Western Michigan University
ScholarWorks at WMU

Archaeological Reports | Anthropology

1999

21-An Intensive Archaeological Survey of the James and Ellen G. White House Site (20CA118), Battle Creek, Michigan

Hidetsugu Kosaka

Michael S. Nassaney
Western Michigan University

Carol Nickolai

William Sauck

Daniel Sayers

See next page for additional authors

Follow this and additional works at: https://scholarworks.wmich.edu/archaeological_reports

Part of the Archaeological Anthropology Commons

Report Number: 21

WMU ScholarWorks Citation

Kosaka, Hidetsugu; Nassaney, Michael S.; Nickolai, Carol; Sauck, William; Sayers, Daniel; and Wilson, Brian C., "21-An Intensive Archaeological Survey of the James and Ellen G. White House Site (20CA118), Battle Creek, Michigan" (1999). *Archaeological Reports*. 21.
https://scholarworks.wmich.edu/archaeological_reports/21

This Report is brought to you for free and open access by the Anthropology at ScholarWorks at WMU. It has been accepted for inclusion in Archaeological Reports by an authorized administrator of ScholarWorks at WMU. For more information, please contact maira.bundza@wmich.edu.

Western Michigan University

Authors
Hidetsugu Kosaka, Michael S. Nassaney, Carol Nickolai, William Sauck, Daniel Sayers, and Brian C. Wilson

This report is available at ScholarWorks at WMU: https://scholarworks.wmich.edu/archaeological_reports/21

An Intensive Archaeological Survey of the James and Ellen G. White House Site (20CA118), Battle Creek, Michigan

edited by
Michael S. Nassaney

Contributions by:
Hidetsugu Kosaka, Michael S. Nassaney, Carol Nickolai,
William Sauck, Daniel Sayers, and Brian C. Wilson

Archaeological Report No. 21

Department of Anthropology

WESTERN MICHIGAN UNIVERSITY

AN INTENSIVE ARCHAEOLOGICAL SURVEY OF THE JAMES AND ELLEN G. WHITE HOUSE SITE (20CA118), BATTLE CREEK, MICHIGAN

edited by:

Michael S. Nassaney

With contributions by:

Hidetsugu Kosaka, Michael S. Nassaney, Carol Nickolai,

William Sauck, Daniel Sayers, and Brian C. Wilson

Presented to:

Pastor Lenard D. Jaecks, D. Min.
Executive Director, Historic Adventist Village
264 W. Michigan Avenue
Battle Creek, MI 49017

Archaeological Report No. 21

Presented by:

Department of Anthropology
Western Michigan University
Kalamazoo, MI 49008-5032

1999

Cover illustration: The James and Ellen G. White house from a photograph taken ca. 1930 (courtesy of Adventist Historic Properties, Inc.).

© 1999 Department of Anthropology
Western Michigan University
Kalamazoo, MI 49008-5032

All rights reserved

This study was conducted in part through funding provided by the Historic Adventist Village of Battle Creek, Michigan.

ABSTRACT

An intensive archaeological survey was conducted at the James and Ellen G. White House site (20CA118) in Battle Creek, Michigan over a seven-week period from May 4-June 24, 1998. The house is a well-known local landmark that was occupied from 1856-1863 by a family that was instrumental in founding the Seventh-day Adventist denominational movement. Although the original site has been subdivided and subjected to significant modification since the third quarter of the 19th century, the 1856 wood-frame Greek Revival house remains extant. Investigations were oriented towards identifying the presence of subsurface archaeological remains and site features that can inform about the landscapes and social identities of the 19th century occupants and subsequent changes.

Documentary evidence suggested the presence of various outbuildings and other landscape features that were typically associated with mid-19th century suburban households in the region. The purpose of the survey was to identify and evaluate material traces of buildings and activity areas in the vicinity of the house and the adjacent property to the south. The identification of archaeologically-sensitive areas would assist preservation planning by the Historic Adventist Village in their efforts to develop the neighborhood for interpretive and religious purposes. A geophysical survey employing magnetometry, soil conductivity, and ground penetrating radar was conducted to locate subsurface anomalies of potential archaeological interest. These results—along with information from local informants, surficial clues, and limited testing in 1996—were used to guide the placement of 29 hand-excavated units of varying size.

Our survey indicates that the site of lot 64 in Manchester's 3rd Addition has experienced disturbances, particularly in the areas south and west of the White's house. However, investigations also exposed artifacts and features in undisturbed contexts from the mid-19th century through the present. Thus, there appear to be intact material deposits with contextual integrity, some of which probably date to the period associated with the Whites' occupation of the house. Noteworthy artifacts and features include: significant quantities of mid-19th century ceramic types, canning jar fragments that may date to the third quarter of the 19th century (1858-1875), a cement-plastered cistern, and a possible root cellar in the door yard immediately behind the house. Given the presence of these deposits, the site appears eligible for inclusion in the National Register of Historical Places. Furthermore, we recommend that subsurface disturbance be avoided in these areas of the site until further evaluation can be conducted.

ACKNOWLEDGEMENTS

A number of individuals and institutions have shown interest in and provided support for this research project. First of all, I would like to thank Pastor Lenard Jaecks and other members of the Historical Adventist Village for inviting me to conduct this study. Their support has underwritten much of the geophysical survey, data analysis, and report preparation. While the field work was under way, Stan Hickerson, Jean Davis, Ralph Benedict, Randy Case, and Mary Butler were forthcoming with useful information about the history of the site and the material world of James and Ellen G. White.

Most of the background research and systematic field work were conducted by personnel affiliated with Western Michigan University. Others who aided our search for documentary information are the employees of the record office of the Calhoun County Building in Marshall and the Assessor's Office and Office of Inspections in the Battle Creek City Hall. I am also thankful for the facilities, equipment, and supplies provided to the project by Western Michigan University through the Anthropology and Geosciences departments. I also appreciate the efforts of Robert Sundick, Chair of the Anthropology Department, in facilitating a successful 1998 archaeological field school and assisting me to secure the external support needed to expand the scope of the project.

A number of individuals read and commented on an earlier draft of this report which has greatly improved its readability and historical accuracy. For taking time out of their busy schedules, I thank Dean Anderson, Mary Butler, and William Cremin. Several of the illustrations were drafted by Pamela Rups, Multimedia Specialist, Western Michigan University. Kanti Sandhu, Western Michigan University, photographed the artifacts illustrated in this report. My co-authors and I remain responsible for the interpretations of the findings and the contents of this report.

Michael S. Nassaney, Ph.D.
Principal Investigator
Southwest Michigan Historic Landscape Project

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

Michael S. Nassaney

This report documents the results of an intensive archaeological survey conducted by the Department of Anthropology, Western Michigan University (WMU) at the site of the James and Ellen G. White house (20CA118) (Figure 1-1) under a grant provided by the Historic Adventist Ministry. The purpose of the survey was to: (1) test the site to determine its National Register eligibility; (2) implement a geophysical survey to identify subsurface anomalies; and (3) conduct subsurface investigations from a landscape archaeology perspective to locate significant artifacts and features associated with the house's 19th century occupants. This work was proposed to assist the Historic Adventist Village in preserving and interpreting a site associated with the early days of the church's history in Battle Creek.

Preliminary background research was conducted by Carol Nickolai (1997) in conjunction with limited subsurface testing undertaken on July 11, 1996, by 9 members of the 1996 WMU archaeological field school. Danielle Phillips and Tim McCauley (1998) compiled subsequent information to produce a material biography of Ellen G. White as an independent study project (Fall, 1997) under my direction. Documentary sources were also consulted in the course of the field work and during the preparation of this final report. The 1996 test excavations and the documentary record indicated that the site had the potential to yield information about its occupants through the identification and examination of potential archaeological remains of outbuildings, activities, and landscape features. The site is also associated with one of the few extant, wood frame Greek Revival houses built in Battle Creek which is the subject of a separate architectural study (Crawford & Stearns 1998).

The 1998 field work consisted of geophysical prospecting and subsurface testing by personnel associated with WMU in conjunction with the WMU Archaeological Field School during May and June, 1998. As principal investigator I was responsible for implementing the research design, supervising the data processing and analysis, and assembling the final report. Graduate assistants Daniel Sayers and Carol Nickolai assisted in directing the daily field work. Dr. William Sauck (Geophysicist, Institute for Water Sciences, WMU) directed the geophysical survey with the help of Hidetsugu Kosaka (Anthropology graduate student) and several members of the field school. To provide a context for the Adventist movement, Dr. Brian C. Wilson (Department of Religion, WMU) presented a lecture on early 19th century sectarianism in America during the field school orientation. Carol Nickolai prepared the artifact inventory (see Appendix B) after the artifacts were processed and catalogued. All artifacts and

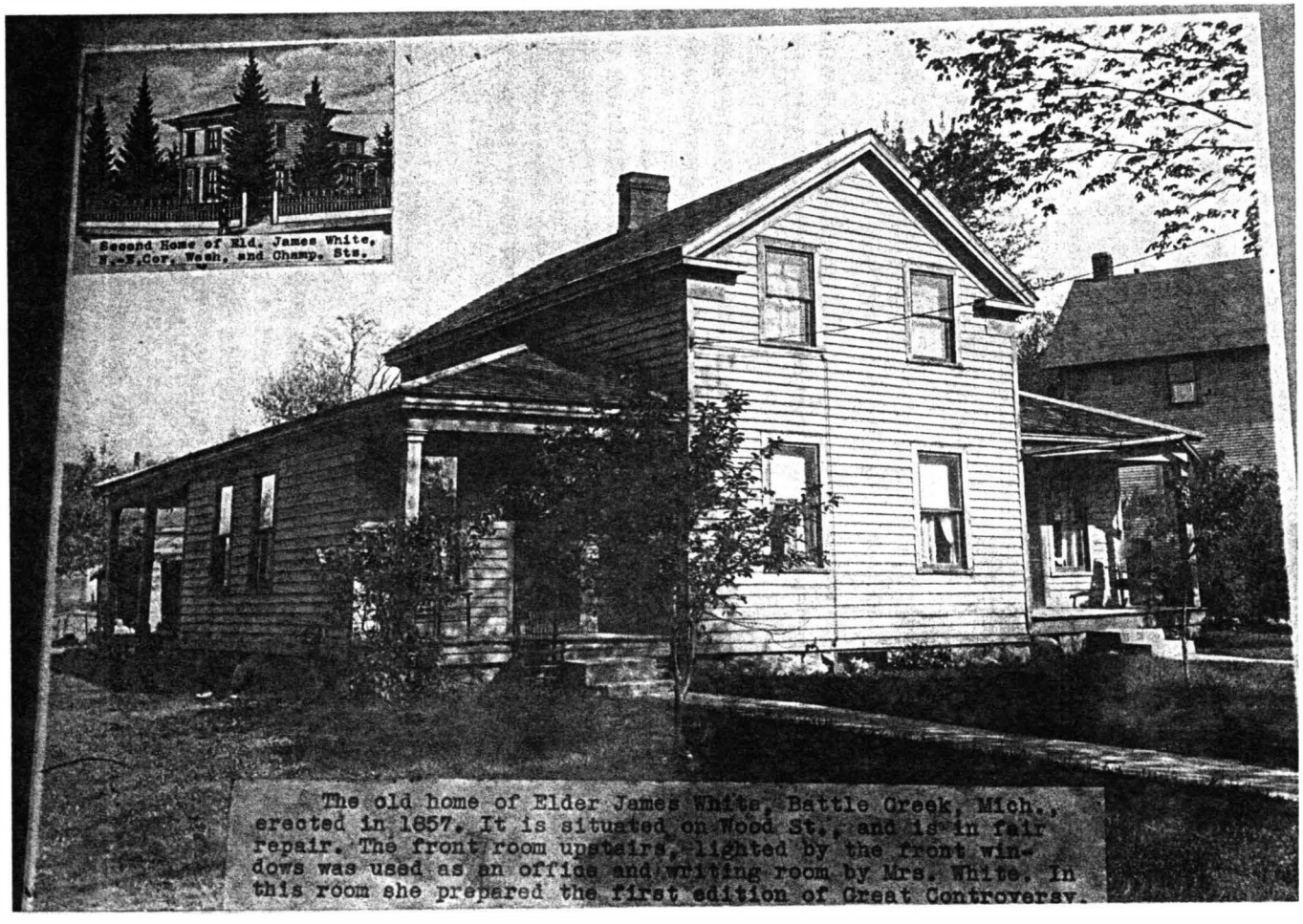


Figure 1-1. The James and Ellen G. White house as it appeared in a photograph taken ca. 1930 (courtesy of Adventist Historic Properties, Inc.)

stratigraphic data (e.g., field notes, maps, photographs) are currently curated at the Department of Anthropology, Western Michigan University.

SITE DESCRIPTION

The James and Ellen G. White house site (20CA118) is currently owned by the Historic Adventist Village. The site is located in the SE 1/4 of the NW 1/4 of the SW 1/4 of the NW 1/4 of section 1, Range 8W, Township 2S of Battle Creek township in Calhoun County (Figure 1-2). The original house site corresponds with Lots 64 (57 and 63-65 N. Wood Street) and 65 (71 N. Wood Street) of Manchester's 3rd addition (Figure 1-3). For the purposes of this study, we focused on Lot 64 where the house was originally built and border areas of the adjacent lots (2 and 3) to the south (Figure 1-4). The landscape slopes gently toward the south where the Kalamazoo River lies less than 1000' away from the site. The house is a wood frame, Greek Revival-style structure with two symmetrical wings and a rear addition. It was built for the Whites soon after they moved to Battle Creek from Rochester, New York, in 1854. Lot 3, located immediately to the south, was occupied by another Sabbath-keeper or Adventist, Jonah Lewis. The house and associated landscape have undergone significant modifications over the past 143 years. These changes are important clues to the social identities and values of the occupants since 1856.

In 1981 a group of laymen, church administrators, and educators established Adventist Historic Properties, Inc., to preserve the dwindling number of historic Seventh-day Adventist buildings in Battle Creek (Adventist Historic Properties 1990). Preservation of sites such as the James and Ellen G. White house is seen as a visible link between the present and the Adventist pioneers by helping to "recall their sense of prophetic mission when they founded the denomination" (Adventist Historic Properties 1990). For nearly two decades, the house has been been maintained as a pilgrimage site and is one of several important Seventh-day Adventist historical landmarks that attract visitors to Battle Creek (Davis and Stoltz 1996). The current appearance of the site and the history of landscape modifications are discussed in more detail in Chapters 3 and 4.

ORGANIZATION OF THIS REPORT

Chapter 2 of this report presents the theoretical and methodological underpinnings of the study by discussing the research design and the methods used to guide our geophysical and archaeological investigations. An historical overview of Battle Creek beginning in the early 19th century and a brief history

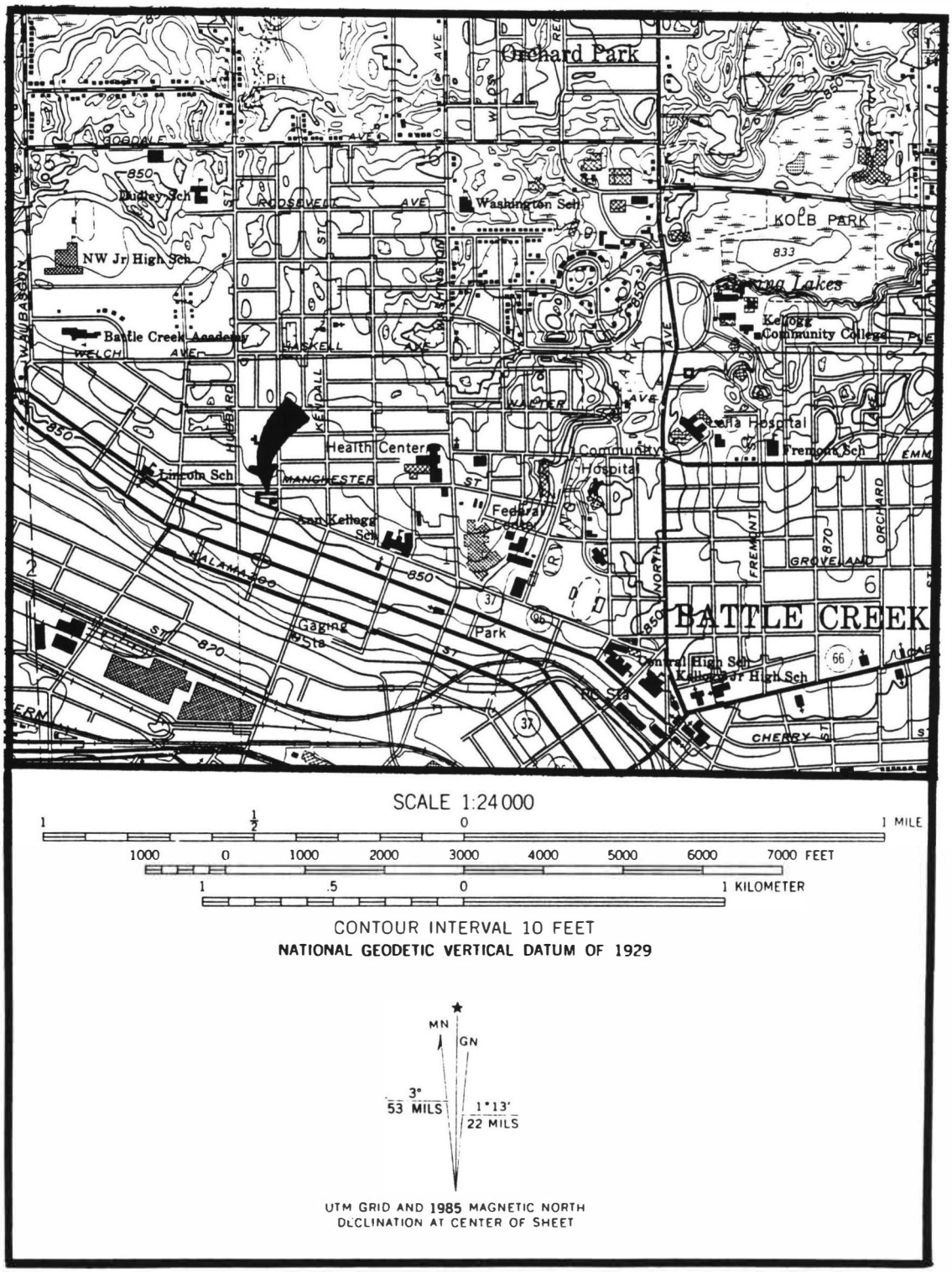


Figure 1-2. The James and Ellen G. White house site indicated on the Battle Creek quadrangle (USGS 1985)

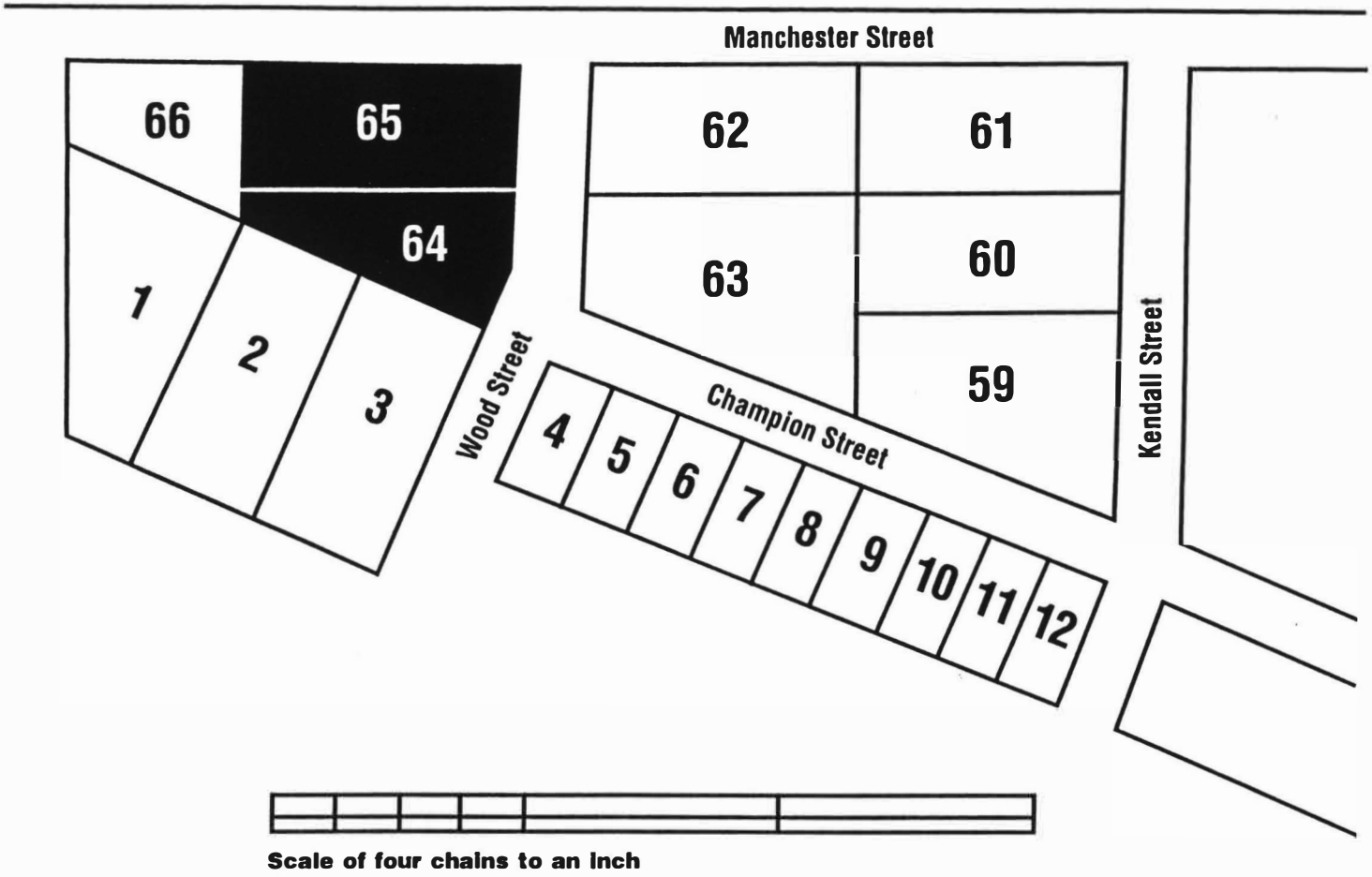


Figure 1-3. Plat map of Manchester's Third Addition. Redrawn from the original in the Assessor's Office, Battle Creek City Hall.

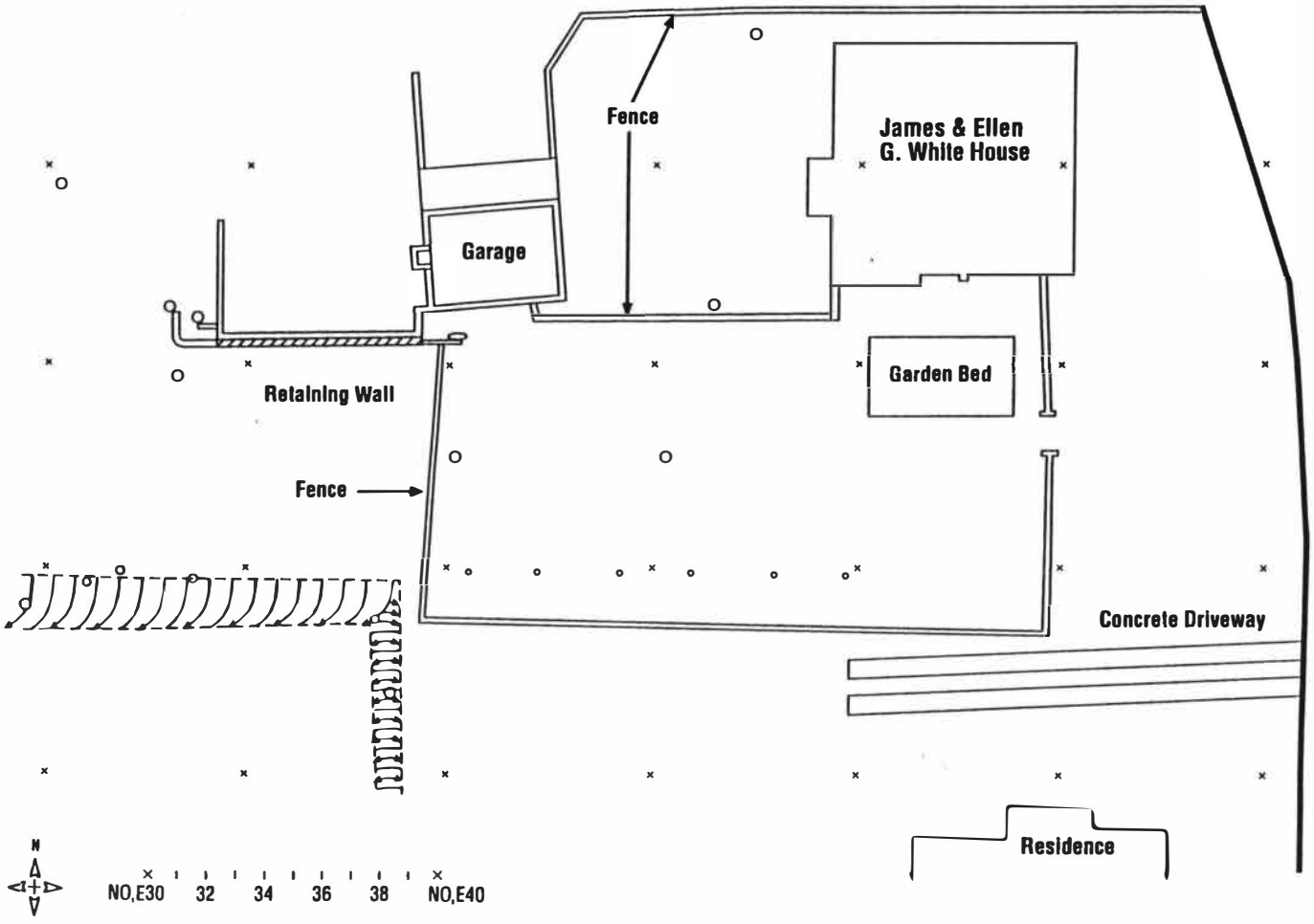


Figure 1-4. Plan of the James and Ellen G. White house site (20CA118) showing the locations of contemporary buildings and select above-ground features.

of the James and Ellen G. White house site is provided in Chapter 3. Also included is a discussion of early 19th century sectarianism in America to provide a context for the Adventist movement. In Chapter 4 the preliminary research findings on land-use patterns based on the surface and subsurface features are discussed, along with an evaluation of the geophysical methods. Chapter 5 is devoted to a description of the artifacts recovered from our excavations organized by functional category. In the final chapter (6), a summary of the results of the study is presented, along with our conclusions and recommendations for future efforts aimed at exploring the material history of Battle Creek and Seventh-day Adventism and interpreting them to the community and beyond.

CHAPTER 2

RESEARCH DESIGN AND THE METHODOLOGY OF LANDSCAPE ARCHAEOLOGY

Michael S. Nassaney, William Sauck, Hidetsugu Kosaka, and Carol Nickolai

THEORETICAL PERSPECTIVE

Contemporary archaeologists typically employ a research design or systematic plan to guide their data collection and analysis. An important component of a research design is the formulation of specific research questions and use of an explicit theoretical orientation. An intensive archaeological survey also requires the collection of some standardized types of information that will allow an evaluation of National Register eligibility.

The research context selected for this study derives from the Southwest Michigan Historic Landscape Project which was designed and implemented in 1994 to explore the social meaning of the built environment (Nassaney 1997). Thus far, the Landscape Project has focused on using historical and archaeological methods to document the spatial organization of gardens, houses, barns, and fences associated with three 19th- and 20th-century homelots in southwest Michigan (see Nassaney 1998; Nassaney and Nickolai 1998; Nickolai 1994; Rotman 1995; Rotman and Nassaney 1997). These and other studies have shown that men and women, rich and poor, native and immigrant build their cultural environments and organize space in ways that serve to create, reproduce, and transform their social roles (see also Lightfoot et al. 1998; Nassaney and Paynter 1995; Paynter et al. 1994). In historic America, Battle Creek included, social relations were codified through the material world. These material texts of social action can be read in ways that differ from verbal and written records and often provide more reliable evidence of actual social relations.

Our work at the James and Ellen G. White house site is part of a larger, multiphase regional study aimed at understanding historical settlement patterns as expressions of social relations at multiple scales of analysis. These material expressions might take the form of changing artifact types and frequencies or temporal variations in the cultural landscape—the articulation between the built environment and the natural world. In short, the houses, barns, and gardens that comprise cultural landscapes embody information about their makers because members of society use space and material objects to inform the larger society about their social identities. Thus, artifacts, landscape features, and their spatial

information that actively serves to create, reproduce, and transform social relations (see Nassaney 1998; Nassaney and Paynter 1995; Rotman and Nassaney 1997).

Over the past decade, landscape studies—once the exclusive domain of cultural geographers (e.g., Cosgrove 1984; Harvey 1973; Jackson 1984; Meinig 1979; Stilgoe 1982)—have emerged as a central concern in the field of historical archaeology (see Crumley and Marquardt 1987; Kelso and Most 1990; Leone 1984; Miller and Gleason 1994; Mrozowski 1991; Nassaney and Paynter 1995; Patterson 1994:57-61; Paynter et al. 1994; Yamin and Metheny 1996). Approaches to cultural landscapes have been quite varied, and both scientific and humanistic perspectives have been used profitably to identify and explain change and continuity in the built environment through interpretations of documentary and material remains. The need for historically-accurate landscape reconstructions began at sites associated with American elites, but the field has grown to encompass the landscapes of people with limited historical documentation such as laborers, women, minorities, immigrants, the underprivileged, the emerging middle class, and now Adventist pioneers.

These studies underscore the idea that landscapes were usually designed and created to be seen and experienced, just as commodities were produced for consumption. Thus, we conceptualize historic landscapes and artifacts as communication media that symbolically express status or other social roles. The size, shape, location, and condition of fences, barns, gardens, and outbuildings encode messages to viewers about their makers and users, as do ceramic place settings, glass containers, and food remains. The potential viewing audience for each category of remains may be different depending on one's social distance, however. For example, passers-by could note the simplicity and symmetry of a wood-frame house, whereas only house guests and intimate visitors might see religious paraphernalia, the contents of a root cellar, or private ritual spaces.

The study of cultural landscapes can take place at multiple scales because social relations are spatially reproduced at different scales from the decoration of individual artifacts to the placement of neighborhoods and the networks of roads at the regional scale. In this study the analysis focuses on Lot 64 and the bordering areas of Lots 2 and 3. We use material and documentary evidence of artifacts and features to examine the activities and social roles associated with the Seventh-day Adventist and subsequent occupants of the site beginning in the third quarter of the nineteenth century.

Historical archaeology—the study of the material world with the aid of historical documents—is by definition multidisciplinary. Practitioners are able to weave together information on social relations, artifacts, and the built environment from various sources including documents, oral accounts, geophysics, and archaeological remains. In the section that follows, we discuss

the methodologies used to collect landscape information from a range of sources. The data collection employed here has by no means been exhaustive, given the tremendous amount of documentary information that was written by and about the Whites. Furthermore, the geophysical survey was hindered by modern features such as fence lines. Finally, no archaeological survey can detect all subsurface remains; instead excavations were used to identify general land-use patterns and assess areas of archaeological sensitivity. Thus, the analyses and interpretations presented in this report are preliminary efforts to understand a site that has the potential to yield information about 19th century Adventist life.

METHODOLOGY IN LANDSCAPE ARCHAEOLOGY

In this section we discuss the data sources that were consulted and the procedures used to collect background information on the James and Ellen G. White house site. For ease of presentation, they are grouped into the following categories: 1) historical documents; 2) geophysical survey; 3) observations on vegetation, architectural remains, and other surface features; and 4) archaeological investigations. The methodology focused on collecting information related to artifacts and landscape features associated with the site's occupants beginning in the 19th century.

Documentary Research

In a recent study discussing the methodology of landscape archaeology, Mascia (1996:154) suggests that investigations should ideally begin by searching and examining five different document groups. These data sources include: 1) primary government and legal documents (vital records, census records, tax records, probate records, maps); 2) family documents (personal diaries, household accounts, and letters); 3) newspapers and journals; 4) photographic evidence; and 5) any relevant secondary documentary sources (agricultural, town, and family histories). Unfortunately, the limited time constraints of this study did not allow for an exhaustive search of all of these types of documents.

The initial phase of documentary research on James and Ellen G. White and the North Wood Street property was conducted by Nickolai (1997) and Phillips and McCauley (1998). The purpose of this work was to create a generalized material biography of early Adventists in Battle Creek and suggest ways in which Adventism might be expected to influence material remains in the community. Most of the information that was compiled derives from secondary sources (e.g., Carson 1957; Numbers 1992). Although the research focused on the 19th century, information on the 20th century also emerged. The following are

some of the documents that were consulted or that might prove to be useful in understanding 19th century Adventist material life.

Government and Legal Documents. Information obtained from government and legal documents is often an integral component of historical research. The early patent records and land transaction descriptions were consulted to trace land ownership from Manchester's original plat to the Whites and subsequent owners. Unfortunately, a complete title search could not be conducted due to time constraints. As a result, the sequence of occupants associated with Lots 64 and 65 is incomplete. This information will be useful in the future because it could help us to link residents with particular landscape alterations or artifacts that have social and economic significance. The tax records can also provide comparative information on the economic status and the value of the property which may reflect house expansions, improvements, or the additions of outbuildings.

Building permits kept in the Division of Inspections of the City Hall provided information on substantial alterations to the houses and outbuildings on lots located at 51, 57, 63-65, and 71 N. Wood Street since 1919 when records were first kept (Figure 2-1). The names of various residents were located in several volumes of the City Directory to determine their occupations. Probate records have not been consulted, but might provide information on the estate of various home owners after they died. A number of maps were examined to identify landscape features and changes since the mid-19th century. Unfortunately, none of the maps prior to 1919 showed any outbuildings at the site and the accuracy of the 1873 map remains questionable (Figures 2-2, 2-3).

Family Documents. Unlike the limited documentation of most historical sites and their occupants, the Whites were prominent members of a sectarian movement that gained denominational status and world-wide recognition. Moreover, Ellen G. White was a prolific writer who published extensively over a period of more than 60 years. She published her first book in 1851, after which she produced a steady flow of articles, books, and pamphlets (Ellen G. White Estate 1985). Many of her scores of books were devotional in nature, "whereas others are selections from the many personal letters of counsel she wrote over the years" (Ellen G. White Estate 1985). She also wrote about the struggle between Christ and Satan, and explored the topics of education, health, and diet. Since her death in 1915, previously unpublished papers have resulted in about 50 compilations. Several thousand shorter articles also appeared in *The Review and Herald, Signs of the Times,* and other Seventh-day Adventist periodicals (Ellen G. White Estate 1985). Of particular interest to this study are her writings on the topics of diet, dress, and religious belief that potentially had a direct influence on her material world through patterns of consumption. This topic is taken up further in Chapters 5 and 6.

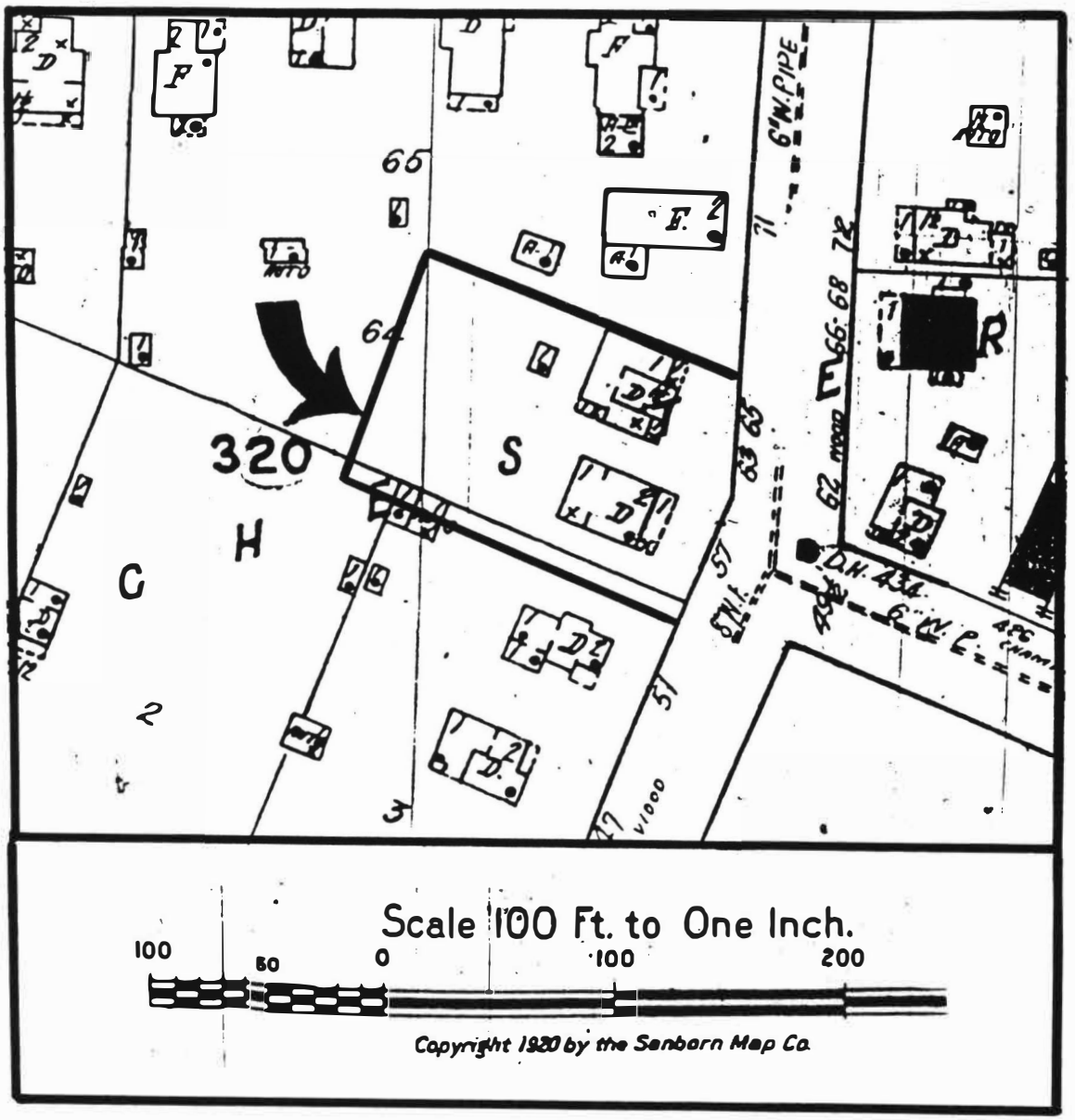


Figure 2-1. Sanborn map (1920) showing the James and Ellen G. White house site and the locations of dwellings and outbuildings on lots 51, 57, 63-65, and 71 of N. Wood Street.

