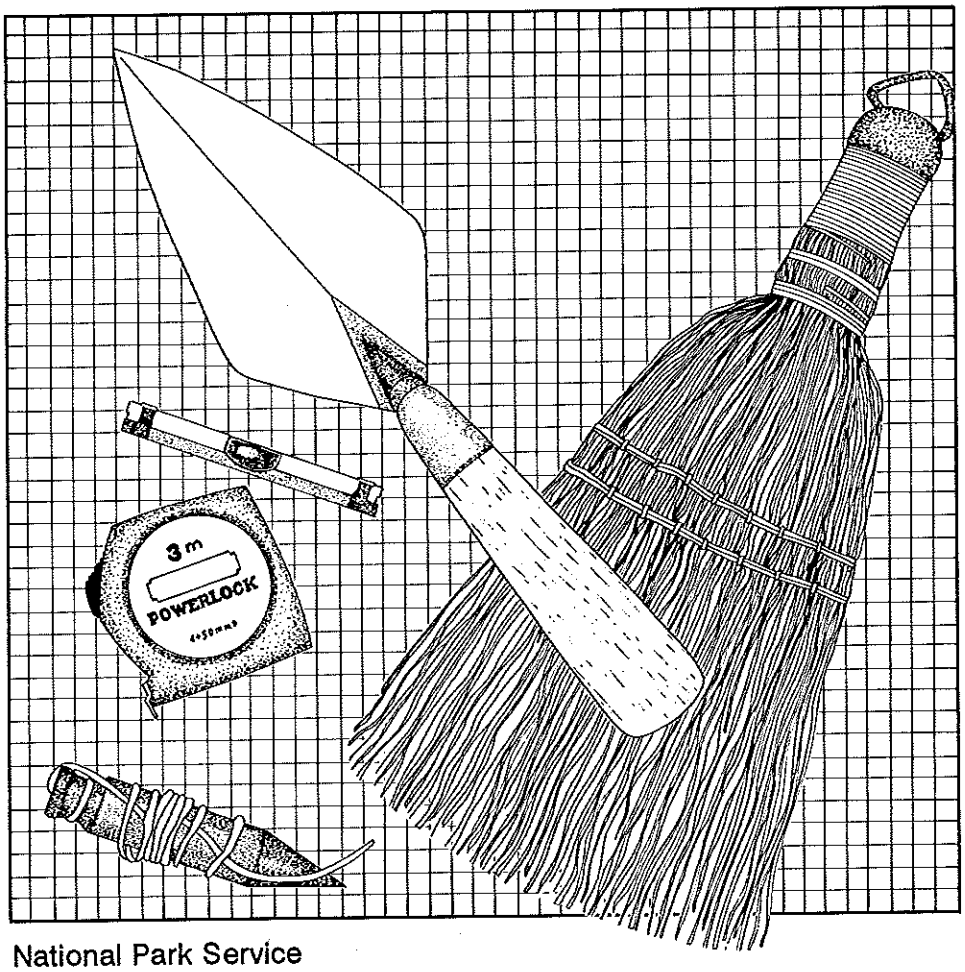
Archeological Investigations at Fort Scott National Historic Site, Bourbon County, Kansas: 1992



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ARCHEOLOGICAL INVESTIGATIONS AT FORT SCOTT NATIONAL HISTORIC SITE, BOURBON COUNTY, KANSAS: 1992

By

Caven P. Clark

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ABSTRACT

In November and December of 1992 trenches were dug for the installation of a new security alarm system at Fort Scott National Historic Site, Kansas. The trenching operations were monitored to determine if cultural features and artifacts are located in the areas of primary impact. Several features were recorded, and a number of artifacts dating to the military and post-military history of the fort were collected. In addition, a final portion of this report addresses the research potential in other areas of the fort complex.

ACKNOWLEDGMENTS

This project was undertaken during the Thanksgiving and Christmas holiday seasons, and the onset of winter weather conditions produced a less-than-optimal context for field archeology and construction. The staff of Fort Scott, Superintendent Steve Miller, Historian Arnold Schofield, Museum Aid Alan Chilton, Maintenance Foreman Mike Vachon, Woodcrafter Mike Youngren, and Richard Armstrong (Innovative Systems, Inc.) and his crew worked in concert between the squalls, ice storms, and mud to complete the project. The vast array of Christmas cookies in Historic Structure 1 did much to mitigate my stay in Fort Scott. Todd Ahlman of the Midwest Archeological Center provided the bulk of the descriptive information on the historic artifacts. His interest and expertise are much appreciated.

TABLE OF CONTENTS

Abstract i

Acknowledgments ii

Table of Contents iii

List of Tables iv

List of Figures iv

Introduction 1

Brief History of Fort Scott 1
Previous Research 2
Soils and Stratigraphy 3

Part I: Trench Monitoring 5

Field Methods 5
Results of Trenching 5
Discussion 14

Part II: Archeological Research Needs 15

HS-30 Trade Shop Foundation 15
Enlisted Men's Latrines 15
Officers' Row 16
Walkway in Parade 17
Retaining Wall at Quartermaster's Quadrangle 17
Prehistoric Component 18
HS-12 Moisture Mitigation 18
Reanalysis of Extant Collections 18
Summary 19

References Cited 21

Table 23

Figures 25

Appendix A: Annotated Artifact Catalog and Descriptions, by Todd Ahlman 35

LIST OF TABLES

1. Summary of historic structures, Fort Scott, Kansas 23

LIST OF FIGURES

1. Location of Fort Scott on the Military Road 25

2. Plan of Fort Scott by Captain Thomas Swords, 1848 26

3. Plan of buried security system trenches 27

4. Typical trench segment in Parade southeast of Dragoon Stables 28

5. Location of buried wall at Historic Structure 30, looking east towards west corner 28

6. Historic Structure 30, buried wall in profile 29

7. Historic Structure 30, buried wall tie-in to original foundation 30

8. Artifacts from Historic Structure 6, infantry barracks 31

9. Artifacts from Historic Structure 4, Garden Wall, footing trench 32

10. Artifacts from Dragoon Stables, Parade, and Historic Structure 1 33

INTRODUCTION

In late November and December 1992, the author monitored the installation of a buried security alarm system. Part I of this report explains the field methods that were used and the results that were obtained. In addition, the author discussed future archeological research needs at Fort Scott with park staff, especially with regard to the cultural landscape. A summary of these discussions is included in Part II of this report.

A Brief History of Fort Scott

Fort Scott was established on the Military Road, which ran from Fort Jessup, Louisiana, to Fort Snelling, Minnesota, as one of a series of forts (Figure 1) designed to provide a military buffer between indigenous and removed Indian groups in the Indian Territory of the Louisiana Purchase, and white settlers on the frontier. The site of the fort was selected and temporary quarters established in 1842 (Oliva 1984). The design of the fort complex was developed by Captain Thomas Swords, and a plan map of the fort showing the structures in various stages of completion was produced in 1848 (Figure 2).

The initial period of Fort Scott's history spans 1842 to 1853, during which time federal policy embraced the concept of a fast-moving, mounted force. Such a force, positioned along the Military Road, could respond quickly to disturbances along its length. Soldiers of the First Dragoon and Fourth Infantry regiments assisted in the fort's construction as skilled as well as unskilled craftsmen. A sawmill was established within a few miles of the fort on the Marmaton River, where the massive walnut beams still preserved in the original structures were cut.

Military duties included exploration and caravan escorts along the Santa Fe Trail, where Texas raiders made traffic hazardous. In addition to its frontier peace-keeping role, much of the garrison at Fort Scott was involved in the Mexican-American War (1846-1848). By 1850 it appeared that the frontier role for which the fort was conceived was obsolete, and the fort was abandoned to the custody of Ordnance Sergeant McCann in 1853 and the buildings sold at public auction in 1855 (Oliva 1984).

The years prior to the Civil War saw the incorporation and growth of the town of Fort Scott around the nucleus of the fort complex. Its location just west of Missouri brought it fully into the often violent controversy over slavery and the role of African Americans in the territory. Violent interactions between the Free-State and the Pro-Slavery factions brought the military back to Fort Scott for a brief period in 1858. At this time, there were two hotels on opposite sides of the Parade known locally as the Free-State Hotel (Historic Structure 1) and the Pro-Slavery Hotel (Historic Structure 7) that symbolized the divisiveness growing in the territory. The Free-State faction won control over the state in 1859 and Kansas was admitted to the Union as a free state in 1861, at which time the troubles experienced on a local level exploded into the Civil War.

Located near the Kansas-Missouri border, the town of Fort Scott was occupied continuously by Union troops from 1860 to October 1865. The troops were billeted in tents on the Parade and in former military buildings as well as privately-owned buildings. During the Civil War the U.S. Army constructed many buildings and quartermaster support facilities in the town of Fort Scott and on land adjacent to it. The army also constructed a line of defensive earthwork fortifications which surrounded the town. Today the only existing representation of these fortifications is a reconstructed blockhouse (Lunette Blair) that is located southwest of the Visitor Center on Skubitz Plaza. It is also believed that the two carriage houses (Historic Structures 31 and 32), which are located behind Officers' Row, were constructed between 1855 and 1865.

The last episode of military concern involving Fort Scott was in 1869-1873, when a small number of troops was stationed in southeast Kansas to protect the railroad construction crews and to facilitate the final removal of the Osages from Kansas (Oliva 1984). The end of the military history of Fort Scott does not, however, spell the end of the archeology of these buildings and the fort complex in general. While several structures were eventually razed, some of the original buildings were preserved, albeit in a much altered state. Thompson (1967, 1968) provides a discussion of these structures.

The history of the actual design and construction of the fort, and of the subsequent alterations and demolitions, rests largely on documentary evidence and the archeological excavations of the Kansas State Historical Society (KSHS). Today's Fort Scott consists of eleven original and nine reconstructed structures, interpreted for the initial period of occupation between 1842 and 1853. Table 1 provides a summary of each historic structure to establish a context for the discussion of the artifacts recovered during the trenching operation.

Previous Research

Previous archeological work at Fort Scott, conducted between 1968 and 1972 by the KSHS and reported by Reynolds (1983), was concerned with the redefinition of the historic structure foundations and features attributable to the 1842-1853 period of construction and use. There was little investigation of the areas between structures and no investigation of areas around standing, original structures. Reynolds, then assistant state archeologist, completed his report a decade after the fact and had been present for only two weeks of the project's field phase in 1970. While his report is technically adequate and informative, there is little of an analytical nature apart from a discussion of structural issues.

More recent work was done by MWAC Archeologist Jeffrey Richner, who monitored the installation of gas lines in trenches in the northwestern portion of the fort complex. In his trip report, Richner (1988) details his findings, which include an assessment of the extent of disturbance in the area of the Dragoon Stables, Historic Structure 10.

While extensive in areal coverage, previous archeological research at Fort Scott has lacked any particular orientation, other than reconstruction, that might be useful in addressing historical or anthropological questions. Further research, beginning with the monitoring project reported herein, must be guided by a broader design that integrates management needs with long-term research interests.

Soils and Stratigraphy

The following description of the Clareson series is taken from the Bourbon County soil survey (U.S. Department of Agriculture 1981) and includes all of the primary soil horizons found in the Fort Scott complex.

> The Clareson series consists of moderately deep, well drained, moderately slowly permeable soils on uplands. These soils formed in material weathered from limestone. Slope ranges from 1 to 12 per cent.
>
> A1 - 0 to 10 inches; very dark brown (10YR2/2) stony silty clay loam, very dark grayish brown (10YR3/2) dry; strong fine granular structure; hard, firm; neutral; clear smooth boundary.
>
> B1 - 10 to 15 inches; very dark brown (7.5YR2/2) flaggy silty clay loam, dark brown (7.5YR3/2) dry; strong medium granular structrure; very hard, very firm; about 50 per cent limestone fragments, by volume; medium acid; gradual smooth boundary.
>
> B2 - 15 to 25 inches; dark reddish brown (5YR3/3) flaggy silty clay, dark reddish gray (5YR4/2) dry; strong fine subangular blocky structure; very hard, very firm; about 65 per cent flaggy and smaller limestone fragments, by volume; few fine black concretions; slightly acidic; gradual smooth boundary.
>
> B3 - 25 to 32 inches; dark reddish brown (5YR3/3) flaggy silty clay, reddish gray (5YR5/2) dry; moderate medium subangular structure; very hard, very firm; about 75 per cent flaggy limestone fragments by volume; few fine black concretions; neutral; abrupt wavy boundary.
>
> R - 32 inches; limestone.

While virtually all of the soils encountered in the trenching project are included in the Clareson series, some other clays were noted in features. These "exotic" clays used in the fort possibly originate in deposits found no closer than a mile from the fort.

The gray clay found in the fort may have come from the Osage silty clay or in the Lanton silty clay loam substrate, both of which occur in the Marmaton River bottoms immediately behind the fort. The Parsons silt loam substrate has a similar gray clay but has no close sources.

The yellow clay may have been brought into the fort from some distance. Similar clays are found in the Tamaha silt loam substrate, with no sources close to the fort, and in the Dennis silt loam substrate, with no sources closer than one mile from fort.

PART I: TRENCH MONITORING

Field Methods

It was recommended that the installation of an underground security alarm system be monitored by an archeologist to examine any previously undocumented features that might be encountered. The trenching involved disturbance to a average maximum depth of 60 cm (2 ft) and an average maximum width of 15 cm (6 in), utilizing a Case "Maxi Sneaker" in areas of generally soft soils. In more intractable areas, a backhoe was employed. The actual location of trenching is depicted in Figure 3, while Figure 4 shows a typical trench segment running along the Parade southeast of the Dragoon Stables.

