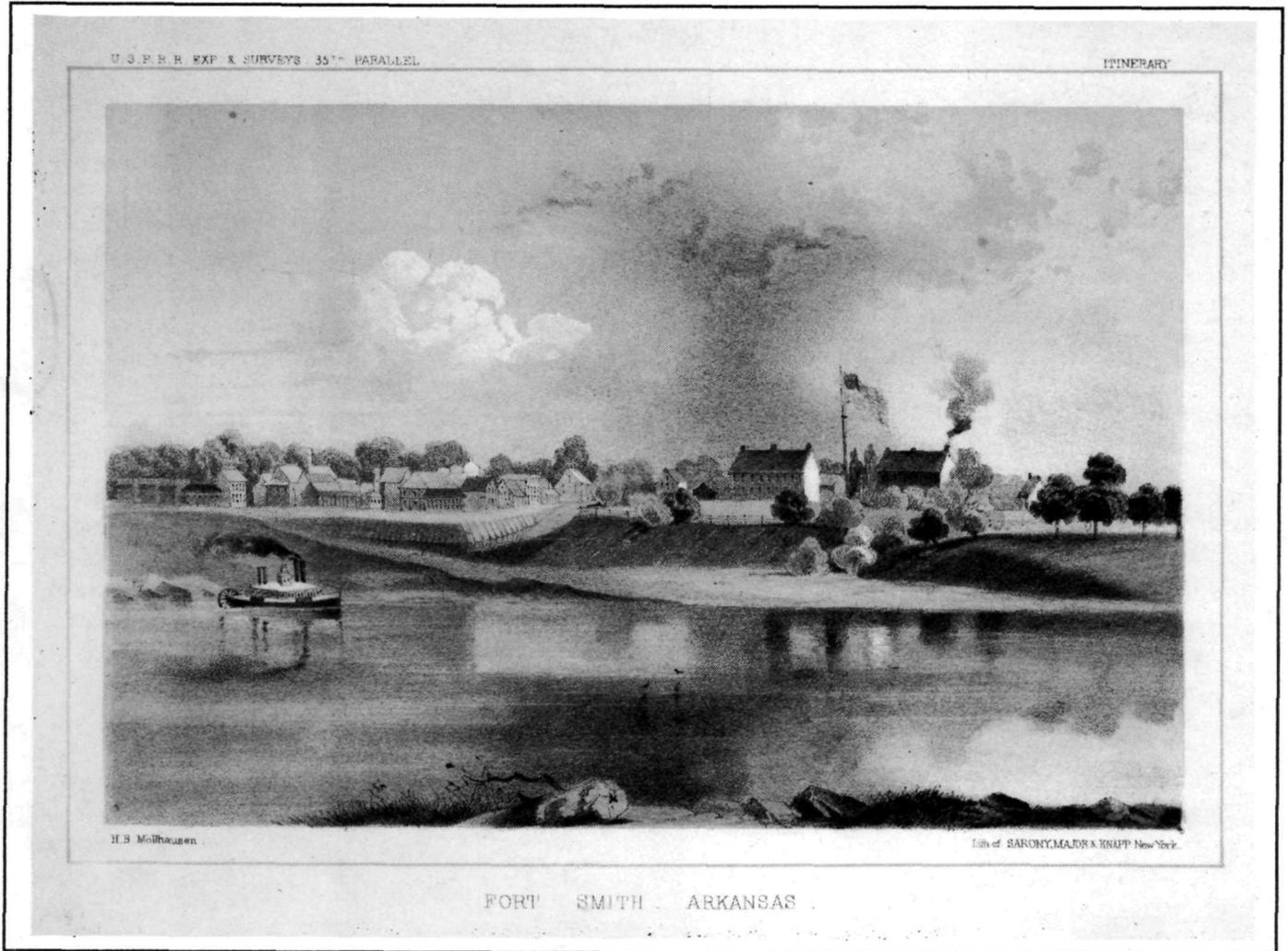


**ARCHEOLOGICAL ASSESSMENT
FOR
FORT SMITH NATIONAL HISTORIC SITE**



Roger E. Coleman

National Park Service
Fort Smith National Historic Site
Fort Smith, Arkansas

1990

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MANAGEMENT SUMMARY

This report assesses archeological resources at Fort Smith National Historic Site pursuant to National Park Service cultural resource management policies and guidelines. An archeological assessment is a document that outlines general cultural resource management policies at the park level and provides substantive data for park planning needs. The document serves as a source of information for production of cultural resource management proposals, land acquisition, and park development, interpretation, and maintenance activities.

Fort Smith National Historic Site was authorized by Congress on September 13, 1961 (P.L. 87 215 H.R. 32), to preserve the site of the first and second Fort Smiths, and the Federal courtroom and prison of Judge Isaac C. Parker. The Purpose of the park, as further outlined by the General Management Plan/Development Concept Plan/Interpretive Prospectus (NPS 1981) is to foster appreciation and understanding of Federal Indian policy as related to Indian removal and the establishment of Indian Territory.

All management, planning, and development must comply with the park enabling legislation that requires the "preservation" of cultural resources. All decisions and actions effecting cultural resources must also comply with the National Environmental Policy Act of 1969 (P.L. 91-190; 83 stat. 852); Section 106 of the National Historic Preservation Act of 1966, as amended (P.L. 89-665 80 stat. 915); Executive Order 11593 of 1971 (36 CFR 800 and 36 CFR 8921); The Archeological and Historic Preservation Act of 1935, as amended (P.L. 74-292 49 stat. 666); The National Park Service Organic Act of 1916, as amended (P.L. 95-625 stat. 3467); and the Antiquities Act of 1906 (P.L. 59-209 34 stat. 225).

Consistent with Cultural Resource Management legislation, National Park Service "Management Policies (NPS-28) require park managers to locate, identify, evaluate, preserve, manage, and interpret qualified cultural resources in every park in such a way that they may be handed on to future generations unimpaired..." (NPS 1985:1). Procedures for implementing this servicewide policy are described in the NPS guideline series NPS-28. A key element of this National Park Service Planning Process is production of the archeological assessment. An archeological assessment for Fort Smith National Historic Site is further recommended in the parkwide Resource Management Plan (NPS 1988:FOSM-C-24).

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ARCHEOLOGICAL ASSESSMENT FOR FORT SMITH NATIONAL HISTORIC SITE FORT SMITH, ARKANSAS

Roger E. Coleman

INTRODUCTION

In 1871, at its hiatus as a military post, Fort Smith contained 72 buildings--today, only two of these documented structures remain standing. As a result, Fort Smith National Historic Site may be realistically described as an archeological park where a large number of cultural resources are located below the ground surface. This situation presents unique problems for park development, maintenance and interpretation. Significant archeological remains endangered by proposed construction must, by law, be properly evaluated and protected. The archeological assessment for Fort Smith National Historic Site addresses this problem by:

- 1) defining the park archeological resource base;
- 2) predicting resource distribution;
- 3) determining resource significance;
- 4) offering recommendations to mitigate impact to significant archeological resources, and
- 5) by suggesting and justifying research priorities and by recommending additional investigations.

Park records were consulted to assess archeological resources at Fort Smith National Historic Site. These consist of fieldnotes and completion reports collected from 1958 to the present that are currently housed in the field generated data file in the curatorial facility at Fort Smith National Historic Site. Other relevant information, usually project specific memoranda, are contained in the park administrative files under file headings H-22, cultural resource studies and research, and H-24, archeological and historical data recovery programs. Often, for early investigations or for small, routine monitoring projects, this is the only source of information available.

Archeological Assessment for Fort Smith National Historic Site

Production of this document follows the format presented in the National Park Service Cultural Resource Management Guidelines, NPS-28 (NPS 1985) and in the approved scope-of-work for development of an archeological assessment. In Chapter 4, the significance of archeological resources is assessed in terms of major park themes and criteria of the National Register of Historic Places. Chapter 5 focuses on previous archeological investigations. Discussions are organized chronologically by project and correspond to the format for record storage used in the field generated data file. Whenever possible, test units have been depicted in Figure 5 (end pocket). For continuity, field test designations are retained, but are prefixed by a specific project number. The locations of many test units, unfortunately, were not accurately recorded in some early projects and are not displayed in Figure 5. Chapter 6 synthesizes these pertinent data by tracts that correspond to former land owner boundaries. The use-history of these areas vary markedly and as a result, each reflects major differences in age of deposits, artifact density, stratification, and subsurface integrity. The variation among them demands that each tract be considered separately. Following summaries of significant archeological remains, specific recommendations are made for resource management on each tract. Chapter 7 explores issues in cultural resource management at Fort Smith National Historic Site by considering potential impacts to the park resource base and recommending parkwide management options to protect significant cultural resources. Interpretive potential of archeological remains and park research priorities are defined. To enhance park management efficiency and to implement park landscape development, a program of additional archeological work is recommended. Finally, recommendations are made to improve the quality of research in future cultural resource management projects.

A memorandum dated April 3, 1990, Disseminating Cultural Resource Documentation, H22 (SWR-PCA), describes the standard operating procedure for processing the documentation portion of a cultural resource collection. The memorandum provides the current policy on handling archeological and other cultural resource information, and this or a more current edition, should be followed for all future cultural resource actions in the future. The memorandum covers the production of:

- 1) Base Map of Site Location,
- 2) Intensity and Extent of Survey Map,
- 3) Field Notes and Forms,
- 4) Photography and
- 5) Reports.

Chapter 1

ENVIRONMENTAL BACKGROUND

Location and Topographic Setting

Fort Smith National Historic Site is located at the confluence of the Poteau and Arkansas Rivers in the northwestern corner of Sebastian County, Arkansas (Fig. 1). The park is a three-sided, 69.83 acre tract bounded on the west by the Poteau and Arkansas Rivers and on the remaining two sides by the City of Fort Smith. The Union Pacific and Missouri and North Arkansas Railroads cross the park and divide it into three geographic sections: the second fort site, a narrow median strip between the railroads, and the first fort site on Belle Point.

The second fort site is the easternmost division of the park and occurs between elevations 444.4 and 438.0 feet AMSL. The area is a relatively high, but level surface broken only by streets and now partially filled road beds. In places, streets are cut over four feet deep. The Missouri and North Arkansas Railroad, on the west edge of the second fort site, cuts below grade some 10 feet and separates this area from the railroad median strip.

The median strip is an elongated section of land created by divergence of the Union Pacific and Missouri and North Arkansas Railroads. The railroad median is aligned on a north/south axis, is over 1,000 feet long, and only 60 feet wide at the widest point. The total area of the median strip is .79 acres. Cutting for construction of the at-grade railroad tracks has pedestalled the median strip. At the greatest depth, cuts are 10 feet and 13 feet deep on the east and west sides of the median, respectively. Thus, the area displays much topographic variation. Maximum and minimum elevations are 441.5 feet AMSL and 426.3 feet AMSL. The highest point on the median occurs roughly in the center at the site of the former Quartermaster Building. From this location, the median strip slopes gradually to the north and south.

West of the Union Pacific Railroad lies Belle Point, a prominent bluff that overlooks the Poteau and Arkansas Rivers. At 442.3 feet AMSL, Belle Point juts some 59 feet above the river bank. A partially filled borrow-pit between the riverbank and bluff edge creates an artificially steep slope. Elsewhere, the ground surface recedes gradually. To the north and south of Belle Point at 420 feet

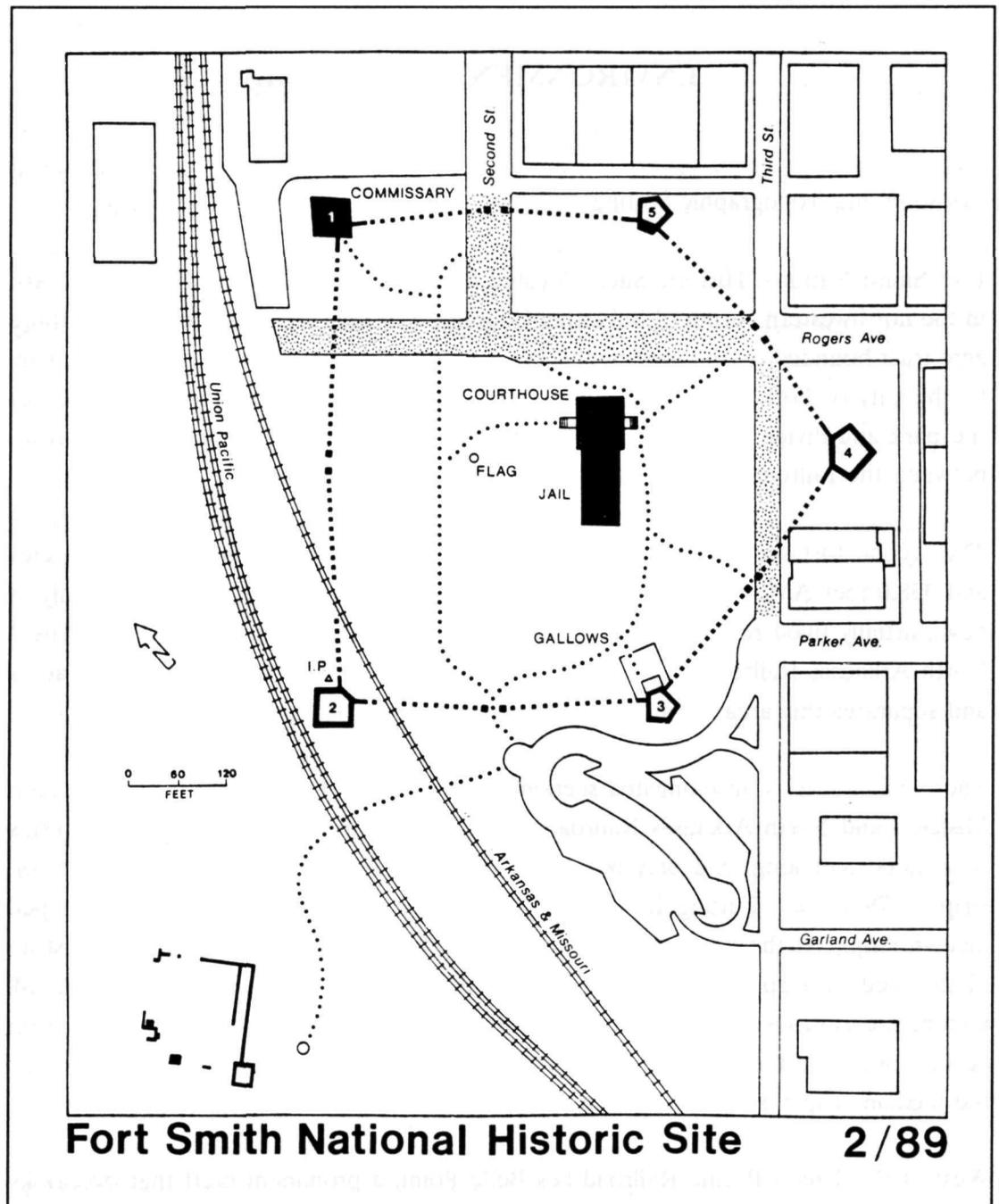


Figure 1. Arkansas portion of Fort Smith National Historic Site

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AMSL are remnants of a river terrace (T1), small areas within the park boundary.

Climate

According to the Koppen-Geiger system of climate classification, Arkansas is characterized by a warm temperate climate (Cfa) where precipitation is sufficient in all months and the mean temperature for the warmest month is over 71.6 degrees Fahrenheit (Strahler and Strahler 1978:148). Meteorological data summarized over a 29-year period (USDA 1975:3) indicate that in Fort Smith, the highest average monthly temperature occurs in July (93.6 degrees F.). Winters in Fort Smith are relatively mild. The coldest month, with an average monthly temperature of 49.7 degrees F., is January. Average yearly precipitation is greatest in May (4.74 inches) while January receives the least (2.38 inches).

Vegetation

Fort Smith occurs in the Oak-Hickory Region of the Eastern Deciduous Forest (Braun 1950). The typical climax community of the Arkansas Valley is the "Post Oak-Blackjack Oak-Winged Elm-Black Hickory Forest" (Foti 1974:25). On the most favorable sites, black oak, red oak and black hickory predominate. In rugged areas or when frequently burned, shortleaf pine is prevalent. With recurrent burning, forest is replaced by prairie. In Sebastian County, prairies are commonly small and widely dispersed. Dominant prairie grass species include big bluestem, Indian grass, switchgrass, and little bluestem.

Today, ground cover within the park is primarily mown lawn composed of several grass species. These include Bermuda, Johnson, rye, crab, wild oat, wild wheat, nut, and sandbur grasses (Gaines 1986:19). Fifty one tree species are known to exist within the park boundary, a number of which are post-historic introductions (Gaines 1986:22). Trees and shrubs are found as border plantings along former streets in the second fort area and as open woodland at Belle Point. A narrow strip of forested land that has reverted to a quasi natural condition borders the Arkansas River.

Geology and Pedology

Fort Smith is located on a soil member of the Leadvale-Taft Association: Muskogee Silt Loam (USDA 1975:5). Soils of the Muskogee series are formed in stratified loamy and clayey sediments on old stream terraces bordering the Arkansas River. Muskogee Silt Loam reflects a relatively well-developed solum with distinctive A and B horizons. A representative soil profile is described

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in detail in Table 1. Below these upper level soils, a relatively unaltered parent material or C horizon is found. At Fort Smith National Historic Site, the C horizon is composed of fine sands that vary from 11-19 feet in thickness (ALI nd:1). Sands are encountered at about 435 feet AMSL where they exhibit a yellowish-red coloration caused by water percolation through the overlying B3 horizon. With increasing depth, sands assume a tan or blond color. Below the sand lies bedrock of Pennsylvanian age.

Table 1

REPRESENTATIVE PROFILE OF MUSKOGEE SILT LOAM

Level	Depth	Color	Texture	Structure
Ap	0-4"	Dark Brown	Silt Loam	Granular
A2	4-9"	Brown	Silt Loam	Fine Blocky
B1	9-17"	Yellowish Brown	Silt Loam	Medium Blocky
B21t	17-27"	Yellowish Brown	Silty Clay Loam	Medium Blocky
B22t	27-40"	Light Brownish Grey	Silty Clay	Medium Blocky
B23t	40-55"	Yellowish Red	Silty Clay	Medium Blocky
B3	55-72"	Reddish Yellow	Silty Clay	Medium Blocky

Lithology of the Arkansas River Valley consists of intervening layers of shale and sandstone. First the McAlester Formation, a layer of shale and weathered shale that varies from three-to-five feet thick, is encountered. Underlying the shale is the Hartshorne Formation, a hard, grey, micaceous sandstone that outcrops (at Belle Point) between 410 and 404 feet AMSL. Underlying these is the Atoka Formation, a red colored sandstone that outcrops north of the Arkansas River and Fort Smith National Historic Site (ALI nd:1; Haley and Hendricks 1972:A24-A25).

Chapter 2

CULTURAL BACKGROUND

Fort Smith National Historic Site is historically and archeologically complex. The park contains a multicomponent prehistoric site and two historic military forts. The second fort also served as a jail and courtroom for the United States District Court for the Western District of Arkansas. Federal use of the site spans some 79 years, a length of time that, for conceptual purposes, is commonly divided into three major periods (eg. Kyril 1980:4): First Fort (1817-1824), Second Fort (1838-1871), and Judicial (1872-1896).

