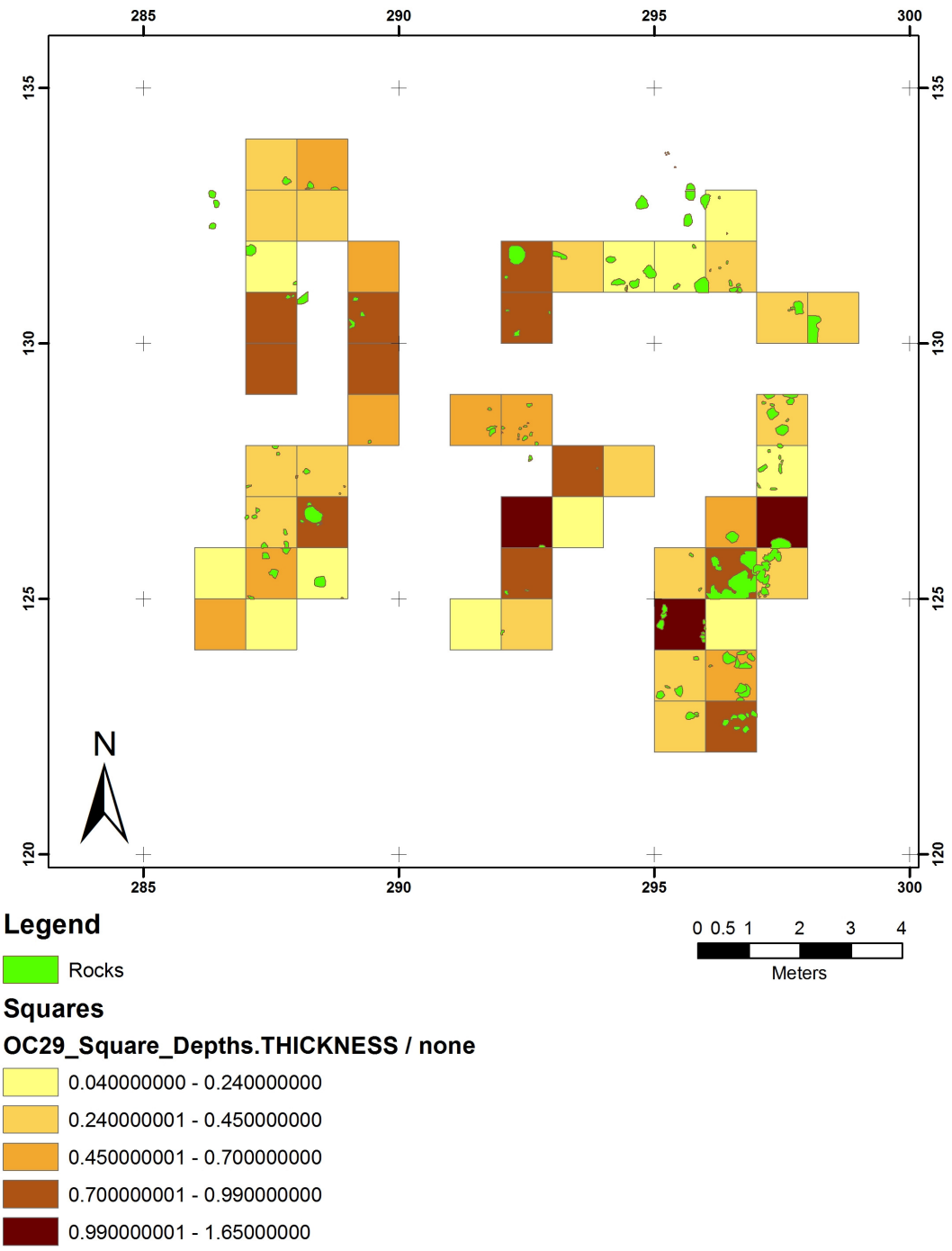

Figure 8. 41OC29 Unit Square Depths

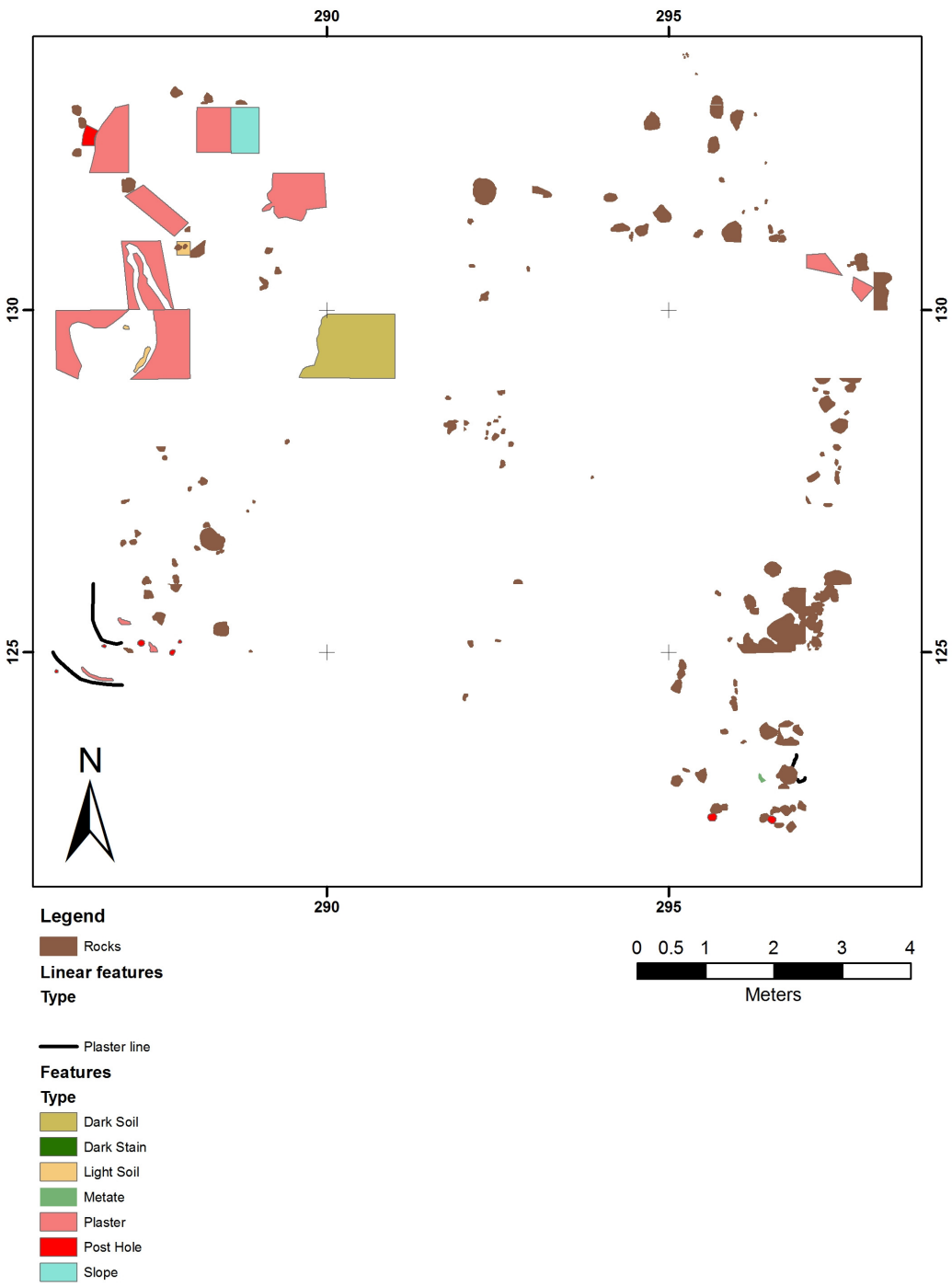

Figure 9. 41OC29 Features

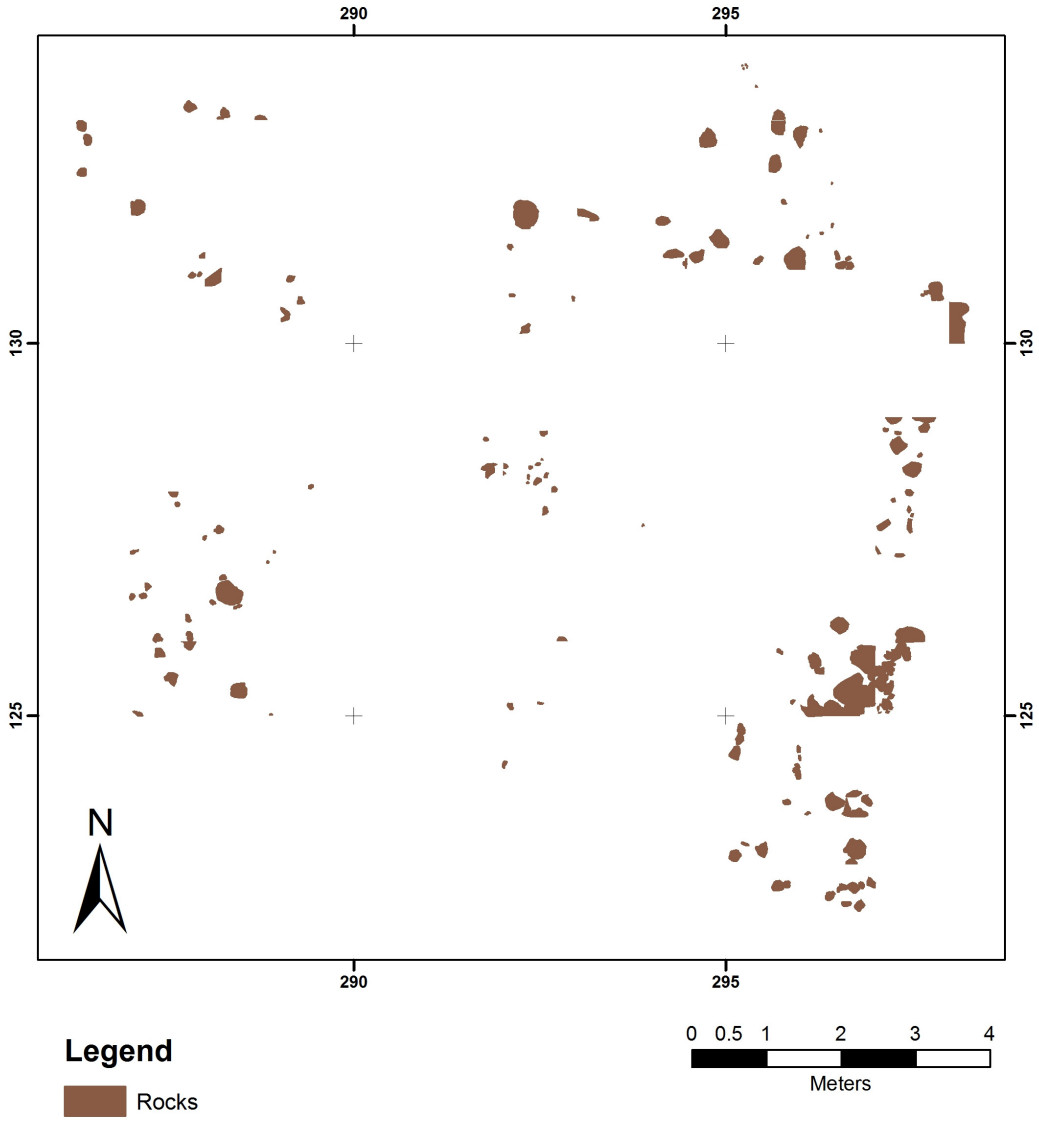

Figure 10. Outline of 41OC29 House

Interpretations of ArcMap 41OC28

The outline of the structure is clearly rectangular. At the center of the east wall there is a dark stain, the possible entrance to the house and directly behind this is a fragmented metate, less than ten artifacts are on the map.