Note that, contrary to earlier practice, actual compass orientations are used in this report. Also note that *historic* refers to features of the fort complex dating to the period 1842-1853, the focus of the National Park Service interpretive program at Fort Scott. In contrast, *nonhistoric* is used in reference to all other features unless specifically dated to a subsequent period. The term *access point* refers to the excavation made at the base of wall foundations where a hole was drilled to permit access of the alarm system wiring into the structure. *Junction* (Jct) is used to denote the point at which a segment of trench departs from the main line towards an access point. *HS-* is the abbreviation used in Historic Structure designations.

Artifacts were collected from the trench backdirt and the trench itself. Some judgement was used in collection. Small pieces of bone, whiteware, window glass, bottle glass, and hardware were not collected. Vessel rims and bottoms were collected for their diagnostic value. There was no attempt to separate items from various temporal components in the field, and collections are likely to contain a large proportion of nonhistoric materials. However, this should serve as a means of assessing the extent of component mixing in specific areas of the fort complex. It was not, in most instances, possible to determine the vertical provenience of individual artifacts. Horizontal provenience was kept for individual trench segments.

Results of Trenching

Results of the monitoring of the trench excavation are presented below in order of excavation, utilizing the historic structure numbers and reference points of the trench segments themselves as the provenience orientations (Figure 3). Artifact descriptions are presented in Appendix A.

HS-9 Access Point to Parade

The trench at the southwest end of the guardhouse (HS-9) contained small amounts of material. Soil is the dark brown clay loam "A" horizon of the Clareson series (U.S. Department of Agriculture 1981).

HS-9 Jct to HS-6 Jct

The trench segment from the Guardhouse (HS-9) to the Infantry Barracks (HS-6) at the southern corner of the Parade contains little material, mostly whiteware and brick fragments. Soil is uniformly dark brown clay loam.

HS-6 Jct to Cistern

The trench along the southwest side of the Infantry Barracks (HS-6) contained mostly the red clay "B" horizon from the walkway to the front of the structure. Here the soil changed to very dark brown clay loam with a red clay substrate and contained more artifacts than the first segment. A lens of coal was found at 30 cm below surface in the segment opposite the south corner of the structure. In general, this and the following trench segments showed buried horizons consistently at 30 cm below surface.

The trench along the southeast side of (behind) the Infantry Barracks is mostly dark clay loam with a red clay substrate. Where the trench turns at the southern corner of the structure there is a heavily mixed clay and debris anomaly, possibly a trash pit, at 30 cm below surface.

The trenching encountered a segment of a wall southeast of HS-6. Reynolds (1983: Figure 7) shows this wall as a post-1863 feature. It was intersected at 20 cm below surface, 5 m southeast of the southeastern (back) wall of HS-6 and 3.7 m southwest of the northeastern corner of the structure. Other pieces of limestone suggest that a flagstone walkway may have existed from the back doors of the Infantry Barracks to the Latrine Complex (HS-22).

In the trench at the east corner of HS-6, even with the northwestern wall, there is an abundance of coal and brick fragments mixed with domestic trash (e.g., porcelain) in a matrix of dark soil. At a point 3 m southeast of the cistern there is a lens of gray clay originating at 20 cm below surface. Thickness varies from 4 cm to 14 cm. The clay lens overlies a deposit of red clay in which there is an abundance of brick and coal fragments. The entire feature measures 2.2 m in length along the trench. More artifacts were recovered here than in any trench segment in this area; some are illustrated in Figure 8.

HS-6 to HS-12 Jct

Other than coal, there were virtually no artifacts found in the remainder of the trench from the cistern to the access point behind HS-12. The trench cut across the roadway, still in evidence from the brick paving near HS-30 and from the cobbles found here that were apparently used in the roadbed. There were very few limestone slabs here as well.

HS-12 Jct to HS-30 Access Point

The trench connecting HS-12 and HS-30 encountered a concrete wall approximately 10 m southeast of HS-12 and running parallel to the northeast-southwest orientation of the complex. A structure, possibly a garage, is clearly shown on a pre-1965 aerial photo of the Fort Scott complex. As the trench neared HS-30, the ground became increasingly difficult to excavate, owing to the amount of limestone slabs near the surface.

HS-12 Jct to HS-14 Jct

The trench segment from HS-12 to the junction with the pathway behind Officers' Row contained very little material. The soil profile is homogeneous, with dark brown clay loam and a red clay substrate. What limestone there is increases with proximity to the pathway. There appears to be little, if any, disturbance in this part of the fort complex. The pre-1965 aerial photographs show no standing structures in this area. A few artifacts were collected, primarily from the northeastern third of the trench segment.

HS-14 Jct to HS-14 Access Point

The existing pathway behind Officers' Row was formerly a road [brick?] under which a sewer line was installed during the Depression. This segment is nonhistoric rubble fill, the soil consisting of various clays with abundant gravel, cobble, and tabular limestone pieces. Some brick fragments and coal were noted. The area is heavily disturbed, and a backhoe replaced the trencher in this area. A one-foot-wide bucket was used to complete this segment. Shallow soil overlies tabular limestone bedrock at a depth of about 60 cm below surface. The action of the backhoe against the bedrock created an uneven trench considerably wider than one foot with an uneven profile. It was not possible to collect all artifacts observed, due to the action of the bucket and the continual slumping of rock back into the trench. Although the amount of fill is less in the northwestern half of this segment, there is very little material and no evidence of features. Some trench fill from the Parade was moved to the trench segment between HS-14 and the Junction for backfilling.

Future researchers conducting excavation in the vicinity of HS-14 should note that a quantity of artifacts was buried behind the bakery. Accession records at Fort Scott state:

> 8/17/81 Description: Unidentified miscellaneous fragments of metal, porcelain, earthenware, and glass culled from objects collected on Fort Scott National Historic Site during the modern restoration period (1972-1980)[.] Burial disposition advised by Regional Curator John Hunter

according to general curatorial policies of the NPS and buried at the following location: starting at the northeast corner of the Bakery (HS-14) measure 14 feet, 2 inches in westerly direction along the north facing of the rear wall of HS-14; then proceed in a straight line in a northerly direction 9 feet, 6 inches to the center of the burial site that is 3 feet, 6 inches by 3 feet, 6 inches and is approximately 3 feet deep. (These buried items were part of Accession Number 3).

HS-4 Access Point to HS-12 Access Point

The trencher was used between HS-4 and HS-12. The KSHS excavations exposed the foundations of HS-4 but did not extend much beyond them. The northeastern side of HS-4 appears to be heavily disturbed, as evidenced by the amount of plastic refuse with brick, shale, and wood. There is little other artifactual material present. Ceramic pipe and metal pipes attest to the nonhistoric disturbance to this area. In a position immediately opposite the third footing support from the northern corner of the standing structure there is a deposit of mortared brick, against which much of the plastic debris noted above was located.

A segment of historic Backyard Wall was uncovered at 10 cm below surface in its anticipated location at the eastern corner of HS-4. The wall is depicted on Captain Swords' 1848 map of the fort complex. Existing Backyard Wall segments average 45 cm thick. The feature uncovered by the trencher was, however, a jumble of dressed and undressed stones in a deposit 85 cm wide. The rocks were trowelled to expose the feature and to determine if it was intact or disturbed. The southeastern side of the wall was dressed and mortared while the northwestern side was rough and tumble. The mortared segment was only one stone wide (20 cm), while the remainder of the deposit consisted of undressed stone in a matrix of yellow, gray, and red clay with large amounts of shale, and brick fragments with mortar adhering. In order to accommodate the installation of the wires, a single dressed and mortared block was removed. All other in situ stones were left undisturbed.

A surprising amount of artifacts was collected in the process of defining this feature. These include a porcelain doll (Figure 9c), glass (Figure 9a,b), whiteware, cut bone, and window glass, items which in aggragate date from the turn of the last century up to the 1920s. It is possible that the types of debris associated with this feature represent the footing trench of the Garden Wall, which received fill material from other areas of the fort complex, including the domestic refuse, shale, and "exotic" clays. It is clear that these artifacts are from the civilian community and may indicate that the wall was destroyed earlier than the fire which claimed the southeastern half of HS-4 in 1944.

Historic footing trenches were exposed by the KSHS excavations at HS-6, HS-9, HS-13, and HS-17. Discussion of these trenches (Reynolds 1983) is limited to mention of the presence or absence of the tabular limestone foundation stones, many of which were apparently removed for use elsewhere after the military abandonment of the fort. There is no comment on the artifact or soil content of the trenches with which to compare the recent find at HS-4.

The trench segment between the wall feature and HS-12 crossed a nonhistoric lane, under which were several metal pipes. This area is probably heavily disturbed. The nonhistoric lane that passed between these two structures probably required grading, which eliminated historic deposits/contours.

HS-14 Jct to HS-32 Jct

The trench segment from the junction near HS-14 to HS-32 was excavated with the backhoe until softer soils allowed use of the trencher. Involvement with the wall feature at HS-4 precluded monitoring during excavation of a short segment of this trench. Aerial photographs indicate two small structures (e.g., sheds or small garages) in the pathway of the trench. The soils in the southeastern half of the trench segment appear minimally disturbed, with the typical profile of dark brown clay loam overlying red clay subsoils. The northwestern half lacks the red clay "B" horizon substrate and contains considerably more artifacts. The soil is a lighter brown with small cobbles, suggesting fill. Artifact densities increased in front of HS-32, where considerable amounts of domestic refuse (e.g., bottle glass, whiteware, porcelain, and cut bone and minor amounts of iron, coal, and brick) were found.

HS-32 Jct to HS-3, Backyard Wall

Opposite the northwest corner of HS-32 a deposit of brick and stone rubble with artifacts was encountered. This extends approximately half the distance between HS-32 and the backyard wall behind HS-3. There is a considerable amount of rubble fill consisting of angular rock. There is 30 cm of nonhistoric fill above a buried "A" horizon. In the northwestern half of this segment there is less rubble and fill. The red clay substrate, absent in the southeastern portion, is present here, indicating less disturbance.

HS-3, Backyard Wall, to HS-31 Jct

This segment coincides with a nonhistoric structure shown on the aerial photograph. There are deposits of brick, coal, bone, and domestic refuse, especially crockery and tableware. There is little metal of any kind, although some railroad spikes were noted but not collected. Apart from the roadbed itself, there are portions of the trench which appear minimally disturbed, exhibiting the typical profile of dark brown clay loam overlying the red clay substrate. Tabular limestone was rare. The area in front of HS-31, on the other hand, has about 20 cm of gravel fill overlying nonhistoric fill. Red clay was brought up from only the extreme bottom of the trench here.

HS-35 and HS-36 Access Points to Main Trench

The short trench segments running from the main trench and connecting to it these two small outbuildings disclosed buried features suggesting a wall or foundation. In each

case, courses of undressed and unmortared limestone were encountered at 20 cm below surface at a distance of 2 m southeast of the back wall of the garden area. Stone was removed by pick to complete the trenches. There is no prior record of walls or other buried features in this area. Soils in the short segments between the walls and the roadway appear undisturbed.

The roadbed itself appears to be rubble-filled, with little potential for preserved archeological features. A concrete and limestone wall was hit by the trencher about 1 m southeast of the turn. The wall runs in a northeast-southwest direction and is not historic. It has 30 cm of fill on top. The last 5 m of this segment evidently ran nearly parallel to a sewer line, as a considerable amount of ceramic pipe was brought up.

North Corner Turn to HS-11/HS-1 Access Points

The northeastern end of this segment crosses the former northwest-southeast road which is rubble-filled. Whole and fragmentary brick, limestone, and small amounts of coal were noted, and only a small amount of artifacts observed and collected. This area is heavily disturbed. The trenching proceeded down the middle of the pathway, formerly a lane running between HS-1 and HS-11. There is 30 cm of loamy clay fill and modern pathway with XYZ fabric overlying a ca. 10 cm thick layer of rough stone and mortar (an old roadbed), running at least half the distance from the turn to the back of HS-1. The red clay substrate occurs almost immediately underneath the roadbed. The trencher proved inadequate and the backhoe was called for. This was attempted for a short stretch and found too destructive. The trencher was re-employed for about 1 m and then abandoned yet again.

The trencher was used to complete the trench segment from the junction between HS-1 and HS-11 northeast to a point even with the line of columns behind HS-1 where the old roadbed was hit at 44 cm below surface. At this point of contact there is a jumble of large unmortared bricks, perhaps marking the end of the paved surface of the old road. The bricks are impressed with Ft SCOTT BLOCK, and are, according to Site Historian Arnold Schofield, the most recent of the locally produced bricks. The bricks were deeper than the level of the road surface. At this juncture a number of sherds of blue porcelain china were brought up.

There is concern that this buried road feature is a part of a historic road that was known to come near to, and possibly into, Fort Scott. There is no documentation of a road through here during the initial period of fort construction and use. Additional archival researches may disclose the origin of this roadbed during a later phase of occupation. The extent of it as exposed by the trencher and backhoe runs from the turn in the trench to the backside of HS-1. According to the Cultural Landscape Report for Fort Scott (Bacon 1992), "There were no mentions of roads in the immediate vicinity of the post at all during the primary fort period. Roads, both new and abandoned, began to appear on maps and in articles in the 1850s and 1860s."