Prehistoric Occupation

The Arkansas River Valley is the least known archeological region in the State of Arkansas (Davis 1982:MA1). Comparatively little research has been undertaken here. Five archeological surveys and testing projects conducted in the vicinity of Fort Smith have documented 59 prehistoric sites--most without cultural diagnostics (Taylor 1987:6). East of Fort Smith, Hoffman et al. (1977) define a Woodland period Gober complex and a Late Mississippian McClure complex for the Ozark Reservoir. Beyond these exceptions, local prehistory must rely on extrapolations from adjacent areas. The prehistory of northwest Arkansas is summarized by Raab et al. (1982) and Sabo et al. (1982). Cultural development in eastern Oklahoma is described by Bell et al. (1984). For this study, the cultural chronology has been extracted from these sources and presented in Table 2.

During archeological investigations at the site of the first Fort Smith (1958-1963), evidence of a substantial prehistoric occupation was brought to light. Beyond a brief description and interpretation of recovered remains (Dollar 1966), the prehistoric occupation of the Fort Smith site has never been investigated or formally recorded. The underlying prehistoric site is not listed in the files of the Arkansas Archeological Survey.

Collections generated from this site reflect a probable extensive multicomponent occupation--at least within the circumscribed area of the first fort. Diagnostic artifacts in the park collection indicate Early-to-Late Archaic and Woodland-to-Mississippian occupations.

Table 2

PREHISTORIC CULTURAL CHRONOLOGY OF THE OZARKS

Cultural Period	Phase	Date Range
Paleo Indian	Paleo Indian	12000-10500 BP
Transitional	Dalton	10500-9500 BP
Archaic	Early Archaic	9500-8000 BP
	Middle Archaic	8000-5000 BP
	Late Archaic	5000-2500 BP
Woodland	Early Woodland	2500-1800 BP
	Middle Woodland	1800-1350 BP
	Late Woodland	1350-1100 BP
Mississippi	Caddo	1100-450 BP
	Neosho	450-300 BP

Historic Occupation

Following the purchase of Louisiana in 1803, federal officials promoted the removal of southeastern Indians to a "permanent Indian frontier" in the new western possession. In 1809, Osage Indians forfeited their traditional hunting territory for resettlement of their eastern neighbors. In a few years, thousands of displaced Cherokees occupied land on the White and Arkansas Rivers. The new Cherokee-Osage boundary became a source of friction, however, and resulted in frequent clashes between both nations. To deter further hostilities, the United States Government established Fort Smith on the disputed boundary.

The site of the new fort was Belle Point, a prominent bluff overlooking the Poteau and Arkansas Rivers. On December 25, 1817, Major William Bradford and 64 men of the Rifles Regiment, Company A, landed at Belle Point. In eight days, temporary shelters had been hastily erected and work initiated on a permanent fortification. Construction progressed slowly. Upon completion, the fort was a simple log stockade with four sides of 132 feet each and two blockhouses at opposite

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angles. Barracks, storehouses, shops, a magazine, and a hospital were located within the walls. In February, 1822, Colonel Matthew Arbuckle and five companies of Seventh United States Infantry garrisoned the post. Quarters for the additional troops were erected outside the original fort. Increased hostilities between the Osages and Cherokees prompted the additional troop strength. The location of the post on the eastern border of the newly redefined Indian Territory, however, was too far removed from the arena of hostilities. Consequently, the military departed from Fort Smith in 1824, and established Fort Gibson some 60 miles up the Arkansas River (Bearss and Gibson 1979:8-42).

Fort Smith was not forgotten. By the treaty of 1825, the Choctaw Indians agreed to settle on lands set aside in Indian Territory and Fort Smith was designated the agency for the western Choctaw. In February, 1827, Choctaw agent William McClellan found the post buildings in ruinous condition. Four years passed, however, before the government could repair the structures. On April 26, 1831, Lieutenant Gabriel Rains and a detail of Seventh United States Infantry arrived at the post. Over the next few months, Rains labored to repair the public buildings. By August, Choctaw Indians began trickling into the area (Haskett 1966:213-228).

Just east of Fort Smith and adjacent to the Choctaw boundary line, a sizeable civilian community had emerged on lands owned by John Rogers. Six taverns dominated the community, the closest only a "few paces" from the Choctaw line. Enterprising merchants supplied the emigrating Choctaws with cheap whiskey. Many of the displaced tribesmen settled nearby and became a source of sustained exploitation. Lieutenant Rains positioned his men on the line to keep peddlers and Choctaws separated. The situation worsened so that in March, 1833, Captain John Stuart and a company of the Seventh Infantry garrisoned the post. Stuart's efforts to control the contraband trade, known as the "Arkansas whiskey war," met with little success. The merchants operated under Stuart's very nose. Whiskey smugglers could slip across the Indian Territory line almost at will. As a result, Stuart abandoned Fort Smith in June, 1834, and established Fort Coffee at a more suitable location in Indian Territory (Haskett 1966:213-218; Bearss 1968:143-172).

As additional tribes were relocated in Indian Territory, fearful residents of the new State of Arkansas requested that a permanent military garrison be placed on their western border. Fort Smithites launched a successful campaign to regarrison Fort Smith. In 1838, congress authorized construction of a new fort and purchased from John Rogers, a 296-acre reservation adjacent to the old fort on Belle Point.

In the spring of 1839, construction of the new fort began. The design called for a pentagonal

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shaped fort of stone with a bastion at each angle and enclosing seven acres (Fig. 2). Inside the wall, several buildings were to be situated around a parade ground including two enlisted men's barracks, two officer's quarters, the commandant's quarter, a hospital, quartermaster store, and other buildings. This ambitious plan, however, would never be fully realized.

Because of events of the next six years, the army completed Fort Smith along much different lines. It had become apparent to the military that armed warriors would not descend on Arkansas from Indian Territory. Yet, hostilities threatened another frontier and war with Mexico loomed on the horizon. Fort Smith was ideally situated to equip military units marching to the Rio Grand and to supply frontier posts in Indian territory. Therefore, in 1845, the half-finished post was formally designated as a supply depot. Without a need for defensive capabilities, portions of the fort curtain wall were never raised to the intended height of 12 feet. To accommodate the vastly increased supply load, foundations of the incomplete commandant's quarter and one of the enlisted men's barracks (Barracks B) were dismantled and used to convert two bastions into commissary and quartermaster storehouses. A third bastion was transformed into a magazine. Upon completion, only two officer's quarters and one enlisted men's barracks fronted the parade ground. Several other structures including maintenance buildings, stables, laundress quarters, hospital, storehouse, and bakehouse were located beyond the fort walls (Fig. 3).

Fort Smith was formally garrisoned in May, 1846, and functioned as a supply depot throughout its 25-year long occupation by the military. In the pre-Civil War years, national interests focused on westward expansion. New posts were established in Indian Territory, including Fort Towson and Fort Washita, and were supplied by the depot at Fort Smith. On April 23, 1861, Arkansas State Troops occupied Fort Smith. Until September 1, 1863, when Federal soldiers regarrisoned the post, Fort Smith served the Confederate Army of the Trans-Mississippi West as a major supply base and defensive bastion protecting Southern interests in Arkansas and Indian Territory. During the post-war years, the army again focused efforts on renewed westward expansion. The line of frontier posts had moved so far to the west, however, that supply lines from Fort Smith were stretched to capacity. The days of Fort Smith as a supply depot were numbered.

Other problems plagued the post and eventually caused its abandonment. Housing for the troops had always been in short supply and on November 24, 1865, Officer's Quarter A burned to the ground. Five years later on December 20, 1870, Officer's Quarter B suffered the same fate. To the military, the role of Fort Smith as a supply depot was no longer tenable. On July 19, 1871, the Sixth Infantry marched out of the post, the last unit to garrison Fort Smith. Once again, however,

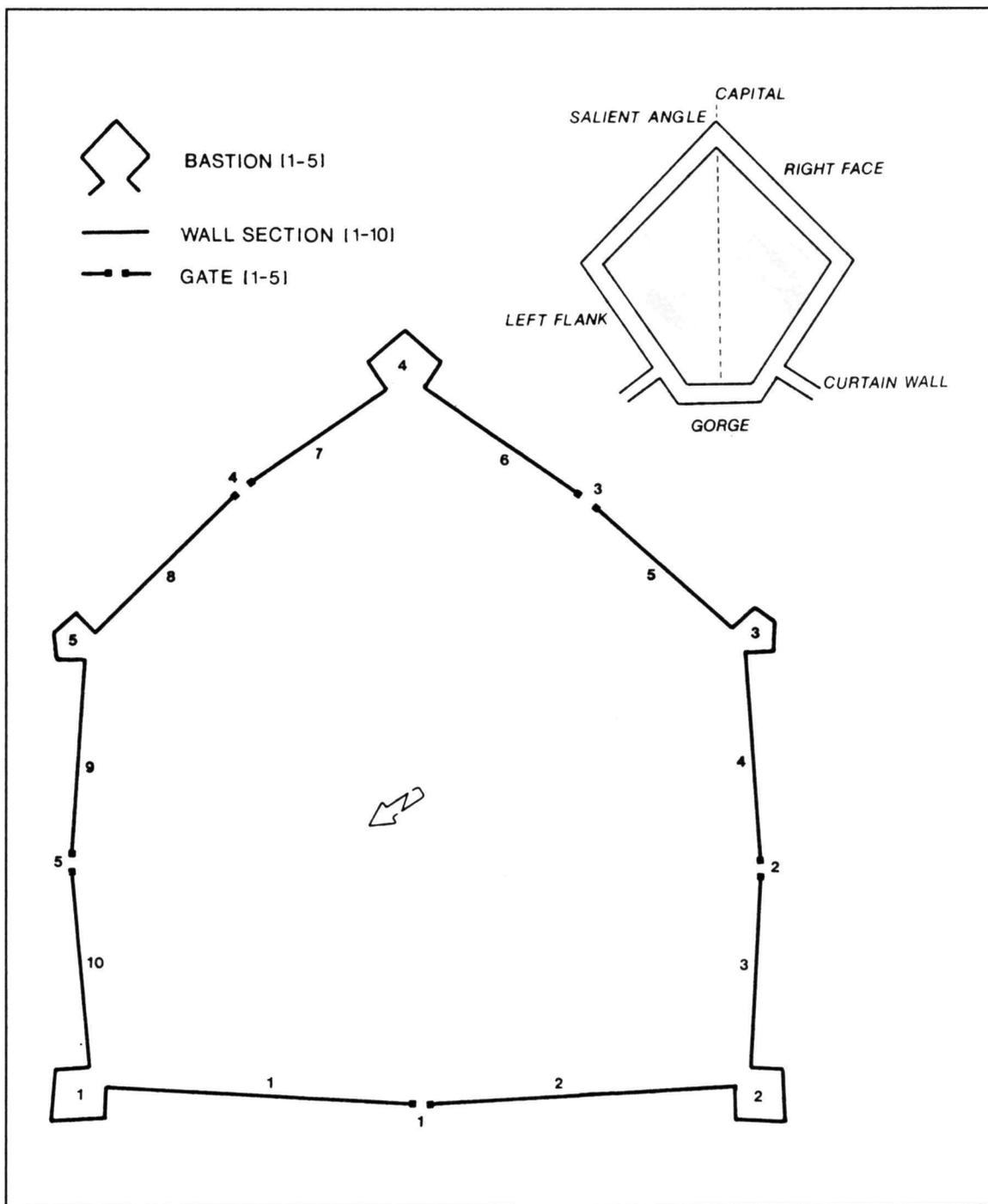


Figure 2. Defenses of the second Fort Smith

the winds of fortune shifted and prolonged the life of the fort.

In 1872, the United States District Court of the Western District of Arkansas occupied Fort Smith. A valuation of property indicated that 27 buildings stood on the former military reserve. Nearly all of these were relegated to civilian or federal use.

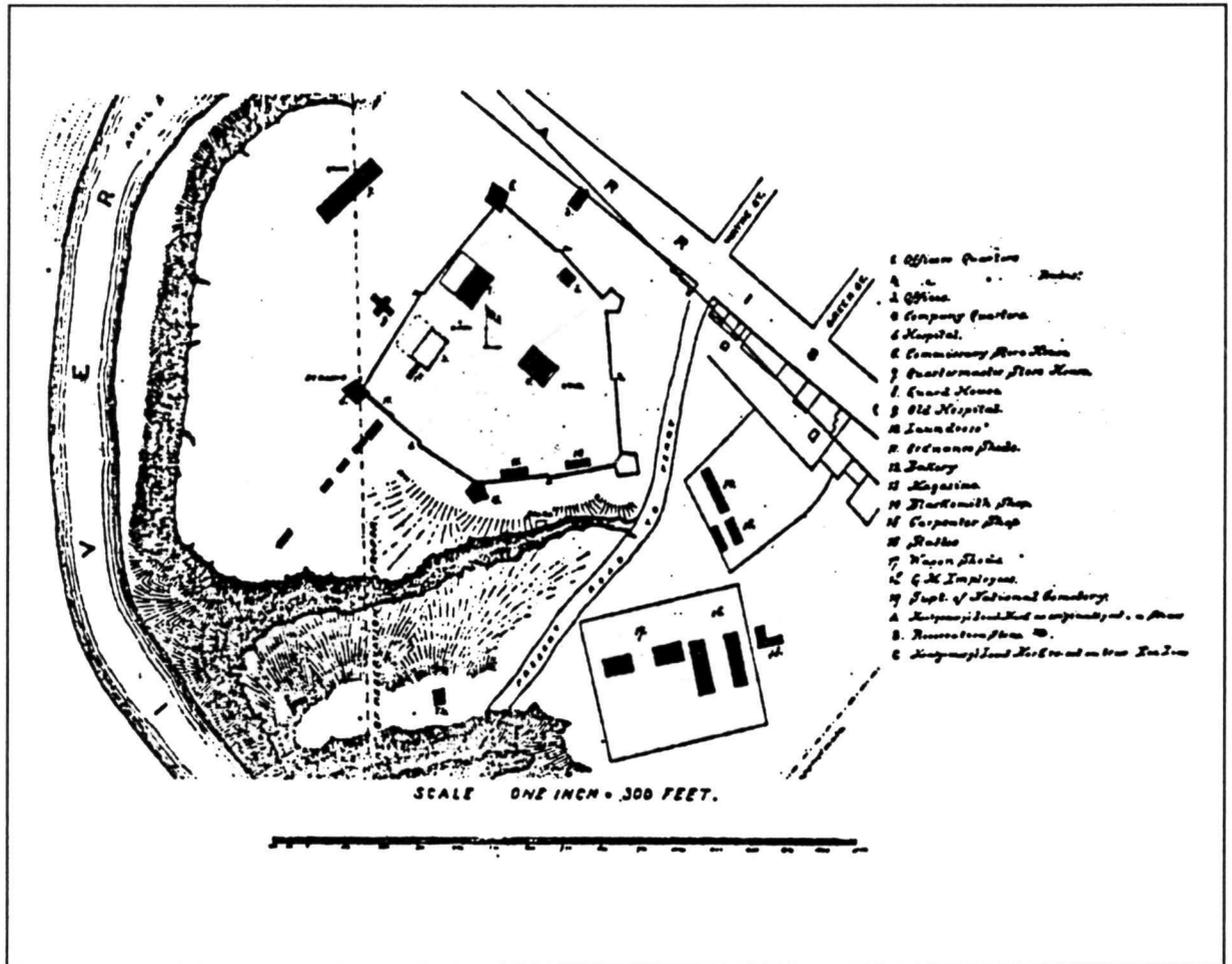


Figure 3. 1870 Army survey map

The former enlisted men's barracks became the federal courtroom and also housed attendant offices. A permanent gallows was constructed along the inward side of bastion 3 or the old Magazine and the Courtroom basement served as a jail. When overcrowding in this makeshift prison, known as "hell-on-the-border," received adverse public attention, a modern prison wing was

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added to the south end of the Courtroom. This structure was completed in February, 1888.

The Federal Court presided over a vast district encompassing western Arkansas and the entire Indian Territory of present-day Oklahoma. Here, tribal courts had no jurisdiction over white settlers. This legal technicality attracted the most desperate breed of outlaw, who finding refuge beyond the pale of justice, could murder and steal with little fear of retribution. To bring offenders to justice, a federal marshal and a number of deputies, never more than 200 strong, combed this wilderness. When fugitives were apprehended, they were taken to Fort Smith for trial.

Fort Smith is best known for Federal Judge Isaac C. Parker whom President Ulysses S. Grant appointed to the bench in 1875. During Parker's 21 years in office, over 13,000 cases came to trial and 79 offenders were hanged for their crimes. Parker proved to be a tireless defender of Indian rights and through his efforts brought law and order to Indian Territory. As the non-Indian population increased, new courts emerged in Indian Territory, gradually reducing Parker's authority. On March 1, 1895, Congress enacted legislation that limited Parker's jurisdiction to several counties in western Arkansas. This legislation became effective on September 1, 1896.

Beginning during the Federal Court occupation and escalating in the late nineteenth and early twentieth centuries, a series of events occurred that changed the appearance of the historic fort. By the act of February 17, 1883, Congress granted right-of-way through the former military reservation to the St. Louis and San Francisco Railroad. Sometime between May, 1886, and February, 1889, the railroad company removed a portion of the garrison wall to accommodate trackage, effectively separating the Quartermaster Building from the rest of the fort. The Missouri Pacific Railroad soon paralleled the St. Louis and San Francisco and also cut through the reservation.

A May 29, 1896, bill called for lands inside the garrison to be granted to the City of Fort Smith. Although use of the Federal Jail continued as late as 1914, the government transferred the remainder of the military reserve to the city. On February 26, 1897, Congress enacted legislation to extend Parker and Rogers Avenues, and Third and Second Streets through this property. The Old Fort Reserve Addition was surveyed in June and sold to private concerns. The stone wall of the fort was dismantled between July 1, 1897, and July 1, 1898, after which, streets were extended. By 1900, several large multi-storied brick buildings had been built or were under construction and the Old Fort Reserve Addition emerged as the light industrial/warehouse district of Fort Smith. The Courtroom/Jail complex became a civic center and housed a variety of city offices and community organizations. Sometime around the turn of the century, Belle Point was densely

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populated and acquired the name of "Coke Hill."

Public interest in the old fort increased during the early twentieth century. In 1910, the Old Fort Museum Association occupied the Commissary and used the building as a museum. In 1957, Public Historical Restorations Incorporated restored the courthouse to its original condition. Local businessmen donated funds to purchase private interests on Coke-Hill and in 1958, sponsored the first archeological excavation at the site. In 1961, the City of Fort Smith donated 11 acres of land containing the site of the first fort, the Courtroom/Jail complex, and the Commissary Building to the National Park Service. Since creation of the Fort Smith National Historic Site, land holdings of up to 75 acres have been authorized and several intrusive streets and post-historic buildings have been removed (Paige 1981:46-66).