The site definitely fits the Buried City pattern. The size of the dwelling itself is approximately 7.5 m (N-S) x 11.5 meters (E-W), (86.25 sq meters), and the foundation is of large caliche boulders and not the typical Antelope Creek phase slab foundations. Due to the destruction caused by pothunters, much of the site is destroyed and the artifacts pilfered. Again, any artifacts recorded are not in context and inference about work areas should be disregarded.

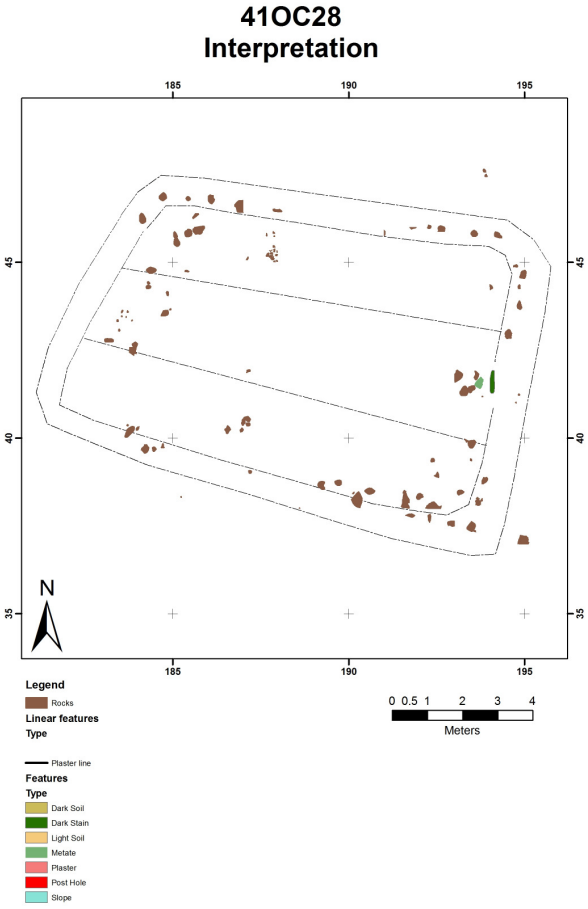

Figure 11. Interpretation of possible outline of 41OC28

Interpretations of ArcMap 41OC29

ArcMap reveals a rectangular structure that measures approximately 8 m (N-S) by 11 m (E-W), 88 sq meters. A line of rocks going east to west defines the north wall. There is a concentration of plaster floor mostly in the northwestern half of the structure. A posthole is visible in the northwest corner, according to the field notes, the boulders next to this posthole appeared to be placed there purposefully for additional support. There is a dark sandy soil stain in what would appear to be the central floor channel. Perhaps this stain is from a hearth. Plaster patches against the west wall extend two meters out from the west wall. Perhaps the plaster is the platform/or altar area. There is a plaster bench in the northwest corner and a sloping platform in front of the west wall.

The southwest area has a definite plaster trench-like curve in the southwest corner. A small posthole is located outside of the trench, in the southwest corner, inside the trench is a plaster layer that is following the curve of the trench and a small posthole that is diagonally across from the first posthole (towards the northeast). Three other postholes are to the east of this second posthole. If a line is drawn from the interior trench line towards the east wall, every other posthole is either inside or outside the trench. This could possibly be a double wicker-pen wall.

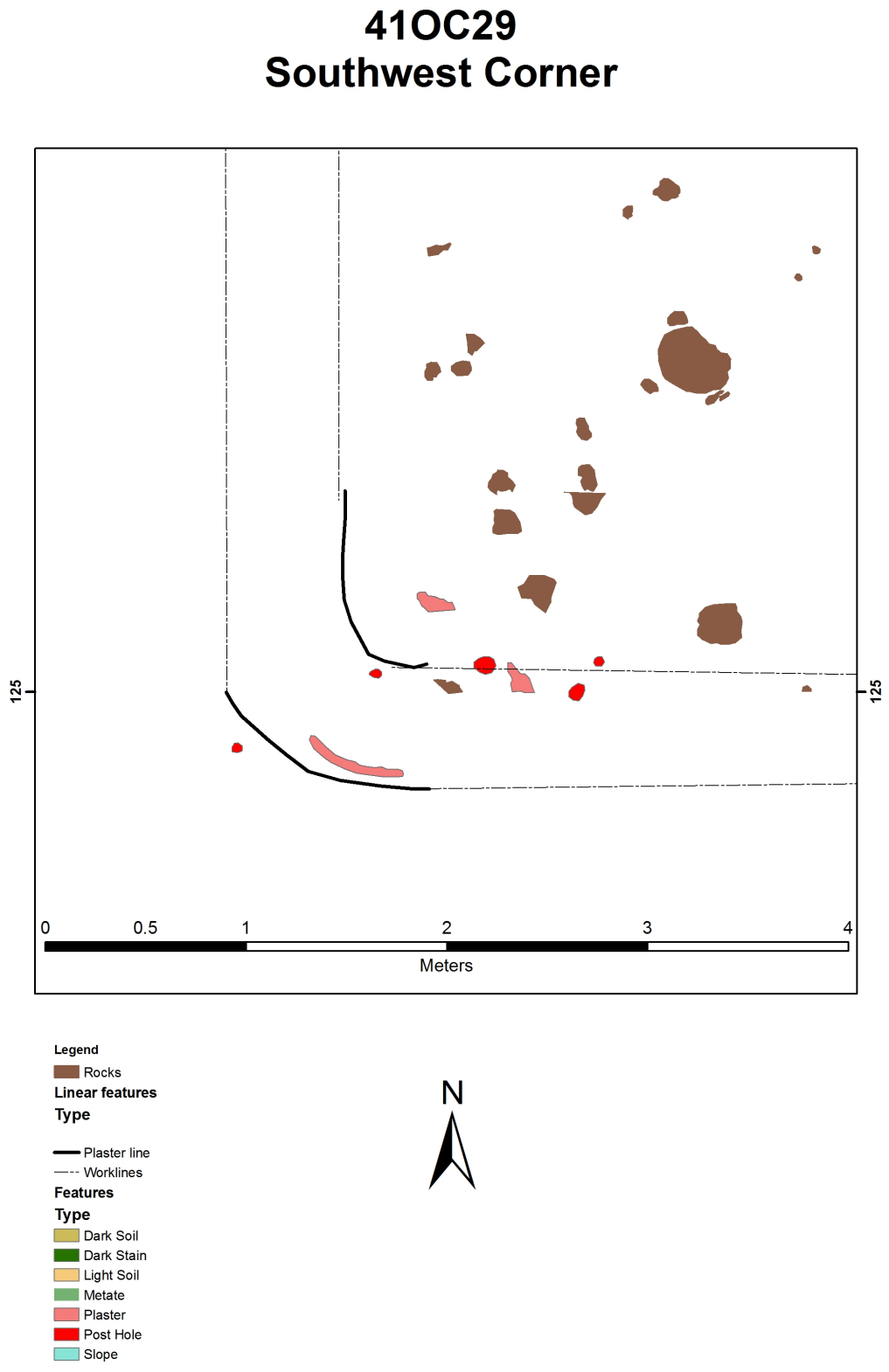

Figure 12. 41OC29 Southwest Corner showing possible double-pen wicker wall

The southeast area has two definite postholes that are located outside of the traced trench lines. The postholes are located on an east-west axis and directly to the south of the western most posthole is an area of charcoal flakes. To the north of the postholes is a metate fragment. A plaster line runs approximately 0.5m along the east wall. This area may in fact represent a separate structure with its own hearth, similar to the structure at the Kirk Courson Ruins, 41OC43. The interior of the structure in the southeast area indicates a large mass of rocks; I suspect this was the cairn burial. The entryway is not discernable, as there appear to be a couple of gaps in the boulders and neither one of them align with the central floor channel or west wall.

There are clusters of ceramic sherds in the northeast quadrant against the east wall. There are three clusters of fauna in the northern half only, but scattered pieces outside of the structure, in the southeast, as well as in the possible separate structure. A cluster of opaline flakes and opaline core are in the northwest corner. A small cluster of flakes with fauna fragments are near the center of the north wall. Another small cluster of fauna and chipped stone is in the northeast corner.

Looking at the ArcMap, the center of the structure is almost completely empty. As noted in the field notes, the center of the structure was the most effected by the looters, therefore many of the artifacts may not be in context and inferences regarding work areas or otherwise should be disregarded.