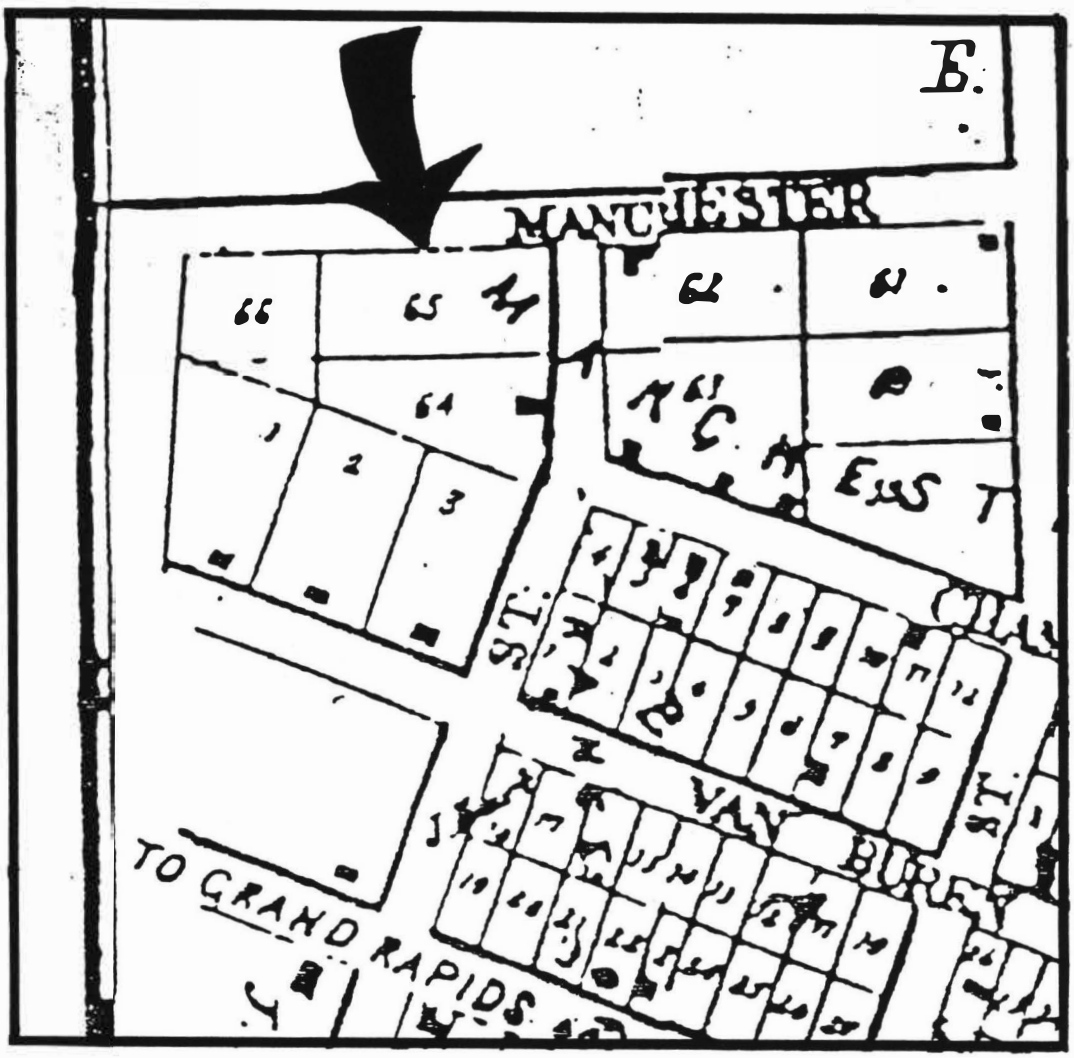


Figure 2-2. Copy of a portion of the 1858 wall map of Calhoun County showing residential structures on lots 64 and 3 in Manchester's 3rd Addition

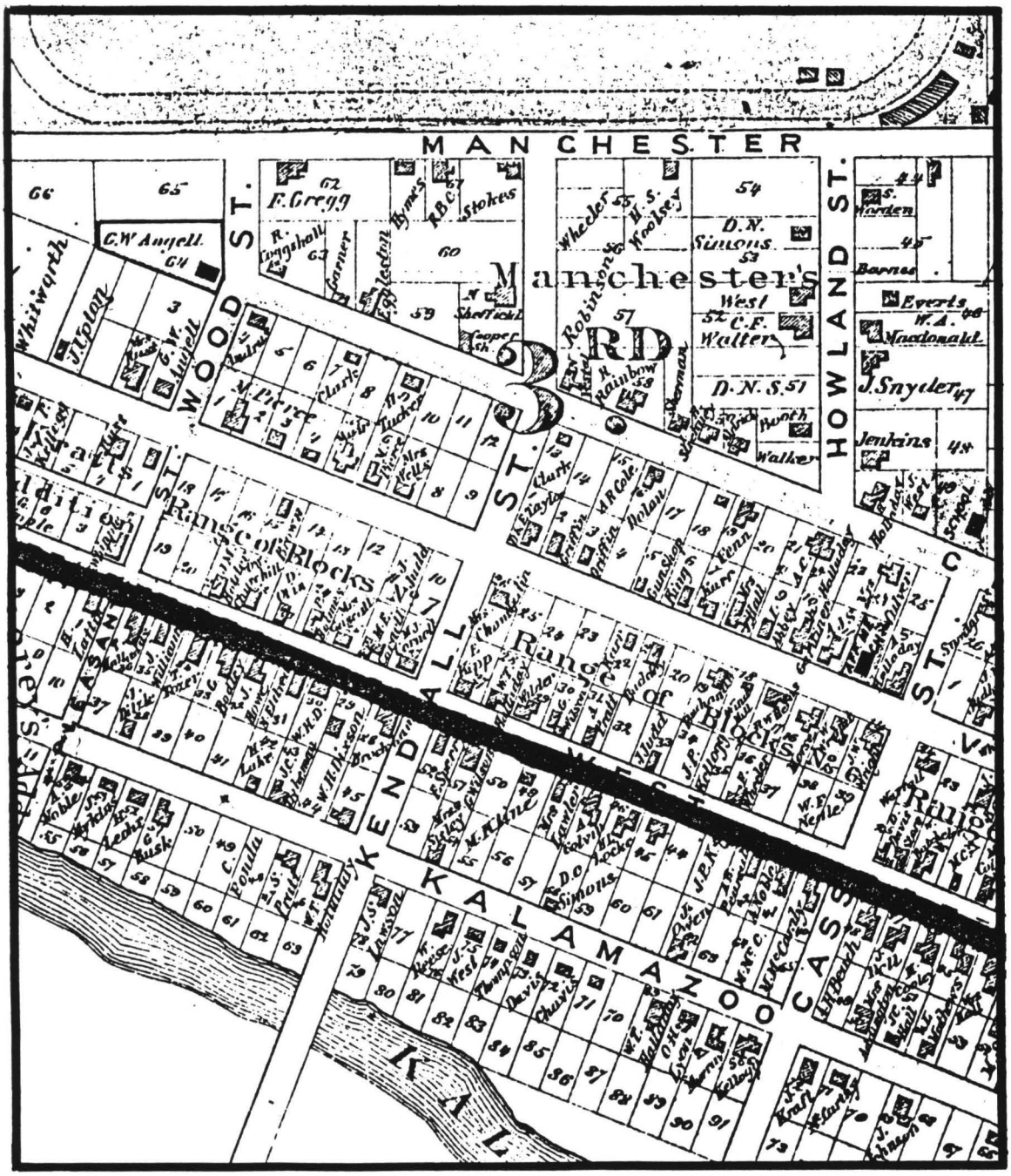


Figure 2-3. 1873 map showing the James and Ellen G. White house likely misplaced on Lot 64. Note that the site is owned by G. W. Angell.

Also included among "Family Documents" are excerpts from the 1859 diary of John N. Loughborough, a fellow Adventist who lived in the neighborhood at 418 Champion Street. In the diary he details daily activities pertaining to gardening in the spring and summer and lists several types ofapples that were grown in his orchard. It is likely that many of the same crops were planted, harvested, and stored by the Whites who were neighbors at the time.

Finally, one of the Whites' sons, William C., recorded some of his early reminiscences in a published article written for *The Advent Review and Sabbath Herald* (White 1936). In this piece he discusses the location of Jonah Lewis's well, from which all neighbors in the vicinity could draw water, and its proximity to a barn and cow stable.

Newspapers and Journals. These sources were consulted occasionally to provide historical information about the occupants of Lots 64 and 65. For example, Dr. William Nickolas Boldyreff's obituary from an unreferenced newspaper clipping of February 2, 1946, alerted us to the fact that this medical researcher lived at 57 Wood Street (Ross Coller Collection). Journals and other publications provided a broader context for understanding 19th century life in Battle Creek and southwest Michigan.

Secondary Sources. These sources served to detail the history of Battle Creek in various ways and situate life in Manchester's subdivision in historical perspective (e.g., Lowe 1976). The Battle Creek business and city directories not only provide an historical narrative of the city but also contain pertinent information regarding the establishment of the Seventh-day Adventist Publishing Association and the Health Reform Institute (e.g., Thomas 1871).

Photographic Sources. A limited number of photographs of the site and house prior to our investigations were located on file with the Adventist Historic Properties and the Battle Creek City Hall. The earliest photo is a black & white print of the Whites' home taken about 1930 (Figure 1-1). Unfortunately, the photographic evidence of the house is rather scanty, considering the historical significance of its 19th century occupants.

In sum, documentary research provided some information on the site and its occupants over the past 143 years (1855-present). According to these sources, the landscape was sparsely settled in the 1850s-1870s, until Lots 64 and 65 became further subdivided and three new houses were built (51, 57, and 71 N. Wood Street). By the end of the 19th century, several outbuildings associated with agricultural activities probably dotted the landscape, and more outbuildings appeared in the first three decades of the 20th century to accommodate a new mode of transportation—automobiles. Sometime in the mid-20th century, many of these owner-occupied homes became available as rental units, precipitating

changes in the appearance of the neighborhood. The houses and associated landscapes in the neighborhood remained poorly kept until Neighborhoods Inc. and Historic Adventist Properties began renovations of two structures (51 and 63-65 N. Wood Street) and demolition of two others that were beyond repair (57 and 71 N. Wood Street). The result is a much more open landscape, much as it may have appeared in the 1860s.

Geophysical Survey Equipment and Methodology

Geophysical techniques have been used for petroleum and mineral exploration for nearly a century. New techniques have evolved and instrumentation has become far more capable, while at the same time the equipment has been miniaturized. Early geophysical applications to archaeology began in the late 1940s, and the proton precession magnetometer saw considerable archaeological use in the 1950s. Since then, in order of development, the additional tools of electrical resistivity, electromagnetic induction (EM), and finally ground penetrating radar (GPR) became available for archaeological site characterization.

These approaches constitute an array of noninvasive techniques that can be used to identify subsurface anomalies which may correspond with historic landscape features (e.g., stone walls, trash pits) and artifacts of archaeological interest (Heimmer and DeVore 1995; Scollar 1989; von Frese and Noble 1984). These techniques can be particularly useful in an intensive archaeological survey in which the goals are to identify the locations of subsurface features and artifacts and evaluate their potential significance for National Register eligibility. Because many features (e. g., wells, cisterns, root cellars) on 19th century urban sites may be obscured by 20th century disturbances or fill (e.g., garage construction, house demolition), they may require considerable efforts to locate using traditional techniques such as hand-excavated shovel test pits. This underscores the potential effectiveness of rapid, noninvasive geophysical methods.

The geophysical prospecting methods used at the James and Ellen G. White house site in 1998 included magnetometry, soil conductivity, and ground penetrating radar (GPR). The purpose of these methods is to identify subsurface anomalies in magnetic fields, soil conductivity, porosity, or soil moisture that may correspond with archaeological remains of interest that can be evaluated using traditional excavation strategies as a means of ground truthing (i.e., determining in the field whether these geophysical anomalies are actually signatures produced by artifacts and other cultural features). The use of geophysics in the context of a landscape archaeology approach has been proven to be effective at the Shepard site (20CA104), a comparable historical site in Battle Creek (Sauck 1998). The integration of a landscape archaeology perspective as defined here with a geophysical methodology provides a powerful paradigm for

interpretation and a useful research framework for effectively evaluating site significance in the context of National Register eligibility.

During the interval between May 4 and May 13, 1998, six days of geophysical surveying were done by William Sauck with the assistance of Anthropology graduate student Hidetsugu Kosaka. The area was covered systematically in 10 m x 10 m survey blocks. By the end of the survey period, 11 full blocks and 4 partial blocks had been covered with magnetometer and EM-31 surveys, using S-N lines separated by 0.5 m. The same blocks were covered with GPR with S-N lines at 0.5 m line spacings. Additionally, the entire lower tier of blocks were profiled with GPR from 0-5 m N with W-E lines at 1 m line intervals. Considerable post-survey processing, map-making, and analysis was done by Hidetsugu Kosaka. The three geophysical systems used and the techniques of their applications at this site are described below. They are the magnetometer, conductivity, and ground penetrating radar systems.

Magnetometer. The instrument used for the magnetometer surveying was the cesium vapor type, manufactured by GeoMetrics. The GeoMetrics G-858 measures total magnetic field intensity to a precision of less than 0.1 nanoTesla (nT) when cycling at a rate of 10 samples per second. Thus, it is effectively a continuous recording instrument which is walked along survey lines with its sensing head about 25 to 40 cm above the ground. Line number, direction, position marks, magnetic readings, and associated times are stored internally for later downloading to a computer. It is powered from a 24-volt belt battery pack. The display screen shows the various control menus, and can also display the six most recent lines in map format for quality control.

In magnetic surveying, care must be taken to avoid or correct for time-varying fields. Short-period variations due to passing cars could be detected as far as 30 m from the street. On-site parked vehicles were kept more than 30 m from the block being surveyed. The most significant long-term magnetic variations are due to solar-terrestrial interactions, and produce the diurnal cycle and longer-term effects. The diurnal cycle is a magnetic change from night to solar noon of about 40 - 50 nT (in the presence of a total field of about 54,000 nT in this area). More intense magnetic "storm" activity due to sunspots was not observed during the survey period. These long-period background magnetic changes were detected and corrected for by using a magnetometer base station—an easily accessible and relocatable spot on the site (N3 E2) in an area with locally smooth magnetic field. The magnetometer was returned to this position for a base station reading before and after every 10 x 10 m square was measured.

Marked fiberglass metric tapes were extended W-E across the S and N edges of the square being surveyed. Then a S-N tape was stretched across each square along the line to be measured. The "mapped survey" mode of operation

was used, in which the (x,y) minimum and maximum survey limits were pre-defined, as was the line spacing and direction. Fiducial marks were inserted into the recorded data by pushing a button as the sensor head passed each two meters along the tape. Thus, any variation in walking speed could be accounted for in later processing. The S-N tape was then moved laterally (usually to the E) by 0.5 m and another line was done in identical fashion. All lines were surveyed in the S to N direction. The magnetometer was not allowed to approach nearer than about 1.5 m to the several wire-mesh fences. Hence, there are approximately 3-m data gaps along the fences.

After each day of field surveying, the magnetometer memory was downloaded to a desk-top computer. MagMap96 software, bundled with this instrument, was used to rectify the horizontal scale by assigning data to positions interpolated between each pair of fiducial marks. SURFER and GEOSOFT programs were used to make the finished products; black line contour maps on each 10 x 10 m square, and color contour maps for the presentation of multiple squares (see Chapter 4).

Electromagnetic Induction (EM-31) Conductivity Survey. The GEONICS EM-31 dual coil electromagnetic induction system was used to cover most of the same survey lines as were done with the magnetometer and GPR. This is a single operator instrument with transmit (9.8kHz) and receive coils separated by 3.66 m on a rigid PVC boom. The instrument provides two output channels: the out-of-phase which has been calibrated in terms of electrical conductivity (of an equivalent flat earth or half space), and the in-phase component which is usually a more sensitive indicator of high conductivity metals than the out-of-phase (quadrature) component. The model used for this survey was the MK2 which has a built-in data recorder and digital display unit. With the coil planes horizontal (vertical dipole mode) and carried at hip level, this instrument has its maximum contribution from the depth range of 2-3 meters. (Of course, the smaller EM-38 instrument with its 1 meter coil spacing would be more appropriate for shallow exploration at such a site, but none was available at survey time. That instrument records very similar parameters, only the coil spacing is less and it operates at a higher frequency.)

The acquisition parameters of the EM-31 are nearly all pre-set, with the exception of the measuring interval or repeat time. This was set near the minimum, at 0.5 sec, to maximize the data density along the line. The instrument is walked along the line and a manual switch used to insert fiducial marks into the record at 2 m intervals.

Data were downloaded to a computer at the end of the day and processed using the GEONICS program DAT31-MK2. This rectified the horizontal scale by proportionally spacing the sample points between the known fiducial spacings.

Next, it writes an output file that can be imported to either GEOSOFT or SURFER mapping software. While there is no diurnal drift, per se, of this instrument, the in-phase data in particular are very susceptible to offsets related to operator height, flexing of the coil support, and deviation of the coil axes from vertical. These data were finally gridded and then contoured using SURFER.

Ground Penetrating Radar (GPR). A Geophysical Survey Systems, Inc. (GSSI) SIR-10A+ pulse radar system was used on this site. This is a digital system which records on internal hard drive and also displays on a color screen. It is designed for continuous profiling along traverse lines, registering a vertical scan as often as 30 to 50 per second. At normal walking speeds this translates to a scan every 2 to 3 cm. The scan length (time) is completely adjustable and its choice depends on target depth, antenna frequency, and ground conductivity. Depths to reflectors can be determined if velocity is known or assumed. In sediments, radio wave velocity is primarily a function of water content, decreasing with increasing soil moisture. In granular soils above the water table, velocity is approximately 1/3 to 1/4 of the velocity of light in vacuum ("c"), while below water table it is about c/5.

All of the surveying was done with dual 500 MHz antennae (mounted in a single enclosure), one to transmit and the other to receive. Scan length was set to 60 nanoseconds, which corresponds to an absolute depth maximum (in the unsaturated zone) of about 3 m. As the system, carried on a 2-wheel cart, requires a relatively smooth path about 0.5 m wide, it could not be used in parts of the site and so was restricted to the open areas. Lines were generally oriented from the S to N, with the lines spaced at 0.5 m. Fiducial marks were entered with a manual switch every 2 m along each line.

As with the other methods, data are passed from the field hard drive to a desk-top computer for processing in profile format, i.e., in horizontal distance vs. depth coordinates. The GPR output is in the form of high density vertical plane image sections, with a 20 m long line typically using 0.4 - 0.8 MegaBytes of storage. Post-processing and color plots are done using RADAN3 software, a proprietary package from GSSI. Some header text and scaling information must be added before rectifying the horizontal scale. Removal of some continuous horizontal lines (system artifacts) may occasionally be necessary. Bandpass filtering along each scan is often necessary, as is horizontal smoothing between adjacent scans. Many other processing steps can be done if the data requires it, including deconvolution (de-ringing) of oscillatory reflections, migration of steeply dipping features to their correct locations, and amplitude balancing in the vertical and horizontal directions. In short, GPR postprocessing can be a rather intensive task. One form of final paper output is color cross sections done with a

HP PaintJet printer. These printed sections contain the date and time stamp of acquisition, as well as field acquisition parameters, and post-processing history.

Archaeological Survey

Two separate stages of archaeological investigations were conducted at the site. The first stage in 1996 consisted of very limited test excavation immediately west of the house in the backyard area bounded on the north and south by a chain link fence and the remains of a concrete block garage wall on the west (Figure 2-4). This work was done at the request of Mr. Ralph Benedict (Historic Adventist Village) in conjunction with the 1996 WMU archaeological field school. After establishing a grid, excavation consisted of eight 50 x 50 cm square shovel test pits (STPs) at 5 m intervals staggered along 3 transects (N0W0, N0W5, N0W10, N5W2.5, N5W7.5, N10W0, N10W5, and N10W10). These STPs were all excavated to B horizon or at least 30 cm below surface and dry screened through 1/4 inch mesh. Soil plans and profiles were recorded using standard techniques including color and black & white photographs as deemed appropriate. Although most of the artifactual materials encountered in our excavations dated to the 20th century, the presence of subsurface artifact deposits to a depth of more than 60 cm in some cases suggested the potential for earlier 19th century materials and possibly features in undisturbed context.

This preliminary work in conjunction with background information and the geophysical survey was used to design a more comprehensive excavation strategy. Larger archaeological excavation units are usually needed to: 1) reveal the contextual patterning among the artifacts, ecofacts, and features uncovered, and 2) assess the functional and temporal significance of that patterning (Sharer and Ashmore 1993:239).

Subsurface investigations conducted over a three-week period in June 1998 by the WMU archaeological field school involved the use of additional STPs (50 x 50 cm) as well as larger excavation units (1 x 1 m, 1 x 2 m) and trenches (2 x 0.5 m) to expose horizontal spatial relationships and vertical stratigraphy to a depth of nearly 2 m in one instance. All STPs and excavation units were dug to culturally sterile soil whenever possible; excavations in units that encountered features often terminated when a sizeable artifact sample was recovered and/or the feature's context and integrity could be evaluated. The procedures were consistent with the goals of an intensive archaeological survey which are to identify the locations of subsurface features and artifacts and evaluate their potential significance for National Register eligibility. An intensive survey differs from a large-scale data recovery excavation project because the goal of a survey is not to excavate features or artifact concentrations in their entirely, but merely to identify them and assess their potential to provide information on the history of the site and its occupants.

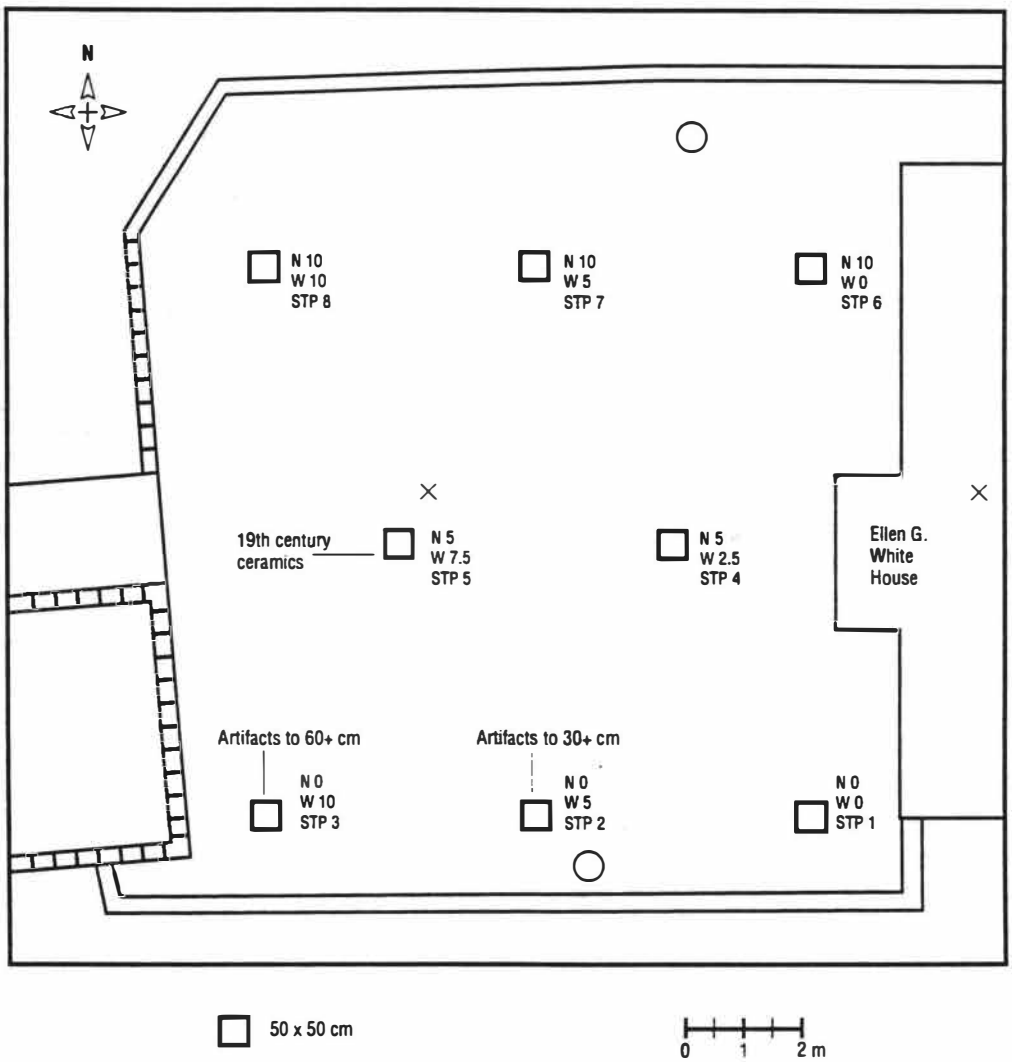


Figure 2-4. The locations of the 1996 excavations immediately west of the James and Ellen G. White house.

In most cases the soil matrix was removed with shovels and trowels in 10 cm levels and passed through 1/4 inch mesh. All artifacts were collected and separated by provenience. Plan views were drawn at 10 cm levels or when soil discolorations became apparent, and observations on the locations and densities of artifactual materials and their associations were recorded on level sheets. Representative profile walls were drawn to scale and described using standardized techniques, and photographs (color slides and B&W prints) were taken of plans, walls, and features as deemed appropriate by the project director. All of the documentation and artifacts are currently curated in the Department of Anthropology at Western Michigan University, though they remain the property of the Historical Adventist Village and will be returned after WMU investigators have completed their studies.

All of the field school students had had previous experience excavating at the Shepard site (20CA104) in Battle Creek under my direction, so excavations began by ground truthing a series of geophysical anomalies that had the potential to represent subsurface features of historical and archaeological interest. Several units were placed judgmentally to investigate surficial features or to follow leads given to us by local informants. A total of 30 units were excavated in 1998. A more detailed discussion of the locations of these units and our findings is presented in Chapters 4 and 5.

In sum, historical documents, limited testing, surface indications, and geophysical anomalies were employed to help locate potentially-significant subsurface remains. These methods were followed by an intensive archaeological survey to identify and record the presence of subsurface deposits including features and artifact concentrations and to assess their integrity. Both undisturbed features and artifact concentrations associated with the 19th century occupation of the site were identified making the site potentially eligible for the National Register of Historic Places. In the following chapters we present the historical context of the study and discuss the research findings that support this recommendation.

CHAPTER 3

HISTORICAL BACKGROUND

Daniel Sayers, Brian Wilson, and Michael S. Nassaney

HISTORICAL OVERVIEW OF BATTLE CREEK

Although Detroit, Michilimachinac, and several smaller trading posts (e.g., Fort St. Joseph) were established by the French by the early 18th century, much of the lower peninsula of Michigan was settled by Euro-Americans relatively late in the post-Revolutionary period of westward expansion (Dunbar and May 1995). Native American groups occupied the region now known as southwest Michigan since the end of the Ice Age, maintaining a continuous, albeit sometimes sparse, presence. Late pre-Contact and early historic native inhabitants of the area were probably represented by the Potawatomi and related groups who practiced traditional subsistence pursuits associated with a mixed horticultural economy that required a seasonally-mobile settlement pattern (Cremin 1996). According to pioneer records, natives were willing traders with early Euro-American settlers, and the two groups co-existed relatively peacefully for at least two decades until most Indian groups were forcibly removed to areas west of the Mississippi River in the 1840s (Neumeyer 1968). In a recent analysis of early Euro-American settlement in Kalamazoo County, Susan Gray (1996:90) suggested that native goods and interaction benefitted the Yankee pioneers by subsidizing white settlement in western Michigan. The same can likely be said for Calhoun County.

The area that is the present-day city of Battle Creek was initially surveyed by Colonel John Mullett in the spring of 1825. The name "Battle Creek" was selected for a tributary of the Kalamazoo River where Mullett and his survey party had a skirmish with some local Potawatomis (Ratner 1991). The native Americans involved were evidently concerned that the European intruders were trying to steal and destroy the land and thus demanded that they leave. When they refused to depart, the natives attempted to forcefully remove them with stolen guns and other weapons. Evidently, later pioneers found this to be a significant event and used it to name their growing community in 1850.

The earliest pioneers were attracted to the area by the confluence of Battle Creek and the Kalamazoo River. Rich fertile prairies, particularly Goguac Prairie, and ample timber made the locality desirable for settlement. Migrants flowed into the area from the East along Territorial Road which was established by the early 1830s. The tract of land that encompasses the city of Battle Creek was first purchased by two men, neither of whom actually came to live there. Like many

speculators of the day they probably bought the sizable tract for $1.25 an acre to sell later at a profit.

The first recorded settler, Isaac Toland, arrived in 1831 and built a cabin adjacent to Territorial Road. Toland rented out sleeping quarters to travelers and pioneers who were moving westward from Detroit, a common practice during the early settlement period (Dunbar and May 1995). In 1834 the original tract of land passed into the hands of Sands McCamly who saw potential profit in the water power that could be harnessed at the rivers' confluence (Gregory 1988:6). At the same time the population had increased to the point where a full-time teacher was needed and Warren Shepard was attracted to the area from New York as the first schoolhouse was being built (Nassaney et al. 1998c; Sayers and Lapham 1996).

Population expansion continued throughout the 1830s with most people living near the rivers and/or Territorial Road. Sands McCamly had drawn up the first plat map of the future city of Battle Creek, built a millrace near the conjunction of the rivers with the help of Irish laborers, and established the short-lived wildcat Bank of Battle Creek. By 1838 there were about 400 people living in the area and businesses included sawmills, flour mills, taverns, smithies, a brickyard, and even a cabinet maker (Gregory 1988:8). It seems that by the close of this decade the seeds of class division were already being sown within the community; there were obviously artisans and merchants with disproportionate amounts of capital, as well as agriculturalists whose land holdings ranged in size, quality, and proximity to markets.

The 1840s saw the beginning of the transition from mercantile to industrial capitalism as some individuals became divorced from the means of production and were forced to sell their labor for cash (Sayers 1998). Small manufactories, such as Henry Willis's pottery and William Wallace's woolen mill, were founded in the early 1840s. By the end of the decade, mill races were being dug for use by wealthier manufacturers and investors. Despite this economic growth, the business community was still too small in 1845 to support the town's first local newspaper (Gregory 1988:12). Economic stability was established by about 1850, a pattern also noted in other regional population centers (Bidwell and Falconer 1925).

In 1850 the settlement was incorporated as a village with a population of 1,064. This year also saw the first civic need for law and order with the election of the first marshall. The first successful newspaper (*Battle Creek Journal*) was published in 1851. During the 1850s, manufacturing success continued and production expanded to meet larger regional and national markets. Local products included lumber, grain, wool, iron, and agricultural implements (Mary Butler, personal communication, 1997). Laborers were needed to perform the tasks associated with this increase in manufacturing. As a result, a more

permanent class division began taking shape in urban areas with clear material consequences for laborers and factory owners. A parallel shift in socioeconomic relations occurred in agricultural production. Whereas laborers were relatively scarce among subsistence farmers, the mechanization of agriculture to produce a marketable surplus created a need for hired hands in rural areas.

Religion also became an important means of social discrimination during this period in Battle Creek, as well as elsewhere in the nation. While churches of the older Christian denominations (e.g., the Baptists) appeared as early as 1835, James and Ellen G. White moved the headquarters of their Seventh-day Adventist church to Battle Creek in 1855. This sect espoused a naturalistic philosophy that stressed healthy lifestyles (e.g., vegetarianism), abstinence from vices like tobacco and alcohol, and general self-reliance. To the Adventists, materialism had become central to people's lives and thus was weakening the connection between humans and the Divine. Thus, they promoted somewhat anti-consumerist values, though not to the same extent as the Shakers and other utopian groups (e.g., Harmonists, Owenites) had done earlier in the century. This pattern stands in marked contrast to the consumer enthusiasm exhibited by members of the emerging middle class who were eager to embrace symbols of modernity and upwardly mobile status (see Cook et al. 1996; Nassaney et al.1998a:115-123; Spencer-Wood 1991).

Disseminating the tenets of Adventist faith was conducted through the printed word. A large two-story wooden building erected in 1855 housed the Review and Herald publishing offices at the southeast corner of W. Michigan and N. Washington streets. In 1857 a large Adams' power press and steam engine were used in the publishing operation (Thomas 1871:40). In 1861 the organization was incorporated under the title of "The Seventh-day Adventist Publishing Association," which freed James White for sole responsibility of the publishing department. Later that year the Association moved into a larger, brick building where *The Advent Review and Herald of the Sabbath* was published and circulated to over 5000 subscribers from Maine to California (Thomas 1871:40). The facility grew "to be the largest, best equipped plant in Michigan" (Davis and Stoltz 1996); James White served as the President of the board of Trustees for over a decade.

To promote a healthy lifestyle, Ellen G. White urged the Adventists to found the Western Health Reform Institute in Battle Creek in 1866, a short distance north of the Publishing Association. According to its charter, its stock was interest-bearing, but the stockholders donated to the Institution all of the dividends that accrued to them so as to enable the worthy poor to be treated at reduced rates (Thomas 1871:41). The patients at the Institute were treated through a "hygienic system" which concedes "that all diseases originate in wrong habits or unfavorable conditions," so that to cure the disease one must correct the habits or change the conditions. Curative methods included fresh air, water, exercise, and rest, "but no drugs, or 'medicines' [i.e., patent medicines]; in the

popular sense of that term" (Thomas 1871:42). The Institute issued a monthly magazine called the *The Health Reformer*, devoted to the cause of health and right living among the people. In 1871 it had a circulation of nearly 5000 copies which sold at the price of $1/year. Dr. John Harvey Kellogg became medical director in 1876, and the name was changed to the Battle Creek Medical and Surgical Sanitarium in 1877. The so-called Battle Creek Sanitarium became world renowned and continued in operation into the twentieth century (Carson 1957).

Whereas health reform became an Adventist speciality, other denominations in the area took up moral causes. The Baptists and, in particular, the Quakers were successfully operating the Underground Railroad throughout this period. Most notable in this effort were Erastus Hussey and Henry Willis, both Quakers. These so-called "conductors" of the Underground Railroad were people who operated a clandestine means of transporting and supporting escaped captives from the American South. They traveled across southern Michigan to their freedom in Canada via Detroit and smaller settlements along the shores of the St. Clair River and Lake Huron. Battle Creek was a famous "depot" on the route and was considered by many slaves to be a safe haven. According to Ben Wilson (1985), the area south of Battle Creek was home to a significant African-American community throughout the pre-Civil War decades. Strong abolitionist sentiments coupled with political action in southwest Michigan had a significant impact on the demographic composition and socioeconomic relations in the region. However, despite the willingness of local landowners to accept African Americans in the region, these recent migrants were usually absorbed into the working class and had to struggle to own their own land with few exceptions.

The church became a means of social integration for these escaped captives and other African Americans very early on. In 1840 seven men filed an application for Articles of Association as the "African Methodist Episcopal Church and Society of the City of Battle Creek" (Brown 1998). By the 1850s about a dozen families were holding religious services at a home on the northeast corner of Champion and Kendall streets. Among this group were members of an unusually large contingent of 45 fugitives who arrived in Battle Creek in 1847 on only two hours notice (Brown 1998). The first public building for the congregation was a small white frame building which once served as the Quaker meeting house. In 1866 the AME church found a permanent home near the corner of West Van Buren and Cass streets, in a building formerly owned by the Seventh-day Adventists, which was erected in 1857. After more than a decade in the building, the church members purchased it in 1877. Now known as the Mt. Zion African Methodist Episcopal Church, the institution has served the community for over 140 years and "has provided vision, religious guidance and community leadership for successive generations of Battle Creek families" (Brown 1998:3).

The church grew in tandem with the rest of the community. By 1860 the population of Battle Creek had reached 3,511 and by 1870 5,838 people lived in the city which was incorporated in 1859. Many large farms were being subdivided during this period to provide lots for the growing population, many of whom would be able to afford their own homes. During this period, few homes had any of the conveniences that we now associate with modern life, such as running water, indoor plumbing, or electricity. In the 1870s transformations in home utilities that were sweeping the nation generally from East to West and from rich to poor were slowly becoming available to people in southwest Michigan. For example, gas lighting began to replace kerosene and wood in about 1871 (Gregory 1988:29), although it is difficult to determine when it became available to specific households. In 1872 the weekly paper became a daily and Atlantic and Pacific brought the telegraph to the city. Electricity became available for lighting purposes in Battle Creek in the mid-1880s (Peck 1991). Other "modern" conveniences included milk delivery, telephones in urban households, and streetcars downtown (Gregory 1988:38). In 1887 the first water pipes were functioning in Battle Creek, though these were likely confined to the urban areas until after the beginning of the 20th century.

By 1890 the population of Battle Creek had grown to 13,197, having nearly doubled from the previous decade. This represents a significant increase in population, perhaps due in part to the increased need for labor in the burgeoning manufacturing sector of the city. This period also corresponds with the Kelloggs and the Sanitarium's increasing notoriety. In the course of his search for a healthful and easy to prepare breakfast food for Sanitarium patients/clients, W. K. Kellogg, J. H. Kellogg, and his wife Ella Eaton invented flaked cereal in the early 1890s (Butler 1996). Charles Post, a one-time visitor to the Sanitarium, also took up cereal production in 1896 and quickly turned a profit (Carson 1957; Dunbar and May 1995). In the wake of the stunning success of Post's breakfast cereals (Postum and Grape-Nuts), many would-be competitors flocked to Battle Creek in the early years of the twentieth century, creating a veritable cereal boom. W.K. Kellogg worked at the San until 1906 when he founded his own company (Mary Butler, personal communication, 1998). Most cereal ventures, however, were undercapitalized and failed (Dunbar and May 1995). The landscape and economy of Battle Creek since 1900 has been heavily influenced by the breakfast cereal industry, which remains based there. The efforts to capitalize on the cereal industry in the first decade of the 20th century are the subject of numerous books and video tapes (e.g., Butler 1996). It was during this period that Battle Creek became synonymous with breakfast, and the city owes its global name recognition to that Adventist invention—flaked cereal.

Since the beginning of the 20th century, Battle Creek has generally prospered. Although many Battle Creek residents were among the Americans who were victims of the 1930s Depression, the large cereal companies helped the

community to buffer itself against this economic hardship (Mary Butler, personal communication, 1997). During World War II manufacturers overhauled their plants to produce war machines, tools, and food packaging. By the height of the war, significant numbers of workers (ca. 9,500) were engaged in defense production in Battle Creek, possibly stimulating a demographic influx. With the end of the war, Battle Creek again resumed civilian production and capitalized on the prosperity of the post-war economy which continues to this day.