Chapter 3

SIGNIFICANCE OF ARCHEOLOGICAL RESOURCES

Because Fort Smith National Historic Site is listed on the National Register of Historic Places, contributing cultural resources are generally regarded as significant. Contributing resources are those falling within the historic period of the park, from 1817-1896, and that relate to the park interpretive theme. According to Part One of the "National Park System Plan--History," Fort Smith National Historic Site illustrates theme 6, westward expansion and in particular, subtheme 6c, military/Indian conflicts. The parkwide Resource Management Plan (1988) defines known significant resources at Fort Smith National Historic Site as the historic grounds and remaining archeological and structural features including the first fort foundation, second fort foundation, Commissary Building, Courthouse/Jail Wing, Cistern, reconstructed Gallows, reconstructed Flagstaff, and a partially reconstructed second fort bastion and curtain wall. This list is expanded here to include all archeological structures and features, known and undiscovered, from the park historic period. All undisturbed historic ground levels and their contents are significant for the information they contain. Isolated artifacts in disturbed contexts, however, are considered significant only when they are diagnostic of the historic period and occupation (eg. military accouterments, coins, weapons, etc.). Many archeological resources at Fort Smith National Historic Site are unrelated to the park theme, but in broader regional contexts, are nonetheless significant. Federal legislation and National Park Service policies provide general guidelines for assessing resource significance.

The concept of archeological significance varies considerably in definition and application. Common criteria for establishing significance include rarity, age, public appreciation, and integrity. It is incumbent upon archeologists to specify the frame of reference used in making determinations of significance (McGimsey and Davis 1977:31). When legal compliance is involved, the National Historic Preservation Act specifies that the criteria used for evaluating significance are those of the National Register of Historic Places (36 CFR 60.4, a-d). To be significant, a site or resource must display:

- 1) an association with events that have made a significant contribution to history;
- 2) an association with a person significant to history;

3) the reflection of the distinctive characteristics of a type, period, method of construction, master, or high artistic values and;

4) the ability to yield information important in prehistory or history.

Criterion 4 is most applicable for evaluating archeological remains. Nearly all resources, however, can yield important information and this general guideline offers no direction for establishing relative significance. Therefore, specific criteria for assessing resource significance are developed at the state level in historic preservation plans. In Arkansas, significance is defined in A State Plan for the Conservation of Archeological Resources in Arkansas (Davis 1982). Evaluations of significance are based on the potential of a specific site or resource to address salient research questions.

For prehistoric cultural resources, Fort Smith National Historic Site is included in the Middle Arkansas River Valley study unit. The Arkansas river valley is the least known archeological region in the state of Arkansas (Davis 1982:MA1). In fact, so little is known of this area, that no attempt was made in the State Plan to formulate research questions. Until significance criteria may be established for the Arkansas River Valley, all prehistoric remains should be considered significant. Undisturbed sites and deposits and even artifact assemblages in disturbed contexts can yield important information on this poorly understood area of the state.

For historic cultural resources, significance criteria in the State Plan may also be consulted (Stewart-Abernathy and Watkins 1982:OP51-54). This inclusive plan establishes three major study units: the contact period (1500-1840), European period (1500-1825) and Anglo-American period (1780-2000). For the contact period, the State Plan recognizes Indian sites with European associations, even in disturbed contexts, as significant and worthy of protection. Because of their rarity, Spanish and French colonial sites of the European period are considered significant regardless of resource integrity. Anglo-American sites, abundantly represented, are considered potentially significant when they display intact structures, features, or undisturbed subsurface deposits. Significance criteria will undoubtedly change, however, as knowledge of the statewide archeological database progresses.

Chapter 4

PREVIOUS INVESTIGATIONS

This chapter describes and evaluates previous archeological work at Fort Smith National Historic Site by identifying principal investigators and the project number, date, and location; by summarizing the methodology used and records produced; and by assessing the contributions and reliability of research. Archeological investigation at Fort Smith National Historic Site was initiated in 1958 at the site of the first Fort Smith (Moore 1963). In 1963, these operations were expanded into a full-scale archeological excavation to document surviving structural remains (Dollar 1966). Exploration elsewhere in the park, however, has been sporadic and less intensive than at Belle Point. Beyond excavations to document the second fort defensive works, most of this later activity consists almost entirely of small-scale test excavations and monitoring efforts for archeological clearance projects. Although geographic coverage within the park has been sporadic and large areas remain to be systematically sampled, nearly all land tracts within the park have been tested (Fig. 4 and 5). These projects provide important data for evaluating the park archeological resource base. Twenty one projects conducted at Fort Smith National Historic Site are described below in chronological order.

Research Summary

PROJECT NUMBER 1A

- 1) Dates: December 8, 1958 - February 1, 1959
- 2) Location: Tract 01-116
- 3) Principal investigator: Clyde D. Dollar
- 4) Type of investigation: Test excavation
- 5) Reference: Dollar, Clyde D., 1960. Interim Report, Old Fort Smith Project. On file at Fort Smith National Historic Site, File Number IV-56.
- 6) Discussion: Dollar conducted a test excavation at Belle Point to identify remains of the first Fort Smith. To locate the fort site, Dollar reversed the steps taken by the survey party of 1852, that had used the east corner of the Fort to establish the initial point of the Choctaw Boundary. Two-foot wide test trenches were hand excavated to search for the stockade walls. Ultimately,

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Dollar located and identified three exterior and two interior fort walls, and minimally traced the foundation of the north blockhouse. Trenches were plotted for Dollar by city engineers.

Regarding Dollar's activities, archeologist Jackson W. Moore (1963:3) noted that although "he lacked formal archeological training, had no engineering equipment, and used disinterested prisoners whose sentences were usually up in a few days . . . , Lt. Dollar's performance was creditable indeed." Discovery of the first Fort Smith by Dollar was instrumental in the establishment of Fort Smith National Historic Site.

PROJECT NUMBER 1B

- 1) Dates: August 22, 1962 - May 1, 1963
- 2) Location: Tract 01-116
- 3) Principal investigator: Jackson W. Moore
- 4) Type of investigation: Excavation
- 5) References: Moore, Jackson W., 1963. *The Archeology of Fort Smith I*. National Park Service, Southeast Regional Office, Virginia.
Dollar, Clyde D., 1966. *The First Fort Smith Report*. On file at Fort Smith National Historic Site.
- 6) Discussion: Jackson W. Moore, National Park Service Archeologist, conducted additional investigation at the site of the first Fort Smith to reveal construction details and determine the appearance of fort walls and cabins. Clyde Dollar was hired by the National Park Service to serve as a field assistant for the project. Excavators began at the east corner of the fort, identified during the first investigation, and delineated all surviving fort walls by trenching. Interiors of room blocks and of the south bastion were completely excavated. These activities confirmed the general configuration and dimension of the fort and resulted in the acquisition of artifacts to aid in determining room functions. Excavators identified the post well, situated 100 feet from the northeast corner of the stockade.

Archeologists gained some construction detail concerning exterior and interior walls, the south blockhouse, and the post magazine. Outer stockade walls were originally horizontal and also formed the backs of cabins. Moore identified the sally port and the location and dimensions of many individual room units, except for the northwest row of quarters where conflicting evidence resulted in three possible room configurations. Physical evidence indicated that, unlike original plans, the fort had no glacis, no central flagstaff, and no vacant corners. Although artifacts were



DEED	TRACT	OWNER	ACRES	INT
DON D-1	01-101	ST LOUIS SAN FRAN RAILROAD	0.01	FEE
DON D-1	01-102	DELETED		
DON D-1	01-103	ST LOUIS SAN FRAN RAILROAD	0.06	FEE
DON D-4	01-104	CITY OF FORT SMITH	0.31	FEE
PUR D-2	01-105	ECHOLS	0.36	FEE
	01-106	DELETED		
COM D-13	01-107	MEEK JAMES W. et al	1.09	FEE
DON D-4	01-108	CITY OF FORT SMITH	2.51	FEE
	01-109	DELETED		
COM D-14	01-110	COCA COLA BOTTLING CO.	0.05	FEE
PUR D-3	01-111	HARBOR INC.	1.92	FEE
	01-112	DELETED		
PUR D-6	01-113	FIRST BAPTIST CHURCH	0.28	FEE
DON D-5	01-114	FORT SMITH & VAN BUREN R.R.	0.19	FEE
PUR D-12	01-115	EASTERN NAT'L PARK & MON. ASSOC.	0.60	FEE
DON D-4	01-116	CITY OF FORT SMITH	7.18	FEE
	01-117	DELETED		
	01-118	DELETED		
DON D-15	01-119	OKLAHOMA GAS & ELECTRIC CO.	0.30	FEE
	01-120	BELLE POINT BEVERAGE CO. INC.	0.28	FEE
	01-121	DELETED		
	01-122	U.S. FORGECRAFT CORP.	1.48	FEE
	01-123	DELETED		
PUR D-9	01-124	LEWIS SALES CO. INC.	0.31	FEE
PUR D-11	01-125	FORT SMITH PAPER CO.	0.45	FEE
	01-126	DELETED		
PUR D-8	01-127	SPEER HARDWARE CO.	0.71	FEE
PUR D-10	01-128	LESTER ESTELLE M.	0.15	FEE
	01-129	DELETED		
	01-130	DELETED		
	01-131	BELLE POINT BEVERAGE CO. INC.	1.56	FEE
	01-132	DELETED		
DON D-17	01-133	CITY OF FORT SMITH	1.09	FEE
DON D-16	01-134	CITY OF FORT SMITH	0.16	FEE
	01-135	MISSOURI PACIFIC RR	0.19	FEE
COM D-	01-136	MIKEL, DORIS J. et al	9.41	FEE
	01-137	DELETED		
DON D-18	01-138	CITY OF FORT SMITH	7.53	FEE
DON D-19	01-139	CITY OF FORT SMITH	0.88	FEE
	01-140	CITY OF FORT SMITH	2.84	FEE
DON D-21	01-141	CITY OF FORT SMITH	(#0.36)	ROW
	01-142	THE OLD COMM. MUS. ASSOC.	0.10	FEE
DON D-20	01-143	FORT SMITH PAPER CO.	0.04	FEE
	01-144	U.S. FORGECRAFT CORP.	0.33	FEE
DON D-23	01-145	U.S. FORGECRAFT CORP.	0.07	FEE
	01-146	STITES, DOUGLAS	1.12	FEE
DON D-22	01-147	SIFE, NORMA BELLE	0.03	FEE
	01-148	CITY OF FORT SMITH	0.54	FEE
	01-149	U.S.A. - B.L.M.	5.80	FEE
	01-150	BURLINGTON NORTHERN RR	(3.00)	ROW
	01-151	MISSOURI PACIFIC RAILROAD	(2.80)	ROW
	01-152	DELETED		

SEE SEGMENT 02

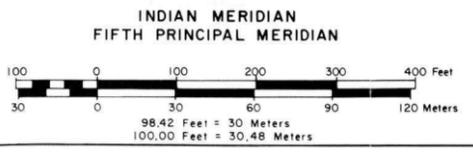
LEGEND

- FEDERAL LAND (FEE)
- FEDERAL LAND (ACQUIRED PUBLIC LAND)
- PUBLIC LAND
- PRIVATE LAND
- TRACT NUMBER (FEE)
- SITE BOUNDARY
- TRACT BOUNDARY
- TRACT BOUNDARY (LESS THAN FEE)
- OTHER FEDERAL LAND

*R.O.W. Acres estimated in agreement with various and unspecified widths.

DATE	REVISIONS	DATE	REVISIONS
3-4-83	CO 1-83 Del 123, Add 144, 145		
9-07-82	CO 3-82 Nm.Cng 142, ADD 143		
9-04-82	CO 2-82 ADD 141, 142, Po.Dd 137		
5-11-82	CO 1-82, ADD 138-140, DEL 137		
5-81	ADD TR. 01-137		
5-81	AC. CHANGE 01-123, 134		
1-80	PER MEMO DTD 1-13-80		
8-78	PER MEMO DTD 7-13-78		
7-78	PER MEMO DTD 6-13-78		
7-77	CORRECT AC TR 01-107		

ESTABLISHED: SEPTEMBER 13, 1961
 BOUNDARY CHANGE: OCTOBER 21, 1976
 DATE: APRIL 1977
 MAPPED BY: DENVER SERVICE CENTER, COLORADO



6	5	4	3	2	1
7	8	9	0	1	2
8	7	6	5	4	3
9	8	7	6	5	4
0	9	8	7	6	5
1	0	9	8	7	6
2	1	0	9	8	7
3	2	1	0	9	8
4	3	2	1	0	9
5	4	3	2	1	0
6	5	4	3	2	1
7	6	5	4	3	2
8	7	6	5	4	3
9	8	7	6	5	4
0	9	8	7	6	5
1	0	9	8	7	6
2	1	0	9	8	7
3	2	1	0	9	8
4	3	2	1	0	9
5	4	3	2	1	0
6	5	4	3	2	1
7	6	5	4	3	2
8	7	6	5	4	3
9	8	7	6	5	4
0	9	8	7	6	5
1	0	9	8	7	6
2	1	0	9	8	7
3	2	1	0	9	8
4	3	2	1	0	9
5	4	3	2	1	0
6	5	4	3	2	1
7	6	5	4	3	2
8	7	6	5	4	3
9	8	7	6	5	4
0	9	8	7	6	5
1	0	9	8	7	6
2	1	0	9	8	7
3	2	1	0	9	8
4	3	2	1	0	9
5	4	3	2	1	0
6	5	4	3	2	1
7	6	5	4	3	2
8	7	6	5	4	3
9	8	7	6	5	4
0	9	8	7	6	5
1	0	9	8	7	6
2	1	0	9	8	7
3	2	1	0	9	8
4	3	2	1	0	9
5	4	3	2	1	0
6	5	4	3	2	1
7	6	5	4	3	2
8	7	6	5	4	3
9	8	7	6	5	4
0	9	8	7	6	5
1	0	9	8	7	6
2	1	0	9	8	7
3	2	1	0	9	8
4	3	2	1	0	9
5	4	3	2	1	0
6	5	4	3	2	1
7	6	5	4	3	2
8	7	6	5	4	3
9	8	7	6	5	4
0	9	8	7	6	5
1	0	9	8	7	6
2	1	0	9	8	7
3	2	1	0	9	8
4	3	2	1	0	9
5	4	3	2	1	0
6	5	4	3	2	1
7	6	5	4	3	2
8	7	6	5	4	3
9	8	7	6	5	4
0	9	8	7	6	5
1	0	9	8	7	6
2	1	0	9	8	7
3	2	1	0	9	8
4	3	2	1	0	9
5	4	3	2	1	0
6	5	4	3	2	1
7	6	5	4	3	2
8	7	6	5	4	3
9	8	7	6	5	4
0	9	8	7	6	5
1	0	9	8	7	6
2	1	0	9	8	7
3	2	1	0	9	8
4	3	2	1	0	9
5	4	3	2	1	0
6	5	4	3	2	1
7	6	5	4	3	2
8	7	6	5	4	3
9	8	7	6	5	4
0	9	8	7	6	5
1	0	9	8	7	6
2	1	0	9	8	7
3	2	1	0	9	8
4	3	2	1	0	9
5	4	3	2	1	0
6	5	4	3	2	1
7	6	5	4	3	2
8	7	6	5	4	3
9	8	7	6	5	4
0	9	8	7	6	5
1	0	9	8	7	6
2	1	0	9	8	7
3	2	1	0	9	8
4	3	2	1	0	9
5	4	3	2	1	0
6	5	4	3	2	1
7	6	5	4	3	2
8	7	6	5	4	3
9	8	7	6	5	4
0	9	8	7	6	5
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4	3	2	1	0	9
5	4	3	2	1	0
6	5	4	3	2	1
7	6	5	4	3	2
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4	3	2	1	0	9
5	4	3	2	1	0
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1	0	9	8	7	6
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4	3	2	1	0	9
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6	5	4	3	2	1
7	6	5	4	3	2
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4	3	2	1	0	9
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6	5	4	3	2	1
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9	8	7	6	5	4
0	9	8	7	6	5
1	0	9	8	7	6
2	1	0	9	8	7
3	2	1	0	9	8
4	3	2	1		

Archeological Assessment for Fort Smith National Historic Site

unprocessed at the time Moore prepared his report, he was able to present a brief discussion of recovered objects.

From March 2, 1964 to June, 1966, the National Park Service contracted Clyde D. Dollar to conduct historical research, to process artifacts, and to prepare a narrative report describing the results of investigation at Belle Point. According to Dollar (1966:I-1), the purpose of the report was to "arrive at conclusions regarding the physical history of the fort." Dollar examined the vertical and horizontal distribution of artifacts from the first Fort Smith. Perhaps because of post-historic disturbances or the method of data retrieval used, meaningful stratigraphic patterning was not apparent to Dollar. The horizontal position of artifacts, however, did shed some light on the construction and use-history of the post. Dollar concluded that the south blockhouse and rooms on the northeast and southeast walls of the stockade had housed the troops. These areas contained the greatest frequency of window pane, adequate lighting and ventilation being requisite for healthy living conditions. Conversely, the northwest and southwest walls of the fort displayed fewer buttons, personal objects, and window pane and probably contained shops and storerooms. Most buildings within the fort, at least at one point in time, seem to have supported slate roofs, and an abundance of brick from the vicinity indicates that it may have been used for construction--perhaps in chimney shafts (Dollar 1966:V28-36).

Unfortunately, the methodology guiding the Belle Point excavations of 1958 to 1963, while typical of the archeology of the day, is often incompatible with current investigative standards. For example while natural stratigraphic levels in all likelihood existed, deposits were excavated in arbitrary levels. Excavators maintained only rudimentary vertical control, measured by trowel and shovel depths below surface. Archeologists selectively collected artifacts. The sample was processed and culled--only diagnostic artifacts thought to be historic were retained for study. Entire artifact categories, including bone, brick, and lithic debris were summarily omitted from the analysis and discarded. Objects culled from the sample, estimated to have been 96% of the original field collection, were reburied in trash barrels somewhere on Belle Point (Dollar 1966:7). Dollar notes that lists of all artifacts were prepared before culling. Comprehensive lists or tables, however, were not included in his report and they have long-since been lost.

In 1983, the National Park Service accessioned the Belle Point collection to standards of the Museum Handbook. In the 20-year long interim from 1963-1983, the collection was neglected, resulting in the irretrievable loss of nearly all associated provenience information as well as the disappearance of several diagnostic artifacts. Because of the loss of provenience data and the original subjective nature of the collection, material recovered by this work will probably be of little

interest to researchers in the future.

The field records and Dollar's (1966) completion report document the Belle Point excavation. The report should be used cautiously by researchers. Test units are not numbered on excavation plans and the specific site of the post well was never recorded. A July 1, 1966, review of the document by park historian James N. Haskett (File D2621) makes several relevant criticisms that are reproduced here: "Dollar did not utilize available research findings in his study--many of his archeological findings...would thereby have been much more meaningful. Mr. Dollar occasionally makes assumptions which . . . are inaccurate." Hasket recommended that use of Dollar's report be limited to the park staff.

PROJECT NUMBER 2

- 1) Date: October 15, 1963
- 2) Location: Tract 01-125
- 3) Principal investigator: Clyde D. Dollar
- 4) Type of investigation: Monitoring
- 5) Reference: Unpublished fieldnotes and photographs, Fort Smith File Number IV-55 and as project Number 2 in the field generated data file.
- 6) Discussion: At the time of this investigation, tract 01-125, a vacant lot, was owned by the RC Cola Bottling Plant. Then housed in the building at the corner of Parker Avenue and Third Street (present park maintenance facility), the bottling company intended to develop the adjacent lot (tract 01-125) as a parking area. On October 15, 1963, cutting for parking lot construction disturbed structural debris in the vicinity of the second fort wall. The company manager notified Superintendent Tom Norris of the discovery, and Norris arranged for Clyde Dollar to inspect the area.