An 1863 plan of the Fort Scott complex, including the surrounding area, was drafted by Captain W. Hoelcke. His map shows a road, indicated generically on the legend as "Byroads, Footpaths, Camproads & Roads leading to Watering Places for Govt Stock," passing between HS-1 and HS-11 towards the point of the bluff. It is difficult to conceive of an extensive paving effort for a secondary or tertiary road or pathway, unless mud became an acute problem. Some archeological investigation near the modern bluff edge could potentially determine the direction of approach into the fort complex.

While the composition of the road itself appears "old," there is no specific documentation of this feature and no discussion of the types of road surfaces. More recent (late nineteenth-century) roads within the fort complex were brick surfaced. Bacon (1992) discusses at length the various hypotheses regarding the relationship of the fort to the military road.

Note that fill obtained from trenching on the southeastern side of the fort was used to backfill a portion of this trench segment. Some displacement of artifacts is involved.

HS-1 Access Point to HS-11 [front] Access Point

A short connection between structures across the road was dug with the trencher. The ground is undisturbed from HS-1 to about 1 m southwest of HS-11 where the extent of excavation (1 m) by KSHS is apparent. The roadbed to the northeast does not extend southwest between HS-1 and HS-11. All artifacts collected and observed were from the foundation of HS-1 to a point exactly midway between the structures. The soil profile here suggests minimal disturbance, with an upper zone of dark brown clay loam and a red clay substrate containing tabular limestone pieces. The fill around the foundation of HS-11 is yellowish clay with dense fist-sized pieces of crushed limestone, and contains no artifacts.

HS-11 Rear Access Point

A hand-dug hole to the northwest of the heating unit on the northwest side of HS-11 exhibited the following profile: surface to 53 cm below surface, nonhistoric fill; 53-59 cm below surface, black midden with burned and fragmented ceramics and coal; and below 59 cm, the "B" horizon of red clay. A small rim sherd dating to the historic period of military occupation was collected from the midden deposit. The intention of the contractor is to enter a buried PVC pipe at this point and run the security system wires to HS-5 without any additional ground disturbance.

HS-9 Jct to HS-8 Jct

This long straight trench was cut on the inside of the modern walk around the Parade. Soils are reported to be largely fill. Almost without exception the profile is a uniform dark brown clay loam; the "B" horizon was only touched in a few places. There are

almost no artifacts at all in this area, although one blade gunflint (Figure 10b) was collected here. A small amount of brick and coal are present in the fill. In one area opposite the north corner of HS-9 and 2 m inside the Parade, a thin lens of mortar was found 27 cm below surface.

HS-5 Jct to HS-5 Access Point

The trench segment on the back (northwest) side of HS-5 exposed a layer of red (burned?) cherty limestone at 32 cm below surface. Only two small artifacts were observed and collected. Some tabular pieces of limestone were hit opposite the southwestern back door and steps, suggesting a possible paved pathway to the former privy complex indicated on the 1848 maps. Several utility lines converge on the western corner of HS-5, one of which was severed by the trencher.

From the west corner of HS-5 to the junction with the main line on the edge of the Parade the soil profile consisted of a dark "A" horizon at the northwestern end with only traces of the red clay "B" horizon at the bottom of the trench and progressed to a shallower "A" as the trench moved to the southeast toward the Parade. There are two distinct zones within the "A" horizon: the upper (0-25 cm) is homogeneous dark brown clay loam; the lower (>25 cm) is the same soil but contains red cherty limestone. This suggests more grading of original surfaces near the Parade and/or more filling away and downslope from the Parade. The soils contained no artifacts whatsoever, other than small amounts of coal. In the northwestern half of this trench segment there is a weakly defined gray clay/ash lens at 25 cm below surface, below which is some recent concrete, indicating the extent of disturbance in this part of the site.

A few pieces of native limestone with mortar adhering were hit by the trencher at 20 cm below surface 60-70 cm southwest of the front porch of HS-5. It was not possible to determine if these were remnants of a footing or wall. In any event, the rock and mortar extended to a depth of 32 cm.

HS-5 Jct to HS-10 Jct

This trench segment is inside the Parade walkway. The "B" horizon is deeper here than in the segment connecting it with HS-5. Most soil is the darker "A" clay loam. There are few artifacts of any kind. A few Ft SCOTT BLOCKS with mortar adhering were unearthed midway between HS-5 and HS-10. There are a number of anomalies that are referable to nonhistoric intrusions. The trencher hit several areas of obvious fill, containing crushed limestone aggregate and brown soil with the occasional Ft SCOTT BLOCK brick. Other areas appear minimally disturbed with a normal profile, although the "A" horizon may be somewhat truncated here by previous episodes of grading of the Parade.

HS-10 Jct to HS-7 Jct

The observations made for the segment between HS-5 and HS-10 are applicable here. There is more evidence of disturbance here, however, which increases southwest towards the town. Only one stone marble was collected. Observed artifacts include coal and brick, but not in abundance or concentration. Near the west corner of the Parade, the trenching crossed into the Catoosa series of soils which, in part, includes a dark brown (7.5YR4/4) clay subsoil (U.S. Department of Agriculture 1981).

HS-7 Jct to HS-7 Access Point

A buried road feature was encountered at 35 cm below surface at a point just outside (southwest) of the existing walkway around the Parade, near its west corner. This feature is similar in all respects to the buried road feature found between and northeast of HS-1 and HS-11. However, in this instance many bricks and brick fragments were found overlying the limestone and mortared surface (perhaps the latter served as a bed for a brick-surfaced road). The amount of other artifacts increased suddenly outside of the Parade. In addition to the materials collected were several unmarked bricks and Ft SCOTT BLOCK bricks, some white styrofoam, abundant coal, some slag or pig iron, and a car window handle. All indications are that this area is very heavily impacted.

HS-10 Jct to HS-10 Access Point

This short trench segment from the southeast wall of HS-10 to the Parade showed evidence of filling near the wall. The same fill was used at HS-11. A small number of artifacts, including whiteware and a ferrous metal stirrup fragment (Figure 10a), were collected.

HS-7 Jct to HS-8 Jct

This trench segment did not penetrate the old road surface even at 30-35 cm below surface. The soil is fill containing abundant brick and rough rock with only small amounts of twentieth-century artifacts (e.g., whiteware). Items not collected from this fill include cigarette butts and a flash cube wrapper. While there may be undisturbed deposits located underneath the road surface, they were not disclosed in this trench segment.

HS-8 Jct to HS-8 Access Point

This is a continuation of the heavily disturbed area in the western corner of the fort complex. The soils were mostly fill with some clay subsoil. Artifacts included brick, concrete, coal, and rock.

Discussion

One must acknowledge the limitations inherent in the type of project reported here. That is, the present collection of artifacts can be associated only generally with a structure. Without more specific proveniences and associations, they can be used to address only a limited set of questions. Of primary interest is the horizontal distribution of discrete classes of artifacts and whether they can be associated with a specific structure or feature. While structures are handy units of analysis, the spaces between buildings can also reflect unique activities such as discard of refuse and may indicate the presence of a nonpermanent structure (e.g., a shed).

The artifacts recovered from the trenching project are described by Ahlman in Appendix A of this report. A discussion of the artifacts relative to the historic structures and features is offered below.

Very few artifacts are specifically attributable to any of the military periods of the fort complex, and fewer yet to the military itself. Military items from the pre–Civil War periods include the brass butt plate (HS-6) and a dragoon button (HS-1). A .46 caliber cartridge case dates to the post–Civil War period and is the only specimen of this caliber recovered from the fort.

Apart from the military artifacts, there are few other artifacts that unequivocally or exclusively date before the 1860s. The wide-ranging domestic ceramic and glass wares date to a broad span of time from initial occupation to the present. Certain pieces of yellowware likely date to the intial period of military occupation. For the most part, however, the domestic refuse is nondiagnostic, reflecting a continuous history of discard in a largely residential area.

Despite the ambiguity of the artifacts recovered in the process of trenching around the fort, several areas deserve special attention. Nonstructural features of an undetermined nature are preserved behind HS-6 near the cistern. These features, and a midden possibly dating prior to the Civil War behind HS-11, should be further explored. Structural features, including the walls and privies behind Officers' Row and the buried wall at HS-30 were not directly impacted by the trenching and are discussed in more detail in the following section on research needs.

PART II: ARCHEOLOGICAL RESEARCH NEEDS

In addition to the primary task of monitoring the installation of the buried security line, a number of other issues were raised that involve archeological investigation. Some relate to the Cultural Landscape Report (Bacon 1992), while others pertain to maintenance or site-improvement issues. All have the potential to increase our knowledge of the archeological resources at the Fort Scott complex, which with little exception, is poorly known. These issues are presented below in no implied order of priority.

HS-30 Trade Shop Foundation

When the access point into the southwest wall (near the south corner) of HS-30 (Figure 5) was excavated, a number of limestone blocks were noted, suggesting a wall feature not previously documented (Figure 6). A second access point was selected and the original excavation was preserved for examination by the author.

The wall segment exposed is 140 cm in length, parallel to the long axis of HS-30 (Figure 6), and is tied in to the original foundation of the structure (Figure 7), indicating that it is part of the 1842 construction of the Quartermaster's Quadrangle. It is, however, outside the perimeter of the Quadrangle. The wall consists of roughly dressed but unmortared native limestone blocks, at least three stones (60 cm) high. Fill removed to expose the base of the wall included a high proportion of unburned coal, which is consistent with the supposed function of HS-30 as a blacksmith shop for at least part of the military and post-military periods of the fort complex. At the base of the southwest wall of HS-30 there is 25 cm of recent fill overlying the top of this new wall segment, suggesting that this feature is well preserved. There is also the suggestion of an apron around the southwest and southeastern sides of HS-30 as indicated by topography and vegetation, which should be investigated in conjunction with any attempt to define the nature and function of the new wall.

The amount of excavation required to determine the nature and extent of this feature involves an area 3 m (NE-SW) by 5 m (NW-SE) that would expose a block at the southwestern end of HS-30. Additional excavation of the possible apron on the southeastern side of the building would involve another 16 square meters for complete exposure, although a more limited approach utilizing linear trenching may be equally informative.

Enlisted Men's Latrines

The park is interested in redefining the Latrine Complex (KSHS Feature 127A and 127B) behind the Infantry Barracks (HS-6). The feature was exposed by the KSHS excavations in 1968 and includes a complex of dressed stone-lined pits and foundations (Reynolds 1983). The southeastern side of the circular part of the Latrine Complex is in a state of disrepair with blocks of stone sloughing into the excavated pit, although there is

no evidence that the feature is in danger of collapse or significant change, as it appears to have stabilized in its current state. However, park staff feels that the need for stabilization and additional interpretation of the feature may be desirable.

An attempt was made to determine the relationship between the current condition of the feature and its condition upon exposure in 1968. Photographs of the latrine complex are inconclusive as to the precise condition of the feature after excavation. The rectangular part of the feature is clearly shown in the KSHS photos, but the circular portion is not. Reynolds (1983:55) describes the feature as "a circular cistern or pit toilet which had limestone rock walls (rather crudely laid) and which had a diameter of 6 ft." No depth of the feature or of the excavation is given.

Barr's 1968 field notes relate the following observations regarding this feature complex:

> ...Worked [*sic*] continued on Feature 127A and 127B, the north and south compartments of the vault complex situated 55.0 feet behind HS-6, the enlisted mens barracks. 127A was completely excavated to the floor of the latrine. Slab lined walls and slab floor characterize the physical makeup of the feature. This feature was sub-divided due to the nature of the material and soils. Red ashy loam with a large percentage of coal waste was encountered from the ground surface of the feature to a depth of 2.5 feet. Below the actual latrine zone was encountered [*sic*] A dark brown soil with feces and lime concentrations constituted the second zone. On the sacks [i.e., artifact bags] F127 is the north chamber of the latrine down to feces level, F127-a is the second zone. When completed, this compartment measured 7.5 feet north-south; 2.8 feet east-west; and 3.8 feet in depth. [Barr 10/1/1968]
>
> ...Work in the area of HS-6 produced an early latrine F127B which is basically a small round rock lined shaft directly to the south of Feature 127. Additional stones were uncovered running north-south and east-west. [Barr 10/2/1968]
>
> ...One additional latrine later in time; intersects Feature 127B, on the southeast. Materials indicative of the 1890s were recovered from this feature. [Barr 10/3/1968]

The feature numbers on some of the photos that document this complex are F. 133 and F. 136 rather than the 127A and 127B in Reynolds (1983). There is no discussion of specific artifact associations with the latrine complex. Similarly, there is no discussion of the treatment of the feces level material. Future research involving human waste should take advantage of the opportunity to investigate dietary practices as well as possible medical issues (e.g., parasites).

Officers' Row

In the area behind Officers' Row on the northeastern side of the Fort Scott complex there is a series of walls and outbuildings that served the domestic needs of the officers and their families. Documentary evidence indicates the presence of household gardens and

privies in this area as well. Today, only two outbuildings and a few wall segments remain standing, although the locations of previous structures are indicated by exposed foundations and depressions. Small herb and vegetable gardens have been established as part of the interpretive program at the park, even though the actual location of the garden beds is conjectural.

The area has never been subjected to an archeological reconnaissance, and a limited program of testing could be used to further delimit the features known from surface indications and documentary evidence to exist here. The location of the garden beds may, however, remain conjectural. Under ideal circumstances, chemical (e.g., phosphate) differences may persist between cultivated and uncultivated areas. Given the post-occupational history of the site, there may have been sufficient disturbance to mask any soil distinctions that would delineate the locations of the gardens.

Note that the position of interior (NE-SW) walls and the spacing of wall ends/openings is not symmetrical. In the NW-SE wall behind HS-2 there is a curious section suggesting a point of juncture with a perpendicular wall which should be further investigated.

