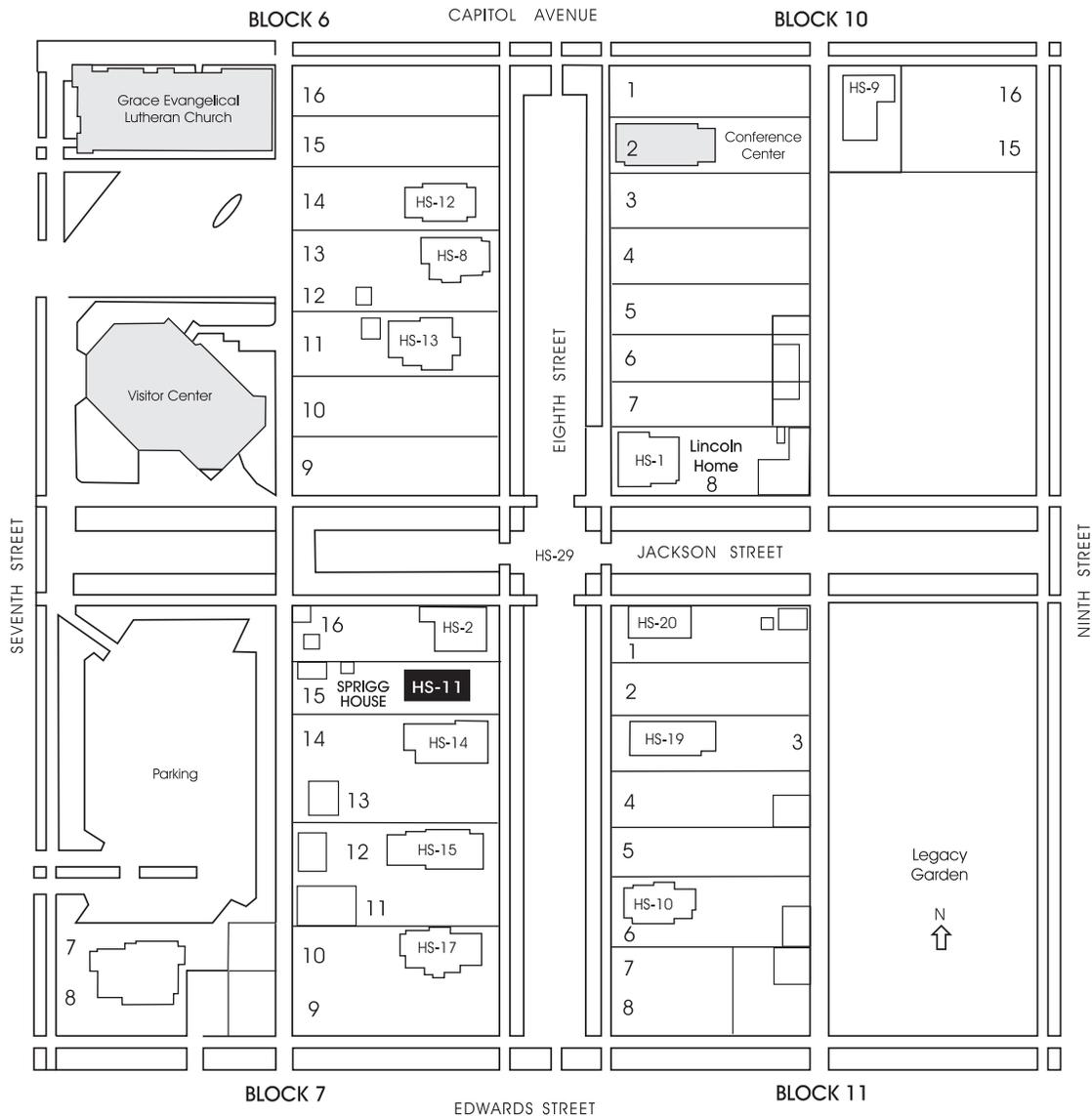


Results of Archeological Testing at the Julia Sprigg House, 1992–1993, Lincoln Home National Historic Site, Sangamon County, Springfield, Illinois



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Lincoln Home National Historic Site,
Sangamon County, Springfield, Illinois**

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with a contribution by Todd Ahlman

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This report has been reviewed against the criteria contained in 43CFR Part 7, Subpart A, Section 7.18 (a) (1) and, upon recommendation of the Midwest Regional Office and the Midwest Archeological Center, has been classified as

Available

Making the report available meets the criteria of 43CFR Part 7, Subpart A, Section 7.18 (a) (1).



Abstract

This report summarizes the methods and results, as well as the initiating purpose, of archeological excavations carried out at the Julia Sprigg House in the summers of 1992 and 1993. That structure was one of several extant historic buildings within Lincoln Home National Historic Site scheduled for restoration. Limited testing confirmed the presence of intact cultural remains at the rear of the lot, but could not confirm the survival of evidence relating to certain historic elements of the main house.

Acknowledgments

Several persons had direct and substantial impacts upon the undertaking of field and laboratory efforts reported here. Among those most notable at Lincoln Home National Historic Site are Superintendent Norman Hellmers, former Deputy Superintendent Lawrence Blake (now Superintendent, Dayton Aviation Heritage National Historical Park), and Maintenance Chief Robert Dunham. The late Francis Krupka, former historical architect at Lincoln Home, also contributed substantially to our efforts. In addition, our sincere thanks are extended to Park Rangers Maureen and Derek Maxey, who then resided in the Julia Sprigg House, for cheerfully tolerating the imposition of our excavations upon their daily routine.

The firm of Fischer-Wisnosky Architects, Inc., of Springfield, Illinois, and Craig Drone in particular, must be acknowledged for the very thorough research supporting the Sprigg House Historic Structure Report. Most of what we present here as either fact or interpretation concerning the Sprigg House history has been drawn from that detailed document.

At the Midwest Archeological Center, former Regional Archeologist Mark Lynott (now the Center's Manager) maintained administrative oversight of the project as part of his programmatic duties. Archeological Technicians Todd Ahlman, Todd Butler, and Susan Skaggs performed much of the project laboratory work and assisted in compiling field data. Todd Ahlman wrote the description of the two pit features included as a chapter of this report. Carrol Moxham converted our relatively crude field drawings into the fine publication-quality maps and supervised the entire report production; Editorial Assistant Ken Gobber transformed the draft into proper English usage.

Floyd Mansberger and Christina Lowry, both of Fever River Research in Springfield, are to be thanked for assistance in gathering information on the R. N. Dodds Drug Store. Their efforts in response to my inquiry proved very helpful and are much appreciated.

It remains, then, to acknowledge those individuals who ably accomplished our 1992–1993 field work at the Julia Sprigg House. During the 1992 season, Todd Butler, Dennis Naglich, and Susan Skaggs excavated at the site. Then Naglich returned with the 1993 crew, which also included Kim Acardy, Todd Ahlman, and Eric Kaldahl. The successes secured in both years are largely owed to the efficient labors of those individuals.

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Introduction

The Julia Sprigg House is one of several structures surviving from the 19th century within what is now Lincoln Home National Historic Site (Figure 1). The National Park Service (NPS) has managed that four-block neighborhood in Springfield, Illinois, since 1972 and is currently engaged in the ambitious task of restoring its built environment and cultural landscape to the period 1860–1861. Accordingly, in the summer of 1992, the National Park Service's Midwest Archeological Center (MWAC) began field investigations in preparation for the restoration of the Sprigg House. The supplemental excavations, which are also described in this report, took place briefly during 1993 at the special request of park management.

The Sprigg House is designated Historic Structure 11 (HS-11) in the List of Classified Structures for Lincoln Home National Historic Site, and Site 11SG1280 in the Illinois archeological site files. Named for the official owner of record during Lincoln's last year of residence in Springfield, it is believed to have had its origins around 1851. The fact that subsequent owners made considerable changes to the Sprigg House is obvious from various records and from even a superficial examination of the structure itself. Today the building is a large and rather massive, two-story house, though its original form has been described as a "small, one-story cottage" (Bearss 1977:97). That characterization may tend to understate the true historical condition, as others point out (Fischer-Wisnosky Architects, Inc. 1995:2.5), but there is no doubt that the contemporary Sprigg House (Figure 2) is the end product of several substantial remodeling episodes spanning almost 150 years.

Initial archeological investigations about the Sprigg House examined poorly documented areas of the site that were likely to be affected by some aspects of the proposed restoration. To that end, the 1992 field crew excavated test units in the back part of the house lot, disclosing the locations of several previously unknown cultural features. The subsequent work in the following year then changed the focus to areas immediately off the rear of the domicile in what proved to be a futile search for physical evidence relating to a former back room of unknown function.

Because detailed plans for treatment of the structure were not yet on paper in 1992 or 1993, the investigations reported here cannot be viewed as providing full compliance with the National Historic Preservation Act of 1966, as amended, and particularly Section 106. It would have been unwise, at the very least, to try to anticipate all possible impacts that might accrue over the course of this restoration and formulate an excavation strategy on that basis, for the final plans could vary from our expectations substantially. To do so might dictate the need for additional archeological reconnaissance at a later date or, worse, it might at last be realized that excavations already completed under such spurious assumptions were but needless expenditures of the archeological resource, to say nothing of the limited planning and construction funds.

This report is an overview of the excavations that took place at the Sprigg House during 1992 and 1993, along with a brief history of the property and a review of pertinent documentary evidence designed to place the excavations in proper context. The summary of excavation findings, however, does not include any detailed descriptions of the artifacts recovered, unless they contribute to the interpretation of certain discrete deposits. Rather, the assemblage is inventoried in tabular format according to provenience unit.

The archeological specimens collected during the course of these investigations are currently housed, along with all accompanying field and laboratory records, at the Midwest Archeological Center in Lincoln, Nebraska. Materials associated with the 1992 field season are cataloged as MWAC Accession Number 483 and LIHO Accession Number 144. The 1993 objects and records are cataloged as MWAC Accession Number 630 and LIHO Accession Number 159.

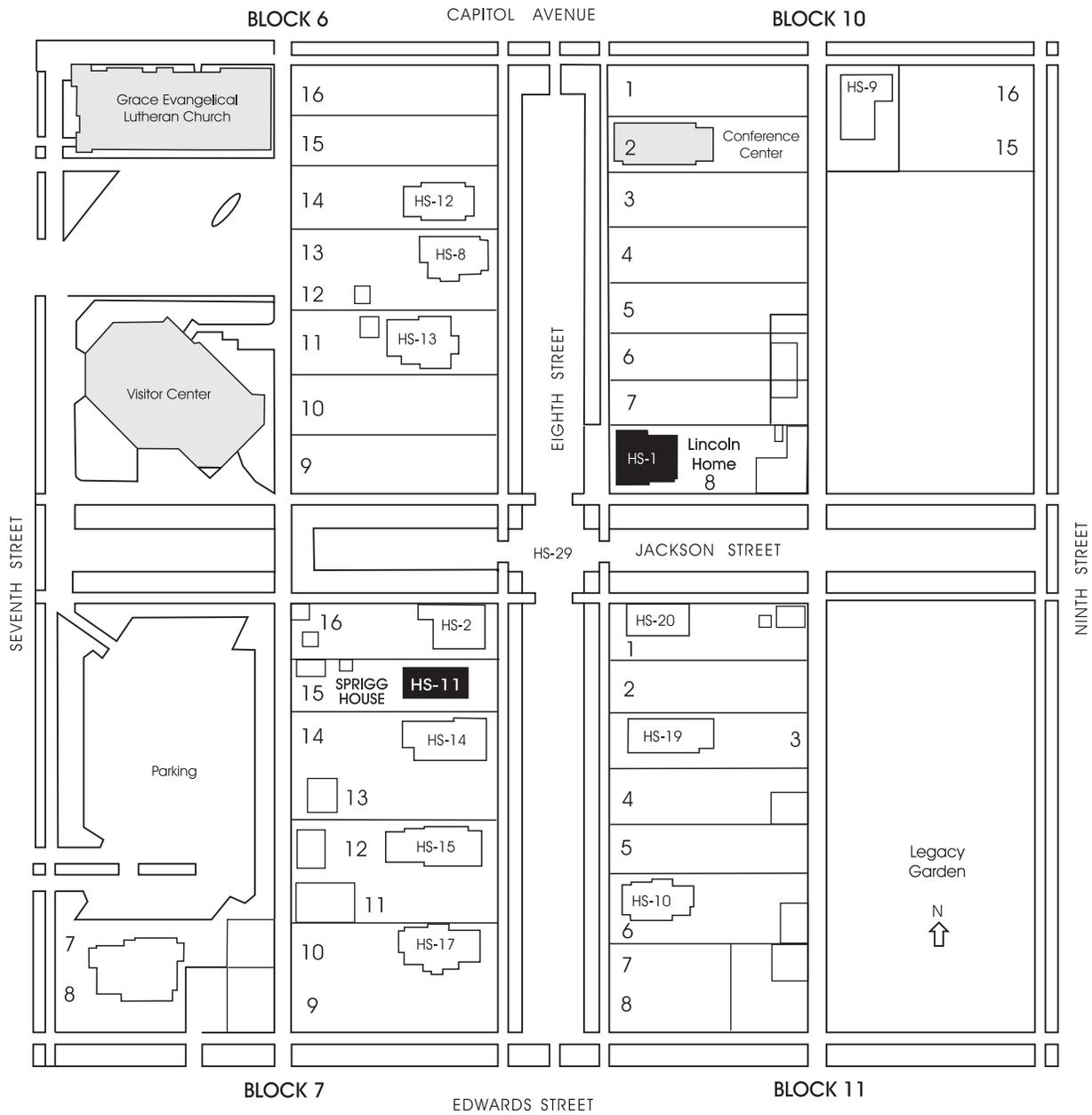


Figure 1. Location of the Julia Sprigg House within Lincoln Home National Historic Site.



Figure 2. Julia Sprigg House in 1992: north elevation (top) and southwest corner (bottom).

Historical Overview

This chapter is intended to provide sufficient background to understand the Sprigg House excavations of 1992 and 1993. It is not meant to chronicle the entire land tenure history nor all that is known of the property's structural evolution, which has been done ably by the Springfield consulting firm of Fischer-Wisnosky Architects, Inc. (1995). Rather, this brief overview draws liberally upon research detailed in their recent Historic Structure Report in focusing upon points of continuity and change across time that might help interpret the excavation findings. Those seeking elaboration on events relating to the Sprigg House are referred directly to the Historic Structure Report.

The Julia Sprigg House stands on Lot 15, Block 6, of the Elijah Iles Addition to the City of Springfield, a subdivision Iles platted for development in 1836. Lot 15 has its standard 40-ft frontage on the west side of S. Eighth Street and lies but one lot south from the intersection of that street with E. Jackson (Figure 1). Its formal address today is 507 S. Eighth Street, as it has been since the latter part of the 19th century. Of course, none of the houses built in the original Iles Addition would have had numbered street addresses at the time of initial occupation; those came in time with the practical demands of administering a growing city.

Iles is credited with having had Springfield chosen as the seat of Sangamon County in 1824, only a year after purchasing the 80 acres that would form his addition. It is probably no coincidence, therefore, that he began surveying the city blocks into lots the year before the state assembly opted to move the capital from Vandalia to Springfield in 1837. Iles was a shrewd speculator and one of several influential citizens who worked hard to promote Springfield as the new seat of state government for Illinois. Doubtless he recognized the potential for growth that would come if Springfield were indeed chosen, and he sought to capitalize on the local population boom that would surely follow. Indeed, another staunch supporter of the transfer, Abraham Lincoln, can be tallied among the earlier immigrants to this city inspired by the promise of Springfield's new status, relocating from New Salem in 1837.

Even with prospects good that the state capital would relocate to Springfield, there was no guarantee of financial success in land speculation during the sudden economic downturn that gripped the region after 1837. Nevertheless, Elijah Iles had the good fortune of transferring several lots in the addition during its first few years of existence. Indeed, he sold the future Sprigg House lot, as well as Lot 16 immediately north, to a Foley Vaughn in February 1837 — the very same month that the state legislature announced its decision to relocate the capital by 1839. The low purchase price of \$262 suggests that the two city lots were then unimproved. Further, it is safe to assume that Lot 15 by itself was worth no more than half that price and probably less, since Lot 16 was the northeast corner lot of Block 6 and probably more highly valued as a result.

It is thought that Vaughn bought the land only as a real estate investment, since it appears to have remained unimproved during his entire period of ownership. Indeed, having quit Springfield, Illinois, for Kentucky, he sold Lot 15 of Block 6 in June of 1844 to a speculator from Ohio named Andrew Fountain. The purchase price at that time, \$300, was more than double the probably inflated 1837 evaluation of \$131. Thus, Vaughn realized a rather good profit in those seven years.

By comparison it would seem that Fountain, who is believed never to have lived in Springfield, Illinois, was a much less successful speculator. After holding Lot 15 for seven years — as did Vaughn — he sold it to John B. Weber, who in partnership with the brothers Daniel and Jacob Ruckel purchased several lots in the immediate neighborhood. The sale price of \$450 in September 1851 represents a margin of precisely \$150 over Fountain's purchase price, or a 50 percent return on his original investment. That represents a decent profit, to be sure, but only half the percentage Vaughn gained over the same length of time. Moreover, if one assumes the payment of even modest annual property taxes over seven years, the net to Fountain was probably far less than the \$150 gross.

It is believed that Weber was the first owner to improve Lot 15, constructing a cottage on the property. Indeed, after only a year and a half he was able to sell the property on February 11, 1853, to Julia

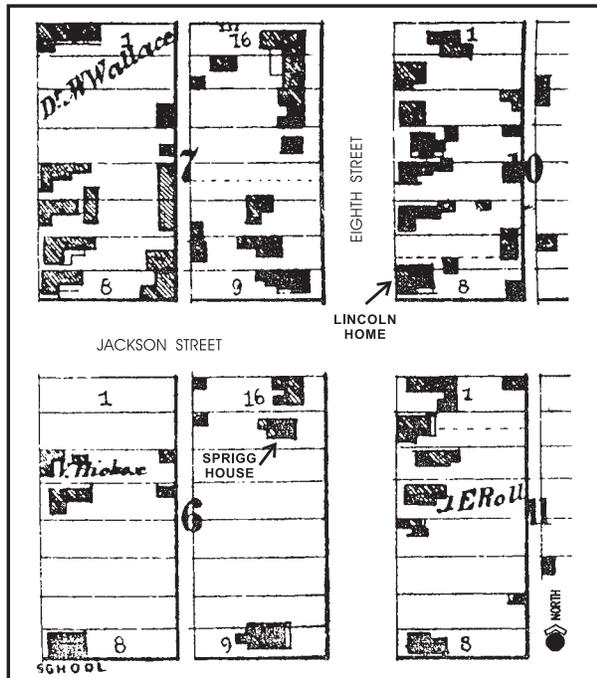
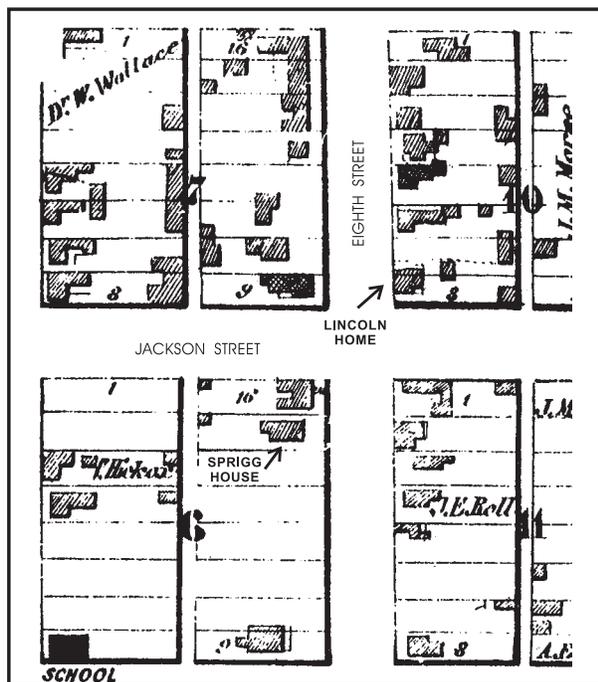


Figure 3. Excerpts from city plats: the McManus “City of Springfield” map, 1854 (top) and the Sides “City of Springfield” map, 1858 (bottom).



prospects. Most state offices fell to Democrats, who then took control of the state house for the first time in 36 years. An important aspect of that regained authority in this period of the “spoils system,” of course, was total mastery over political appointments in the state, including custodianship of the Lincoln Home, which had been deeded to Illinois by Robert Todd Lincoln in 1887.