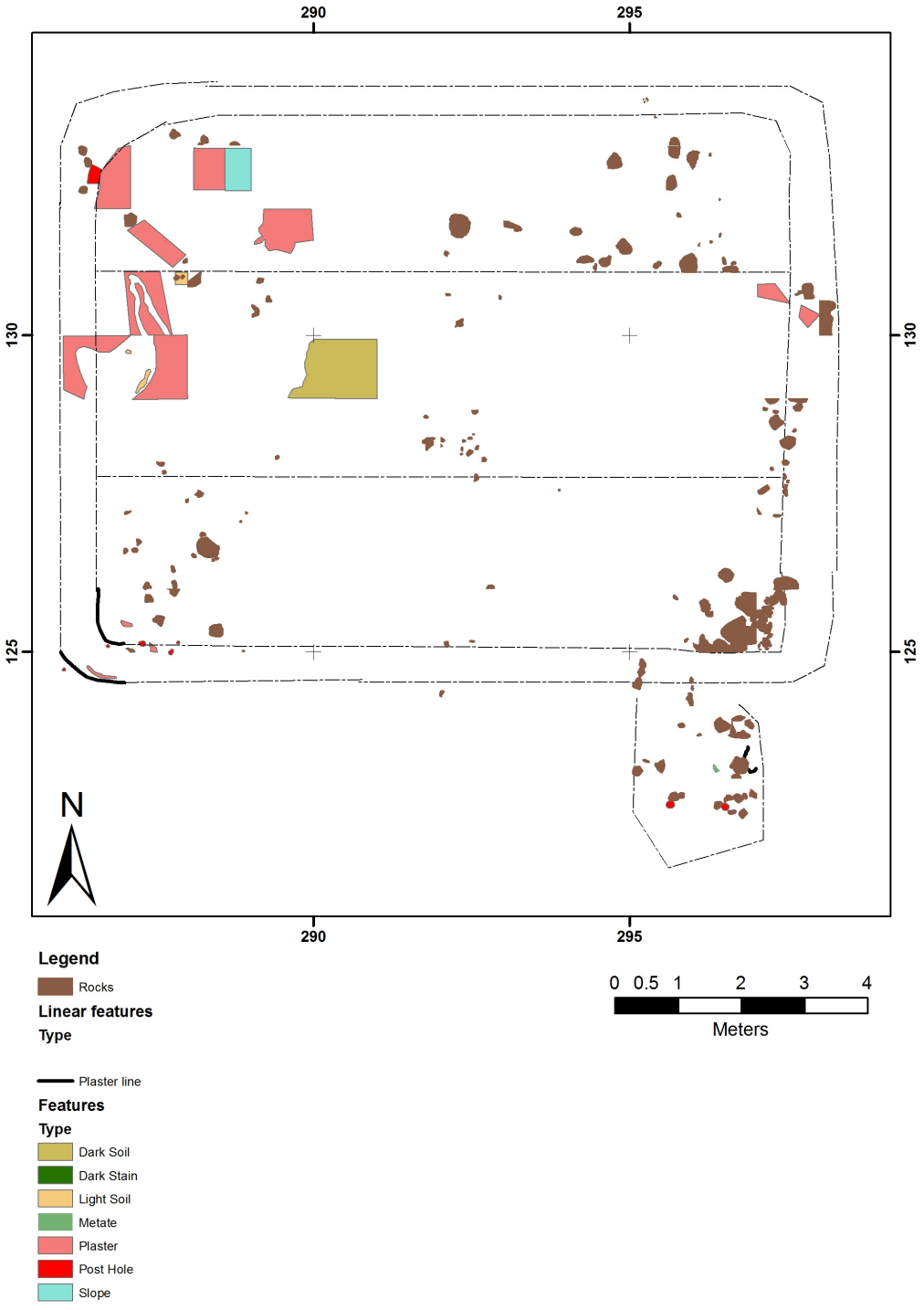

Figure 13. Interpretation of 41OC29 House

CHAPTER 3

REGIONAL COMPARISONS

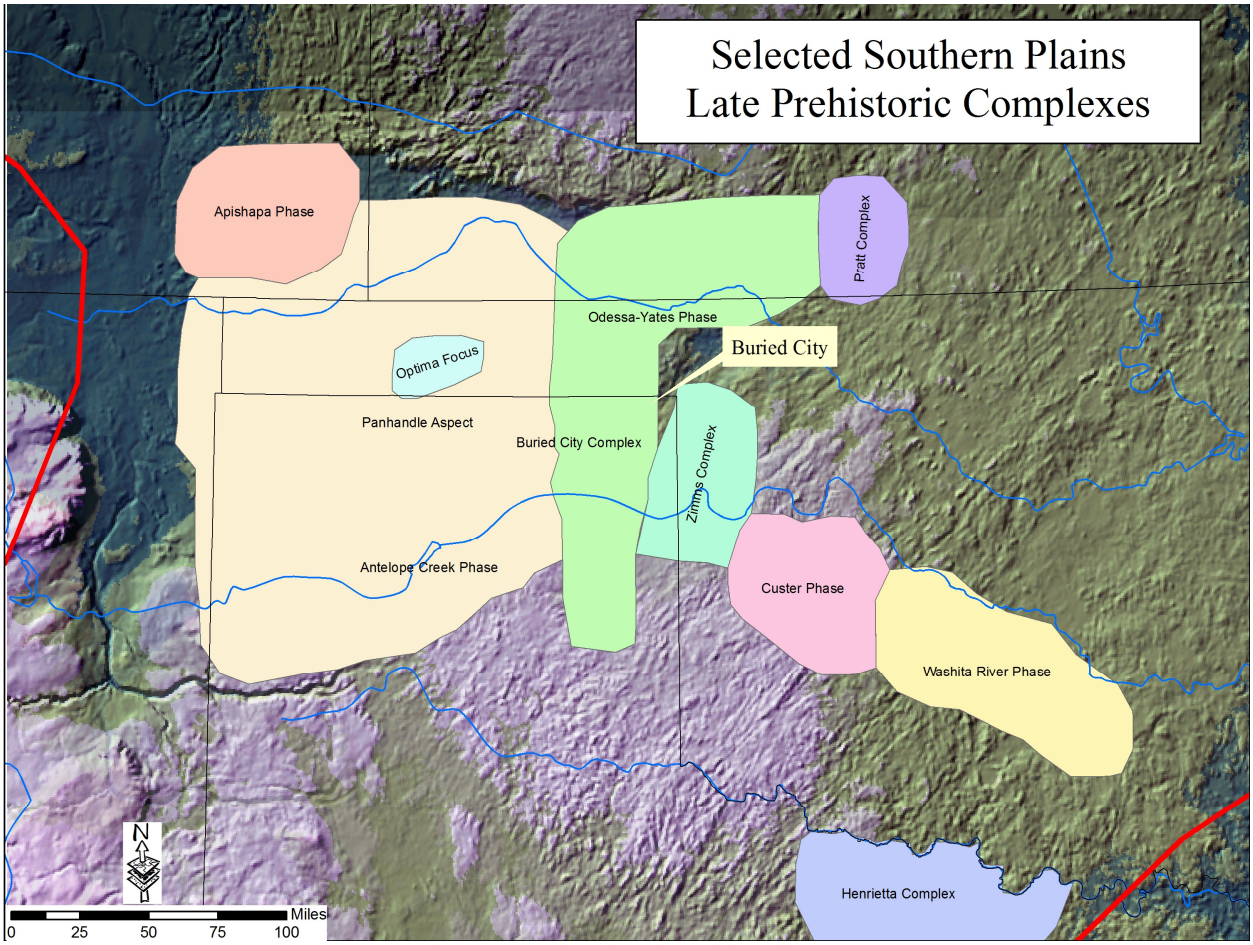

Figure 14. Location of Southern Plains Villages

Antelope Creek

The ruins in the Texas Panhandle have had many names to describe them. "Panhandle Culture," "Slab-House Culture," "Panhandle Phase," "Canadian Valley Culture, etc.," to describe the stone ruins. Krieger suggested Antelope Creek Focus be used for the similarities in stone work; and the Panhandle Aspect for all the closely related artifacts in the northern Texas Panhandle and surrounding areas such as northeast New Mexico, southeast Colorado, and western Oklahoma to form foci.

Krieger then defined the Antelope Creek focus based on architectural features including artifacts from the Antelope Creek Ruin, Tarbox, Saddleback, Alibates, and Ruin 55, all single level multi-roomed dwellings (1946:9-10). A typical Antelope Creek house is rectangular or square and oriented in the cardinal directions. Interior features include plaster floors and walls, depressed central floor channel, benches along the north and south wall running the entire length of the structure. In the depressed floor channel would be a clay-lined fire pit, four central roof supports, and an extended entryway leading away from the east wall. Opposite the entryway and against the west wall is a small plastered altar with a rounded rim or curb.

The extended entryway originally thought of as a tunnel or ventilator had the entry to the house through the roof via a ladder, similar to the Pueblos. Large slabs of stone inside the structures originally served two purposes, the first as a deflector since the position was between the tunnel and fire pit and second as roof hatch cover. This second purpose is unlikely, as the roof would have collapsed from the weight of the stone. Attached to the outside, smaller rooms known as anterooms served as storage facilities, these were located on either side of the extended entryway. As no entryway led into the anterooms, Krieger suggests that entry was through a roof hatch (1946:43). A discussion with David T. Hughes (personal communication 3/31/09) has shed some light on the entrance to these two storage units. It may be possible that the entryway to the anterooms were somehow accidentally concealed when the site was being reconstructed during the 1930s.

The wall construction for Antelope Creek houses described by Hobbs has four variations. The first is two vertically placed slabs with mortar and rubble used as fill and another slab placed on top horizontally. The second is a single row of slabs coated heavily with mortar to hold them

together. Third, the use of horizontal slabs in one corner or along one wall held together with mortar and four, small poles used as a wall then covered with clay (Hobbs 1941:123).

The differences between the Pueblos and Antelope Creek are most noticeable in the architecture. What are missing from the Pueblos are the vertical slab wall construction, central depressed floor channel, extended entryway, platform against the west wall and benches along the north and south walls. Krieger believes that certain features from Antelope Creek houses originated in the Southwest and the people of Antelope Creek transformed them to suit their needs (Krieger 1946:72)

Christopher Lintz

Christopher Lintz's dissertation examines intra-site architecture and community patterning and further discuses architectural variations, interior features and the various types of architectural units. To define units, Lintz used 61 attributes and variable observations on 223 architectural units at 28 sites used in his study. Criteria used were shape, size, length-to-width ratio, unit preparation, wall type, doorway, roof configuration, interior features, channels, platforms/benches (Lintz 1984: 145).

Lintz's six unit types show distinct floor sizes, the definition of units are "very small," units that cover less than 1.5 square meters. The "small" units ranging in floor space from 1.6 to 5.0 sq meters. The "medium" units size range from 5.0 to 12.0 sq meters. The "Large" sized units have at least 12.0 sq m floor area and are contiguous room blocks. The "very large" units range in size from 23.0 to 40.0 sq m and the "extremely large" units range in size from 40.0 to 90.0 sq m of floor area (Lintz 1984:141-144).