Walkway in Parade

The 1848 plan map shows a walkway running NW-SE across the Parade between the Dragoon Stables (HS-5) and Infantry Barracks (HS-6). The park is interested in an archeological determination of the actual location of this walkway. There is a discrepancy between the walk as indicated on the 1848 plan, which shows it running between the barracks and meeting at the well, and the actual location of the well, which is sited to the northeast of its supposed position. Some limited excavation of the hypothesized location of the walkway is required for an archeological determination of its presence or absence.

Retaining Wall at Quartermaster's Quadrangle

Park staff indicated a desire to remove the retaining wall at the east corner of the Quartermaster's Quadrangle and, possibly, recontour the slope as a visual improvement to the park. The wall dates to the twentieth century and is made of concrete, with steps leading to a former house site visible on aerial photographs prior to 1965. The Quadrangle has been disturbed by a variety of construction and removal projects, and it is unknown to what extent intact deposits and features may be preserved here. It is likely that there is an intact, undisturbed area between the existing retaining wall and the front of the former house sites. Between four and six test excavation units, each 1 m square, should be located in this intermediate zone to determine the nature and extent of subsurface deposits. The results of this testing may then guide the options for removal of the retaining wall.

Prehistoric Component

Several areas containing chipped stone debris were identified. While lawn and stone walkways cover much of the fort, exposed areas were examined for the presence of artifacts of any type. Chipped stone was noted between HS-1 and HS-2, on the southeast side of HS-30 in the Quartermaster's Quadrangle, and in the open area between HS-6 and HS-9 where the second dragoon stable complex was to have been built.

The flakes are not conclusive evidence of a prehistoric component at the site, but suggest that one may be present. The confounding factor is that chipped stone resembling in all aspects the residual products of a prehistoric lithic industry is mimicked by crushed aggregate which includes chert. While there is no documentation of the introduction of aggregate in any of the areas considered, the possibility cannot be excluded until sufficient archeological investigation can assess the nature of the deposits. This could be accomplished by the placement of several excavation units to determine the context and nature of the deposits where flakes have been found.

Artifacts in the Fort Scott Museum (recently sent to MWAC for curation) include a projectile point base and a hoe. The point fragment, found behind HS-6, is contracting stemmed, dating to the Early Woodland substage. It is made of heat-treated chert, possibly Burlington or Crescent City from the Mississippi drainage to the northeast. The hoe is made of chipped stone (source unknown) and exhibits the characteristic silica gloss from use in prairie vegetation. Hoes date to late prehistory when maize horticulture was an important aspect of aboriginal subsistence systems. This artifact is said to have come from the fort but lacks more specific provenience.

HS-12 Moisture Mitigation

Moisture problems in HS-12 will eventually require mitigation. Similar measures at other historic structures involve installation of perforated PVC pipe around the perimeter of the foundation. This action will require archeological clearance prior to implementation. Since HS-12 is an original structure, hand excavation of test units is recommended, the placement and number of which will be determined by the location of the anticipated disturbance.

Reanalysis of Extant Collections

The concern for structural data in the KSHS excavations resulted in a report that failed to consider the horizontal distributions of artifacts within the fort complex or the associations of artifacts with specific structures. The artifact analysis is presented by type, and is essentially a listing of the recovered materials with some discussion of age and description of their physical attributes. There is some consideration of ceramic variation by

structural association (Reynolds 1983:231-238), and selected artifact classes are listed by structure association. It would be beneficial to investigate the artifacts on the basis of provenience rather than by type. This approach may provide data pertaining to class, ethnic, and rank distinctions within the Fort Scott community of the mid-nineteenth century. Contents of foundation trenches could give clues to the sequence of construction or reconstruction.

Summary

Archeological monitoring of the trenching project revealed some interesting artifacts and features. It also provides a basis for determining which areas of the fort complex may yet contain intact historic deposits from the 1842-1853 period, as well as for assessing heavily disturbed areas.

The number of artifacts datable to the 1842-1853 period are very few and widely dispersed. It is likely that intact deposits may be preserved behind HS-11, where a buried midden was located. Artifacts dating to the Civil War period and later are much more numerous and widespread, reflecting the non-military use of the fort complex. This is especially true in the area behind Officers' Row where large quantities of domestic artifacts are located.

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Table 1. Summary of historic structures, Fort Scott, Kansas.

Designation	Function	Condition	Excavated*
HS-1	Officers' Quarters	original	No
HS-2	Officers' Quarters	original	No
HS-3	Officers' Quarters	subsurface only	No
HS-4	Officers' Quarters	original	KSHS
HS-5	Dragoon Barracks	reconst.	KSHS
HS-6	Infantry Barracks	reconst.	KSHS
HS-7	Infantry Barracks	reconst.	KSHS
HS-8	Hospital	original	KSHS
HS-9	Guardhouse	reconst.	KSHS
HS-10	Dragoon Stables	reconst.	KSHS
HS-11	Post Headquarters	reconst.	KSHS
HS-12	Quartermstr. Stores	original	No
HS-13	Quartermstr. Quad.	subsurface only	No
HS-14	Post Bakery	original	No
HS-15	Well Canopy	reconst.	KSHS
HS-16	Flagpole	reconst.	KSHS
HS-17	Magazine	reconst.	KSHS
HS-22	Latrine/Wash House	subsurface only	KSHS
HS-30	Trade Shop	original	No
HS-31	Carriage House	post-1855	No
HS-32	Carriage House	post-1855	No
HS-35	Outbuilding	original	No
HS-36	Outbuilding	original	No

*KSHS = Kansas State Historical Society excavations, 1968-1972.

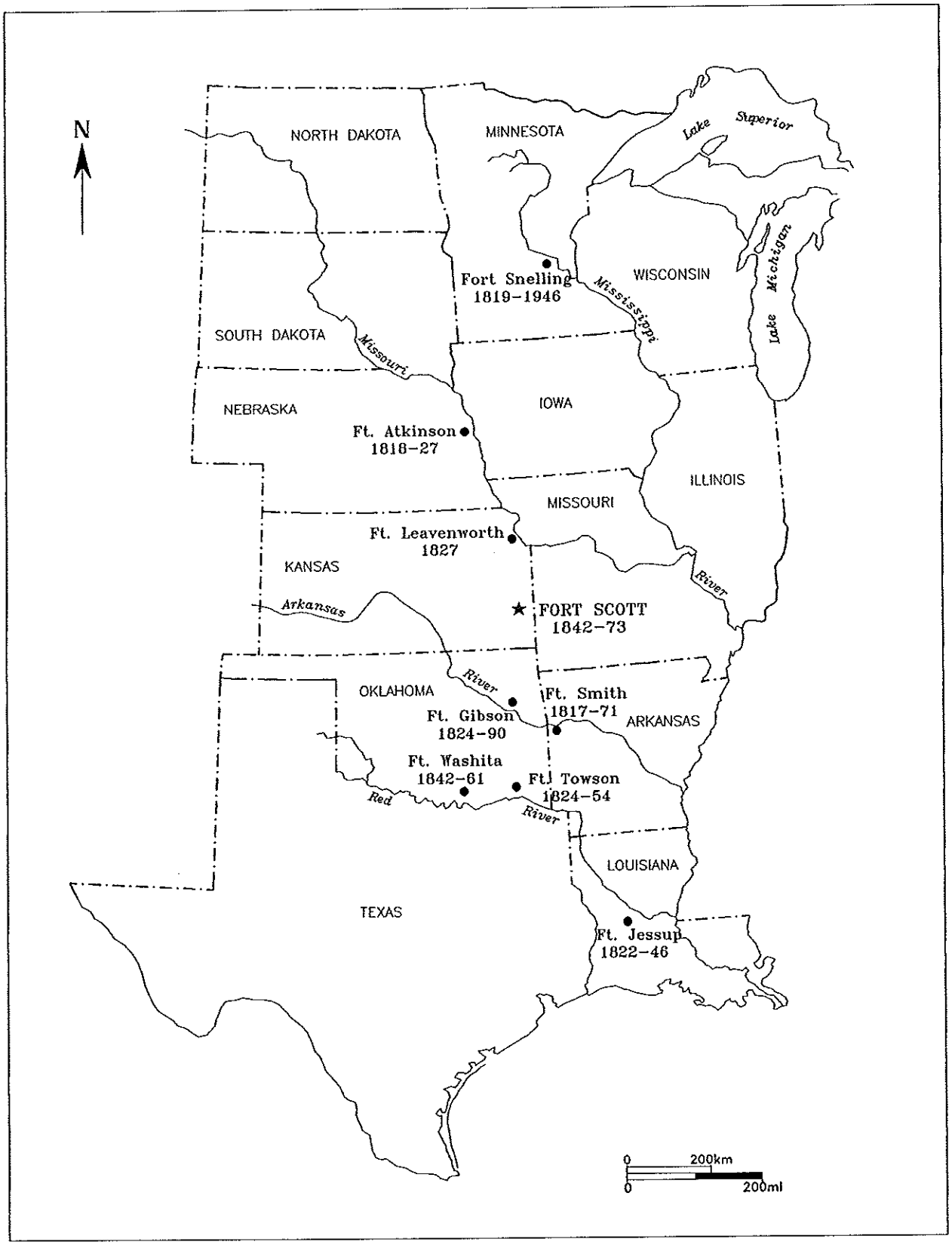


Figure 1. Location of Fort Scott and other forts along the Western Military Frontier.

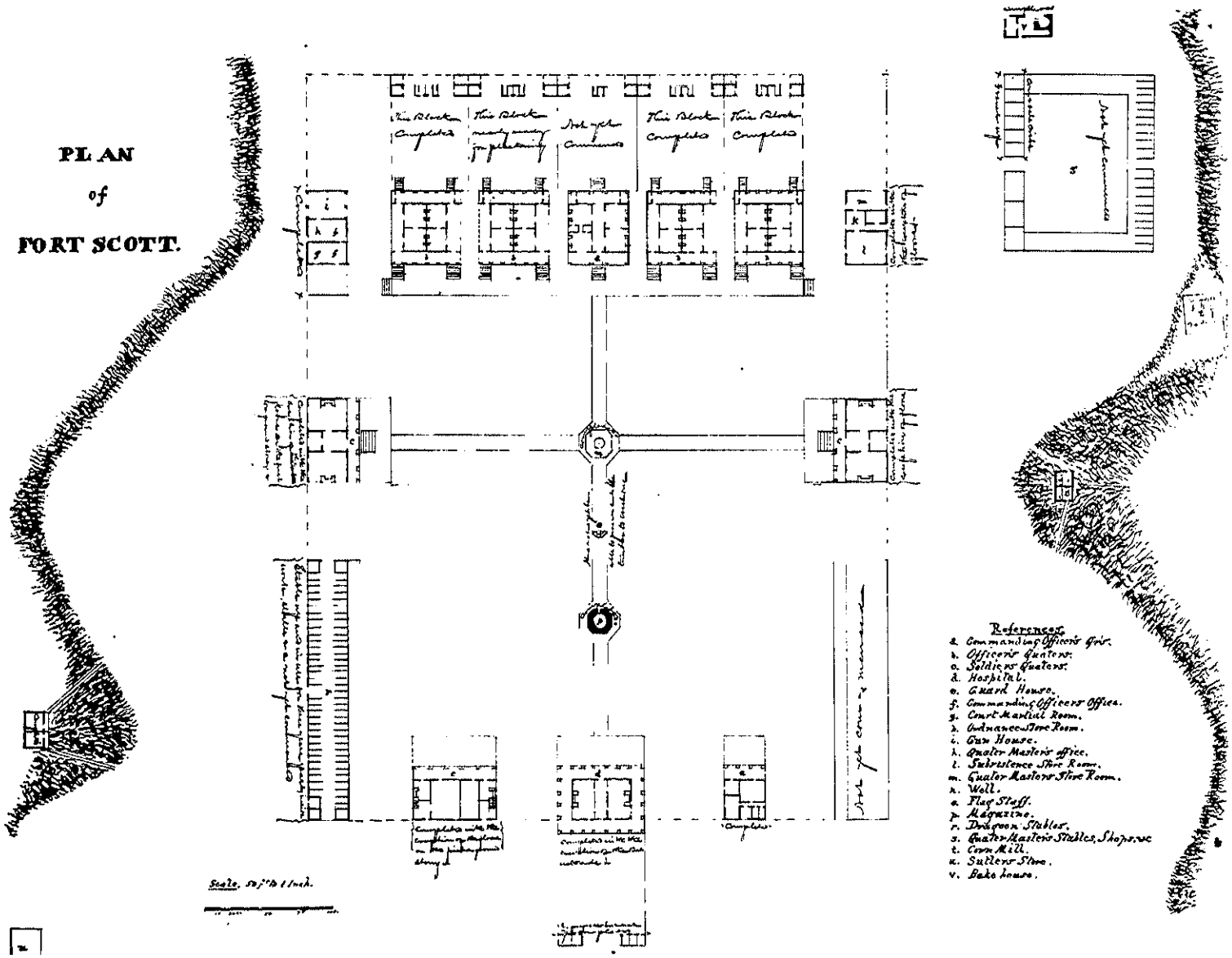
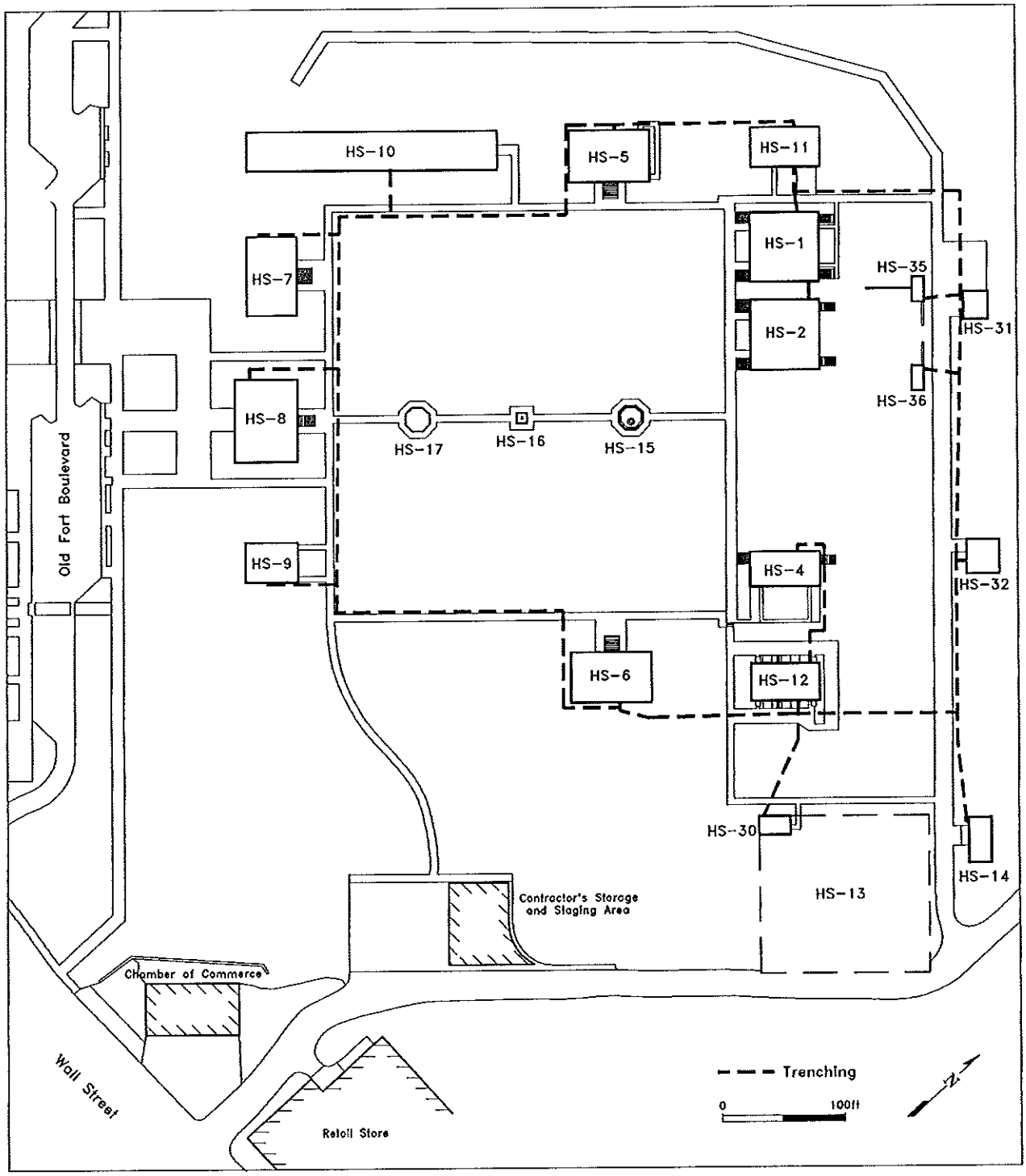