Sprigg for the consideration of \$970, making more than twice the gross profit his predecessor gained and taking barely a quarter of the time to do it (\$970 in 1853 would be roughly equivalent to \$18,860 in 1999 dollars). Two city plat maps (McManus 1854; Sides 1858) depict the property in the early years of her ownership (Figure 3).

But recently widowed when she took possession of the property now bearing her name, Mrs. Sprigg in the coming years would cultivate a close friendship with her new neighbor, Mrs. Lincoln. The Lincolns, it should be noted, had lived since 1844 in a small house built five years earlier by the Reverend Charles Dresser on the opposite corner of Eighth and Jackson. Their association was rather short lived, however, as the Lincolns would leave Springfield and their neighbors eight years to the day after Mrs. Sprigg’s purchase was recorded in the county annals.

Julia Sprigg and her two sons continued to live at the house more than 16 years, selling it for \$1,500 in March of 1869 to Herman Hofferkamp, an immigrant German who served Illinois as a soldier during the Civil War (\$1,500 in 1869 would be about \$18,250 in 1999 dollars, indicating that even the 53 percent property appreciation did not keep pace with inflationary trends during the years 1853–1869). The Hofferkamps may have built the two-story front addition to the house, expanding the cottage closer to the structure’s current configuration, but that is not firmly established. Several “bird’s-eye view” depictions of Springfield (Ruger 1867; Beck and Pauli 1870; Kock 1873) reveal no substantial changes in configuration of the house in the years immediately before and after the transfer of ownership (Figure 4). The first in the Sanborn map series for Springfield (Figure 5), however, shows that by 1884 a section had been added to the east elevation of the Sprigg House, including a full porch, which brought the front of the structure much closer to Eighth Street.

Herman Hofferkamp, a faithful Democrat, won election to the post of Sangamon County Coroner in 1888. As he neared completion of his four-year term in 1892, the fall elections changed the complexion of state politics and Hofferkamp’s

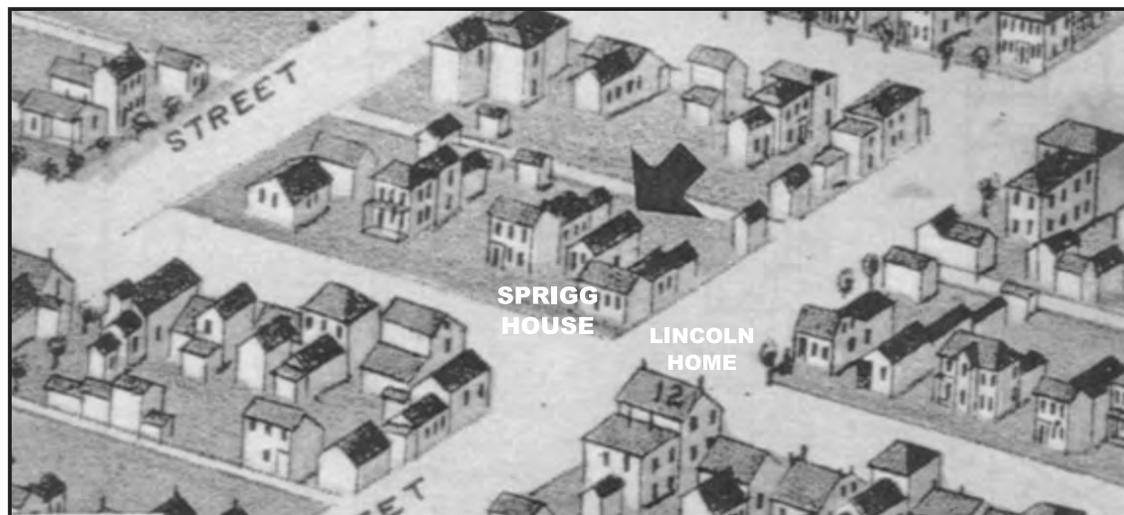
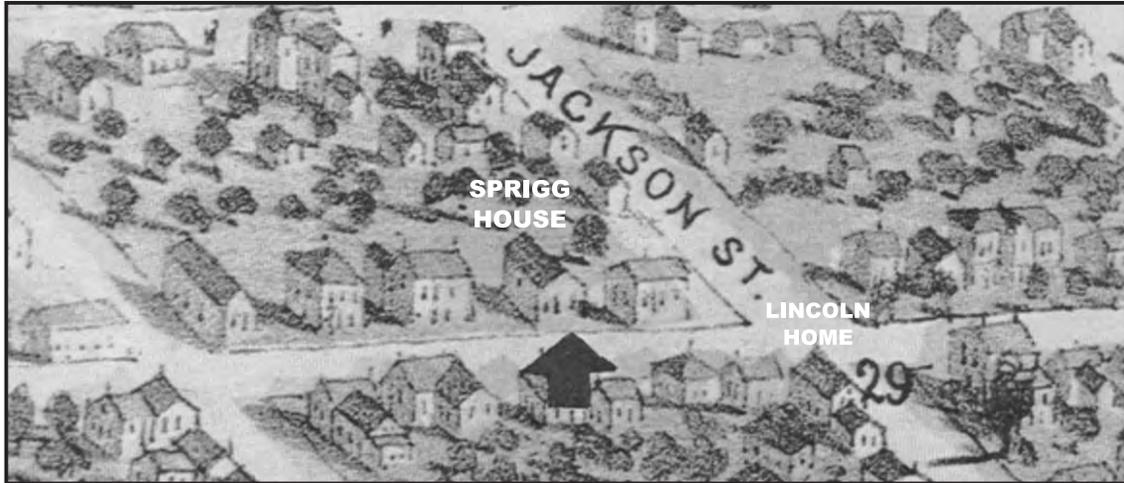


Figure 4. Excerpts from bird's-eye views of Springfield: Ruger 1867 (top); Beck and Pauli 1870 (middle); and Koch 1873 (bottom).

Not long after his inauguration, Governor Altgeld sent notice to the original and incumbent Lincoln Home Custodian, Osborn Oldroyd, that he was to vacate the premises. Herman Hofferkamp, who had lived in sight of the Lincoln Home for more than 20 years, apparently lobbied hard for the post of Custodian and succeeded to the appointment even over the recommendations of Robert Todd Lincoln, who favored his cousin Albert S. Edwards — like Hofferkamp, a Democrat. Indeed, it must have been particularly galling to the only surviving Lincoln family member when Hofferkamp took up residency on April 15, 1893 — the 28th anniversary of President Lincoln’s tragic death.

Despite having moved into the Lincoln Home, the Hofferkamps continued possession of the house at 507 S. Eighth Street, with their eldest son thereafter recorded as head of household at that address. The fall elections of 1896, however, returned Republican rule to state politics and the Hofferkamps to their own home by the following summer. The couple lived well into old age in that house, with Rachel Hofferkamp preceding her husband in death in her 75th year. Herman Hofferkamp sold the house three years later, in March of 1922, having owned the property 53 years. Seven months later he took his own life, only a few weeks before attaining 81 years of age.

It is clear from the sequence of Sanborn maps (Figures 5 and 6) that the Hofferkamps made several substantial changes to the property during their long tenure at 507 S. Eighth Street. Aside from their probable addition to the front (east) side of the house that first appears on the 1884 map, obvious modifications to the mapped outbuildings appear in depictions of 1890 and 1917. More subtle alterations are evident at the rear of the house on the 1896 and 1917 Sanborn maps of Springfield.

Carl and Rose Mund bought the Sprigg House from Hofferkamp in 1922 for the consideration of \$2,500, only \$1,000 more than the selling price when it last changed hands in 1869 (\$2,500 in 1922 would be roughly equivalent to \$22,700 in 1999). However, that low figure, in spite of the numerous improvements, may reflect various factors including possible deterioration of the nearly 70-year-old structure or the depression of the 1920s housing market in Springfield, or perhaps it was due to the ailing Herman Hofferkamp’s desire to dispose of his real property with haste. Whatever the reason, records show that the Munds, upon assuming their ownership, converted the Sprigg House to a duplex. They then sold the property a year later for cash and mortgage assumptions totaling more than \$11,000 — a sum commensurate with the cost of those improvements, as well as an estimated profit nearly equal the Munds’ original purchase price.

The Sprigg House changed hands no less than six times over the next 50 years. Indeed, two of the succeeding buyers held the property only nine months before reselling it. The last private owners purchased the house in 1969 at a price estimated near \$26,000. It is likely that this was a speculative venture, since the buyers lived in the Washington, D.C. area and continued to live there. Indeed, given their location, they may have had advance knowledge of the government plan to establish Lincoln Home National Historic Site through acquisition of the neighborhood properties. If so, that intelligence proved lucrative, as the owners sold 507 S. Eighth Street to the United States Government less than six years later for \$43,000, a return on their original investment exceeding 65 percent.

Few major external changes to the Sprigg House are documented for the post-Hofferkamp period. The Sanborn map of 1941 (Figure 7) shows a simpler rear porch area that may be a product of dividing the structure for two-family occupancy in the 1920s. That same map further reveals that by 1941 the earlier alley-side outbuildings had been expanded or (more likely) replaced by a much larger structure overlapping the next lot to the south. Perhaps a garage shared with the residents of 511 S. Eighth Street, the outbuilding is half again the size of the earlier shed. Those features are retained on the 1952 Sanborn map, but some time after that year the outbuilding obviously was reduced to the width of Lot 15, as it is still today.

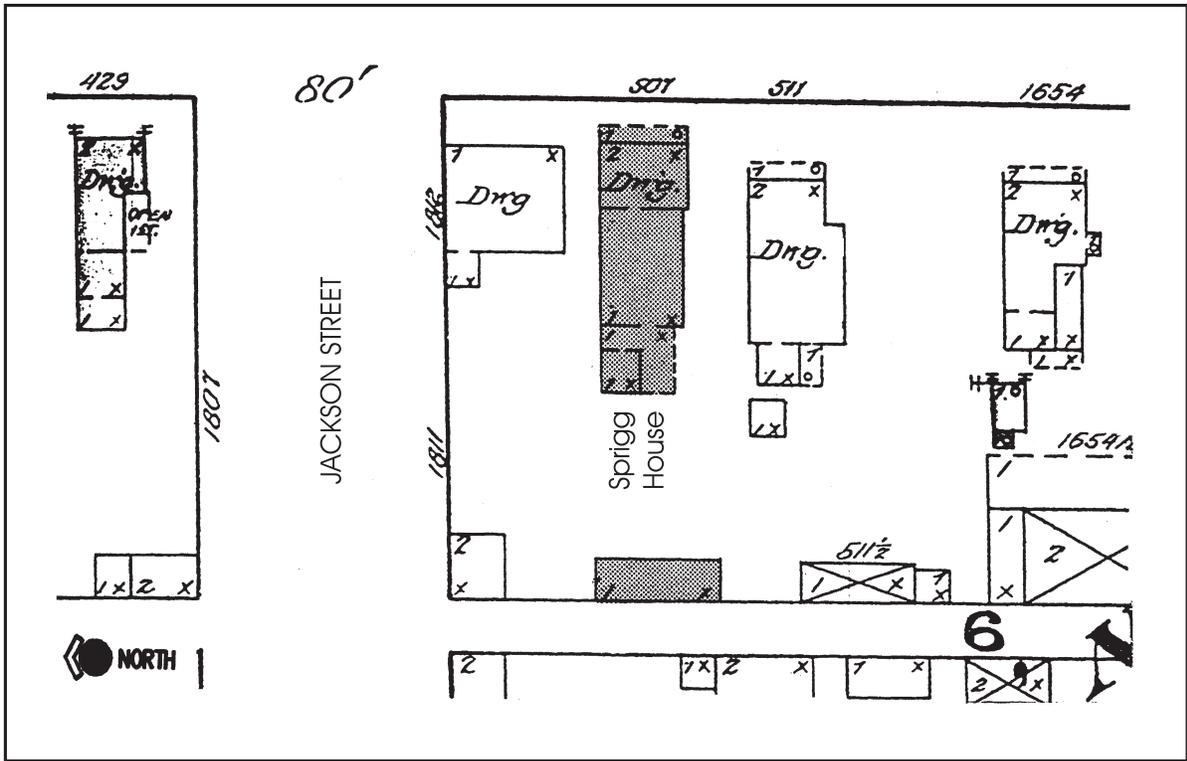
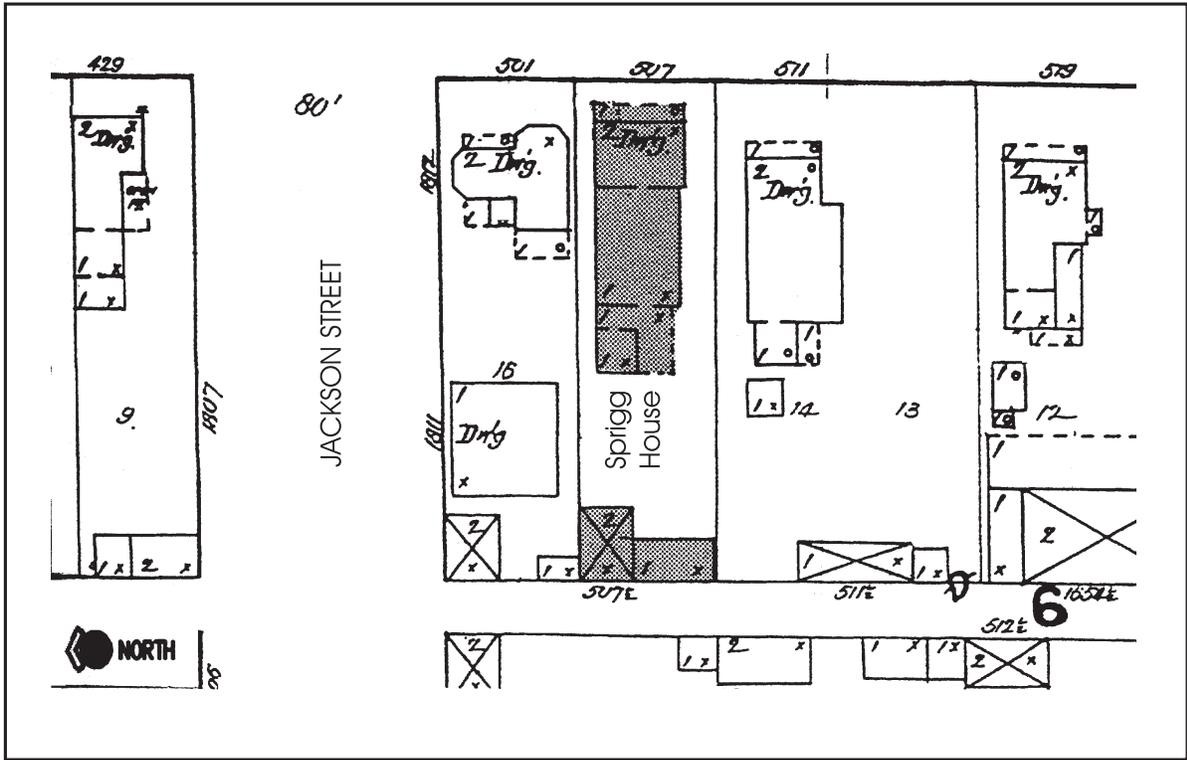


Figure 5. Portion of annotated Sanborn map showing the Sprigg property in 1884 (left) and 1890 (right).

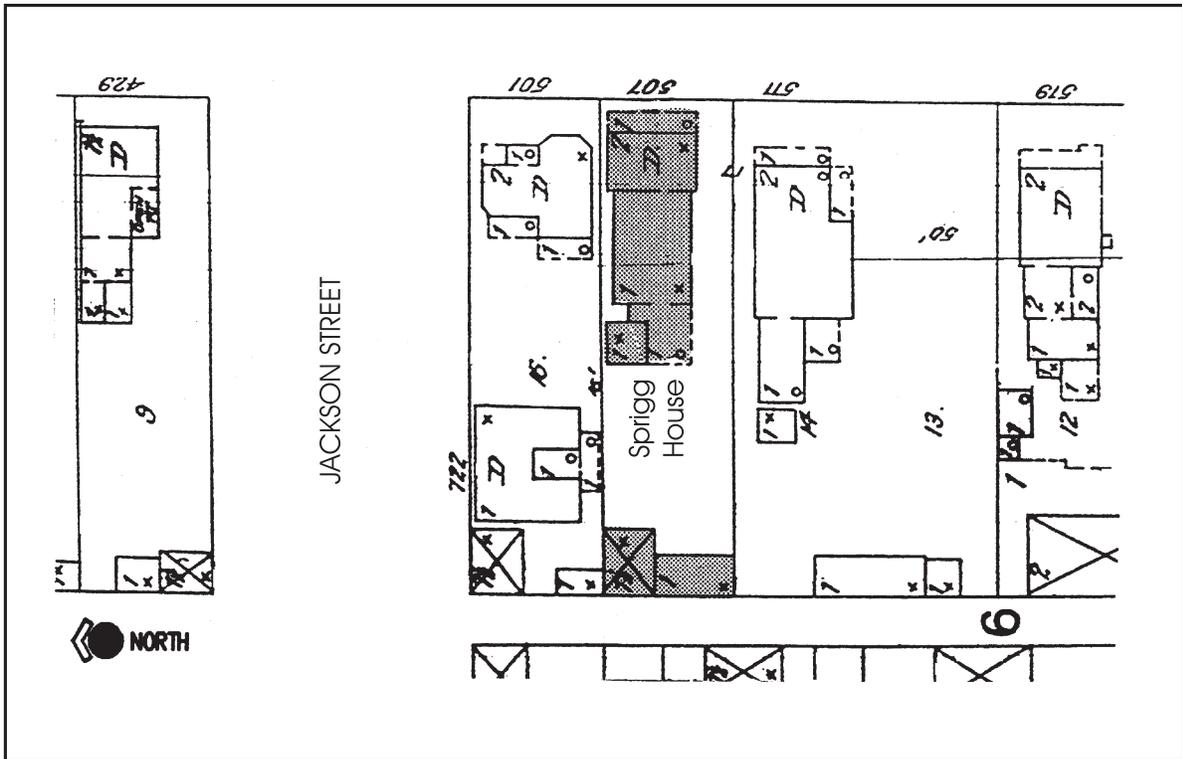
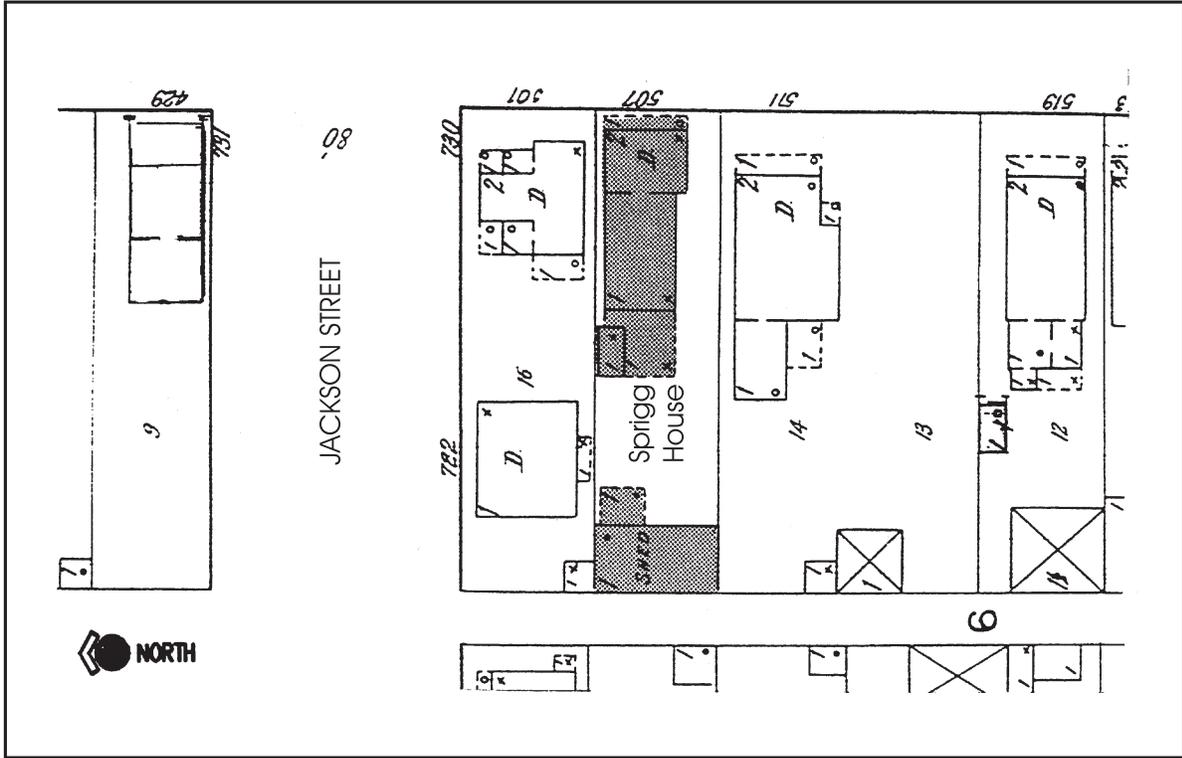


Figure 6. Portion of annotated Sanborn map showing the Sprigg property in 1896 (left) and 1917 (right).