From this historical overview it is clear that 19th-century Battle Creek was by no means socially homogeneous, although the city prided itself on a native work force into the 1920s (Mary Butler, personal communication, 1998). Still, the region attracted small but significant numbers migrants with different ethnic, racial, and religious backgrounds who contributed to the formation of distinctive social enclaves in the community. Segments of the community (e.g, African-Americans, the Seventh-day Adventists, or the working class) shared different value systems and may have interacted within their own groups more frequently. These interaction patterns served as a means of creating and reproducing social identities. Moreover, the social relations of class, gender, religion, and ethnicity are etched in the artifacts and features that people used to facilitate their livelihood on a daily basis (Lightfoot et al. 1998; Nassaney 1998). By recovering these objects and their spatial relationships, we can obtain a better understanding of what life was like for James and Ellen G. White as they struggled to establish their beliefs in 19th century Battle Creek. The following section discusses the religious climate in America that gave rise to Seventh-day Adventism.

SEVENTH-DAY ADVENTISM AND 19TH-CENTURY AMERICAN SECTARIANISM

Seventh-day Adventism is one of the more successful examples of what is broadly classified as early 19th-century American sectarianism. From the years 1790 to 1850, the United States experienced a period of vigorous religious innovation unparalleled before or since. During that time, dozens of new sectarian movements arose and broke away from the traditional Christian denominations. Most of the new sects faded quickly, but others endured, and a few eventually evolved into denominations of their own. Those that survived the period ranged from Mormonism to Spiritualism, from Shakerism to Oneida Perfectionism, and from Universalism to Adventism, including Seventh-day Adventism. Despite the disparate nature of each of these sects, they all shared certain characteristics beyond simply their historical and national origins. Scholars of American religions have long pointed out that these sects tended to embody variations on a limited set of religious themes—millennialism, illuminism, restorationism, and perfectionism. In this section we will review

these religious themes and some of their variations. In this way we can better understand the early history of Seventh-day Adventism by contextualizing it within the larger religious environment of early 19th-century America.

The Religious Environment of Early 19th-Century America

Since the founding of the Republic, American religious freedom has meant a certain competitive market mentality when it comes to winning souls. It is perhaps for this reason that revivalism has always been a fixture on the American religious scene. Sometimes spontaneous, sometimes planned, revivals are massed gatherings in which religious enthusiasm is whipped to a high emotional pitch and the rate of religious conversion accelerates. Occasionally revivals can take on regional or national importance, with religious enthusiasm running high for months, even years. Such "super revivals" are called awakenings. Scholars are undecided on just how many awakenings there have been, but they generally agree that two occurred early in America's history. The first "Great Awakening" took place during colonial times, roughly from 1700 to 1740. The second "Great Awakening" began some fifty years later and lasted from 1790 to 1830. It was during and shortly after the Second Great Awakening that sectarianism reached its peak in the United States.

Awakenings have many causes. In the period immediately preceding the Second Great Awakening, interest in religion was on the wane in this country. Church membership was at an all-time low. Many blamed this religious malaise on the pervasive influence of Enlightenment freethinking so popular during the Revolutionary period. In response, an energetic "evangelical" movement developed within the major denominations (Congregationalism, Presbyterianism, Methodism, the Baptists, Episcopalianism, etc.). The evangelical movement evinced a strong biblicism, an emphasis on the primacy of the conversion experience, and a concern for missionary outreach. It also stressed voluntaryism and strong pan-denominational cooperation. In many ways, the evangelical movement was perfectly suited to the times. Social conditions were changing rapidly in the United States. At the beginning of the 19th century, a new national consciousness was emerging and the nation entered a period of rapid expansion. Americans began to experience an unprecedented social and geographic mobility, and a fervent egalitarianism seemed to pervade the American social order in proportion to the westward advance of the frontier. Such dislocation produced both exhilaration and insecurity in the citizenry at large. The evangelical movement capitalized on this instability as it promised to bring comfort and meaning to people caught in a chaotic situation. The movement was rewarded for its efforts by the Second Great Awakening, a massive outpouring of religious enthusiasm that lasted some forty years.

The Second Great Awakening unfolded in three geographical phases. It began in the 1790s when the evangelical movement hit the colleges and universities of New England. Under strict clerical control, the New England revivals were decorous and orthodox, but they did lead to a substantial number of sensational conversions. By 1800, the evangelical movement had traveled to the Southern frontier areas of Tennessee, Kentucky, and Southern Ohio. Here, local congregations were fired with the spirit of revival by a procession of itinerant ministers. Local revivals often grew so large that services had to be held out of doors, and it was from these impromptu outdoor services that the custom of the camp meeting developed. Camp meetings were huge outdoor revivals held over a series of days. Widely advertised, camp meetings attracted families from four or five counties at a time and were important social as well as religious events.

A decade later, the third phase of the Second Great Awakening began in the Old Northwest. It was especially strong in the recently settled areas of western New York. Over the next twenty years, so many individual revivals had swept through western New York that it came to be called the "Burned-Over District." Here, again, the camp meeting attracted many, but so too did the more decorous revival hall. Indeed, as revivals in the region gained momentum, they drew in people from the Atlantic coast and, conversely, evangelists from the "Burned-Over District" began traveling to the big cities and college towns of the East. The Second Great Awakening thus came full circle before the revival fires finally began to cool in the late 1830s.

The Second Great Awakening and the Sectarian Spirit

Given the lack of established churches in the United States, the widespread religious enthusiasm of the Second Great Awakening could not always be channeled in orthodox directions. Thus, the first half of the 19th century witnessed an explosion of new religious movements or sects. By definition, a sect is a small religious group whose members withdraw from a more dominant religious group. (Unfortunately, much like the word "cult," the word "sect" has taken on pejorative meanings in the minds of the general public. When used by sociologists of religion, however, "sect" refers only to the institutional origins and structural development of a religious movement. It in no way implies value judgments about the truth or worthiness of that movement.) Typically, sectarian dissatisfaction is due to a heightened concern for a particular doctrine or cluster of doctrines which sectarians believe are either misinterpreted or inappropriately de-emphasized by a parent religious group. Typically as well, sectarians have no desire to break with their parent religious group, only a desire to reform it. However, at some point, usually with the appearance of a charismatic leader, sectarians come to believe that reformation is impossible and

separation the only resort. During the Second Great Awakening, when the sectarian spirit ran so high in this country, four such clusters of doctrines inspired most sectarian separations. These were millennialism, illuminism, restorationism, and perfectionism.

Millennialism. Millennialism revolves around the ancient Christian doctrine of the Second Coming of Christ, especially as it is envisioned in the Book of the Apocalypse. According to the Apocalypse, the world is completely under the evil influence of Satan and thus degenerates every day. At some unknown future date, however, Jesus will return and do battle with Satan, eventually subduing and imprisoning him for a thousand years. During these thousand years—the millennium—Jesus will reign on earth and only the righteous elect will have the privilege of dwelling with him in the kingdom. At the end of this time, Satan will escape from captivity and after a final cataclysmic battle (Armageddon), evil will be destroyed forever. Jesus will then judge the living and the dead. The righteous will be granted eternal life on a rejuvenated earth and sinners will be condemned to eternal hellfire.

Faith in the Second Coming and the millennium ran high during the Second Great Awakening. However, the traditional millennial scenario as narrated above was far too pessimistic for many Americans of the period. Since 1800, therefore, new, more optimistic, interpretations of the Apocalypse were surfacing. In these new interpretations, the world was not degenerating, but improving, and indeed, humanity itself would eventually succeed in creating the millennial kingdom on earth. Only after the millennium, it was argued, would Jesus return, and then only to judge the quick and the dead. Scholars call this new interpretation "postmillennialism" (Jesus comes after the millennium) to differentiate it from the more traditional "premillennialism" (Jesus comes before the millennium). Despite its novelty, postmillennialism became the dominant millennial ideology of the Second Great Awakening. It has even been suggested that many of the period's social reform movements—abolitionism, temperance, women's rights, etc.—found their inspiration in the doctrine of postmillennial progress.

Not all, though, were willing to abandon the traditional "premillennial" scheme as outlined in the Apocalypse. A significant minority clung to the idea that the world would grow progressively more evil until Jesus would finally arrive to rescue his righteous elect. Furthermore, from the middle of Second Great Awakening on, a number of Americans became convinced that the Second Advent of Christ was to occur very soon. A few even claimed that they could predict the date of this event. In 1818, for example, a Vermont farmer and Baptist preacher named William Miller (1782-1849) announced that he had "broken the code" of the apocalyptic books of the Bible. Miller was especially fascinated with one passage (8:14) in the Book of Daniel that read: "For two thousand three hundred days; then shall the sanctuary be cleansed." To interpret this passage,

Miller made three assumptions: (1) the biblical day equaled a year and thus the passage spoke of 2,300 years; (2) the sanctuary to be cleansed referred to the cleansing of the earth by Jesus' Second Coming.; and (3) that the 2,300 years began with the rebuilding of the temple of Jerusalem in 457 B.C. This meant, Miller concluded, that the Second Coming was due sometime between 1843 and 1844.

Slowly, through public lectures, pamphlets, and newspapers, Miller's calculations permeated the public's consciousness and, in time, Miller attracted a significant following. The newspapers called his followers "Millerites," but they preferred to call themselves "Adventists." As Adventist excitement grew throughout the 1830s and early '40s, Miller made his predictions even more precise, eventually claiming that the Second Coming would occur between March 21, 1843, and March 21, 1844. When that fateful period had come and gone and nothing occurred, the date was recalculated to October 22, 1844. Again, nothing happened. Adventists still call this non-event the "Great Disappointment."

Dismayed by this failed prediction, the bulk of Miller's followers fell away. Most returned to their denominations, while others abandoned religion altogether. A few, though, held on, and in 1845 in Albany, New York, this Millerite remnant met in conference to reaffirm their Adventist beliefs. Some attendees simply contended that Miller had miscalculated and they pushed for a new calculation of the correct date of the Second Coming. Others, however, were convinced that Miller had been right and that something had indeed occurred on October 22, 1844. Two Adventists, Hiram Edson and O. R. L. Crossien, announced that the "cleansing of the temple" spoken of in the prophecy did not refer to the cleansing of the earth. Instead, it referred to the entry of Jesus into the heavenly temple in preparation for the Second Coming. It was Jesus' entry into the heavenly temple that had occurred on October 22, which meant that the Advent was indeed still imminent. Buoyed by this new interpretation, some Adventists set to work to spread the good news of this spiritualized version of Miller's premillennialism.

Two such Adventists were James White (1821-1881) and Ellen G. Harmon (1827-1915), both originally from Maine. Harmon had come to the Adventist movement earlier than White, having been convinced in 1840 by a series of lectures given by Miller himself in Portland, Maine. White, on the other hand, was converted at a camp meeting at Exeter, Maine, in 1842. After the "Great Disappointment," both remained steadfast in their support of Miller and, realizing a meeting of minds, they married on August 26th, 1846. Together, the Whites now embarked on a career that would place them at the forefront of Adventism in America. Moving frequently, the Whites preached the new Adventist message widely through New England, New York, and eventually, the Old Northwest. Beginning in 1849, James White started publication of an

Adventist newsheet and, thanks to generous donations, he set up a permanent print shop in Rochester, New York, in 1852. Here, White published a wide array of broadsides, newspapers, journals, books and hymnals, all of which promoted the Adventist cause. Both James and Ellen G. White authored much of this material, and by the time the Whites moved their printing operations to Battle Creek, Michigan, in 1855, the couple had all but replaced William Miller in the affections of many Adventists. Had it not been for some of the Whites' more idiosyncratic teachings, their control of the Adventist movement may have become complete in time. One of the teachings that caused division was bound up with the White's restorationism.

Restorationism. Restorationism is the desire to return the Christian church to the way it was in ancient times, especially as it was described in the Book of Acts. Restorationism has played a role in most sectarian movements throughout the history of Christianity and it flourished once again during the Second Great Awakening. During the Awakening's Southern phase, for example, the followers of Barton Stone (1772-1844) and Alexander Campbell (1788-1866) united with the purpose of doing away with all denominations in order to restore the unity of the "primitive" church. Calling themselves simply "Christians," these restorationists demanded a strict reading of the New Testament. They rejected any doctrines not explicitly contained in that book, arguing that such doctrines were illegitimate and led inevitably to a sectarian spirit. Their motto was: "Where the Bible speaks, we speak; where it is silent, we are silent." Ironically, this anti-doctrine doctrine of the "Christian" movement was rejected by most mainstream Christians. In order to survive, therefore, the "Christian" movement gradually institutionalized, choosing the name "Disciples of Christ" to differentiate their group from other Christian denominations.

James and Ellen G. White also had deep restorationist concerns and these were symbolized by the Saturday Sabbath. The Saturday Sabbath was an idea that had been abroad in America for a long time. In 1664, the first "Sabbath-keeping" Baptists landed in the English colonies. Sabbath-keepers believed that the Sabbath spoken of in the fourth commandment of the Decalogue referred to the seventh day or Saturday. The Sunday Sabbath was simply a pagan innovation introduced by a corrupt Catholic Church. Those who failed to keep the Saturday Sabbath were therefore breaking a fundamental rule of God. By 1671, there were enough Sabbath-keepers to organize the first American Seventh Day Baptist Church, although the denomination grew so slowly that only in 1802 was a general conference organized. Nevertheless, the Seventh Day Baptists were tireless evangelizers and undoubtedly did much to inspire the spirit of restorationism in the Second Great Awakening. Sabbath-keeping tracts eventually reached the fledgling Adventist churches in 1844, and two years later there emerged a number of congregations identifying themselves as Seventh-day Adventists. James White was an early Sabbath-keeper, but Ellen White was not. She was not alone. Many Adventist congregations strongly opposed the Saturday

Sabbath as Jewish and therefore heretical. In 1845, however, Ellen White had a vision in which she was transported into the presence of the ark of the covenant in the heavenly temple. The cover of the ark was raised, and White saw the tablets of the Ten Commandments. On the left tablet, the fourth commandment was encircled with a halo of divine light. The meaning was clear: from this point on, White was an ardent Sabbath keeper and the Adventists she would lead would be Seventh-day Adventists.

Illuminism. Spiritual visions such as the one above were not unusual for Ellen G. White. She experienced her first vision in December of 1844, shortly after the "Great Disappointment," and over her lifetime she experienced some 2,000 visions more, many of which were recorded and reprinted. Mrs. White's visions came to be seen as an integral part of the Seventh-day Adventist movement. Even more than the Saturday Sabbath, the illuminism of Ellen G. White was perhaps the most controversial element of this new religious movement and brought it great notoriety. Orthodox Christianity had long maintained that the era of direct revelation or illumination from God had long since ended. No longer would there be prophets as in the Old Testament, nor would the Holy Spirit descend on the church as it did at that ancient Pentecost. Of course, throughout the history of Christianity, despite such orthodox prohibitions, prophets have arisen claiming direct inspiration. Most were executed as heretics, but a few went on to found new sectarian movements.

Illuminism was a staple sectarian theme during of the Second Great Awakening. "Mother" Ann Lee Stanley (1736-1784), founder of the Shakers, claimed such inspiration, as did Jemimah Wilkinson (1752-1819), founder of the short-lived Jemimakins. Perhaps the most spectacular example of illuminism during the Second Great Awakening was the case of Joseph Smith (1805-1844), founder of the Church of Jesus Christ of Latter-Day Saints or "Mormons." As a young man living in the "Burned-Over District," Smith claimed a number of heavenly visions. Ultimately, his visions led to his recovery of the "Book of Mormon." The Book of Mormon, which Smith translated from the "reformed Egyptian" using special spectacles, was purportedly a record of the church founded by Jesus in pre-Columbian America. Proclaiming himself a "second Muhammad," Smith announced that it was his destiny to re-establish this church in preparation for Jesus' Second Coming. Smith continued to receive prophetic revelations from on high throughout his short life. Collected as The Doctrines and Covenants, Smith's prophecies are still authoritative within the Mormon Church. Moreover, upon his death, Smith's prophetic mantle passed on to the next president of the Mormon Church. Prophecy continues to operate through this office to the present day.

In Seventh-day Adventism, illuminism has functioned in much the same way, although prophecy was never institutionalized in a specific ecclesiastical office. Adventists, too, believe that prophecy is a gift of the Holy Spirit that

manifests itself to the righteous elect in these, the last days before the millennium. For Seventh-day Adventists, however, the gift of the spirit was most strongly manifested in the ministry of Ellen G. White. It is for this reason that her writings, collected as *Testimonies for the Church*, continue to be an authoritative source of guidance. It was, of course, by means of Mrs. White's visions that many of Seventh-day Adventism's distinctive beliefs and practices were originally promulgated and legitimated. We have already seen this in the case of the spiritualized interpretation of Miller's premillennialism, as well as in the case of Saturday Sabbatarianism. In addition, Mrs. White's illuminism also legitimated Seventh-day Adventism's unique brand of perfectionism.

Perfectionism. Broadly speaking, perfectionism is the idea that human beings can achieve a state of being beyond sin. This doctrine derives primarily from the teachings of John Wesley (1703-1791), the founder of Methodism. Wesley taught that after the religious experience of conversion, the truly devout embark on a long-term struggle towards another religious experience—the "Second Blessing." Those who experience the "Second Blessing" enter a state of holiness in which one is free from voluntary impulses or behaviors that are sinful. Wesley was careful to teach this doctrine cautiously and selectively, but others were not, and by the Second Great Awakening, perfectionism or "holiness" as it was also known, was a popular concept. Charles Gradison Finney (1792-1875), for example, was one of the most successful revivalists of the period. He believed and preached that perfectionism was a logical corollary to postmillennialism. If the world were to achieve a state of grace, Finney argued, it would logically have to do so one soul at a time until each individual had achieved spiritual perfection. By democratizing perfectionism in this way, Finney de-emphasized the Wesleyan insistence on the lifetime of effort necessary to achieve it. For Finney, spiritual perfection was an experience awaiting any person shortly after conversion. Like most Americans of the time, Charles Gradison Finney was a man in a hurry.

Anthropologists have long noted the human tendency to link spiritual states with daily habits and physical well-being. Americans of the early 19th century were no different. During the Second Great Awakening, the equation of spiritual perfection with physical perfection was often manifested by an evangelical concern for health and diet reform. There were a variety of reasons for this connection. John Wesley himself had emphasized the importance of physical hygiene for spiritual perfection. In addition, the United States at large was in the grips of a health craze. During this period, Americans eagerly embraced a plethora of new health treatments such a hydropathy, homeopathy, Thompsonianism, Mesmerism, etc. "Orthodox" doctors called these new treatments "health sects," perhaps because many of the practitioners of these new treatments claimed that they endowed their patients with both physical and moral health. It was perhaps for this reason as well that the evangelical

movement embraced health reform in all its various forms, giving it even more overtly religious meanings.

Perhaps the best example of this blending of spiritual with physical perfectionism can be seen in the career of Sylvester Graham (1794-1851). As a young man, Graham was one of the Second Great Awakening's most popular revival speakers, especially noteworthy because of his early emphasis on temperance. Temperance, of course, was a popular issue of the day, made even more popular by Graham's insistence on its connection to Christian perfection. In time, Graham's concern for temperance led him to a more general concern with the moral importance of reforming the American diet. According to Graham, the American diet—high in calories, animal fats, and "spicy condiments"—served to over-stimulate an individual. This in turn made a person susceptible not only to disease, but also to sin, especially the sin of lust. Graham proposed reforming the American diet through a comprehensive program of vegetarianism, central to which was the use of a special unbolted wheat flour baked into what came to be known as "Graham's crackers." In addition, Graham also prohibited the use of caffeine and tobacco, and the abuse of medicinal drugs. Graham published his ideas widely, and "Grahamism" came to be seen as one of the surest ways to achieve the physical perfection necessary for spiritual holiness. Grahamism was widely adopted not only by mainstream evangelicals, but also by such sectarian groups as the Shakers, the Mormons, and of course, the Seventh-day Adventists.

Health had always been a concern for Mrs. White, as she had been a sickly child and was plagued throughout her life with a wide variety of medical problems. It is not surprising, therefore, that early in her career, Mrs. White became intensely interested in health and diet, especially in the form of hydropathy and Grahamism. In 1863, and then again in 1865, Mrs. White experienced spiritual visions that confirmed Graham's prohibitions on meat, alcohol, tobacco, caffeine and the abuse of medicinal drugs. Like Graham, Mrs. White made the connection between physical and spiritual perfection explicit: her duty was to make all true Christians "understand how much their habits of diet have to do with their health, their characters, their usefulness in this world, and their eternal destiny" (Olsen 1972:265).

Followers of Mrs.White found some of these prohibitions hard to bear at first—especially the prohibition against meat eating. Only after many years did Mrs. White's health and diet doctrines become widely accepted by the Seventh-day Adventism movement as a whole. Indeed, in time, Mrs. White's health and diet concerns would become one of the most widely known features of the movement—overshadowing even its premillennialism. Part of the reason for this was the success of the Western Health Reform Institute, opened by Mrs. White in Battle Creek in 1866. Modeled after the "Our Home on the Hillside" hydropathic resort of Dansville, New York, the Institute promoted both hydropathy and a modified form of Grahamism. Ten years later, her protégé, Dr. John Harvey

Kellogg took over the directorship of the Institute and changed its name to the Sanitarium. The "San," as it became known, would become one of the most fashionable resorts in America, attracting a diverse and wealthy clientele including such luminaries as J. C. Penny, Montgomery Ward, John D. Rockefeller, and President Taft.

For Mrs. White, the popularity of the Institute was a mixed blessing. Although highly profitable, fewer and fewer visitors to Battle Creek were at all interested in Millerite premillennialism or any of the other doctrines of Seventh-day Adventism. For Mrs.White, however, health and diet could never be divorced from their spiritual purpose. As the Sanitarium came to be better known for its diet reform than for its perfectionism, Mrs. White severed her ties with the Institute in 1903 and shifted her attention to the numerous other Adventist sanitaria that had sprung up around the country. Indeed, eventually Seventh-day Adventism would abandon Battle Creek altogether. Rejecting the creeping "worldliness" of both the Institute and the massive cereal industry it had indirectly spawned, Mrs. White lobbied to have the headquarters of the movement moved. Accordingly, the headquarters were moved to Takoma Park, Maryland, in 1905.

Seventh-day Adventism: From Sect to Denomination

Throughout its first decades, the Seventh-day Adventist movement had operated on an ad hoc basis, largely under the charismatic leadership of James and Ellen G. White. By the end of the 1850s, however, it was clear that the rapidly-expanding movement needed more formal organization. Therefore, in the last week of September, 1860, a general meeting of Seventh-day Adventists was held in Battle Creek to discuss the situation. Some opposed institutionalization; like most sectarians, their desire was to reform the larger church, not create a new denomination. And yet, Seventh-day Adventism had already been undergoing a slow process of institutionalization. Since 1854, elders of the movement had begun to license ministers, and by 1859, a tithe system had been adopted to support them. Moreover, by 1860 it was clear that the movement's publishing operations needed some legal status if they were to continue. In the end, a certain Yankee pragmatism won out: not only did the general meeting move to incorporate the publishing house, but Seventh-day Adventism was adopted as the official name of what would inevitably become a new denomination.

From that point on, the process of institutionalization moved quickly. Local congregations throughout the United States were encouraged to organize themselves into constitutionally-convened Adventist conferences at the state level. By 1863, six such state conferences sent delegates to another general conference in Battle Creek. There, they ratified a constitution for the general

conference, elected an executive committee, and then elected a president. This democratic organization proved both flexible and durable, and while it has been modified over the years, it served remarkably well to promote the expansion and cohesion of Seventh-day Adventism during the rest of the 19th century. Typically, the most dangerous time for the survival of a sect is at the death of its charismatic leader. By the time Ellen G. White died in 1915, Seventh-day Adventism already had more than a generation of strong institutional experience behind it. Moreover, a large number of church members had been born into the movement by this time. Thus, while Mrs. White's death was keenly felt, it hardly affected the continued survival of Seventh-day Adventism. It was perhaps at this point that Seventh-day Adventism truly passed from the status of sect to that of denomination.

Today, if one were to ask the "man on the street" to name a sect, it is unlikely that Seventh-day Adventism would be selected. The average American today is far less aware of or concerned with the doctrinal controversies that consumed the nation nearly 200 years ago. Thus, most see Seventh-day Adventism as simply another unremarkable strand in America's denominational fabric. And yet, the history of Seventh-day Adventism demonstrates otherwise. With its blend of millennialism, restorationism, illuminism, and perfectionism, Seventh-day Adventism is in fact a perfect microcosm of early 19th-century American sectarianism and study of this movement thus provides a window on a vital period of American religious history.

HISTORY OF THE JAMES AND ELLEN G. WHITE HOUSE SITE (20CA118)

Early Period: 1855-1863

According to the Calhoun County index of deeds (1855), James White purchased lots 64 and 65 in Manchester's 3rd addition from Cyrenius Smith on October 6, 1855, for $230, less than a year after he and his wife had moved to Battle Creek from Rochester, New York (Figure 1-3). The Whites were apparently attracted to this location by another Sabbath-keeper, Jonah Lewis, who owned Lot 3 immediately to the south. The Whites' two wooded lots covered approximately 1.5 acres (6,000 square meters). With the assistance of labor and finances, the Whites erected a modest, Greek Revival-style wood-framed house on Lot 64 the following year at a cost of about $500. Much of the land was soon cleared to make way for gardens, orchards, and perhaps associated outbuildings, with the exception of a small grove of second-growth oak in the northeast corner of the property. This served as a retreat for James White when he retired for prayer.

The one and two-thirds-story house originally had six rooms (Crawford & Stearns 1998; Historic Adventist Properties 1990). On the first floor was a parlor

and sitting room in the front; to the rear there was a small bedroom to the north and a kitchen to the south that also served as a dining room. Above the front room was another large, open space with a ceiling that that sloped to the north and south. Two more bedrooms and the stairway were found at the rear. Later in the decade, the Whites added wings to the south and north sides of the house. The southern room was used for the boys' bedroom, while the room to the north was occupied first by Ellen's parents (Robert and Eunice Harmon). When they moved out, James's parents (John and Betsy White) lived there until they built their own place directly across the street on Lot 63. This lot was purchased by James White from Elias Manchester in 1855 for a cost of $80.

Blueprint / Layout

From the exterior, the appearance of the Whites' home was of a simple, Greek Revival style, with the gable end towards the road. The southern wing of the house is part of the original construction (Crawford & Stearns 1998). The house's symmetry was created with a later addition of another wing to the north. A crawl space separated the floorboards from the ground surface, as the house lacked a true basement. On June 19, 1861, Ellen G. White informed Lucinda Abbey, a neighbor, that the Whites were having some work done on their house (Jean Davis, personal communication, 1998). A small wood shed presumably located behind the house had been replaced by a good-sized kitchen, a dining room, a large bedroom, and a buttery and pantry. A meal room was also added off the buttery with a little room for the stove in the summer that could be used for a wood shed in the winter. The Whites occupied the house until April 15, 1863 when Robert Sawyer bought it for $1,480.

Agricultural Period (ca. 1864-1885)

By the late 1860s, George W. Angell owned lots 64, 65, and three/quarters of the adjacent lot 3 (Beers 1873). According to the 1871 Battle Creek City Directory, Angell was a farmer residing in the James and Ellen G. White house. If Angell was still actively farming then he likely owned or rented other parcels of land in the vicinity, since Lots 64 and 65 were much too small to support him in agricultural pursuits. In 1867, Angell purchased the northerly quarter of Lot 3 and the privilege of using water from the well on said lot from Jonah R. and Caroline E. Lewis.

Residential Period (ca. 1886-1949)

In the late 19th and early 20th centuries, lots 64 and 65 were subdivided and several smaller house lots were created. Residential structures were erected at 51 N. Wood Street (1880s?), 57 N. Wood Street (1880s?) and 71 N. Wood Street (1906). The White house remained at 63-65 N. Wood. These houses were modest

dwellings typically occupied by owners of middle class socioeconomic standing. Many residents in the neighborhood were employed at the Sanitarium during this period. For example, W. Edson Marsh, who lived at 71 N. Wood in 1921, was employed as a plumber and engineer at the Sanitarium. From 1926-29, the Boldyreff family resided at 57/59 N. Wood Street. Dr. William Nicholas Boldyreff is best known as the head of the San's physiological laboratory, named after the great Russian physiologist Ivan Pavlov, under whom Dr. Boldyreff once served as first assistant. He, his son Ephraim, and daughter Tatiana were all employed at the San during this period.

The transformation of the agricultural landscape to a more suburban one entailed the construction of unattached automobile garages often at the rear of each property. Two such garages appear on a Sanborn map (1920) that was updated to the 1940s (Figure 2-1). Documentary evidence for a garage behind the White house consists of an application dated May 5, 1926, seeking permission to erect a single story 2-car private garage 20 x 18' on the west side of 65 N. Wood Street. Marsh also applied for a permit to build an unattached garage at 71 N. Wood Street in April, 1920, after his permit for an attached garage filed a month earlier was cancelled.

These landscape modifications suggest a general prosperity for the neighborhood residents; they owned automobiles and could afford structures to protect them. This is mirrored in the permit sought and granted to C. Fremont Mosher to construct a one-story addition (7.5 x 15.5') on the west side of his home to be used as an office. Mosher, who resided at 51 N. Wood Street, was apparently a successful insurance agent, real estate agent, and notary public according to the 1921 City Directory. In 1922 he also sought permission to add a 7 x 4' "store room" on the west side of his house. Finally, A. William Hildebrand, a carpenter, was granted permission in 1926 to build a $300 garage behind the White house which he owned. At the time the permit was granted, Hildebrand lived at 82 Byron Street, suggesting that the garage was intended for a tenant who now occupied the house.

Tenancy Period (ca. 1950-1975)

By the middle of the 20th century, none of the houses at 51, 57, 63-65, or 71 N. Wood Street were owner occupied. Absentee landlords who resided outside of the neighborhood rented these houses just as Hildebrand had done beginning in the late 1920s. The end of the owner occupancy period was generally marked by a decline in the upkeep of the landscapes associated with the houses. Outbuildings such as garages and remnants of the older agricultural landscapes fell into disrepair. During this period, the owners and/or residents at 51, 57, and 71 N. Wood Street were cited for numerous environmental health violations.

These included housing code violations (e.g., lack of down spouts) to such practices as throwing garbage on the ground.

Two changes to the built environment at 63-65 N. Wood Street were recorded in the Battle Creek Division of Inspections. In Fall 1969 the owner sought to alter the interior of the dwelling to make one unit out of two apartments. The following year permission was granted to construct a 5 x 20'4" addition to the north side of the existing garage.

Preservation Period (ca. 1976-present)

In the mid-1970s, the Adventist Historic Properties ushered in the preservation period by purchasing the James and Ellen G. White house. Although no major renovations were initially undertaken, there were efforts made to find a suitable tenant to occupy the northern wing of the house, which apparently had been converted back into a separate apartment. The remainder of the house held artifacts, documents, and furnishings associated with James and Ellen G. White.

In the late 1980s, Neighborhoods, Inc., a local non-profit agency organized to renovate dilapidated houses, purchased the house at 51 N. Wood Street and made it habitable once again. This house has since been purchased by Historic Adventist Properties, Inc.

The house once occupied by the Boldyreff family at 57 N. Wood Street was acquired by the City of Battle Creek and demolished on May 24, 1994. This property was acquired by Historic Adventist Properties, Inc. and now supports fruit trees and a small garden, all of which are enclosed by a fence. The dwelling at 71 N. Wood Street was also acquired by Historic Adventist Properties, Inc. It was being demolished just as the field school began in early May 1998.

Having provided some background information on the history of the site and its occupants, in the next chapter we integrate this documentary information with material evidence derived from field investigations. This involves a more detailed examination of the history of land-use patterns at the site based on our archaeological and geophysical methods.

Adventist Historic Properties' Gradual purchasing of land for preservation

CHAPTER 4

RESEARCH FINDINGS: FEATURES AND LAND-USE PATTERNS

Michael S. Nassaney, William Sauck, and Hidetsugu Kosaka

In this chapter we present our preliminary research findings regarding the landscape associated with the James and Ellen G. White house site from the mid-19th century up through the present. Obviously, the dominant feature at the site is the mid-19th century dwelling. An analysis of these architectural remains has been conducted in a separate study (Crawford & Stearns 1998). A very brief examination was conducted of the cistern discovered beneath the house during the architectural study and some suggestions for investigation are included in this chapter. Emphasis here is placed on the surface and subsurface features at the site, how they have changed over time, and their archaeological and cultural significance. Interpretations are based on the integration of the documentary, archaeological, and geophysical results. The aim is to identify and draw attention to physical remains which have the potential to contribute information about life in the 19th century. The locations of features and dateable artifacts, for example, may imply spatial variation in activity areas over time that reflect the dominant themes of successive periods of occupation. By examining the locations, functions, and contents of features and other objects of material culture, we can begin to understand the development of the landscape as an expression of changes in political, economic, and social relations.

GEOPHYSICAL RESULTS

Magnetometer

As can be expected at a homestead which has been occupied for more than a century, there are many hundreds of iron and steel objects scattered about the property. Those detectable with the magnetometer range in size from nails, bolts and cans, up to large sheets resembling roofing. The magnetic field strength slopes steeply toward and away from the wire mesh fences which subdivide the back yard, and hence a 2-3 meter wide band along each fence is overprinted with this strong signal. The composite magnetic map (Figure 4-1) shows the general concentrations of iron and steel (but not other metals) on the property. Black and white contour maps of each approximately 10 m x 10 m square are also available, some of which are shown in the following section in which excavations are discussed.

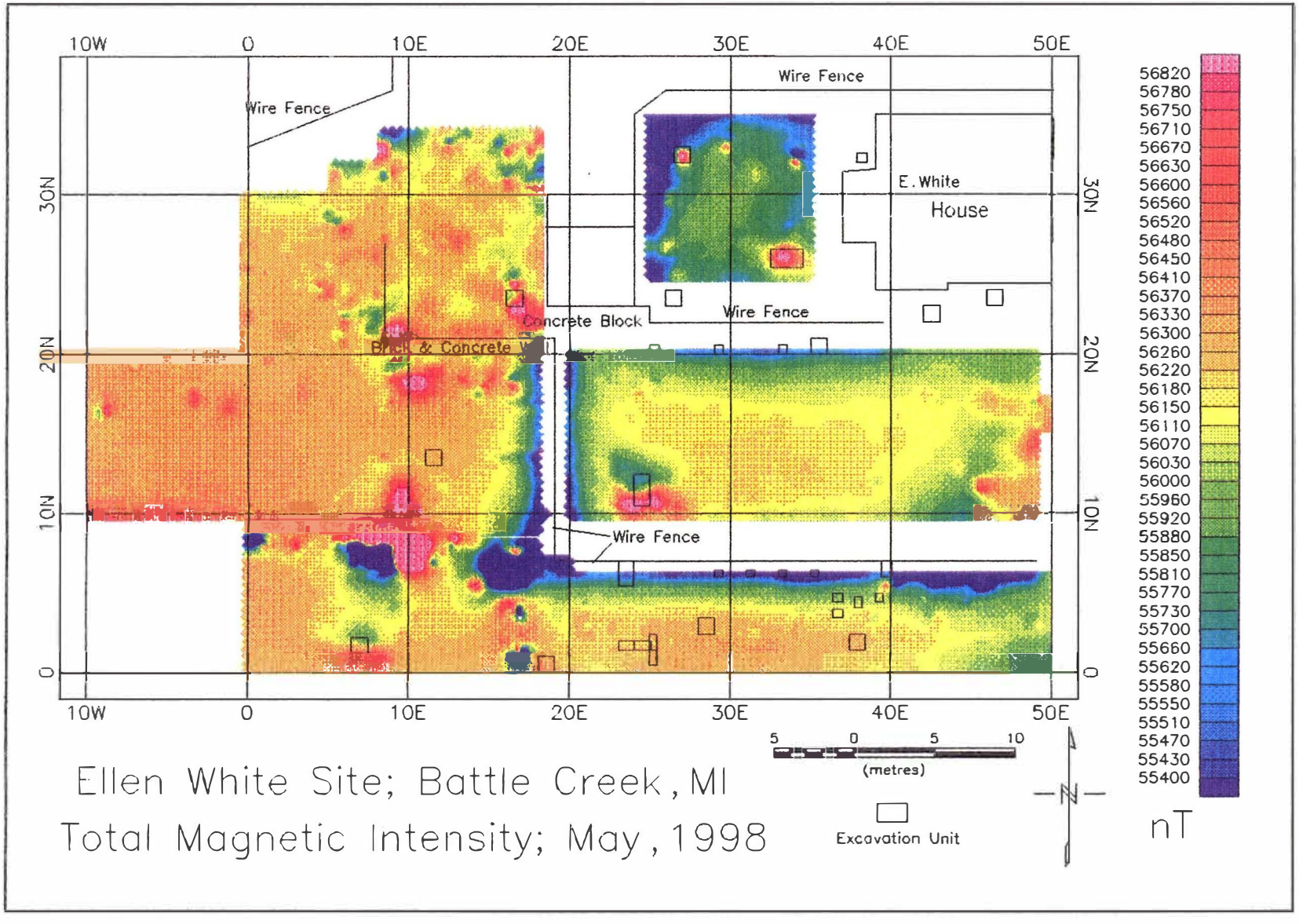


Figure 4-1. Composite magnetic map.

No survey was conducted near the remains of the garage in Area 4. Further to the west, the area bounded by the brick retaining wall had numerous intense magnetic anomalies, indicating a great deal of buried iron and steel materials within the artificial fill used to level this area. The boundaries of some of the magnetic anomalies in these two blocks (0E, 20N) and (10E, 20N) have pronounced NE and NW alignments. The several squares further to the SW and S (-10E, 10N) and (0E, 10N) are relatively less disturbed magnetically, but do contain significant isolated anomalies. At the N edge of the southern tier of blocks, at 8-9 m N coordinate, there is a tree-line and obvious remains of an old wire fence, which is the locus of a number of stronger anomalies. These are probably related to remnants of wire fence, downed fence posts, and debris which was thrown along the former fence line. Similarly, there are remains of a S-N fence line at 17E in block 10E, 0N; this one is marked by some steel posts still standing.

In the garden, lawn, and orchard area to the south of the White house (Area 3) there are two blocks (30E, 10N and 40E, 10N) with only a few pronounced anomalies. This is the location of the Boldyreff house (57 N. Wood) which was razed recently, so these features are contained within the backfill of the former basement. Additionally, one might expect further overprint by debris further to the west and south of the former house if bulldozer operators pushed sidewalk and foundation materials away from it.

Electromagnetic (EM) Conductivity

The electromagnetic induction system produces two data sets: the conductivity channel, and a parameter called the "in-phase" component. The conductivity is measured in units of milli-Mhos/meter which in the SI system of units is milli-Siemens/meter (mS/m). This is simply the inverse of the number measured by a resistivity system (which measures in Ohm-meters). To convert EM conductivity to resistivity, simply divide 1000 by the EM conductivity (in mS/m). Thus, 4 mS/m is 250 Ohm-m and 10 mS/m is 100 Ohm-m. The "in-phase" is given in units of parts-per-thousand, or ppt, of the primary energizing field. It responds more to metallic objects, while the conductivity channel is calibrated for bulk earth conductivity.