Figure 2. Plan of Fort Scott by Captain Thomas Swords, 1848.



HS-1	Officers' Quarters	HS-9	Guardhouse	HS-16	Flagpole
HS-2	Officers' Quarters	HS-10	Dragoon Stables	HS-17	Magazine
HS-4	Officers' Quarters	HS-11	Ordnance & Post HQ	HS-30	Blacksmith Shop
HS-5	Dragoon Barracks	HS-12	Quartermaster Storehouse	HS-31	Carriage House
HS-6	Infantry Barracks	HS-13	Quartermaster Quadrangle Site	HS-32	Carriage House
HS-7	Infantry Barracks	HS-14	Post Bakery	HS-35	Smokehouse
HS-8	Hospital	HS-15	Well Canopy	HS-36	Smokehouse

Figure 3. Plan of buried security system trenches.

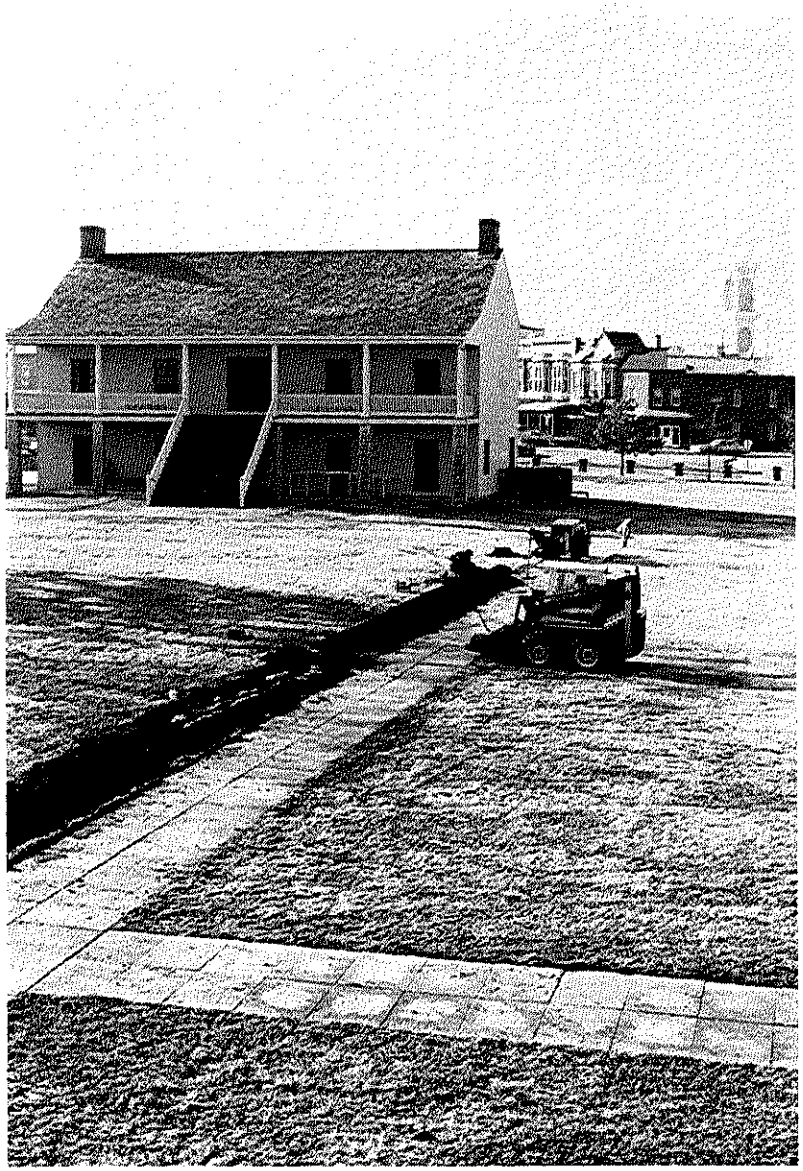


Figure 4. Typical trench segment in Parade southeast of Dragoon Stables.

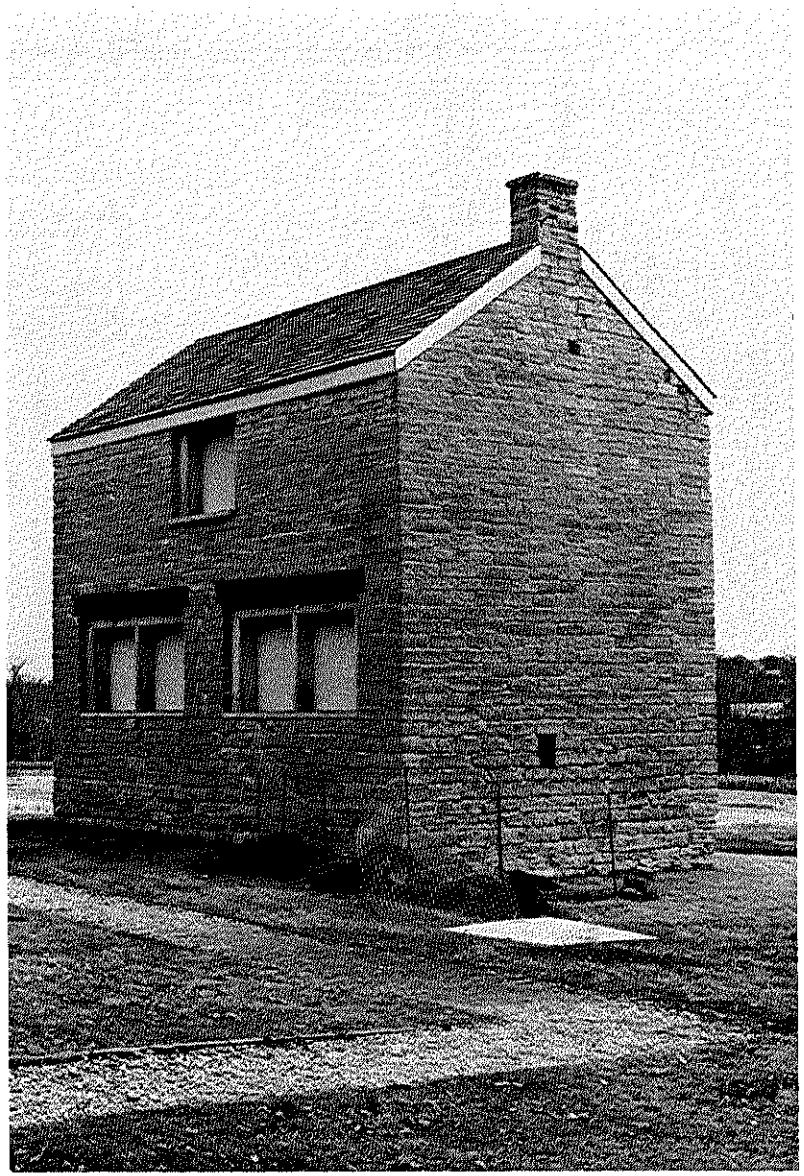


Figure 5. Location of buried wall at Historic Structure 30, looking east towards west corner.

Figure 6. Historic Structure 30, buried wall in profile.

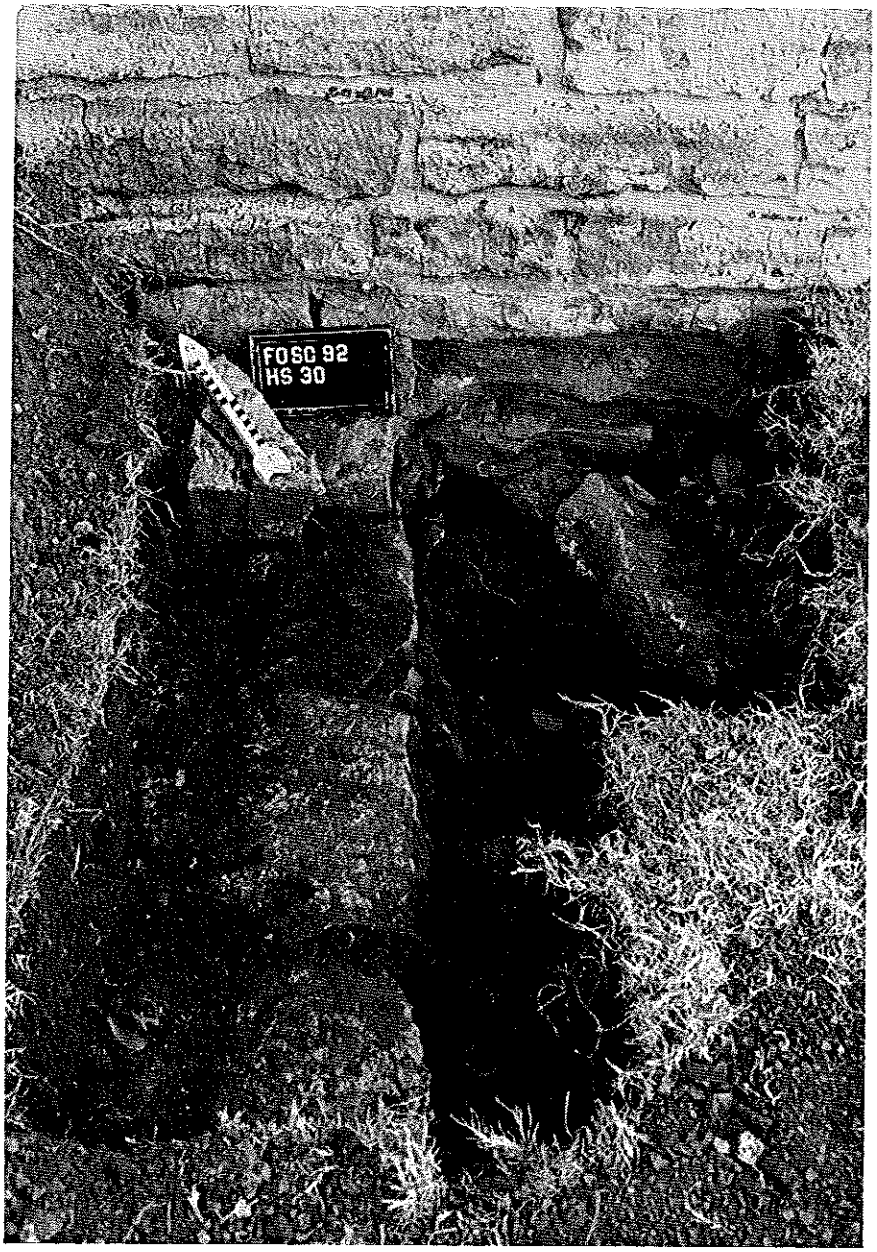


Figure 7. Historic Structure 30, buried wall tie-in to original foundation.