Dollar visited the site and observed that a linear rubble mound varying from 1-15 feet wide and from 2-3 feet high, ran diagonally across tract 01-125. Apparently, this was the remains of wall section #5 and bastion 4. Notes and photographs of this activity document quantities of construction stone in the area, but no mention of an in-situ foundation was made. Dollar's fieldnotes were entered by tape recorder. The tape, on file at Fort Smith National Historic Site, has not been transcribed. There are no field maps for this project on file.

PROJECT NUMBER 3

- 1) Dates: September 1-2, 1978
- 2) Location: Tract 01-125
- 3) Principal investigator: Bruce Anderson
- 4) Type of investigation: Test excavation
- 5) Reference: Anderson, Bruce, 1979. Archeological Test Excavations for Portions of the Walls of the 2nd Fort, Fort Smith National Historic Site, Fort Smith, Arkansas. National Park Service, Southwest Regional Office, Southwest Cultural Resource Center, Santa Fe.
- 6) Discussion: Bruce Anderson, a National Park Service Archeologist of the Southwest Regional Office, conducted a two day test excavation on tract 01-125 to locate structural remains of bastion 4 and adjoining wall sections 6 and 7. This area, now owned by the National Park Service, had been the parking lot for employees of the Fort Smith Paper Company. Anderson monitored the excavation of two two-foot wide backhoe trenches, placed to intersect the hypothesized location of structural remains. This work revealed four archeological features: feature 1, believed by Anderson to be the remains of wall section 6, feature 2, a stone concentration thought to be a prepared house floor, and features 3 and 4, possible disturbed wall foundations.

Anderson's work constitutes the first problem oriented investigation on tract 01-125 and the entire second fort site, yet, his work was limited in scope. It was clear at that time that additional work would be needed to verify his tentative findings. Anderson's activities, however, positively identified surviving structural remains and the questions raised by his work prompted additional investigations at the site.

PROJECT NUMBER 4

- 1) Dates: March 19-21, 1980
- 2) Location: Tracts 01-104, 01-105, 01-111, 01-138
- 3) Principal investigator: Bruce Anderson
- 4) Type of investigation: Test excavation
- 5) Reference: Anderson, Bruce, 1981. Continuing Archeological Test Excavations for Portions of the Walls of the 2nd Fort, Fort Smith National Historic Site, Arkansas. National Park Service, Southwest Regional Office, Southwest Cultural Resource Center, Santa Fe.
- 6) Discussion: Bruce Anderson conducted additional investigations at Fort Smith National Historic Site to locate remnants of the second fort defensive works. Anderson devoted three days to this project and concentrated his efforts in the vicinity of Bastion 1 and Bastion 3. Seven test trenches,

Archeological Assessment for Fort Smith National Historic Site

excavated with a backhoe using a 2-foot wide bucket, were strategically placed to intersect structural remains. In the vicinity of the Commissary (Bastion 1), Anderson identified two features: feature 1, a 13-foot long segment of wall section 10 at its juncture with the Commissary and feature 2, a linear rubble concentration marking the former location of wall section 10 on the east edge of tract 01-105. Testing exposed a portion of flagstone paving that parallels the right flank of bastion 1. Efforts to locate bastion 3 and adjacent wall sections 3 and 4, however, failed to reveal structural remains. Likewise, evidence of the gallows, once situated at the site of bastion 3, was not encountered.

Anderson's work yielded important information regarding the identification and location of the second fort defensive works. He established that at least 13 feet of wall section 10 remained intact in tract 01-104 and that elsewhere, rubble in a stone remover's trench marked the former wall location. Past cutting activity in tracts 01-111 and 01-138 appears to have removed all evidence of bastion 3, adjacent wall sections 3, 4, and 5, and the gallows. A flagstone pavement associated with the Commissary was not explored further and a positive identification of the feature could not be established.

PROJECT NUMBER 5

- 1) Dates: February 13 - March 31, 1981
- 2) Location: Tracts 01-108, 01-111, 01-114, 01-125, 01-127, 01-138
- 3) Principal investigator: Diane Traylor
- 4) Type of investigation: Test Excavation
- 5) Reference: Traylor, Diane, 1981. Test Excavations for Bastion and Wall Foundations of the Second Fort at Fort Smith, Arkansas. National Park Service, Southwest Regional Office, Southwest Cultural Resource Center, Santa Fe.
- 6) Discussion: Diane Traylor, a National Park Service Archeologist of the Southwest Regional Office, conducted additional investigations at Fort Smith National Historic Site. Her stated purpose, to locate walls and bastions and determine "what remained of foundations" compliments Anderson's previous investigations. Using a backhoe with a 2-foot wide bucket, Traylor placed trenches in areas suspected to contain the foundations of second fort defensive works. Ultimately, 20 trenches were excavated in six land tracts.

Traylor identified the remains of bastion 2 and adjoining wall sections 2 and 3, and further explored the sites of bastion 3 and bastion 4. Test trenches in the vicinity of bastion 3 failed to produce remains of that structure or the gallows, thus confirming Anderson's previous assessment. One

Archeological Assessment for Fort Smith National Historic Site

trench excavated along the east edge of tract 01-118 to encounter wall section 5 revealed instead, a previously undocumented building foundation, 54 cm. below surface. This feature, obviously not remains of second fort defensive works, was not explored further. In an attempt to address unresolved issues regarding the location of bastion 4, Traylor excavated 12 trenches in that area (tract 01-125). Feature 1, identified by Anderson as remains of wall section 6, was reexcavated by Diane Traylor. She observed that stones in feature 1 were not "in situ" and that the rubble alignment did not represent a fort curtain wall. Traylor's reanalysis of feature 2 seemed to confirm Anderson's original assessment that it was, indeed, the remains of bastion 4. Traylor found a mortared stone alignment conforming to the shape of bastion 4 with a possible point of juncture for wall section 6. Regarding features 3 and 4, as defined by Anderson, Traylor found no compelling evidence to associate them with fort wall foundations, but offered no other explanations of their function.

Testing at the site of bastion 5 was accomplished with difficulty. Demolition of the Speer Hardware Building was underway and construction materials were stockpiled in the adjacent lot (tract 01-127) over the site of bastion 5. Test units placed between debris piles, however, were sufficient to identify bastion 5 at its juncture with wall section 8. Stone at this point appeared at the surface and was exposed by brushing.

Traylor's investigation revealed new information concerning the location and integrity of the second fort defensive works. She identified intact foundations at bastion 2 and adjoining wall sections 2 and 3, and at bastion 5 and adjoining wall section 8. Her efforts resulted in the identification of a previously unknown building foundation and clarified the relationship of feature 1 to wall section 6. The project concluded without the foundations being completely delineated and the project methodology made it difficult to assess the remains encountered. Stratigraphic information comparable to more current research was not recorded; artifacts were collected, but not interpreted in the report; and an accurate base map with trench and feature locations was never prepared.

PROJECT NUMBER 6

- 1) Dates: August 1, 1982 - September 12, 1982
- 2) Location: Tract 01-104
- 3) Principal investigator: Clyde D. Dollar
- 4) Type of investigation: Test Excavation
- 5) Reference: Dollar, Clyde D. 1983. Archeological Investigation and Historical Documentation in the Vicinity of the Old Commissary Building, Fort Smith National Historic Site, Fort Smith,

Arkansas. Historic Preservation Associates, Fayetteville, Arkansas.

6) Discussion: Archeological investigation in the vicinity of the second fort Commissary was undertaken to provide information on external features of the building for an updated historic structure report. To accomplish the archeological research, a contract was awarded to Historic Preservation Associates of Fayetteville, Arkansas. This agency subcontracted to Tri-Arch Research Associates, also of Fayetteville, for the services of Clyde D. Dollar as project director. Dollar, director of Tri-Arch Research Associates and history instructor at the University of Arkansas, had previously conducted fieldwork at Fort Smith National Historic Site. As stated by Dollar, the specific goals of his work were: to archeologically explore the area on each side of the Commissary; to search for structural features associated with the building; to recover, study, and preserve all artifacts found in the excavated area; and to expose the footing at the southeast corner of the building and determine the cause of settlement there.

Under Dollar's guidance, a grid system was established on the site and 20 test units were hand excavated within a 30-foot radius of the north, east, and south sides of the Commissary. Soil was removed by arbitrary six inch levels and screened. All artifacts were retained for analysis.

The investigation revealed evidence for three of four historically documented porches, the locations where two curtain walls of the fortification once intersected the building, and a flagstone walk that parallels the east side of the Commissary. Both wall section 10 and the flagstone walk were previously identified by Bruce Anderson (Project 4), but were relocated by Dollar for mapping purposes. Wall section 1, on the south side or left flank of the Commissary was marked by a linear trench feature, apparently without in-situ construction stone. Two surviving stone piers and one possible post mold from the south side of the Commissary are from an 8x48 foot porch. A porch of identical dimensions on the north side of the building is represented by a stone retaining wall, visible at the surface. This archeological investigation discloses that a set of stone steps once serviced the east end of the porch. Historically, two porches existed on the east side of the Commissary. Two post molds identified there relate to the second porch, an 8x23 foot structure that accessed the second floor of the building. Based on the presence of two additional post molds at the southeast corner of the Commissary, Dollar contends that the south and east porches may have been connected in a "wrap-around" porch configuration.

Dollar's work at the Commissary was a model excavation that employed current methods and standards of research. Data control was excellent. Artifacts were tabulated and presented in the report along with a base map of appropriate scale. However, the method of data collection used by Dollar, sadly, skews his results and interpretation. By collecting artifacts from arbitrary six inch

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levels and crosscutting natural stratification present on the site, Dollar ignored culturally relevant information. Thus, the dates he places on historic ground levels and associated external features of the Commissary are grossly errant. Dollar's interpretation of the archeological evidence contrasts with the physical history of the Commissary as described by James Ivey, a National Park Service historical archeologist. According to Ivey, "by . . . discarding his [Dollar's] conclusions . . . a coherent physical history resulted (Frazier, Ivey, and Coleman 1987:16). After the untimely death of the author, Dollar's report was finished posthumously. Expectedly, the report contains numerous typographical mistakes as well as errors of fact and should be limited to use by the park staff. For general research purposes, the archeological section prepared for the 1987 Commissary historic structure report (Frazier, Ivey, and Coleman 1987) should be used.

PROJECT NUMBER 7

- 1) Dates: October 17, 1982 - April 15, 1983
- 2) Location: Tracts 01-107, 01-110, 01-139
- 3) Principal investigator: Clyde D. Dollar
- 4) Type of investigation: Monitoring
- 5) Reference: Coleman, Roger E., 1984. Results of Archeological Monitoring for Demolition of the Meek Bottling Plant, Fort Smith National Historic Site, Fort Smith, Arkansas. Report on file at Fort Smith National Historic Site.
- 6) Discussion: Archeological monitoring was conducted by Clyde D. Dollar during demolition of the Meek Bottling Plant. This building complex, recently acquired by the National Park Service, overlays portions of the nineteenth century military fort including part of the parade ground, the Cistern, and Officer's Row. Although the primary objective of the project was protection of these underlying remains, enough information was gathered to approximate the location of Officer's Row. Thirty five features were discovered. Among these are flagstone pavements, segments of fort wall section 1, the garrison flagstaff, possible well and privy locations, and linear rubble concentrations believed to represent former wall lines of Officer's Row. Evidence suggests that 1.7-1.8 feet and 0.5 feet of fill remain in the basements of Officer's Quarters A and B, respectively. Monitoring failed to reveal remains of the Commandant's Quarter.

Because of the untimely death of Clyde D. Dollar, the report was finished by another researcher. Archeologist Roger E. Coleman was contracted to do the work. Using Dollar's fieldnotes, Coleman produced a substantial report of investigation that contained feature descriptions, artifact tables, and a base map. Because of a gap in continuity between the investigators, as Coleman notes, the results must be used with caution.

PROJECT NUMBER 8

- 1) Dates: July 12 - August 19, 1983
- 2) Location: Tract 01-139
- 3) Principal investigator: Roger E. Coleman
- 4) Type of investigation: Excavation
- 5) Reference: Coleman, Roger E., 1983. Excavation of the Flagpole Base at the Second Fort, Fort Smith, Arkansas. Report on file at Fort Smith National Historic Site.
- 6) Discussion: The Flagstaff had been discovered by Clyde D. Dollar shortly before the archeologist's death. The National Park Service decided to reconstruct the flagstaff as a memorial to Dollar. To obtain necessary construction details, Roger E. Coleman, an anthropology graduate student of Texas A&M University, was contracted by the National Park Service to excavate the flagstaff base.

According to Coleman, the purpose of the investigation was to document construction detail, recover associated hardware, determine episodes of repair, and reveal the date of construction for the flagstaff. First, Coleman delineated the flagstaff base and then hand excavated two opposing quarters of the feature. Clay and brick rubble fill in the feature was not screened, but all artifacts encountered were piece-plotted and retained.

Excavation revealed a well preserved subterranean wooden structure designed to support the flagstaff. All components of the support system are constructed of oak and include four massive 1x1-foot square, 18-foot long beams and eight 4x6-inch square, 10-foot long angled braces. The beams, arranged in two parallel sets joined at the center by half-notching, comprise the flagstaff base. A one foot square opening occurs between the beams, within which the flagstaff was undoubtedly set. Attached to the end of each crossbeam by two-to-three five inch spikes is an angled brace. Braces are set at a 45 degree angle and once projected from the ground and attached to the flagstaff approximately three feet above ground surface. The data collected during Coleman's investigation assisted in constructing the accurate reconstruction of the flagstaff. Associated hardware and diagnostic artifacts were not recovered, making it difficult to determine age of the structure. Likewise, an attempt to dendrochronologically date the flagstaff failed. It is believed, however, that the structure was in place by 1846, when the fort was formally garrisoned.

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PROJECT NUMBER 9

- 1) Date: July 18, 1984
- 2) Location: Tract 01-108
- 3) Principal investigator: Roger E. Coleman
- 4) Type of investigation: Monitoring
- 5) Reference: Unpublished notes on file as project Number 9 in the field collected data file at Fort Smith National Historic Site.
- 6) Discussion: On July 18, 1984, sidewalk replacement at the east visitor center entrance exposed a circular soil discoloration that probably marks the site of a former post well, documented in the 1870 army survey map. The location of the well was triangulated. Following removal of concrete sidewalk at the base of the visitor center steps, two additional steps, 1.7 feet below extant ground level, were identified. Thus, 1.7 feet of fill has been deposited on the visitor center lawn, probably after 1898, when the configuration of the courthouse steps are known to have been altered.

Significant historic resources were not adversely effected by sidewalk replacement. Observations made during archeological monitoring indicate the presence of extensive fill on tract 01-108, and the likelihood of historic subsurface remains, including a post well underlying that fill.

PROJECT NUMBER 10

- 1) Dates: September 4-11, 1984
- 2) Location: Tracts 01-104, 01-105
- 3) Principal investigator: Roger E. Coleman
- 4) Type of investigation: Test excavation, monitoring
- 5) Reference: Coleman, Roger E., 1984. Archeological Monitoring at the Old Commissary Building, Fort Smith National Historic Site, Fort Smith, Arkansas. Report on file at Fort Smith National Historic Site.
- 6) Discussion: This investigation occurred in conjunction with rehabilitation of the Commissary Building. Archeologist Roger E. Coleman, contracted by Fort Smith National Historic Site, monitored the insertion of subsurface utility lines from Second Street to the Commissary and exposed portions of adjacent fort curtain wall sections 1 and 10 to facilitate capping the foundations with stone. To accomplish these objectives, eight test trenches were excavated or monitored during the project. Information concerning fort wall construction and site stratigraphy were collected that compliment and refine Clyde D. Dollar's (1983) investigation (project number 6).

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In situ stone exists for both wall sections 1 and 10 and is encountered 4 and 9 inches below surface, respectively. Some construction techniques vary at different points along the wall, including width of the builder's trench and position of the wall within the trench. The original bastion gorge survives intact beneath the flagstone floor of the Commissary.

Stratigraphic history in the vicinity of the Commissary is complex--11 distinctive soil zones are present, including two historic ground levels. These buried occupational surfaces occur 22 inches and 29 inches below surface. The lowest historic ground level, beyond the fort curtain wall, covers an extensive rubble lens that accumulated during fort construction.

The investigation resulted in the discovery of wall section 1, making it possible to accurately delineate and cap both wall sections. Monitoring during the insertion of utility lines to the Commissary prevented adverse impact to significant cultural resources and resulted in new information that resolved issues in interpretation stemming from Dollar's (1983) investigation (Frazier, Ivey, and Coleman 1987).

PROJECT NUMBER 11

- 1) Dates: June 12-13, 1985
- 2) Location: Tracts 01-111, 01-134, 01-138, 01-139
- 3) Principal investigator: Roger E. Coleman
- 4) Type of investigation: Test excavation, monitoring
- 5) Reference: Coleman, Roger E., 1986. Archeological Testing and Monitoring for Parking Lot Construction, Fort Smith National Historic Site, Fort Smith, Arkansas. National Park Service, Southwest Regional Office, Southwest Cultural Resource Center, Santa Fe.
- 6) Discussion: Coleman conducted archeological testing for construction of a new parking lot in a 2.45 acre tract at the southwest end of the park. This area, known to have contained an extensive ravine during the historic occupation of the site, was expected to harbor deep fill deposits. Field methods were appropriately designed to sample these deposits.

A baseline, established on the north boundary of the project area, was used to project test trenches. These were oriented perpendicular to the baseline and placed at even 20 foot intervals. A backhoe with 2-foot wide bucket was used to excavate trenches. Profiles were recorded and, for dating purposes, artifacts were collected by soil zone.

Eleven test trenches, totalling 600 linear feet, were excavated at the proposed parking lot site.

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Numerous fill episodes, some containing quantities of rubble, were identified. Fill dates from the late 1870s to ca. 1947, but is predominantly twentieth century in age. Testing was sufficient to delineate the former ravine. It is estimated to have been 285 feet wide and 23 feet deep. Two building foundations were identified and delineated in tract 01-111. A Sanborn insurance map reveals that these are remnants of the Webber-Ayere's warehouse complex, constructed ca. 1900.

Coleman determined that significant cultural resources would not be adversely effected by proposed parking lot construction. Yet, important information concerning park history and development was acquired through the investigation.

PROJECT NUMBER 12

- 1) Date: 1986
- 2) Location: Tracts 01-108, 01-111, 01-124, 01-134, 01-138, 01-144, 01-145
- 3) Principal investigator: Roger E. Coleman
- 4) Type of investigation: Monitoring
- 5) Reference: Coleman, Roger E., 1987. Archeological Monitoring for Burial of Overhead Telephone Lines and Identification of an Historic Midden, Fort Smith National Historic Site, Fort Smith, Arkansas. National Park Service, Southwest Regional Office, Southwest Cultural Resource Center, Santa Fe.
- 6) Discussion: To protect undiscovered cultural resources, Coleman monitored the burial of overhead telephone lines at Fort Smith National Historic Site. The AT&T Company used a front-end-loader with one-foot wide bucket to excavate over 986 feet of trench along Third Street and Parker Avenue. Monitoring of this potentially destructive activity averted impact to a buried historic midden and resulted in increased information on the stratigraphic history of the park.