The conductivity map is shown in Figure 4-2, and the corresponding in-phase map is Figure 4-3. Note that near the house and fences, both these channels produce large negative numbers. This is not physically possible (to have negative conductivity), but is a system response to the presence of significant metallic conductors. This system gives high readings more than 3 meters from large conductors such as the house and fences, thus leaving a band 6 meters wide along fences where subsurface features are effectively obscured.

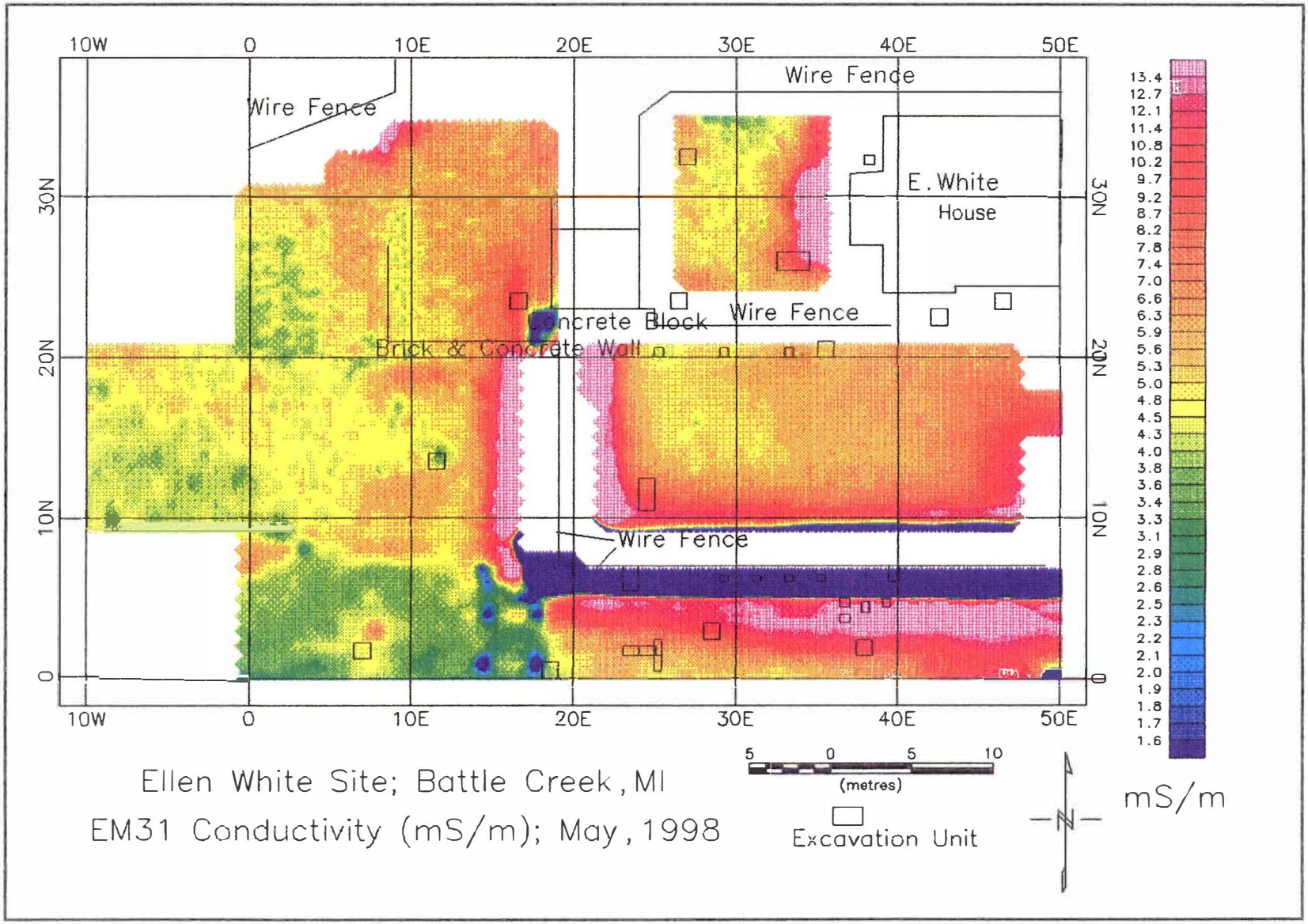


Figure 4-2. Conductivity map (EM-31).

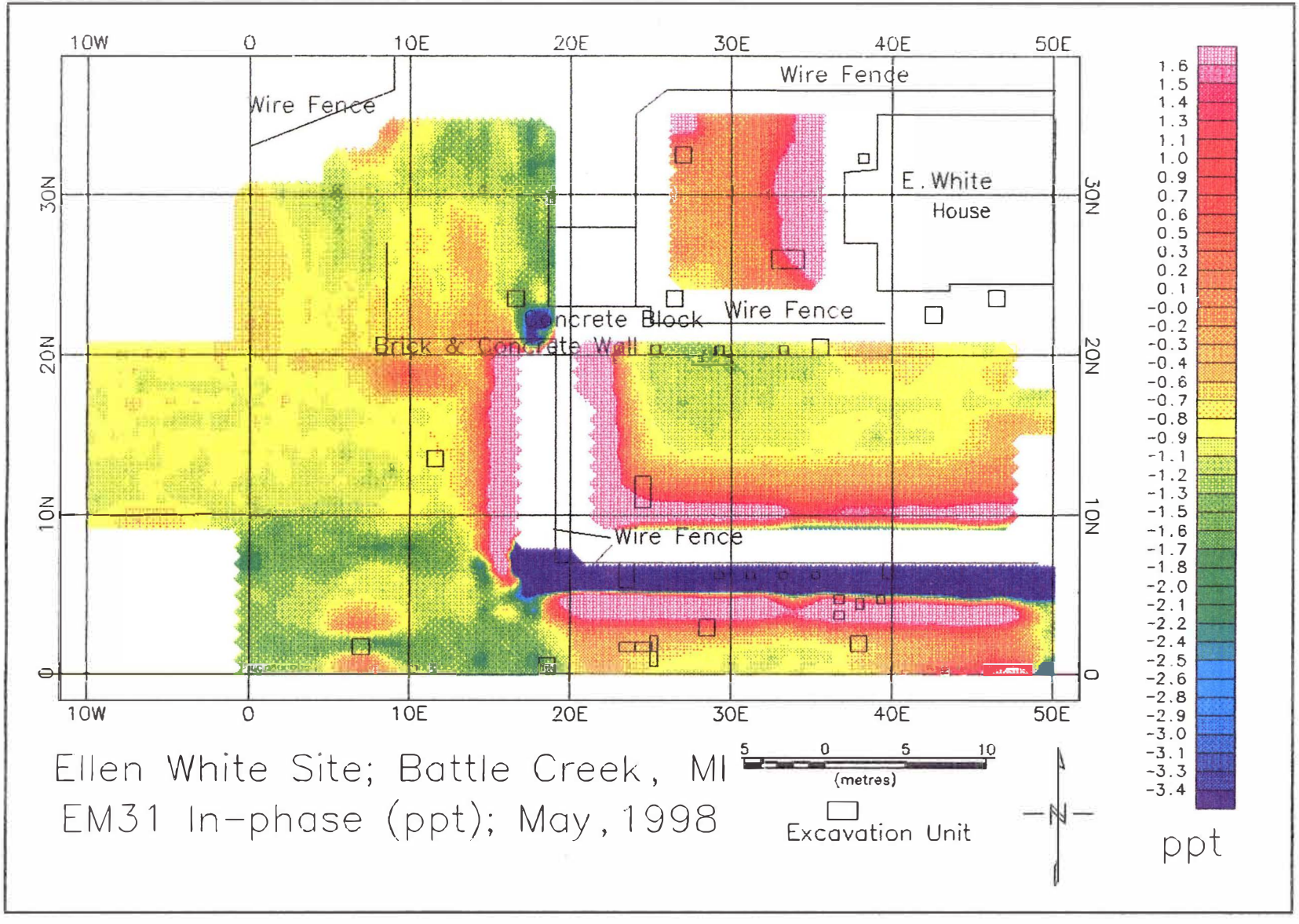


Figure 4-3. In-phase response map (EM-31).

The in-phase channel is usually set to near zero at the beginning of a survey when the instrument is located away from anomalous areas. Hence, these readings will typically oscillate about zero giving both negative and positive numbers. The sense of the variations is somewhat similar to that of the conductivity channel.

The conductivity away from fences and the house shows only a small range, varying from about 3.5 to about 5.5, indicating the relatively uniform geologic background of the site.

Ground Penetrating Radar (GPR)

For a given antenna system, the GPR can not "see" shallower than a certain limit, nor deeper than another limit. The shallow limit is due to the reverberations of the transmit pulse and the arrival of a strong air wave directly from the transmit to the receive antenna. For the 500 MHz antennae, which are almost touching each other in the same enclosure, this early dead time is about 4 nsec, which corresponds to the uppermost 20 cm. The deep limit is dependent upon transmitter power and the attenuation of the ground. More conductive earth reduces the depth penetration. At this site, coherent reflections were rarely seen at more than 40 nsec (2 meters depth). A lower frequency antenna would move both these limits deeper, as well as have lower resolution, while a higher frequency system would enable high resolution mapping at very shallow depths.

Along the southernmost tier of blocks, south of the yard fence, in the interval of 23-30 m E, the GPR shows a wedge of surface layer material thickening towards the fence, from S to N. This is probably recent fill associated with re-leveling after the demolition of the house where the young orchard is now located. Figure 4-4 is a sample GPR profile showing this stratigraphic feature.

The GPR response to single, discrete objects is usually an umbrella or hyperbolic-shaped echo. If it is a non-metallic object, the echo consists of no more than about 2 relatively low-amplitude complete cycles, that is, a stack of 4 hyperbolic arcs of alternating polarity. This signature can be caused by an animal burrow, large tree root, cobble or boulder, as well as by numerous archaeological objects. If it is metallic, as for example a pipe or pail, there may be a resonance effect which causes many more cycles to be produced. This may continue all the way to the bottom of the record, as is shown on Figure 4-5 from near the back door of the house.

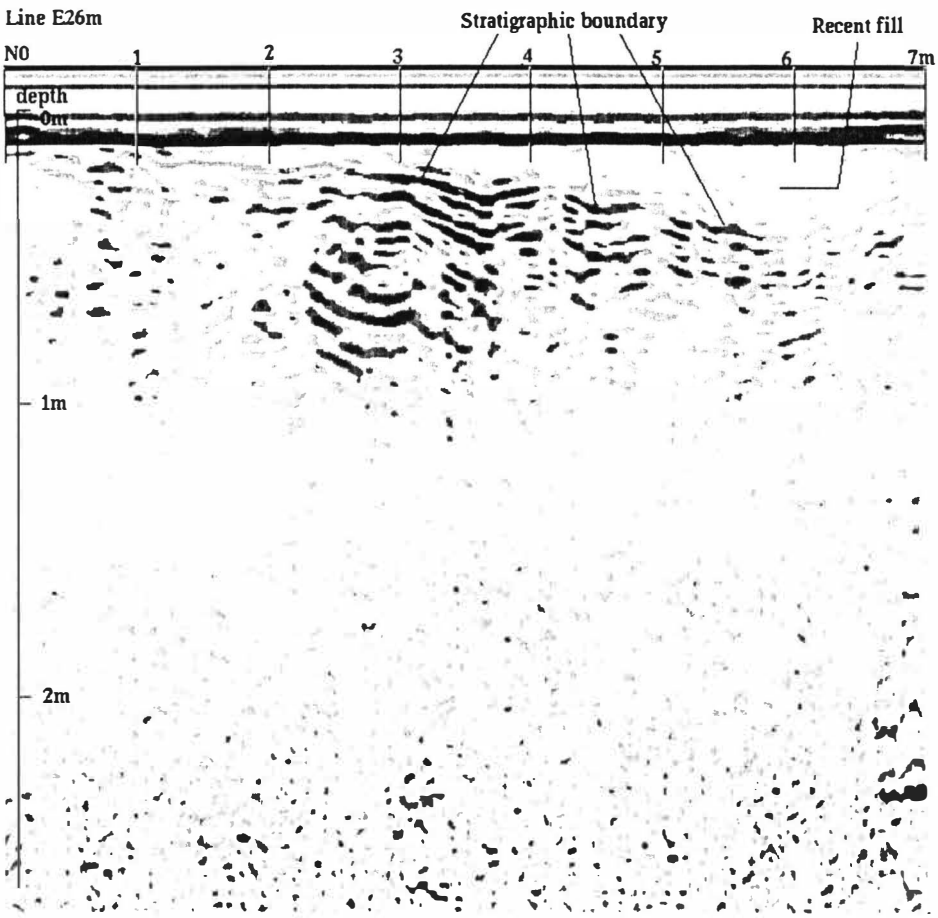


Figure 4-4. Sample GPR profile.

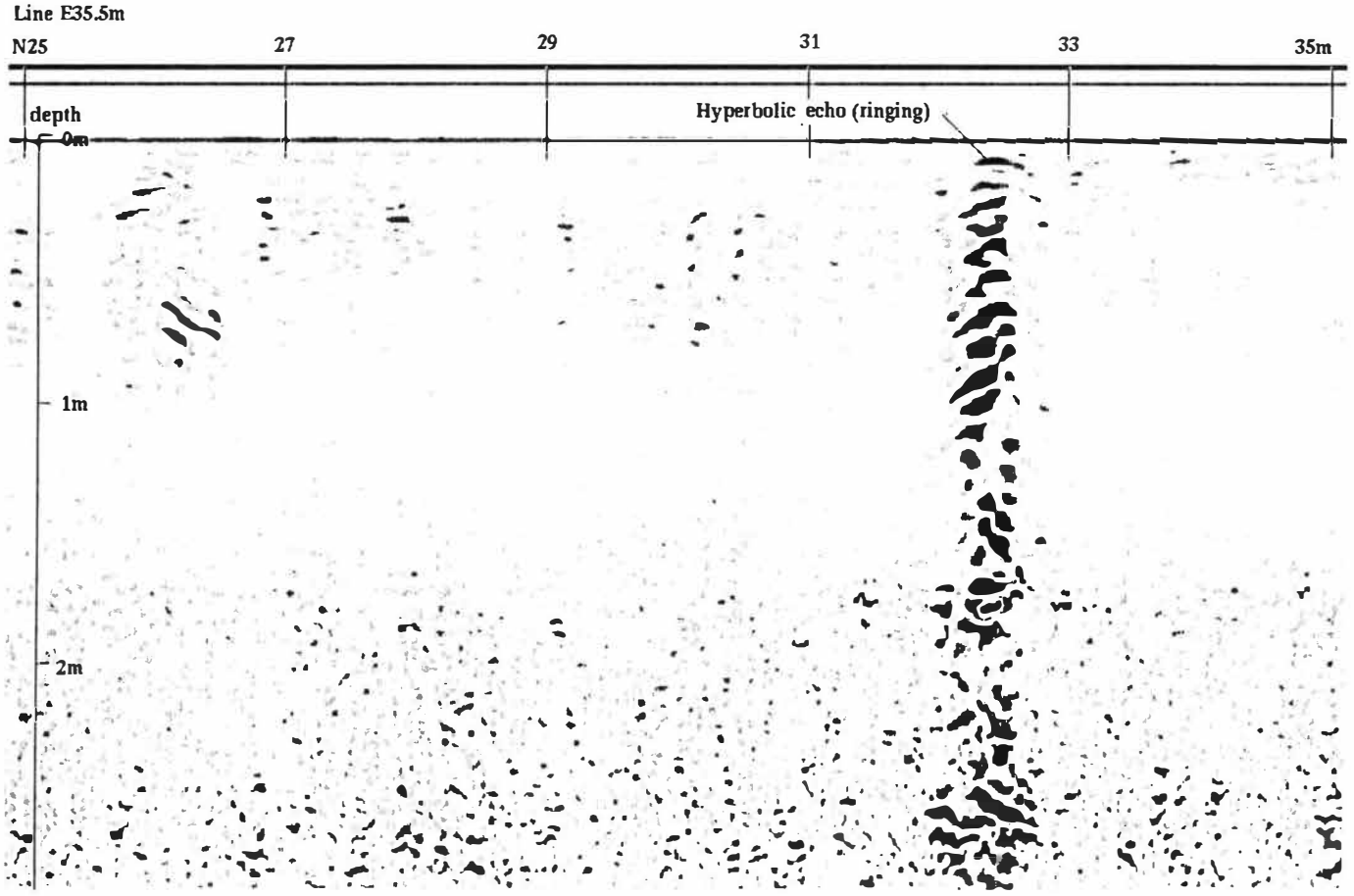


Figure 4-5. Sample GPR profile showing a hyperbolic-shaped echo caused by a metallic object.

COMPARISONS WITH EXCAVATED FEATURES

Every excavation on a magnetic anomaly resulted in the find of some iron/steel object including some of archaeological interest in association with other non-magnetic objects. One excavation was based only on a conductivity low (high resistivity), but where there was no magnetic anomaly. While no excavations were based only upon GPR anomalies, the GPR profiles through or near the excavations do in many cases reveal the stratigraphic context, as well as show bright reflections from buried objects in some cases. In this section we show the geophysical results at six of the excavation units.

Excavation Unit N1.25 E6.5

The detail of the magnetic map for this excavation unit is shown in Figure 4-6. The magnetic high and low of the dipolar pattern are more than 2 m apart, indicating a relatively deep (1-1.25 m) source for the bulk of the pattern. The high is also elongated about 2.2 m long along a W-E axis, which indicates that the source zone is elongated in that direction. The most intense part of the high is at the east end, indicating the location of the south edge of the shallowest part of the body(s). The bulk of the buried magnetic material should lie between this high (at 1.0mN) and the N edge of the zone of steep gradient (2.0mN).

The excavation revealed abundant metal debris encountered between 50-70 cm, with minor brick and rock, and showed characteristics of a burning pit for rubbish. Unfortunately, time did not allow the expansion of the unit one more meter to the east towards the steeper gradient. The EM-31 conductivity map (Figure 4-7) shows a pair of highs, with a low trough between them at the position of the excavation unit. This is the pattern expected for a profile transverse to a long metallic conductive zone with positive shoulders and a negative trough over the source. In this case the highs are not equal, probably due to irregularity of the source, and the area midway between the two highs is just to the east of the excavation unit.

All the S-N GPR profiles from 6.5 to 8.5 mE show significant anomalous returns beginning near 1 mN and extending to 3 mN. One of these lines, Line 7.5E, is shown in Figure 4-8, and it corroborates the interpretation of the magnetic map. The shallowest reflecting object is at about 25 cm depth at the 1 mN coordinate, and was missed by the excavation unit. The central hyperbolic reflector on this section is at 2 mN and depth of 60 cm, within the excavation unit, and the third hyperbola is at 2.8 mN and depth of 65-70 cm, but is just N of

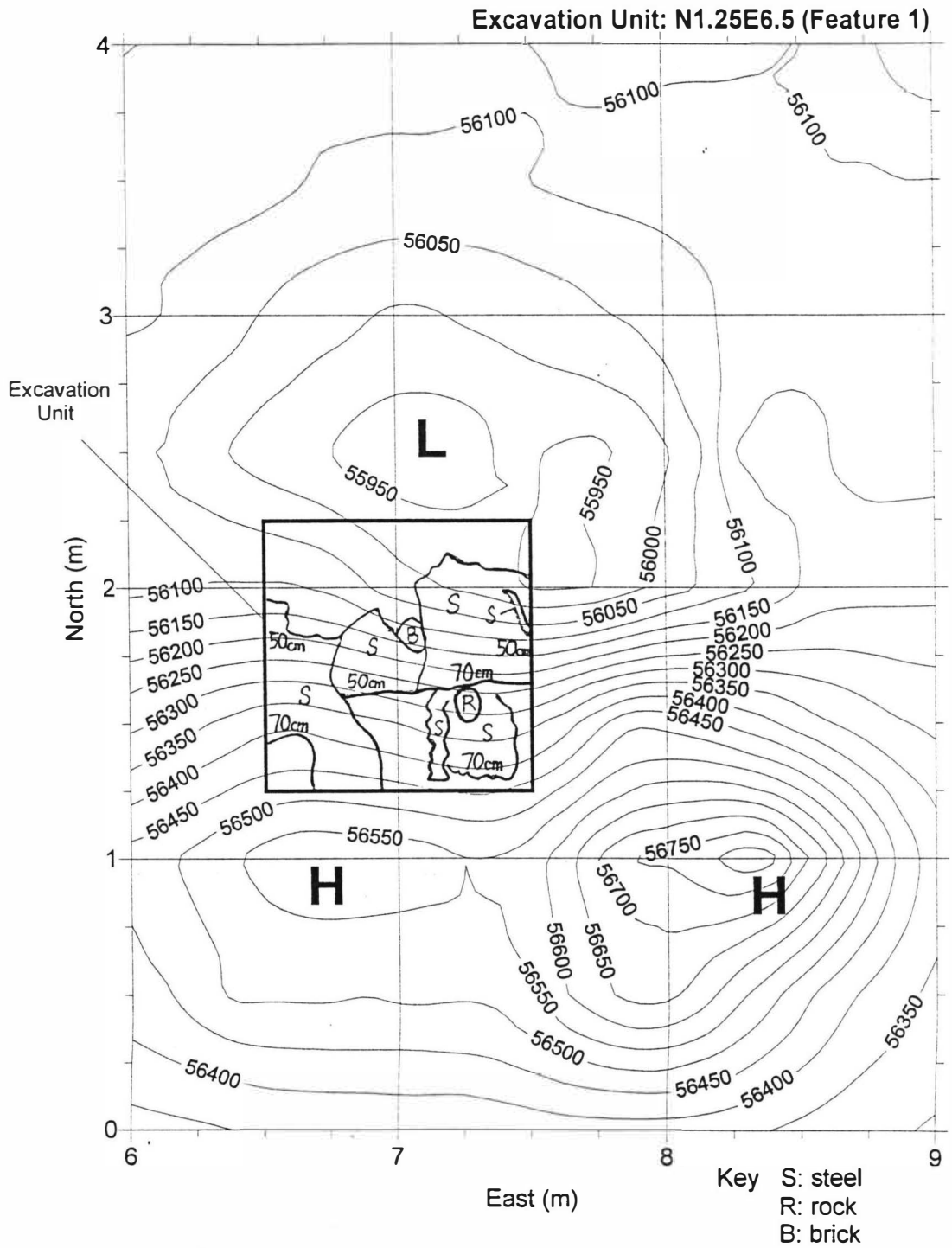


Figure 4-6. Detail of the magnetic map for Unit N1.25 E6.5.

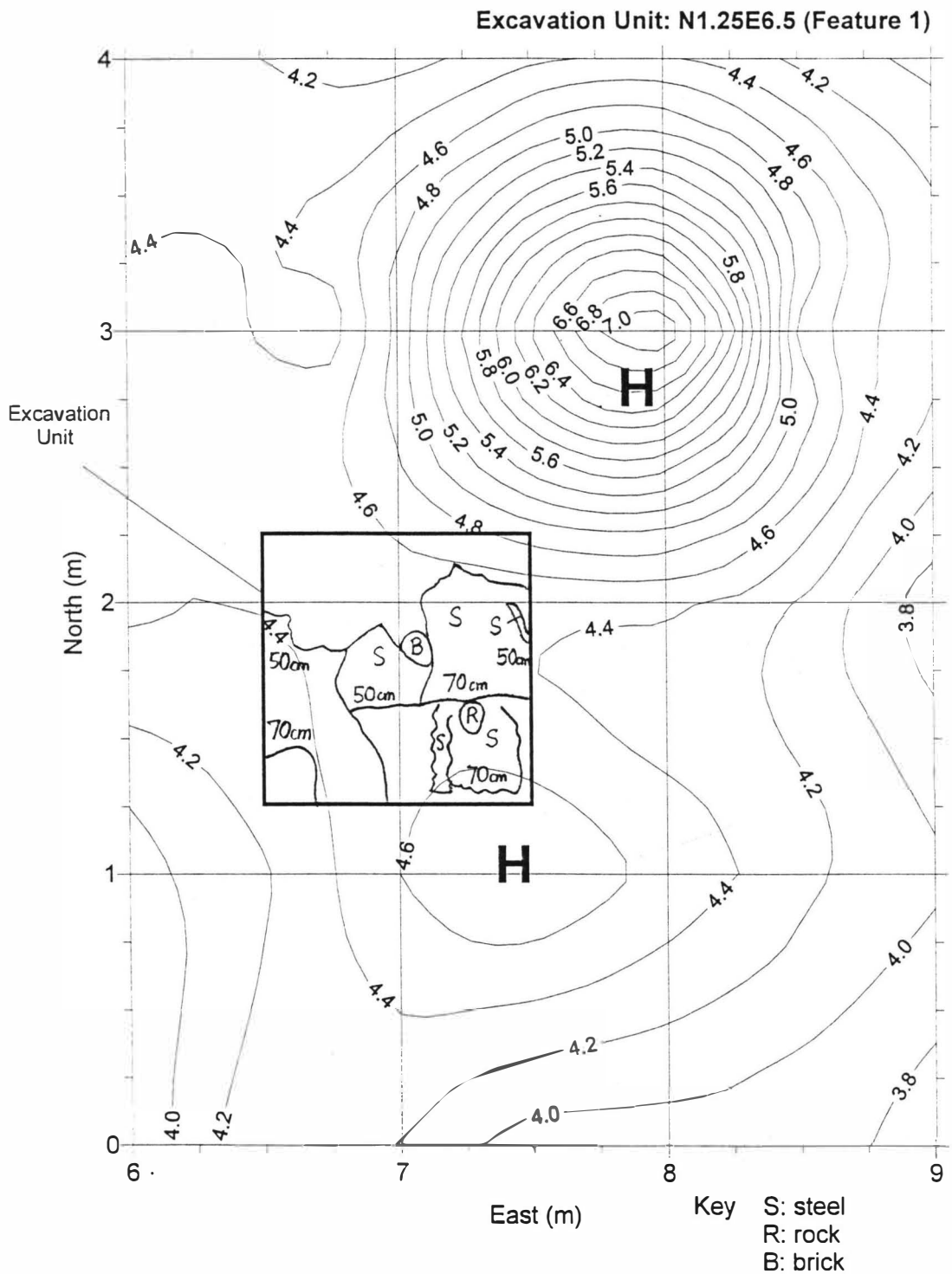


Figure 4-7. EM-31 conductivity map for Unit N1.25 E6.5.

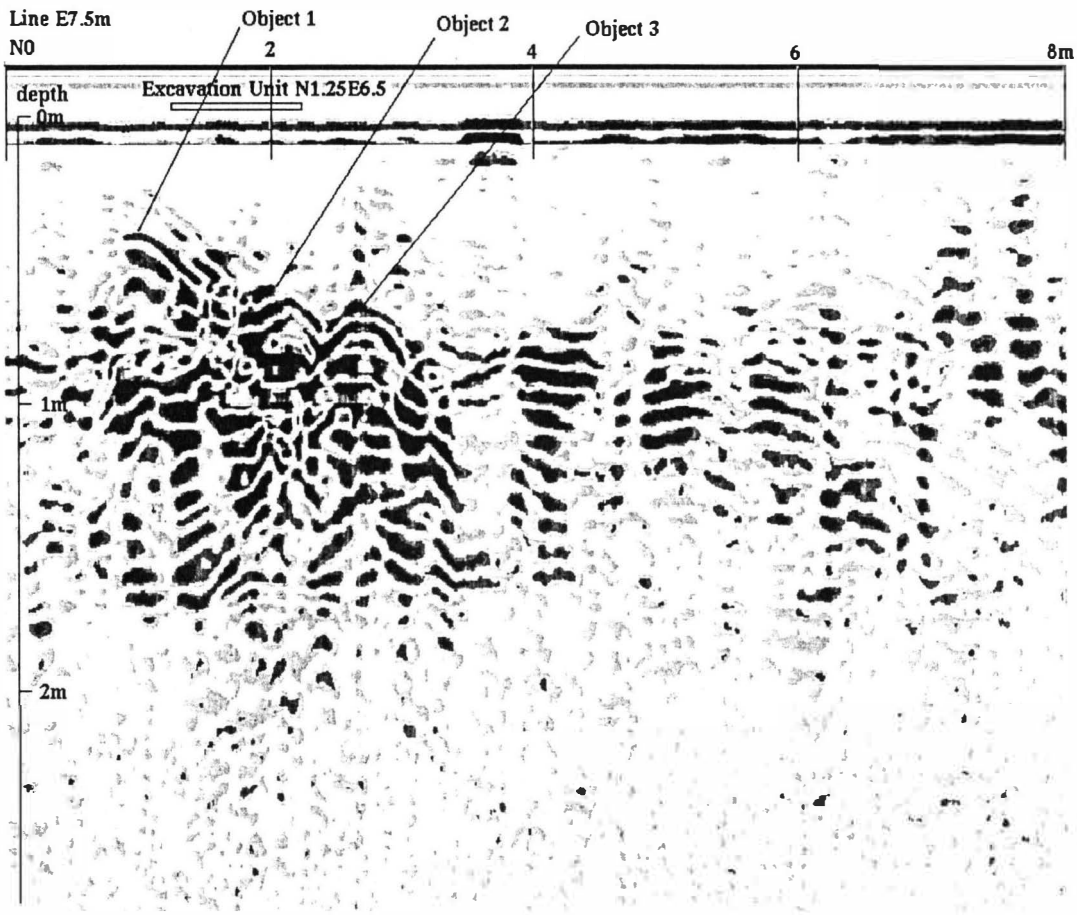


Figure 4-8. GPR map for Unit N1.25 E6.5.

the excavation unit. Thus, the GPR confirms a burial trench about 2 m on a side, with the shallowest object at the S edge and oriented W-E.

Excavation Unit N10.5 E24

The detailed magnetic contour map at this 1 x 2 m excavation unit shows a complex of two unequal magnetic highs and a broad low to their north (Figure 4-9). While the SW corner of the Unit is on the magnetic maximum, the zone of steepest gradient is just a few cm W of the excavation unit, suggesting that the steel source of the most intense anomaly was just beyond the west excavation wall. Nonetheless, the Unit revealed a sloping concrete slab, remains of a concrete wall with a reinforcing bar, broken concrete, rocks, and wood; all of which indicated that this was probably modern demolition debris from the former house which once stood a few meters to the east.

The EM-31 maps show this area as a steep gradient, dominated by the fence to the south, and hence are of no use at this Unit. The GPR profiles over and adjacent to this Unit (Lines 23.5-25.5E) all show strong reflections in the range of 10.5 - 13 mN. Line 23.5E shows a N-dipping reflector which ranges from 60 cm deep at 11N to 90 cm at 13N. Line 24E is included as Figure 4-10, and shows a reflective object at 40 cm depth at the S wall of the Unit, and an asymmetric or N-dipping reflector at 12N at 65 cm depth. These are probably objects below the uppermost objects found in the Unit, as those shallow objects are apparently within the surface dead zone of the GPR. Line 25E shows a strong reflector at 10.5N at a depth of 85 cm, as well as other shallower disturbances. Line 25.5E shows a N-sloping reflector centered at 11N and 75 cm depth. The radar thus indicates that this grouping of objects occupies at least a 2 x 2 m area.

Excavation Unit N23 E16

Figure 4-11 shows the magnetic response of this area, which is a triangular low between three quite intense magnetic maxima. This unit also lies within a gentle conductivity maximum which has a S-N extension of about 3 meters (Figure 4-12). (The strong conductivity gradient to the SE is related to surface fences and posts.) A typical GPR profile is from Line 16.5 E (Figure 4-13), which shows numerous strong reflections beginning at a depth of 35-40 cm at the location of the excavation unit. This depth corresponds to the top of the third stratigraphic layer found in this excavation, the unit containing most of the 20th century debris. GPR also shows two very shallow objects, one at 23.3 mN and <15 cm deep, and the other at 24.6 mN and about 15 cm deep. The GPR indicates that the first and second layers thicken to the north, and that the highly reflective interface (top of the trash layer) deepens to 60+ cm at 28 mN. The entire area

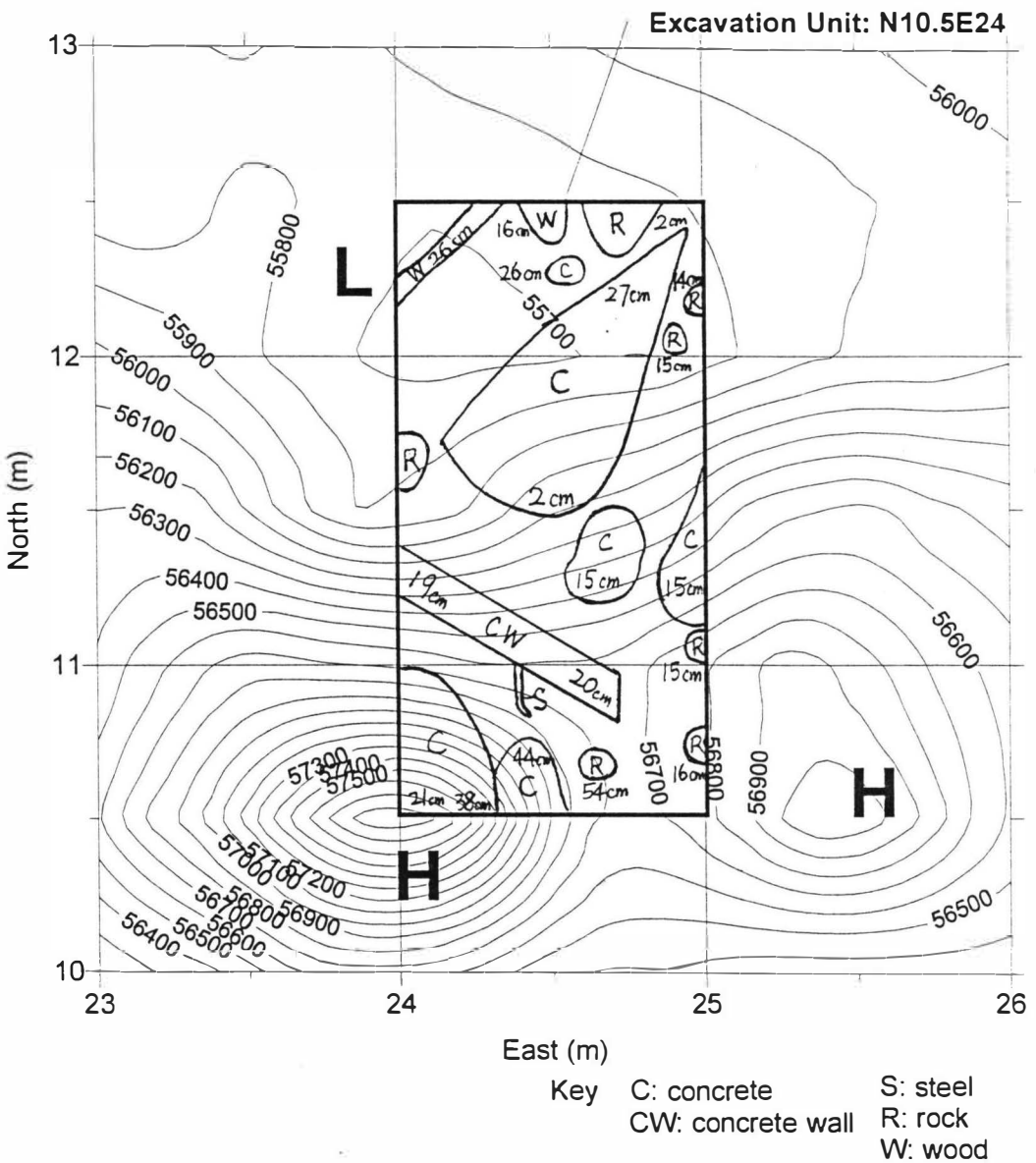


Figure 4-9. Detail of the magnetic map for N10.5 E24.

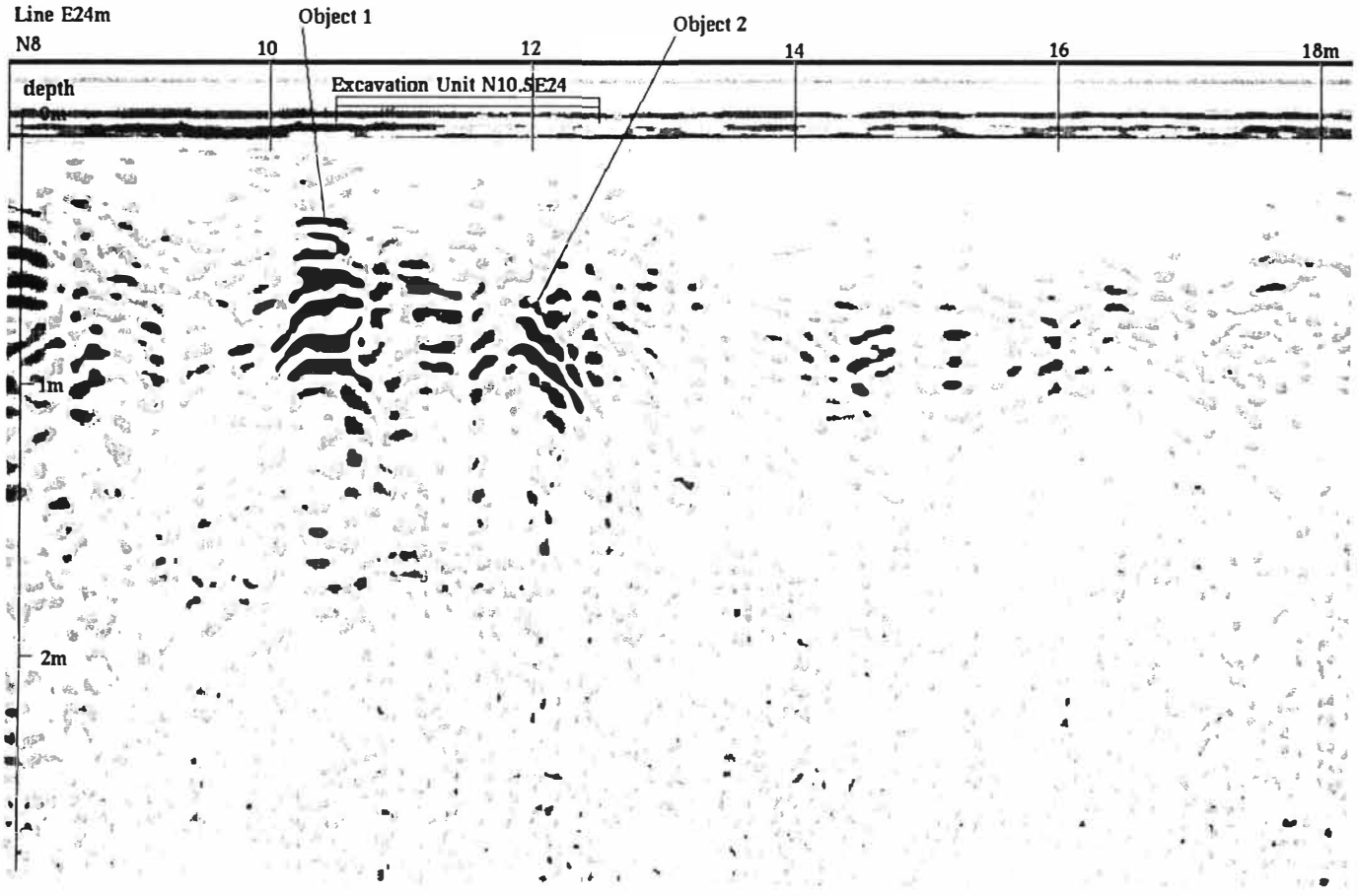


Figure 4-10. GPR map for Unit N10.5 E24.