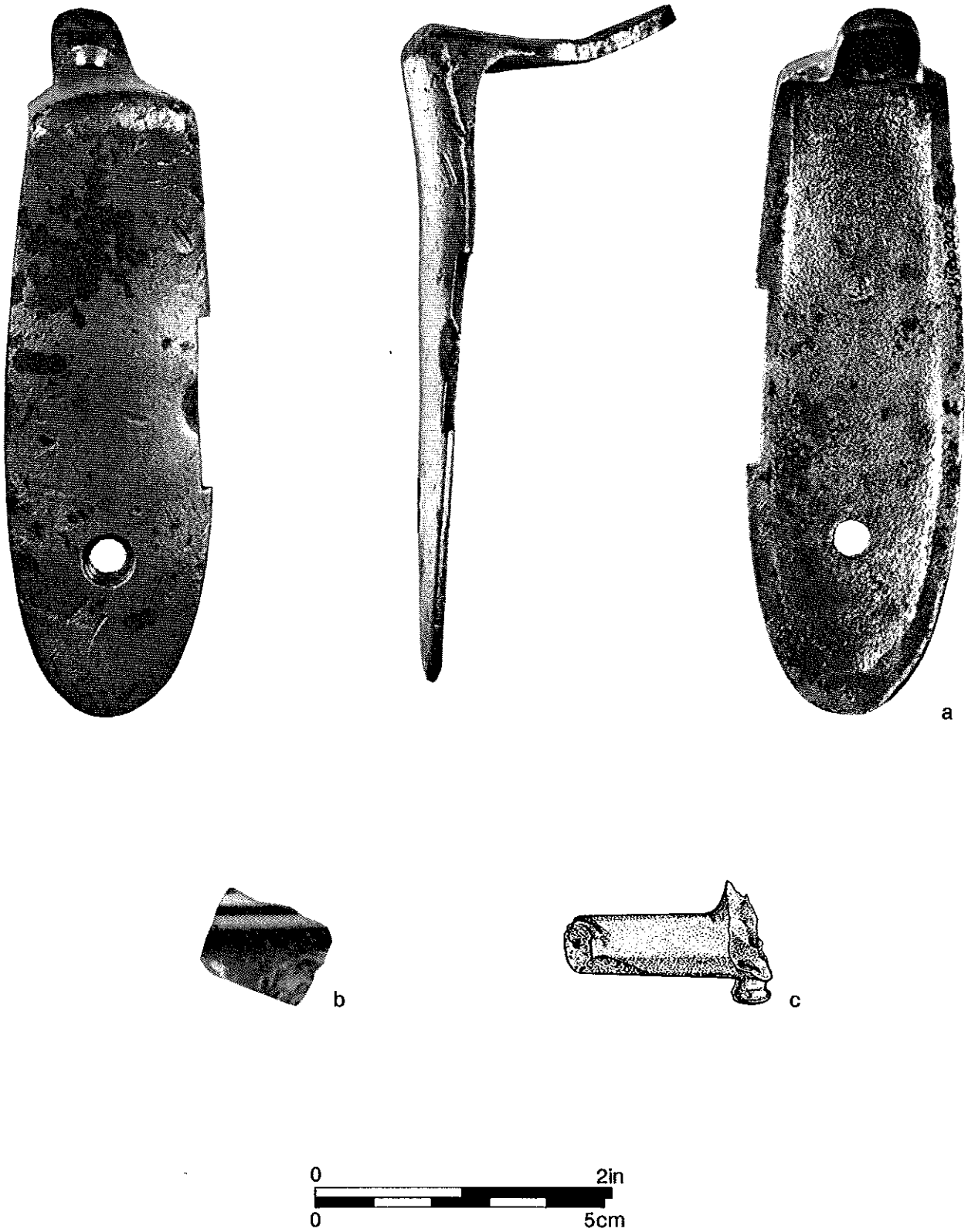


Figure 8. Artifacts from Historic Structure 6, Infantry Barracks: a) carbine butt plate; b) yellowware; c) white clay pipe fragment.

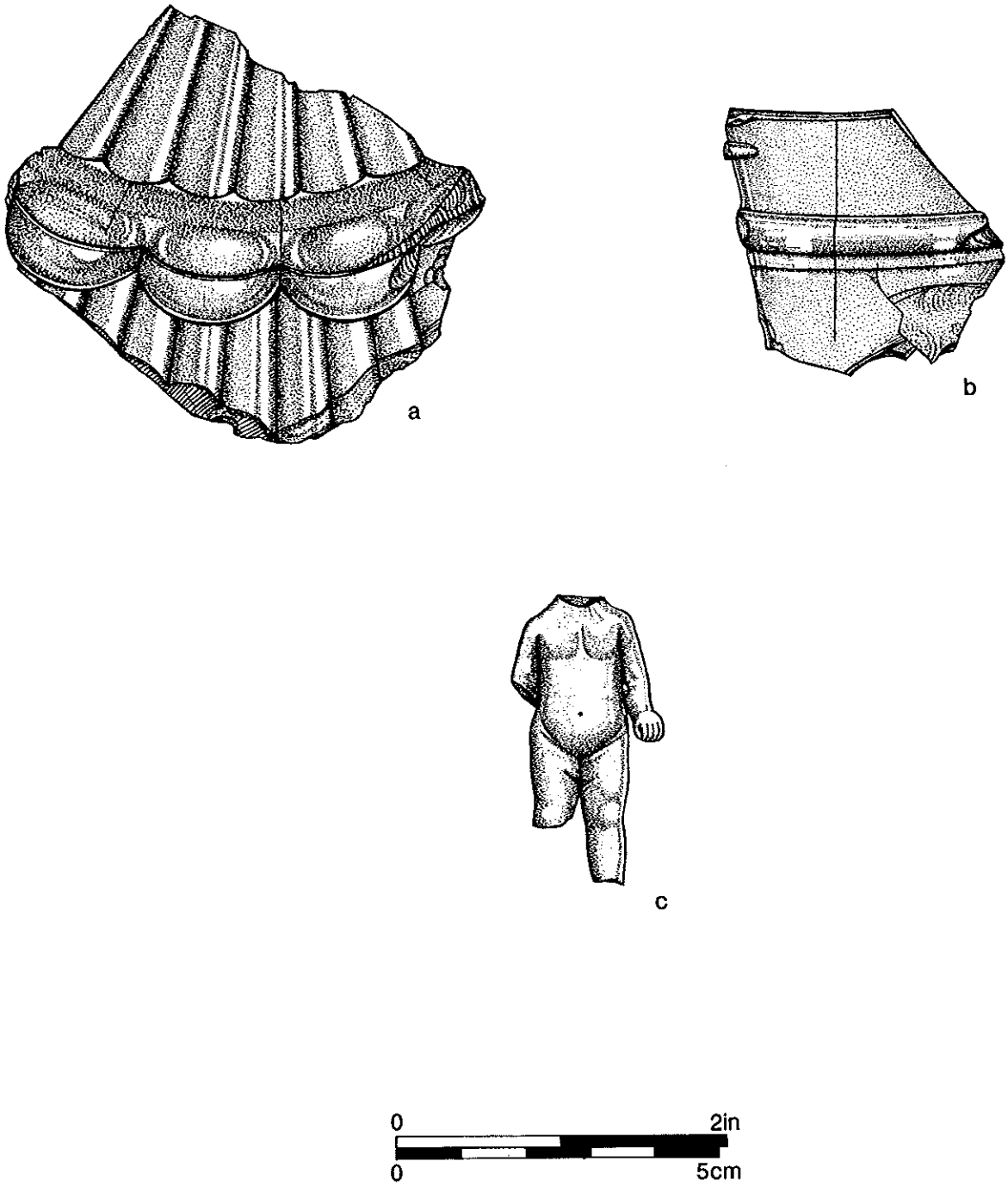


Figure 9. Artifacts from Historic Structure 4, Garden Wall, footing trench: a) glass bowl fragment; b) glass jar fragment; c) porcelain "Frozen Charlotte" doll.

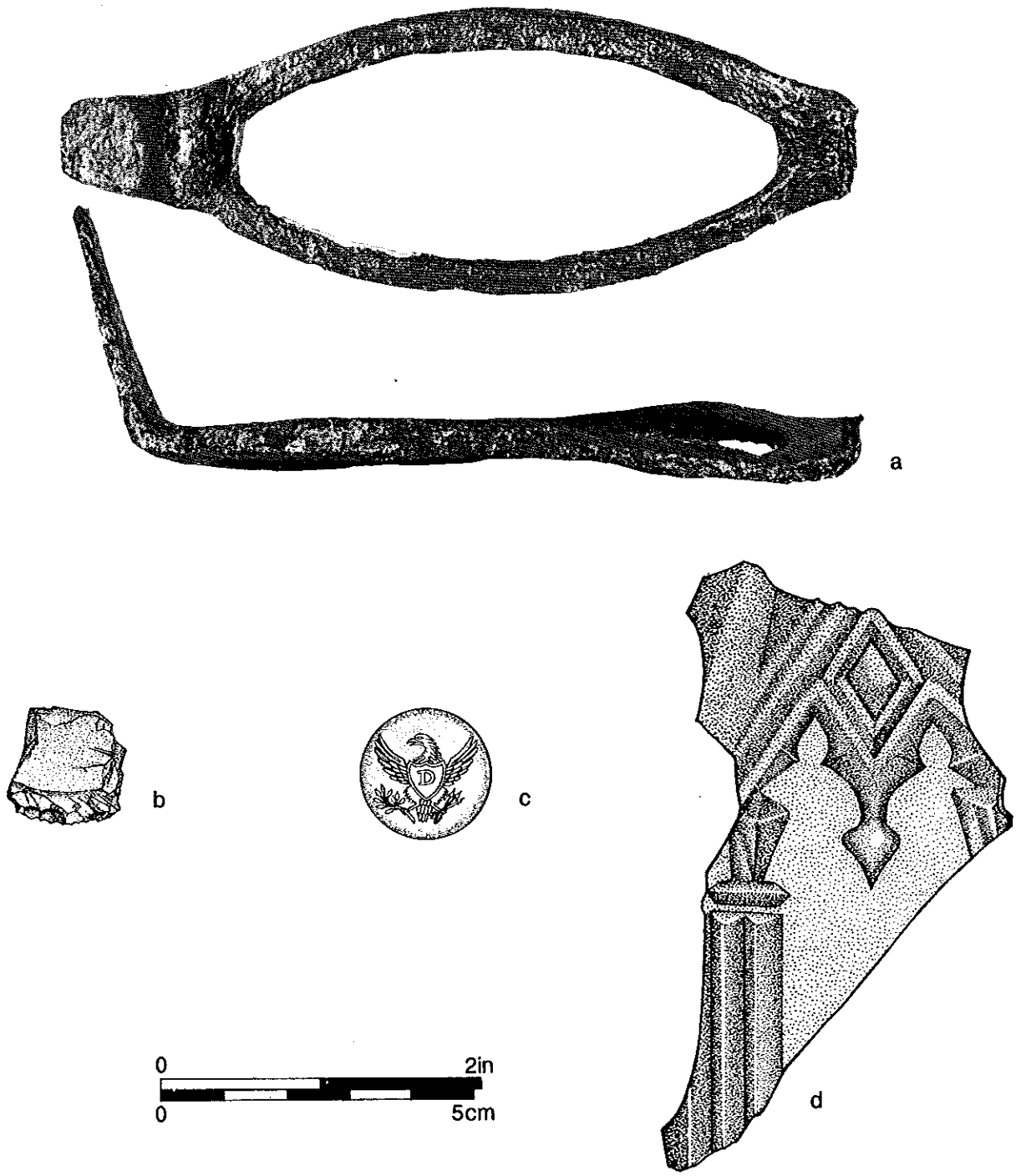


Figure 10. Artifacts: a) iron stirrup from Dragoon Stables; b) gunflint from Parade; c) Dragoon button from Historic Structure 1; d) cathedral jar fragment from Historic Structure 1.

APPENDIX A

ANNOTATED ARTIFACT CATALOG AND DESCRIPTIONS FROM TRENCHING PROJECT, FORT SCOTT NATIONAL HISTORIC SITE, KANSAS.

By

Todd Ahlman

Introduction

In late 1992, trenches were dug at Fort Scott National Historic Site for the installation of a buried security system line. A sample of artifacts was taken from the backdirt of each trench. The artifact descriptions in this appendix are grouped by artifact lots, which are based on trench proveniences. Trench proveniences are based on proximity to the historic structures at the park.

The primary goal of the artifact analysis was to assign as many artifacts as possible to a chronological context from which an assessment of the nature of buried deposits and features could be made. As will be seen below, much of the material is nondiagnostic, and relatively little is attributable to the historic military period of the fort. The description follows the sequence of the artifact catalog lot numbers, provided in brackets.

Note that a few lots (92-6, 92-15, 92-36, 92-48, 92-49, and 92-51) are not specifically related to the trenching operation, but reflect small surface collections made either by park staff or by the archeologist during the project. Finally, depth information is provided in each heading only where such information was available during field work.