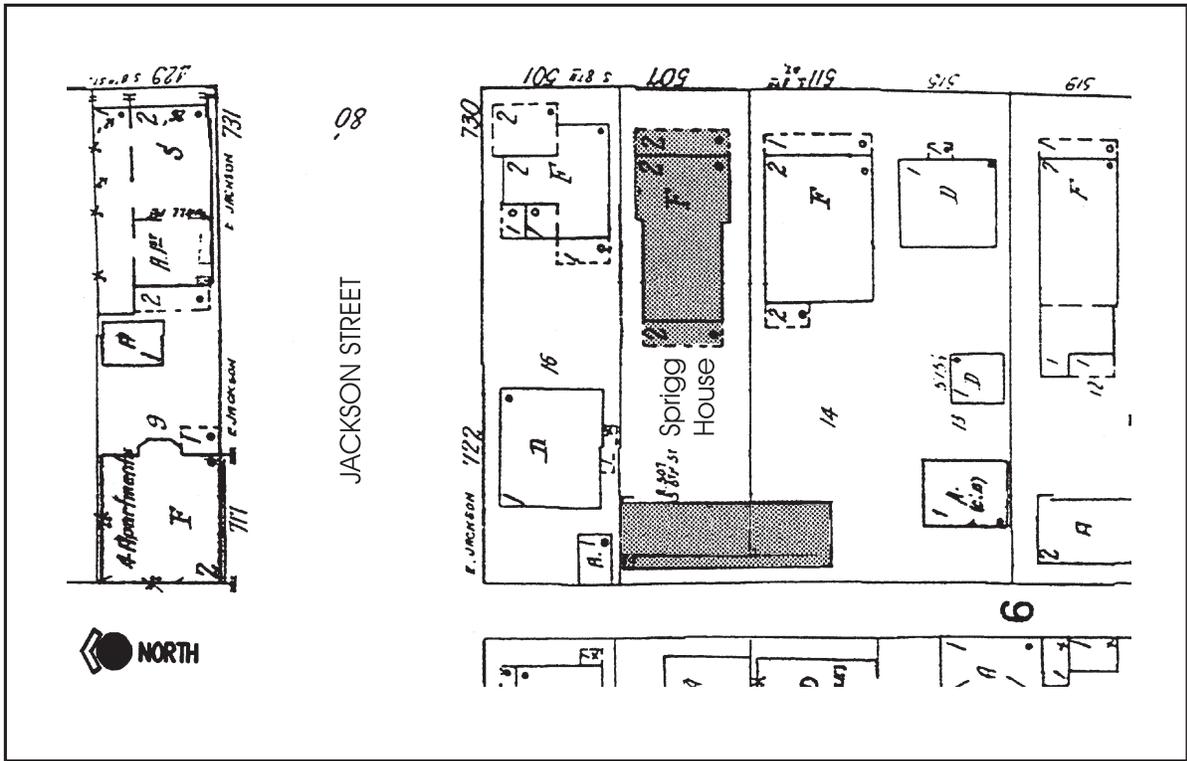
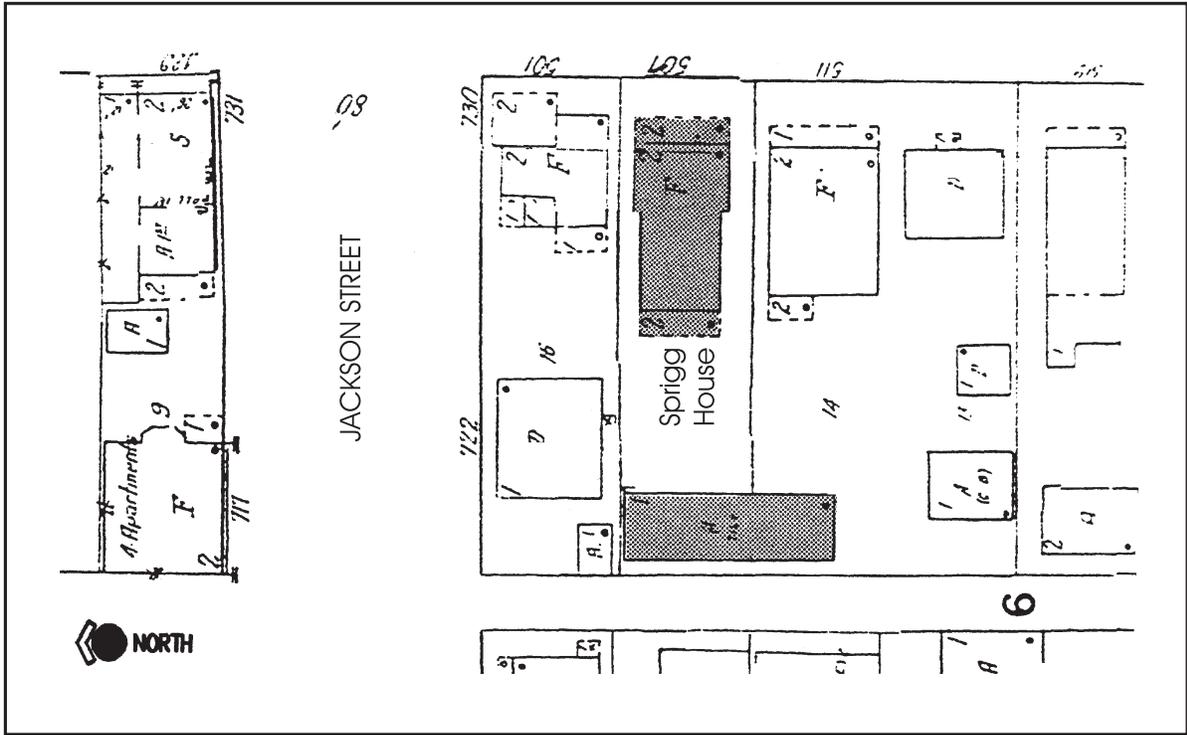


Figure 7. Portion of annotated Sanborn map showing the Sprigg property in 1941 (left) and 1952 (right).

Field Strategy

When the time came to devise an archeological research strategy for the Sprigg House project, plans for restoration of the structure were still indefinite. It was safe to assume that at least some, and perhaps all, of the foundation perimeter would be disturbed in the process of making the structure more stable. It also appeared certain that there would be a need to bury new utility lines to service the building. Further, it seemed likely that there could be ground disturbance away from the main house associated with construction staging and, possibly at some later date, reconstruction of absent outbuildings.

The field strategy undertaken reflects an attempt to balance Section 106 compliance concerns with management requests for information on structural evolution of the property. Informed by reference to historic cartographic sources, the placement of test units corresponded with areas likely to yield new, undocumented information on cultural resources. Thus, it was intended that our Sprigg House investigations would provide insight into the potential effects of the restoration undertaking and, perhaps, contribute data useful for overall restoration planning.

The 1992 field efforts focused principally upon the rear portion of the lot, where it was assumed that remains representing such features as privies, trash pits, and minor dependencies were likely to have been located during the 19th century. Excavations in 1993, carried out at the specific request of park management, concentrated on areas in close proximity to the rear porch of the main house. There, they hoped, evidence might be found that would shed light on an earlier configuration of the back house.

Methods employed in the Sprigg House investigations are typical of those employed by Midwest Archeological Center staff researching historic sites in urban areas. Further, the methods used here for excavation are not radically different from those used at any archeological site. Major differences relate only to the strategy of deploying test units across the site, rather the means of excavating those units.

The prior existence of current measured drawings of the house and lot, as well as the survival of numerous historic maps depicting the property during the late 19th and 20th centuries, helped to focus and facilitate the placement of archeological test units. Furthermore, structures standing on the lot, particularly the house itself, served well as ready points of reference. Indeed, they became expedient datum points from which measurements could be taken and to which units could be related spatially.

As noted previously, much of the Sprigg House archeological testing sought to explore areas of the property for which there was no cultural resource information available. That approach is based upon the principle that, until restoration plans take on greater definition, features depicted on historic maps can be presumed to survive archeologically. It is known, after all, that historic elements of the built environment formerly stood at such mapped locations. Accordingly, there is no necessity to confirm their survival through destructive excavation until there actually is a perceived threat to the integrity of those presumed remains. Rather, the greater concern for management should be undocumented cultural resources that are likely to be present and might be affected by the proposed restoration undertaking.

An appropriate cultural resource management recommendation, then, is to advocate construction avoidance of mapped features in formulating plans. Although this does not represent an affirmative preservation action, avoidance poses no immediate threat to the resource. In our view, the consumption of such cultural resources should be discouraged and kept to an absolute minimum until the probable area of effect is known. Once the unavoidable impacts become clear, testing and data recovery can proceed in those areas where historic architectural elements are known to have stood, in the same way that investigations normally progress after a broader exploratory strategy has established the presence of previously undocumented remains.

It is also acknowledged, however, that a restoration planner here or elsewhere might well have incomplete knowledge of the evolution of any particular structure, owing to gaps and other deficiencies in the historic record. Therefore, planners naturally may reasonably perceive the need to acquire archeological information on specific architectural questions. To address such questions, limited testing is often car-

ried out in response to specific problems with the hope of clarifying obscure details, as in the present case. Indeed, the desire of planners and managers to acquire additional insights into the character of mapped elements of the main house was the sole purpose for our supplementary archeological field research at the Sprigg House site in 1993.

Nevertheless, it is appropriate to note that in many cases archeology is powerless to provide the details that planners seek, even when substantial remains do survive in the ground. Unlike many other archeological contexts, experience shows that urban historic sites of the last 100 years rarely seem to have interpretable deposits in direct association with architectural features. It might be possible to determine where a former foundation once passed, of course, but it might not be possible to determine its dates of construction and use — at least not to the level of precision that restoration planners would prefer. Indeed, it would be highly exceptional for historical archeology to provide independently a probable time span any narrower than a quarter century.

Nor is it often likely that archeological data will be able to answer questions concerning the past function of specific rooms or even entire structures at particular times. During the latter part of the 19th century, there were fewer opportunities for materials to enter the archeological record in a way that would enlighten us about past activities in confined spaces. Solid flooring and site maintenance would have prevented the inadvertent deposition of most objects, of course, whereas long-term use of a feature would tend to obfuscate its function at a particular time if that feature served distinctly different purposes episodically in its history.

Finally, it is worth noting that the failure to confirm the presence of a feature at its mapped location is not necessarily evidence that the historic map is in error. Inconsequential groundwork, rather than a more substantial foundation, may have supported a removed addition, for example, or removal of a historic feature may have been so thorough that it left no trace to be found today. Often, we are left no choice but to trust the essential accuracy of historic maps examined in light of other supporting information that does survive.

As for the actual excavations of 1992 and 1993, the Sprigg House archeological project primarily employed 1-m by 2-m units laid out with reference to the corners of the main house or the existing outbuilding. Excavators in both years took down each unit in arbitrary levels of 10 cm relative to the ground surface at the unit, noted in terms of centimeters below surface (cmbs). The process continued repeatedly with each level until reaching sterile soil, with all matrix screened through quarter-inch hardware cloth to retrieve culturally produced materials collected according to provenience. The field crew also prepared measured drawings of all unit plans and profiles with appropriate field notations, and documented the excavation process with both color transparencies and black-and-white imagery.

It should be noted further that, regardless of the intent of a particular unit, whether exploratory or designed to expose a specific historic feature, the excavators recorded any and all soil anomalies that might be indicative of cultural activity or natural processes. Many of those noted were readily interpretable as fill, trash pits, rodent burrows, root casts, or a host of other manifestations. Of course, some anomalous deposits at the Sprigg House, though recorded, could not be readily identified under conditions of our limited testing program. To be sure, as will be the case in any archeological endeavor, even the added perspective that might be permitted by more extensive excavation would doubtless fail to make sense of all field observations.

Excavation Results

In view of the fact that the 1992 and 1993 Sprigg House excavations took different approaches, with the second year not building upon the first, they can be viewed for all intents and purposes as separate archeological projects. The primary purpose of the 1992 project was to explore the back yard for undocumented cultural resources that might contribute to a fuller understanding of the property as a whole and that also might be impacted adversely by the proposed restoration activities. The 1993 project, on the other hand, sought very specific information on incompletely documented historic features at the direction of park management and planners. The excavation base map for the 1992 and 1993 excavations is shown in Figure 8, and the results from both seasons are described below according to year.

1992 Investigations

The excavations of 1992, given their purpose, concentrated on the rear portion of the back yard where construction staging, utility installation, and possible removal of the existing concrete block outbuilding (clad in board-and-batten siding for visual effect) might disturb archeological features. Knowledge gained from earlier excavations at other house lots in the Lincoln Home neighborhood, as well as general knowledge of 19th-century urban life, suggested that a variety of cultural features would likely be present in that part of the yard and that the area should be considered archeologically sensitive. It was not known, however, whether previous demolition and construction activities had already rendered any remains unintelligible. Indeed, the excavators did not venture within 1 m of the modern shed, owing to the obvious obstructions of ornamental vegetation and the probability of substantial disturbance in that area.

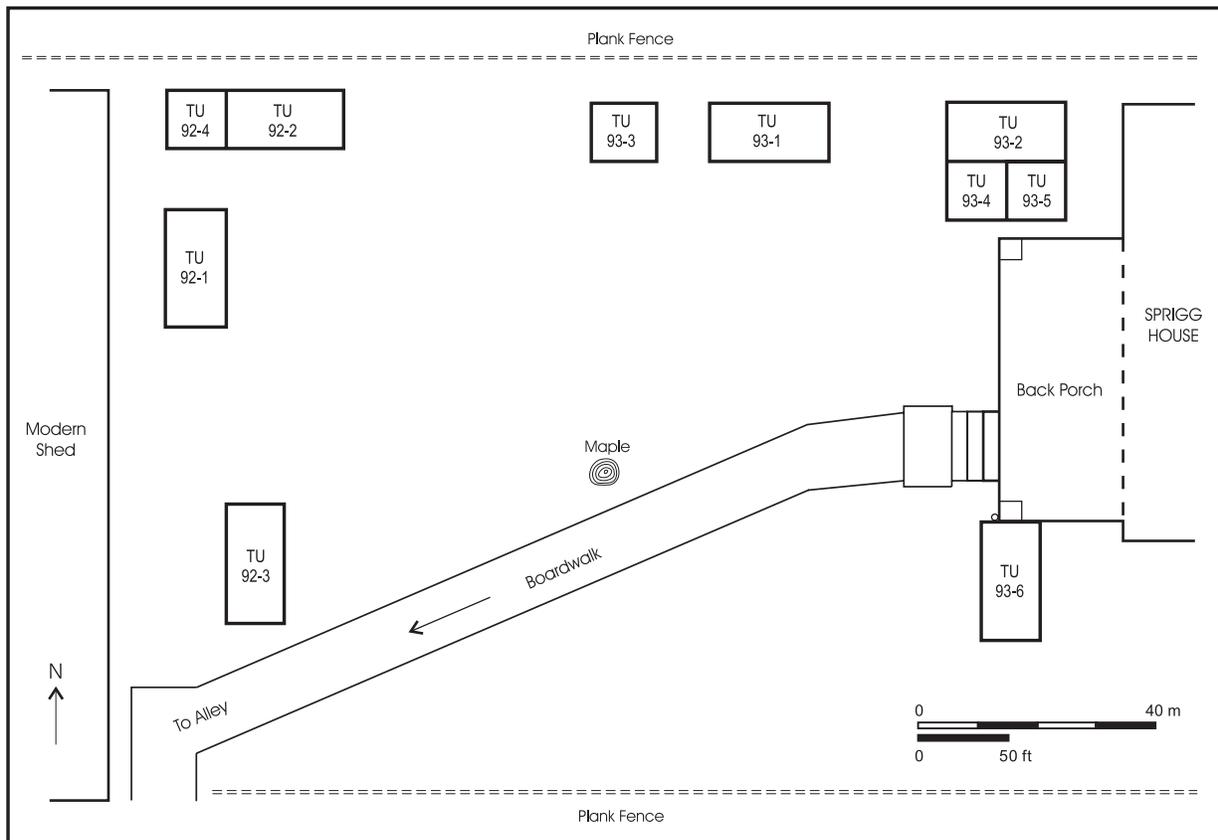


Figure 8. The 1992–1993 excavations in the back yard of the Julia Sprigg House.

Although three 1-m by 2-m test units were sufficient to demonstrate the need for caution in the rear quarter of the yard during any future undertakings that might be planned, a fourth unit was expanded upon one of the initial three. Cultural features encountered were still largely intact, despite continued use of the area long after their probable abandonment and ample evidence of both 19th- and 20th-century disturbances. That good fortune owes, in part, to the confined character of those more recent intrusions and the buffering effect of fill atop the earlier ground surface.

Test Unit 92-1

The first excavation unit opened in 1992 measured 1 m by 2 m, with its long axis oriented north and south. If the northeast corner of the existing outbuilding can be considered the 0/0 datum point for Cartesian coordinates in this sector of the yard, the unit's northwest (nearest) corner is located precisely 2 m south and 1 m east of that referent. In simplified notation, the plot of ground enclosed by all four of the corner stakes would be recorded as 2-4S/1-2E. Materials collected from Test Unit 92-1 are summarized in Tables 1 and 11.