Unit Type 1:

Unit Type 1 is one of the most common at Antelope Creek and has two variations. The first is an isolated freestanding unit and the second is a dominant unit within a contiguous group. Size ranges from large to extremely large (12.6 to 90.0 sq meters) they are rectangular with rounded corners and oriented in the cardinal directions. Interior features include a depressed central floor channel running east to west, raised benches along the north and south walls, extended entryway away from the east wall, an entry step, entry collar, centrally located hearth in the floor channel, and two to six support posts along the channel margins. The In the corners of the benches are where the storage pits and cists are located. Against the west wall is a platform or altar that recesses into the wall or extends into the floor channel (Lintz 1984a: 145-146).

The widths of the benches measured approximately 1.71 ± 0.18 meters in width (Lintz 1984a:160). Patterson (1974:218) examined the skeletal remains from Antelope Creek and measured the height of the adult males who were approximately 1.68 to 1.69 meters tall. From this and archaeological data Lintz concludes that the bench areas are sleeping quarters and storage areas, the central channel for cooking, manufacturing of tools, processing foods and the platform against the west wall may have been a household altar (Lintz 1986:257). The wall base description is very similar to Hobbs' however; Lintz has included a single row of vertical slabs, foundations without any internal adobe support, reinforcement of a single or double row of vertical slabs with posts (1984a:149).

Mentioned earlier, Krieger reported that entry to the structure was through the roof instead of the extended entryway. However, evidence from Ele and Jewel Baker supports entrance through the extended entryway. At Alibates 28, Unit 7 they reported the extended entryway was lined with stone and worn smooth due to crawling through to the interior (Baker &

Baker 2000:107). Lintz also supports entryway at ground level, as the tunneled entryway is large enough for an adult to crawl through and there is no evidence for ladder supports (Lintz 1984:153).

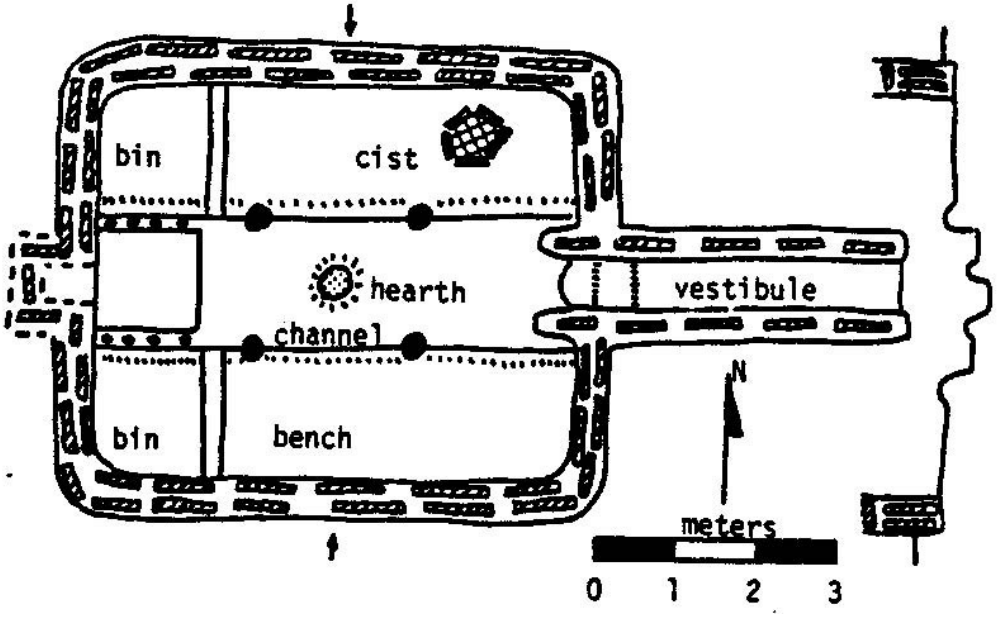

Figure 15. Antelope Creek Unit Type 1 (*Reproduced from Lintz 1986:90)*

Unit Type 2:

Unit Type 2 is similar to Unit Type 1 only smaller, 11.32 to 39.60 sq meters, and exhibits the extended entryway and central hearth. Absent are the central depressed floor channel, benches against north and south walls, the altar against the west wall and the floor bins. Stone bases are either single row of vertical slabs or double row of vertical slabs with rubble-filled cores (Lintz 1984a:169-171).

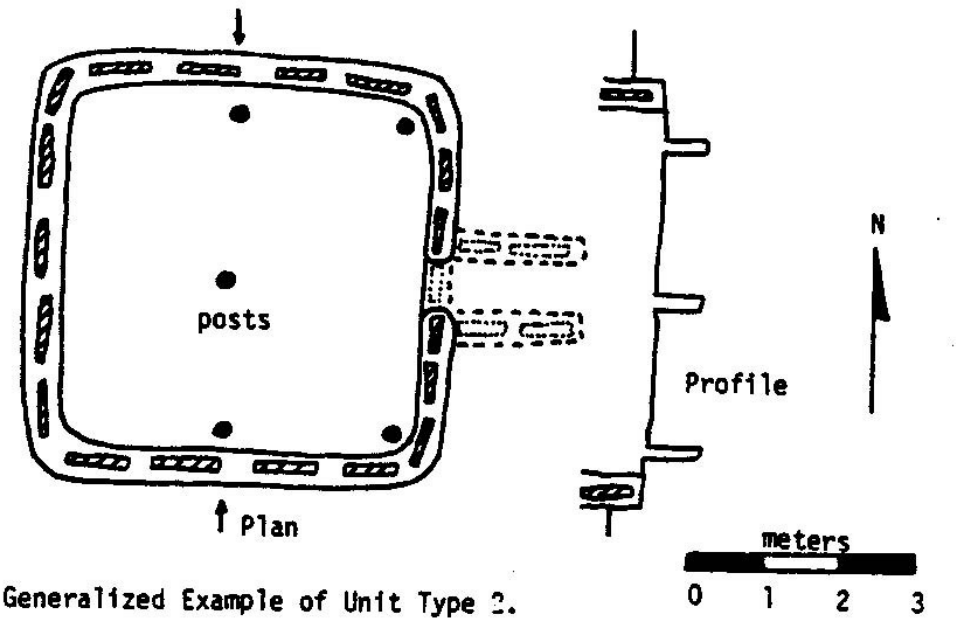

Figure 16. Antelope Creek Unit Type 2 (*Reproduced from Lintz 1986:103)*

Unit Types 3-11 are much smaller and interior features present in Unit Type 1 are absent. The units exhibit variable shapes and can be considered storage units or rooms of unknown function.

Community Patterning at Antelope Creek sites:

Lintz's community patterning at Antelope Creek examines the room blocks as a collective then examines the individual structures. Six aggregate types reflect the multiple household groups on a north-south axis, the individual household clusters and the separate subordinate components of the household clusters (Lintz 1984a:223, 226). The criteria used to detect this patterning is the presence and number of dominant rooms (Unit Types 1 or 2), subordinate rooms (Unit Types 3-6, 8, 9), and pits or cists (Unit Types 7, 10, 11).

The three types of sites determined are the sub-homesteads, homesteads, and hamlets. These sites further divide into simple to complex depending if there are subordinate rooms (Lintz 1984a:245). As the structures of Buried City are Unit Type 1 and according to the data, Lintz has presented, Buried City is included as a Complex Homestead. The Complex Homestead definition includes a single dominant room with one or more subordinate rooms with features reflecting a single household (Lintz 1984:247).

The temporal variation is visible with the shift in architecture at Antelope Creek, for example, the central floor channel is present throughout the entire phase, but the structures shift from the large contiguous room blocks to the extremely large isolated room structures that increase in size from 23.53 m ± 12.99 to 32.65 m ± 9.79. Another modification is the use double rows of vertical slabs for the large contiguous structures to single row of vertical slabs for the isolated room structures with an increase in interior roof supports as the room size increased, and the threshold collar is replaced by a fan-shaped sill and ridge. What has not changed is the central hearth, recessed platforms and interior pits and cists (Lintz 1984:310)

Beardsley et al. identify seven types of community patterning. Buried City fits in as a semi-permanent sedentary community. According to Beardsley et al., this pattern identified a village that has established itself in consecutive locations and occupied for several years. The population is stable, sedentary, and only able to move the entire village periodically. Population density is typically low, between 500-1000. Each village is independent, self-sufficient, and friendly with other villages. The social organization is either clan or moiety including extended family. As for the patterning of the houses, they are patterned in their relationship to one another this is repeated from site to site (Beardsley et al. 1955:140-141). People that are semi-permanent sedentary depend on exploiting local plants and animals they eventually exhaust the local food

resources which in turn keeps the village from settling permanently in one area (Beardsley et al. 1955:151).

Before Christopher Lintz commenced on his work in Antelope Creek proper, the definition of the Antelope Creek focus had been amended to include single–roomed dwellings due to the excavations carried out by F.E. Green in Potter County, Texas (Lintz 1984b:327). During his work, Lintz defined the Antelope Creek phase in 1985 to narrow the area the Antelope Creek focus had included. He defined the Antelope Creek phase within a fifty-mile segment of the Canadian River Valley of Texas. As he clearly states, "… most recent authors tend to view the stone slab sites in the Oklahoma Panhandle as an extension of the Antelope Creek phase which was formally defined in 1985 for sites within only a 50 mile segment of the Canadian River Valley of Texas (Lintz 1986: 42, 2003b:25)." If this is the case then any other sites outside of the fifty-mile realm cannot not to be considered as part of the Antelope Creek Phase. This leaves out the Buried City and many others that have fallen under the Antelope Creek phase taxonomy in the last few years.