Most of the trench occurred within sterile fill deposited by the military prior to second fort construction in 1839. In two areas, however, the excavation exposed significant underlying deposits. The first, area 1, contains an historic ground level over a cinder deposit. Area 1 is located on Forgecraft property immediately south of the National Historic Site. Area 2, located at the corner of Third Street and Parker Avenue, contained a 1.4-foot thick historic midden deposit, 2.9 feet below surface. To document contents and assess significance of the midden, a single 1x6 foot test unit was excavated to the base of the deposit. This activity resulted in the recovery of 1,681 artifacts.

Artifact analysis indicates that the midden is from the early civilian community of Fort Smith that

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originally occupied the second fort site from fall, 1821-August, 1838. The midden is the only known resource from this early civilian hamlet and is a significant, contributing resource. Since additional work in the area, however, would have impacted remains in overlying ground levels, the deposit was not delineated. To assess the extent of the midden and to protect this resource in the future, Coleman recommended that a program of small bore coring should be implemented.

PROJECT NUMBER 13

- 1) Date: July 13, 1987
- 2) Location: Tract 01-151
- 3) Principal investigator: Roger E. Coleman
- 4) Type of investigation: Monitoring
- 5) Reference(s): Unpublished maps and fieldnotes filed as project number 13 in the field generated data file at Fort Smith National Historic Site.
- 6) Discussion: Coleman provided archeological monitoring for excavations of the Missouri Pacific Railroad Company. Their purpose, to clean-up the railroad right-of-way within the park boundary, required the excavation of pits to bury railroad ties and other debris. To prevent historic resources on the adjacent railroad median strip from being impacted, Coleman requested that all pits be placed in the ditch between the track bed and median strip. Five pits were excavated in this area, all in sterile subsoils. Significant cultural resources were not adversely effected.

PROJECT NUMBER 14

- 1) Dates: December 1-5, 16-18, 1987; May 7-10, 1988
- 2) Location: Tracts 01-107, 01-149
- 3) Principal investigator: Roger E. Coleman
- 4) Type of investigation: Test excavation, monitoring
- 5) References: Coleman, Roger E., 1989. History and Appearance of the Second Fort Cistern, Fort Smith National Historic Site, Arkansas. National Park Service, Southwest Regional Office, Southwest Cultural Resource Center, Santa Fe.
- 6) Discussion: As recommended by the Resources Management Plan (1988) for Fort Smith National Historic Site, an excavation was undertaken at the historic second fort cistern to collect essential planning data. Coleman conducted the investigation and tested the site of an associated overflow drain. Key issues to be addressed by the investigation included: construction and original appearance of the cistern; local stratigraphy and historic ground level; age of the cistern; and its relationship to Officer's Row.

Cumulatively, 11 days were devoted to the project. Four test units were excavated at the site of the cistern and the overflow drain. Tests were hand excavated. Soil was screened and all artifacts were retained for analysis. A fuel tank adjacent to the cistern was removed by backhoe. This work was closely monitored and formally recorded as a test unit. Ample information was acquired to accurately display and interpret the cistern.

Physical evidence indicates that the cistern never had an historic platform. The crown of the structure jugged above the ground surface like an inverted bowl and rose at least 2.6 feet above historic grade. The exterior crown surface may have been finished with a durable stucco coating. The cistern manhole cover probably once supported a hand operated pump or rope and bucket. Investigation of the cistern drain revealed a 38-foot long stone-lined trough. Visible at ground surface, this feature contained only .2 feet of fill. Projected alignment of the drain indicates that the structure is an overflow drain from the second fort cistern. The precise relationship of the cistern to Officer's Row could not be established, but the absence of a drain inlet for Officer's Quarters A suggests that the cistern and overflow drain post-date 1865, when Officer's Quarters A burned to the ground. Apparently, there is no surviving evidence of the Commandant's Quarter and the relationship of the cistern to Officer's Row can not be determined.

Coleman recommended that the modern, obtrusive brick platform should be removed and that the cistern crown should be stabilized and displayed.

PROJECT NUMBER 15A

- 1) Dates: May 21 - August 2, 1985
- 2) Location: Tract 01-127
- 3) Principal investigator: Roger E. Coleman
- 4) Type of investigation: Test excavation
- 5) Reference: Unpublished field records on file at Fort Smith National Historic Site as project 15A in the field generated data file.
- 6) Discussion: Coleman conducted an investigation at the site of bastion 5 to supplement previous work undertaken there and to acquire essential planning data for capping and outlining the second fort defensive works. Specific project goals included the location and delineation of bastion 5 and adjacent wall sections 8 and 9. To accomplish these objectives, 2-foot wide, hand-excavated trenches were placed to intersect foundations. Eight test units were excavated to locate and delineate wall and bastion remains. After locating bastion 5, this structure was exposed with two

block units separated by a balk wall and appropriately designated E1/2 and W1/2.

Archeological investigation indicates that bastion 5 is approximately 95% complete. Only a portion of the gorge and left flank are disturbed and a short break in the foundation occurs from a city storm sewer that crosses through the right and left faces of the structure. Stone is encountered 1.0 foot below surface at the gorge and 2.5 feet below surface at the salient angle of the bastion. The excavation revealed an unanticipated foundation within the bastion interior. This pentagonal alignment of dry-laid sandstone slabs is a footing for the parados, an internal wall to support a second story gun platform or terreplein.

Evidence of both adjoining wall sections exists in tract 01-127. Wall section 8, a 70-foot long foundation scarcely 1.0 foot below surface, occurs on tract 01-127. On the east end of the tract, a builder's trench for the footing was not apparent, suggesting that this area contains military embankment and holds potential for significant buried deposits. Unfortunately for this investigation, almost all of wall section 9 had been destroyed by construction of the Speer Hardware Building. Only a 2.0-foot long segment of wall section 9 survives 3.0 feet below surface, but is enough to determine its point of juncture with bastion 5. Although historic foundations survive in tract 01-127, an historic ground level does not exist and few historic artifacts were recovered during this investigation.

PROJECT NUMBER 15B

- 1) Dates: September 7 - October 21, 1985
- 2) Location: Tract 01-125
- 3) Principal investigator: Roger E. Coleman
- 4) Type of investigation: Test excavation
- 5) Reference: Unpublished field records on file at Fort Smith National Historic Site as project number 15B in the field generated data file.
- 6) Discussion: Coleman conducted additional investigations of the second fort defensive works, this time at the site of bastion 4 and adjacent wall sections 6 and 7. Two previous investigations at this site identified structural remains thought to represent elements of the defensive works. Bruce Anderson discovered two rubble concentrations that he identified as wall section 6 (F4) and a possible house floor (F2). A second investigation conducted by Diane Traylor yielded conflicting results. She determined that feature 4 was not wall section 6, but offered no alternative identification. Feature 2 was redefined and is considered by Traylor to be the foundation of bastion 4. Coleman's objectives were to clarify these unresolved issues resulting from prior

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investigations, to positively identify feature 4, and to locate and accurately delineate the remains of bastion 4 and adjacent fort curtain walls.

Coleman employed cross-trenching in areas suspected to contain structural remains. Two-foot wide trenches were hand excavated. A deep cross-trench was used to examine feature 4 in profile and grid units were opened over the hypothesized remains of bastion 4. Thirteen test units were excavated and enough information was obtained to clarify issues of feature identification. Feature 2 as identified by Anderson and Traylor is a .5-foot deep, dry laid, linear stone arrangement forming an obtuse angle or corner and resembling the bastion foundation. In 1981 Traylor reported that the foundation was mortared. This investigation found no evidence of mortar and suggests that the original investigators were in error. The "probable wall juncture" identified by Traylor in 1981 was found to be rubble in disturbed topsoil and her Feature 2 "bastion foundation" was found to be the remains of the parados or bastion interior wall (supporting the second story terreplein). Nearly all of the bastion scarp wall had been completely removed. This investigation identified only a three-foot long portion of the bastion gorge, .55 feet below surface. A complex arrangement of features, however, occurs within bastion 4. At least three superimposed features that may have abutted the bastion scarp wall are evident. At least two of these features produced nineteenth century artifacts and are possibly historic period privys.

Feature 4, examined in cross-section, is a sandstone rubble concentration between two levels of military embankment. Twenty three soil zones, all fill episodes, were identified here to a depth greater than 3.5 feet below surface. The stone rubble follows a sloping contour toward the fort interior. Stone is jumbled without mortar and as Traylor concluded, is unquestionably not the foundation of wall section 6. Feature 4 is, however, a byproduct of fort wall construction. This linear debris concentration accumulated from spot dressing stone during wall construction and its position in profile marks a former construction surface. Additional embankment was then placed to fill the fort interior and to strengthen wall section 6, thus covering feature 4. Unfortunately for this investigation, the stratigraphic sequence also indicates that wall section 6 and the historic ground level in tract 01-125 has been completely removed.

PROJECT NUMBER 15C

- 1) Dates: September 8 - December 5, 1986
- 2) Location: Tracts 01-107, 01-114
- 3) Principal investigator: Roger E. Coleman
- 4) Type of investigation: Test excavation

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5) Reference: Unpublished field records on file at Fort Smith National Historic Site as project 15C in the field generated data file.

6) Discussion: Further investigation of the second fort defensive works was undertaken by Coleman. To supplement previous investigations and to acquire information for park planning and management needs, efforts were concentrated on bastion 2 and adjacent wall sections 1, 2, and 3, and the identification of historic ground levels at these locations.

Coleman employed a combination of trenching with grid square and block unit excavation to identify and expose structural remains, and to sample soil deposits. Four 5x5-foot square units were excavated to encounter wall section 1 and to reveal site deposits on tract 01-107. At bastion 2, block units were opened over wall sections 2 and 3, and over each bastion wall. To maintain stratigraphic control, balk walls were left in each block unit. For sampling deposits beyond the fort and bastion walls, a grid system was established and seven 5x5 foot square units were excavated or partially excavated. A total of 16 test units were excavated, providing a wealth of data for planning purposes.

Testing on tract 01-107 indicates that 180 feet of wall section 1 survives intact. While the historic ground level is cut away on the fort interior, successive historic ground levels and fill episodes are evident on the fort exterior. Historically, extrafort areas were lower than the fort interior and received more fill over time. Test 1 revealed an historic ground level and a substantial trash midden from 2.0-3.5 feet below surface. Sterile military embankment and possibly unidentified historic resources exist below this. In test 2, 10 soil zones were identified including two historic ground levels, wall construction and demolition surfaces, and at least two episodes of military embankment. Previously undocumented structural remains were encountered in this embankment. A dry laid sandstone wall, set as embankment progressed, provides a stabilizing scarp or toe for wall section 1.

Testing on tract 01-114, the railroad median strip, revealed intact foundation from all sides of bastion 2. Approximately 134 feet or 67% of the structure has survived. The investigation identified remains of both adjoining curtain walls, 27.5 feet of wall section 2 and 10.5 feet of wall section 3. Construction stone is encountered from 1.1 to 4.4 feet below surface. The bastion interior contains military embankment over construction rubble and marks the former floor level of the building.

Historic ground levels are present on both interior and exterior fort areas. On the fort interior, historic ground level occurs .8 feet below surface. Beyond the fort and bastion walls, four historic

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ground levels separated by fill episodes are apparent. Historic ground levels are .4, 1.4, 2.8, and 3.2 feet below surface, respectively.

Evidence of external building features were identified. Porch foundations from the 1866/7 renovation of the Quartermaster Building are evident on both the right face and left flank of the structure (opposite sides). Because of time and funding limitations, however, porches were not delineated.

Coleman located and delineated bastion 2 and adjacent wall sections 1, 2, and 3, acquiring information for park planning and management needs. Work revealed new insights into construction and use of the second Fort Smith. Unfortunately, funds for a final report to synthesize and interpret this information was unavailable and has not been forthcoming. It is essential that all wall and bastion excavations be properly reported.

PROJECT NUMBER 16

- 1) Dates: October 21, 1985 - October 28, 1988
- 2) Locations: Tract 01-114, 01-115, 01-116
- 3) Principal investigator: Roger E. Coleman
- 4) Type of investigation: Test excavation, mitigation, monitoring
- 5) References: Coleman, Roger E., 1987. Interim Report: Archeological Investigation for Construction of a Pedestrian Trail at Fort Smith National Historic Site, Fort Smith, Arkansas. National Park Service, Southwest Regional Office, Southwest Cultural Resource Center, Santa Fe. Coleman, Roger E., 1989. Archeological Investigation for Construction of a Pedestrian Trail and Identification of Laundress Row, Fort Smith National Historic Site, Arkansas. National Park Service, Southwest Regional Office, Southwest Cultural Resource Center, Santa Fe.
- 6) Discussion: Archeological investigations were undertaken by Coleman for construction of a pedestrian trail at Fort Smith National Historic Site. The pedestrian trail, an 1,070-foot long, paved walk crosses three park areas: visitor center lawn, median strip, and Belle Point to connect the visitor center and the first fort site. Work occurred sporadically over a four year period. Cumulatively, from October 21, 1985 to October 28, 1988, seven months were devoted to the field investigation. A five-phase excavation procedure that ranged from systematic sampling to controlled excavation of significant remains was used to sample, identify, and assess cultural resources, and to mitigate construction impacts. Fieldwork resulted in the excavation of 145 test units, accounting for a total excavated area of 3,728 square feet (346.3 square meters). Sixty seven archeological features were identified. Buried historic ground levels were encountered in two locations. To

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mitigate construction impacts, a 3,775 square foot area of historic ground level and four features were excavated or partially excavated, resulting in the acquisition of 43,906 artifacts.

Significant archeological remains are present on the visitor center lawn (tract 01-107). These include the filled basement of Soldier's Barracks B (Feature 78), an unfinished building of the second Fort Smith that was razed in 1846 to provide construction stone for the Quartermaster Building. Fill and construction rubble in the former basement is encountered 2.0 feet below surface and one surviving course of foundation stone occurs 4.7 feet below surface. Two buried historic ground levels were identified in tract 01-107. The lowest ground level, associated with Barracks B, is encountered 1.4 feet below surface and dates from ca. 1846-1888. The second ground surface, associated with the 1888 Jail addition occurs 0.8 foot below surface. Both levels contain significant artifacts and possible unidentified structural remains.

Several archeological features are associated with a buried historic ground level on the railroad median strip. This former occupational surface averages 0.4 foot thick and is coextensive with the entire median strip area. It is encountered from 0.6-3.5 feet below surface and contains abundant artifacts, features, and structural remains. Archeological testing revealed eight features associated with the buried historic ground level including the fireplace foundation from a barracks of Laundress Row, a prepared drive for the Quartermaster Building, and a dumpsite for the post Blacksmith Shop.

Cultural deposits on Belle Point are mixed in a disturbed topsoil or Ap horizon that varies from 0.5-1.0 foot thick. Artifacts are abundant here, but most are twentieth century--only 5% of all artifacts collected are potentially historic. Likewise, most of the 45 subsurface features encountered there are twentieth century in age. Archeological monitoring during construction, however, resulted in the identification of a single historic feature associated with the first Fort Smith (F#77). Feature 77 is probably a privy or cellar from the first Fort Smith. Encountered 1.4 feet below surface, the feature is greater than 3.1 feet deep and contains artifact bearing fill.

Investigation for construction of the pedestrian trail sampled previously untested areas of the park and defined new archeological resources. Impact to significant resources was mitigated through a combination of avoidance, excavation, and construction monitoring. Coleman summarized his findings in a report of investigation (1989). Much of the document is devoted to the description of artifacts from the buried historic ground level that Coleman believes is an important source of analysis for Fort Smith and other nineteenth century sites. Additionally, the raw data is tabulated with provenience information and included with the document in microfiche form. The report

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outlines eleven research questions to address three problem areas: differences between use of intrafort and extrafort areas, identification of laundress row, and definition and delineation of the prehistoric Belle Point site. The research questions are addressed with varying degrees of success. Arguments for the identification of laundress row are persuasive. The array of analytical techniques used to verify the documented laundering function are convincing but suffer from the absence of tests of significance.

PROJECT NUMBER 17

- 1) Date: August 23, 1988
- 2) Location: Tract 01-113
- 3) Principal investigator: Roger E. Coleman
- 4) Type of investigation: Monitoring
- 5) Reference: Coleman, Roger E., August 24, 1988 memorandum to Regional Director, Southwest Region. On file at Fort Smith National Historic Site, File D30, and in the field generated data file as project number 17.
- 6) Discussion: On August 23, workers of the City Sewer Department closed an active storm sewer at Fort Smith National Historic Site. This operation, preliminary to constructing a pedestrian trail from the visitor center to Belle Point, occurred at the northernmost manhole on park service property in tract 01-113. To prevent impact to significant archeological resources, Roger E. Coleman monitored the work. A backhoe with 27-inch wide bucket was used to excavate an 8-foot long trench adjacent to the manhole. The storm sewer, exposed 6.4 feet below surface, was broken and plugged with concrete to complete the operation.

Coleman identified a buried historic ground level in the excavation profile. From 2.5-3.8 feet below surface, an undifferentiated Ap horizon is encountered. Artifacts were not observed in this level, but brick and charcoal mottles are evident. Tract 01-113 is the former site of the post garden (Dollar and Coleman 1986), an activity or land use that can account for the abnormal thickness (1.3 feet) of the Ap horizon as well as the paucity of artifacts.

PROJECT NUMBER 18

- 1) Dates: April 3-4, 1989
- 2) Location: Tract 01-116
- 3) Principal investigator: Jody S. Parrish
- 4) Type of investigation: Test excavation, monitoring

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- 5) Reference: Parrish, Jody S., 1989. Archeological Testing and Monitoring for Storm Drain Construction, Fort Smith National Historic Site, Fort Smith, Arkansas. National Park Service, Southwest Regional Office, Southwest Cultural Resource Center, Santa Fe.
- 6) Discussion: Parrish conducted an archeological investigation to assess the effect of constructing a new storm drain on the south end of Belle Point in tract 01-116. The storm drain will require a 340-foot long trench that ranges from 7-12.5 feet deep. Historically, the proposed construction site was occupied by a deep ravine that is now partially filled. Parrish's objectives as outlined in the scope-of-work were to: identify subsurface deposits in the construction right-of-way, define and interpret these deposits, offer recommendations for future park management, assess the significance of deposits encountered and if significant, provide a plan of mitigation.

To accomplish her goals, Parrish excavated six test trenches by backhoe and placed them at 50 foot intervals perpendicular to the proposed storm drain centerline. Tests measured 2x10 feet and were excavated as deep as required to encounter sterile subsoil. Depth of fill encountered by Parrish varied from 1.5-3.5 feet deep. Although a mix of historic and post-historic artifacts were encountered, most are clearly twentieth century in age and signify recent deposition at this location. Parrish recommended that archeological clearance be provided for construction providing that an archeologist monitor all cutting during storm drain construction.