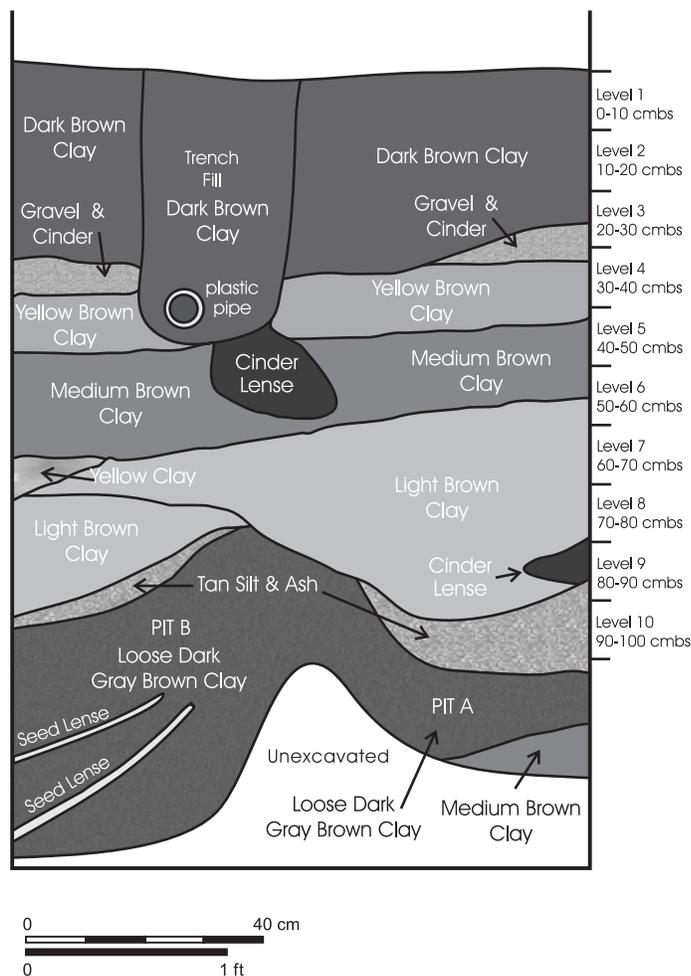


Figure 9. North half of the east profile, Test Unit 92-1, and Pits A and B.

The upper levels of Test Unit 92-1 were unremarkable with respect to either soil matrix or artifact content. Materials did occur in good number, but the artifact specimens were temporally diverse and probably represent a disturbed context. The dark-brown organic soil contained silt and clay, typical of house lots within Lincoln Home National Historic Site. After the first level (0–10 cmbs), however, an area dominated by yellow clay appeared in the northern half of the unit (Figure 9). With greater depth, the soil anomaly diminished to the northeast corner and took on greater definition. By the bottom of Level 3 (20–30 cmbs), it became clear that the yellow clay zone represented fill in a recent utility trench. In fact, in Level 4 (30–40 cmbs), it became apparent that two sets of utility lines intersect in the unit, one running north-south and the other east-west.

The east-west utility trench crossed the north end of the test unit, with its fill extending from the north profile to about 25 cm south of that line. The trench was shallow, reaching a depth of only 25 cm from the current ground surface, which appears to have been the surface at the time this utility trench was excavated. The trench contained at its bottom a single PVC conduit, which apparently carries or carried electrical wiring into the nearby outbuilding. When viewed in plan, it was apparent that this trench is superimposed over a deeper and earlier trench running north and south near the midline of the unit.

The north-south utility trench reaches more than twice the depth of the trench that intrudes upon it, approaching some 65 cm below the present ground surface. There are two lines of conduit placed in this trench, both metal, and one of them immediately above the other. The lines, however, do not lie at the

floor of the trench; rather, they are buried at approximately half the depth of the trench, or 35 cmbs. Accordingly, less than 10 cm separate the north-south utility conduits from the later east-west line.

By Level 6 (50–60 cmbs), it became clear that the utility trench disturbances had initially obscured the presence of a large refuse pit. At that level, an area of dark-brown clay with ash and abundant charcoal flecks took on greater definition in contrast with the intrusive utility trench. The pit further seemed to be in two parts, with the larger absorbing some three-quarters of the unit area. A clear soil break occurred at 50 cm from the north profile, with the soil north of that line consisting of medium-brown clay with yellow mottling. From that point on, it was possible to distinguish the apparent trash pit readily from the general soil matrix and to collect their contents separately. It would still be several levels, however, before it became clear that there were actually two overlapping pits, one intrusive on the other.

Few materials that can be dated within relatively tight time spans occurred in the pit fill from Levels 6 (50–60 cmbs) through 9 (80–90 cmbs). Most of the materials enjoyed popularity over such a long period of time that their presence is virtually meaningless. Others at least narrow the range to a half century, such as a sherd of yellowware in Level 5 (40–50 cmbs) with dendritic mocha decoration, which is typical of the first half of the 19th century (Noël Hume 1976:131). In Level 8 (70–80 cmbs), a sherd of flow blue whiteware typical of the 1840s–1860s (Lofstrom et al. 1982:9) also appeared. Among the best artifacts for discrete dating purposes are ceramic sherds that bear legible maker's marks; unfortunately most of those recovered from this test unit derive from the later trench fill.

Of course, it is quite probable that many, if not all, of the artifacts contained in any utility trench derive from the matrix upon which it intrudes, in this case the trash pit fill. Therefore, although one can never be absolutely certain about the original provenience of redeposited materials, it is worth taking special note of diagnostic specimens retrieved from the trench fill. In Level 5 (40–50 cmbs), for example, the mark of J.W. Parkhurst & Co., which operated in Hanley, England, during the years 1850–1882 (Godden 1964:481) is present, as is the mark used by Forester & Hulme in the years circa 1891–1893 (Godden 1964:256). Level 6 (50–60 cmbs) contained a marked whiteware sherd apparently manufactured by James Edwards & Son, representing the period 1851–1882 (Godden 1964:230). These combine to indicate a date of primary deposition certainly in the second half of the 19th century and perhaps more narrowly in the last quarter.

At the base of Level 9 (80–90 cmbs) it finally became obvious that two trash pits were present in Test Unit 92-1. They proved the only sources of archeological materials in the unit below that level. Pit A terminated at approximately 122 cmbs, and Pit B terminated at a depth of approximately 150 cmbs. Todd Ahlman describes the two features in a later section of this report.

Test Unit 92-2

This 1-m by 2-m excavation unit lay directly east of the modern shed's northeast corner, which served as the 0/0 referent for testing in 1992. Oriented with its long axis running east-west the unit corners were at 2–4 m east and 0–1 m south of the datum point, placing its north profile approximately 60 cm away from the existing north fence line. Started at the same time as Test Unit 92-1, the purpose of this excavation was to provide additional information on the presence or absence of cultural resources in the western quarter of the house lot. Table 2 reports the artifact frequencies for this unit by provenience.

No soil anomalies or remarkable artifacts came to light in Test Unit 92-2 through the first four levels (0–40 cmbs) of controlled excavation. At the floor of Level 4 (30–40 cmbs), however, there appeared the first indication of a distinct soil zone partly exposed in the unit's northwest corner and which played out by the end of Level 6 (50–60 cmbs). The anomaly consisted of a dark-brown, organic clay fill liberally laced with ash and chunks of slag, suggesting perhaps an expedient receptacle for furnace waste. Of the few artifacts recovered from the fill (Table 2, Level 5b), only four cut nails can be considered even vaguely diagnostic. It is worth noting, however, that nothing definitely of the 20th century turned up in this section of the small pit.

Continued excavation of Test Unit 92-2 produced substantial numbers of artifacts through Level 7 (60–70 cmbs), after which the yield dropped precipitously. In the course of removing the matrix of

Level 7, however, the excavators encountered a line of drainage conduit still linked in series. The line ran east and west, parallel to the north unit profile and approximately 30 cm from it (on the centerline). Several isolated brickbats also lay scattered about the west quarter of the unit.

The drainage line, which appeared to dip ever so slightly in its transit from east to west, must have once carried rainwater from downspouts on the main house to a cistern or some similar receptacle at the rear of the yard. Approximately 1 m from either end of the long axis, however, the conduits made a sudden plunge downward in a manner suggesting an unintended departure from the functional design. Continued excavation in the unit revealed that this was due to the fact that the lined conduit crossed the fill of an earlier cultural feature, allowing subsidence of the conduit line over a certain period of time. Indeed, ultimately it proved to be the case that the line simply was bowed and resumed its normal sloping course near the western edge of the test unit.

The feature that the line coincidentally crossed turned out to be a privy vault, though that was not patently obvious at the outset. In the floor of Level 9 (80–90 cmbs) there was an ill-defined area of fill concentrated in the northwest corner of the unit. Not until Level 10 (90–100 cmbs), however, did it begin to take on a squared shape more recognizable for what it is. At last, by Level 12 (110–120 cmbs), the feature exhibited good, straight sides and showed no indication of terminating (in fact, the excavators removed one more 10-cm level with the same result before abandoning efforts here).

It was not possible to determine the full dimensions of the privy feature within Test Unit 92-2, for that excavation exposed only its southeast corner at a point 60 cm (23.6 in) from the north profile and 70 cm (26.6 in) from the west. The subsequent excavation of Test Unit 92-4, a 1-m-sq unit immediately west of and contiguous with Test Unit 92-2, provided an opportunity to ascertain the actual length of the privy vault's south edge, which appeared to be less than 4 ft.

Although the privy pit yielded more than a few artifacts, none were particularly diagnostic. Generally, the materials are consistent with the latter part of the 19th century, and there is no question that use of the privy predates installation of the drainage conduit, which is almost certain to have occurred prior to the current century. Should there ever be a need for further investigation into the privy vault, it is likely that greater numbers of artifacts will be found deeper in the feature, and an increased sample of diagnostics might help narrow the possible range of dates.

Test Unit 92-3

This test unit represented an attempt to examine the rear of the Sprigg property in its more southerly extreme. Situated near the modern boardwalk that angles to the Sprigg House back door, the 1-m by 2-m unit lies 2 m east of the shed, with its long axis oriented north and south. In grid coordinates relative to the shed's northeast corner, the corners of Test Unit 92-3 are 7–9 m south and 2–3 m east.

For the most part, Test Unit 92-3 proved to be unremarkable. Various artifact specimens came to light, of course, but few can be considered atypical or terribly interesting. As expected, the upper levels contained a mixture of fairly recent materials along with artifacts that were more certainly of the 19th century. Many of the artifacts recovered could not be dated precisely, but none in the lower levels are clearly products of the 20th century (Table 3).

The most obvious item of note present in Test Unit 92-3 was yet another buried utility line—this one, according to park maintenance staff, carrying the wire for an electronic security system. It lay at a depth of approximately 60 cmbs in a narrow trench that reached a maximum depth of about 80 cmbs; the PVC conduit did not bisect the center of the trench, but rested near its west edge. The utility trench was already becoming discernible in Level 1 (0–10 cmbs), consistent with the relatively recent date for installation of the security line. Well defined by Level 2 (10–20 cmbs), the trench measured 12 cm (4.7 in) wide and ran straight and true on a north-south course centered 25 cm (9.8 in) from the west profile. Excavators collected artifacts from the trench and bagged them separately from the rest of the unit in Level 2 and all subsequent levels in which it persisted. The materials, of course, would have been redeposited as a result of the conduit installation and would not be in their original site context.

Excavations finally revealed the conduit at the base of Level 6 (50–60 cmbs), but the trench continued for several levels beyond that depth. Not having been dug to a consistent depth, the trench began to terminate at its northern end in Level 7 (60–70 cmbs). No trench fill remained anywhere in the unit shortly after the start of Level 9 (80–90 cmbs).

Miscellaneous artifacts came out of non-trench areas in every level through the last excavated, Level 10 (90–100 cmbs). Further, it appears likely that much of the unit floor may have exposed a late-19th-century refuse pit larger in size than Test Unit 92-3 itself. Not until Level 7 (60–70 cmbs), where the apparent basin-shaped feature constricted as it neared its bottom, was it possible to discern an edge. By that time, however, the anomalous soil zone extended only 20 cm from the east unit profile and approximately 150 cm south from the north profile wall. The few artifacts for which a date of manufacture can be approximated all seem to derive from the turn of the last century. In all likelihood, most of the material found in the utility trench also derived from this refuse pit, but there is no way to be absolutely certain of that.

Test Unit 92-4

Simply a westward extension of Test Unit 92-2, this 1-m by 1-m excavation unit provided additional information on the privy vault touched upon in that other test unit. Test Unit 92-4 lay 1 m east of the modern storage building, its grid coordinates reading 0–1 m south and 1–2 m east. Given that position, it seemed likely that the utility conduit running north and south through Test Unit 92-1 would continue into Test Unit 92-4, and that proved to be the case.

As was true of the other three test units at the rear of the Sprigg House property, the uppermost levels of Test Unit 92-4 contained various domestic, personal, and structural artifacts including both modern and older materials (Table 4). It seemed obvious from those varied associations that the deposits could not have been primary, but instead represent a mixture of redeposited materials. Given the amount of disturbance here, the composite character of the assemblage was not at all surprising.

The line of trench fill became clearly visible at the base of Level 2 (10–20 cmbs). There, as in Test Unit 92-1, the utility trench ran north and south, with its center about 45 cm from the east profile or 155 cm from the modern storage building. The area of dark-brown fill, mottled with yellow clay, again was quite narrow, measuring approximately 12 cm across. Outside the trench was a more homogeneous medium-brown clay.

By Level 3 (20–30 cmbs), the general matrix had lightened somewhat in color, being mottled with a yellowish-brown clay. Furthermore, two dense slag deposits appeared for the first time on either side of the trench line in the northwest and southeast corners. The former was of irregular shape, whereas the latter formed almost a perfect square corner 3 cm from the east edge of the trench. Although both areas contained artifacts in addition to the predominant slag material, they did not provide much help in assigning a date to the deposit.

In Level 4 (30–40 cmbs), however, it became clear that the slag deposit was continuous across the unit and that the utility trench intruded upon it. At the floor of that level, the dense deposit of slag and charcoal flecks took up better than a third of the unit area. Further, it seemed to be a sector of a circle centered somewhere near the northeast corner stake of the unit. This circular character became even more evident with excavation of Level 5 (40–50 cmbs).

At the floor of Level 6 (50–60 cmbs), the character of Test Unit 92-4 again changed dramatically. Now below the level of the utility conduit, only part of the trench still remained in the north half of the unit. Further, on either side of the remaining trench fill could be seen the first indications of the east-west trending trench that carried the drainage tile observed in Test Unit 92-2.

In the next two levels it became clear that the clay drainpipes laid in series no longer ran at a functional pitch. At the west edge of the test unit, the bell end of one pipe lay exposed at the bottom of Level 7 (60–70 cmbs). The leading end of the pipe section immediately west, however, was not inserted into the other's bell. Rather, it was disjoined, and the cylindrical pipe dipped sharply downward toward the east.

At Level 9 (80–90 cmbs), with the conduit entirely exposed within the unit, the meaning of its eccentric course finally became manifest. It was then clear that the conduit had sagged markedly, about 20 cm at its greatest extent, having been laid across an area of soft fill that had subsided since installation of the drainage line. Coupled with information already gleaned from Test Unit 92-1, it was obvious that the loosely compacted soil represents an earlier, filled, abandoned privy vault that the drainage line coincidentally crossed. That identification having been made certain, there was no attempt to excavate further into the feature. Only if the area could not be avoided by restoration activities would there be any compelling reason to do more.

1993 Investigations

Lincoln Home management requested additional archeological investigation at the Sprigg House while a team from MWAC was present on another research assignment in 1993. In order to honor their request for supplementary excavations, the research team interrupted initial fieldwork at the nearby Du-bois House. Accordingly, the redirection of effort from the approved work plan for that summer meant that there would be insufficient time to accomplish all the research tasks originally approved for the Du-bois House back yard.

Park managers wanted to acquire additional information in the form of physical evidence relating to mapped structural features formerly near or attached to the Sprigg House itself. They specifically focused our attention on a small outbuilding, possibly a laundry shed, and a room that once stood at the rear of the main house in hopes of ascertaining their precise functions and periods of use. Management was advised at the outset, however, that various factors might preclude obtaining such specific information. As it turned out, the field investigations requested were unable to provide any intelligence augmenting what was already known through the historic record. In fact, the supplementary excavations could not even confirm the locations and dimensions of structural elements clearly shown on early maps of the house lot, suggesting that demolition of those features had been very thorough or that they had been supported by minimal groundwork.

The 1993 field crew excavated a total of six test units near the back of the Sprigg House. Three measured 1 m by 2 m, and the other three measured 1 m by 1 m. Two 1-m by 1-m squares, Test Units 93-4 and 93-5, lay side by side on the south edge of one of the 1-m by 2-m units, Test Unit 93-2. Together, the three formed a 2-m block, which is described below. Owing to the fact that a section of coursed brick appeared along the eastern limits of that block excavation, excavators expanded the east profile a short distance to expose the superior surface of that apparent partial foundation.

One 1-m by 2-m test unit excavated in 1993, Test Unit 93-1, had as its purpose exploration for evidence of a structural element shown as a square room at the northwest corner of the Sprigg House on Sanborn maps from 1884, 1890, and 1896 (Figures 5 and 6). Depictions of that room suggest that it might have been separate from the Sprigg House when first built, but incorporated into the main house by 1884. No corresponding feature is evident on the 1854 and 1858 city plats (Figure 3) or the three extant bird's-eye views that sporadically document the next two decades leading up to Sanborn map coverage (Figure 4).

In addition to those units, a 1-m square excavated near Test Unit 93-1 represented an attempt to obtain more information on the length of drainage pipe observed in that first unit of 1993. Results from Test Unit 93-3 proved uninformative, however, and so that minor effort is not described in the narrative that follows (the artifacts collected are summarized in Table 7). One last excavation, Test Unit 93-6, was a 1-m by 2-m unit extending perpendicularly from the southwest porch pier at the rear of the Sprigg House. Its purpose was to search for additional evidence of buried brick paving noted years earlier by park maintenance personnel working on the rear porch.

Test Unit 93-1

With the first test unit begun at the Sprigg House in 1993, excavators sought evidence of a former structural element that appears on several Sanborn maps from the late 19th and early 20th centuries (Figures 5 and 6). Although it is not shown on any map or other representation as having been separate from

the main house, the manner of depiction where it does appear suggests that distinct possibility. The purpose of Test Unit 93-1, then, was to attempt an intersection with the western edge of the room that was removed from the Sprigg House sometime between 1917 and 1941. Accordingly, the unit lay west of the northwest corner of the Sprigg House a distance of 5 m (ca. 16.5 ft) to 7 m (ca. 23 ft). Measurements taken from turn-of-the-century maps suggested that the western edge should lie somewhere in the vicinity of 17 ft from the rear of the main house.

Excavation of this 1-m by 2-m test unit failed to reveal any discernible indication of a foundation corresponding to the structural element noted on historic maps of the Sprigg House. Instead, there was an old drainage conduit angling through the southwest corner of the unit at approximately 60 cm below the present ground surface. An unconformity in the soil column, however, suggests that a fill layer about 24 cm thick covers an earlier surface. The pipe, which probably once led to a cistern, lies around 30 cm below that soil interface.