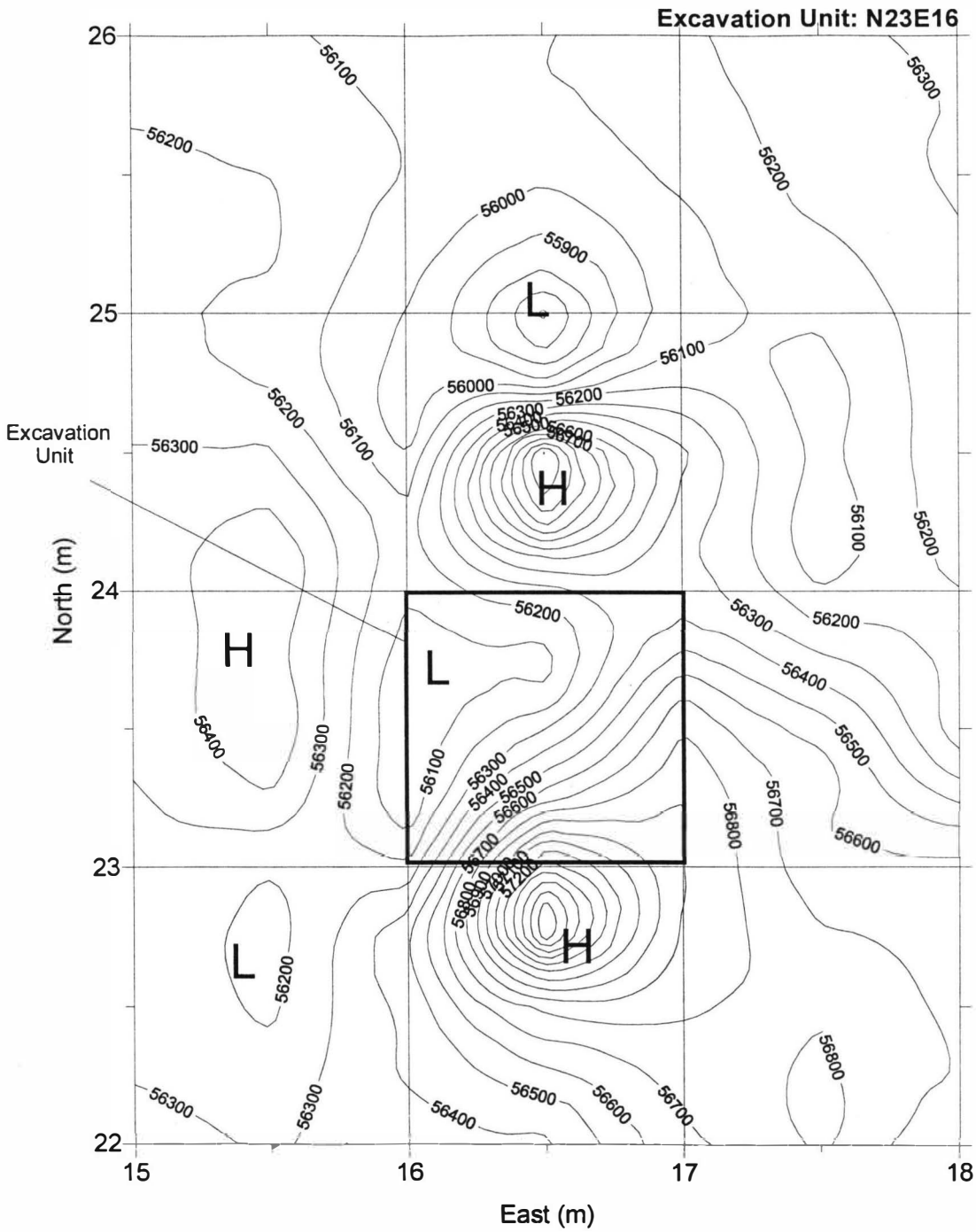


Figure 4-11. Detail of the magnetic map for Unit N23 E16.

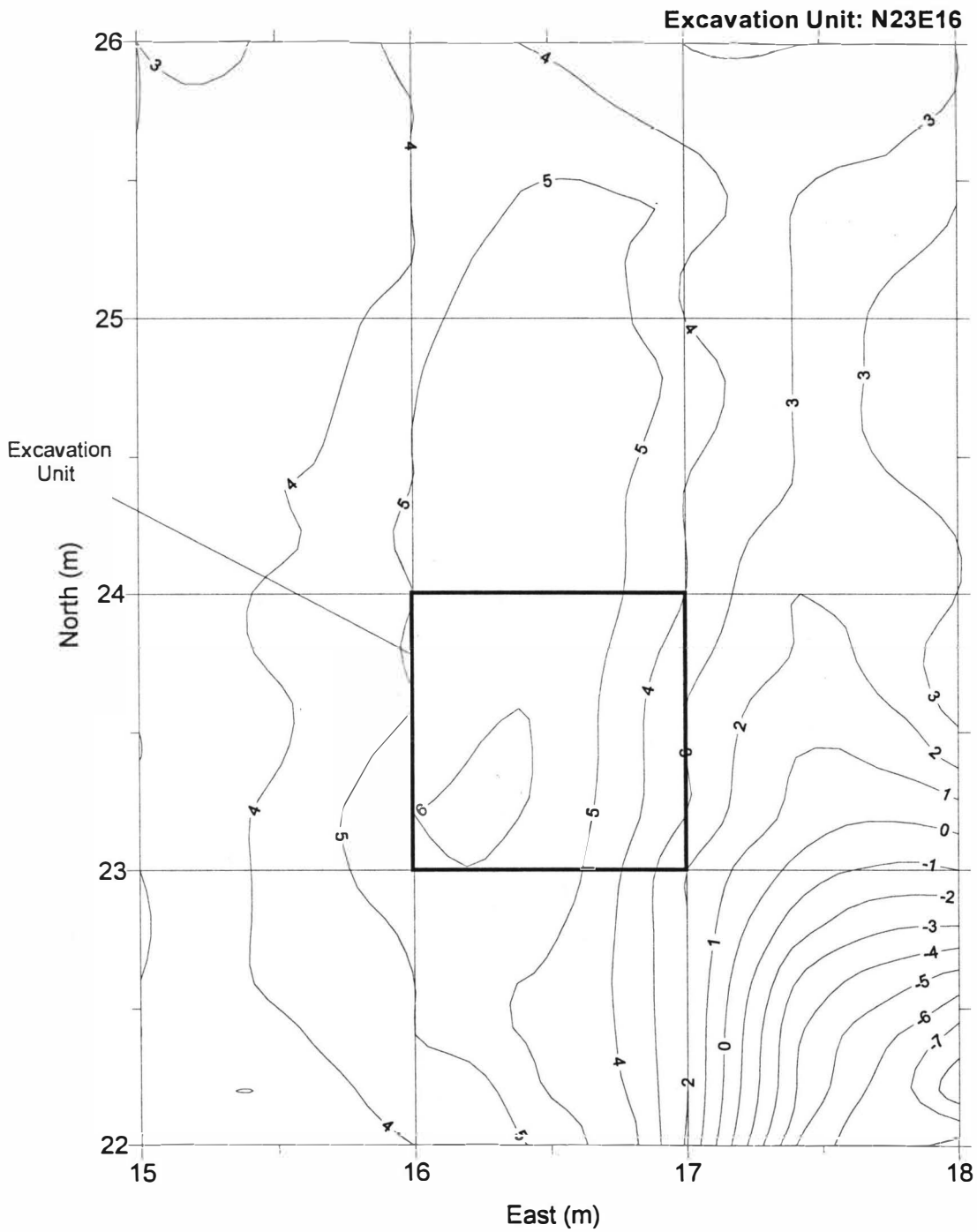


Figure 4-12. EM-31 conductivity map for Unit N23 E16.

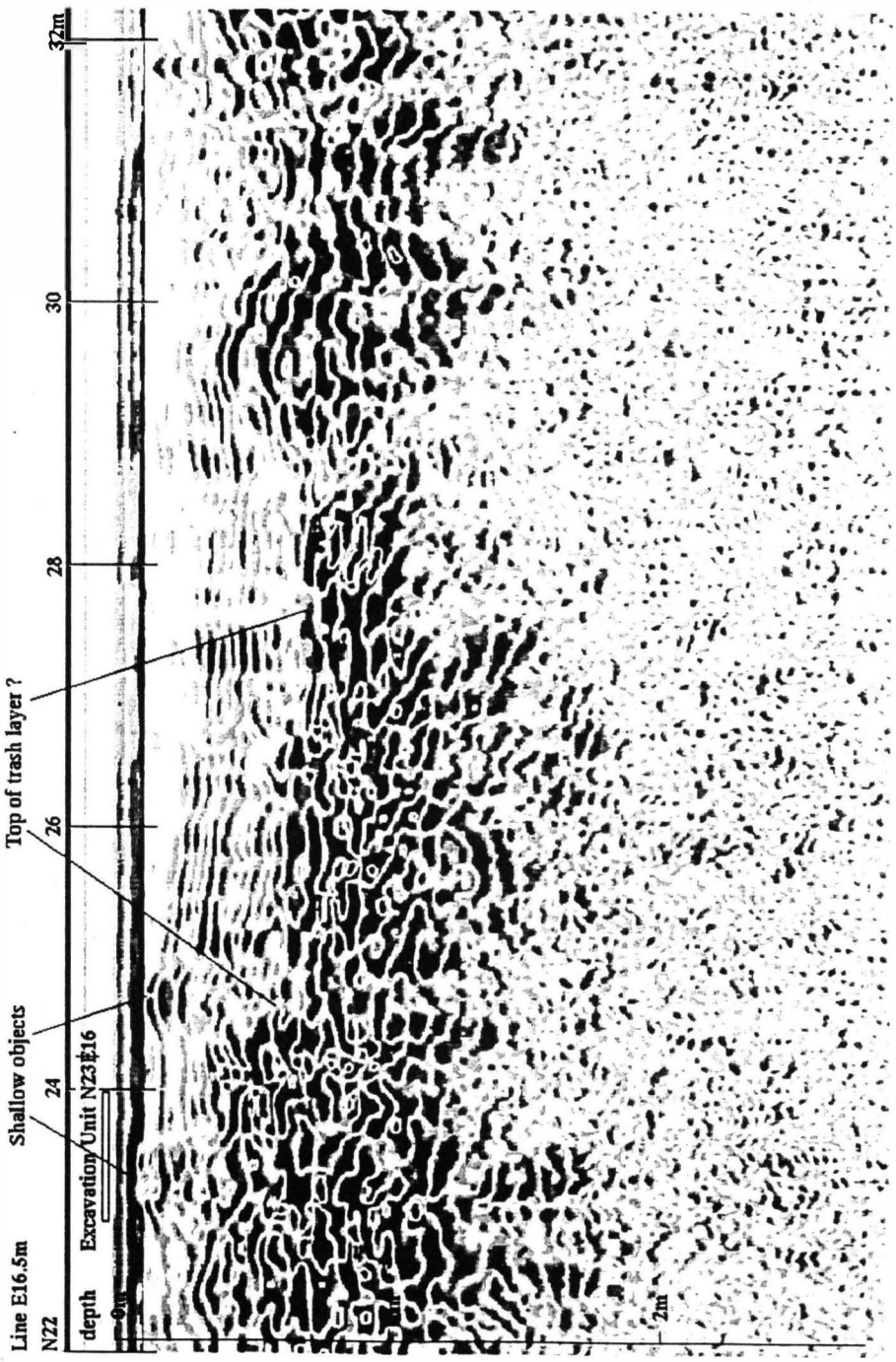


Figure 4-13. GPR map for Unit N23 E16.

above (N of) the brick and cement retaining wall produced continuous high amplitude radar reflections at 40-70 cm depths.

Excavation Unit N13.5 E11

This unit was excavated on a closed minimum of the conductivity map (Figure 4-14). The magnetic map was nearly smooth at this location and so is not shown. The conductivity decreased from a background of above 5 mS/m to a minimum of 3 mS/m. The excavation revealed only an apparent cistern wall of cement plastered directly on a NE sloping earth wall, with none of the trash or magnetic debris typical of the other excavation units. The conductivity low might be explained by dry or otherwise anomalous backfill soils within the cistern, and/or extra dry soil beneath the cistern due to diversion of infiltrating rainwaters by the impermeable cement. The GPR profiles over this feature do not show any marked reflectors shallower than about 70 cm. The cement is probably not very different in its electrical properties from the adjacent soil. In any case, if there were a reflection from the steeply sloping inner surface of the cistern, it would be directed sub-horizontally to the NNE, with no vertical return to the receiver antenna. There are weak hyperbolic reflections from about 75 cm depth at 14.2 mN on Lines 11.5 E and 12.0 E (Figure 4-15), and a broader, stronger one at 11 N on Line 12.5 mE (outside the excavation unit).

Excavation Unit N32 E26.5.

This unit was located on a nearly monopolar magnetic high (Figure 4-16), near the NW corner of the fenced back yard. Because of the proximity of the fences, no EM-31 lines were run directly over this 1 m square unit. Even the magnetic feature is within the range of the steep gradient toward the fence, but is strong enough to stand out as a closed anomaly. Thus, it is clearly due to a sizable amount of iron or steel. This was verified by the excavation, which discovered a pipe and parts of a garden rake. The GPR profile along Line 27 mE (Figure 4-17) does show two strong ringing events which are typical of metal objects. Adjacent lines 0.5 m to the E and W do not show this, but only weak hyperbolic signatures at about 25 cm.

Excavation Unit N25.5 E32.5

This 1 x 2 meter excavation unit was close to the SW corner of the house. It was centered on a broad, nearly monopolar magnetic high of more than 1100 nT amplitude (Figure 4-18). This unit uncovered a large number of sizable steel objects as well as a large clay or ceramic tile section, all of which could easily explain the magnetic anomaly as a composite due to various sources in close proximity. Had they been shallower or just below the surface, the magnetic

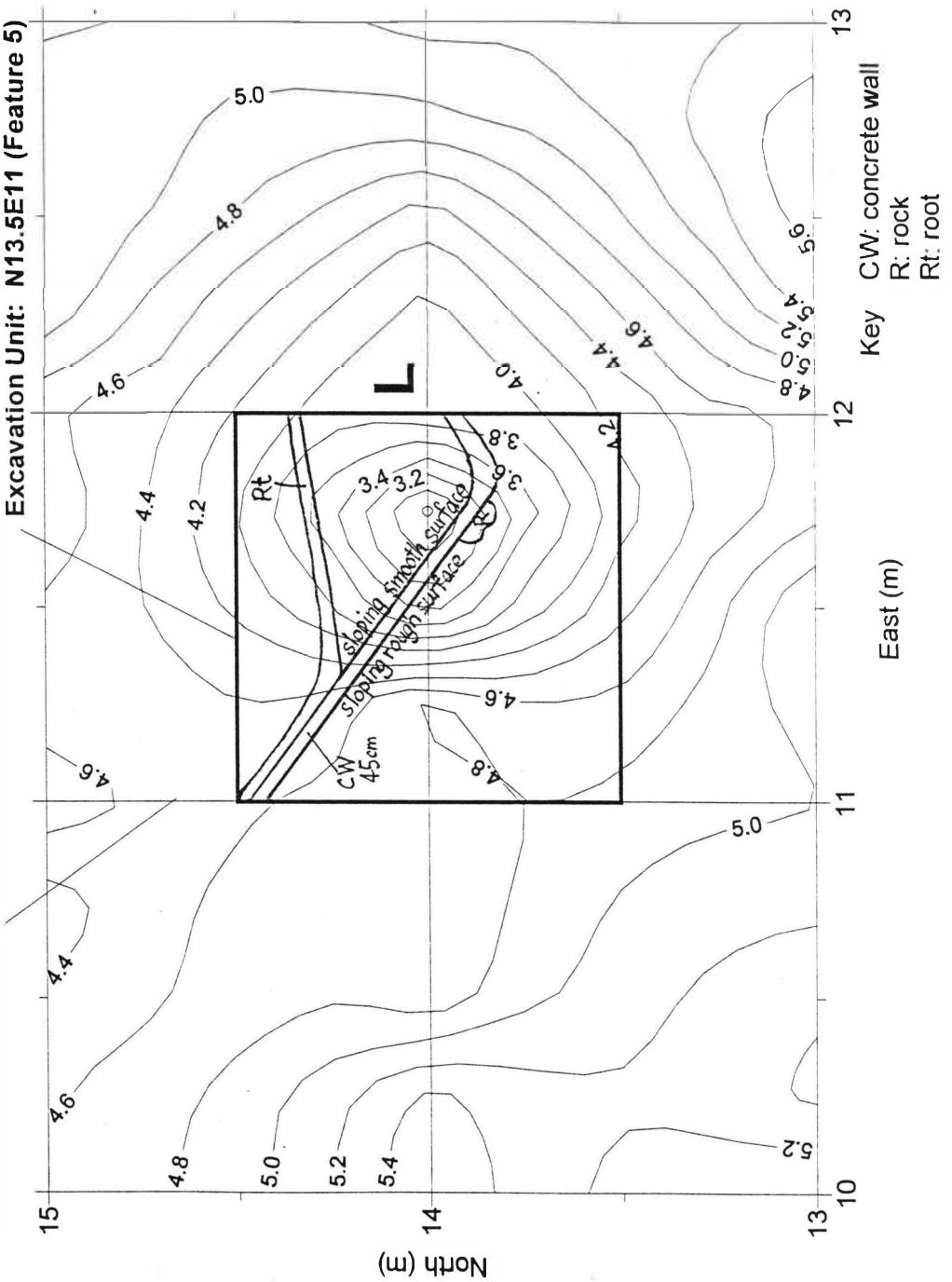


Figure 4-14. EM-31 conductivity map for Unit N13.5 E11.

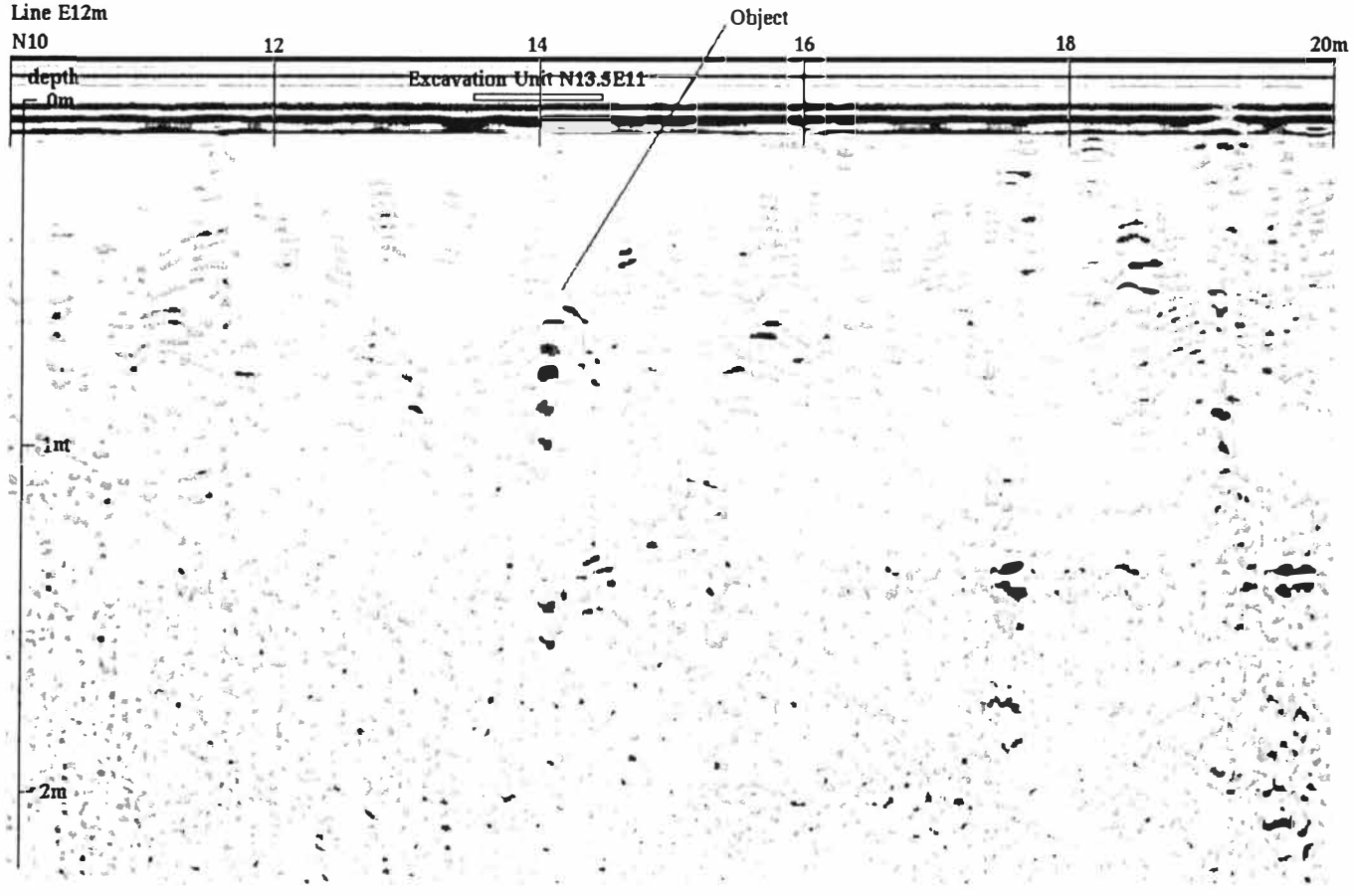


Figure 4-15. GPR map for Unit N13.5 E11.

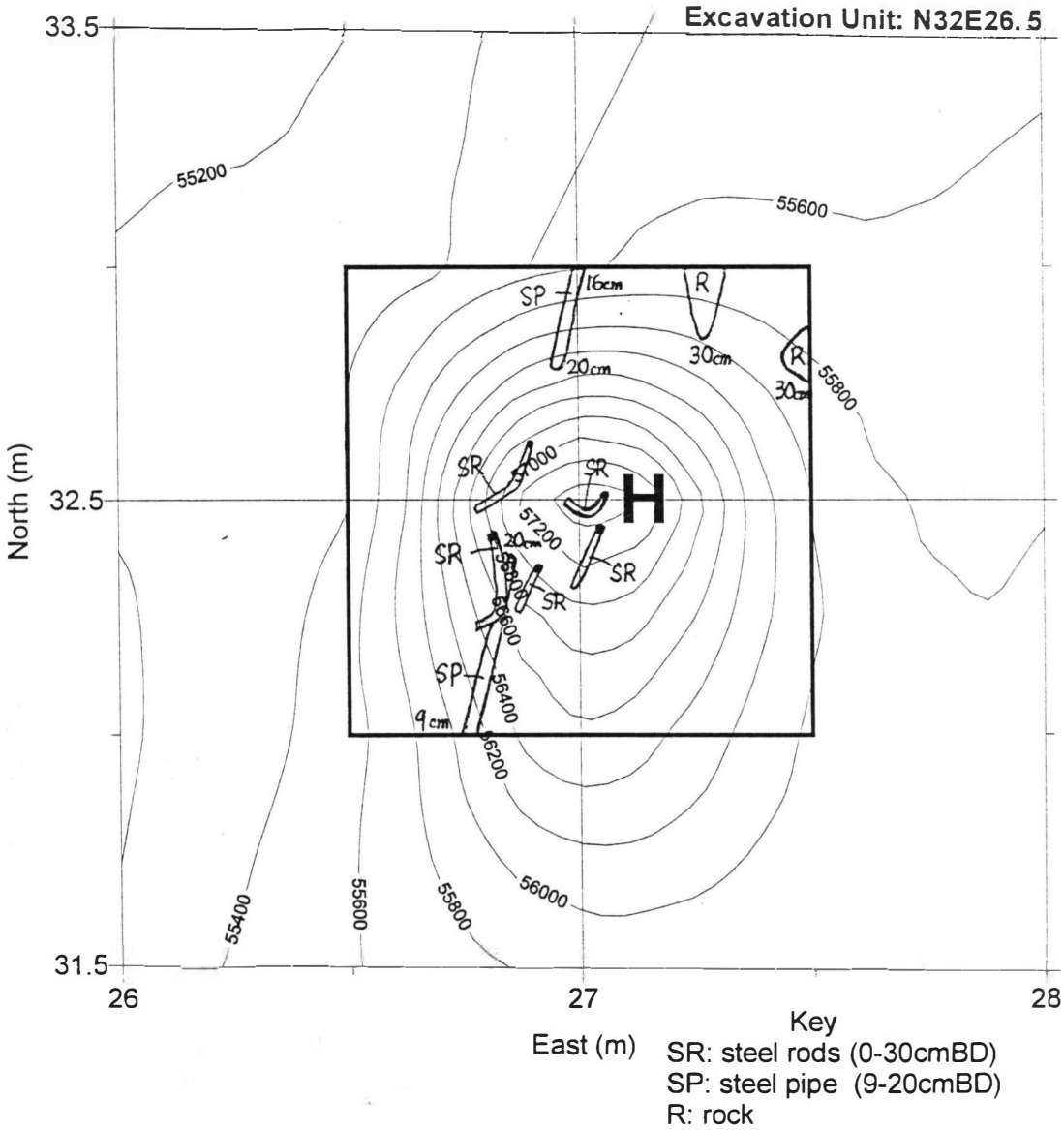


Figure 4-16. Detail of the magnetic map for Unit N32 E26.5.

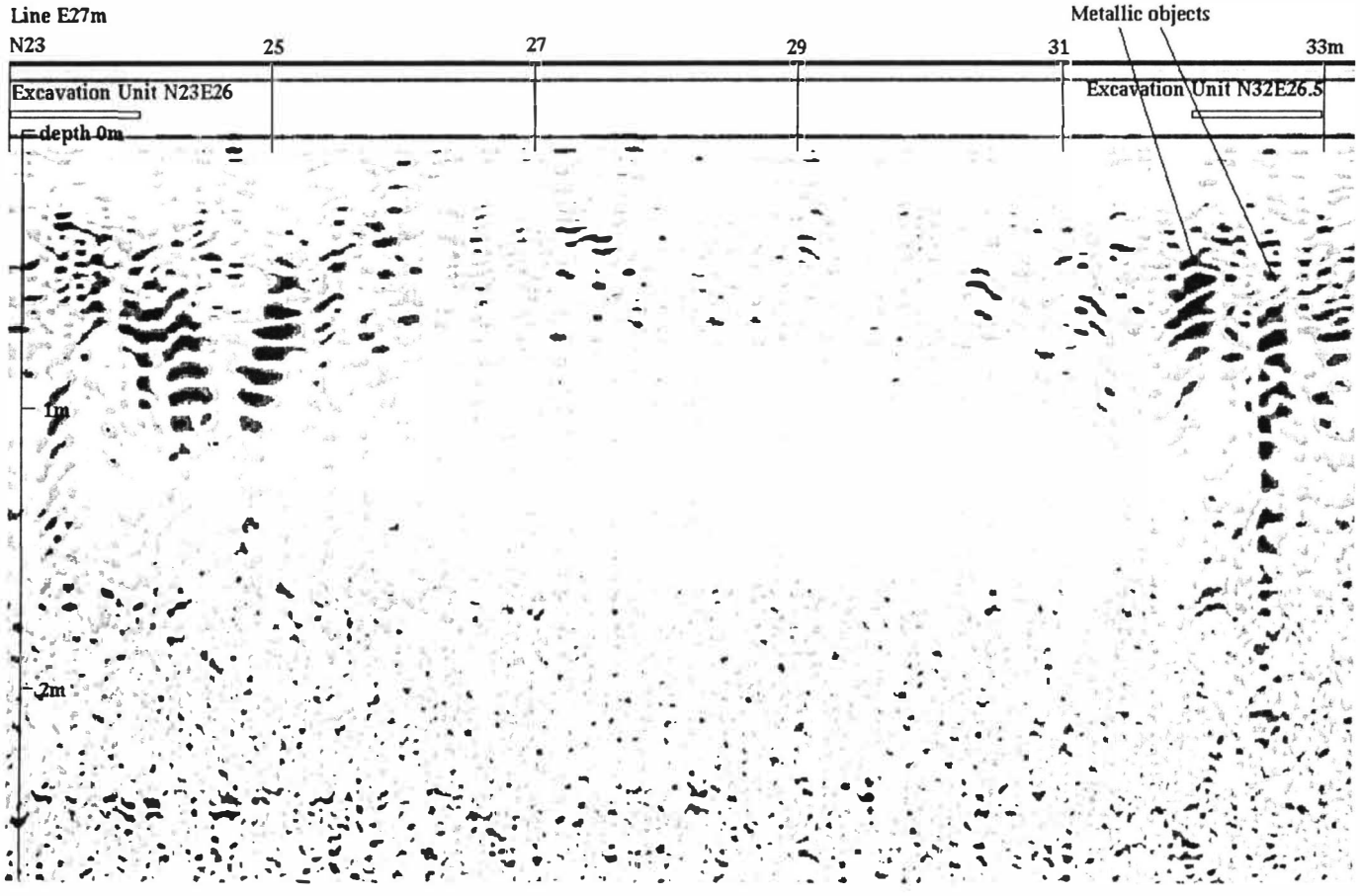


Figure 4-17. GPR map for Unit N32 E26.5.

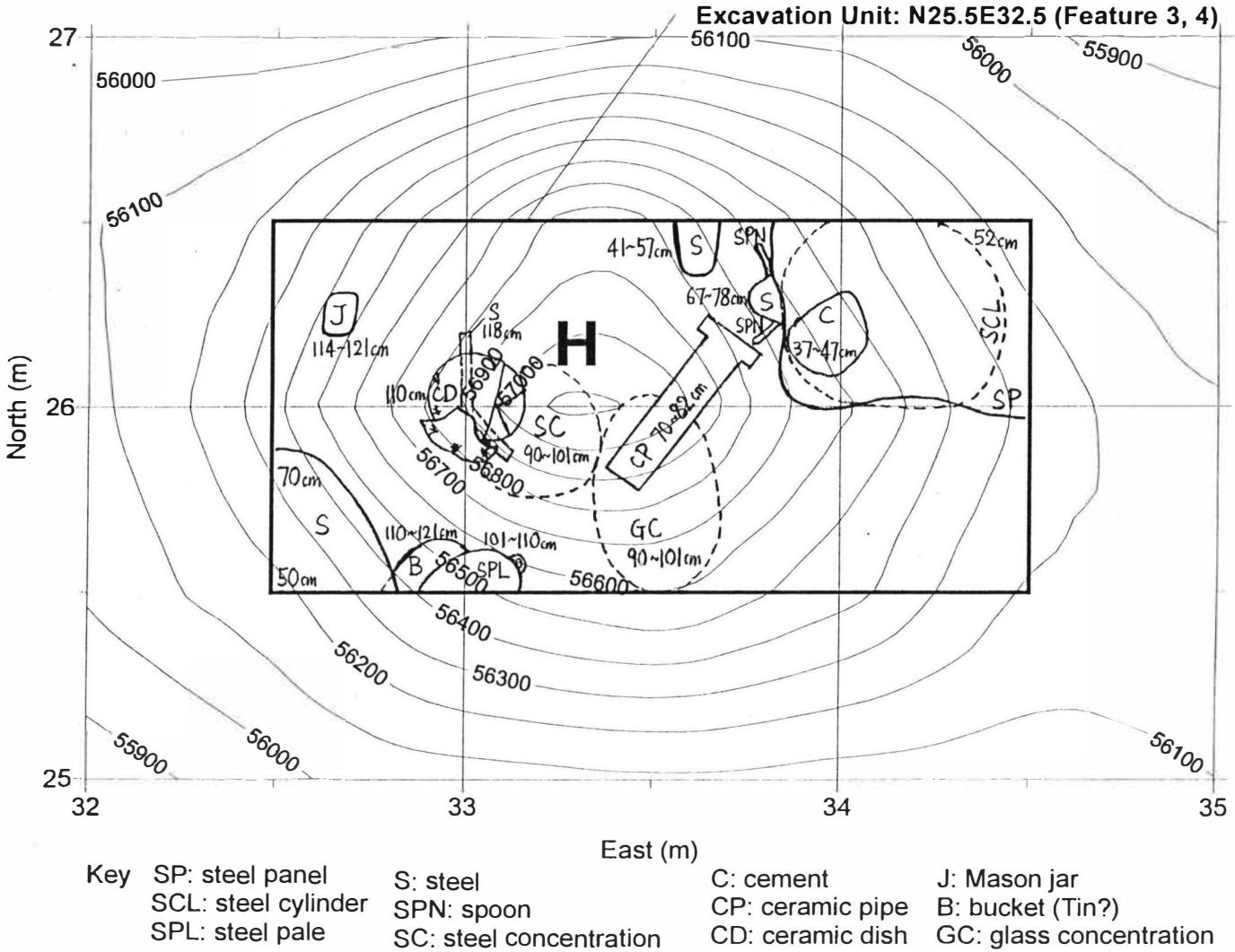


Figure 4-18. Detail of the magnetic map for Unit N25.5 E32.5.

pattern might have shown several high peaks within the broad high. At this location, the EM-31 output was dominated by the strong signal from the house, possibly even the aluminum foil outer covering of the insulating panels, or else the electrical wiring within the walls. Four of the five GPR profiles over this excavation showed strong return echoes; 65 cm deep on Line 32.5 E; weak hyperbola at 60 cm on Line 33 E; 50 cm deep near the N edge of the unit on Line 33.5 E; and 45 cm deep on Line 34 E. Line 33.5 E has been included here as Figure 4-19 to illustrate the GPR responses typical of this location.

In addition to these six selected excavation units, considerable effort was made in small excavation units and extra geophysical work in the area immediately south of the fence between the Whites' house and the next residence to the south where historical documentation suggested the presence of an open well and a barn in this general area. We added W-E radar lines to the S-N coverage of this area, but did not find any striking features. If the barn foundations and the well are in this area, they have left only the most subtle of geophysical indications. This area apparently has some overprint by debris from the recent demolition of a house just to the north/northeast, which may also have contributed to the inability to locate these features. Another possibility is that the historical maps had some scaling error, and that these features were really further west. There are strong magnetic and EM conductivity anomalies in the zone 14-16 mE, 5-7 mN, just W of the former fence line and NW of the large tree which have not been investigated. There is also a strong complex of magnetic features at 7-11 mE, 6.5-9 mN which contains a 90 degree bend and has not been excavated.

LAND-USE PATTERNS: SURFACE AND SUBSURFACE FEATURES

Our understanding of changing land-use patterns at the James and Ellen G. White site occurs within the context of changes in land ownership and site function over nearly 150 years of occupation. For example, many of the outbuildings required for animals during the Agricultural period (ca. 1864-1885) would have been unnecessary during the Residential period (ca. 1886-1949) and, thus, would have disappeared from the landscape. Likewise, several driveways which led to garages to the rear of the lots fell into disuse once the buildings were abandoned and torn down. The most recent land-use practices at the site are discussed first, since they are best known, before presenting evidence of earlier human activities and subsequent developments based on geophysics and archaeological investigations.

The process of land subdivision that created the present property boundaries has already been described. The White house lot (63-65 N. Wood Street) was associated with an irregular-shaped parcel measuring about 7900

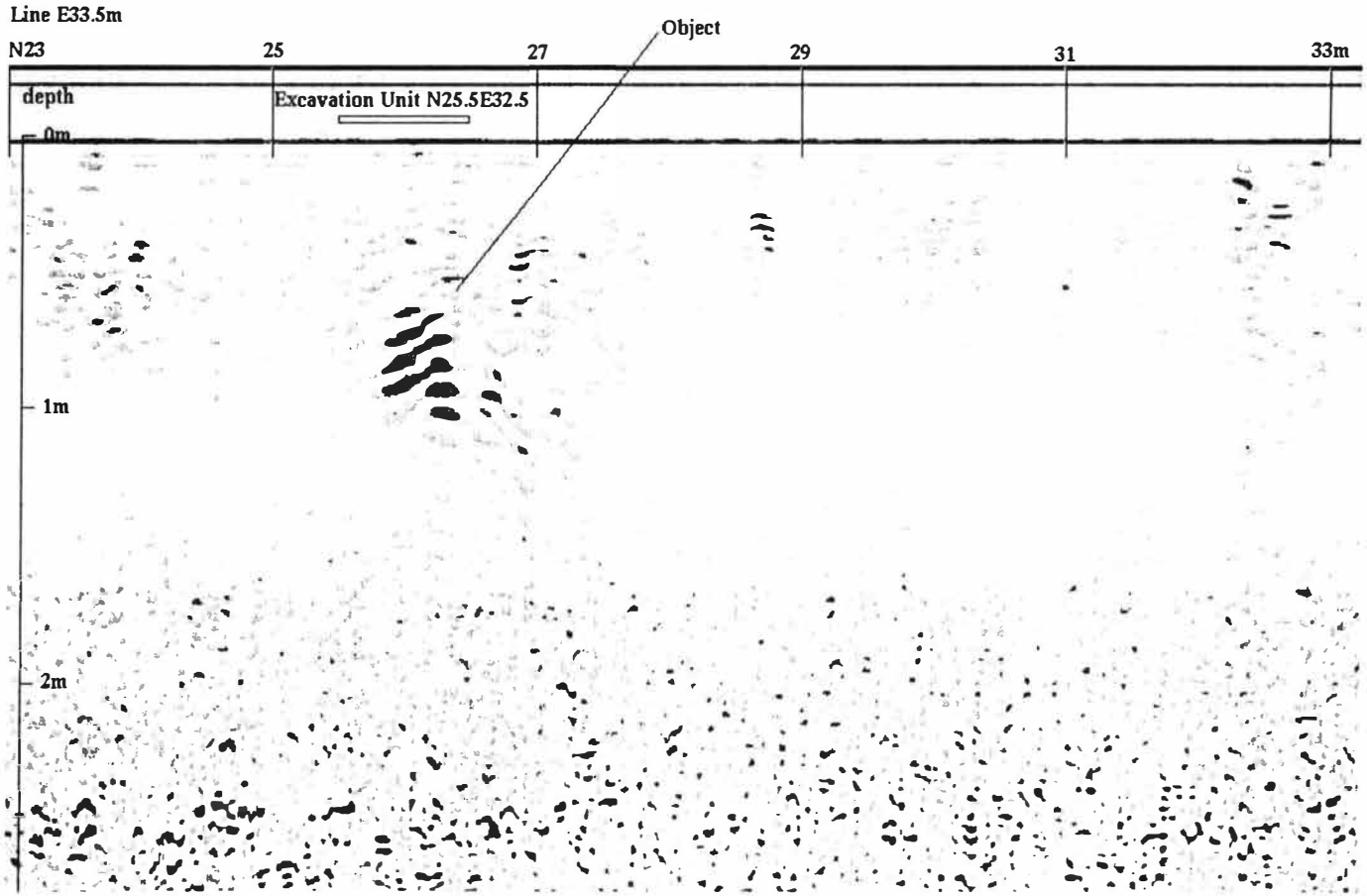


Figure 4-19. GPR map for Unit N25.5 E32.5.