Trench SE of HS-9 [92-1]

No diagnostic artifacts were recovered from this trench. One amber curved glass sherd, one whiteware sherd, and one piece of debitage were recovered.

Trench Twelve Meters NE of HS-9, Front Walk [92-2]

There was a 1942 D penny, one whiteware sherd, and one piece of debitage in this trench segment.

HS-30 Access Point, 0-30 cmbs [92-3]

There were no diagnostic artifacts recovered from this area. The artifacts include two flat glass sherds, two curved glass sherds, and two metal fragments. The curved glass consists of one aqua and one colorless sherd. The metal includes one cut nail fragment and one unidentified iron piece.

HS-30 Access Point, 30-56 cmbs [92-4]

This group of artifacts consists of one milk glass sherd, one flat glass sherd, one piece of coal, and one of slag. There are no diagnostic attributes to these artifacts.

HS-30 Southeast Side Opposite Door [92-5]

There were four pieces of lithic debitage recovered in this area.

Strip between HS-1 and HS-2, Surface [92-6]

There were nine pieces of lithic debitage recovered in this area.

Trench E of HS-9, 0-60 cmbs [92-7]

This assemblage consists of one aqua curved glass sherd, two whiteware sherds, one bone fragment, and three metal pieces. The metal is composed of two cut nails and one unidentified iron fragment. These artifacts have no diagnostic features.

Trench SW of HS-6, 0-60 cmbs [92-8]

There were six curved glass sherds recovered from this trench, including one dark green sherd, one milk glass sherd and four aqua sherds. One of the aqua sherds is a pontiled homeopathic vial base. The use of pontiling started to decline in the 1850s after the advent of the snap case, and by the 1870s it had generally fallen out of use (Jones and Sullivan 1985:45)

Eleven whiteware sherds and one yellowware sherd were also recovered in this trench segment. The whiteware sherds consist of nine undecorated sherds, one annular sherd, and one handpainted sherd. The yellowware sherd (Figure 8b) has an annular seaweed mocha pattern on it. Mocha designs first started to be used in the late 1850s and were widely used in the 1860s (Liebowitz 1985:10).

The miscellaneous artifacts consist of one porcelain doll head fragment, one white clay pipestem fragment, and three buttons. The buttons include one shanked shell button, one fabric-covered brass button, and one four-hole blue plastic button.

The faunal material is composed of one shell fragment.

The brass butt plate (Figure 8a), found near the Infantry Barracks (HS-6), is from a military-issue Sharps carbine. The large notch for the patchbox is partially diagnostic. Identical specimens curated at the Nebraska State Historical Society Museum include both Sharps carbines and rifles with initial patent dates of 1852 and final dates of 1859.

Trench on SE Side of HS-6, 0-60 cmbs [92-9]

This group of nondiagnostic artifacts consists of one aqua curved glass sherd, two whiteware sherds, one four-hole shell button, and two metal pieces. The metal consists of one iron bar and one "eyed" bolt.

Access Point HS-31, 0-60 cmbs [92-10]

Two ceramic sherds and one iron spike were recovered from the access point of HS-31. The ceramic sherds consist of one undecorated whiteware rim and one blue sponge decorated whiteware rim.

East Corner HS-6 Trench, Feature near Cistern [92-11]

There is one colorless sand pontiled medicine bottle base. Pontiling was generally out of use by the 1870s (Jones and Sullivan 1985:45).

There were twelve ceramic sherds recovered. There are ten undecorated whiteware sherds, one blue transfer print whiteware sherd, and one stoneware sherd with an ochre decoration. The pattern of the transfer print sherd could not be identified. The undecorated sherds include two chamber pot lid fragments and two sherds with maker's marks. One of the maker's marks is illegible and the other is a coat-of-arms over "IRONST(ONE)/__MEAKIN__." The identity of the Meakin who produced this could not be determined. The Meakins who manufactured ceramic wares are: Alfred Meakin (Ltd.) 1875-?, Charles Meakin 1883-1889, Henry Meakin 1873-1876, and J. & G. Meakin 1851-? (Godden 1964:425-427).

The rest of the artifacts from this feature and trench segment are a four-hole milk glass button and three bone fragments. One of the bone fragments is from a bovine pelvis.

Trench Between HS-6 and HS-12, 0-60 cmbs [92-12]

Thirteen ceramic sherds were recovered from this trench segment, including eight porcelain and five whiteware sherds. The porcelain sherds all have various decal patterns on them, with two having luster and molded decoration in addition to the decal pattern. Decal patterns were developed in the early 1900s in Europe and were manufactured there because of the low cost of production (Lehner 1980:13). The whiteware sherds include four undecorated sherds and one mold decorated sherd.

A plaster sample was also recovered from this trench. This was classified as plaster using Dial's classification from Fort Larned (Cockrell et al. 1991:207-210). This sample had well-sorted sand, few lime fragments, and had approximately parallel interior and exterior surfaces.

One iron horseshoe fragment was the only metal item recovered from this trench.

HS-12 to HS-30, 0-60 cmbs [92-13]

The artifacts recovered consist of four undecorated whiteware sherds, one bone fragment, and four metal pieces. The metal includes one hinge fragment, one wire nail, one cats-paw nail claw, and one unidentified iron fragment.

HS-30 Access Point, 0-40 cmbs [92-14]

The one artifact recovered from this trench is a stoneware sherd with a bristol slip.

West Half of Parade Ground, Under Oaks, Surface [92-15]

There was one red bead and a one-piece pewter button recovered. These artifacts are probably modern replicas that were lost by someone participating in a living history re-enactment.

Trench Between HS-12 and Junction on Road/Pathway [92-16]

There were two flat glass sherds, eight curved glass sherds, and one opal glass jar lid insert recovered from this trench. The curved glass includes two amethyst tint sherds, one amber sherd, one colorless sherd, one colorless sherd stained red, and three milk glass sherds. One of the amethyst tint sherds is a machine-made bottle base. Semi-automatic machine-made bottles came into production in the 1890s and generally ended around the 1920s. The advent of the Owens Bottle Machine in 1903 was the beginning of major

machine production until the 1920s when it was replaced by feeders. Production of a few Owens machine bottles continued into the 1940s and 1950s (Jones and Sullivan 1985:39). Staining on glass was used from the 1890s to the early twentieth century on cheap tableware (Jones and Sullivan 1985:58). One milk glass sherd is embossed with "ME...M/B2.../TRADE/Mark." The opal glass jar lid insert was patented on 11 March 1869 by Lewis R. Boyd and on 30 May 1869 by Louis R. Boyd, of New York City (Toulouse 1969:116).

A total of twenty-one ceramic sherds were recovered from this trench. There is one bristol slip stoneware sherd, two decal decorated porcelain sherds, one undecorated porcelain sherd, and seventeen undecorated whiteware sherds. One of the whiteware sherds has an impressed maker's mark, "(J. &) G. MEAKIN." This type of mark was used by J. & G. Meakin from 1851 to around 1891 (Godden 1964:427).

The metal artifacts include one unidentified brass fragment, one cut nail, and a butter knife. The ferrous horseshoe listed below under lot 92-50 was found near these items on the east side of HS-12.

Trench from Junction to HS-14, 0-60 cmbs [92-17]

There were five curved glass sherds recovered from this trench segment. Four are colorless and one is an amethyst tint cup mold base. One of the colorless sherds has a cup mold base. This type of manufacturing broadly dates from ca. 1850 to the present (Jones and Sullivan 1985:45).

Other nondiagnostic materials from this trench segment include six undecorated whiteware sherds and one unidentified iron fragment.

HS-32 Access Point, 0-60 cmbs [92-18]

There were two ceramic sherds recovered. One is an undecorated porcelain rim and the other is a sponge decorated stoneware rim.

Trench HS-12 to HS-4, 0-60 cmbs [92-19]

The glass sherds recovered from this trench include one pressed milk glass sherd, one aqua curved glass sherd, and one opal jar lid insert. The aqua sherd is a lipping tool brandy finish.

The ceramics recovered include two salt glazed stoneware sherds, two undecorated whiteware sherds, one handpainted whiteware sherd, and one yellowware sherd with green and brown glaze.

Two unidentified bone fragments were recovered from this trench.

There was a cartridge casing from a 7.62 mm blank NATO round for the M-14 recovered. It has a "L C 6 9" headstamp, which indicates it was manufactured at the Lake City Ordnance Plant in Independence, Missouri, in 1969 (White and Munhall 1977:5, 102).

Garden Wall Footing Trench HS-4, 0-40 cmbs [92-20]

The glass artifacts recovered are include two flat glass sherds, three colorless curved glass sherds, and one colorless pressed glass sherd. One item (Figure 9b) is a rim fragment from a shoulder sealed Mason jar, machine- or semi-machine-made and dating to ca. 1920. A second sherd (Figure 9a) is a fragment of a shallow bowl with lug feet made of pressed glass of indifferent quality, dating anytime from the turn of the century to after World War II (Ed Sudderth, personal communication 1993).

There were three undecorated whiteware sherds recovered from this trench. One sherd has a maker's mark, "_E/_UIS/_ND/_EY&Co," with the last two lines in a wreath. This mark could not be attributed to any known maker.

The main body portion of a small Frozen Charlotte-type china doll (Figure 9c) was found. It is similar to a doll mentioned by Reynolds (1983:124-126) in previous excavations at Fort Scott and dates to the very late nineteenth and early twentieth century.

There were three unidentified bone fragments recovered from this trench. The metal artifact recovered from this trench is a cut nail fragment.

Trench from Junction to HS-32, 0-60 cmbs [92-21]

There was a total of twenty-nine glass sherds recovered from this trench, two flat glass sherds and twenty-seven curved glass sherds. The twenty-seven curved glass sherds include one amethyst tint sherd, one pink pressed sherd, five amber sherds, five aqua sherds, one green sherd, two milk glass sherds, one dark green sherd, and eleven colorless sherds. Of the five amber sherds, there is one machine-made bottle base. Two of the aqua sherds are lipping tooled. One is an English ring finish and the other is a patent finish. From the colorless sherds there is one lipping tool bead finish, two continuous thread finish fragments, one pontiled base, one milk bottle finish, and one base sherd with an Owens Bottle Machine suction scar.

Twenty-one ceramic sherds were recovered from this trench. This includes eight stoneware sherds, three undecorated porcelain sherds, nine whiteware sherds, and one yellowware sherd. The stoneware sherds include five salt glazed sherds, one Albany slip sherd, and two Bristol slip sherds. The whiteware sherds consist of seven undecorated sherds, one decal sherd, and one sherd with a green slip. The yellowware sherd has an annular decoration of blue and pink bands.

Five bone fragments were recovered from this trench. Two of these are bovine long bone and one is a rib.

The miscellaneous materials from this trench include one brass thimble, one glazed brick, and two carbon rods from an arc lamp. The arc lamp was in use from ca. 1877 to around the 1950s in some cities (Woodhead et al. 1984:74-76).

The metal artifacts recovered are five cut nails and one unidentified iron fragment.

South Corner HS-6, Trench Backdirt, 0-60 cmbs [92-22]

There is a spurred white clay pipe bowl fragment (Figure 8c) from this trench segment that was collected from a backdirt pile after a heavy rain. The spur of the pipe is mushroomed but is otherwise unmarked. Similar pipes with a mushroomed spur were found at Fort Laramie and Old Munising. Fort Laramie was a "fur trading post from 1834 to 1849, a miliary post until 1890, and a civilian-owned social and business center until 1938" (Wilson 1971:1). Old Munising was an iron smelting community in Upper Michigan from 1867 to 1875 (Richner 1992). A date around the 1860s and 1870s for the Fort Scott specimen is indicated.

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HS-32 to HS-31, Northwest Half of Trench, 0-60 cmbs [92-23]

There were sixteen curved glass sherds recovered from this trench, including one aqua sherd, one amethyst tint sherd, eight colorless sherds, four dark green sherds, one milk glass sherd, one amber sherd, and one aqua glass insulator fragment.

The colorless sherds recovered are one pontiled bottle base, three pressed sherds, one stemware fragment, and one machine-made bottle base. The machine-made bottle base is embossed with an "N" in a square. This is the mark for the Obear-Nester Glass Co. of East St. Louis, Illinois, used from 1915 to the present (Toulouse 1971:373-375).

The amber glass sherd is from a bitters bottle. Whole bottles are embossed in various forms of "S.T./DRAKE/1860/PLANTATION/X/BITTERS/PATENTED/1862." The formation of the P.H. Drake Co. in 1860 was the beginning of Plantation Bitters. In 1862 Drake entered a partnership with Demas Barnes, which led to Drake being able to

increase production. In 1862 the design for the aforementioned bottle was patented. In 1870 Barnes divided up his businesses and Drake brought in William P. Ward as his partner. When Drake died in 1883, Ward took over the business. "The business apparently did quite well until the early 1890s, when the firm disappeared from the directories" (Schulz et al. 1980:55). The product was advertised in various capacities until the 1940s (Fike 1987:33; Wilson and Wilson 1971:32, 112; Schulz et al. 1980:53-55; Ring 1980:169-173). This bottle design was found at Fort Laramie and Fort Union from 1862 to 1885 (Wilson 1971:24) and at Old Sacramento (Schulz et al 1980:53-55).

There were thirty-five ceramic sherds recovered from this trench, fourteen stoneware sherds, one Rockingham yellowware sherd, seventeen whiteware sherds, and three undecorated porcelain sherds. The fourteen stoneware sherds include four salt glazed sherds, seven Albany slip sherds, two bristol slip sherds, and one lead glazed sherd. One of the salt glazed sherds is from an ink bottle. The seventeen whiteware sherds include fifteen undecorated sherds, one flow blue sherd, and one blue shell edge decorated sherd. No diagnostic features could be discerned on the sherds.