As noted above, the excavation team also placed a 1-m by 1-m test unit, designated Test Unit 93-3, a short distance west from Test Unit 93-1 in an attempt to ascertain more information about the conduit. That effort proved fruitless, however, as it failed to intersect another segment of the drainage line. Either the line stopped short of that point, depositing into a cistern, or the line was interrupted at this particular juncture and may have continued on toward the west. The fact that a conduit similar in character and orientation was present in Test Unit 92-2, some 5 m farther west, would tend to argue the latter case. Limitations of time, however, precluded additional attempts to resolve this question with finality in 1993.

Artifacts collected in Test Unit 93-1 indicate a mixed context, particularly in the upper levels. Some specimens, such as a ceramic sherd bearing the simple mark of Hope & Carter, are consistent with late-18th-century use of the site; according to Godden (1964:334), that Staffordshire pottery operated from 1862 through 1880. Other items, however, are clearly of 20th-century origin (Table 5).

Test Unit 93-2

This 1-m by 2-m unit sought information on an area in closer proximity to the back of the main house. The unit's north edge is in direct line with the north foundation of the house, ranging 1 m to 3 m from the northwest corner. Further, it approximately straddles a north-south line extending north from the northwest pier of the existing rear porch.

The first 10-cm level (0–10 cmbs) excavated in Test Unit 93-2 almost immediately revealed some intriguing soil anomalies. One was a linear soil break that extended the length of the unit some 35 cm from the north profile. Although not a true straight line, there was a clear difference between the two soil zones on either side of it. To the north lay a deposit of medium- to dark-brown silty clay. South of the line the soil itself was very similar, but there it was dotted with brick rubble and pieces of mortar that appeared to be the leavings of demolition activity. The other anomaly was even more distinct, lying entirely within the southern soil matrix but only a few centimeters below the line of separation. This area of gray-brown sand and gravel was almost perfectly square at the floor of Level 1, measuring about 38 cm on a side.

Level 2 (10–20 cmbs) made clear the meaning of the anomalies noted in Level 1. The squared-off soil zone proved to contain the lower courses of a brick pier (Figure 10), probably associated with an earlier configuration of the back porch. Formed by an arrangement of four bricks in plan, the pier was situated with its northern edge some 40 cm (1.3 ft) south of the northwest corner of the house and its western (far) edge approximately 238 cm (7.8 ft) from the present west house foundation. Using straight-line Cartesian coordinates, that places the excavated pier's northwest corner about 28 cm west and 210 cm north of the comparable point on the northwest pier of the existing porch.

The fact that the bricks in combination form a right angle suggests that it is not a medial pier, but one that supported a structural corner, specifically the northwest corner, as judged from the configuration. Not one of the known historic maps depicting the Sprigg House, however, shows either a back room or a porch as having had a corner at this precise location. It may be, however, that the pier corresponds to the "full" back porch appearing on the 1941 and 1952 Sanborn maps (Figure 7).

It would have been very difficult, of course, to represent the slight 15-in offset of the porch edge using the small Sanborn map scale. Further, no pier remnant occurs directly off the northwest corner of the house. Therefore, although there is no way to determine the age of this pier with certainty, it is probable that it was laid up as support for the two-story rear porch that was removed for safety reasons by park maintenance personnel in 1986. According to the Sprigg House Historic Structure Report, that porch is believed to date from a 1922/1924 remodeling episode (Fischer-Wisnosky Architects, Inc. 1995:3.10–11).

In addition, it should be noted that several large brickbats lay scattered about the unit floor, suggesting the random discard of materials obtaining from demolition activity. Excavations also exposed a length of electrical wire, which apparently once had the main house as its point of origin. The wire passes immediately alongside the north edge of the brick pier as though buried with respect to the former porch position. It is believed to have carried power to the modern outbuilding that still stands at the alley before the conduit was abandoned in place.

While excavating Level 5 (40–50 cmbs), there appeared the first indications of a second feature of coursed brick located in the extreme southeast corner of Test Unit 93-2. Furthermore, it clearly lay within a linear zone of dense ash and charcoal that paralleled the east profile wall, with a western edge about 25

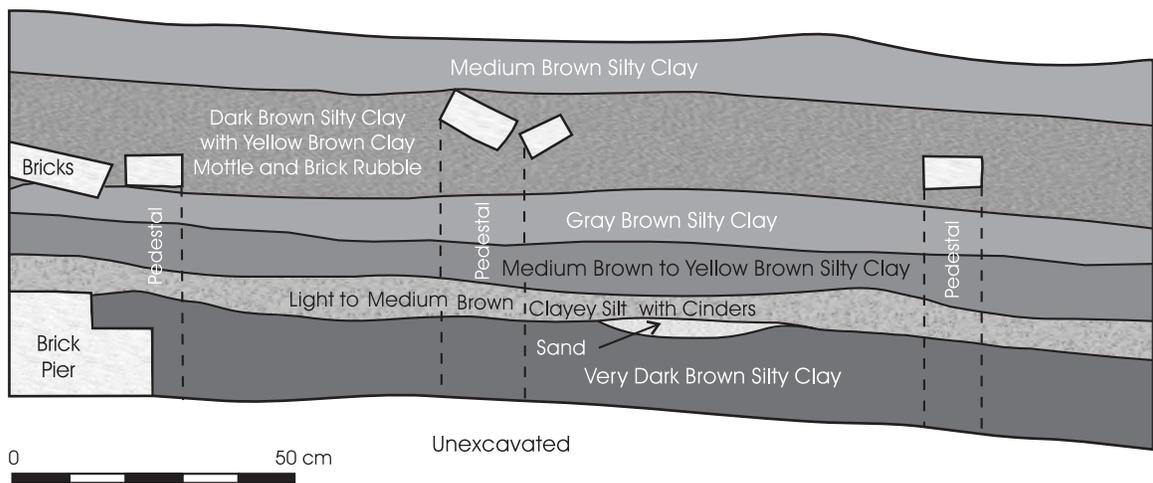
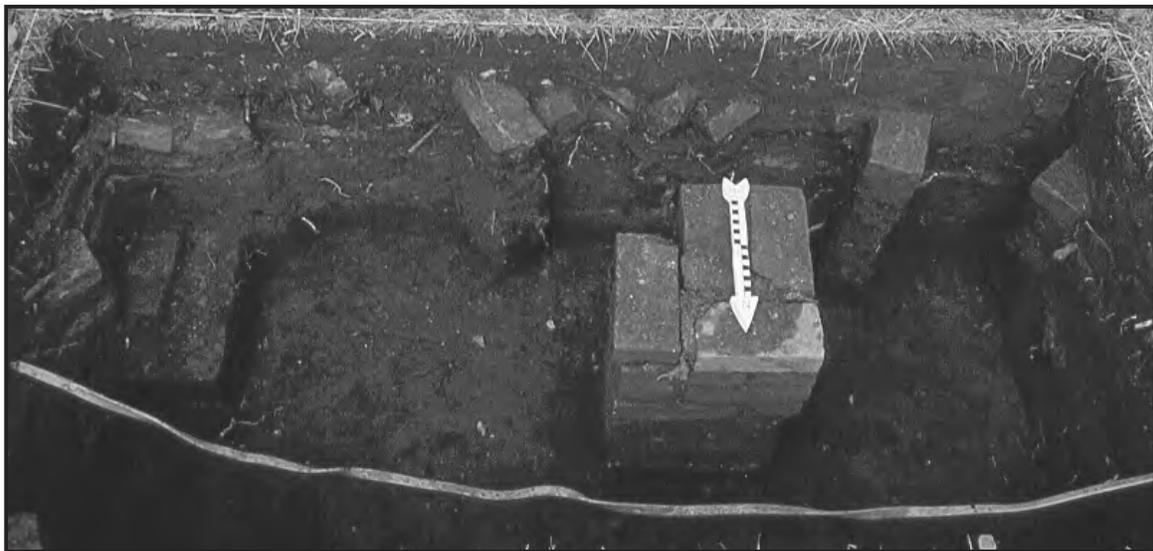


Figure 10. Brick pier, Test Unit 93-2, probably associated with an earlier configuration of the back porch.

cm from that edge of the unit. Further excavation to Level 6 (50–60 cmbs) in the unit revealed much of the masonry patterning and laid bare the base at about 70 cmbs. The feature had at least four courses of brick, as indicated by one isolated brick and traces of mortar on the exposed superior surface. This would indicate partial demolition of the structural element, in the same manner as the pier described above. It was unclear at first, however, whether the brick feature represented a large pier or a foundation wall segment. Subsequent excavation of Test Unit 93-5, immediately south, revealed a continuous line of brick and mortar representing a wall segment of as yet unknown age and significance.

Examining either the south or east unit profiles, it is apparent from context that the uppermost portion of this second brick feature corresponds to an obvious unconformity in the stratigraphic column; a clear soil interface occurs at the top of the pier. It seems that the brick feature was taken down to a point just below the contemporary ground surface or that the grade itself was lowered at the same time. This would argue that all of the nearly 50 cm of mixed fill above the soil break dates after demolition of this structural element.

The excavation of Test Unit 93-2 yielded only a few datable artifacts, and none were from a discrete context that would shed more light on the structural features encountered here (Table 6). Level 3 contained a small, fragmented medicine bottle embossed / R.N. DODDS / DRUGGIST / ... GFIELD, IL ... /, and a hard rubber button bearing the Goodyear mark was present in Level 5. Either of those artifacts could date from the late 19th to the early 20th century, whereas a solarized bottle glass sherd from Level 6 is likely to be an early-20th-century product. Therefore, it is apparent that the depositional context is mixed origin.

It may be of passing interest to digress briefly on the medicine bottle fragment found in Level 3. Richard N. Dodds for many years operated a thriving drug store business at the northwest corner of 5th and Monroe Streets, only a short distance — three blocks west and two north — from the Julia Sprigg House. A search of city directories for Springfield indicates that R. N. Dodds opened for business there in 1872 or 1873 and continued at the same location until he died in 1921. Touted as the busiest downtown intersection at the turn of the century, the drug store at “Dodds Corner” was a focal point of activity in downtown Springfield. Not only did he maintain a brisk trade in sundries, cigars, and prescription medicines, with a night druggist always available in a sleeping room on the premises, Dodds also sold physician supplies and surgical instruments. Perhaps more important to the store’s popularity as a meeting place, however, was the soda fountain — the first in Springfield. According to an entry in the *Souvenir of Springfield*, published in the early 1890s, Dodds was where “during summer months two nimble-fingered young men dispense to thirsty and heated thousands Dodds’ famous ice cream soda ... , the drink that refreshes and cools, but does not intoxicate nor injure the system.”

Test Units 93-4 and 93-5

These 1-m by 1-m test units are considered together, since very little of interest turned up while excavating the six levels (to 60 cmbs) in Test Unit 93-4. In fact, other than the occurrence of a random scatter of brick rubble in the second level (10–20 cmbs), Test Unit 93-4 was unremarkable. Of greater note were the results of Test Unit 93-5.

The excavation team initiated work on Test Unit 93-5 specifically to follow the alignment of brick partly exposed at the east edge of the adjacent Test Unit 93-2. As was true of both contiguous test units, Level 2 (10–20 cmbs) of this 1-m square revealed a scatter of brickbats most probably connoting demolition of the very features exposed in the several units. The fill surrounding this profusion of brick rubble contained a diverse mixture of historic artifacts that in combination represent a long span of time, roughly from the late 19th to the early 20th century. Even if the associated materials could provide more temporal clarity, however, they would merely help narrow a date for the demolition episode and not for the mortared-brick structural features that are of greater interest.

The top of the coursed-brick alignment appeared at the eastern edge of Test Unit 93-5 as excavation proceeded through Level 6 (50–60 cmbs), as had been the case in Test Unit 93-2 immediately north. The superior surface showed that the alignment was at least two bricks wide, and there were immediate indications that at least one more row of brick lay hidden further east within the profile. In consideration of

the brief time available for the Sprigg House investigations, therefore, excavators cut back the continuous east profile of both Test Unit 93-2 and Test Unit 93-5 to expose the entire width of the apparent foundation wall, thereby showing it to be three bricks wide and no more.

Viewed in three dimensions, it is clear that the foundation wall is of substantial size and could have supported considerable weight. It is also clear from its shallow depth, approximately 1.5 m below the present elevated ground surface, that this did not formerly surround a basement. What is most interesting about this foundation segment, though, is that it ends abruptly and cleanly without closure midway across Test Unit 93-2. Indeed, it is apparent from the brick arrangement that the north end of the alignment is finished and does not reflect a truncation of some longer feature. Why this substantial wall segment should end without turning at a point some 50 cm (20 in) from the present northwest corner of the Sprigg House is unknown. Neither the consulting historical architect, nor the park staff expert on this structure could offer any ready interpretation of what they observed in the ground.

No attempt was made to continue following the foundation segment farther south, as that edge of Test Unit 93-5 lay only about 30 cm (1 ft) from the Sprigg House back porch. To have done so would have required documentation supporting removal of the porch decking and also would have meant disrupting the primary means of access to the occupied residence. Further, there seemed little likelihood that excavation on the south side of the porch would pick up the alignment. Accordingly, the brick feature will remain a mystery at least until removal of the back porch, and the answer might still be elusive even then.

The material culture recovered from these two units for the most part is unremarkable (Tables 8 and 9). A panel bottle fragment from Level 5 of Test Unit 93-4 is embossed / J. PREST ... / ... STON /. Fike (1987:178) reports that the firm of Preston & Merrill, producers of rose water and flavoring extracts, operated in Boston from 1845 to ca. 1906. Since the full name of the first partner was Joshua P. Preston, there is a strong likelihood that this bottle represents a related company. Level 3 of Test Unit 93-5 contained an unmarked bottle clearly manufactured in a fully automatic machine, indicating an origin no earlier than the first decade of the 20th century. Level 6 of that unit, however, yielded several embossed bottle sherds. One sherd reads / GINGER / ... ADA /, which probably would read / F. BROWN'S / ESS OF / JAMAICA GINGER / PHILADA / if it were whole. Fike (1987:178) notes that this product was introduced in 1822, but that Frederick Brown's company continued in operation well into the early 20th century. Four sherds, including the bases of two emponited vials, all appear to derive from bottles of Dr. McMunn's Elixir Of Opium. The sides of one cylindrical base has the characters / ... N'S / ... UM / remaining, whereas the other bottle base has only / ...S / ...M / discernable. Two other bottle sherds exhibit characters consistent with the same mark. One reads / ELIX ... /, whereas the other has only the letter 'N' following what appears to be the lower part of a 'U.' First marketed around 1842, McMunn's elixir was still available at the turn of the century (Fike 1987:115).

Test Unit 93-6

The last excavation at the Sprigg House in 1993 was a 1-m by 2-m unit placed against the southwest corner of the back porch, extending 2 m out from the corner pier. Some years earlier park maintenance staff had dug a few holes in this general area when rebuilding the two-story porch in 1978. In so doing, they discovered two different levels of patterned brick pavement, indicating as many former ground surfaces. The excavation of Test Unit 93-6, therefore, was an attempt to gather information that might elaborate on those limited observations.

Level 1 (0–10 cmbs) was unremarkable, yielding various bits of modern debris. At Level 2 (10–20 cmbs), however, two clear soil zones could be observed in the floor of the unit, separated by a well-defined, nearly straight line at approximately 60 cm from the north. South of that line was an area of yellowish-orange, culturally sterile clay, whereas to the north was a medium-brown silty clay containing gravel, charcoal, brick rubble, and what appeared to be furnace clinkers. Further, the wide temporal range of artifacts contained in the matrix gives ample evidence that this zone represents mixed fill, rather than a primary deposit.

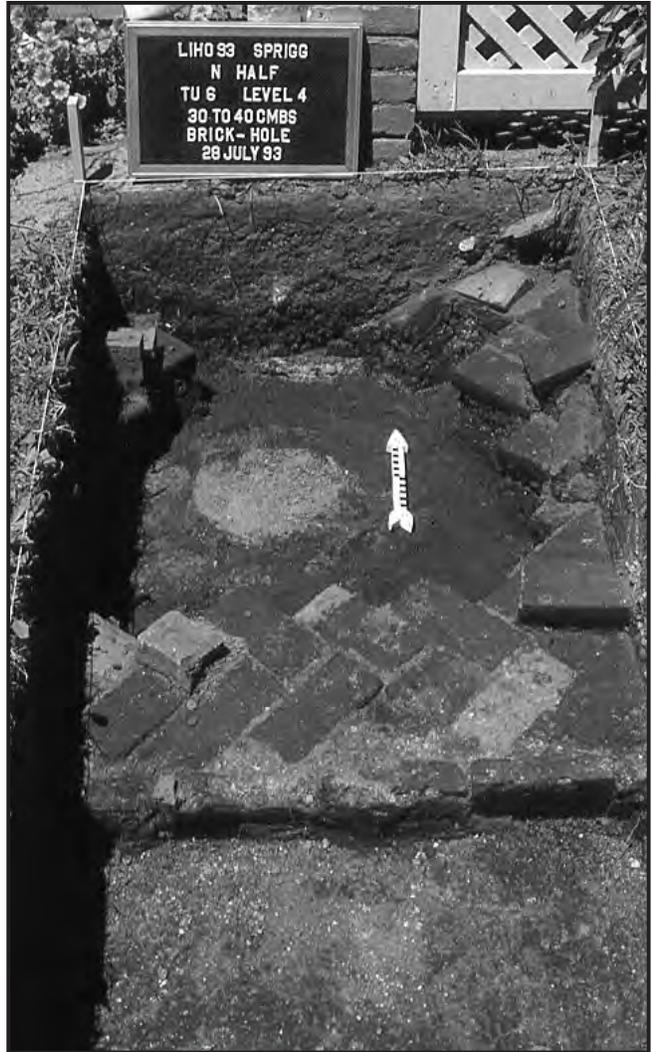
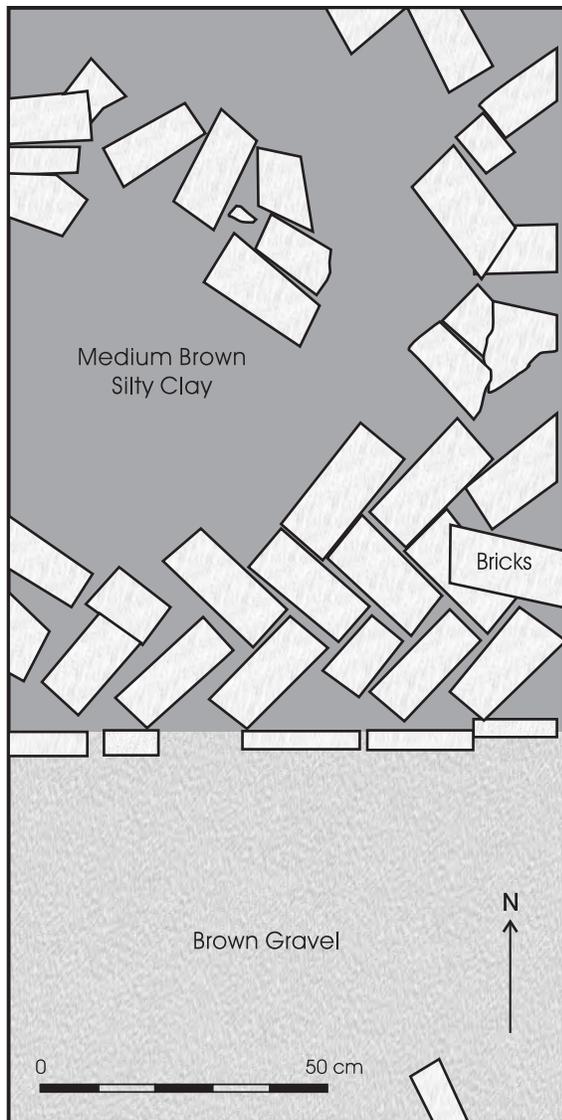


Figure 11. Brick walkway, Test Unit 93-6, Level 4, 30–40 cmbs.