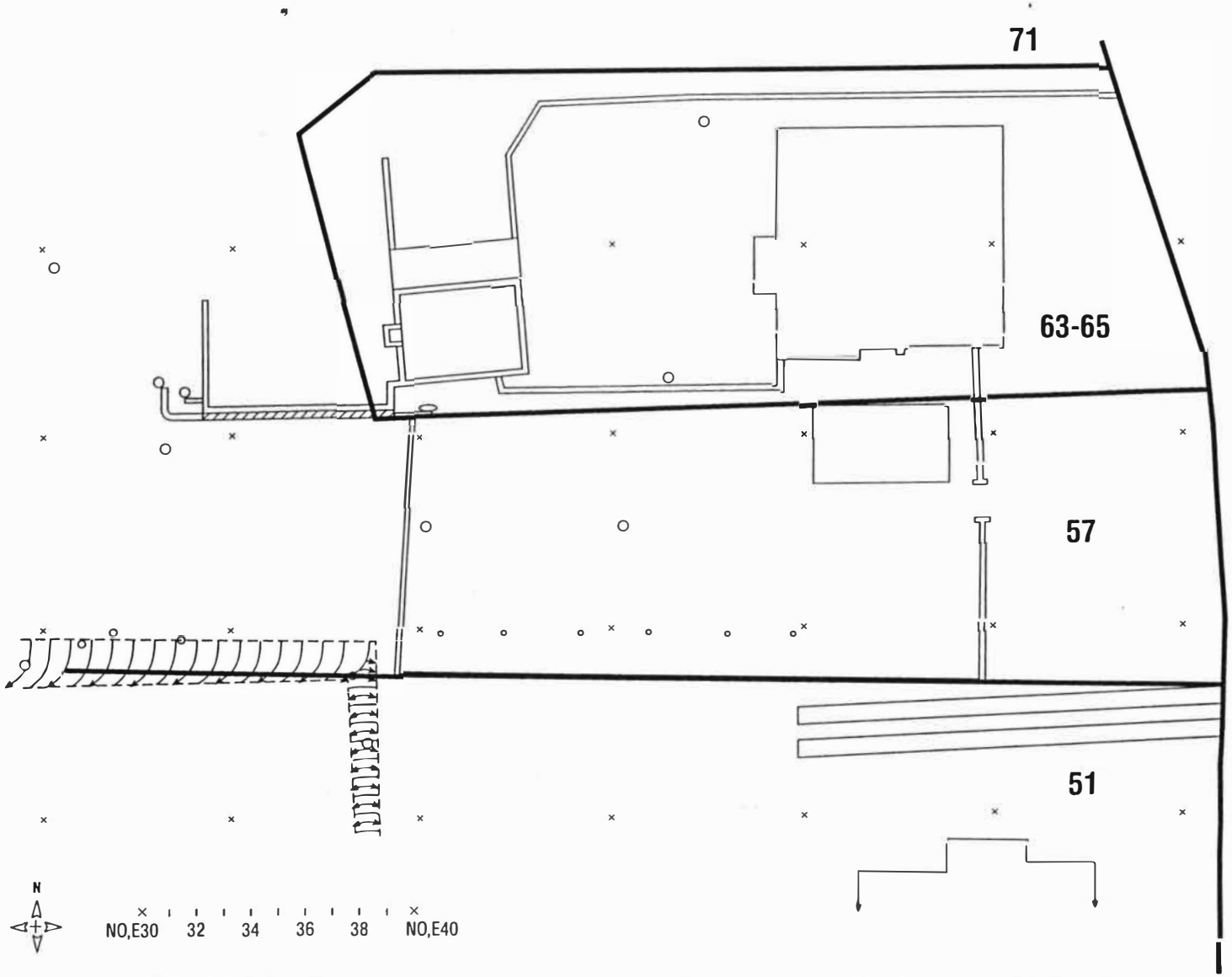


Figure 4-20. Lot subdivisions superimposed on a map of the James and Ellen G. White house site.

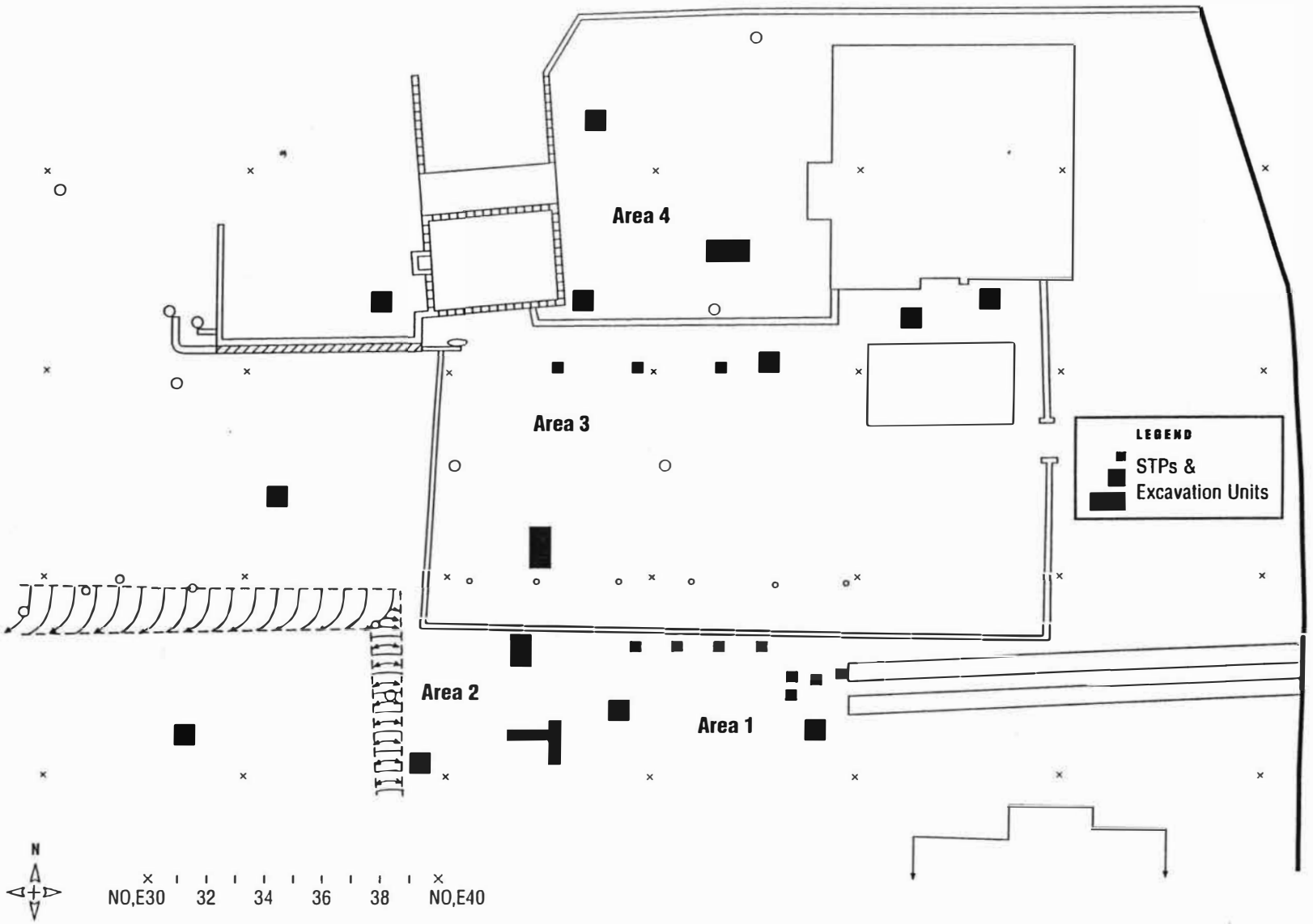


Figure 4-21. Areas of the James and Ellen G. White house site selected for excavations. Shown are the locations of contemporary buildings, select above-ground features, site areas (1-4), shovel test pits, and larger excavation units (e.g., 1 x 1 m, 1 x 2 m).

square feet when it was first acquired by Historic Adventist Properties; lots 51, 57, and 71 N. Wood have been subsequently acquired (Figure 4-20). Our investigations concentrated in an area that corresponds with the original plat of lot 64, with some work along the northernmost edge of Lots 2 and 3 (see Figure 4-21). Thus, the majority of artifacts and features that pre-date ca. 1885 are associated with the occupants of 63-65 N. Wood, whereas those that post-date ca. 1885 derive from the occupants of 51, 57, 63-65, and/or 71 N. Wood Street. To facilitate the discussion of our findings regarding contemporary and historic land-use practices, we have divided the site into four areas which include: (1) the area of Jonah Lewis's well; (2) the area of Jonah Lewis's barn; (3) the Boldyreff lot; and (4) the yard immediately behind the Whites' home. Numerous artifact deposits and features were exposed and investigated in each of these areas of the site, prompting a discussion of each in turn.

Area 1

Location and present appearance. This area corresponds with the northern edge of the house lot at 51 N. Wood Street (Figure 4-21). This was formerly the northeast corner of Lot 3, owned by Jonah Lewis. The area is bounded on the north by a wire fence with wooden posts that separates it from Lot 64 (57 N. Wood). The house built in the 1880s lies immediately to the south. The most conspicuous feature in this area is a concrete driveway that extends into the property from N. Wood Street for about 20 m. The rest of the area is covered by a lawn.

Investigation rationale and results. Documentation, geophysical evidence, and oral accounts guided our excavations in this area. According to the recollections of the Whites' son, William C. (1936), Jonah Lewis had dug "a good well close to the line between his property and that of James White. He also made a pathway from the well to Wood Street, so that all the neighbors in the vicinity could come in and draw water from the well. I remember clearly its wooden curb and windlass and its oaken bucket, and how good the water tasted to thirsty boys." Several subtle geophysical anomalies were also detected on the northern edge of the Jonah Lewis property. To locate evidence of the well, along with other possible subsurface features, we excavated a total of two 1 x 1 m units, seven shovel test pits (50 x 50 cm), and a short trench (50 x 85 cm). The trench was abutted to the modern fence where Ralph Benedict reported a possible field stone wall. From his description, we thought that stones may have been used to create a property boundary. This practice has been documented elsewhere in southwest Michigan (Rotman 1995:44, 46-47).

Excavations immediately below the ground surface on the north edge of Lot 3 exposed a thin layer of recent fill thought to be associated with the

demolition of the Boldyreff house in 1994. Beneath this fill we encountered a layer of clinkers (coal residue) up to 15 cm thick that appears to have been intentionally placed as a driveway surface, perhaps as early as the late 19th century (Figures 4-22 and 4-23). It appears to be oriented along an approximately east-west axis corresponding with the modern concrete driveway surface. This 19th century driveway probably led to the garage shown on the 1919 Sanborn map (Figure 2-1) and may have provided access to Jonah Lewis's barn described by William White (see below).

Clinker driveway surfaces are common features in late 19th century southwest Michigan where they have been identified at the Shepard site (20CA104) in Battle Creek and the Woodhams site (20AE852) in Plainwell. At the Woodhams site, investigators reported "a 4-cm-thick layer of coal slag and ashes," covered by "another driveway surface of sand and coarse gravel" (Rotman and Nassaney 1997:56). Based on photographic and stratigraphic evidence, Rotman and Nassaney (1997:56) argue that this clinker surface served as a driveway in the late 19th and early 20th centuries. Similarly, Nassaney and coworkers previously reported a clinker driveway at the Shepard site (Nassaney et al. 1998b:62, Figures 4-4, 4-5); it was also a late 19th century feature used no later than the 1950s. In both cases the raw material was likely the by-product of a coal-burning stove.

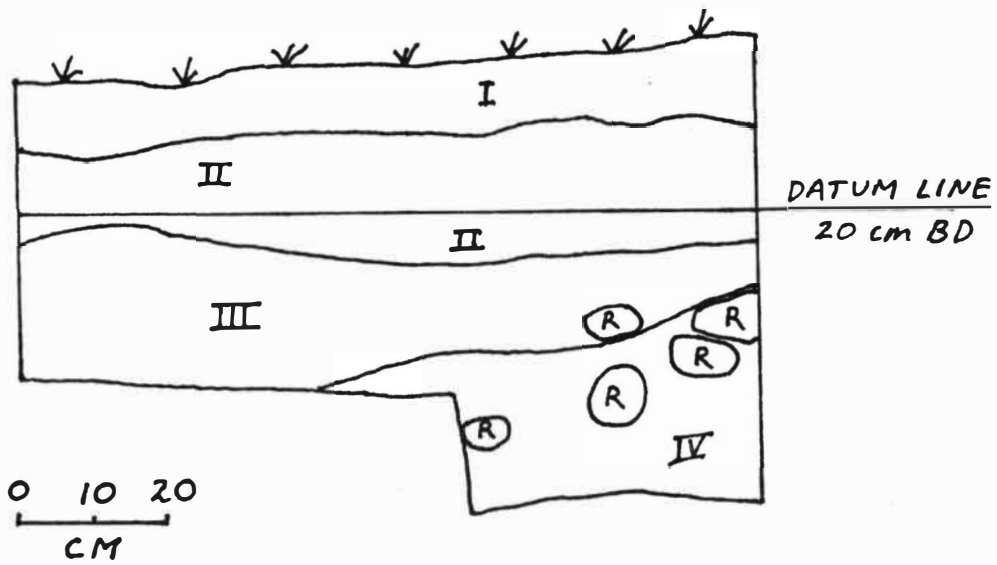
Immediately beneath the clinkers we recovered a number of 19th century objects (ceramics, glass bottles, Mason canning jar fragments) which may have been deposited as early as the third quarter of the 19th century (1850-1875). The underlying subsoil yielded no artifacts; it invariably contained large field stones that were likely deposited by glacial activity over 10,000 years ago.

The STPs located nearest to the fence showed evidence of 40-45 cm of fill and natural soil strata overlying an undisturbed layer of large, glacial cobbles. The fill in the upper soil horizons derived from the demolition of the Boldyreff house. Evidence of this disturbance was identified in a number of units located south and west of this former dwelling.

The short trench placed near the fence to locate a property boundary also encountered fill associated with the demolition of the Boldyreff house. Modern debris was identified as deep as level 5 (29-44 cm BD), interspersed among pieces of concrete, mortar, and large field stones. The concrete and field stones probably account for Ralph Benedict's impression of a cobblestone wall along the edge of the property. It would be surprising if any of the post holes dug for the fence did not encounter significant quantities of stone or concrete, as these materials were found in most of our excavation units in this part of the site.

No obvious evidence of a well was detected in our survey. Large quantities of cobbles in the subsoil would have made it extremely difficult to identify a feature such as a stone-lined well using ground-penetrating radar as

West Profile Wall Unit N1.5 E37.5



Key:

R= Rock

I= 10YR 3/2 very dark greyish brown sandy loam

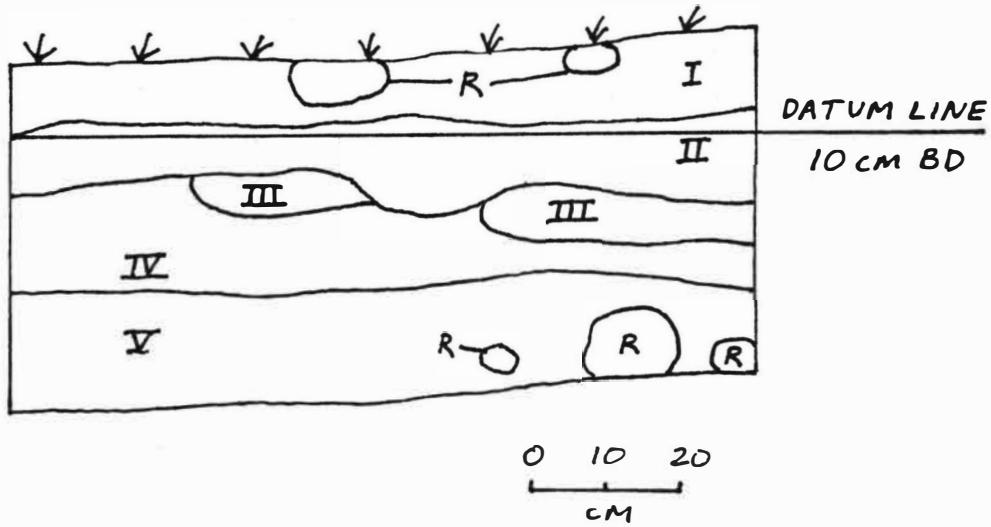
II= 10YR 3/1 very dark grey fill zone comprised of clinkers

III= 10YR 6/4 light yellowish brown compact sand

IV= 10YR 6/6 brownish yellow compact sand

Figure 4-22. West profile of Unit N1.5 E37.5.

West Profile Wall Unit N2.5 E28



Key:

R= Rock

I= 10YR 4/6 dark yellowish brown sandy loam

II= 10YR 3/1 very dark grey fill zone comprised of clinkers

III= 10YR 7/2 light grey ash

IV= 10YR 5/3 brown sandy loam

V= 10YR 5/6 yellowish brown sandy loam

Figure 4-23. West profile of Unit N2.5 E28.

the cobbles would have obscured any radar signals that the well might have produced. However, we cannot rule out the possibility that physical evidence of the well still exists; a more intensive survey strategy is recommended to detect it, such as mechanical stripping of the upper soil horizons.

Portions of the old clinker driveway appear to have integrity. Furthermore, this surface may have sealed artifacts associated with 19th century occupants of the site. However, since this was a driveway, it seems likely that objects deposited in this area were either small and inconsequential or became fragmented by the movement of carriages, wagons, and other vehicular traffic in the 19th and early 20th centuries.

Area 2

Location and present appearance. Area 2 refers to the northwest corner of Lot 3 and the northeast corner of Lot 2 of Manchester's 3rd addition (Figure 4-21). It is bounded on the north by a modern wire fence and an earthern berm sloping from north to south. Another berm oriented north-south, but sloping from west to east, bisects this area. This latter feature likely corresponds with the boundary between Lots 2 and 3. There is a large wooden post on the northern edge of this berm that probably also marks the southern extent of Lot 64. This area is partially maintained in grass cover; weeds and small woody vegetation also occur. An area to the northwest was selected for the placement of the new Seventh-day Adventist Meeting House which was constructed after investigations were completed in July, 1998. As a result, the landscape has been considerably altered in this area.

Investigation rationale and results. Documentary, geophysical, and surficial evidence guided our excavations in this area. In his 1936 recollections, William White noted that Jonah Lewis kept his barn and cow stable "a few rods west from the well, . . . on the northwest corner of his tract" (Lot 3). Although no building appears in this location on the 1873 Beers map of the parcel (Figure 2-3), there is a two-stall building in the northwest corner of the lot shown on the 1919 Sanborn map (Figure 2-1). The larger, eastern portion of the building is designated "AUTO." This building may correspond with the location of the Lewis barn described by W. White. If this is the case, then the Lewis barn was later used as a garage, or a garage was constructed in the same location where the Lewis barn once stood. A thin scatter of historic artifacts (ceramics, glass, mortar) was noted on the eroded surface in this area.

Three 1 x 1 m units and two 2 x 0.5 m trenches were excavated to locate physical evidence of this outbuilding. One of the 1 x 1 m units (N6 E23) was expanded by 50 cm. Excavations detected recent fill immediately beneath the

modern ground surface, especially along the northern edge of Lot 3. Possible evidence of an outbuilding consists of occasional pieces of brick and concrete and a square post mold (Feature 6). The area exhibited a generally low artifact density, although some 19th century objects were recovered in the upper 40 cm.

A large magnetic anomaly was identified west of the area thought to be the location of the barn in the northeast corner of Lot 2. Excavation of a 1 x 1 m unit (N1.25 E6.5) to test the anomaly exposed a large concentration of metal and other late 19th-early 20th century artifacts which we designated Feature 1 (Figure 4-24). Among the metal objects were several large pieces of possible (zinc?) roofing material which may have been associated with the barn/garage. It appears that the feature is a large trash pit that was filled in with early 20th century debris, perhaps after the garage fell into disuse in the first half of the 20th century. The deposits continued to a depth of over 80 cm, and the unit lacked the glacial cobbles observed elsewhere on the site, perhaps due to this disturbance. The pit contained glass, ceramics, charcoal, and some building materials which decreased in quantity with depth. The pit may derive from clean up activities associated with the demolition of the 1919 garage, perhaps sometime in the mid-20th century. Older objects found in the feature may have been stored in or accumulated around the garage. We recommend that this area be avoided as it may contain more deeply buried materials of 19th century origin associated with Jonah Lewis and/or the Whites.

Area 3

Location and present appearance. The southern half of Lot 64 was designated Area 3 (Figure 4-21). Toward the front of this lot (57 N. Wood Street) stood the Bolydreff house from the late 19th century until its demolition in 1994. The area is partially enclosed by a wire fence installed by Historic Adventist Properties after the house was removed. The enclosed area supports a small orchard and a raised garden bed about 4 x 7 m. There are also several large trees toward the back of the property, some of which are probably more than 50 years old. The grounds west of the fence are partially overgrown with weeds and small bushes. In the 19th century this area supported gardens and a small orchard, though their precise locations remain unknown. James and Ellen G. White's sons performed much of the gardening activities, eventually developing their own seed catalog business (Jean Davis, personal communication, 1998). Evidence of past horticultural use of this area is provided by the presence of a number of introduced plant species that continue to thrive (Diana Lynn, personal communication, 1998). The construction of the Meeting House in July, 1998 has completely modified this landscape; its foundation required an excavation measuring approximately 10 x 15 m and over 3 m in depth.

Figure 4-24. Photo of Feature 1 in plan at 70 cm BD.

Investigation rationale and results. Documentary, geophysical, and surficial evidence guided our investigation of this area. This area was part of Lot 64 and, hence, owned by the Whites when they lived here in the 1850s and 60s. Unsubstantiated, local accounts indicate that the Whites had a barn for their horse and cow. It may have been located toward the back of the property, in proximity to their gardens and fruit trees. We avoided the area where the 1880s house once stood because of the disturbance that the house demolition would have created. A geophysical survey was conducted in the remainder of the parcel where we detected several anomalies of potential interest. One of these anomalies coincided with a somewhat rectangular-shaped area of homogeneous vegetation that piqued our interest.

Excavations to investigate these anomalies and others were placed judgmentally in areas south and southwest of the Whites' house. A total of seven units (one 1 x 2 m, three 1 x 1 m, and three STPs) were excavated in the so-called Boldyreff lot. In the 1 x 2 m unit near the fruit trees (N10.5 E24) we identified evidence of the house demolition where a geophysical anomaly led us to a large concentration of concrete blocks and slabs which may have been part of the original 1880s dwelling or an associated outbuilding (Figure 4-25). The debris was thoroughly jumbled and it appeared that no pieces were in situ.

In excavation units nearer to the Whites' house, however, we identified an interesting series of soil profiles. Beneath the sod layer in N20 E35, for example, we exposed a thin (ca. 5-10 cm) layer of sterile fill that was likely spread out for landscaping purposes after the house was torn down (Figure 4-26). This fill layer covered an old ground surface (buried "A" horizon) that was relatively undisturbed. The surface exhibited a sheet midden with scattered 19th century objects, including some powder blue transfer print ceramics manufactured in the 1840s and 50s. Based on the age, stratigraphic context, and proximity to the house, these objects were likely used by the Whites when they lived at the site.

On the south side of the house, we found a similar soil sequence (Figure 4-27). We also exposed a recent trench (Feature 2) that contained a telephone line oriented parallel to the house in N22 E42 and N23 E46. In N22 E42 we uncovered a circular post hole (Feature 7) that may have been used for a fence or clothes line post. Besides scant amounts of construction debris from this feature (e.g., asphalt shingles), there was a piece of cement at the bottom of the hole that may have been placed to support the post it once held.

Perhaps the most interesting feature in this parcel was found west of the fence at the rear of the lot in a 1 x 1 m unit (N13.5 E11) located to investigate a geophysical and surficial anomaly. Here we noted a thin (ca. 1-2 cm), vertically-oriented piece of cement in plan at ca. 40 cm. below the ground surface. It extended diagonally across the unit from northwest to nearly southeast (Figure 4-28). We excavated the darker soil in the northeast corner to a depth of 190 cm

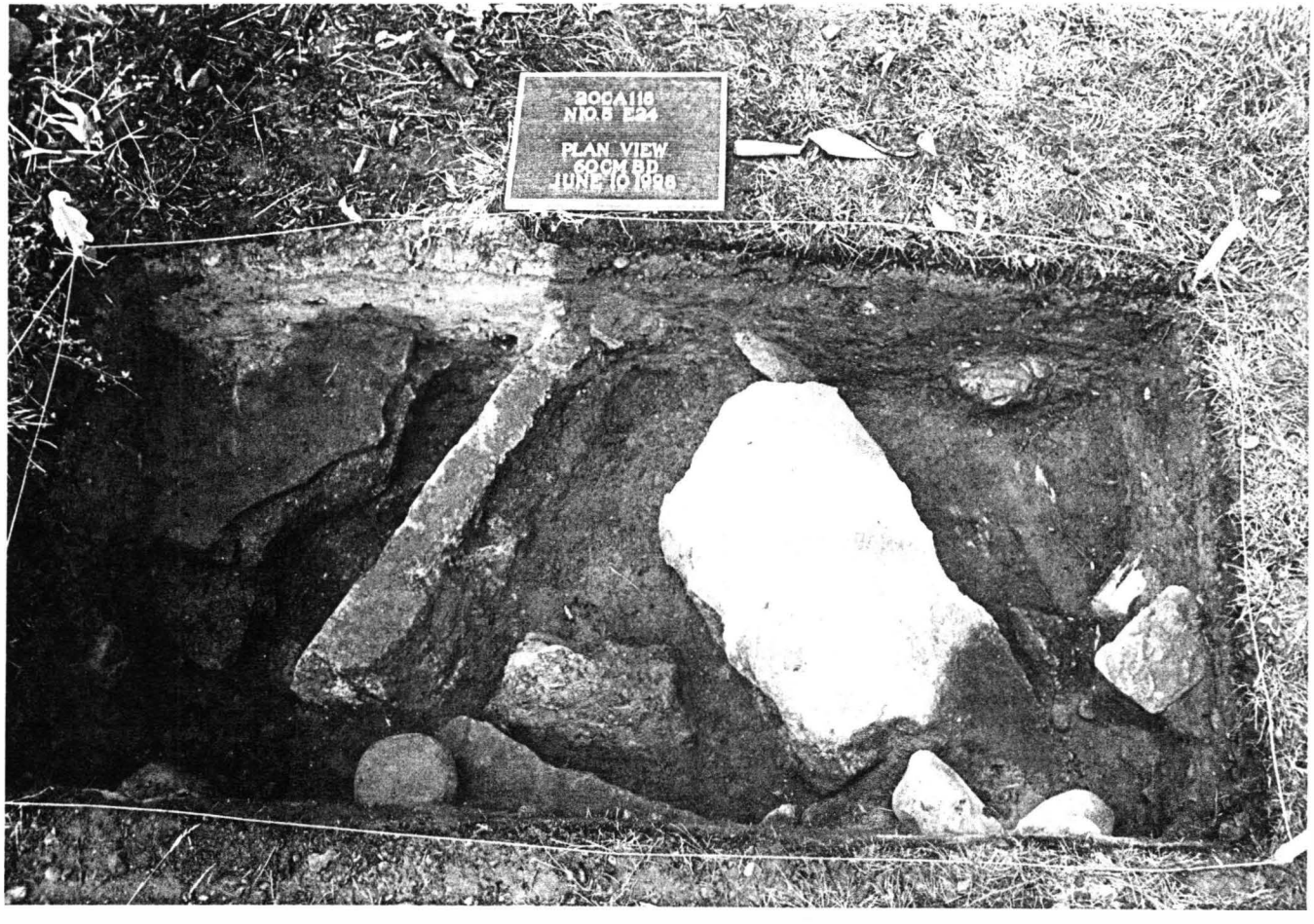


Figure 4-25. Photo of concrete rubble in plan at 60 cm BD in Unit N10.5 E24.

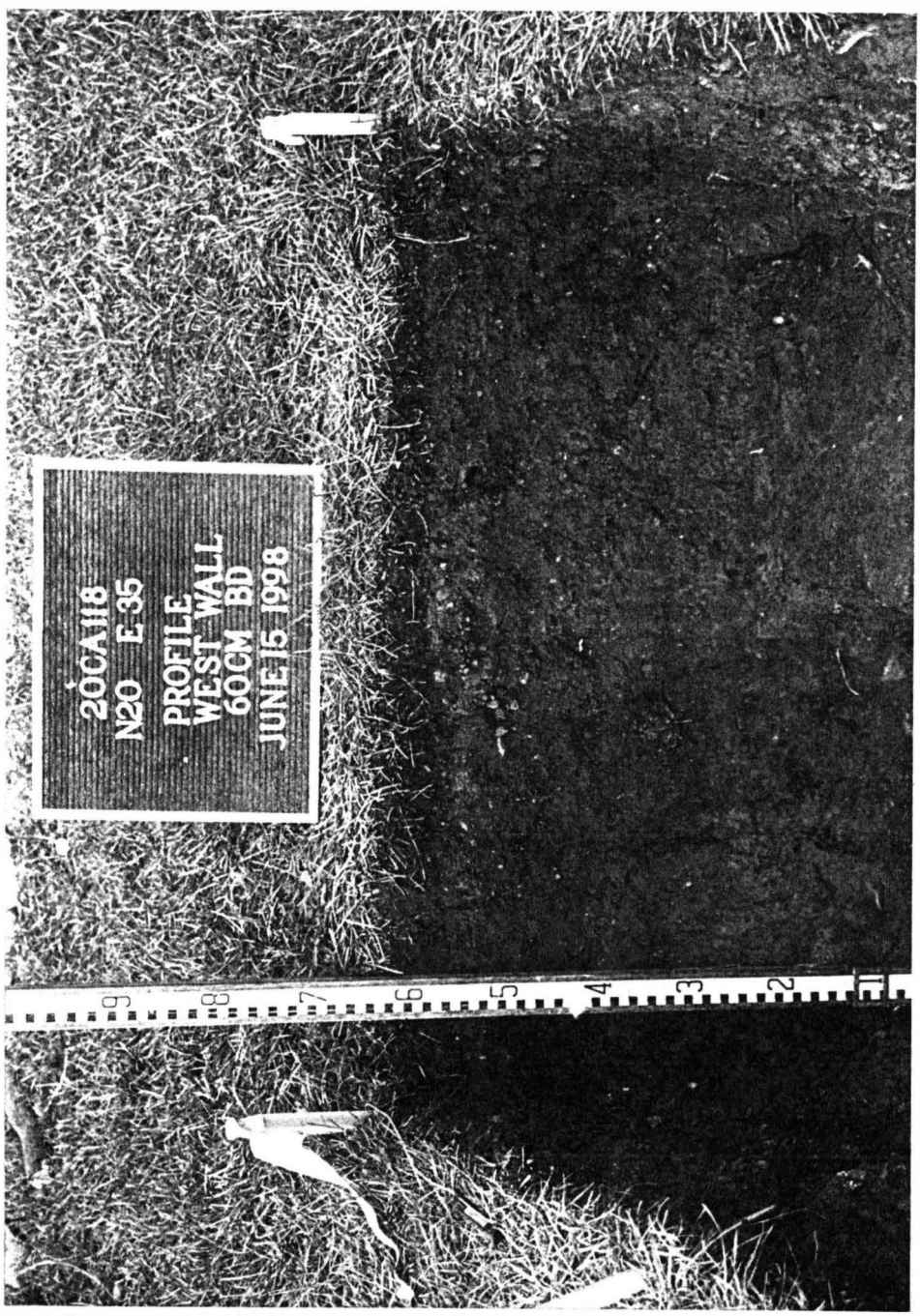
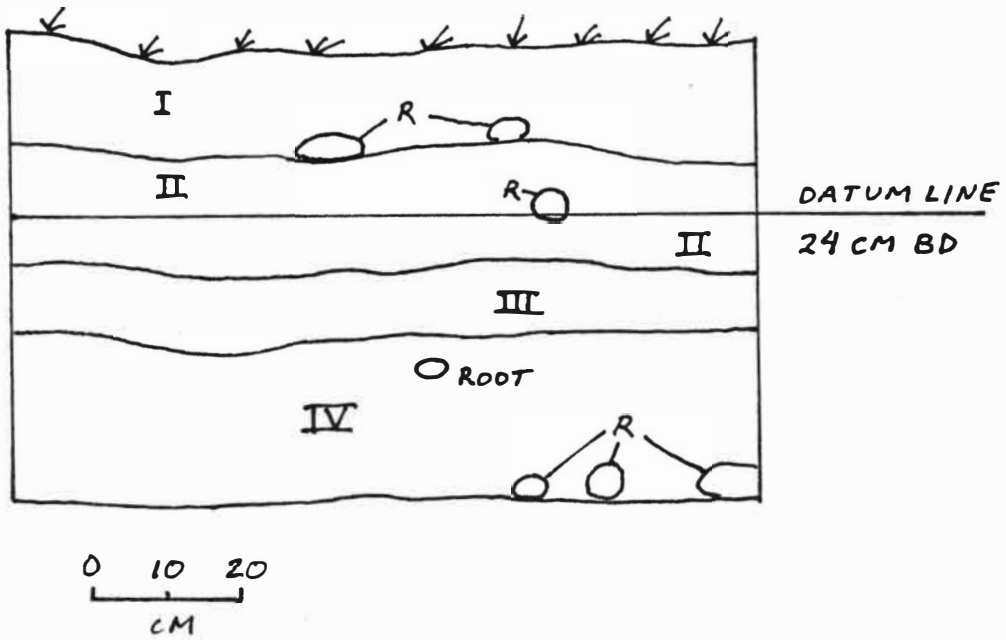


Figure 4-26. Photo of buried A horizon in Unit N20 E35.

North Profile Wall Unit N23 E46



Key:

R= Rock

I= 10YR 2/1 black sandy loam

II= 10YR 4/3 brown sandy loam mottled with 10YR 2/1 black sandy loam

III= 10YR 2/2 very dark brown sandy loam (buried A horizon)

IV= 10YR 3/4 dark yellowish brown sandy loam (undisturbed B horizon)

Figure 4-27. North profile of Unit N23 E46.

Figure 4-28. Photo of the cistern (Feature 5) in plan at 100 cm BD.

as this appeared to be the "inside" of the feature. The depth and orientation of the cement suggests that this feature was a cistern constructed using cement plastered directly on the soil. The fill of the cistern was a brown sandy loam with occasional artifacts including some construction debris (nails), undiagnostic glass, and small fragments of blue transfer printed ware. It also contained a moderate quantity of small field stones similar to those found in the subsoil in other areas of the site.

Schroeder (1991) has discussed the use and construction of cisterns in the Midwest based on documentary and archaeological sources from which the following information is drawn. In the 19th century there were four common strategies for obtaining water for all but the most urban populations: wells, cisterns, rain barrels, and naturally occurring streams, ponds, or springs. A cistern is an artificial reservoir, usually an underground tank, for storing rainwater. As a source of soft water, it was used primarily for washing, but references to cisterns as sources of drinking water for humans and animals also occur. Although there is limited discussion of cisterns functioning in non-household or non-domestic contexts, barnyard cisterns are mentioned in the 1860s and 70s (Schroeder 1991:108). Presumably they "supplied drinking water for livestock, and were cheaper and less laborious than digging or drilling a well" (Schroeder 1991:108).

The use of cement plastered directly on soil was a common construction method for cisterns in the 19th century (Schroeder 1991:108-109). Other types of construction methods included the use of brick or stone with a waterproof cement lining, wood, and poured concrete. Descriptions of the plastered cement method of construction appeared in *The Prairie Farmer* (1843) and knowledge of the technique was probably widely disseminated by the middle of the century. One author suggested the following:

> To make a cistern of about 40 barrels—that being a suitable size for a common family—I would commence by digging a circular hole, 8 feet in diameter and two feet deep; having made the bottom tolerably level, strike a circle 6 1/2 feet in diameter on it, this leaving a shoulder all round to rest the plank on. Then dig by the circle a hole 6 feet deep, drawing gradually as you go down, so that at the bottom it will be about 5 1/2 feet diameter; then round out the bottom, about 18 inches deeper, thus making it somewhat in the shape of a pot ash kettle, but considerably deeper in proportion (Smith 1843, cited in Schroeder 1991:109).

The next step entailed plastering the cement directly on the soil walls, often in multiple coats. Wood planks, preferably oak, then covered the top, and any cracks or joints were plastered before the hole is covered with "earth to a depth sufficient to exclude frost" (A Lady's Friend 1846, cited in Schroeder 1991:111).

Construction using brick or stone was recommended in the 1850s to replace the plastered cement method for health reasons. Burrowing animals such as rats in the city and gophers in the country might "dig down along the side, and the pressure of the water would burst through the cement" with the consequence of contamination (Rockwell 1855, cited in Schroeder 1991:111). Despite these warnings, there are a number of archaeological examples including Feature 5 which suggest that the older technology was retained in the Midwest. Schroeder (1991:113) suggests that maybe "the writers and editors of the farming publications were more progressive than their audience," an observation that underscores the contradictions between ideal prescriptions promoted in the literature and the reality of practice reflected in the archaeological record.

It is difficult to ascertain the precise age of the cistern exposed at the White site since our excavations only revealed a small part of the feature and recovered a limited artifact sample. Its construction technique suggests that it could date to the 1850s-60s, however it may have been constructed later in the 19th century. Since it was located a significant distance away from any residential structures (ca. 28 m), it was likely used to collect water for animal consumption and/or to irrigate the garden. Thus, contamination would not have been a severe problem. Randy Case (personal communication, 1998) also suggested that similar cisterns were sometimes constructed beneath or adjacent to barns. Based on the location, contents, and type of construction, it seems reasonable to infer that this cistern was associated with Jonah Lewis's barn or the barn used by the White's for their cow and horse. In any event, it is clearly a 19th century construction and should be investigated further to determine its vertical and horizontal extent, as well as obtain a larger sample of its contents. We recommend that construction activities in this area be avoided due to its high archaeological sensitivity. The excavation for the Meeting House was located less than 10 m west of this feature. Any further subsurface impacts in this area should be very carefully monitored.