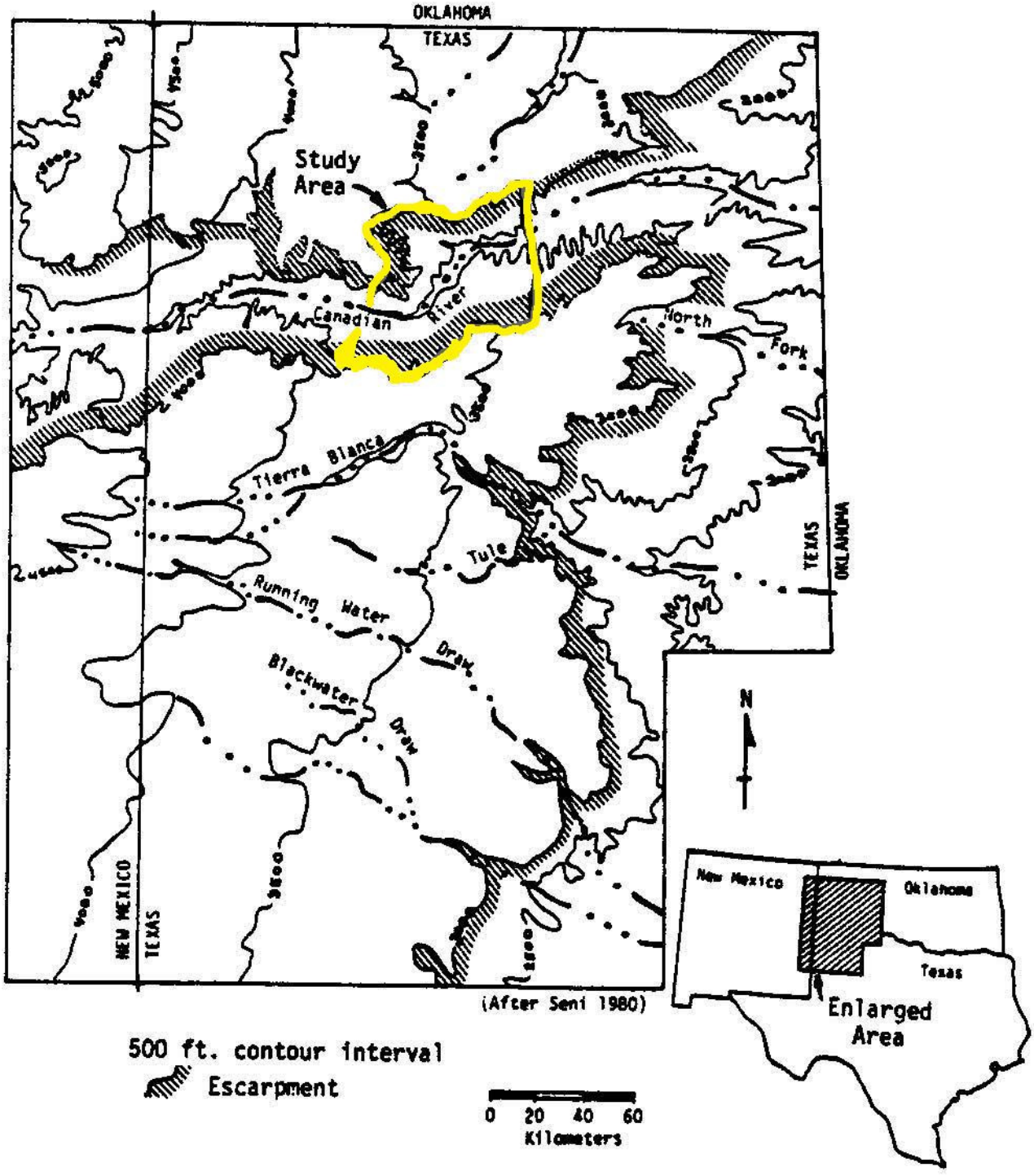

Figure 17. Antelope Creek Proper (*Reproduced from Lintz 1986:40)*

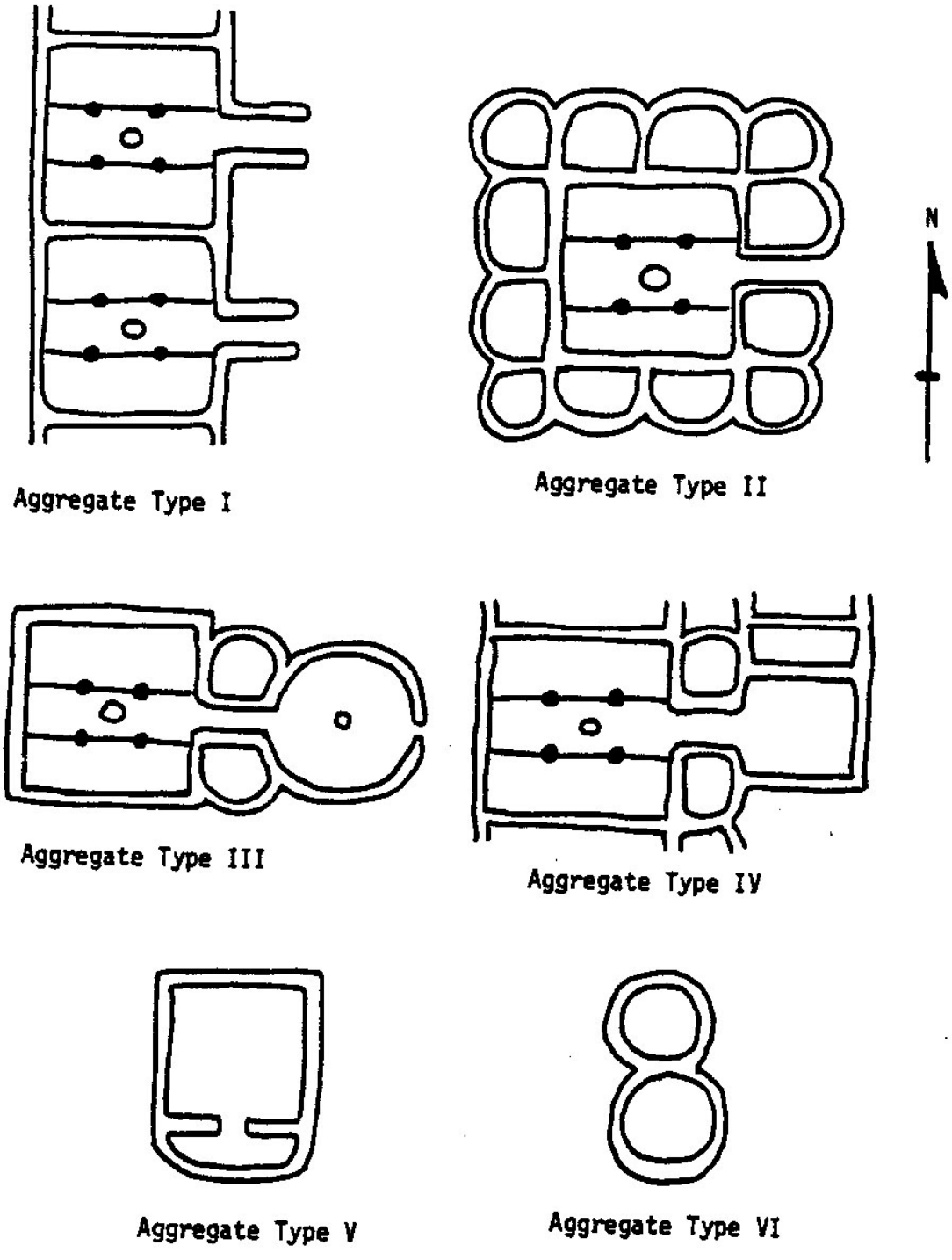

Figure 18. Room Block Aggregate Types (*Reproduced from Lintz 1986:135)*

Optima Focus

The Optima Focus of the Panhandle Aspect is represented by one archaeological site in the Oklahoma Panhandle, the Stamper site. The site is located approximately two and one-half miles south of the town of Optima on the south bank of the North Canadian River in Texas County, Oklahoma. The Stamper site is located on the first terrace of the North Canadian River overlooking the river valley (Watson 1950:10).

Structures at the site are all single units rectangular to square in shape with square and rounded corners, and anterooms. Sizes range from 2.4 x 3 meters, 4.8 x 6.4 meters to the largest structure measuring 9.7 x 11.6 meters. Units contained sub-floor burials, few artifacts and a wall base that is different from Antelope Creek (Watson 1950:13). Structure 2 also exhibited the platform/altar that is common in Buried City, it is located against the west wall and is approximately 1.8m long and 2.1 m wide, its height is much shorter than those found in the Texas Panhandle (Watson 1950:20). There is a strong possibility of an extended entryway, Watson describes the construction as parallel rows of vertically placed slabs, but orientation and to where they lead to is unknown (Watson 1950:23).

The wall bases are of two different styles, the first is the use of caliche slabs held together with adobe, the second used irregular shaped slabs placed vertically in a single row. The caliche slabs used were approximately one and a half feet wide, thirty inches high, and five inches thick set in a shallow trench. The gaps between the slabs were then filled with dirt, caliche and adobe mix. Reinforcement of the base was with extra adobe. Room 2 or structure two has a unique foundational base; the slabs were in two parallel rows topped with horizontal slabs. This was found at the north, south and east walls, possibly used as reinforcement for the larger structure (Watson 1950:14, 17).

Watson found enough differences between Antelope Creek and the Stamper site that she concluded that the Stamper site should be placed in its own focus, the Optima focus. The most defining factor being the units at the Stamper site are all single units where as at Antelope Creek they are multi-roomed dwellings (Watson 1950-53-54). Unfortunately, for Watson, later research proved that the Antelope Creek and Optima focus traits were not so different after all (Lintz 2003b:25).

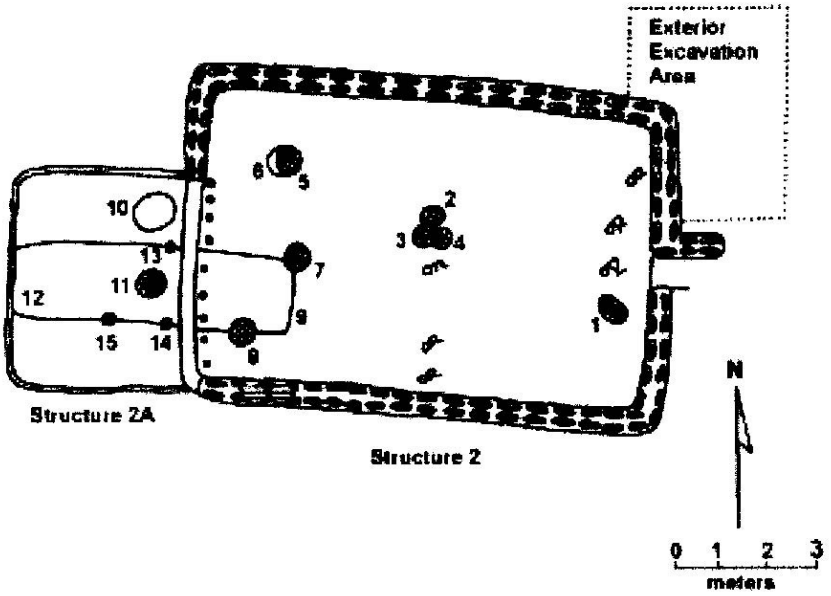

Figure 19. Stamper Site Structure (Reproduced from Lintz 2003c:20)

Custer Phase: A.D. 800-1100

Custer phase villages occur along the Washita and Red rivers or their tributaries in western Oklahoma (Baugh 1982:39). Architecture for the phase is limited to three houses at the Goodman I site and the Mouse site. The houses are of wattle-and-daub with posts used as wall supports, a centrally placed hearth, rectangular with rounded corners, roof made of thatch but no discernable entryway. The size of the structures range from 4.5 to 7.2 meters the largest measuring 172.5 square meters at the Goodman I site and the smallest being 85.5 square meters

at the Mouse site. Structure 1 at the Goodman site also had a raised platform in the northwest corner that was approximately 2.4 square meters, similar to the Buried City platform/altars (Hofman 1984:295).