In the third level (20–30 cmbs), the meaning of previous observations in the unit became much clearer. Most notable was the presence of brick pavers laid in a herringbone pattern across much of the northern 70 cm of the unit (Figure 11). The pavement was disrupted, however, apparently by one of the earlier holes dug by park maintenance personnel. At the apparent south edge of the pavement occurred a zone of gravel and debris believed to be fill, and at the southeast corner of the unit again appeared a continuation of the sterile yellowish-orange clay (Figure 12).

What would seem to be a migration southward of the soil zones is an effect of the manner in which deposits formerly sloped down with distance from the house. By excavating in horizontal levels the angling beds appear to move from north to south, when they are in fact dipping slightly downward. A simple inspection of either the east or west unit profiles belies the illusion that first meets the eye in plan (Figure 12, bottom).

Although partial evidence of a brick pavement would first appear at Level 3 (20–30 cmbs), the feature took on much greater definition in the course of excavating Level 4 (30–40 cmbs). Near the base of that level, three things became clear: (1) the brick pavers were originally laid in a herringbone pattern; (2) that pattern survived most clearly at the south edge of the pavement, with the remainder disrupted; and (3)

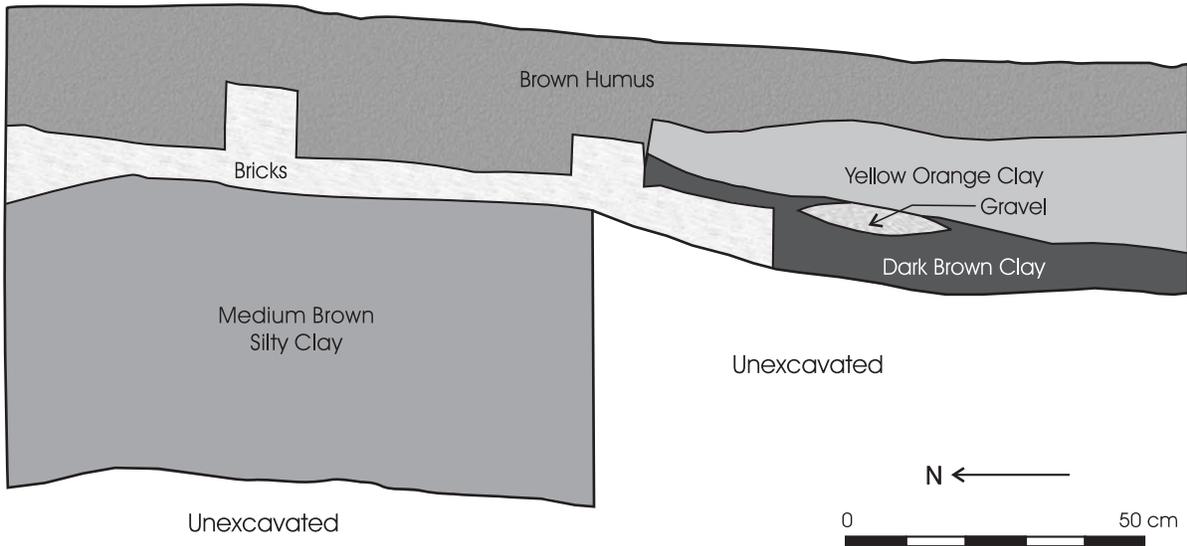


Figure 12. A view of the completed excavation of the brick walkway in Test Unit 93-6 and the east wall profile.

the pavement was bordered by bricks laid end-to-end on their sides. None of the bricks appeared to be impressed with any markings that would assist in assigning a date to the feature.

Excavators continued to take down the northern half of Test Unit 93-6 in order to investigate what was below the disrupted section of pavement. A small, sand-filled circular hole soon became apparent at the approximate center of the disruption (Figure 11, right). With a diameter of about 25 cm (10 in), it continued straight and true through Level 7 (60–70 cmbs), after which its limits became more irregular. Work ceased at 80 cmbs, since the fill at that depth had proved to be sterile of cultural materials.

The size, shape, general character, and placement of the filled hole suggest that a soil boring taken in recent years produced it. Although there is no indication in the approved Sprigg House Historic Structure Report (Fischer-Wisnosky Architects, Inc. 1995) that such engineering tests were performed about the structure, borings typically have been taken as part of the planning for similar restoration projects at Lin-

coln Home National Historic Site and elsewhere. Perhaps the borings were made prior to involvement of the architectural/engineering firm that produced the report, or it could be that the findings were not sufficiently remarkable.

Only one artifact stands out among those collected from Test Unit 93-6 (Table 10). In Level 5 the excavators found a white clay smoking-pipe fragment bearing the mark of Peter Dorni. Although interesting, such pipes, decorated with ribs and stars, were common throughout the latter part of the 19th century. Therefore, its presence at the Sprigg House adds little to the interpretation of this site.

Description of Pits A and B

Todd Ahlman

Test excavations in 1992 at the Sprigg House revealed two pit features in Test Unit 92-1, which was situated near a modern shed at the rear of the lot. Labeled “Pit A” and “Pit B” for convenient reference, the features were first clearly distinguished around 90 cmbs in the east profile of that test unit (Figure 9). Both proved to be basin-shaped, ovoid refuse pits. They were situated next to each other and overlapping; it was therefore difficult to differentiate the two features when they were initially encountered because of their proximity to each other and the similar soil types contained in both pits. Artifact counts for the two pits are listed in Table 11.

Pit A, Level 10, 90–100 cmbs

There were 7 ceramic sherds recovered from this level. This includes 2 stoneware sherds, 1 glazed redware sherd, 2 undecorated whiteware sherds, 2 two molded whiteware sherds. The two molded whiteware sherds mend and form a portion of a 9" plate. The pattern from this plate was identified as “True Scallop” (Wetherbee 1980:46). A temporal range could not be determined by the pattern, but it was possible to determine a temporal range by the maker’s mark on the plate. It is a transfer print mark consisting of / IRONSTONE CHINA / JAMES EDWARDS / under the royal coat-of-arms. James Edwards was an English potter, whose firm operated from 1842 to 1851 in Burslem, England (Godden 1964:230).

Of the glass artifacts, there are 13 flat glass sherds and 38 curved or bottle-glass sherds. The flat glass fragments are very thin, suggesting an older manufacturing date. Most of the curved glass is not diagnostic. There are 23 colorless, 3 aqua, and 3 amethyst-tinted sherds. One of the amethyst-tinted sherds is a medicine bottle base. It appears to be sand pontiled, but not enough of the base is present for positive identification. Among the curved glass are also 10 colorless chimney-glass sherds. At least 2 chimneys are represented by the sherds, one of which is an early free-blown type. It has an undecorated top, suggesting a date between 1856 and the 1870s (Woodhead et al. 1984:58–64).

Twenty-four bone fragments were recovered, of which 14 are burned and 3 are whole enough to permit at least partial identification. The latter include the right femur head from a bovine, a bird bone of undetermined species, and a large mammal rib, possibly from a bovine. In addition, 2 types of seeds were identified in this level, the more numerous being *Rubus* (Martin and Barkley 1973:107), possibly black raspberry (*Rubus occidentalis*). The other plant species represented is elderberry (*Sambucus canadensis*), as evident from comparative examination (Martin and Barkley 1973:116).

Metal artifacts recovered consist of 43 cut nail fragments, 2 tin pieces, and 1 iron ornamental object. The cut nails are highly oxidized and difficult to identify beyond general manufacturing technology. Other artifacts in this level include a slate pencil fragment and a four-holed, lead-glazed, brown stoneware button. These artifacts are not useful for dating purposes. An interesting fine-toothed comb fragment also was recovered from this level. It is predominantly white on the outside with a black interior. The construction material could not be identified. It might be made of hard rubber or other type of composite material. A small sample of the comb was burned to see if it would produce an odor to help in the identification of the material, but no odor was emitted.

Pit A, Level 11, 100–122 cmbs

There were 3 ceramic sherds recovered from this level of Pit A. A single burned stoneware sherd and 2 whiteware sherds were recovered. One whiteware sherd is from a multi-sided plate; the other whiteware sherd is from a molded 6½" bowl or syllabub bowl. The pattern attributed to this sherd is “President Shape.” James Edwards registered it in 1855 and 1856 (Wetherbee 1980:52).

The glass artifacts are quite numerous—90 sherds—and they offer some diagnostic attributes. There were 25 flat glass sherds recovered, most of which are very thin, suggesting an early manufacturing date. There were 2 colorless chimney glass sherds found, and the curved and bottle glass assemblage yielded

some interesting artifacts. The 44 colorless sherds include a few diagnostic artifacts. Among them is a bottle neck with a wide prescription finish that is ground on the inside for use with a glass stopper, as well as a pontiled bottle base and body. The pontil generally fell out of major use by the 1870s. At this time the snap case replaced it in the manufacturing of bottles. The snap case began to be used in the 1840s, with the 1870s as the general ending date for the use of the pontil (Jones and Sullivan 1985:45–46).

Two amethyst-tinted sherds were recovered, one of which is a molded vessel with an applied finish. The fact the vessel is molded suggests a date after the mid-19th century. Also recovered were 2 nondiagnostic aqua sherds, 1 nondiagnostic dark green sherd, and 2 melted glass sherds.

An interesting set of glass artifacts were 4 blue-green sherds from a “Gothic” or “Cathedral” six-sided pickle jar. Its incomplete height, to around the top of the molded design, is 9.5" (24 cm), and its base dimensions are 5" by 5.5" (11 cm x 12.5 cm). It was mold blown using a sand pontil. Several similar cathedral pickle jars were recovered from the steamboat *Bertrand* (Switzer 1974:51–58). The vessels found on the *Bertrand* were four-sided one-quart jars. The steamboat was built in 1864 and sank in the Missouri River in 1865. Wilson (1981:89) gives a date of 1851–1861 to a cathedral pickle jar from Fort Union, New Mexico, whereas Munsey (1970:152) gives a much later production date for cathedral jars as “about forty years — twenty on either side of the turn of the century.” Zumwalt (1980:452–458) illustrates several different cathedral jars. An early date of 1870s is given for some four-sided jars, with the motif following on six-sided jars later (Zumwalt 1980:455).

The metal artifacts recovered from this level of Pit A are not numerous. There were 26 cut nails, 2 wire fragments, 6 unidentified ferrous metal pieces, and 2 copper strip fragments. The ferrous metal pieces are highly oxidized and hard to identify.

Fourteen bone fragments were recovered in this level, 5 of which were small and burned. Most of the remaining bone was too small to identify. Two were identifiable and were from the genus *Rattus*, but the species of rat could not be determined.

Pit B, Level 10, 90–100 cmbs

Very few ceramic artifacts were recovered from this level. A lead-glazed stoneware sherd and an undecorated whiteware sherd were found. These sherds contain no diagnostic features.

The glass artifacts were few in number. Two flat glass sherds and 16 curved and bottle glass sherds were recovered from this level. Unlike Pit A, the flat glass is not very thin. The curved glass consisted of 2 dark green sherds, 4 aqua, and 10 colorless. These sherds offered no diagnostic features.

There were 10 bone fragments recovered from this level, of which 6 are burned. Four of the unburned bones were identified. These include 1 long-bone fragment from a medium mammal, 1 proximal right humerus from a Passeriformes, 1 sternum from a Charadriiformes (gull or shorebird) and 1 large mammal vertebra.

Cut nails dominate the metal recovered. There were 35 cut nail fragments found, all of which were highly oxidized. Also, there were 2 unidentified copper fragments recovered.

Pit B, Level 11, 100–150 cmbs

Of the 21 ceramic sherds recovered, 20 are whiteware. The other sherd is a salt-glazed redware sherd. Twelve of the whiteware sherds are undecorated, and one of them is from a multi-sided cup. Seven undecorated sherds define 3 multi-sided plates. A single sherd defines one of these plates; 4 sherds define the second plate, with 3 of the sherds mending; and 2 mended sherds define the third plate. This plate is probably 16-sided and measures 9.5" across. The impressed maker's mark reads / SEMI PORCELAIN. / S. ALCOCK AND CO. / HILL POTTERY. / BURSLEM. /. Samuel Alcock and Co. produced pottery at Hill Pottery in Burslem from approximately 1830 to 1859 (Godden 1964:28). Six molded sherds, with 5 mending, comprise a creamer or pitcher. The name of the pattern is “Gothic Shape,” which was registered by T. J. & J. Mayer in 1847 and by James Edwards, also in 1847, and was used through the 1850s (Weth-

erbe 1985:34–35). One whiteware sherd is sponge decorated, and the final whiteware sherd is a hand-painted sprigware.

The glass artifacts from this level of Pit B are sparse. Two pieces of flat glass and 7 curved and bottle glass comprise the glass artifacts. There are 4 nondiagnostic colorless sherds. Of the 3 aqua sherds, 1 is a lipping tool small mouth pickle jar finish.

The miscellaneous artifacts consist of a four-holed milk-glass button with a green decal pattern applied to it and 2 small pieces of slate. These slate fragments were most likely used for slate boards rather than as roofing tile.

A mortar sample was also recovered. The sample is defined as mortar following criteria used for defining mortar at Fort Larned, Kansas (Cockrell et al 1991:209–210). It contained poorly sorted sand and visible lime inclusions, and it was irregular in overall shape.

The faunal material from this level of Pit B consisted of 29 bone fragments and 1 shell fragment. Most of the bone is unidentifiable. The shell is of saltwater origin.

The metal recovered from this level is comprised mostly of cut nail fragments, of which there were 47 recovered. Like the rest of the ferrous metal from these two pits, these nails are highly oxidized. In addition, there is an iron lid, but the function of this lid is unknown. There is also a “winged” screw. The non-ferrous metal consists of 13 fragments of copper stripping and 1 unidentified copper fragment.

Summary

Pits A and B appear to have functioned as refuse pits, judging from their characteristic shape and size, their proximity to the alley, and the materials recovered from them. The bulk of the datable artifacts fall within the temporal span of ca. 1830 through the 1870s, except for the amethyst-tinted glass that was manufactured from the 1880s to the 1910s.

That anomaly might be explained in at least two ways. One explanation is that the features date from the 1880s, with the earlier artifacts still retained in use until that later time of deposition. Another explanation is that the amethyst-tinted sherds simply were deposited in the pits sometime later by intrusion. Indeed, the presence of a different soil type deposited over the main portion of Pit A is consistent with such an interpretation.

By attributing the amethyst-tinted sherds to a possible later, intrusive depositional episode, these features could be securely placed into a temporal period ranging from the 1860s to the early 1870s. However, should the hypothesis of later deposition for the amethyst-tinted glass not be correct, then a temporal span of the late 1870s to the 1880s would be more probable for these features.

Summary and Recommendations

The 1992 archeological investigations sought to address solely the question of whether unknown cultural resources were present on the property that might be affected by the proposed restoration undertaking. There was no perceived need at that time to examine areas where historical documents showed former structures or structural elements associated with the Sprigg House. Especially in view of our experience at house lots having similar conditions in the neighborhood, it seemed likely that physical remains of most things depicted on maps would survive in the ground. Accordingly, it would have been imprudent to spend the limited time and resources confirming the need for caution in those areas.

Instead, there was a conscious effort to explore areas of the property where evidence of other features not shown on any map might be present. For that reason, initial investigations concentrated on the rear portion of the lot, directly east of the existing modern outbuilding. Two things became abundantly clear soon after work began in that part of the backyard.

First, despite the obvious fact that there have been several intrusive utility lines laid through the rear quarter of the lot in modern times, largely intact cultural features still survive. This owes, in part, to the layer of fill that buffers the historic ground surface. Because of that 12- to 18-in-thick fill, a trench excavated down from today's ground surface perhaps would only scratch the former one. The fact that a privy and several refuse pits with relatively good integrity were encountered demonstrates that continued use of the property has not obliterated remains near the alley and suggests that similar features may also be present within the immediate environs. Despite that strong likelihood, however, having shown sufficient cause for caution during the restoration, it was not necessary to explore for other nearby deposits.

Second, from the standpoint of research, remains partly exposed in this quarter appear to be have considerable potential to contribute meaningfully to the archeological literature. Refuse pits and privies, because of their typical concentrations of artifacts, are famous for providing insights into past cultural processes. Whether features in this part of the yard have anything to contribute to the restoration is irrelevant to their potential significance as sources of information. Indeed, it is quite possible that materials derived from this context, viewed in the light of comparable finds made elsewhere, will prove to be far more important to general knowledge than anything directly related to the specific task of restoring the Sprigg House.

The 1993 excavations, on the other hand, sought specific information on former historic elements of the main house, and in this our efforts raised more questions than they answered. We found no archeological evidence clearly related to the mapped structural features formerly near or attached to the back of the Sprigg House. Accordingly, the small outbuilding and the room that once stood at the rear of the main house are still unknown with regard to their precise functions and periods of use. The failure of our rather thorough investigations to shed light on these matters is perhaps indicative of the thoroughness of demolition activities that removed the features.

Of minor consequence was the discovery of a corner porch pier probably laid up as support for the 1922/1924 two-story rear porch that was removed by park maintenance staff in 1986. The former existence of that structural feature, of course, was already known, and our investigations did not add anything more to that knowledge. We also examined the herringbone brick pavers that previously had been observed in the process of demolishing that porch and confirmed the former existence of two former ground surfaces.

Excavations near the back of the house did reveal a previously unknown foundation remnant, but it is not at all clear what that brick feature supported. The feature appeared much too substantial to have been merely the support for a porch. In addition, its position relative to the current rear elevation of the house does not seem consistent with any known form of the historic structure. Why the brick foundation should terminate abruptly where it does is also open to speculation.

In sum, results of the Sprigg House archeological investigations were mixed. Although the efforts in both years may be considered successful, in that the excavators accomplished all assigned tasks, information derived from the two summers of fieldwork differed markedly.

The 1992 season resulted in the acquisition of a considerable amount of new data on the location and integrity of previously unknown cultural features at the rear of the property. Indeed, the privy vault and two 19th-century trash pits partly exposed in the four back yard test units, although somewhat disturbed by more recent intrusions, proved to be in remarkably good condition. Furthermore, their presence suggests that others like them could be in the same general area.

The 1993 season, however, produced a less satisfying outcome. Excavations in that second year by turns confirmed what was already known, disclosed remains that could not be interpreted, or revealed that traces of certain historic structural elements do not survive.