Area 4

Location and present appearance. The final area to be discussed is the backyard or door yard immediately west of the Whites' house (Figure 4-21). This is currently a small lawn-covered yard measuring approximately 12 x 14 m. A small outbuilding is shown approximately 15' (4.5 m) west of the house on the 1919 Sanborn map. A building is also shown behind the house in a 1930s photograph (Figure 1-1), though it is difficult to determine the size, function, or precise location of it from this perspective. Further west are the remains of a two-car garage that was built in 1926, expanded in 1970, and torn down in 1985. They consist of a low concrete or cinder block wall. The garage appears to have been entered from the north via a driveway that passed north of the house. This

driveway may have been shared with the occupants of 71 N. Wood Street (W. Edson March) who also built a garage behind their house by 1920 (Figure 2-1).

Another enigmatic feature was observed west of the first garage. This consists of a 70 cm high retaining wall comprised predominantly of mortared brick, with the occasional addition of field stones and cinder block fragments. Several iron bolts in the top of this wall suggest that they may have once held a sill that supported a superstructure. While this may have been yet another garage, there is no documentary evidence that such a structure existed in this area. The "inside" of this architectural feature exhibited numerous clinkers and artifacts (glass, ceramics, metal), some of which dated to the 19th century (Unit N23 E16). Although this appeared to be fill, it may have sealed off an older, undisturbed ground surface that was exposed in the mid-19th century.

Previous archaeological investigations conducted in the backyard during the 1996 field season indicated the presence of possible 19th century ceramics (STP 5) and relatively undisturbed artifact deposits to a depth of at least 30 cm in STP 2 and 60 cm in STP 3 (Figure 2-4). Finally, our geophysical survey revealed a large magnetic anomaly approximately 4 m west of the house.

Investigation rationale and results. Based on the documentary record, previous archaeological testing, surface indications, and the geophysical survey, this area appears to have a high archaeological sensitivity. We excavated five units (one 1 x 2 m, three 1 x 1 m, and one STP) to evaluate the archaeological potential of this area. A 1 x 1 m unit (N23 E16) north of the brick retaining wall exposed a heavy concentration of late 19th and 20th century artifacts to a depth of 80 cm. These deposits were the densest that we observed on the site, however, they were clearly in a mixed and disturbed context. For example, some of the materials found on the surface were significantly older than those found in the lowest levels. Pieces of plastic and other mid-20th century objects were identified in nearly every level of this unit. Because of the lack of integrity, only a limited sample of artifacts were collected from this unit. At about 1 m below the ground surface, the artifact density decreased and the matrix contained significant quantities of large gravel. Excavations failed to identify a well-defined buried ground surface in this unit; it may have been disturbed by the activities that led to the creation of this artificial fill. At present we do not completely understand the processes that were responsible for this thick trash deposit. It is possible that the area behind the retaining wall served as a natural catchment for the disposal of debris associated with several houses in the neighborhood over several decades in the mid-20th century. This might explain the disparate ages of the materials in various levels.

Excavations in the yard area immediately behind the house exposed a 20-30 cm zone of very dark grayish brown sandy loam that has become homogenized from gardening activities over a period of many years. In one area

(N32 E26.5) we noted a concentration of burned objects similar to the signature that might result from urban domestic burning in a 55-gal drum before such practices were prohibited in the 1970s or early 1980s. The presence of coins dating to the 1970s and 80s in levels 4 (30-40 cm) and 5 (40-50 cm) suggest that this deposit is relatively recent.

Unit N23 E26 was located to explore a trash deposit identified in the 1996 investigations. As noted previously, the soils in this area are very homogeneous dark gray brown sandy loam to a depth of 40 cm. The underlying soil was a lighter and looser gray matrix, with the sterile subsoil appearing at ca. 45 cm in the south half of the unit and extending to 60 cm in depth in the north half. This sloping deposit may be the edge of the trash pit that we encountered in 1996. An interesting assortment of items of a personal and domestic nature were recovered including a pipestem fragment (20-30 cm BD), a shell button (50-62 cm BD), and other ceramic and glass objects from the late 19th century. While none of these objects may be associated with the earliest period of occupation, they nevertheless attest to intense use of this area of the site over the past 100 years.

Somewhat surprisingly, excavation near the house (N32 E38) exposed fairly shallow deposits. Relatively dark and homogeneous top soil extended to a depth of approximately 30 cm, underlain by dark yellow brown sterile sand. Most of the material from this unit is domestic debris, and much of it was probably produced and deposited in the last two decades.

Perhaps the most significant and complex deposits were associated with two features identified in unit N25.5 E32.5. This 1 x 2 m unit was located to examine an unusual monopolar magnetic anomaly (see Figure 4-18). Overlying the source of this anomaly we encountered a moderately high density of mid-late 19th century artifacts scattered in a dark gray brown sandy loam to a depth of ca. 40 cm. A large concentration of sheet metal, which we designated Feature 3, was noted in plan in the eastern third of the unit at this depth (Figure 4-29). Excavations in the rest of the unit yielded a moderate concentration of artifacts to a depth of over 120 cm (Figure 4-30); moreover, these objects were deposited into a feature (no. 4) that was dug into the subsoil. The artifact-bearing matrix was bounded by a rock-filled trench adjacent to a dark organic stain that we interpret as the remains of decaying upright wooden boards. At present, Feature 4 appears to be a root cellar or underground storage facility that was in use during the mid-19th century (ca. 1855-75), almost certainly by the Whites. The artifacts that we recovered from this feature date no earlier than the 1880s. Thus, it appears that the feature was in use until shortly after this time when it became a receptacle for late 19th century debris once it fell into disuse. It served as a repository for numerous objects including ceramic pipe tiles, ceramic plates, and other domestic debris, as well as objects that may have been used and later abandoned in the feature, such as canning jars and other storage equipment.

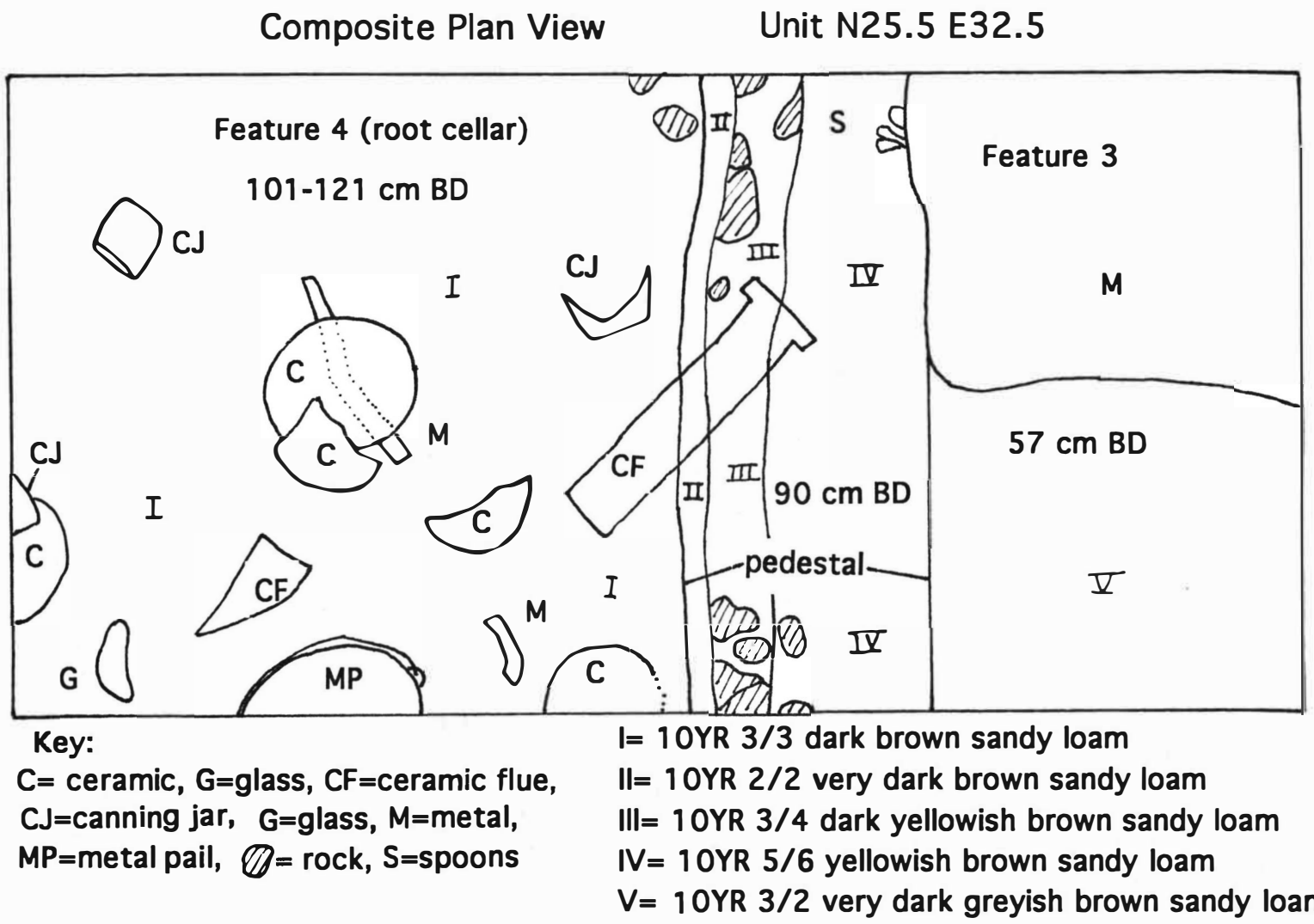


Figure 4-29. Composite plan view of Features 3 and 4 in Unit N25.5 E32.5.

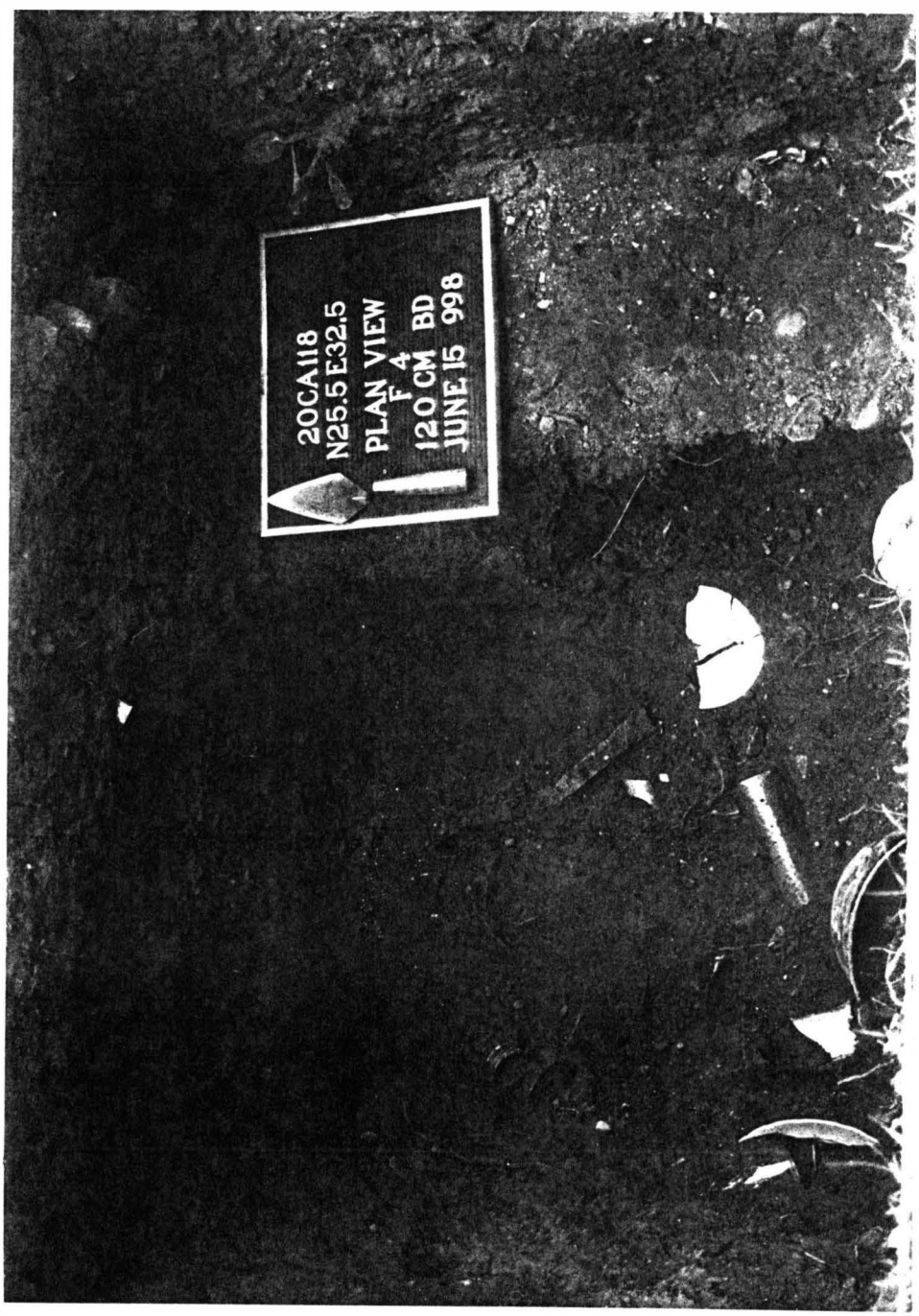


Figure 4-30. Photo of Feature 4 at 120 cm BD.

Canning jars have played an important role in home food preservation since the 19th century, and the practice continues to this day. The canning method was perfected in the early 19th century by Nicholas Appert of France, though the technique did not became widespread until the 1850s (Powell 1981:49). The Whites were well acquainted with this technology by the 1860s, if not much earlier. For example, in *The Review and Herald*, James White (1867) recounted the pleasure of encountering a family who had gathered two gallons of red raspberries "which to be preserved in Mason's two quart glass cans." Blueberries and strawberries were also secured in this manner.

Canning is a labor intensive practice and unnecessary to preserve some types of foods (Cheryl Lyon-Jenness, personal communication, 1998). Apples, cabbage, various root crops (e.g., potatoes, carrots, turnips), and other produce could have been stored in a root cellar to prolong their seasonal availability. Root cellars were sometimes built in the basement of a house. However, since the White home lacked a full basement, an unattached root cellar would have been a logical solution to their storage needs. Information on the procedures for the proper storage of produce was widely disseminated by the early 20th century (Beattie 1921; Knott 1930:193-197; Strahan 1917; Thompson 1939:1709-176). These publications probably codified what many farmers and households had known and been practicing for years.

It is difficult to describe fully the characteristics of the underground storage facility that the Whites used, since so little of it has been revealed archaeologically. The following is a generalized description of a storage facility similar to the one that the Whites may have used that is consistent with: (1) the archaeological signature of Feature 4; (2) the needs of the White family; and (3) the type of feature that would be most efficient in the climate of southwest Michigan. To protect vegetables from freezing in this region, a fairly simple structure can be built by placing it almost entirely under ground (Beattie 1921:9). While a hillside location may be preferable, in the absence of one (as behind the White house) it is necessary to have steps down to the level of the floor. Excavation to a depth of 5-6' is required, perhaps covering an area of 120-150 square feet. While this would be a relatively small cellar, it would have probably been adequate for the Whites' needs. A frame might be erected by setting two rows of posts in the bottom of the pit near the dirt walls; the Whites apparently dug a trench for upright boards, and filled the exterior of the trench with stones for stability. Another line of posts in the center of the pit would serve as supports for the planks forming the roof of the structure. No such posts were observed in our spatially limited excavations.

A door would be placed at one end of the structure and a ventilator put in the roof (Beattie 1921:9). The ventilator might be a ceramic flue, similar to the pipe tiles found in the fill of the cellar. A ventilator serves to assist in maintaining

proper temperature and humidity by drawing out the air through suction as the wind goes past the flue (Knott 1930:195). The entire structure, with the exception of the entrance, would have been covered with dirt and sod to insulate the interior. The thickness of the covering was, of course, determined by the location and climate. Straw, manure, and other materials can be added to the soil to protect the cellar's contents. An outdoor storage cellar, such as the one used by the Whites, probably had a dirt floor to provide a certain degree of desirable moisture. A detailed drawing of an outdoor storage cellar comparable to that represented by the archaeological remains behind the White house is shown in Figure 4-31. Further work is needed to document this structure by determining its depth and horizontal extent. In addition, a larger sample of artifact should be recovered as these may include objects that were in use prior to the cellar's abandonment in the mid-19th century.

Immediately prior to the field work, preservation planners were making observations on the interior of the Whites' house as initial attempts to restore the home to its 1860s appearance were underway (Crawford & Stearns 1998). In the course of this work a previously undiscovered cistern was identified beneath the floorboards inside the house. When the cistern was discovered, it contained a small cupboard that held two or three unopened canning jars with their contents—home preserved vegetables (turnips?)—intact. The cistern last functioned as a storage facility, perhaps similarly to the earlier root cellar behind the house.

Dan Sayers and Michael Nassaney conducted a brief examination of this cistern. It appeared to be a mortared brick construction that was approximately 5-6' high and 6-8' in diameter. Many 19th-century cisterns were lined with gravel at the base to allow for periodic drainage, otherwise water would tend to become stagnant (Dan Sayers, personal communication, 1998). Probing with a chaining pin indicated that there is at least 15-20 cm of sediments on the floor of this feature which may contain important artifactual deposits. It is not uncommon for objects to accidentally find their way into such features. Thus, excavations in the cistern can contribute information on its method of construction, as well as assist in the recovery of any objects that may have been lost or intentionally discarded into this archaeological feature.

In sum, archaeological investigations in four areas of the James and Ellen G. White house site demonstrate that several areas of the site have a very high archaeological sensitivity and any activities that could impact the landscape should be avoided. The presence of undisturbed artifact deposits and features can provide important information about the life of early Adventist pioneers in Battle Creek. The following discussion presents in more detail the relationship between the results obtained through the geophysical survey and the subsurface investigations.

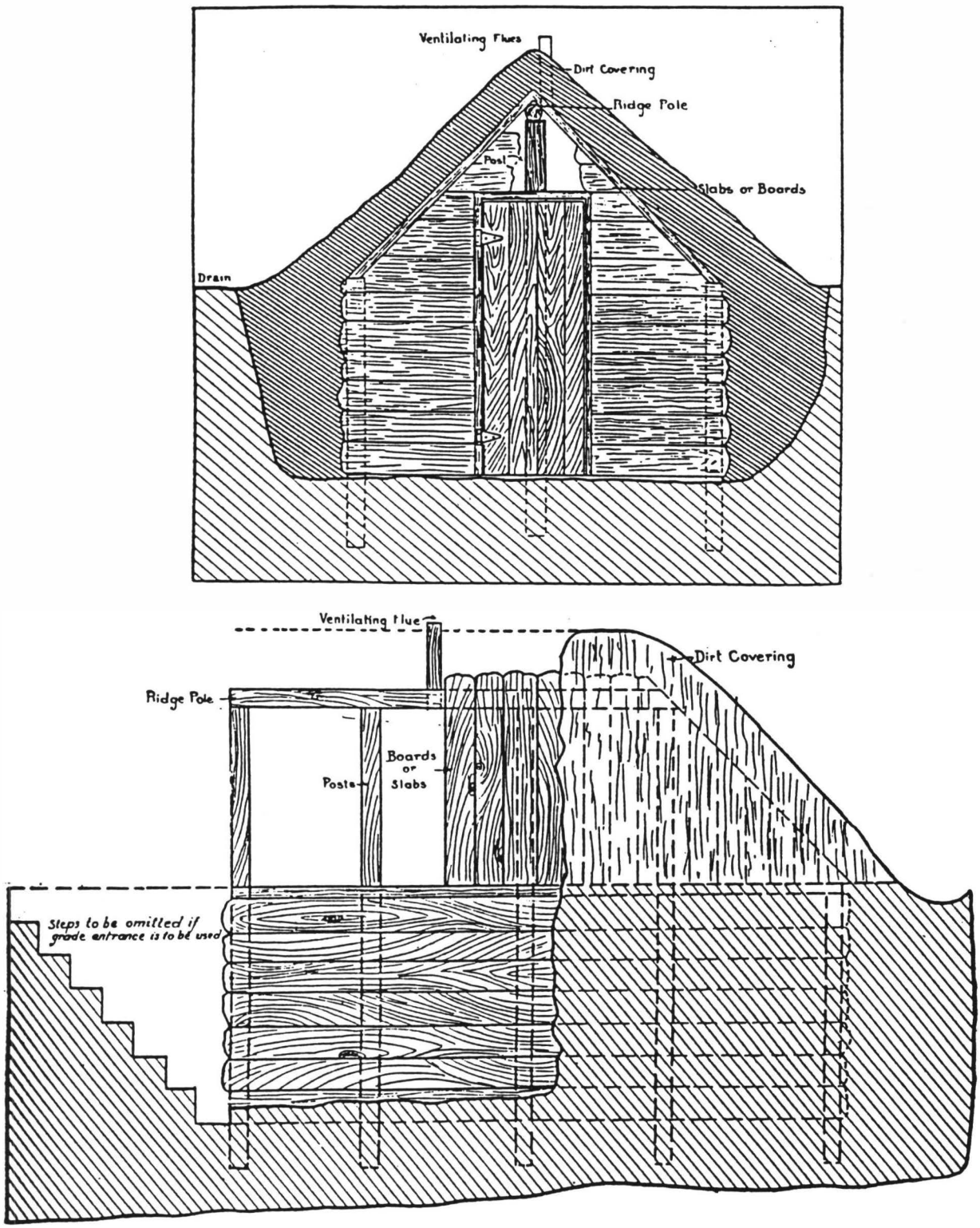


Figure 4-31. End and side views of an outdoor storage cellar (from Beattie 1921:Figures 7 and 8).

CHAPTER 5

RESEARCH FINDINGS: MATERIAL OBJECTS

Carol Nickolai and Michael S. Nassaney

Artifactual materials can vary along a number of different dimensions that pertain to form, function, raw material, and style. Despite attempts at standardization, historical archaeologists have not established any single convention by which to inventory and analyze artifacts and ecofacts from archaeological deposits. Although artifact typologies are often based on different attributes depending upon the goals of the analysis, in reality archaeologists usually use a number of attributes to create a classification system and examine variation in the archaeological record.

All of the artifacts recovered from the 1996 and 1998 investigations were washed, labeled, and catalogued while maintaining their specific contextual proveniences within the site. Materials within proveniences were organized initially by gross categories based predominantly on raw material (e.g., brick, ceramic, clinker, glass). A detailed inventory of the collection conducted by Carol Nickolai is included in this report (Appendix B). At present, a full scale analysis of the entire collection has not been conducted. In this chapter we present a preliminary summary of the types of artifacts that were recovered and their chronological, functional, and contextual meanings. It is important to note that this is a preliminary description that selectively examines a sample of objects. The collection is in a ready state for a more detailed study should one choose to analyze the materials with specific research questions in mind. Given the initial goals of an intensive archaeological survey, the following descriptions should sufficiently demonstrate that the materials, many of which were derived from undisturbed archaeological contexts, have the potential to yield information on the history of the site, making it potentially eligible for the National Register of Historic Places.

ARTIFACT DESCRIPTIONS

In this study we have adopted the artifact categories presented by Stewart-Abernathy (1986b: Table 7) to organize the materials recovered from the James and Ellen G. White house site (20CA118). This framework proved to be useful for presenting the findings from another historic site in Battle Creek investigated under the auspices of the Southwest Michigan Historic Landscape Project (Sayers et al. 1998). As can be seen from Table 5-1, the organizing scheme

Table 5-1. Functional categories used for artifact classification (adapted from Stewart-Abernathy [1986:54]).

- I. Personal
  - A. Clothing
    1. Buttons, snaps, and fasteners
    2. Shoe parts
    3. Accouterments
  - B. Health and Grooming
    1. Containers
    2. Hair items
    3. Dental
  - C. Adornment
  - D. Recreation
    1. Marbles
    2. Doll parts
    3. Other toys
- II. Household
  - A. Foodways
    1. Kitchenwares
       a. glass vessels/bottles
       b. stoneware vessels
       c. coarse earthenware
       d. cutlery
    2. Tablewares
       a. glass vessels
       b. ceramic vessels
       c. cutlery
       d. utensils
  - B. Furnishings
  - C. Facilities
    1. Lighting
    2. Cooking
    3. Fuel
  - D. Maintenance and Repair
  - E. Leisure
    1. Tobacco
    2. Alcohol containers

Table 5-1 (continued).

III. Built Environment
- A. Construction Material
  - 1. Shingles
  - 2. Mortar/Plaster
  - 3. Wood
  - 4. Concrete
  - 5. Window glass
  - 6. Brick
- B. Fencing
- C. Hardware
- D. Fasteners

IV. Occupational
- A. Agricultural
- B. Hunting

V. Exchange
- A. Commerce
  - 1. Coins and tokens
- B. Communication
  - 1. Writing implements
  - 2. Printed paper
- C. Transportation
  - 1. Animal related
  - 2. Vehicle related

VI. Miscellaneous
VII. Natural Objects
VIII. Unknown

for presenting the Shepard artifact collection is based on an integration of context and function (Stewart-Abernathy 1986b:54). Function is particularly important, as this is the primary purpose for which an object was made and the principal way in which it was used (Stewart-Abernathy 1986b:54). The framework consists of eight major categories, five of which have been subcategorized (personal, household, built environment, occupational, and exchange) (see Table 5-1).

Personal: Clothing

Buttons, snaps, and fasteners. A total of 34 buttons, 40 snaps, and 46 other fasteners were recovered from various parts of the site. Of these buttons, 11 are shell, 11 are plastic, and the rest are metal. Most of the shell buttons were recovered from N25.5 E32.5, features 3 and 4 and may date to the late 19th century. The buttons were all plain except for one plastic button with an

embossed fleur-de-lis, and a metal button with an embossed anchor motif. A large number of snaps were found scattered around the site, mostly in the upper levels of excavation units father from the house. Likewise, a number of zipper pulls, eyelets/grommets, and small buckles were found generally in the upper levels and all probably date to the 20th century.

Shoe Parts. Shoe parts recovered numbered 9 and were made of leather and metal. The leather parts, consisting of part of an upper and built up heel parts, were located in levels 15 (101-110 cm) and 16 (110-121) of N25.5 E32.5 associated with late 19th century materials. However, all the parts were too fragmentary to identify by style or date.

Accouterments. This category includes 10 objects that include sewn fragments of fabric and vinyl, a wire hanger fragment, a purse latch, and a frame from a 1980s style fabric-covered purse. These objects were mostly found in the area directly behind the house. The 1980s purse frame was recovered from level 5 (37-47 cm) of N25.5 E32.5.

Personal: Health and Grooming

Containers. We found an assortment of bottle fragments that were probably containers for cosmetics and/or patent medicines (see Figure 5-1). Many of these could be tentatively dated by manufacturing method and were assigned dates ranging from the late 19th century to 1915 (Newman 1970). Two small perfume bottles were assigned post-1920 dates, and one small graduated bottle from the cistern inside the basement of the house was dated as not earlier than 1913. One small fragment of a paneled bottle (1880-1913) embossed with the word "Homeop . . ." was recovered from level 4 (20-30 cm) of N6 E23. We suspect that these are the first six letters of the word "homeopathy" which is a system of medical practice for the treatment of disease. Practitioners of homeopathy believed in administering minute doses of a remedy that in healthy persons would produce symptoms of the disease being treated (Fuller 1989:22-26). Homeopathy was an alternative medical practice that arose in the 19th century in response to the health reform movement that was sweeping the country. It was introduced to the U.S. in 1835 by Hans Gram and became widely popular during the 1840s through books and pamphlets. It remained highly popular throughout the 19th century and it is estimated that between 10 to 12% of all medical schools during that century were homeopathic. Unlike "orthodox" medicine with its emphasis on large doses of powerful drugs, homeopathy's emphasis on less-is-more drug therapy was completely consistent with Ellen

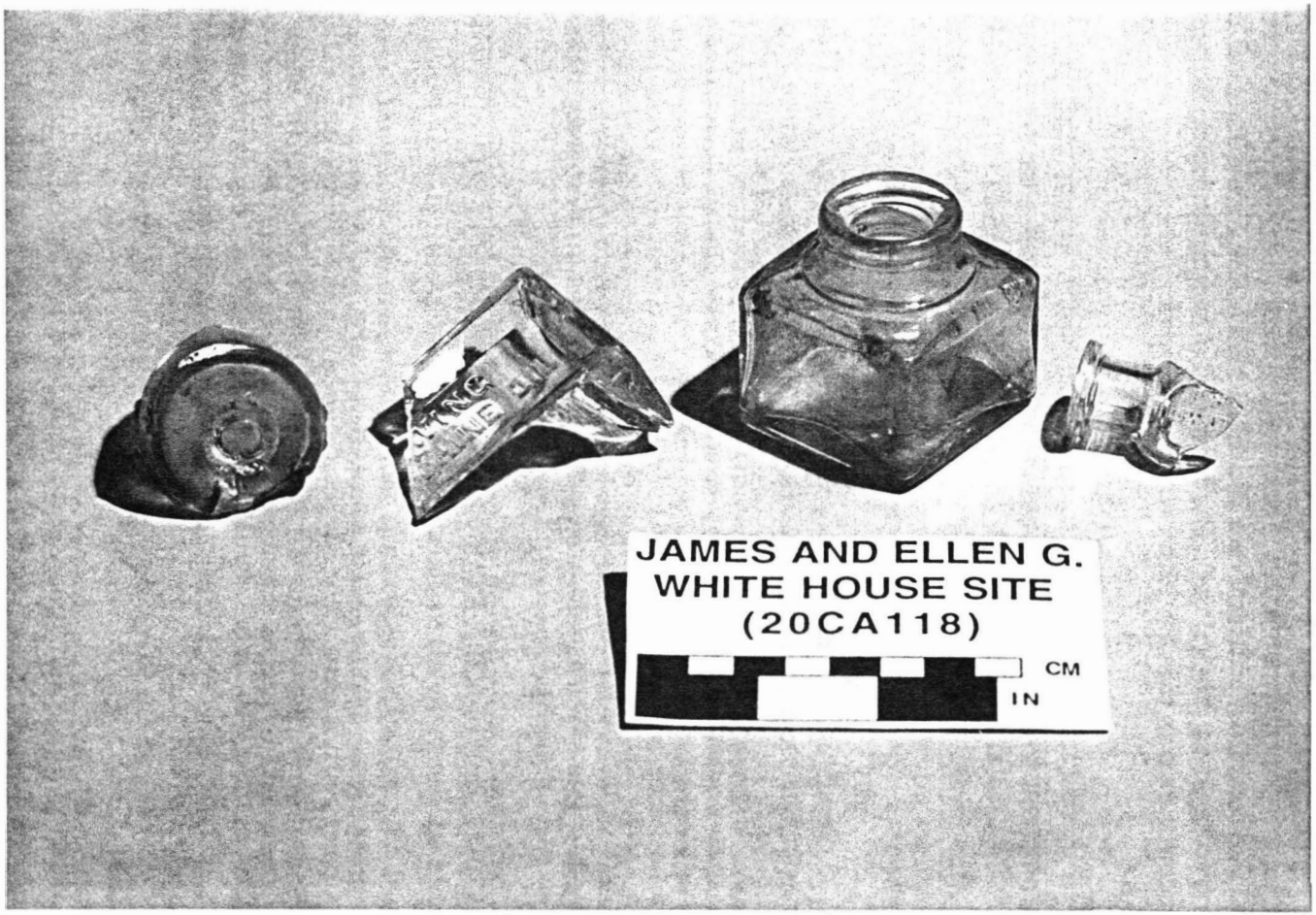


Figure 5-1. Select glass containers from the 1998 excavations. From left to right: cylindrical bottle with a pontil mark at the base; sewing machine oil bottle; ink well; and a paneled bottle (1880-1913) embossed with the word "Homeop . . ."

White's health reforms, although we do not have any direct evidence of White's involvement in homeopathy or that of subsequent occupants.

Another bottle with an embossed side panel reading "Our extracts guaranteed pure will not bake or freeze out" was found in level 5 (37-47 cm) of N25.5 E32.5. More recent objects in this category include a small foil bottle safety seal, a metal lipstick tube, and two small spray cans, none found near the house. One spray can was, however, found in level 8 (50-60 cm) of N1.25 E6.5 feature 1.

Hair items. Four fragments of combs and one barrette clip fragment were found at the site. Two comb fragments were found in N25.5 E32.5, one in level 1 (0-10 cm) and one in level 14 (90-100 cm). The later object may be rubber, rather than plastic, and could date to the late 19th century.

Dental. No objects in this category were recovered from the site.

Personal: Adornment

A total of 20 objects from this category were recovered from the site. This includes three plastic beads, two ceramic beads, and four glass beads. Three clip earring fragments were found, along with one piece of twisted metal set with rhinestones, that may be part of a fourth clip earring. Several pieces of necklace chains were also recovered.

One fragment of molded metal was placed in this category without being precisely identified. It has an elaborate arrow and flower design and may have been part of a pin. This was found in level 2 (10-20 cm) of N23 E26.

Level 16 (110-121 cm) of N25.5 E32.5 yielded the round frame and pin part of a button/badge of the type often handed out free at political and public events.

The only object with a clear date in this category was a safety pin with plastic beads threaded on it recovered from N32 E26.5, level 4 (30-40 cm). These were popularly traded among young and teenage girls in the 1980s.

Personal: Recreation

Marbles. Four ceramic and seven glass marbles were found at the site. Two of the ceramic marbles were recovered from levels 3 (20-30 cm) and 4 (30-37

cm) of unit N25.5 E32.5. All four of these unglazed buff ceramic marbles probably predate ca. 1930. The ceramic marble found in level 1 (0-10 cm) of N23 E16 suggests that this unit is somewhat disturbed. The fourth ceramic marble was found in level 4 (30-39 cm) of N23 E46. Three of the glass marbles were found in level 4 (30-40 cm) of N32 E26.5, and a fourth in level 3 (20-30 cm) of the same unit. The remaining glass marbles were all found in the upper levels of units on the N23 line.

Although marbles are primarily children's toys today, and not very common ones in the last couple of decades, in the nineteenth century adults also played a variety of marble games. In addition to traditional games involving rolling marbles, they are also used as playing pieces in several other board games (e.g., "Chinese checkers").

Doll parts. Nine porcelain doll parts and 2 clumps of doll hair were recovered from the site. Four of these doll parts were found in unit N25.5 E32.5, in levels 2 (10-20 cm), 7 (41-57 cm), 8 (57-70 cm), and 10 (82-90 cm). The two clumps of doll hair were found in N32 E26.5 (level 3, 20-30 cm). The doll hair is probably not from the nineteenth century. It seems to be synthetic and is more likely from a relatively recent "Barbie" type doll.

Two small fragments of doll-sized tea cups were also found in unit N23 E16 level 1 (0-10 cm) and N20 E33 level 3 (20-31 cm). These undecorated whiteware/ironstone cups may have been part of a set and cannot be assigned narrow date ranges.

Other Toys. Evidence of other toys from the site includes a whistle, a skate key, a jack, a game piece, 1 and a half toy guns, and an assortment of wheels. None of these objects can be definitively dated and they are found scattered around the site at various levels.

In addition, one headphone/speaker jack plug and 13 fragments of vinyl records were found. The headphone/speaker jack is of recent manufacture. It appears to be the kind used for hand-held radio/cassette players, and is from N32 E26.5 (level 3, 20-30 cm). The record fragments were all recovered from the south edge of the site, with seven pieces from N6 E23 (level 3, 10-20) and an additional three pieces in level 4 (20-30 cm).

Household

The objects in this class relate to activities that took place in a domestic social context. These objects would have been material aids in the continuance and perpetuation of household activities as well as signifiers of changes in those activities throughout the occupation of the site. These have been divided into four subclasses: Foodways, Furnishings, Facilities, and Maintenance and Repair.

Household: Foodways: Kitchenwares

Glass vessels/bottles. A total of 243 fragments identifiable as being from bottles were recovered from this site. Most of these bottles occur as milk bottle/soda bottle shapes in a variety of glass colors. Only two of these bottles had readable embossing, both from N25.5 E32.5. One from level 1 (0-10 cm) read "Pat Rand July 28, 1928," and the other read "KING" and "SCO." In both cases the wording is too fragmentary to determine the vessel content or its brand.

Manufacturing dates were tentatively established for 12 vessels. One fragment from level 3 (20-30 cm) in a unit near the house (N32 E38) exhibits a pontil mark, which indicates that it was made between 1810 and 1870 (Figure 5-1). One fragment, level 14 (90-101 cm) N25.5 E32.5, was made between 1840 and 1913. Three fragments from N25.5 E32.5 (levels 11, 57-67 cm; 15 , 101-110 cm, and at 120 cm), and one from the cistern inside the house were manufactured between 1880 and 1913. One fragment from level 1 (0-30 cm) in N5.5 E23 was made after 1903. One fragment, level 4 (30-40 cm) in N32 E26.5, was made more recently than 1913. The remaining two fragments, made more recently than 1920, were found in level 4 (30-40 cm) of N32 E26.5 and level 2 (10-20 cm) of N32 E26.5.

In addition to a few metal screw-on caps, metal crown caps, dated as more recent than 1895, were discovered on the site. A total of 34 crown caps were recovered, too rusted to determine brand names. A concentration of these was evident in Feature 1 (N1.25 E6.5), where 26 caps were found in level 8 (50-60 cm) and five caps in level 7 (60-70 cm).

Also included in this category was a quantity of glass fruit jars (Figure 5-2) and jar lids. Although they were found in several places on the site, these fruit jars were concentrated in the root cellar (N25.5 E32.5) in levels 5 (37-47 cm), 7 (41-57 cm), 14 (60-101 cm), 15 (101-110 cm), and 16 (110-121 cm). Several kinds of jars were represented, including Ball and Mason. No identifiable Kerr jars were recovered. These jars, along with the milk glass lid liners and zinc caps in association, probably date to the late nineteenth and early 20th centuries (Toulouse 1969). Fruit jars were used to preserve an assortment of fruits and vegetables in the home. Until canned, and later frozen, fruits and vegetables

Figure 5-2. Canning jar fragments from the 1998 excavations.

became widely available, home canning was an important way to store food. Canning was also a way to preserve a surplus, such as was being produced at the site almost continuously since the mid-19th century. Although it is difficult to attribute any of these vessels specifically to James and Ellen G. White, canning is consistent with what is known of their gardening and dietary practices.

Stoneware vessels. A variety of utilitarian stoneware vessels were found on the site. These usually were two-tone, with a dark brown interior and lighter colored exterior. Stoneware vessels, such as crocks and jugs, were common during the nineteenth century. While they can still be purchased today, modern stoneware is often intended for the decorative and collectable markets. Possible production dates hence range from the early nineteenth century to the present. However, a number of these vessels may have albany slip, a technique used between 1805 and 1900. The use of utilitarian stoneware vessels would have fit well with the early Adventists' emphasis on plainness of decoration.