PROJECT NUMBER 19

- 1) Dates: April 3-5, 1989
- 2) Location: Tract 01-108
- 3) Principal investigator: Jody S. Parrish
- 4) Type of investigation: Monitoring
- 5) Reference: Fieldnotes, slides and photographs on file at Fort Smith National Historic Site in the field generated data file as project number 19.
- 6) Discussion: On April 3, 1989, Parrish monitored the removal of a commemorative flagpole on the east visitor center lawn in tract 01-108. The cavity created by removing the square concrete flagpole base measured five feet to a side and four feet deep. Parrish triangulated the location of this disturbance and profiled pit walls to record stratigraphic details. Eight soil zones, including a buried historic ground level, were identified. The first four levels are identical to those described in an earlier investigation in tract 01-108 (project number 16) with one exception, the absence of a rubble lens overlying the historic ground level (zone 3). Since this lens was created by throw-out from the barracks B basement during construction of the 1888 jail wing, its absence in the more distant flagpole site is explicable. The deep flagpole footing hole also revealed four previously

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unidentified soil zones. Three of these zones, occurring successively in profile, contain construction rubble and may be a former construction surface for the soldier's barracks or possibly fill in an unidentified feature. Rubble occurs between 2-3.5 feet below surface. In zone 5, Parrish observed five mortared bricks arranged in a linear configuration. Apparently, the lowest soil encountered by Parrish, a mottled sandy clay, is another fill episode. Therefore, fill on the courthouse lawn exceeds four feet in depth.

PROJECT NUMBER 20

- 1) Dates: May 19-31, and July 7, 1989
- 2) Location: Tract 01-151
- 3) Principal investigator: Jody S. Parrish
- 4) Type of investigation: Monitoring
- 5) Reference: July 10, 1989 memorandum to Regional Director, Southwest Region. Fort Smith file number H24. Field notes and photographs filed as project number 20 in the field generated data file.
- 6) Discussion: Fiber optic cable was placed through Fort Smith National Historic Site on tract 01-151, in the Missouri Pacific Railroad right-of-way. This activity required excavation of a one-foot wide, five-foot deep trench to house the cable. To prevent impact to unidentified cultural resources, archeologist Jody S. Parrish monitored this potentially destructive operation. Parrish observed that the cable trench exposed only railroad bedding, modern fill, or sterile subsoil. Historic remains were not encountered.

PROJECT NUMBER 21

- 1) Date: September 19, 1989
- 2) Location: Tracts 01-111, 01-138
- 3) Principal investigator: Jody S. Parrish
- 4) Type of investigation: Monitoring
- 5) Reference: September 22, 1989 memorandum to Regional Director, Southwest Region, Fort Smith file number H-24. Fieldnotes and photographs filed as project number 21.
- 6) Discussion: On September 19, Parrish monitored the insertion of an electrical line to an audio box in the gallows enclosure. A 0.5-foot wide, 1-foot deep trench was excavated by ditch witch to house the electrical line. Parrish encountered only sandy fill deposited by the National Park Service following removal of Parker Avenue. Thus, at least one foot of this recent fill covers tract 01-111. Significant historic resources were not adversely effected by this project.

Chapter 5

ARCHEOLOGICAL RESOURCE OVERVIEW

Previous investigations have identified both prehistoric and historic resources at Fort Smith National Historic Site. Although these are a fraction of the remains that are potentially present, they nonetheless provide important information on the extent, variety, and integrity of resources for most land tracts within the park boundary. The following discussion deals with known and predicted resources for each park land tract. Pertinent data regarding resource identification, integrity, depth, and location are summarized and specific recommendations for resource protection are made at the tract level. For more specific information, the reader is referred to original field records and completion reports housed in the field generated record file in the park curatorial facility (file cabinet B). These records may be accessed by the project number format used herein.

Resource Summary

TRACTS: 01-101, 01-103, 01-104, 01-105

Owner: National Park Service

Project Numbers: 4, 6, 10

Resources: The Commissary lot contains numerous structural remains and significant buried deposits. Intact foundations for both fort wall sections 1 and 10 occur and are encountered four and nine inches below surface, respectively. Structural remains associated with exterior features of the Commissary include a flagstone walk that parallels the right flank of the building (ca. 1.5 feet below surface); two stone piers and a possible post mold from the left flank porch (.73-2.8 feet B.S.); buried steps that once serviced the porch on the right face of the Commissary (2.6' B.S.); and two post molds on the right flank that mark a former porch at this location (2.0 feet B.S.). Eleven distinctive soil zones, including two historic ground levels, have been identified in these tracts. Within the boundaries of the fort curtain wall, a buried historic ground level is encountered 2.0 feet below surface. In extrafort areas where more fill accumulated, two former occupational surfaces are evident. The first historic ground level, 1.8 feet below surface, postdates 1898/9 and is associated with the late historic period of the site. The second historic ground level, 2.4 feet below surface, overlies the fort wall construction surface and dates from ca. 1839-1898/9. This historic ground level contains significant artifacts and holds potential for the discovery of features and

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structural remains.

Recommendations: Construction activities in the vicinity of the Commissary Building should be carefully planned to avoid known structural remains. To prevent impact to porches and other external features of the Commissary, destructive activity within a 10 foot radius of the building should be avoided whenever possible. Because of shallow structural remains, some only four inches deep, even superficial work should be monitored by an archeologist. Significant buried ground levels, 2.0 feet below surface should be avoided. If avoidance is not possible and historic deposits must be disturbed, a 100% excavation of the effected area should be conducted.

TRACTS: 01-107, 01-110

Owner: National Park Service

Project Numbers: 7, 14, 15C

Resources: Significant cultural resources are present on tracts 01-107, and 01-110. The second fort cistern and 35 subsurface features identified in this area relate to possible well and privy locations, and wall lines from Officer's Row. Investigation suggests that less than 1.7 and 0.5 feet of fill remains in the basements of Officer's Quarters A and B, respectively. Evidence for the former Commandant's Quarter no longer exist or at least has not been identified by previous investigations. A 100-foot long segment of fort wall section 1 occurs from 1.5-1.8 feet below surface on tract 01-107. Although the historic ground level is cut away on the fort interior, significant buried deposits exist in extrafort areas on tract 01-107. Test 15C-1, on the north boundary of tract 01-107 yielded a buried historic ground level and historic trash midden from 2.0-3.5 feet below surface. At 3.5 feet below surface, sterile military embankment occurs that may overly significant pre-1839 cultural deposits. In test 15C-2, ten distinctive soil zones were recognized. These include two historic ground levels and wall construction and demolition surfaces separated by two episodes of military embankment. Historic ground levels in test 2 are encountered 0.5 feet and 2.7 feet below surface, respectively. Military embankment at this location is greater than 3.0 feet deep and pre-1839 remains may occur below it.

Recommendations: To prevent disturbance to subsurface portions of the second fort cistern, potentially destructive activity within a five foot radius of the modern cistern platform should be avoided. To avoid impacting significant features, structures, and buried historic ground levels, construction should be limited to the upper 1.5 feet of soil. All activity that extends 1.5 feet below surface should be monitored by an archeologist. Significant cultural remains identified at this level must be avoided. If avoidance is not possible, a 100% excavation of the effected area is necessary.

TRACT: 01-108

Owner: National Park Service

Project Numbers: 5, 9, 12, 16, 19

Resources: Having escaped the wholesale urbanization that disrupted much of the site, the visitor center lawn is the least altered area within the park. Known structures and features include a filled well east of the visitor center entrance and the filled basement of Soldier's Barracks B. Bisected by the 1888 Jail addition, only narrow strips of the former barracks basement survive and are encountered 2.0 feet below surface. Although not formally investigated, the Courthouse once harbored full-length basement-level galleries--now filled. Judicial period artifacts may be expected to occur therein. A sandstone foundation identified at the southeast corner of tract 01-108, 54 cm. below surface, is probably the remains of an ordnance shed depicted by an 1870 Army survey map. Additional unidentified features may exist on tract 01-108 in buried historic ground levels.

Fill on the visitor center lawn exceeds four feet in depth. At least eight soil zones are found on tract 01-108 including two buried historic ground levels. The uppermost ground level is .8-foot deep, but is expected to be closer to the surface near the tract edge. The lowest historic ground level, dating to ca. 1846-1888, is encountered 1.4 feet below surface. Both levels contain historic artifacts and possibly unidentified structural remains. Sterile military embankment underlying the second historic ground level covers the entire east half of tract 01-108. In at least one location on the tract edge, this fill overlies an historic trash midden located 3.25 feet below street level. The deposit is believed to have accumulated between Fall, 1821-August, 1838, when the civilian community of Fort Smith occupied the site. Potentially, deposits such as this could underlay military embankment elsewhere within the park.

Recommendations: The potential for significant cultural remains on the visitor center lawn exists at any level. Late prison-related features may occur in zone 2, a buried historic ground level 0.8 foot below surface. Second fort and early Federal Court remains undoubtedly occur in the buried historic ground level 1.4 feet below surface. Evidence of the early civilian community of Fort Smith and possible prehistoric remains will be encountered at an unspecified depth below second fort fill (zone 6). If future earth altering activities on the visitor center lawn can not be avoided, impact must be mitigated through data collection. Proposed construction projects will be archeologically investigated to prevent impact to structures, features, and historic artifacts. Structural remains must be avoided. All impacted areas of historic ground level and features that can not be avoided must be systematically excavated.

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TRACTS: 01-111, 01-134

Owner: National Park Service

Project Numbers: 4, 5, 11, 12, 21

Resources: The only structural remains encountered in tracts 01-111 and 01-134 include two ca. 1900 building foundations, remnants of the Webber-Ayere's warehouse complex that occupied the west 1/2 of tract 01-111. The northwest corner of this tract had been cut for construction of the warehouses, exposing sterile subsurface clays. Elsewhere in the tract, substantial fill deposits occur that date from the late 1870s to ca. 1947 and are predominantly twentieth century in age. These deposits are contained in a former ravine, depicted in the 1870 Army survey map. This former erosional feature is estimated to have been 285 feet wide and 23 feet deep at this location.

Recommendations: The building foundations and fill deposits in tracts 01-111 and 01-134 were not deemed significant to the park, but may have significance to the city of Fort Smith. Significant archeological remains are not expected to occur on the surface and potentially significant, older deposits are thin, discontinuous, and deeply buried. Mitigation of future construction impacts in this area is unnecessary.

TRACT: 01-113

Owner: National Park Service

Project Number: 17

Resources: Tract 01-113, the site of the first fort garden, contains a buried historic ground level from 2.5-3.8 feet below surface. Significant prehistoric and historic remains may be expected to occur in this area.

Recommendations: Earth altering activities on tract 01-113 should not exceed 2.5 feet in depth. If disturbance to the buried historic ground level there may not be avoided, then the effected area should be archeologically investigated to assess adverse effects to significant archeological resources.

TRACTS: 01-114, 01-115

Owner: National Park Service

Project Numbers: 5, 14, 15C, 16

Resources: The railroad median strip has been the subject of intensive investigation for construction of the pedestrian trail and for capping/outlining bastion 2. Tracts 01-114 and 01-115 contain a buried historic ground level predating ca. 1898/9, that is coextensive with the entire median strip area. It is encountered .6-3.5 feet below surface and contains abundant artifacts and structural remains. These include a fireplace foundation from one building of Laundress Row, the

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foundation of bastion 2 and adjoining fort wall sections 2 and 3.

Approximately 67% of bastion 2 is intact and foundation exists on all five sides of the structure. Wall section 2 is represented by a 27.5-foot long foundation and wall section 3, a 10.5-foot long foundation. Construction stone is encountered from .4-4.3 feet below surface. Stratification in the vicinity of bastion 2 is more complex than elsewhere on the median strip. On the bastion interior, extant ground surface marks former floor level. Thus, internal features may survive here. The small area of fort interior, between wall sections 2 and 3, contains numerous levels of military embankment and a single historic ground level, ca. 1839-1930, .8 foot below surface. Over time, extrafort areas in the immediate vicinity of bastion 2 received successive layers of fill. Four historic ground levels occur here at .4, 1.4, 2.8, and 3.2 feet below surface, respectively. Artifacts and structural remains are associated with each level. External building features constructed during the 1866/7 renovation when the structure was converted to a barracks are encountered at the lowest ground level. These include stone piers for full length porches on the right face and left flank (opposite sides) of the structure.

Recommendations: The railroad median strip contains significant artifact bearing deposits and structural remains. Bastion 2 and adjacent, related foundations must be avoided. Sensitive archeological deposits occur close to the surface near bastion 2 (.4 feet B.S.) and should not be disturbed. Elsewhere, a buried historic ground level occupies the median strip, sloping from .6-3.5 feet below surface to the south. Earth alteration that would disrupt this level and disturb its contents must be avoided. If avoidance is not possible, impact should be mitigated through data collection.

TRACT: 01-116

Owner: National Park Service

Project Numbers: 1A, 1B, 16, 18

Resources: Numerous features are present on Belle Point, but most are from the twentieth century Coke Hill occupation of the site. An estimated 2.2% of the features on Belle Point are potentially historic. Investigations here have encountered the foundations of the first Fort Smith--now capped and outlined, the post well, and an unidentified privy or cellar from an extrafort structure. Artifacts are quite abundant on Belle Point, but like the features, most are recent. It is estimated that less than 5% of all artifacts there are potentially historic. Artifacts are contained in a 1-foot thick, disturbed topsoil--a product of early National Park Service landscaping activity. Thus, an historic ground level does not exist on Belle Point. Low-lying areas on the north edge of tract 01-116, however, hold potential for a buried historic ground level. Such a deposit was identified 2.5 feet below surface on the adjacent tract 01-113. The south edge of Belle Point is also a naturally low area. In fact, the ravine identified in tract 01-111 also crosses tract 01-116. In this

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area, however, the ravine received substantially less fill. Deposits here are only 1.5-3.5 feet deep and contain a mix of historic and post-historic artifacts, signifying recent deposition.

Recommendations: All ground disturbing activities conducted at Belle Point must account for the presence of significant cultural resources. The area enclosed by the fort walls has not been completely excavated and since foundations were only selectively capped, other subsurface structural remains are present. All earth alteration on the interior of the first Fort Smith must be avoided.

The discovery of the post well and a first fort cellar or privy establishes the presence of significant historic features beyond the walls of the first Fort Smith. The north end of Belle Point, like adjacent tract 01-113, may contain a buried historic ground level. To prevent adverse impact to significant resources, construction activities on Belle Point should be restricted to the upper one foot of soil. If this is not possible, an archeological investigation should be conducted to identify and assess adverse effects on significant cultural resources. If avoidance is not possible, a 100% excavation of all endangered significant remains should be undertaken. Since fill deposits on the south end of tract 01-116 are recent, mitigation of construction impacts in this area should not be necessary.

TRACTS: 01-119, 01-133

Owner: National Park Service

Project Number: ---

Resources: Although not previously investigated, this area holds potential for the presence of significant cultural resources. Adjacent tract 01-113 contains a buried historic ground level 2.5 feet below surface. Thus, archeological remains may occur in tracts 01-119 and 01-133.

Recommendations: Prior to earth alteration on tracts 01-119 and 01-133, an archeological investigation to assess impact to significant resources should be undertaken. If a buried historic ground level is present, it should be avoided. If avoidance is not possible, a 100% excavation of the effected area should be conducted.

TRACTS: 01-120, 01-131, 01-148

Owner: Belle Point Beverage Co., Inc.

Project Number: ---

Resources: Because of its proximity to tract 01-113, the Belle Point Beverage Company property may also contain a buried historic ground level. Historic structures are also expected to occur. The 1870 Army survey map reveals that the Quartermaster Warehouse, a large frame structure, is situated nearby. In fact, a low, linear mound in the Belle Point Beverage Company picnic area may mark the site of this former building.

Recommendations: If the National Park Service acquires this property an archeological

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investigation should be conducted to assess the potential for significant cultural remains. Structural remains must be avoided. If a buried historic ground level and other archeological features are present and may not be avoided, a 100% excavation of the effected area should be undertaken.

TRACTS: 01-122, 01-135

Owners: U.S. Forgecraft Corporation and the City of Fort Smith

Project Number: ---

Resources: Although archeological investigation has not been undertaken in tracts 01-122 and 01-135, the area is suspected to contain the first fort cemetery and the second fort sawmill (Coleman and Dollar 1984:51-52). The site is significantly altered from building construction, but the extent of cutting and filling can not be determined without an investigation.

Recommendations: If the National Park Service acquires this property, an archeological investigation should be conducted to determine if the first fort cemetery and second fort sawmill are present. These remains should be identified, delineated, and protected from destruction or impairment.

TRACT: 01-124

Owner: National Park Service

Project Number: 12

Resources: A utility excavation on tract 01-124, between the park maintenance building and Parker Avenue, revealed subsurface deposits. Although an historic ground level does not exist here, extensive military embankment is present and extends deeper than seven feet below surface--at least on the south edge of the tract. The potential for significant buried deposits below this sterile fill is present.

Recommendations: Earth altering activities may be safely conducted on tract 01-124 to a depth of 7 feet. If construction will disturb deposits greater than 7 feet below surface, archeological monitoring to identify significant remains should be conducted.

TRACTS: 01-125, 01-143

Owner: National Park Service

Project Numbers: 2, 3, 5, 15B

Resources: Although disturbed from parking lot construction in 1963, tracts 01-125 and 01-143 contain significant structural remains. A small portion of bastion 4 is intact on tract 01-125. A six-foot long section of the bastion gorge is encountered .55 feet below surface. Intensive testing failed to identify surviving foundation from the flanks and faces of bastion 4 or from adjoining wall sections 6 and 7. Significant features, however, do occur on the bastion interior. A 17-foot long

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section of the parados, an internal foundation to support the terreplein, survives. It is a fragile, dry-laid foundation of sandstone slabs. A complex arrangement of pit features, possibly privies, also occurs within the former bastion walls. At least three superimposed features exist. They contain historic artifacts and are encountered .6 feet below surface.

Complex stratigraphy is evident on tracts 01-125 and 01-143. Twenty three soil zones have been identified. The uppermost deposits are disturbed to one foot below surface and a buried historic ground level does not exist. Below this topsoil, sterile military embankment is encountered. Seven distinct levels of this historic fill were identified to a depth of 3.5 feet below surface where testing was discontinued. The potential exists for encountering significant prehistoric and historic cultural deposits below this military embankment. A one-foot thick cinder zone occurs within the embankment as does a linear concentration of sandstone rubble. Sandwiched between two layers of embankment, the rubble follows a sloping contour toward the interior of the fort, from .4-2.2 feet below surface. The stone concentration parallels the site of wall section 6 and is probably a former wall construction surface. Testing suggests that this rubble is coextensive with tract 01-125--features 3 and 4 as identified by Anderson (project no. 3) may be a continuation of this construction surface.

Recommendations: Significant structural remains and features in tracts 01-125 must be avoided. All activity extending one foot below surface in tracts 01-124 and 01-143 should be monitored by an archeologist.