References Cited

- Bearss, Edwin C.
1977 *Historic Resource Study and Historic Structure Report Historical Data, Blocks 6 and 11, Lincoln Home National Historic Site, Illinois*. National Park Service, Denver Service Center, Denver.
- Beck and Pauli
[1870] *Map of Springfield*. A.C. Geiseler, Milwaukee. Undated map repositied at Illinois State Historical Society, Springfield.
- Cockrell, Ron, Alan W. O'Bright, and Janis L. Dial
1991 *Historic Structure Report: Blockhouse (HS-10), Fort Larned National Historic Site, Pawnee County, Kansas*. U.S. Department of Interior, National Park Service, Omaha, Nebraska.
- Fike, Richard E.
1987 *The Bottle Book: A Comprehensive Guide to Historic, Embossed Medicine Bottles*. Gibbs M. Smith, Inc., Salt Lake City.
- Fischer-Wisnosky Architects, Inc.
1995 *Historic Structure Report: Julia Sprigg House (HS-11), Lincoln Home National Historic Site, Springfield, Illinois*. Submitted to the Office of Planning and Resource Preservation, National Park Service, Omaha, Nebraska.
- Godden, Geoffrey A.
1964 *Encyclopaedia of British Pottery and Porcelain Marks*. Crown Publishers, Inc. New York.
- Jones, Olive, and Catherine Sullivan
1985 *The Parks Canada Glass Glossary*. National Historic Parks and Sites Branch, Parks Canada, Environment Canada, Ottawa.
- Koch, Augustus
1873 *Bird's Eye View of Springfield, Illinois*. Map repositied at Illinois State Historical Library, Springfield.
- Lofstrom, Ted, Jeffrey P. Tordoff, and Douglas C. George.
1982 A Seriation of Historic Earthenwares in the Midwest, 1780–1870. *The Minnesota Archaeologist* 41(1):3–29.
- Martin, Alexander C., and William D. Barkley
1973 *Seed Identification Manual*. Reprint of 1961 edition. University of California Press, Berkeley.
- Munsey, Cecil
1970 *The Illustrated Guide to Collecting Bottles*. Hawthorn Books, Inc., New York.
- McManus, M.
1854 *City of Springfield, Sangamon County, Ills.* Hart and Mapother, New York. Map repositied at Illinois State Historical Library, Springfield.
- Noël Hume, Ivor
1976 *A Guide to Artifacts of Colonial America*. Fourth printing. Knopf, New York.
- Ruger, A.
1867 *Springfield, Illinois, Drawn from Nature by A. Ruger*. Chicago. Map repositied at Illinois State Historical Library, Springfield.

Sanborn Map & Publishing Co.

1884 *Springfield, Illinois*. Map repositied at the Illinois State Historical Library, Springfield.

1896 *Springfield, Illinois*. Map repositied at the Illinois State Historical Library, Springfield.

1917 *Springfield, Illinois*. Map repositied at the Illinois State Historical Library, Springfield.

1941 *Springfield, Illinois*. Map repositied at the Illinois State Historical Library, Springfield.

1952 *Springfield, Illinois*. Map repositied at the Illinois State Historical Library, Springfield.

Sides, William (Surveyor and Publisher)

1858 *City of Springfield, Sangamon County, Ills.* R.L. Barnes, Philadelphia. Map repositied at the Illinois State Historical Library, Springfield.

Switzer, Ronald R.

1974 *The Bertrand Bottles: A Study of the 19th-Century Glass and Ceramic Containers*. National Park Service Publications in Archeology No. 12. Washington, D.C.

Wetherbee, Jean

1980 *A Look at White Ironstone*. Wallace-Homestead, Des Moines, Iowa.

1985 *A Second Look at White Ironstone*. Wallace-Homestead, Des Moines, Iowa.

Wilson, Rex L.

1981 *Bottles on the Western Frontier*. The University of Arizona Press, in collaboration with Southwest Parks and Monuments Association, Tucson.

Woodhead, E.I., C. Sullivan, and G. Gusset

1984 *Lighting Devices in the National Reference Collection, Parks Canada*. Parks Canada, Ottawa.

Zumwalt, Betty

1980 *Ketchup, Pickles, Sauces: 19th Century Food in Glass*. Mark West Publishers, Fulton, California.

Table 1. Artifact frequencies by level, Test Unit 92-1.

Description	Level:	1	2	3	4	5a	5b	6	7a	7b	7c	7d	7e	8b	8c	8e	9c	10a	10b	Total
Whiteware		21	23	17	16	89	45	93	8	7	68	6	8	5	6	14	8	—	—	434
Porcelain		2	—	—	4	5	1	2	1	—	—	1	—	—	—	3	—	—	—	19
Yellowware		2	—	—	—	8	2	1	—	—	—	1	—	—	—	—	—	—	—	14
Stoneware		3	—	—	2	3	—	4	1	1	6	1	—	—	—	1	1	—	—	23
Redware		1	1	—	—	2	—	4	1	—	6	—	—	—	—	—	—	—	—	15
Porcelain doll tea service fragment		—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Ceramic insulator		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
Clay pipe fragment		1	—	—	—	—	—	1	—	—	1	—	—	—	—	—	1	—	—	4
Flat glass		3	10	10	45	9	4	17	6	5	16	4	—	1	9	4	3	1	—	147
Curved glass, colorless		18	17	13	31	7	8	15	5	8	12	—	1	2	11	9	4	1	—	162
Curved glass, aqua		2	2	2	6	3	1	9	—	1	11	1	—	—	1	—	—	—	—	39
Curved glass, amber		1	—	2	—	—	1	3	—	—	7	1	—	—	—	2	2	—	—	19
Curved glass, dark green		—	—	1	1	2	—	1	—	—	1	—	—	—	—	1	—	—	—	7
Curved glass, milk glass		—	1	—	—	1	—	2	—	—	—	—	—	—	—	—	—	—	—	4
Curved glass, green		—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Mirror glass		—	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	2
Melted glass		—	—	—	—	—	—	1	—	—	3	—	—	—	—	—	—	—	—	4
Marble		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
Glass bead		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
Buttons		1	—	2	1	—	—	4	1	—	3	—	—	—	1	1	—	—	—	14
Shell		—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Bone		3	4	9	17	10	4	16	10	3	29	4	—	3	2	7	4	—	—	125
Brick		4	1	4	—	6	3	3	—	2	2	—	—	—	1	—	—	—	—	26
Slag		—	4	2	—	—	—	—	3	—	6	—	—	—	2	—	—	—	—	17
Shingle		—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Mortar		—	2	—	—	—	2	—	—	—	2	—	—	—	1	—	—	—	—	7
Street lamp carbon		—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Copper thimble		—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1
.22-caliber shell casing		—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1
Light bulb fragments		—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3

Table 1. Concluded.

Description	Level:	1	2	3	4	5a	5b	6	7a	7b	7c	7d	7e	8b	8c	8e	9c	10a	10b	Total
Leather		—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Lead		—	3	2	1	—	—	1	1	1	2	—	—	—	4	—	1	—	—	16
Copper		—	1	—	1	—	2	2	—	1	1	—	—	—	2	—	—	—	—	10
Cut nails		4	12	25	14	15	10	40	12	6	66	4	—	8	20	5	35	7	3	286
Wire nails		2	6	5	2	—	—	—	—	—	—	—	—	1	—	—	—	—	—	16
Roofing nails		14	4	5	1	—	3	—	—	1	—	—	—	—	—	—	1	—	—	29
Finishing nails		—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Tin		—	3	2	5	—	—	4	4	2	11	1	—	—	8	—	—	—	—	40
Miscellaneous metal		1	3	4	1	1	2	—	1	—	2	—	—	—	—	—	1	—	1	17
Total		83	102	108	148	161	90	226	54	39	255	24	9	20	69	47	64	9	4	1,512

Level Key: 5a = yellow mottled brown clay; 5b = trench fill/dark-brown fill; 7a = general fill; 7b = trench fill under pipes; 7c = charcoal area, possible trash fill; 7d = trash pit area; 7e brown yellow mottled clay; 8b = conduit trench fill; 8c trash pit; 8c = medium-brown clay with yellow mottling; 9c = pit; 10a = tan silt, medium-brown clay; 10b = gray-brown clay.

Table 2. Artifact frequencies by level, Test Unit 92-2.

Description	Level:	1	2	3	4	5a	5b	6	7	8a	8b	9a	9b	9c	10	11a	11b	12a	12b	13	14	15	Total
Whiteware		2	10	24	15	24	—	46	20	5	1	—	3	6	2	4	—	2	—	—	—	—	164
Porcelain		1	4	1	6	1	—	1	4	—	—	—	—	—	—	—	—	—	—	—	—	—	18
Yellowware		—	—	—	2	14	—	8	15	1	—	—	—	1	1	4	—	—	—	—	1	—	47
Stoneware		—	—	—	3	3	—	7	11	5	—	—	—	1	—	—	—	6	—	1	—	—	37
Redware		—	—	—	1	—	—	2	3	—	—	—	—	—	—	2	—	4	—	—	—	—	12
Clay pipe fragment		—	—	—	—	1	—	1	4	—	—	—	—	—	1	—	—	—	1	—	—	—	8
Flat glass		6	18	23	10	20	1	29	22	1	1	1	—	1	—	4	3	—	3	—	—	—	143
Curved glass, colorless		5	20	52	31	48	2	50	26	3	—	—	5	—	1	—	—	—	—	—	1	—	244
Curved glass, aqua		—	2	9	7	10	—	3	6	3	—	—	3	—	—	—	—	1	—	—	1	—	45
Curved glass, amber		—	1	—	2	2	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	6
Curved glass, amethyst		—	—	—	4	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	5
Curved glass, green		1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Curved glass, milk glass		—	—	1	3	1	—	3	—	—	—	—	—	1	—	—	—	—	—	—	—	—	9
Curved glass, dark green		—	—	—	—	11	—	27	2	—	—	—	1	1	1	—	—	—	—	—	—	—	43
Curved glass, red		—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Curved glass, blue		—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Mirror glass		—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Melted glass		—	—	—	—	2	—	2	—	—	—	—	—	—	1	—	—	—	—	—	—	—	5
Milk glass bead		—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Glass insulator		—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Glass individual salt		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Buttons		—	4	5	—	4	—	2	—	1	—	—	—	—	—	1	—	—	—	1	1	1	20
Bone		—	5	2	3	11	—	13	32	11	—	10	1	9	34	12	1	2	5	1	—	—	152
Brick		2	—	1	1	—	—	1	—	—	—	—	1	—	—	—	1	—	2	—	—	—	9
Coins		1	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Slate pencil fragment		—	—	—	—	—	—	1	—	—	—	—	1	—	—	1	—	—	—	—	—	—	3
Mortar/plaster		—	—	1	—	—	—	—	2	—	—	—	—	4	—	—	1	—	1	—	—	—	9
Slag		—	—	—	2	—	9	4	—	—	—	—	—	—	—	1	—	—	—	—	—	—	16
Jewelry		—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1

Table 2. Concluded.

Description	Level:	1	2	3	4	5a	5b	6	7	8a	8b	9a	9b	9c	10	11a	11b	12a	12b	13	14	15	Total
Marble		—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Doorknob		—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Plastic duck toy		—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Slate		—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Copper		—	2	4	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13
Lead		—	—	1	1	1	—	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	6
Brass		—	1	1	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4
Cut nails		4	12	13	30	17	4	30	18	—	—	1	3	12	3	7	2	—	—	1	—	—	157
Wire nails		4	19	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	43
Roofing nails		—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—	—	—	3
Tin		—	2	—	7	40	1	—	6	1	—	—	—	—	—	—	—	2	—	—	—	—	59
Miscellaneous metal		—	3	1	1	1	—	4	—	3	—	2	—	—	—	—	—	—	3	—	—	—	18
Total		26	106	166	139	214	17	237	177	34	2	14	19	36	44	36	8	18	15	4	5	1	1,318

Level Key: 5a = general fill; 5b = dark-brown clay, slag, ash; 8a = general fill; 8b = trench fill; 9a = dark-brown clay; 9b = clay tile trench fill; 9c = yellow-brown mottled clay; 10 = pit fill; 11a = light-brown clay with charcoal (pit); 11b = yellow-brown clay; 12a = light-brown clay (pit); 12b = yellow-brown mottled clay; 13 = privy; 14 = wall scrapings; 15 = no vertical provenience.

Table 3. Artifact frequencies by level, Test Unit 92-3.

Description	Level:	1	2a	2b	3a	3b	4a	4b	4c	4d	5a	5b	6a	6b	7	8a	8b	8c	8d	10	Total
Whiteware		14	6	7	9	10	1	1	4	2	29	6	55	1	73	4	2	19	22	4	269
Porcelain		2	—	3	—	—	—	—	—	—	—	2	1	—	3	—	—	1	2	—	14
Yellowware		—	—	—	—	—	—	—	—	—	1	—	1	—	6	—	—	1	—	—	9
Stoneware		—	3	—	1	—	—	—	3	—	2	2	1	2	1	—	—	5	—	—	20
Redware		—	—	2	—	—	1	—	—	—	4	—	1	—	—	—	—	4	3	—	15
Earthenware		—	—	—	—	1	—	—	—	—	2	—	—	—	—	1	—	—	1	1	6
Porcelain figurine fragment		—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Clay pipe fragments		—	1	—	—	—	—	—	—	—	—	—	1	—	3	—	—	—	—	—	5
Ceramic insulator fragment		—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Flat glass		6	3	5	5	7	8	5	7	1	22	2	7	2	7	—	—	10	13	2	112
Curved glass, colorless		9	9	21	4	22	7	32	10	10	35	4	16	1	14	—	—	9	5	—	208
Curved glass, aqua		—	—	5	2	25	1	4	1	—	9	2	1	—	2	—	—	6	7	1	66
Curved glass, amber		2	—	5	—	1	—	2	—	—	—	1	—	—	—	—	—	—	—	—	11
Curved glass, dark green		1	2	1	—	3	2	—	—	—	2	—	1	—	5	1	—	5	1	—	24
Curved glass, milk glass		3	1	—	1	2	—	—	—	—	1	—	—	—	—	—	—	—	—	—	8
Curved glass, purple		—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Curved glass, amethyst tint		—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Curved glass, cobalt blue		—	—	—	—	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	2
Curved glass, green		—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Mirror glass		—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	1	—	3
Bottle		—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Opal jar lid insert		—	—	—	—	1	—	—	—	—	1	—	1	—	—	—	—	—	—	—	3
Glass bead		—	—	—	—	2	1	1	—	—	—	—	—	—	—	—	—	—	—	—	4
“Lightning” fruit jar closure		—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Melted glass		—	—	—	—	—	—	—	1	—	—	—	—	—	3	—	—	1	—	—	5
Buttons		1	—	2	2	3	1	1	—	—	—	1	—	—	5	—	—	4	—	—	20
Bone		13	5	7	—	6	2	—	4	—	22	3	3	—	14	2	—	17	12	5	115
Shell		—	—	—	—	—	—	—	—	—	6	—	—	2	3	—	—	—	—	—	11

Table 3. Concluded.

Description	Level:	1	2a	2b	3a	3b	4a	4b	4c	4d	5a	5b	6a	6b	7	8a	8b	8c	8d	10	Total
Brick		4	1	—	1	1	1	—	2	—	3	1	—	—	—	1	—	—	—	—	15
Shingle fragments		1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Concrete		2	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4
Wood		—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1
Plaster		—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Clothing hardware		—	—	—	—	1	—	1	—	—	1	—	—	—	—	—	—	1	—	—	4
Pen nib		—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Coins		1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Brass key hole plate		—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Plastic screw-on cap		—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Mortar		—	—	—	—	2	—	—	—	—	1	—	—	—	—	—	—	—	—	—	3
Slate pencil fragment		—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	2
Slag		—	—	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—	3
Zinc lid fragments		—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	2
Slate		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2
Brass		—	—	—	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	2
Pewter		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
Cut nails		8	4	15	10	29	3	4	9	11	18	3	9	—	18	1	—	28	3	1	174
Wire nails		1	3	7	1	12	—	6	1	—	—	1	—	—	1	—	—	—	—	—	33
Roofing nails		1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	2
Tin		—	—	—	1	9	—	—	—	—	9	—	1	—	—	—	—	—	—	—	20
Miscellaneous metal		5	3	—	2	3	1	3	—	1	2	1	—	—	—	—	—	—	—	—	21
Total		74	41	86	39	148	29	62	44	25	174	31	100	8	162	10	2	114	72	14	1,235

Level Key: 2a = trench fill; 2b = general fill; 3a = trench fill; 3b = general fill; 4a = medium-brown clay; 4b = light-brown clay; 4c = trench fill; 4d = dark-brown clay and light-brown sand; 5a = medium-brown clay; 6b = trench fill; 8a = dark-brown clay; 8b = trench fill; 8c = brown/yellow-brown clay; 8d = medium-brown clay.

Table 4. Artifact frequencies by level, Test Unit 92-4.

Description	Level:	1	2	3a	3b	4a	4b	4c	5a	5b	5c	6a	6b	6c	6d	7b	7c	7d	8b	8c	8f	9b	9c	9e	9f	Total
Whiteware		4	4	4	4	1	1	—	8	1	4	—	4	—	12	—	14	7	7	1	1	4	1	—	4	86
Porcelain		—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Yellowware		—	—	—	2	—	—	1	—	2	—	—	2	—	1	—	—	—	—	—	—	1	—	—	—	9
Stoneware		—	1	—	—	—	1	—	—	2	—	—	3	—	—	—	—	1	3	8	—	—	—	—	—	19
Redware		2	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	4	—	—	—	1	—	—	—	9
Earthenware		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	2
Porcelain figurine fragment		—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Porcelain doll fragment		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Clay pipe fragment		—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	—	2
Ceramic insulator frags.		—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1
Flat glass		10	10	14	4	12	8	1	2	2	1	—	6	1	5	—	2	4	3	5	1	8	—	1	1	101
Curved glass, colorless		10	22	7	5	1	10	3	6	2	3	1	5	—	4	—	4	3	4	—	2	3	—	—	1	96
Curved glass, aqua		4	9	3	3	1	2	2	2	1	1	—	3	—	9	—	—	7	5	—	—	3	—	1	3	59
Curved glass, amber		2	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Curved glass, dark green		—	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	2
Curved glass, milk glass		—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—	1	—	—	—	—	4
Curved glass, blue		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Melted glass		—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	4
Opal jar lid insert fragments		—	—	11	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12
Buttons		1	1	—	—	1	—	—	—	—	—	—	3	—	—	—	3	2	1	1	—	1	—	—	—	14
Glass bead		—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Bone		2	4	1	3	—	1	—	—	10	3	—	9	—	4	—	4	—	5	13	1	6	—	—	4	70
Brick		5	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8
Concrete		—	1	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4
Slag		2	—	—	—	—	—	—	1	—	—	1	—	1	1	—	—	1	—	2	—	—	—	—	—	9
Mortar		—	—	—	—	—	—	3	—	—	1	—	2	—	—	—	—	—	—	—	—	—	—	—	—	6
Plaster		1	—	1	1	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	5
Slate pencil fragments		1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Shingle fragments		16	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	27

Table 4. Concluded.

Description	Level:	1	2	3a	3b	4a	4b	4c	5a	5b	5c	6a	6b	6c	6d	7b	7c	7d	8b	8c	8f	9b	9c	9e	9f	Total
Coins		—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Clothing hardware		1	2	—	1	—	—	—	—	—	—	—	—	—	—	1	—	2	—	—	—	—	—	—	—	7
Zinc jar lid fragments		—	1	10	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12
Spark plug		—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Hard rubber comb frags.		—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Plastic screw-on cap		—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
.32-caliber shell casing		—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Foil		—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Cellophane		—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Graphite pencil lead		—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Carbon rod from street lamp		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1
Brass thimble		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
Copper		—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	2
Brass		2	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	3
Lead		3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Other non-ferrous metal		—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Cut nails		8	15	20	3	5	13	2	7	5	—	—	8	—	8	—	7	29	7	15	2	8	2	4	3	171
Wire nails		4	22	2	3	—	—	—	—	—	—	—	2	—	—	—	1	—	—	—	—	—	—	—	—	34
Roofing nails		26	2	—	—	1	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	31
Tin		1	1	—	—	8	—	—	—	1	—	—	—	—	—	—	—	9	—	—	—	—	—	—	—	20
Miscellaneous metal		2	5	3	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	13
Total		107	120	83	30	34	41	15	27	28	15	2	51	2	50	1	35	75	35	45	8	39	4	6	16	869

Level Key: 3a = general fill; 3b = brown/yellow clay fill; 4a = slag; 4b = yellow-brown mottled clay; 4c = trench fill; 5a = slag; 5b = yellow-brown mottled clay; 5c = trench fill; 6a = slag; 6b = brown yellow mottled clay; 6c = trench fill; 6d = brown clay; 7b = yellow-brown mottled clay; 7c = trench fill; 7d = medium-brown clay; 8b = yellow-brown mottled clay; 8e = medium-brown clay; 9b = yellow-brown mottled clay; 9c = trench fill; 9e = medium-brown clay; 9f = dark-brown clay.