Hofman argues that the Custer phase may have contributed to the Panhandle aspect in respect to the cordmarked pottery, the Plains Village artifacts and the rectangular shaped houses and, he feels that the platforms found at Custer phase houses may be ancestral to the platform/altars in the Panhandle aspect structures (Hofman 1984:303).

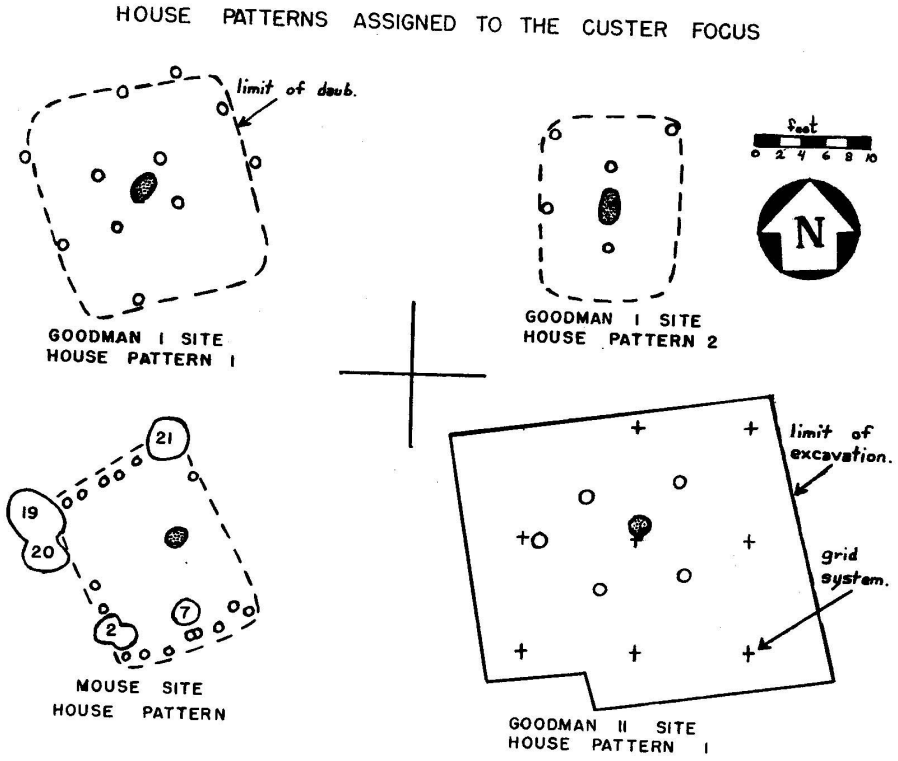

Figure 20. House Pattern for Goodman I Site – Custer Phase (*Reproduced from Lintz 1974:32)*

Washita River Focus: A.D. 1150-1375

The Washita River focus is located near the central portion of Oklahoma along the Washita River Valley and its tributaries, and along the South Canadian River (Bell 1984:307). Houses are square to rectangular in shape and are made of wood and daub. The interior floor size ranges from 40.87-78.0 square meters. The interior features are roof support posts, cache pits, hearth and occasionally post holes. Construction of the walls is made of wooden posts placed about 45-75 cm apart and the gaps filled with sticks, grass and daub and clay plastered over the fill. The roof was made of grass thatch placed on small poles that supported by the centrally located roof supports (Bell 1984:312).

The McLemore site is the only site having a complete house pattern. It was rectangular and measured 6.71 x 7 meters and had several pits dug into the floor presumed to be of later dates. One large central roof support and the outer walls contained twenty-seven upright posts. Although no hearth was found, in the southwestern end of the house a large area of ash was found. The construction was of wattle and daub, no clay floor and no obvious entryway (Pillaert 1963:6, 42).

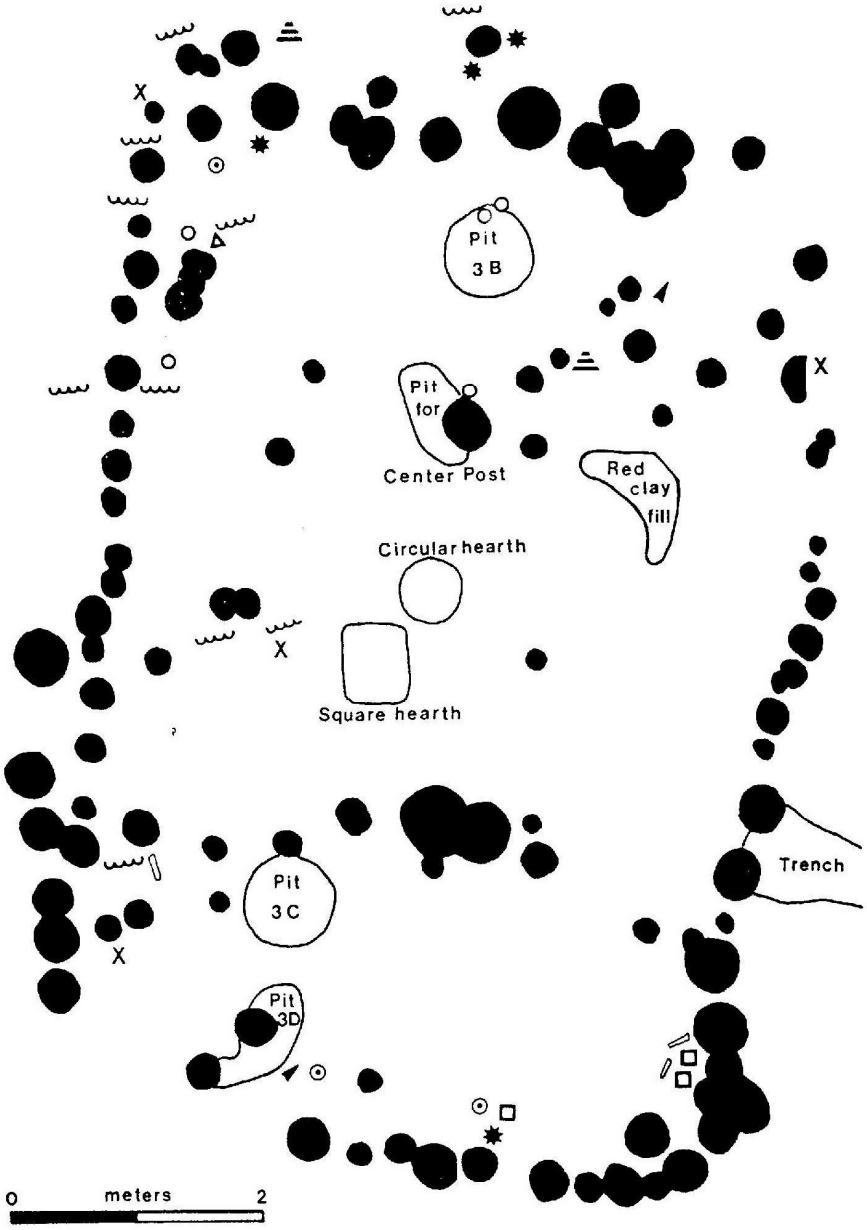

Figure 21. House 3 from the Arthur Site a Washita River phase structure (*Reproduced from Brooks 1987:51)*

Zimms Complex: A.D. 1250 – 1450

The Zimms Complex is located in Roger Mills County, Oklahoma. The typical dwelling is semisubterranean with rounded corners, approximately 6.1 x 6.4 meters, a central depressed floor channel containing a hearth and pit, raised platforms and two interior support posts. The central depressed floor channel measured 15 cm below the surface and extended the entire length of the structure in an east to west orientation. Against the west wall is a platform that projects into the central floor channel, measuring 1.7 x 2.1 m. Opposite on the east wall, is a smaller platform or step that is located at the entryway. Roof construction is of thatch and the walls are of pole construction covered with wattle and daub (Flynn 1986:130-132).

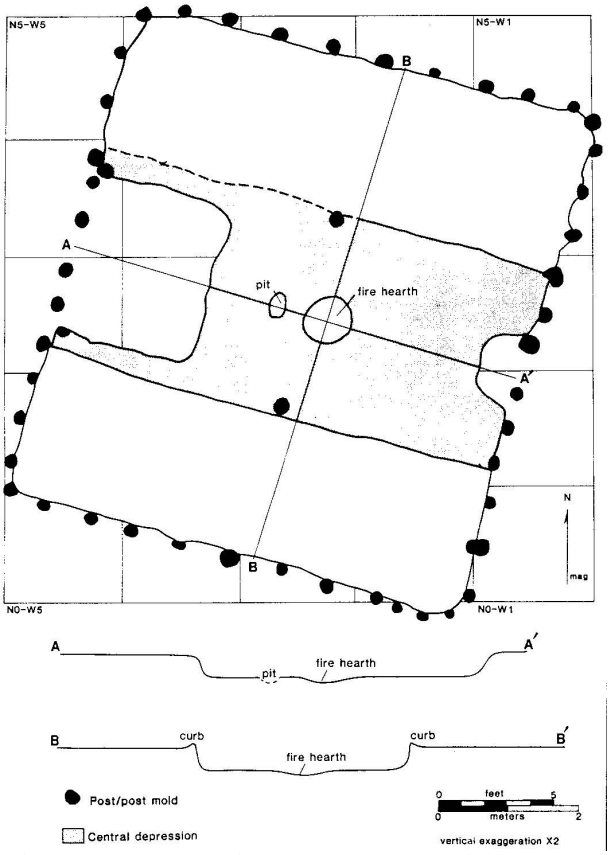

Figure 22. Structure 1 at Zimms (*Reproduced from Flynn 1984:222)*

Odessa: A.D. 1250 - 1475

The Odessa sites are located in Mead County, Kansas, Beaver and Ellis counties in Oklahoma, and Ochiltree and Lipscomb counties in Texas, this area covers over a 160 km north to south and 140 km east to west (Brosowske 2005:132). Brosowske defines three different architectural types for the Odessa phase. The first is a semisubterranean pithouse, circular to oval, four to eight meters in diameter and approximately 0.8 to 1.8 meters below the surface, roof support posts are single or in pairs. The entryway, roof and wall construction of this structure is unknown (Brosowske 2005:143).