The miscellaneous artifacts recovered consist of a ceramic electrical insulator, and one brick fragment. Three unidentified bone fragments were recovered from this trench segment.

The metal from this trench includes one bolt, one horseshoe, one screw-in hook, a tin disk, and one unidentified iron piece. The non-ferrous metal includes two laminated brass plates, one unidentified brass piece, and a brass harmonica reed holder.

HS-32 Access Point to Junction, 0-60 cmbs [92-24]

There were four curved glass fragments recovered from this trench, including one amethyst tint sherd and three milk glass sherds. One of the milk glass sherds has a pressed floral design.

The ceramics include four undecorated whiteware sherds. There were two unidentified bone fragments recovered. The metal artifact is an unidentified iron piece.

HS-32 to Wall Behind HS-3, 0-60 cmbs [92-25]

There was one flat glass sherd, four curved glass sherds, and two aqua glass insulators recovered from this trench segment. The curved glass includes one dark green sherd, two milk glass sherds, and one aqua sherd. The aqua sherd is a blow-over mold, continuous thread fruit jar finish. This type of finish was used during the second half of the nineteenth century and into the early twentieth century (Jones and Sullivan 1985:42).

Thirty-seven ceramic sherds were recovered from this trench. These thirty-seven sherds are composed of three stoneware sherds, two yellowware sherds, four undecorated porcelain sherds, and twenty-eight whiteware sherds. The three stoneware sherds include two salt glazed sherds and one Albany slip sherd. One of the yellowware sherds is undecorated and the other sherd has an annular decoration. Twenty-four of the whiteware sherds are undecorated, one is mold decorated, one has a late flow blue decoration, one has a blue transfer print decoration, and one is hand painted. The patterns from the flow blue and blue transfer print sherds could not be identified.

Other ceramic artifacts include one tile fragment and two insulator fragments. One of the insulator fragments is embossed "THE/__MERKINS CO."

The non-ferrous metal consists of two brass sheeting fragments (probably from a bucket) and a brass tag. The brass tag is impressed "THE G__."

The ferrous metal consists of three bolt fragments, two cut nail fragments, one iron ornamental piece, and three unidentified pieces.

HS-3 Wall to HS-36 Junction, 0-60 cmbs [92-26]

The glass sherds recovered from this trench include three flat glass sherds, one colorless curved glass sherd, and one melted glass sherd. The curved glass sherd is embossed "(ON)E HALF."

There were fifty ceramic sherds recovered in this trench segment. These include one salt glazed redware, five stoneware sherds, one undecorated yellowware sherd, thirty-eight whiteware sherds, and five undecorated porcelain sherds. The stoneware sherds include two lead glazed sherds, two salt glazed sherds, and one Albany slip sherd. One of the lead glazed sherds is from a multi-sided bottle. Seventeen of the thirty-eight whiteware sherds are undecorated, one is sponge decorated, one has a blue slip, and one has a transfer print advertisement. The advertising is difficult to read, but a few letters are legible, "__UEL NO.120." There are eighteen whiteware sherds that are mold decorated and have a light blue slip with gold gilt. These sherds are possibly from a serving dish fitted with a lid.

A four-hole pewter button was recovered from this trench. Other metal artifacts include one brass sheeting fragment, one iron rod, one cut nail fragment, and a fragment from a rim lock bolt.

HS-36 Junction to HS-31 Junction, 0-60 cmbs [92-27]

Four ceramic sherds were recovered from this trench segment. There are two molded whiteware sherds, one undecorated whiteware sherd, and one albany slip stoneware sherd.

HS-35 to Junction, 0-60 cmbs [92-28]

There was one flat glass and six ceramic sherds recovered from this trench segment. The latter includes one hand-painted porcelain rim, one undecorated porcelain sherd, one blue transfer print whiteware sherds, two undecorated whiteware sherds, and one unglazed stoneware rim. The pattern of the transfer print sherd could not be identified.

The metal artifact recovered from this trench is an unidentified iron piece.

Junction to HS-36 Access Point, 0-60 cmbs [92-29]

The artifacts recovered from this trench consist of one aqua curved glass sherd and one mold decorated whiteware sherd.

HS-31 to Junction, 0-60 cmbs [92-30]

Two ceramic sherds were recovered from this trench. One is an undecorated whiteware sherd and the other is a blue edge decorated whiteware sherd.

HS-31 to HS-35 Junction, 0-60 cmbs [92-31]

One porcelain sherd and one four-hole ceramic button were recovered from this trench segment.

HS-31 Northwest to Turn Towards HS-1 and HS-11, 0-60 cmbs [92-32]

One dark green curved glass sherd was recovered from this trench. The four ceramic sherds include one undecorated porcelain sherd and three undecorated whiteware sherds. A carbon rod was also recovered.

Turn to Segment Between HS-1 and HS-11, 0-60 cmbs [92-33]

The curved glass recovered from this trench includes one dark green sherd, one aqua sherd, two amber sherds, and one colorless sherd stained red. There are no diagnostic attributes to these sherds.

There were eighteen ceramic sherds recovered from this trench. These include one hand-painted porcelain sherd, nine whiteware sherds, and eight stoneware sherds. Two of the whiteware sherds are molded, one is a luster decorated rim, one has a blue slip, and five are undecorated. One of the undecorated whiteware sherds has a maker's mark: a coat-of-arms over "_E CHINA." The maker could not be identified. Seven of the stoneware sherds have an Albany slip and one is salt glazed.

A .46 caliber short rimfire cartridge casing with a raised "H" headstamp was recovered. The Winchester Repeating Arms Co. of New Haven, Connecticut, produced this cartridge (Logan 1959:69; White and Munhall 1977:23). This cartridge was used in the Remington Army single action and other revolvers. The Winchester Repeating Arms Co. was in business from 1866 until 1932 when it was bought by the Western Cartridge Co. (Logan 1959:8,21). Logan (1959:69) states the raised "H" headstamp is of "earlier Winchester manufacture."

The other metal artifacts recovered include one staple, one cut nail, and a metal cap. A brass strap is the only non-ferrous metal item.

HS-1 to HS-11, 0-60 cmbs [92-34]

There was an opal jar lid insert fragment recovered from this trench, embossed "PORCE(LAIN)_."

The ceramics recovered consist of six flow blue whiteware sherds and one albany slip stoneware sherd. The flow blue sherds are late and the pattern could not be identified.

HS-1 Access to Junction, 0-60 cmbs [92-35]

There were two colorless glass sherds recovered from this trench segment. One of the sherds has an unidentified pressed decoration.

Six ceramic sherds were recovered. There are four undecorated whiteware sherds, one bristol slip stoneware sherd, and one lead glazed stoneware sherd.

The miscellaneous artifacts include one oyster shell fragment and a pewter sheet ornamental piece fragment.

The metal recovered consists of a single cut nail fragment.

Under North Stairs HS-2, Surface [92-36]

The glass sherd recovered is a pressed colorless sherd. There were two buttons recovered. One is a four-hole shell button, and the other button (Figure 10c) is a metal two-piece known as a "S-type, Line Eagle Device, D on shield" (Reynolds 1983:344). The back of this button is inscribed "SCOVILLS/WATERBURY." This type of button was manufactured from 1833-1854 (Albert 1969:65-67; Reynolds 1983:96). Scovills & Co. used the type of mark used on this button from 1840-1850 (McGunn and Bazelon 1988:90-91). The "D" stands for Dragoon and was used by both officers and other ranks alike.

HS-9 to HS-8 on Parade Ground, 0-60 cmbs [92-37]

The glass sherds recovered include one flat glass sherd and two curved glass sherds. The curved glass includes one aqua sherd and one colorless sherd.

There were five undecorated whiteware sherds recovered from this trench segment.

A small chert gunflint, sized for a pistol, was recovered from this trench segment (Figure 10b).

Northwest Side of HS-5, 0-60 cmbs [92-38]

The artifacts recovered from this trench include one amber, curved glass sherd and two undecorated whiteware sherds.

HS-11 Access, 0-60 cmbs. [92-39]

The two curved glass sherds are composed of one amber sherd and one colorless sherd. There is one ceramic drain tile fragment. The single metal artifact is a cut nail fragment.

HS-5 Junction to HS-10 Junction, 0-60 cmbs [92-40]

The curved glass recovered from this trench includes one amber sherd, one amethyst tint sherd, and one colorless sherd. The amethyst tint sherd is a slightly lipping tooled straight brandy finish with a cork still in it. The colorless sherd is a six-sided tumbler base.

There were five ceramic sherds recovered from this trench, including one lead glazed stoneware sherd and four whiteware sherds. A ceramic drain tile fragment was also recovered.

The metal artifacts recovered from this trench include one cut nail fragment, one hinge fragment, one iron coat hook fragment, and an iron rod piece.

HS-10 Junction to HS-7 Junction, 0-60 cmbs [92-41]

A stone marble was recovered from this trench. The production of stone marbles was rejuvenated in Europe in the late seventeenth century from early Greek and Roman starts. By the mid-eighteenth century and again around the mid-nineteenth century, Germany had the bulk of stone marble production. The production of stone marbles began to decline around 1870 and never regained strength after this date, although it continued until around 1915 (Randall 1971:102).

HS-10 Junction to HS-10 Access, 0-60 cmbs [92-42]

A small number of artifacts were recovered from this trench segment. The assemblage consists of one undecorated whiteware sherd and one decal decorated whiteware sherd. One stirrup fragment (Figure 10a) and one mower sickle blade are the only metal items.

HS-11 Rear Access Midden, 53-59 cmbs [92-43]

There was one blue shell edge decorated whiteware sherd recovered. This type of edge decorated ware was produced from the 1840s to the 1870s (Miller and Hunter 1990:118).

HS-7 Junction to HS-7 Access, 0-60 cmbs [92-44]

The glass artifacts recovered from this trench include two flat glass sherds, three curved glass sherds, and one opal jar lid insert. The curved glass sherds include two colorless sherds and one milk glass sherd.

The ceramics are represented by ten whiteware sherds and one yellowware sherd. Seven of the whiteware sherds are undecorated, one is mold decorated, one has a gilt decoration, and one is a late flow blue decorated sherd. The yellowware sherd is undecorated.

The miscellaneous artifacts recovered consist of an asbestos brake lining piece, a piece of leather, and an aluminum child's spoon that is embossed "MADE IN USA."

The metal artifacts recovered are a gear fragment and a metal cap.

HS-8 Junction to HS-8 Access, 0-60 cmbs [92-45]

There were a small number of artifacts recovered from this trench segment. This includes one late flow blue whiteware sherd and an unidentified pewter fragment.

HS-7 Junction to HS-8 Junction, 0-60 cmbs [92-46]

There were four ceramic sherds recovered from this trench segment, including four undecorated whiteware sherds, one annular decorated whiteware sherd, and one lead glazed stoneware sherd. The annular sherd has blue, white, and yellow bands.

HS-1 Access, 0-60 cmbs [92-47]

The glass sherd recovered is a dark green push-up that has been pontiled. The use of pontiling declined after the 1850s and generally ended around 1870 (Jones and Sullivan 1985:45).

The four ceramic sherds recovered consist of three undecorated whiteware sherds and one annular decorated yellowware sherd. The annular sherd has blue and white bands.

HS-32 East Garage House-Pedestrian Doorway [92-48]

There were three curved glass sherds recovered from this area including two colorless sherds and one aqua sherd. The aqua sherd is a machine-made patent finish. The colorless sherds are both bottle bases, one of which is an Owens machine-made base. Machine-made bottles were first manufactured in the late nineteenth century with semi-automatic machines. Fully automatic machines started production in the early twentieth century. The Owens machine was the first large producer of automatic machine-made bottles. The Owens machine was first used in 1903 and its height of use continued through the 1920s, with some producers using still using the process into the 1940s (Jones and Sullivan 1985:35-39).

HS-1 "Crawl Space below Closet in Morning Room" [92-49]

This lot includes one aqua glass sherd from a "cathedral" jar (Figure 10d). The size of the design on sherd suggests it is from a pickle jar and not a sauce bottle. Cathedral

pickle jars seem to have a long temporal span. Four-sided one-quart pickle jars were recovered from the steamboat *Bertrand*, built in 1864 and sunk with its cargo in the Missouri River in 1865 (Switzer 1974:51-58). Wilson (1981:89) illustrates cathedral jars from Fort Union with dates from 1851 to 1861, while Munsey (1970:152) gives the date of production for cathedral pickle jars as "about forty years–twenty on either side of the turn of the century." Zumwalt (1980:452-458) illustrates several different cathedral pickle jars with an early date of the 1870s for four-sided jars with the motifs carried onto six-sided jars later.

A stone marble similar to the one mentioned above was recovered from this area.

The metal artifacts recovered include two unidentified ferrous objects.

HS-12, East Side Trench [92-50]

One fragmentary horseshoe was collected in this trench segment.

HS-30 Southwest Corner Access Point [92-51]

There was one colorless curved glass sherd and one lead glazed stoneware sherd recovered. These artifacts contained no diagnostic attributes.

The metal artifact recovered from this area is a center clip from a singletree used in the harnessing of horses for wagons.

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REPORT CERTIFICATION

I certify that "Archeological Investigations At Fort Scott National Historic Site, Bourbon County, Kansas: 1992" by Caven P. Clark

has been reviewed against the criteria contained in 43CFR Part 7 (a)(1) and upon recommendation of the Regional Archeologist has been classified as available.

Regional Director

6/17/93
Date

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