Table 5. Artifact frequencies by level, Test Unit 93-1.

Description	Level:	1	2	3	4	5	6	Total
Whiteware								
Plain		4	10	8	11	8	18	59
Luster decorated		—	—	—	—	1	—	1
Transfer print, blue		—	—	—	1	1	4	6
Transfer print, mulberry		—	—	—	—	—	1	1
Annular decorated		—	—	—	—	—	1	1
Painted overglaze		—	1	—	—	—	—	1
Unidentified		—	2	—	—	—	—	2
Pearlware		—	—	—	—	1	—	1
Ironstone		—	2	—	—	—	—	2
Basaltware		—	—	2	—	—	—	2
Yellowware		—	1	—	—	—	—	1
Rockingham glaze		—	1	—	—	—	—	1
Redware, unglazed		3	6	1	—	—	—	10
Redware, lead glaze		—	—	—	—	—	1	1
Porcelain		—	—	—	1	—	—	1
Stoneware, salt-glazed		—	1	1	—	—	—	2
Stoneware, Albany		—	—	—	—	1	—	1
Tile, hexagonal blue		—	—	1	—	—	—	1
Pipe bowl, white clay		—	—	—	—	—	1	1
Flat glass, clear		2	8	14	10	13	7	54
Curved glass, clear		2	34	2	19	4	9	70
Curved glass, clear, embossed		—	—	—	1	—	—	1
Curved glass, solarized clear		—	2	4	—	—	2	8
Curved glass, amber		—	3	1	4	—	2	10
Curved glass, milkglass		—	1	—	—	1	—	2
Pressed glass		—	1	—	—	—	—	1
Glass tumbler rim		—	1	1	—	—	—	2
Glass marble fragments		—	2	—	—	—	—	2
Clay marble		—	—	1	—	—	—	1
Button, shell (lug shank)		1	—	—	—	—	—	1
Button, shell, two-hole		—	1	—	—	—	—	1
Button, milkglass		—	—	—	—	1	—	1
.45-caliber cartridge		1	—	—	—	—	—	1
Cut nails		2	14	—	8	12	21	57
Wire nails, common		1	—	18	—	—	—	19
Screw/bolt shank		—	1	—	—	—	—	1
Pintle hinge (?)		—	—	—	—	—	1	1
Scissors blade		—	—	—	—	—	1	1
Wire, multistrand insulated		—	—	1	1	—	—	2
Mesh screen		—	—	5	—	—	—	5
Unidentified iron		1	—	2	3	—	1	7
White metal cap		—	1	—	—	—	—	1

Table 5. Concluded.

Description	Level:	1	2	3	4	5	6	Total
Cuprous metal rod		—	1	—	—	—	—	1
Clock part (?)		—	1	—	—	—	—	1
Percussion cap		—	—	1	—	—	—	1
Rubber ball fragment		—	1	1	—	—	—	2
Unidentified rubber		—	1	—	—	—	—	1
Plastic tube cap		1	—	—	—	—	—	1
Plastic lavender vessel fragment		1	2	—	1	—	—	4
Clear plastic strap slide		1	—	—	—	—	—	1
Unidentified yellow plastic		—	3	—	—	—	—	3
Unidentified burned plastic		—	—	1	—	—	—	1
Composite shingle fragment		—	4	23	—	—	—	27
Slate		—	—	—	3	—	—	3
Brick rubble		1	2	1	—	—	1	5
Bone, animal		—	17	10	13	4	12	47
Bone, animal, butchered		—	—	8	6	3	1	18
Shell, mollusk		—	—	1	—	—	—	1
Coal cinders, in grams		—	—	7	—	—	—	7
Clinker		—	—	—	—	—	3	3
Totals		21	125	108	82	50	84	470

Note: totals do not include weights.

Table 6. Artifact frequencies by level, Test Unit 93-2.

Description	Level:	1	2	3	4	5	6	7	Total
Whiteware									
Plain		—	1	3	9	15	23	1	52
Flow blue		—	—	—	1	—	1	—	2
Transfer print, brown		—	—	—	—	—	5	1	6
Transfer print, blue		—	—	—	—	—	8	—	8
Painted, blue		—	—	1	—	—	—	—	1
Pearlware		—	—	—	—	—	2	—	2
Rockingham		—	—	—	1	—	—	—	1
Brown, lead-glazed		—	—	—	—	—	2	1	3
Redware, unglazed		—	—	1	1	—	—	—	2
Porcelain		—	1	—	—	—	—	—	1
Stoneware, Albany		—	—	3	—	—	—	—	3
Flat glass, clear		16	5	2	15	1	26	4	69
Flat glass, mirror		1	3	—	—	—	—	—	4
Flat glass, blue coating		—	—	—	4	—	—	—	4
Curved glass, clear		4	8	20	10	10	69	2	123
Curved glass, clear, embossed		2	—	1	—	—	—	—	3
Curved glass, clear, threaded jar lip		—	—	1	—	—	—	—	1
Curved glass, solarized clear		—	—	—	—	1	7	—	8
Curved glass, amber		—	1	2	—	—	5	—	8
Curved glass, milkglass		1	—	—	—	—	—	—	1
Lid liner, milkglass		—	1	—	—	—	—	—	1
Button, shell, four-hole		—	1	—	1	—	—	—	2
Button, milkglass		—	—	—	1	—	—	—	1
Button, hard rubber		—	—	—	—	1	—	—	1
Nails, cut		14	11	6	11	50	16	5	113
Nails, wire, common		8	14	1	—	—	—	—	23
Nails, wire, galvanized roof		1	1	—	—	—	—	—	2
Nails, wire, finishing		1	—	—	—	—	—	—	1
Screw, wood		1	—	—	—	—	—	—	1
Screw, machine		1	—	—	—	—	—	—	1
Iron file, triangular		—	—	—	—	1	—	—	1
Penny, 1962 D		1	—	—	—	—	—	—	1
Cuprous metal roof disc		—	—	—	1	—	—	—	1
Cuprous metal scrap		—	—	—	—	1	—	—	1
Disc, iron		1	—	—	—	—	—	—	1
Unidentified iron		1	—	—	1	1	—	—	3
Pin, white metal		1	—	—	—	—	—	—	1
Faucet washer, rubber		1	—	—	—	—	—	—	1
Composite shingle fragment		—	3	—	—	—	—	—	3
Slate pencil (?)		1	—	—	2	—	—	—	3
Brick rubble		—	5	—	—	—	1	—	6
Mortar		—	5	—	1	—	1	—	7
Bone, animal		1	2	—	11	10	6	—	30
Bone, animal, butchered		—	—	—	5	11	—	—	16
Tooth, animal		—	—	—	—	1	—	—	1
Totals		57	62	41	75	103	172	14	524

Table 7. Artifact frequencies by level, Test Unit 93-3.

Description	Level:	1	2	3	4	5	6	7	8	Total
Whiteware										
Plain		2	9	4	3	1	3	2	3	27
Transfer print, blue		—	—	—	3	1	—	—	—	4
Annular decorated		—	—	—	—	—	—	1	—	1
Unidentified		—	—	—	—	—	—	1	—	1
Yellowware										
		—	1	—	—	—	—	—	—	1
Pearlware										
		—	—	—	—	—	—	—	1	1
Redware, unglazed										
		—	—	—	1	1	1	—	—	3
Redware, lead glazed										
		—	—	—	—	—	1	1	—	2
Porcelain, gilt overglaze										
		—	—	—	2	—	—	—	—	2
Porecelain, molded										
		—	—	—	—	—	1	—	—	1
Stoneware, salt-glazed										
		1	—	—	—	—	—	—	—	1
Stoneware, Albany										
		1	—	—	—	—	2	1	—	4
Flat glass, clear										
		7	2	—	5	1	2	—	—	17
Curved glass, clear										
		2	6	1	5	8	4	5	4	35
Curved glass, solarized clear										
		—	1	—	—	—	—	—	—	1
Curved glass, green										
		—	—	—	—	—	1	—	1	2
Curved glass, amber										
		—	—	—	—	1	—	1	—	2
Curved glass, milkglass										
		—	—	—	4	—	—	—	—	4
Nails, cut										
		1	—	1	5	11	11	4	5	38
Nails, wire, galvanized roof										
		1	—	—	—	—	—	—	—	1
Nails, unidentified										
		—	1	—	—	—	—	—	—	1
Pull-tab										
		1	—	—	—	—	—	—	—	1
Marble, glazed ceramic										
		1	—	—	—	—	—	—	—	1
Buckle, iron										
		—	—	—	1	—	—	—	—	1
Unidentified iron										
		—	1	—	—	—	—	4	—	5
Vent prick, white metal										
		—	—	—	1	—	—	—	—	1
Ointment tube										
		—	—	—	1	—	—	—	—	1
Brick rubble										
		—	1	—	—	—	1	1	1	4
Plastic, yellow sheet										
		4	—	—	—	—	—	—	—	4
Styrofoam										
		1	—	—	—	—	—	—	—	1
Mortar										
		1	—	—	—	—	—	—	—	1
Bone, animal										
		—	—	—	9	4	—	4	4	21
Bone, animal, butchered										
		—	—	—	1	2	3	1	1	8
Charcoal, in grams										
		—	—	—	neg.	—	—	—	10	10
Cinder, in grams										
		—	—	—	—	—	—	4.5	—	4.5
Totals		23	22	6	41	30	30	26	20	198

Notes: neg. = negligible; totals do not include weights.

Table 8. Artifact frequencies by level, Test Unit 93-4.

Description	Level:	1	2	3	4	5	6	Total
Whiteware								
Plain		2	—	4	—	4	38	48
Flow blue		—	—	—	—	7	—	7
Transfer print, blue		—	—	—	—	—	4	4
Transfer print, brown		—	—	—	—	—	5	5
Annular decorated		—	—	—	—	—	4	4
Rockingham		—	—	—	—	—	1	1
Pearlware		—	—	—	—	—	3	3
Redware, lead-glazed		—	—	—	—	—	3	3
Redware, slip-decorated		—	—	—	—	—	1	1
Stoneware, salt-glazed		—	—	—	—	—	2	2
Flat glass, clear		—	6	5	7	6	50	74
Curved glass, clear		2	1	15	9	8	15	50
Curved glass, clear, embossed		—	—	1	1	1	—	3
Curved glass, clear, threaded jar		—	—	1	—	—	—	1
Curved glass, solarized clear		—	—	—	—	—	6	6
Curved glass, amber		1	—	1	—	1	6	9
Curved glass, milkglass		—	—	—	—	1	—	1
Nails, cut		—	—	7	17	10	27	61
Nails, wire, common		8	—	—	—	—	—	8
Nails, unidentified		—	3	—	—	—	—	3
Chain, ball-link		—	1	—	—	—	—	1
Gimlet bit		—	—	—	1	—	—	1
Iron, unidentified		—	—	—	1	—	—	1
File fragment (?)		—	—	1	—	—	—	1
Buttplate, iron		—	—	1	—	—	—	1
Hardware, cuprous		—	—	—	—	—	1	1
Unidentified white metal		—	—	—	—	—	1	1
Comb, hard-rubber		—	—	2	—	—	—	2
Button, hard-rubber		—	—	1	—	—	—	1
Button, milkglass		—	—	—	1	1	—	2
Button, shell, four-hole		—	—	1	—	2	—	3
Bottle cap, crown		—	1	—	—	—	—	1
Lid, jar		—	1	—	—	—	—	1
Composite shingle		1	—	—	—	—	—	1
Paint flake		1	—	—	—	—	—	1
Brick rubble		—	—	1	—	1	1	3
Plastic, faux horn		1	—	—	—	—	—	1
Mortar		—	—	1	—	—	—	1
Bone, animal		—	1	17	15	1	21	55
Bone, animal, butchered		—	—	6	7	1	2	16
Totals		16	14	65	59	44	191	389

Table 9. Artifact frequencies by level, Test Unit 93-5.

Description	Level:	1	2	3	4	5	6	Total
Whiteware								
Plain		1	—	2	2	3	8	16
Shell-edge, blue		—	—	—	1	—	—	1
Transfer print, mulberry		—	—	—	—	—	5	5
Transfer print, brown		—	—	—	1	—	1	2
Annular decorated		—	—	—	1	—	—	1
Earthenware, unglazed		—	—	—	1	—	—	1
Yellowware, slip		—	—	—	—	1	—	1
Basaltware		—	—	—	—	—	1	1
Redware, lead-glazed		—	—	—	—	—	6	6
Stoneware, Albany		—	—	—	—	1	—	1
Porcelain		—	—	—	—	—	1	1
Drain tile		—	—	—	—	—	7	7
Flat glass, clear		4	2	1	1	4	10	22
Curved glass, clear		2	4	5	1	5	53	70
Curved glass, clear, embossed		—	—	—	—	—	3	3
Curved glass, clear, dish		—	1	—	—	—	—	1
Curved glass, solarized clear		—	—	—	—	1	7	8
Curved glass, green		—	1	—	—	1	—	2
Medicine bottle, whole		—	—	1	—	—	—	1
Nails, cut		—	5	1	1	12	40	59
Nails, wire, common		3	—	—	—	—	—	3
Iron strap, perforated		—	—	—	1	—	—	1
Unidentified iron		—	—	—	—	1	3	4
Bottle cap, crown		—	—	—	1	—	—	1
Button, glass, four-hole		—	—	—	1	—	—	1
Button, shell, two-hole		—	—	2	—	—	—	2
Button, brass, three-piece		—	—	—	—	—	1	1
Composite shingle		1	—	—	—	—	—	1
Brick rubble		2	—	1	1	—	—	4
Mortar		—	—	1	1	—	—	2
Bone, animal		1	4	5	31	2	17	60
Bone, animal, butchered		—	—	—	3	—	—	3
Shell, mollusk		—	—	—	—	1	—	1
Clinker		—	—	—	1	—	—	1
Totals		14	17	19	49	32	163	294

Table 10. Artifact frequencies by level, Test Unit 93-6.

Description	Level:	1	2	3	4	5	6	7	8	Total
Whiteware										
Plain		2	4	1	6	9	7	—	—	29
Shell-edge, blue		—	—	—	—	—	—	—	1	1
Transfer print, black		—	—	—	1	—	—	—	—	1
Transfer print, blue		—	—	—	—	—	5	—	—	5
Transfer print, brown		—	—	—	—	1	—	—	—	1
Sponge decorated, blue		1	—	—	—	—	—	—	—	1
Pearlware, blue shell		—	—	—	—	—	—	—	1	1
Earthenware, brown slip		—	1	—	—	—	—	—	—	1
Earthenware, lead-glazed		—	—	—	1	—	—	—	—	1
Redware, unglazed		—	1	—	1	—	—	—	—	2
Porcelain figurine fragment		1	—	—	—	—	—	—	—	1
Porcelain		—	—	—	—	—	1	—	—	1
Porcelain, bisque		—	—	—	1	—	—	—	—	1
Drain tile		—	1	—	1	—	—	—	—	2
Pipestem, white clay		—	—	—	—	2	—	—	—	2
Flat glass, clear		13	11	5	1	37	13	1	1	82
Curved glass, clear		1	7	6	1	25	34	4	—	78
Curved glass, clear, dish		—	—	—	—	1	—	—	—	1
Curved glass, solarized clear		—	2	—	—	—	1	—	—	3
Curved glass, amber		—	—	—	1	2	1	—	—	4
Nails										
Cut		4	12	4	8	19	2	1	1	51
Wire, common		8	8	3	—	—	—	—	—	19
Wire, roofing		7	—	3	—	—	—	—	—	10
Unidentified iron		—	—	—	—	5	—	—	—	5
Wire mesh		—	—	1	—	—	—	—	—	1
Lead splatter		1	—	—	—	—	—	—	—	1
Hex nut		1	—	—	—	—	—	—	—	1
Carriage bolt		1	—	—	—	—	—	—	—	1
File, triangular		—	—	—	1	—	—	—	—	1
Unidentified metal fitting		1	—	—	—	—	—	1	—	1
Unidentified iron tube		—	—	1	—	—	—	—	—	1
Metal scrap		—	1	—	—	—	—	—	—	1
Washer, white metal		1	—	—	—	1	—	—	—	2
Wire, plastic insulated		—	—	1	—	—	—	—	—	1
Marble, blue clay		—	—	—	1	—	—	—	—	1
Button, milkglass, four-hole		—	—	—	—	1	1	—	—	2
Button, glass (metal shank)		—	—	—	—	1	—	—	—	1
Button, bone, four-hole		—	—	—	—	—	1	—	—	1
Comb tooth, hard-rubber		—	1	—	—	—	—	—	—	1
Comb fragment, hard-rubber		—	—	—	—	1	—	—	—	1
Composite shingle		1	5	—	—	—	—	—	—	6
Rubber band fragment		1	—	—	—	—	—	—	—	1

Table 10. Concluded.

Description	Level:	1	2	3	4	5	6	7	8	Total
Brick rubble		3	1	—	1	—	—	—	3	8
Slate		—	—	—	—	—	1	—	—	1
Concrete		2	—	1	—	—	—	—	—	3
Board, beaded		—	—	1	—	—	—	—	—	1
Plastic, unidentified		1	—	—	—	—	—	—	1	2
Noise-maker bit, plastic		—	1	—	—	—	—	—	—	1
Wire insulation, plastic		—	2	—	—	—	—	—	—	2
Label, yellow plastic		—	1	—	—	—	—	—	—	1
Paint chip, gray-blue		4	3	—	—	—	—	—	—	7
Mortar		—	1	—	—	—	—	2	—	3
Bone, animal		—	7	4	5	7	12	1	—	36
Bone, animal, butchered		1	—	—	1	1	—	—	—	3
Bone, worked		—	—	—	—	—	1	—	—	1
Shell, mollusk		—	—	—	—	1	—	1	—	2
Clinker		—	—	—	1	—	—	1	—	2
Wood, charred		—	—	—	—	—	—	2	—	2
Totals		55	70	31	32	114	80	15	8	405

Table 11. Artifact frequencies for Pits A and B, Test Unit 92-1.

Description	Level 10 Pit A	Level 10 Pit B	100–122 cmbs Pit A	100–150 cmbs Pit B	Total
Whiteware	4	1	2	20	27
Stoneware	2	1	1	1	5
Redware	1	—	—	—	1
Flat glass	13	2	25	2	42
Curved glass, colorless	23	10	44	4	81
Curved glass, aqua	3	4	2	3	12
Curved glass, dark green	—	2	1	—	3
Curved glass, amethyst tint	2	—	2	—	4
Curved glass, chimney glass	10	—	2	—	12
Curved glass, blue green	—	—	4	—	4
Melted glass	—	—	2	—	2
Buttons	1	—	—	1	2
Bone	—	10	14	29	53
Mortar	—	—	2	1	3
Slate pencil fragment	1	—	—	—	1
Slate	—	—	—	2	2
Shell	—	—	—	1	1
Copper	—	2	2	14	18
Cut nails	43	35	26	47	151
Tin	2	—	—	—	2
Miscellaneous metal	1	—	8	2	11
Total	106	67	137	127	437