The second house type is smaller than the first, and a pithouse. It is circular to oval ranging from 2.5 to 4.0 meters in diameter and 40-60m below the ground surface, there is a shallow hearth and a small central post, roof and wall construction is unknown. Only four of these structures are located along Wolf Creek, in Ochiltree County, Texas at the Buried City location 41OC26, 41OC27, and 41OC29. According to Brosowske similar house types have been recorded in central Kansas in Pawnee and Rice Counties (Brosowske 2005:143). The third house type is at Buried City.

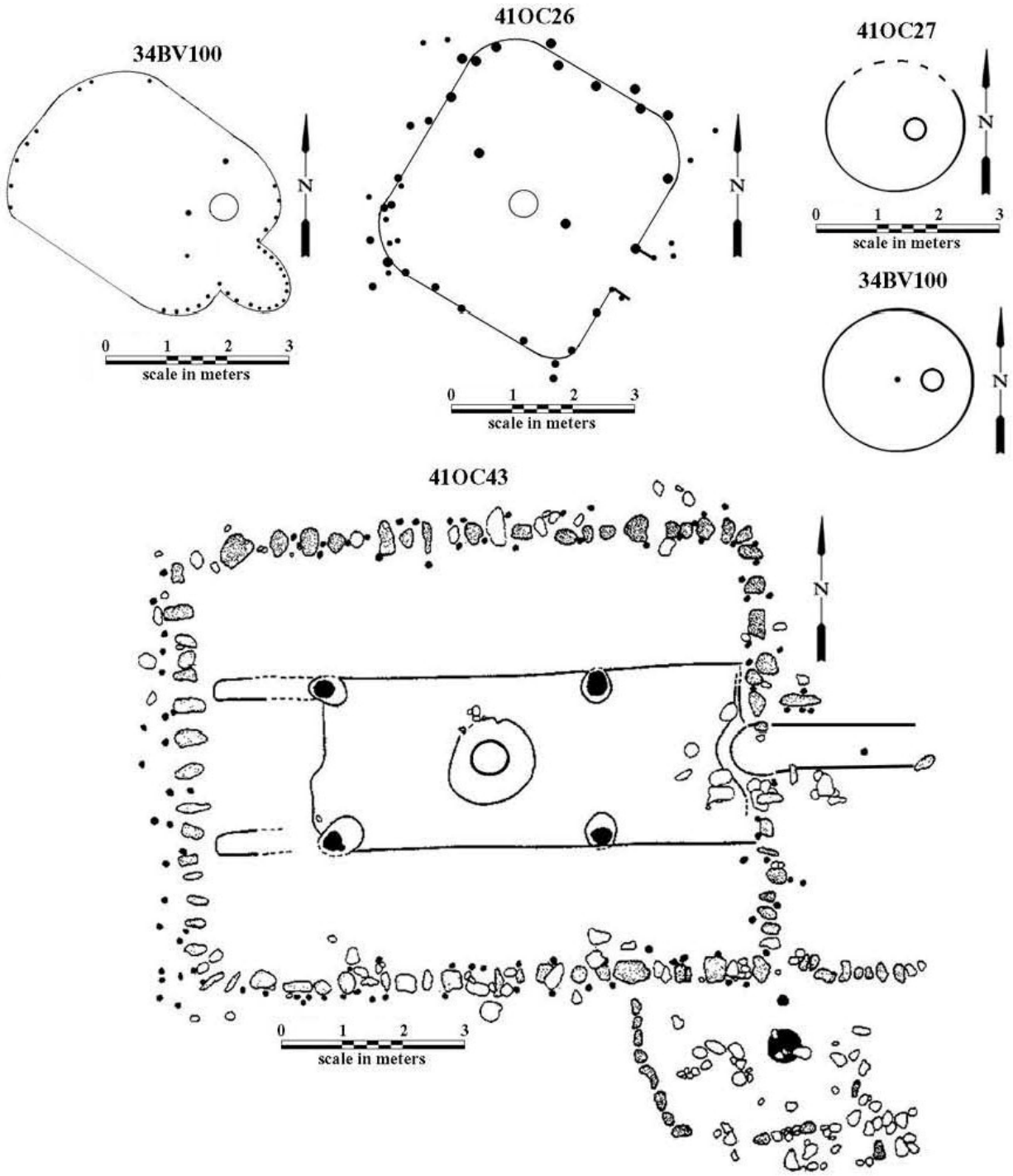

Figure 23. Odessa Phase Structures (*Reproduced from Brosowske 2005:144)*

The Kent Creek Site (41HL66) of the Texas Panhandle A.D. 690-1010

The Kent Creek site is located in the in Hall County, the southeastern part of the Texas Panhandle. Structures found at the site were two semi-subterranean pithouses, and a possible third structure that is not included in this discussion. The second structure was also a pithouse but much smaller than the first structure, it is a storage facility.

Structure 1 is a rectangular, semisubterranean pithouse with rounded corners, a sloping clay-plastered entryway leading out of the structure, a step separating the entryway from the floor, a hearth and four post molds (Cruse 1992:51, 54). The construction of the structure is wattle and daub with the framework made of poles in a gabled fashion (Cruse 1992:57).

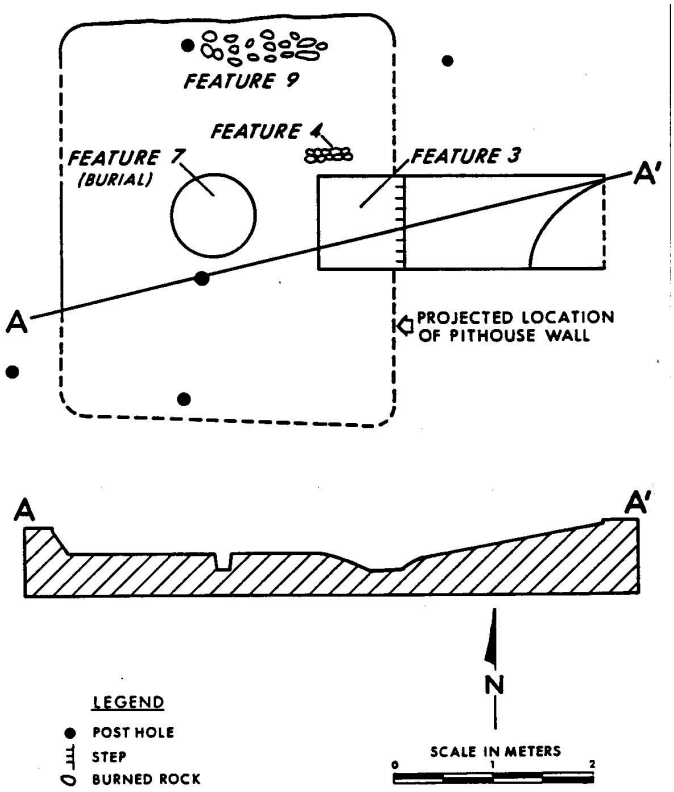

Figure 24. Structure 1 at Kent Creek Site (*Reproduced from Cruse 1992:53*)

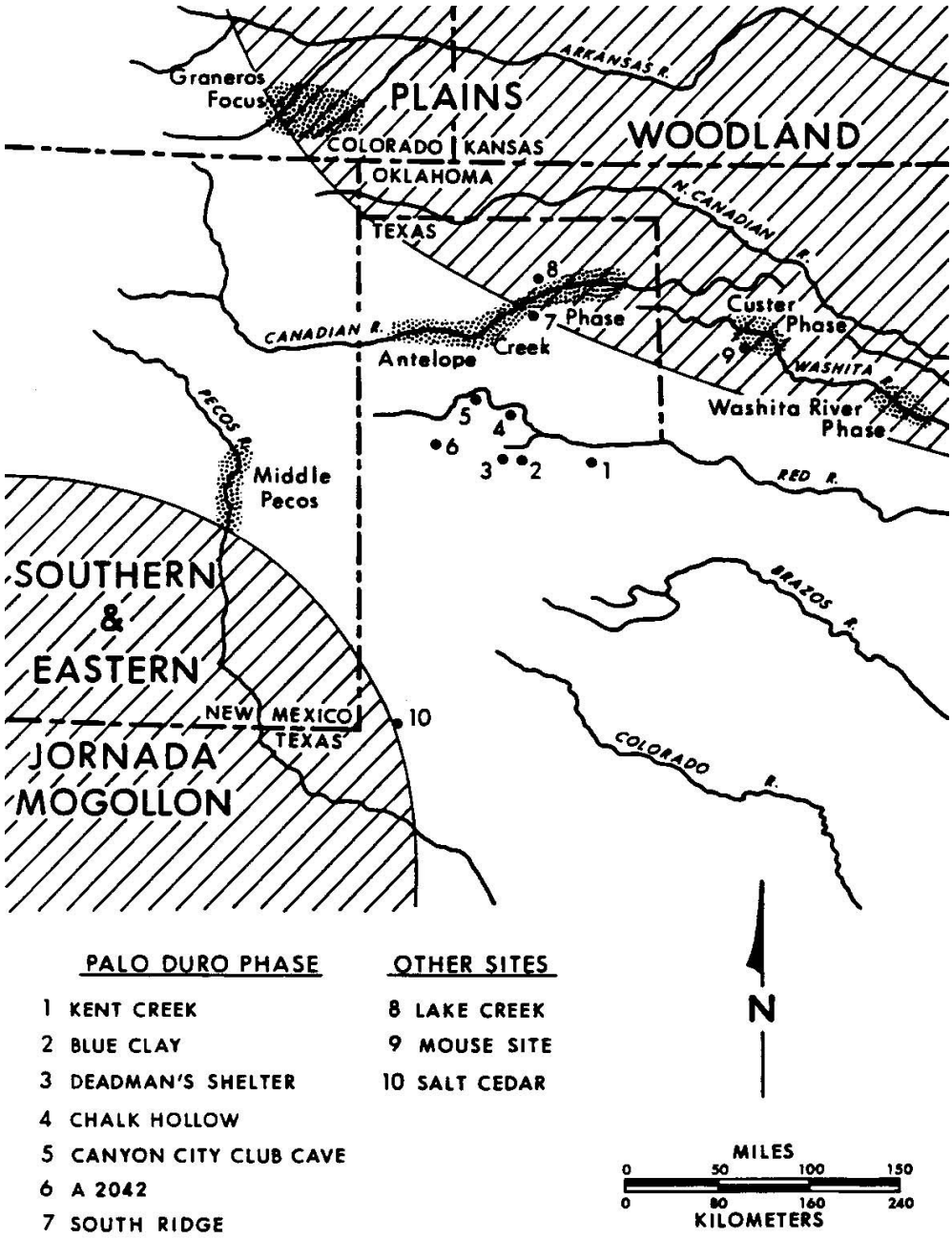

Figure 25. Location of Kent Creek to other sites in Texas Panhandle (*Reproduced from Cruse 1992: 20)*