TRACTS: 01-127, 01-128

Owner: National Park Service

Project Numbers: 5, 15A

Resources: Significant structural remains occur in tract 01-127. Archeological investigation reveals that bastion 5 is approximately 95% complete--only a portion of the gorge and left flank are disturbed, and a city storm sewer creates a short break in the right and left faces of the structure. Construction stone in the bastion is encountered from 1.0-2.5 feet below surface. The parados, on the bastion interior, occurs .3 foot below surface. This pentagonal arrangement of dry laid sandstone slabs was intended to support the terreplein and may mark historic ground level at this location. Both adjoining fort walls are represented. Wall section 8, in places only .3 foot deep, is completely intact on tract 01-127. Only a two-foot long segment of wall section 9 exists at the juncture of bastion 5. It is 3.0 feet below surface. The remainder had been destroyed by basement construction for the former Speer Building. The implication also holds for other cultural remains between bastion 5 and second street (eg. the guardhouse) that have also been destroyed by basement excavation. A small portion of wall section 9, however, may survive on tract 01-128 between the Speer Building foundation and Second Street.

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An historic ground level does not exist on tracts 01-127 and 01-128 and few historic artifacts were recovered there. The southeast portion of tract 01-127, however, does contain sterile military embankment. Significant buried deposits may occur at an unknown depth below this fill episode.

Recommendations: Construction activity must avoid known bastion and wall foundations. Since the potential for subsurface features and buried deposits exists on the eastern half of tract 01-127, all activity in this area should be monitored by an archeologist.

TRACT: 01-136

Owner: National Park Service

Project Number: ---

Resources: Archeological investigations have not been undertaken in this recently acquired tract. A brief survey of the area, however, indicates that late nineteenth and early twentieth century artifacts are eroding from exposures along the Arkansas River. Boat mooring rings mark landing sites at the river edge and one stone monument marking the Choctaw Boundary exists in the tract. Therefore, the potential for significant cultural remains exists.

Recommendations: An archeological investigation should be undertaken on the riverfront to document cultural resources for future management needs. Until cultural resources in this area can be assessed, all earth altering activity should be preceded by archeological testing to determine adverse effect to significant cultural resources. To check site attrition in tract 01-136, erosional cuts should be stabilized.

TRACT: 01-138

Owner: National Park Service

Project Numbers: 4, 5, 11, 12, 21

Resources: This former section of Parker Avenue has been intensively investigated for evidence of bastion 3 and the gallows. Testing encountered sterile subsoil and revealed no evidence of historic structures. Apparently, Parker Avenue had been cut considerably lower than historic grade. Because of discoveries on adjacent tract 01-108, the potential for military embankment and pre-1839 cultural deposits exists on the extreme east end of tract 01-138. Midden should be encountered here approximately 3.25 feet below street level.

Recommendations: Fill placed on tract 01-138 by the National Park Service, however, has raised the elevation at least one foot above former grade. Construction in the first one foot of soil on tract 01-138 will not impact significant cultural resources. Because of the potential presence of significant buried deposits, all ground disturbing work extending deeper than one foot should be monitored by an archeologist.

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TRACT: 01-139

Owner: National Park Service

Project Numbers: 7, 8, 11

Resources: Archeological monitoring and testing in tract 01-139, an abandoned section of Second Street, has identified significant cultural remains. The second fort flagstaff, long covered by street pavement, is marked by a 20x20 foot square excavation. This feature, 1.5 feet below surface, contains a well preserved wooden structure or flagstaff base. Elsewhere in tract 01-139, sterile subsurface clays are evident. The presence of other historic features on this former section of parade ground is possible.

Recommendations: All construction activity should avoid the site of the second fort flagstaff. Because of the potential for other significant features, all work in tract 01-139 that is conducted 1.5 feet below surface or deeper, should be monitored by an archeologist.

TRACTS: 01-140, 01-141

Owner: City of Fort Smith

Project Number: ---

Resources: Four active city streets cross park boundaries: Rogers Avenue, Second Street, Third Street, and Parker Avenue. These are included in tracts 01-140 and 01-141, and have never been archeologically investigated. Historical documentation and testing on adjacent tracts indicates that significant cultural resources probably underlay street pavements. Military embankment and subsurface cultural deposits may be present on the east and west ends of Rogers Avenue within the park boundary. The remaining segment of second Street may overly wall sections 9 and 10, and gate 5. Third Street and Parker Avenue, although cut below historic grade, cover military embankment that may overly pre-1839 midden deposits. In at least one area, a buried midden occurs 3.25 feet below street level in adjacent tract 01-108.

Recommendations: Because second fort defensive works and buried midden deposits may underlay street pavements, an archeologist should monitor city utility work in tracts 01-140 and 01-141. If the National Park Service should acquire the streets, removal of pavement must be monitored by an archeologist. An archeological investigation should be conducted to document significant structural remains. All future construction activity in tracts 01-140 and 01-141 should be monitored and significant resources should be avoided.

TRACT: 01-142

Owner: The Old Commissary Museum Association

Project Number: ---

Resources: This area, now a parking lot for the Old Fort Museum, once contained a

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warehouse with basement. Significant cultural resources will not be found here.

Recommendations: If the national Park Service acquires this property, it will not be necessary to mitigate future construction impacts in tract 01-142.

TRACTS: 01-144, 01-145

Owner: U.S. Forgecraft Corporation

Project Number: 12

Resources: A buried historic ground level is present in tract 01-144 and 01-145. This former occupational surface (ca. 1839-1898/9) occurs 1.2 feet below surface over a layer of military embankment and a one-foot thick cinder deposit. Artifacts were not recovered from the historic ground level, but the potential exists for locating artifacts and structural remains. The presence of embankment here indicates that the military intended to use this area, south of the historic ravine, as a construction site. The 1870 Army survey map indicates that the Post Bakehouse was situated nearby.

Recommendations: If the National Park Service acquires tracts 01-144 and 01-145, an exploratory excavation to document cultural resources should be conducted. Any activities that effect deposits 1.2 feet below surface should be preceded by an archeological investigation. A 100% excavation of effected historic ground level should be undertaken. All soil from this former occupational surface should be screened and all artifacts should be retained for analysis.

TRACT: 01-146

Owner: Douglas Stites

Project Number: ---

Resources: The Frisco Station, a restaurant and National Register property, is located on tract 01-146. The area is deeply cut from Second Street to track grade at the adjacent Arkansas and Missouri Railroad. It is expected that all cultural resources relating to Fort Smith National Historic Site in tract 01-146 have been destroyed. One possible exception may be the sutler's store in the northeast corner of the tract.

Recommendations: Significant archeological resources, with one possible exception, will not be found in tract 01-146. If the National Park Service should acquire this property, an archeological investigation should be conducted to identify remains of the Sutler's Store. The remainder of tract 01-146 will not require archeological mitigation.

TRACT: 01-147

Owner: National Park Service

Project Number: ---

Resources: Investigation on an adjacent tract suggests that an historic ground level will not be found on tract 01-147. This area has been disturbed by a spur of the former St. Louis & San Francisco Railroad. Intact subsurface features, however, may occur in this tract.

Recommendations: Construction activities in tract 01-147 should be monitored by an archeologist.

TRACTS: 01-149, 01-150, 01-151

Owners: Arkansas and Missouri Railroad and Union Pacific Railroad

Project Numbers: 13, 14, 20

Resources: The railroad right-of-way crossing Fort Smith National Historic Site is cut below historic grade. The entire length of right-of-way has been investigated, indicating that the railroads are on sterile, subsurface deposits. Significant historic resources are not present here.

The northern half of the railroad median strip, although distinct from the railroad cuts, is included in tract 01-149. Like tracts 01-114 and 01-115, the southern end of the median strip, this area also contains significant buried deposits and structural remains. A buried historic ground level will occur here. Although depth of this former occupational surface is unknown, it is expected to be shallow at the northern end of the median where the historic cistern overflow drain was once exposed at the surface. The surface drain has been covered with fill, however, and is no longer visible. The existence of additional structural remains is likely since construction stone is exposed in the North Arkansas and Missouri Railroad cut where the 1870 Army survey map depicts the post hospital. This site, however, has not been investigated.

Recommendations: Mitigative action is not required for construction within the railroad cuts. Any potentially destructive activity on the median strip between the railroad cuts, however, must be avoided. If avoidance is not possible, a 100% excavation of effected deposits is required.

Chapter 6

ASSESSMENT AND RECOMMENDATIONS

The purpose of Chapter 7 is to assess cultural resource management at Fort Smith National Historic Site. This will be accomplished by identifying potential impacts to the archeological resource base and by recommending protective or mitigative measures; by suggesting and justifying research priorities with reference to park management and interpretive needs and; by recommending additional investigation to supplement knowledge of the archeological resource base for enhanced management efficiency and park development.

Resource Protection

Most potential impacts to archeological resources at Fort Smith National Historic Site are clearly defined in the parkwide Landscape Management Plan (Gaines 1986) and make advance planning and development of appropriate resource management strategies possible. Actions defined by the LMP that could potentially impact archeological resources include development of park facilities (trails, buildings, etc.), burying overhead utility lines, street removal, tree removal and planting, and landscaping (cutting and filling).

As required by federal law, archeological resources must be properly evaluated prior to construction and impact to significant archeological remains must be mitigated. Three management options are available to mitigate adverse effect and include: avoidance, protection, and data recovery (McGimsey and Davis 1977:11). Avoidance, the favored option, requires changing construction plans to save significant resources. Protection entails long term mitigative efforts such as fencing, barrier construction, monitoring, public education, and interpretation, etc. Data collection through controlled excavation completely removes significant resources endangered by proposed construction. Excavation is a costly process, however, and because all information can not be saved, is also an impact on the resource base. Data collection should be undertaken only when options 1 and 2 are not feasible. Appropriate mitigative actions may be selected by consulting Chapter 6 of this document that identifies known and predicted archeological resources, and makes specific recommendations for resource preservation.

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Each land tract within the park should be managed according to its information potential as prescribed in Chapter 6. Avoid impacting significant archeological resources. Ground disturbing activities should be contained above significant buried deposits. If cutting, as recommended in the LMP, can not be accomplished without impacting significant resources, it should not be implemented. New utilities should be placed in previously existing utility line corridors or routed along former road beds, prior disturbed areas, and locations containing recent fill deposits. Such measures to avoid archeological resources may seem circuitous and costly, but when compared to the price of archeological excavation and artifact curation, these are the feasible management options. If avoidance is not possible, then impact to significant resources must be mitigated through excavation or data collection.

Interpretive Potential and Research Priorities

Archeological data offer significant research potential and can enhance park interpretation. The purpose of this section is to identify important research priorities and interpretive potential of the archeological resource base at Fort Smith National Historic Site.

According to the park General Management Plan, Fort Smith National Historic Site was established to preserve and interpret the first and second Fort Smith and the United States Court for the Western District of Arkansas (NPS 1981:17). The Landscape Management Plan (Gaines 1986), an "integrated action plan" for implementing landscape related elements of the GMP, recommends specific actions to enhance visitor understanding of park history and to compliment historic resource integrity. These actions include removal of noncontributing features (streets, buildings, overhead utility lines), site regrading, planting vegetation, historic structure delineation, and the development of walkways and related features in historically accurate locations. Archeological research should focus on areas most relevant to these overall park management objectives by:

- 1) locating and delineating structural remains,
- 2) acquiring structural data to permit accurate delineation of foundations,
- 3) establishing elevations of former historic grade throughout the park, and
- 4) identifying paths and vegetation.

These research data must be acquired before specific LMP actions can be completed. To assure

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locational accuracy, vegetation and walkways should be placed only after structural remains have been delineated and historic grade has been restored. As an example, bastion 3 was reconstructed as a backdrop to the gallows some years ago. Archeological investigation failed to identify structural remains and instead of gathering pertinent data from an identical bastion, planners based their reconstruction on historic drawings. Subsequent investigations indicate that second fort defensive works do not completely follow original specifications. The bastion 3 reconstruction, therefore, is inaccurate in dimension and appearance. Because the structure was placed on an extant ground surface with no attempt to define historic grade, the bastion is situated several inches below its original elevation. Problems such as this can be avoided through data acquisition and proper scheduling of LMP actions.

Additional Investigations

Compliance projects conducted at Fort Smith National Historic Site provide information about the archeological resource base in many park areas. A comprehensive parkwide survey, however, has never been undertaken. Such an investigation is recommended to provide supplemental information for making informed management decisions and for implementing development actions of the LMP. Work should focus on areas where inadequate data exist, notably tracts 01-119, 01-133, and 01-136 where investigation has never been undertaken, and in portions of tracts 01-104, 01-105, 01-107, 01-108, 01-116, 01-125, and 01-127 where previous work has been limited. As prescribed by National Park Service policies, archeological investigation should employ nondestructive methods to the maximum extent feasible (NPS 1988:3). To accomplish these objectives, the following program of investigation is recommended:

- 1) Conduct a magnetometer survey to locate and delineate archeological features.
- 2) Limited testing should be undertaken for verification of remote sensing information and for data recovery.
- 3) A program of auger testing or small-bore coring should be implemented in areas known to contain historic fill deposits to identify and measure buried deposits and former historic ground levels.
- 4) For dating purposes, limited testing should be used to recover data from buried deposits and historic ground levels.

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These procedures will provide required information for park development with minimal impact to archeological resources, and will enhance park management efficiency.

For successful implementation of LMP actions, archeological projects should be organized by level of importance. The following discussion sets priorities for projects essential to development of the park landscape.

- 1) Finish a report of investigation for the second fort defensive works. Progress has been made in the investigation of second fort walls and bastions, slated for delineation by the LMP. Field research was conducted with donated funds and labor, however, leaving no resources to complete a report of investigation. To assure an accurate appearance of the delineated foundations, this information must be synthesized before work can begin.
- 2) Further investigate Officer's Row and collect information to delineate Officer's Quarters A and B. Previous work in tract 01-107 has produced inconclusive results.
- 3) Test the perimeter of tract 01-108, the visitor center lawn, to identify historic ground level. This information will facilitate restoration of former grade following the removal of adjacent streets.

Research Quality

Past archeological research conducted at Fort Smith National Historic Site displays several shortcomings. These include poor data control in some projects, only sporadic publication of results, and poor distribution of completion reports. The following discussion presents the status of archeological research at Fort Smith National Historic Site and makes recommendations for improving research quality.

Data Control

Problems of data control may be resolved by consulting the State Plan for standards of fieldwork and report preparation (Davis 1981:B5-11). The Plan requires accurate site maps and profile drawings of appropriate scale. For proper data control at Fort Smith National Historic Site, all archeological work should be indicated on the park base map (1:20 or 1:40 scale). Available since 1964, the base map requires updating, but is adequate for locational purposes. Detailed plan maps of smaller scale must be prepared for all test units where cultural features are located. When an excavation reveals stratified site deposits, data should be collected by natural stratigraphic levels.

Publication

All projects, even those with negative findings, should be concluded with a report of investigation (Davis 1981:B15). Fourteen projects or 67% of all investigations conducted at Fort Smith National Historic Site are marked by a report of investigation. For the remainder, mostly small clearance or monitoring operations, unpublished fieldnotes and memoranda are available. These small clearance projects should be grouped and dealt with in consolidated reports of investigation.

Forty three percent of the archeological field work conducted at Fort Smith has not been prepared in a publishable format. Perhaps the most important work left unfinished is the report on the investigation of the second fort defensive works. In this instance, fieldwork was undertaken with donated funds and labor, leaving no resources to fund a report of investigation. This work discovered and documented numerous significant foundations and subsurface deposits, and generated a large amount of data useful to implementation of LMP goals. Funding for this report must be obtained in advance of capping and outlining the second fort walls. In all cases where completion reports have not been written, efforts should be made to contract with the original investigator. Where this is not possible, existing information should be compiled and presented as best as possible in a publishable format. Past experience has clearly demonstrated that archeological field information and materials that are not promptly curated and reported rapidly lose a considerable portion of research value.

Dissemination of Information

Because much archeological research is supported by public funds, archeologists are obligated to inform law makers and the general public about their research results. As required by Section 106 of the National Historic Preservation Act and by the National Park Service Management Policies (NPS-28), cultural resource management studies are widely distributed to both federal and state agencies. Reports of investigation are placed in appropriate NPS repositories including the library of the Southwest Regional Office, the Technical Information Center of Denver Service Center, the NPS History Collection of Harpers Ferry Center, and the Office of the Associate Director of Cultural Resources, Washington D.C. Other Federal receiving offices include the Natural Resources Library of the Department of the Interior, the Library of Congress, and the Library of the Smithsonian Institution in Washington D.C. At the state level, cultural resource management studies are provided to the State Historic Preservation Officer of the Arkansas Historic Preservation Program in Little Rock. Courtesy copies are provided as appropriate, to the State Archeologist,

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the Arkansas Archeological Survey Library, the Registrar of the Arkansas Archeological Survey, the Sponsored Research Program of the Arkansas Archeological Survey, Arkansas Archeological Survey Research Stations, and to the University of Arkansas Library.

Dissemination of cultural resource management data to the general public is provided for by the Cultural Resource Management Bibliography (CRBIB). Initiated in 1972, CRBIB is an automated catalogue of all National Park Service cultural resource management studies compiled by the Office of the Associate Director of Cultural Resources, Washington D.C. In 1985, to promote archival stability and availability to the widest possible audience, Chadwick-Healey began microfilming all CRBIB reports. Chadwick-Healey will market this microfiche to libraries, universities, state historic preservation officers, American Indian tribes and the general public.

The dissemination of Fort Smith related studies to required federal and state agencies is satisfactory. Information sent to state agencies as a courtesy, apparently, has occurred only infrequently or sporadically in the past. A check of the Arkansas Archeological Survey library and of the Office of Arkansas Archeological Survey Registrar discloses that only 18% of Fort Smith cultural resource management reports are on file there. This situation is presently being rectified and copies of all Fort Smith reports will be filed with this agency. At the present time, Fort Smith cultural resource management reports are not widely available to the general public. With implementation of the Cultural Resource Management Bibliography, however, these data should eventually be accessible on a national level. As the CRBIB is updated, all new Fort Smith studies will be microfiched and distributed.

A report of investigation is a synthesis of field collected data and much potentially important information is never published or made available. Field records including maps, photographs, notes, and a variety of forms are usually housed in a park filing system or curatorial storage area with limited access. Recently, however, provisions were made for the dissemination of these data. New standard operating procedures for the dissemination of cultural resource documentation are prescribed in the Southwest Regional Office memorandum of April 3, 1989 (Appendix 1). The proposed system complies with the National Historic Preservation Act, Archeological Resources Protection Act, American Indian Religious Freedom Act, and Museum Handbook (1984) standards where preservation and accountability are concerned. All field generated data should be supplied to the Southwest Regional Office where they will be microfilmed and distributed to the generating park, the Western Archeological and Conservation Center in Tucson, Southwest Regional Office working files, and to an appropriate state repository. Fort Smith National Historic Site should comply with this regional directive. All field records should be released to the Southwest Regional

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Office following completion of field projects. Data from former projects should be supplied for microfilming as time and funding allow.

Appendix 1

BIBLIOGRAPHY

Anderson, Bruce

- 1979 Archeological Test Excavations for Portions of the Walls of the Second Fort, Fort Smith National Historic Site, Fort Smith, Arkansas. National Park Service, Southwest Regional Office, Southwest Cultural Resource Center, Santa Fe.
- 1981 Continuing Archeological Test Excavations for Portions of the Walls of the Second Fort, Fort Smith National Historic Site, Fort Smith, Arkansas. National Park Service, Southwest Regional Office, Southwest Cultural Resource Center, Santa Fe.