Regional Comparisons and Ethnicity

The debate over the origins of the Antelope Creek peoples is one that has gone one for many years. Theories on their origins state that they migrated from the Southwest, southeastern Colorado, Upper Republican or developed in situ from the Woodland period. Over the years, reevaluation of these particular theories, examination of skeletal remains and inquiries into origin and migration myths has strengthened some theories and led to the abandonment of others. Migration stories of the Wichita and Pawnee and an *in situ* development are a few of the possibilities on the origins of Buried City. Of those origin theories abandoned are the Southwestern origins, Upper Republican, and Apishapa.

One origin theory that remains is one put forth by Jack Hughes wherein the Panhandle aspect peoples developed *in situ* out of the local Woodland peoples. He suspects the influences are "…Basketmaker influences to the west and Hopewellian and Gibson influences to the east, and endured long enough to experience Puebloan influences from the west and Mississippian and Fulton influences from the east (Hughes, J.T. 1968:210)."

The migration myths tell once of the unification of the Wichita and the Pawnee and their possible origins being from the Southwest. Grinnell recorded migration stories that give credit to the southwestern origins that may just be Buried City as Jack T. Hughes and David T. Hughes firmly believe.

In one example, one of the old men of the tribe told the Pawnee origin story to Grinnell. The old man stated that the Pawnee "… long ago came from the far southwest, where they used to live in stone houses (Grinnell 1889:224)." This may in fact be the Buried City.

And another migration story told by Bear Chief, a Skiddi, stated, "Long ago we were far in the southwest, away beyond the Rio Grande. We came north and settled near the Wichita

Mountains. One summer there we planted our corn. So we came from the south (Grinnell 1889:225)."

Another example given by the Secret Pipe Chief, discusses the migration pathways of the Pawnee and Wichita as they traveled as one group. Part of the story states, "Then they were far off in the southwest, and came from beyond two ranges of mountains. When they scattered out, each party became a tribe. At that time the Pawnees and the Wichitas were together (Grinnell 1889:224)."

E.B. Townsend recorded a migration story of the Wichita Indians told by Chief Niastor of the Tawákoni Indians. He explained the Wichita made their way to the Wichita Mountains, they settled on the banks of the North Canadian River at the Red Sand Hills. Half of the group left and half of the group remained behind they became known as the Tawákoni or "river bend among red or sand hills." From this location, the group then moved on to the Wichita Mountains (Gatschet 1891:249-250).

Jack Hughes compiled a Caddoan culture trait list of the Caddo Proper, Pawnee and Wichita. The Wichita and Pawnee family household is an extended matrilineal family of three generations and the kinship is matrilineal descent with matrilocal residence (Hughes, Jack 1968:350). Could the extended matrilineal household explain the large houses at Buried City?

Skeletal Remains

Many of the Southern Plains collections are small and poorly represented. In the past, many remains were returned to the tribes and reburied without the opportunity for study. Some are located at facilities that do not allow an individual to study the remains, while many have been destroyed or lost due to looting.

David K. Patterson performed an analysis on skeletal material for his Master's Thesis focusing on the remains of Antelope Creek. His results indicate that the Antelope Creek and the Alibates remains differ from the Southwestern population he was examining and that they indicate a close relationship with the Central Plains skeletal populations (Patterson 1974:290).

Unfortunately, for Buried City, the analysis of skeletal material is still awaiting publication.

CHAPTER 4

DISCUSSION

Since the late 18th century, the Buried City ruins have intrigued many locals and professionals throughout the years. Since Eyerly's first expedition to the area, the ruins of the Texas Panhandle have been described as the "Panhandle Culture," "Slab-House Culture," "Panhandle Phase," "Canadian Valley Culture" for any ruin that is associated with masonry (Krieger 1946:41).

Since then the taxonomy of Antelope Creek and the numerous "similar" sites within the Plains region has had many problems within the last 25 years due to the inclusion of sites that contain slab-stone architecture. Alex Krieger defined the Panhandle phase in the 1940s, which in turn began to encompass not only the stone houses of the Canadian River Valley, but also stone-based structures in southeastern Colorado, the Oklahoma Panhandle, western Oklahoma and the Texas Panhandle. Krieger then defined the Antelope Creek focus based on architectural features including artifacts from the Antelope Creek Ruin, Tarbox, Saddleback, Alibates, and Ruin 55, all single level multi-roomed dwellings. In the 1960s, the definition of the Antelope Creek focus expanded to include single-roomed dwellings due to the excavations carried out by F.E. Green in Potter County, Texas (Lintz 1984b:327).

In the 1980s, Christopher Lintz proposed the Upper Canark Variant to include Plains Village sites that were located along the upper Canadian River and the southern tributaries of the Upper Arkansas River, in order to differentiate them from the eastern Southern Plains Village sites. The area covers the Texas and Oklahoma Panhandles, the Raton section of the Great Plains in southeastern Colorado and northeastern New Mexico. Within the variant are two phases, the Apishapa phase and the Antelope Creek phase (Lintz 1984a:44). When Lintz defined

the Antelope Creek phase, its application was to a fifty-mile segment of the Canadian River Valley, centered within the Alibates National Monument (Lintz 1986:2; 2003b:25). Therefore, any sites not encompassed in this particular fifty-mile segment of the Canadian River should not be included in the Antelope Creek phase this includes the Buried City. By removing Buried City from the Antelope Creek phase, Lintz must also reconfigure the "extremely large" units that range in size from 40.0 to 90.0 sq meters and possibly redefine House Type 1.

The most important defining characteristic of Buried City is the stone-based structures. They are not like the typical Antelope Creek phase houses with vertical slab masonry, the peoples of Buried City used massive caliche boulders as a base with some structures possessing posts inside and outside the structure then woven with wicker to form the walls then covered them with plaster. The settlement pattern is different to Antelope Creek phase in that they are single roomed dwellings, approximately 100 to 200 meters between units and 500 to 1 kilometer between groups of dwellings. Antelope Creek phase is defined by the single story multi-roomed dwellings with varying unit sizes and floor space. Buried City should remain as a complex as part of the Panhandle phase.

Scott Brosowske included the Buried City in Odessa phase based on only one trait, the pithouse. This is due to the presence of pithouses exposed during the 1985 and 1991 field seasons at Buried City. However, they were buried beneath the large stone houses, it would be impossible for them to date later or during the same time period. In fact, Brosowske states, "Radiocarbon dating of architectural forms demonstrates that semi-subterranean pithouses predate the earliest stone foundation houses (2003:129)."

Excluded from the Buried City are three radiocarbon dates as they represented erroneous readings. A discussion with David Hughes (personal communication 4/15/2009), clarified that

all three of these dates were in fact either contaminated or misread in the dating of Buried City and were not used in reports to date the Buried City.

The Kent Creek site is a unique blend of both the Southwest and of the Southern Plains traits. The architecture influenced by the Mogollon of the Southwest exhibit a ramp entryway, a step in the entryway, floor area size and the use of a central roof support (Cruse 1992:127-128). There is one Southern Plains Village site, the McLemore site, of the Washita River focus that has the very same large central roof support (Pillaert 1963:6). Influences from others are evident in architecture and the presence of non-local cherts, obsidian and ceramics. Is it possible they were trading with the peoples of Lake Creek who are approximately 100 miles to the north and near the source of Alibates and is it possible that they could be responsible for the migration north bringing with them diverse ideas of architecture.

The Custer phase dates earlier than Buried City but the architecture, although not caliche boulder based it is very similar but smaller. A centrally placed fire pit, the rectangular shape with rounded corners and a platform have many thinking that the Custer phase may have in some way contributed to Buried City. The Washita River phase is ancestral to the Custer focus. Its houses are large but still smaller than the Buried City structures. They exhibit most of the same features except for the large central roof support, no plastered floors or benches and no central depressed channel.

The Zimms Complex is similar in traits with a rectangular structure with rounded corners, central depressed floor channel with a hearth, benches and step at the entryway. The major differences are the size, 39.4 sq meters compared to 80 plus square meters and the two roof support posts.

The migration myths of the Pawnee and Wichita discuss how they came from the Southwest together and then later split from each other. One of the myths discussed of them returning to the place of the "stone houses." Although some many not accept this as solid evidence, this is certainly something to consider. Something Jack Hughes discusses is the kinship and residence patterns of the Wichita and Pawnee. Both are matrilineal and both practiced a matrilocal residence pattern. Could this possibly explain the large house size at Buried City?

Another thought is the community patterning at Buried City. If the people of Buried City are a semi-permanent sedentary group depending on the local plants and animals, is it not possible for a population of 400 or more to quickly deplete the habitat including the soils for their crops? Is it also not possible for a household to live in one house on a ridge, deplete the soils then move on to the next ridge build a structure exhaust the soil there and move on down the valley?

There remain many questions unanswered in the mystery of Buried City. Who are these people and where did they go? The literature points to a Southwestern origin with the possibility of the population related somehow to the Plains Indians especially to the Pawnee or Wichita. The architectural remains are unique yet many sites surrounding Buried City seem somehow related. With the new data available for the Texas and Oklahoma Panhandles, a revision of the taxonomy would be a fruitful endeavor. More research and better technology used to examine the Wolf Creek area may provide answers to many questions.

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