Arkansas Laboratories, Inc.

- n.d. Report of Subsurface Soil Investigation and Foundation Recommendations for the Proposed Pedestrian Bridge, Fort Smith, Arkansas. Arkansas Laboratories, Inc., Fort Smith.

Bearss, Edwin C.

- 1963 Fort Smith, 1838-1871. National Park Service, Washington D.C.
- 1968 The Arkansas Whiskey War: A Fort Smith Case Study. Journal of the West VII:143-172.

Bearss, Edwin C., and A.M. Gibson

- 1979 Fort Smith: Little Gibraltar on the Arkansas. University of Oklahoma Press, Norman.

Archeological Assessment for Fort Smith National Historic Site

Bell, Robert E. (ed.)

- 1984 Prehistory of Oklahoma. Academic Press Inc., New York.

Bento, Sylvia Deborah

- 1988 Fort Smith, Mother Post of the Southwest, Quartermaster Supply and Archeological Patterning. Thesis submitted to the graduate college of Texas A&M University, College Station.

Braun, E.L.

- 1950 Deciduous Forests of Eastern North America. Hafner Publishing, New York.

Coleman, Roger E. and Clyde D. Dollar

- 1984 Historic Landscape at the Fort Smith National Historic Site (1817-1896), Fort Smith, Arkansas. Report on file at Fort Smith National Historic Site.

Coleman, Roger E.

- 1983 Excavation of the Flagpole Base at the Second Fort, Fort Smith, Arkansas. Report on file at Fort Smith National Historic Site.
- 1984a Archeological Investigations in the Vicinity of the Fort Smith Commissary Building. Report on file at Fort Smith National Historic Site.
- 1984b Results of Archeological Monitoring for Demolition of the Meek Bottling Plant, Fort Smith National Historic Site, Fort Smith, Arkansas. Report on file at Fort Smith National Historic Site.
- 1986 Archeological Testing and Monitoring for Parking Lot Construction, Fort Smith National Historic Site, Fort Smith, Arkansas. National Park Service, Southwest Regional Office, Southwest Cultural Resource Center, Santa Fe.

Archeological Assessment for Fort Smith National Historic Site

- 1987a Interim Report: Archeological Investigation for Construction of a Pedestrian Trail at Fort Smith National Historic Site, Fort Smith, Arkansas. National Park Service, Southwest Cultural Resource Center, Santa Fe.
- 1987b Archeological Monitoring for Burial of Overhead Telephone Lines and Identification of an Historic Midden, Fort Smith National Historic Site, Fort Smith, Arkansas. National Park Service, Southwest Regional Office, Southwest Cultural Resource Center, Santa Fe.
- 1989a History and Appearance of the Second Fort Cistern, Fort Smith National Historic Site, Arkansas. National Park Service, Southwest Regional Office, Southwest Cultural Resource Center, Santa Fe.
- 1989b Archeological Investigation for Construction of a Pedestrian Trail and Identification of Laundress Row, Fort Smith National Historic Site, Arkansas. National Park Service, Southwest Regional Office, Southwest Cultural Resource Center, Santa Fe.

Davis, Hester A.

- 1982 A State Plan for the Conservation of Archeological Resources in Arkansas. Arkansas Archeological Survey Research Series 21. University of Arkansas, Fayetteville.

Dollar, Clyde D.

- 1960 Interim Report, Old Fort Smith Project. Report on file at Fort Smith National Historic Site, File No. IV-56.
- 1966 The First Fort Smith Report. Report on file at Fort Smith National Historic Site.
- 1983 Archeological Investigation and Historical Documentation in the Vicinity of the Old Commissary Building, Fort Smith National Historic Site, Fort Smith, Arkansas. Historic Preservation Associates, Fayetteville, Arkansas.

Archeological Assessment for Fort Smith National Historic Site

Foti, Thomas L.

- 1974 Natural Divisions of Arkansas. In Arkansas Natural Area Plan, pp 11-34. Arkansas Department of Planning, Little Rock.

Frazier, C. Craig, James E. Ivey, and Roger E. Coleman

- 1987 Historic Structure Report, Restore Historic Commissary Building to 1897, Fort Smith National Historic Site, Arkansas. United States Department of the Interior, National Park Service, Denver Service Center.

Gaines, David

- 1986 Landscape Management Plan, Fort Smith National Historic Site, Fort Smith, Arkansas. National Park Service, United States Government Printing Office, Washington D.C.

Haley, Boyd R. and Thomas A. Hendricks

- 1972 Geology of the Van Buren and Lavaca Quadrangles, Arkansas-Oklahoma. Arkansas Geological Commission Information Circular 20-I, Little Rock.

Haskett, James

- 1966 The Final Chapter in the Story of the First Fort Smith. Arkansas Historical Quarterly XXV:213-228.

Hoffman, Michael P.

- 1977 An Archeological Survey of the Ozark Reservoir in West-Central Arkansas, pp 1-44. In Ozark Reservoir Papers: Archeology in West-Central Arkansas 1965-1970. Arkansas Archeological Survey Research Series 10.

Archeological Assessment for Fort Smith National Historic Site

Kyral, JoAnn

- 1980 Fort Smith National Historic Site, Arkansas: Statement for Management. United States Department of the Interior, National Park Service, Washington D.C.

Moore, Jackson W.

- 1963 The Archeology of Fort Smith I. National Park Service, Southeast Regional Office, Richmond.

McGimsey, Charles R. III and Hester A. Davis (editors)

- 1977 The Management of Archeological Resources: The Airlie House Report. Special Publication of the Society for American Archaeology.

National Park Service

- 1981 Fort Smith National Historic Site General Management Plan/Development Concept Plan/Interpretive Plan. United States Department of the Interior, National Park Service, Washington D.C.
- 1984 Museum Handbook, Part II, Museum Records. United States Department of the Interior, National Park Service, Washington D.C.
- 1988a Resources Management Plan for Fort Smith National Historic Site. National Park Service, Fort Smith National Historic Site, Fort Smith, Arkansas.
- 1988b Management Policies. United States Department of the Interior, National Park Service, Washington, D.C.
- 1985 Cultural Resource Management Guidelines, NPS-28, Release #3. United States Department of the Interior, National Park Service, Washington D.C.

Archeological Assessment for Fort Smith National Historic Site

Noble, Vergil

- 1988 Historical Archeology and the Management of Cultural Resources. CRM Bulletin vol. 11 (5-6):2-6.

Paige, John C.

- 1981 Historic Structure Report and Furnishing Study, Courthouse and Jail Wing, Historical Data Section, Fort Smith National Historic Site, Fort Smith, Arkansas. National Park Service, Denver Service Center.

Parrish, Jody

- 1989 Archeological Testing and Monitoring for Storm Drain Construction, Fort Smith National Historic Site, Fort Smith, Arkansas. National Park Service, Southwest Regional Office, Southwest Cultural Resource Center, Santa Fe.

Raab, L. Mark, Gayle Fritz, Daniel Wolfman, Robert H. Ray, and George Sabo III

- 1982 The Arkansas Ozarks. In A State Plan for the Conservation of Archeological Resources in Arkansas. Arkansas Archeological Survey Research Series 21. University of Arkansas, Fayetteville.

Sabo III, George, David B. Waddell, and John H. House

- 1982 A Cultural Resource Overview of the Ozark-St. Francis National Forests, Arkansas. Arkansas Archeological Survey, Project No. 497.

Stewart-Abernathy, Leslie C. and Beverly Watkins

- 1982 Historical Archeology, pp HA51-97. In A State Plan for the Conservation of Archeological Resources in Arkansas, edited by Hester A. Davis, Arkansas Archeological Survey Research Series 21. University of Arkansas, Fayetteville.

Archeological Assessment for Fort Smith National Historic Site

Strahler, Arthur N., and Alan H. Strahler

1978 Modern Physical Geography. John Wiley & Sons, New York.

Taylor, Robert A.

1987 An Archeological Survey of a Proposed Sand Barge Unloading Dock and Associated City Lots in Fort Smith, Sebastian County, Arkansas. Spears Professional, Environmental, & Archeological Research Service, Report No. 87-6. West Fork, Arkansas.

Traylor, Diane

1981 Test Excavations for Bastion and Wall Foundations of the Second Fort at Fort Smith, Arkansas. National Park Service, Southwest Regional Office, Southwest Cultural Resource Center, Santa Fe.

United States Department of Agriculture

1975 Soil Survey of Sebastian County, Arkansas.

Appendix 2

FORT SMITH NATIONAL HISTORIC SITE ARCHEOLOGICAL COLLECTIONS (6/90)

YEAR	PRINCIPAL INVESTIGATOR	SURVEY METHOD	TRACT	RESULTS	REPORT TITLE	ACCESSION NUMBER	CATALOG NUMBER	PROJECT NUMBER (Field collected files)	FIELD NOTES & PHOTOGRAPHS	COLLECTION NOTES (All collections housed at FOSM NHS)
1959	DOLLAR	Testing	01-116	Locate first fort site, 3 exterior walls, 2 interior walls & block house	<u>Interim Report, Old Fort Smith Project</u> , 1960, FOSM	63 72 73	1,119 - 1,136 2,035 2,036a & b	1A	Interim report copy in file. 72 maps, 73 field notes	Projects 1A & 1B overlap, collection and field notes are stored as one, collection & notes represent dated methods
1963	MOORE & DOLLAR	Excavation	01-116	Construction detail of first fort, room functions, delineated surviving fort walls	<u>The Archeology of Fort Smith I</u> , 1963, FOSM	8 94 (see acc 1 for analysis) 100	336 - 792 2,280 - 2,294 2,369 - 2,431	1B	Field notes in file, maps and photos in final report in file, 2 boxes photos in storeroom BKSH 1	Collection was stored in Fayetteville at University Museum then transferred to FOSM, collecting methods dated and provenience in question, some objects missing, collection in storage and on exhibit, 9,386 objects
1963	DOLLAR	Monitoring	10-125	Remains of wall (see 5) and possibly bastion 4 were cut away	----	----	----	2	Field notes on tape, partial transcription in file, see also file IV-55 in main building	None collected
1966	DOLLAR	Research	01-116	Construction and use history, and artifact analysis from projects 1A & 1B	<u>The First Fort Smith Report</u> , 1966, FOSM	See acc 8, 63, 72, 73, 94, 100	----	----	Report and copies located in park library	Methods and procedures dated (see files 1A & 1B), see acc 8 for comments on report
1978	ANDERSON	Testing	01-125	Wall section 6 and possible wall foundations of bastion 4	<u>Archeological Test Excavations for Portions of the Walls of the Second Fort</u> , 1979, FOSM	53	955 - 986	3	Photos and final report in file, field notes are not present	Artifacts collected are not described in report, collection in storage, 32 objects (report not accessioned)
1980	ANDERSON	Testing	01-104 01-105 10-111 10-138	Segments of wall section 10 at bastion 1, could not find bastion, 3 remains of adjacent walls	<u>Continuing Archeological Test Excavations for Portions of the Walls of the Second Fort</u> , 1981, FOSM	----	----	4	Photos, maps and final report in file	None collected (report not accessioned)
1981	TRAYLOR	Testing	01-108 01-111 01-114 01-125 01-127 01-138	Bastion 2 remains, wall sections 2 & 3, couldn't find bastion 3 remains, explored bastion 4, bastion 5 remains located and wall section 8	<u>Test Excavations for Bastion and Wall Foundations at the Second Fort at Fort Smith, Arkansas</u> , 1981	54	987 - 1,061	5	B&W photos, maps and final report in file, field notes are not present	Artifacts collected are not described in report (report with photos not accessioned)

YEAR	PRINCIPAL INVESTIGATOR	SURVEY METHOD	TRACT	RESULTS	REPORT TITLE	ACCESSION NUMBER	CATALOG NUMBER	PROJECT NUMBER (Field collected files)	FIELD NOTES & PHOTOGRAPHS	COLLECTION NOTES (All collections housed at FOSM NHS)
1982	DOLLAR	Testing	01-104	Explored north, east and south side of commissary, reveal external features of commissary for historic structures report/evidence of porches	<u>Archeological Investigation and Historical Documentation in the Vicinity of the Old Commissary Building</u> , 1983	60, 74	1,285 - 2,025	6	Slides, contact prints and field notes in file	Artifacts collected in asrbitrary levels may cause level dating errors, artifacts tabulated and presented in report, see also 1987 Historic Structures Report, Archeology Section (field notes not accessioned)
1983	DOLLAR	Monitoring	01-107 01-110 01-139	Demolition of Meek Bottling Plant (Coca-Cola)	<u>Results of Archeological Monitoring for Demolition of the Meek Bottling Plant</u> , Coleman, 1984, FOSM	58 64	1,112 - 1,115 1,137 - 1,238	7	Maps, field notes and pollen analysis in file, negatives in storeroom BKSH 1	Report written by Coleman after Dollar's death, note lack of continuity, #58 brick sample, 562 objects
1983	COLEMAN	Excavation	01-139	Document second flagpole construction details for use in reconstruction	<u>Excavation of the Flagpole Base at the Second Fort Smith, Arkansas</u> , 1983	80	2,049 - 2,185	8	Maps and field notes in file, prints and negatives in storeroom BKSH 1	Collection in storage
1984	COLEMAN	Monitoring	01-108	Located well east of visitor center during sidewalk replacement	----	83	2,189	9	Photos and field notes in file	Brick sample
1984	COLEMAN	Testing Monitoring	01-104 01-105	Discovered wall section 1, exposed wall section 1 & 10 for capping	<u>Archeological Monitoring at the Old Commissary Building</u> , 1984, FOSM	92	2,202 - 2,277	10	Maps and field notes in fiel	Artifacts described in report, collection in storage (field notes not accessioned)
1985	COLEMAN	Testing Monitoring	01-111 01-134 01-138 10-139	Delineate and date fill south of second fort	<u>Archeological Testing and Monitoring for Parking Lot Construction, Fort Smith National Historic Site</u> , 1986	132	2,748 - 2,834	11	Maps and field notes in file	Artifacts described in report, collection in storage (field notes not accessioned)
1986	COLEMAN	Monitoring	01-108 01-111 01-124 01-134 01-138 01-144 01-145	Identified historic ground level dating 1821 - 1838 during AT&T telephone line	<u>Archeological Monitoring for Burial of Overhead Telephone Lines and Identification of an Historic Midden</u> , 1987	127	2,856 - 2,931	12	Photos, maps and field notes in fiel	Artifacts described in report, collection in storage, 1,681 objects (field notes not accessioned)
1987	COLEMAN	Monitoring	01-151	Monitored railroad excavation of pits to bury railroad ties, occurreed in sterile subsoil	----	----	----	13	Field notes in file	None collected (field notes not accessioned)
1987 to 1988	COLEMAN	Testing Monitoring	01-107 01-149	Design details of second fort cistern and overflow drain	<u>History and Appearance of the Second Fort Cistern</u> , 1989, FOSM	153	(backlog)	14	Photos, maps and field notes in file	Collection has been accessioned but not cataloged, 1 box of approximately 2,000 objects (field notes not accessioned)

YEAR	PRINCIPAL INVESTIGATOR	SURVEY METHOD	TRACT	RESULTS	REPORT TITLE	ACCESSION NUMBER	CATALOG NUMBER	PROJECT NUMBER (Field collected files)	FIELD NOTES & PHOTOGRAPHS	COLLECTION NOTES (All collections housed at FOSM NHS)
1985	COLEMAN	Testing	01-127	Further examination of bastion 5 for wall capping information	Funding was not available for report	154	(backlog)	15A	Unpublished, photos, maps and field notes in cabinet C	Collection has been accessioned but not cataloged, 2 boxes of approximately 4,000 objects (field notes not accessioned)
1985	COLEMAN	Testing	01-125	Further examination of bastion 4 and second fort construction for wall capping	Funding was not available for report	155	(backlog)	15B	Unpublished, photos, maps and field notes in cabinet C	Collection has been accessioned but not cataloged, 2 boxes of approximately 4,000 objects (field notes not accessioned)
1986	COLEMAN	Testing	01-107 01-114	Located and delineated bastion 2 and adjacent wall, see 1, 2 & 3 and construction information of second fort for wall capping	Funding was not available for report	151	(backlog)	15C	Unpublished, photos, maps and field notes in cabinet C	Collection has been accessioned but not cataloged, 18 boxes of approximately 2,500 objects (field notes not accessioned)
1985 to 1988	COLEMAN	Testing Mitigation Monitoring	01-114 01-115 01-116	Identified buried historic ground level on railroad median strip, 67 features were identified	<u>Interim Report:</u> <u>Archeological</u> <u>Investigation for</u> <u>Construction oa a</u> <u>Pedestrain Trail at</u> <u>FOSM, 1987</u> <u>Archeological</u> <u>Investigation fior</u> <u>Construction of a</u> <u>Pedestrain Trail and</u> <u>Identification of</u> <u>Laundress Row, 1989</u>	152 156 165 178	(backlog)	16	Photos, maps and field notes in cabinet C (accession #178) (extensive)	Collection has been accessioned and partially cataloged, 45,000 objects
1988	COLEMAN	Monitoring	01-113	Identified buried ground level and unusually thick horizon	Memo to Regional Director, 8/24/88	----	----	17	----	None collected
1989	PARRISH	Testing Monitoring	01-116	Identified fill with depth from 1.5 to 3.5 feet	<u>Archeological Testing and</u> <u>Monitoring for Storm</u> <u>Drain Construction,</u> 1989, FOSM	179	(backlog)	18	Slides, photos, maps and field notes in cabinet C	Collection has been accessioned, 161 objects (field notes not accessioned)
1989	PARRISH	Monitoring	01-108	Recorded stratigraphy of east lawn during flagpole removal, 8 distinct layers	----	167	3,155 - 3,174	19	Slides, photos and field notes in file	37 objects (field notes not accessioned)
1989	PARRISH	Monitoring	01-151	Monitored the placement of AT&T fiber optic cable along railroad tracks, identified railroad weight station	Memo to Regional Director, 7/10/89	175	(backlog)	20	Slides, photos and field notes in file	12 objects (field notes not accessioned)

YEAR	PRINCIPAL INVESTIGATOR	SURVEY METHOD	TRACT	RESULTS	REPORT TITLE	ACCESSION NUMBER	CATALOG NUMBER	PROJECT NUMBER (Field collected files)	FIELD NOTES & PHOTOGRAPHS	COLLECTION NOTES (All collections housed at FOSM NHS)
1989	PARRISH	Monitoring	01-111 01-138	Monitored the placement of electrical line to gallows, collected a sample of artifacts	Memo to Regional Director, 9/22/89	177	(backlog)	21	Slides and field notes in file	3 objects (field notes not accessioned)
Not Included in Archeological Assessment:										
1990	PARRISH	Monitoring	01-104 01-105 01-107 01-108 01-109	Monitored placement of cable to commissary for video security system, collected a sample of artifacts	Memo to Regional Director with map, 4/13/90	----	(backlog)	22	Photos and field notes in file	10 objects (field notes not accessioned)
1990	PARRISH	Recorded	01-116	Recorded location of circular brick feature on Belle Point	----	----	----	23	Photos taken and location triangulated in field notes	None collected (field notes not accessioned)

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