Coarse earthenware. An assortment of yellowware vessels was recovered. These vessels are either undecorated or have simple annular bands. Yellowware vessels were popular for kitchen use between 1830 and 1940, although occasional examples can still be purchased. Like the stoneware, yellowware was a utilitarian ceramic primarily used in the kitchen, that would have fit with the early Adventists' goal of plainness. All but one piece of the yellowware was found in the lower levels of the root cellar (Feature 4) identified in unit N25.5 E32.5.

A few pieces of redware were also found on the site. This is another example of a utilitarian ceramic used mainly for food preparation that would have fit the Adventists' views on decoration. All the shards of redware were recovered from the lower levels of N25.5 E32.5 which is probably a late nineteenth century deposit.

Cutlery. No examples of cutlery for kitchen use were recovered.

Household: Foodways: Tablewares

Glass vessels. Several fragments of glass tableware were recovered from the site. These were found directly behind the house in Areas 3 and 4 (units N32 E26.5, N25.5 E32.5, N23 E16, and N13.5 E11). Almost all of these vessels are

molded Depression glass, used and produced primarily from 1920-1940 or later. Several pieces of the "Moonstone" pattern, with raised balls covered with iridescent white paint, produced between 1941 and 1946, were found in level 5 (52-93 cm) of N23 E16. Unit N32 E26.5 yielded several fragments of a FireKing glass plate, probably produced between 1935 and 1970 for use both in oven cooking and serving. In addition, several pieces of heavy cut or pressed glass forming parts of a candy dish, bowl, and pitcher were recovered from the root cellar between 110 and 120 cm BD.

Ceramic vessels. Over 1,000 ceramic fragments were recovered and curated from the excavations. These vessels include all forms of tablewares: plates, bowls, saucers, cups, and serving dishes. In addition, because of the small size of most of these fragments, decorative closed vessels may also be represented in this category. The level of analysis performed so far does not permit any detailed statements about this assemblage. As a result only preliminary general statements, derived mostly from decorative techniques, can be made here.

Although porcelain vessels are represented in this collection, the vast majority of the fragments are undecorated whiteware and ironstone. All three of these types of ware are still in production, making it difficult to ascertain production dates. Most of the decorated whiteware has a dark blue transfer print, and many fragments are too small to discern the overall pattern (Figure 5-3). This style, and other colored transfer printing, has been in production longer than the site has been occupied.

One piece of blue shell edged, unscalloped and unmolded, plate rim was found in unit N1.25 E6.5 (level 1, 0-10 cm). This style was popular between 1865 and 1895 (Miller 1996). Another piece of dark blue molded shell edge rim, produced between 1841 and 1857 (Miller 1996), was found in level 2 (24-33 cm) of N2.5 E28 (see Figure 5-3).

Nine pieces of whiteware with powder blue transfer printing were recovered. This style of decoration was used primarily in the mid-19th century (Miller 1996) (Figure 5-3). Although none of the fragments is large enough to easily discern the pattern, they bear some similarity to the Medici pattern recovered from the Shepard site (Sayers et al. 1998:86, Figure 5-1). Medici was produced in sets by Mellor, Venables, & Company in England around 1847. The plates were typically twelve-sided and their rims exhibited a pattern of scrolls forming reserves, each containing an urn. In the center of the plate there is a classical scene depicting a large urn, statues, and a stone column presenting a popular composition in the Romantic period (Williams 1978:333). These fragments were concentrated behind and directly south of the house. Several pieces with blue flow or blue pooling were also recovered in the same area

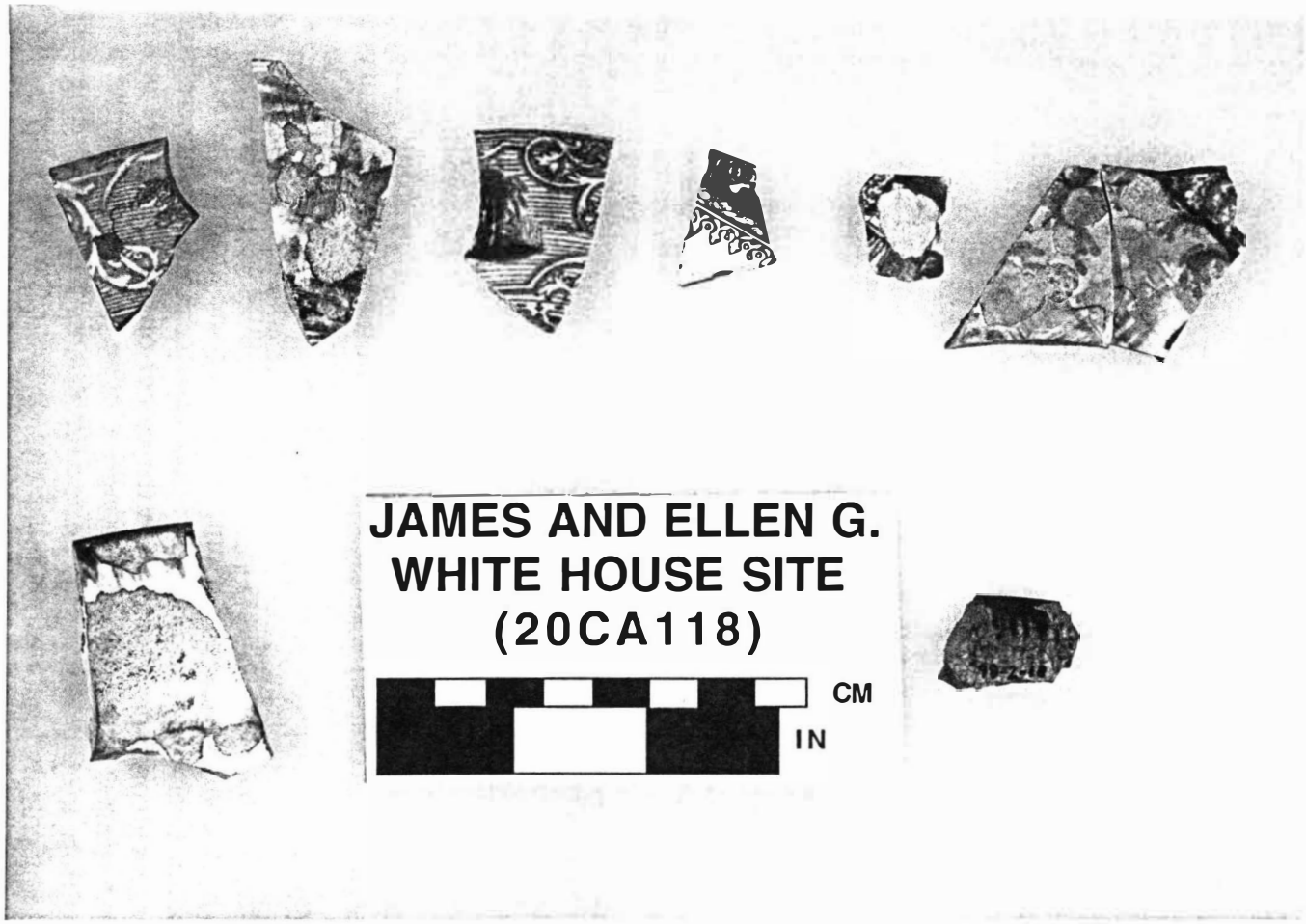


Figure 5-3. Select ceramic sherds from the 1998 excavations. Top row: powder blue transfer printed wares, ca. 1840-1860. Bottom row: blue, shell-edged plate rims, c. 1851-1895.

(Figure 5-4). This flow and pooling was the result of a production technology used primarily in the mid-19th century.

Another interesting transfer printed sherd was recovered from level 15 (101-110 cm) in unit N25.5 E32.5 (Figure 5-4). This whiteware fragment has a green stipple transfer print, with the words/letters "Dost Thou L . . .". The rather archaic form of "do" in the second person singular and the word "thou" are often used in ecclesiastical language. Thus, it may be the only object from our excavation that has a direct religious reference.

Only a very few pieces of annular ware, all blue, were present at the site. Again these pieces were found immediately behind and south of the house. This ware, particularly blue, was popular from about 1830 until 1926 (Miller 1996).

A large number of the ceramics present at the site were decorated with decals. Rose and other floral decals, which reached their peak of popularity in the first quarter of the 20th century (Miller 1996), were particularly well represented.

Although the ceramics were scattered across the site, there was a large concentration of them in nearly all the levels of N25.5 E32.5. These ceramics show some stratigraphic patterning, with more recent materials appearing near the top and older ones toward the bottom of the root cellar. However, at 120 cm several pieces with gilding and floral decals were recovered, styles that came into use in the late 19th century (Miller 1996) (Figure 5-5). This suggests that these materials were deposited sometime after 1900, an interpretation which is supported by the fruit jars and other objects recovered from this depth.

Cutlery. No examples of table knives were recovered.

Utensils. One large spoon was recovered from N32 E26.5 (level 4, 30-20 cm), and one teaspoon from N25.5 E32.5 (level 12, 68-78 cm). Several other similar spoons, apparently of the same set, remained embedded in the wall of a pedestal between Features 3 and 4 in unit N25.5 E32.5 (Figure 4-30). In addition, N25.5 E32.5 yielded one metal salt/pepper shaker at 120 cm. The spoon and shaker further support the idea that this feature was filled in with domestic refuse from the kitchen area of the house.

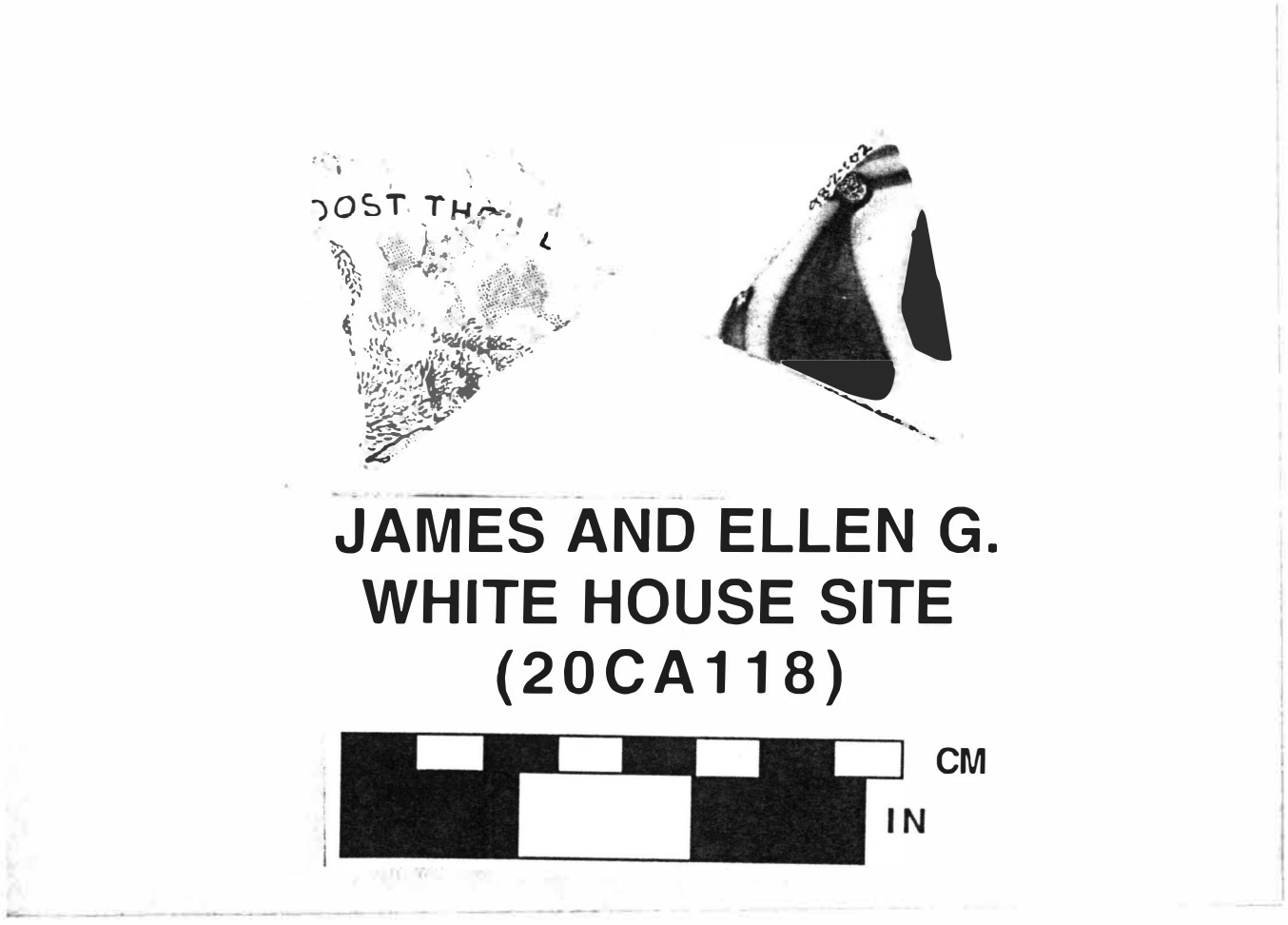


Figure 5-4. Transfer printed (left) and flow blue (right) sherds from the 1998 excavations.

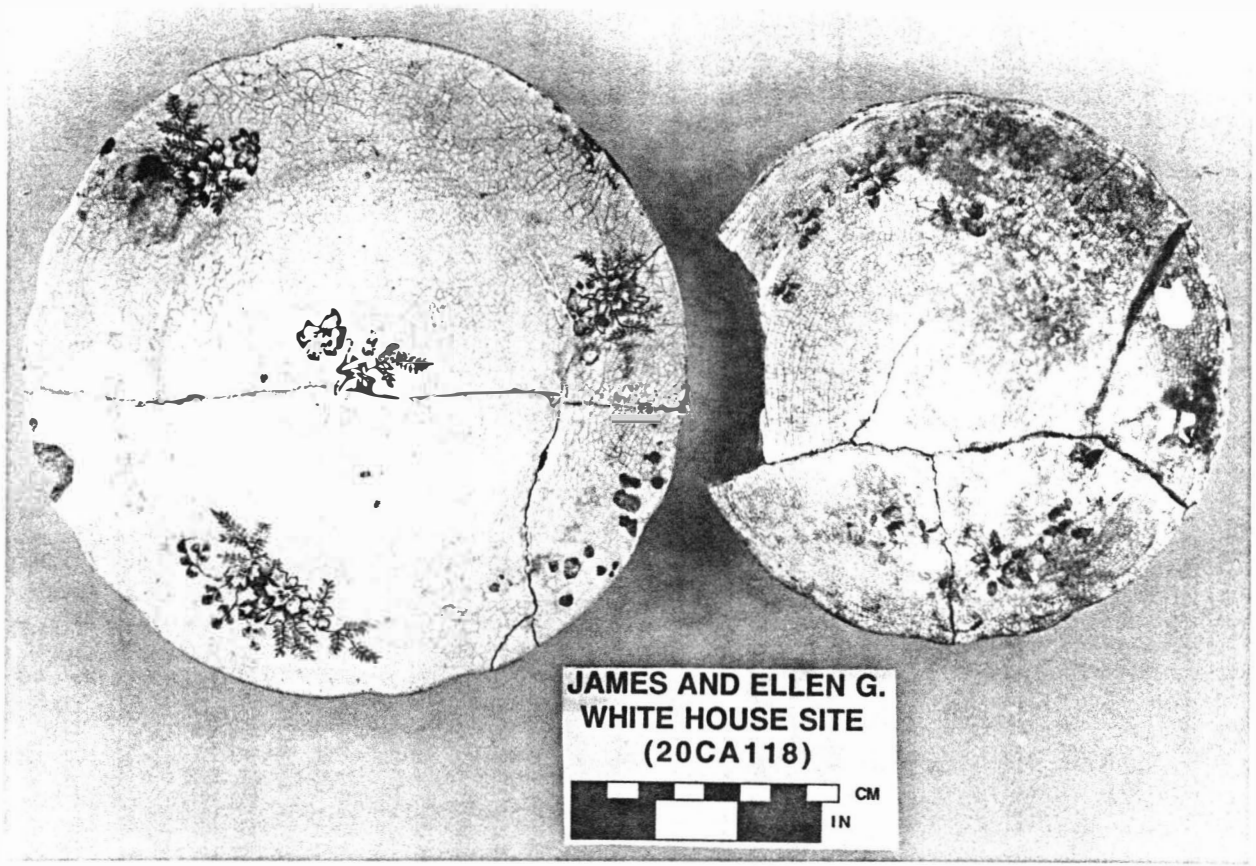


Figure 5-5. Late 19th century ceramic plates recovered from the root cellar.

Household: Furnishings

The majority of objects in this category are flower pot fragments. These are unglazed ceramic, terra cotta, ranging from a classic orange to reddish to buff and are found scattered all over the site. Although this kind of ceramic has been manufactured for a very long time, the style and condition of these pot fragments suggest that they were mostly used in the 20th century.

The remaining objects include several pieces of furniture decoration, a fragment of a wind chime set, three ceramic fan pull pieces, and several pieces of plastic plants.

Household: Facilities

This group refers to artifacts that relate to lighting and cooking technologies.

Lighting. An assortment of small thin fragments of glass, probably from lamp chimneys, were located throughout the site. Likewise, small fragments of light bulbs were also found. Although these were scattered throughout several units, there does seem to be a slight concentration of both kinds of glass in N25.5 E32.5. The location of the house well inside the city limits, and in a middle-class 19th century neighborhood, suggests that electricity was probably available soon after the city began electrifying in the mid-1880s.

In addition, several pieces of industrial porcelain were recovered. One early electric insulator, probably plastic, was found in level 7 (41-57 cm) of N25.5 E32.5. Finally, level 3 (20-30 cm) of N23 E26 yielded a gas light key, suggesting that prior to electricity the residents of the house had access to a supply of gas for lighting, probably from a municipal source.

Cooking. Only one stove piece was recovered from the site. It was found in level 8 (50-60 cm) of Feature 1 (N1.25 E6.5). Since this feature is rather far from the house, the stove part was probably deposited there, along with the many other metal objects, as part of an early 20th century dumping episode.

Fuel. A large quantity of clinkers was recovered from the site. Clinkers were defined as pieces of slag or cinders derived from a coal-burning stove, probably the main source of heat for the house during most of the 19th century. Although clinkers are spread across the site, they were concentrated in Area 1,

where they were intentionally laid down to create a driveway surface (see above). As discussed above, clinkers would have provided a porous, gravel-like surface more convenient than bare dirt. They were common as an inexpensive driveway treatment in the late 19th and early 20th centuries.

Some unburned pieces of coal were also recovered from the excavations. The coal was found throughout the site, without any apparent concentration. This stands in contrast to the Shepard site where most of the coal was concentrated adjacent to the house where it was delivered to the basement stove through a coal chute or bulkhead (Sayers et al. 1998:92).

Finally, some non-clinker slag was also found. This material probably also resulted from oven use and/or coal burning. Although it was not found in as many locations, no concentrations are evident.

Household: Maintenance and Repair

Few objects in this category were recovered from the site. These objects almost all related to clothing sewing, mending, or washing. Several pins, straight and safety, were found as were several pieces of clothespins. One fragment of an embossed panel bottle, probably manufactured between 1865 and 1915, read "...wing" "...chine oil" and most likely contained sewing machine oil (Figure 5-1). One metal object was identified as probably a piece of a sewing machine.

Sewing was a common household activity usually performed by women in the 19th century. The Shepard site yielded several sewing-related items including a thimble and a clear, glass bottle that held sewing machine oil produced by the Singer Manufacturing Company. William White (1936:7) recalled that his mother engaged in "sewing, mending, knitting, (and) darning" among her afternoon activities. While much of this was done by hand, Singer Sewing Machines were being marketed throughout the East by the 1850s and were available to, and possibly adopted by, Ellen G. White and other Battle Creek women by the 1860s.

Other repair-related objects were for household cleaning. A perforated metal top of a cleanser canister and a plastic cap from a Clorox bottle were found. Much of the amber curved glass from the site, particularly behind the house, was probably from early 20th century bleach and cleanser bottles, but no temporally diagnostic marks were noted.

Household: Leisure

Tobacco. Prior to the introduction of cigarette papers in the early 20th century, tobacco was consumed in fragile clay pipes which are ubiquitous on 19th century sites in America. At the James and Ellen G. White site, only seven ceramic pipe stem and bowl fragments were found on the site. Of these, two bowl and two stem fragments were recovered from N25.5 E32.5 all above 57 cm. While stem diameter and bowl shape are temporally sensitive markers, it was not possible to provide these fragments with a date more specific than the mid to late 19th century. After about 1840 pipe stem diameter is a much less sensitive chronological indicator and the bowl fragments are too small to be clearly identified. Based on the stratigraphic contexts of these objects, there is little reason to think that they might be associated with the earliest occupation of the site (1856-1863). Moreover, their extremely low frequency is quite interesting, particularly considering that Ellen G. White and fellow Adventists, were opposed to smoking tobacco in all forms.

Alcohol containers. An assortment of amber and olive green glass fragments were found in the upper levels of many of the units that may represent beer bottles. None of these could be definitively identified as alcohol containers however, and at least some of them are likely to have been bleach or cleanser containers as well. No definitively 19th century containers for alcohol—be it wine or other spirits—were recovered. This is intriguing because the early Adventists opposed alcohol consumption, and even after the house became occupied by non-Adventists a large social movement toward Temperance had begun. Similarly, alcohol containers were infrequent during most periods represented by the Shepard site assemblage with a single exception (Sayers et al. 1998:84). Several green glass bottle fragments may have been associated with grape fermentation home-made wine production during Prohibition by an Italian immigrant family who brought their Old World tastes and values with them to Battle Creek (Nassaney and Nickolai 1998).

Built Environment: Construction Material

Shingles. A quantity of asphalt shingle fragments were found all over the site.These vary by the color of the inclusions in the tar matrix and probably represent several episodes of roofing both the White house and neighboring houses. No clear date for the beginning use of asphalt shingles is currently determined, but it was almost certainly around 1910. While a few pieces of slate were recovered from the site, they do not seem to be roofing material. Further, it seems highly unlikely that the houses on the property would have had slate roofs

give the socioeconomic status of their occupants. Rather, the houses were probably covered with cedar shingles in the 19th century.

Mortar/Plaster. Both mortar and plaster were recovered from various parts of the site. They were generally distinguishable from each other; mortar was greyish in color and harder, while plaster was usually lighter in color and softer. Some of the plaster was associated with paint or other wall covering, suggesting it was deposited as the result of some major remodeling or the destruction of the neighboring house.

Wood. Although the White house is constructed of wood, very few cut wood fragments were found. The most significant of these were cut wood planks placed vertically in the trench associated with Feature 4 in N25.5 E32.5. These boards, some of which are charred and all of which are badly decayed, were probably the wall to the root cellar exposed in this unit.

Concrete. A great deal of concrete was encountered on the site, much of it behind the neighboring house (Area 3, N10.5 E24) and too large to recover and curate (see Figure 4-25). This distribution of concrete seems to be the result of the destruction of the neighboring house, which may have had a concrete foundation, walkways, or porch. Smaller pieces of concrete were found scattered around this area and were probably also related to the demolition.

Window glass. Window glass was common in this collection and varied in color. It was found in units close to the house and in association with other materials from the demolition of the neighboring house. While it has been suggested that color and thickness of window glass can be used for both dating and estimating socio-economic status, it would be very difficult to separate glass from the Whites' house from that deposited by the demolition of the neighboring house.

Brick. Brick was surprisingly common on the site, given that none of the houses in the immediate neighborhood are comprised of brick (but cf. Sayers et al. 1998:94). It was mostly found in the upper levels of units placed behind the White house and in the neighboring lot. Although the cistern beneath the Whites' house is made of brick, it is unlikely that all the bricks observed in our

excavations are related to the construction of this feature. Perhaps the neighboring house also had a brick cistern or other elements (porch, walkway, foundation?) that were once made of brick.

Built Environment: Fencing

The only fencing material found on the site during excavations was two fragments of barbed wire in N1.5 E37.5 (level 3, 15-27 cm) near the boundary between Lots 3 and 64. Fences may have been used to delineate various property boundaries at the site, much as they are used today. Furthermore, there may have been enclosures for livestock or fences bounding gardens to physically and symbolically demarcate space on the site.

Built Environment: Hardware

A total of 189 objects, mostly metal, were assigned to this category. The more recognizable of these objects include two redware doorknobs, one from N23 E26 (level 6, 50-62 cm) and one from N25.5 E32.5 (level 10, 80-92 cm). Also, a soapstone lumber pencil was found in N25.5 E32.5 (level 3, 20-30 cm). These pencils are used to mark on lumber before cutting it, often at a construction site. While they first appeared in the 19th century, they can still be purchased today, though they have been nearly replaced by the use of graphite pencils. A variety of other objects are also included in this category (e.g., hinges? other?), though many are too fragmentary or rusted to be diagnostic.

Built Environment: Fasteners

More than 1100 nails and threaded fasteners were recovered from the site. These include various kinds of nails, screws, tacks, and bolts. Although there are suggestions that nails can be diagnostic artifacts for the late 19th century, no detailed analysis of these has yet been undertaken. Suffice it to say that both square and wire nails occur, the former being predominant in the 19th century. Most of these fasteners were found in the area behind the White and neighboring houses, though not into the far back lot. Since the White house is entirely of wood construction, it seems likely that it would have involved a large number of nails during its various phases of renovation and expansion. The destruction of the neighboring house is probably also responsible for a large number of these nails.

Occupational: Agriculture

Only two objects clearly related to agriculture were recovered, other than plastic plant tags and a wire frame used to support tomato plants recovered from the immediate back yard of the White house. These objects were a hoe head from N25.5 E32.5 (level 7, 41-57 cm) and a rake head from N25.5 E32.5 (level 10, 82-90 cm). While the low frequency of these objects could be interpreted to reflect the limited duration and intensity of agricultural activities at the site, similarly few agricultural objects were recovered from the Shepard site which was a large, working farm for over 50 years (Sayers et al. 1998:95).

Occupational: Hunting

The only objects that might be associated with this category are the six shell casings found at the site. Three of these shells, two from level 16 (110-121 cm) and one from level 14 (90-101 cm) of unit N25.5 E32.5, are 12 gauge. One cartridge is marked "UMC 38 S&W," from N25.5 E32.5 (level 5, 37-47 cm). The two remaining shells are small and unmarked. The presence of any ammunition on a suburban landscape such as the James and Ellen G. White site is in need of explanation, as it is unlikely that these shells would have been discharged regularly on the site.

Exchange: Commerce

Coins and tokens. A total of six coins were recovered from the site, of which four had legible dates. Five of the six coins came from N32 E26.5 levels 2 through 5, whereas the sixth was found in level 1 (0-20 cm) of unit N1.5 E23. The latter coin was a Lincoln cent of the Wheat variety (pre-1959) with no legible date. The other five coins had dates ranging from 1967 to 1981, suggesting that this trash deposit is of extremely recent vintage.

Exchange:Communication

Writing implements. Fifteen pencil lead fragments were found on the site, all of modern manufacture, and a pencil sharpener on a ball chain. One charcoal drawing pencil was found in level 2 (11-22 cm) of unit N20 E33. A plastic pen barrel and a metal pen nib marked "faber" were also recovered. One clear glass inkwell, probably manufactured between 1880 and 1913, was found near the base of excavations in the root cellar (N25.5 E32.5,101-110 cm) (see Figure 5-1).

Printed paper. The only printed paper fragments from the site were from N32 E26.5 which yielded fragments of newspaper and a catalog in levels 3 (20-30 cm) and 4 (30-40 cm). A page of a local newspaper from the early 1950s was also noted from the cistern beneath the house but not saved.

Exchange: Transportation

Animal related. No artifacts of this category (e.g., horse shoes) were recovered.

Vehicle related. A number of shatterproof windshield glass fragments were found on the site, mostly near the old clinker driveway in Area 1. In addition, N23 E16 (level 1, 0-10 cm) contained the metal handle of an ice scraper for an automobile windshield, perhaps adding credence to the idea that the retaining wall in Area 4 supported a garage. All of these objects clearly date to the latter part of the 20th century.

Miscellaneous

This category includes a number of artifacts which could be identified, but not conveniently fit into the classification scheme, such as a Duracell battery, a small bell, ribbon, foil fragments, and a natural sponge.

Natural Objects

This category includes natural objects, some of which were deposited on the site through human intervention, that do not fit into other classes. This includes more than 400 bone fragments from all over the site, one probable insect larvae, two fossilized shells, 11 nutshells , 9 terrestrial snail shells, 9 marine shell fragments, and 22 eggshell fragments. The bones likely represent food remains associated with meals that were consumed by the site occupants. Faunal remains from undisturbed archaeological contexts can provide valuable insights into diet and socio-economic status when analyzed by species and element (e.g., Sayers et al. 1998:99-109). None of the animal bones in our assemblage appears to be directly associated with the 19th century occupants of the site. This is not to say that such remains were unexpected at the site, however. Although Ellen G. White upheld strict prohibitions against eating meat, the shift from an omnivorous diet to a vegetarian one did not occur overnight. Until suitable protein substitutes for

meat could be found in the 1870s and 80s, we might expect that the Whites' and other Adventists' diets would have led to discarded animal bones, including some that survived in the archaeological record.

Unknown

Numerous small, fragmentary objects could not be identified (n>3400). Among these were objects of glass, metal, and plastic, with smaller quantities of unusual materials such as styrofoam, vinyl, and paper.

In our preliminary analysis of the artifacts recovered from excavations at the James and Ellen G. White site, we have attempted to expose the chronological and functional dimensions of the material objects that the site occupants used to create and display their social identities. The archaeological deposits that we encountered contain objects that were used predominantly in the latter half of the 19th century through the present. Most of the artifacts reflect the activities of a domestic, suburban household. Furthermore, they have the potential to speak to changes in social identity, as evidenced by the presence and absence, as well as varying frequencies, of various artifact types. For example, packaged foods seem to have been increasingly adopted over the 20th century. New packaging technologies along with the advent of refrigeration have almost completely replaced domestic means of food storage in contemporary, suburban society. As archaeologists have noted elsewhere, consumer choice is a sensitive barometer of the political, economic, and social conditions that influenced how household members related to each other, the community, and larger market forces (Cook et al. 1996; Spencer-Wood 1987). The study of artifacts and landscapes can provide insights into the activities conducted by the site occupants, their use of space, and the changes that marked the development of the household over the past 143 years. While some of this information can come from the written documentation about the site, the material record provides a different point of entry for this study by representing the seemingly mundane aspects of daily life that went unrecorded in official government and personal documents.

CHAPTER 6

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Michael S. Nassaney and William Sauck

Archaeological and historical investigations at the site of the James and Ellen G. White house (20CA118) in Battle Creek, Michigan, have led to significant observations concerning the history of site use, its occupants, and landscape changes over the past 143 years. Perhaps most importantly, this work has demonstrated that there are undisturbed archaeological remains associated with the site that make it potentially eligible for listing in the National Register of Historical Places. Both the house and the landscape can contribute important information on the lives of early Adventist pioneers in 19th century America. In the remainder of this report we summarize our findings and discuss the conclusions and recommendations of this intensive survey.

GEOPHYSICAL CONCLUSIONS AND RECOMMENDATIONS

The geophysical methods used at the James and Ellen G. White House site have all produced results that were useful in guiding excavations, as well as for extrapolating results of excavations over a much larger area. Small magnetic high-low anomaly pairs define discarded steel objects, with the amplitude of the magnetic anomaly crudely proportional to the size (and shallowness) of the object. A better relation is not possible because of the variable effects of permanent magnetism of the objects, and of their variable orientation in the present-day earth's magnetic field. Small iron/steel objects will only be revealed by the magnetometer. Larger iron/steel objects may also be detected by the EM-31 system. GPR will also see the larger metallic objects, particularly if the GPR line is nearly perpendicular to the long axis of the object. The GPR and EM conductivity methods will also detect long metallic objects which are <u>not</u> iron/steel, such as buried copper wire or aluminum. These will have no effect on the magnetometer. The EM-31 system measured features not seen by the magnetometer, such as the low-conductivity concrete-plastered cistern at 12E, 14N. Thus, multiple methods are always preferable, as some are restricted to only a certain class of objects, while other features may be defined and even identified by their responses to more than one geophysical method, an example of synergism. The GPR system was least affected by lateral, surficial structures, such as wire fences and walls. Hence, it provided the greatest coverage at this site because the antennae could be pulled until it contacted these obstacles, whereas the other two instruments were stopped several meters away.

Another geophysical system should be used as an alternative to the EM-31 system. The GEONICS EM-38 is a similar, but smaller, two-coil electromagnetic induction system which measures soil conductivity (inverse of resistivity) in the upper 0.75 to 1.5 m, depending upon the orientation of the instrument. Its coil separation of only 1 meter makes it much more suitable to shallow archaeological applications than the EM-31. It has the capacity for nearly continuous measurement at a rate of 3000 data points per hour, which should give a surveying efficiency similar to that of the magnetometer.

With the equipment available, the magnetic method was the most rapid in covering an area. The EM-31 survey was similarly done at a walking pace. The GPR is rapid in the field, but requires a smooth path about a half meter wide. Thus, it could not be used in the wooded areas or locations with landscape obstacles. In a marginally applicable site such as this (marginal because of the surface roughness and obstacles), the GPR data requires considerable post-processing such as filtering to remove resonances and enhance weak deeper signals. This involves transfer of data from the field disk to desktop computers, time-consuming processing, and finally printing out the profiles.

Considerable further work at this site is warranted. With regard to the magnetic surveys, it would be desirable to excavate and remove many of the strongly magnetic objects, and then resurvey some of those 10 x 10 m data blocks. The high sensitivity of the magnetometer is not utilized in the present survey, as the 20th century (undesired) iron/steel objects dominate much of the map with high amplitude anomalies covering many square meters for each small object. The steel mesh fences caused 3-meter wide no-record areas for the magnetometer, with steep magnetic gradients extending into the maps even 4-5 meters from the fences. For the EM system, the fence overprint was even wider. With those objects cleared away, a new magnetic map could be made with much smaller contour intervals, showing subtle features such as weakly magnetized ceramics, fieldstones, and bricks. Only a small fraction of geophysical anomalies were excavated, and one could expect further excavations to reveal many more features and objects than were found in the six excavation units described in Chapter 4.

CONCLUSIONS

Thus far, the results of our investigations should be seen as preliminary. Based on these initial findings, the site exhibits some interesting similarities and differences in comparison with other 19th century properties in Calhoun County, particularly the Shepard site (20CA104) which has been the focus of intensive historical archaeological research since 1995 (Nassaney 1998; Sayers and Lapham 1995). By placing our findings within a comparative context, we can begin to gain

a better understanding of what it meant to be a Seventh-day Adventist in 19th century Battle Creek.

We have begun to examine a large body of literature related to James and Ellen G. White, early Seventh-day Adventist history, and the lives of pioneer Americans in Battle Creek to provide a context for our geophysical and archaeological findings. Much more work needs to be done in this regard, due to the voluminous amount of documentation that exists on these topics. Geophysical equipment proved to be very effective at this site; magnetometry, in particular, helped us to accurately identify a number of subsurface anomalies, several of which have proved to be archaeologically significant.

Excavations were concentrated in four areas of the site based on the documentary record, surficial evidence, the geophysical survey and the 1996 test excavations. In Area 1, investigations sought to identify material remains of Jonah Lewis's well and other related features. Although we failed to find physical evidence of the well, we encountered a 19th century clinker driveway surface oriented along an approximately east-west axis immediately below a thin layer of recent fill. This surface treatment is an effective and cost efficient way to create a porous surface for vehicular traffic (i.e., a driveway). Clinkers would have served to fill in low areas, improve drainage, create friction, and absorb sunlight to melt snow and ice in the winter, providing a level and easily passable roadway. This practice has been observed elsewhere in the region by both working class and middle class households, where it has been dated to the late 19th and first half of the 20th centuries (Nassaney 1998; Rotman and Nassaney 1997). Embedded within and below this surface were a number of artifacts (ceramics, glass bottles, Mason canning jar fragments) which may have been deposited as early as the third quarter of the 19th century (1850-1875). Thus, this area has a moderate archaeological sensitivity because objects associated with the earliest occupants of the site may lie sealed beneath this driveway surface. Although they are likely to be fragmentary, these materials occur in relatively undisturbed context. Furthermore, given the high density of field stones in the subsoil of the site, we cannot rule out the possibility that evidence of the well may still exist until a more intensive survey strategy has been used to detect it, such as mechanical stripping of the upper soil horizons.

Somewhat disappointedly, our geophysical and archaeological surveys failed to identify any unequivocal evidence of Jonah Lewis's barn and cow stable or later structure in Area 2 on the northwest corner of Lot 3. It is possible that grading activities associated with the demolition of the house that once stood at 57 N. Wood Street have obscured all but the most subtle archaeological signature of any previous structures in this vicinity. Scattered pieces of brick and concrete, and occasional 19th century artifacts and a lone post mold may be all that remains of an outbuilding here.

The late 19th-early 20th century trash deposit designated Feature 1 was found in the northeast corner of Lot 2 west of the area thought to be the location of the barn. The age and contents of this feature bear some similarities to other refuse disposal patterns in the region. At the Shepard and Woodhams sites there was evidence of large concentrations of refuse that also date to the same period. These remains represent disparities in the products available for consumption and the available means for their disposal. In other words, by the end of the 19th century mass-produced consumer goods had flooded national markets, whereas local municipal services such as trash pick-up were underdeveloped and lagged behind. As a result, individuals were responsible for their own disposal of a mounting quantity of trash. In a suburban setting, household members often responded by digging pits in inconspicuous areas of their yards and using them to dispose of various objects. In some cases, trenches dug for other purposes (e.g., sewer line) or other concavities (e.g., abandoned drainage features) were used as repositories for non-recyclable goods that no longer served their intended purpose (see Nassaney et al. 1998b:62; Rotman and Nassaney 1997). A subterranean pit might have also served to conceal any non-organic architectural remains of a barn or garage after the structure had been razed or burned. The deposits in the pit continue to a depth of over 80 cm below the surface. This area should be tested further or avoided as it may contain deeply buried materials associated with earlier 19th century activities that may be linked to Jonah Lewis and/or the Whites.

Several intact features were identified in the original Lot 64 that we subdivided into Areas 3 (57 N. Wood Street) and 4 (63-65 N. Wood Street). While our survey intentionally avoided the area where an 1880s domestic dwelling once stood, the demolition activities disturbed the upper soil horizons to the southwest. However, in several excavation units nearer to the Whites' house, we identified a buried ground surface that was relatively undisturbed. The surface represented a sheet midden or culturally-enhanced A horizon associated with occasional 19th century objects, including some ceramic types manufactured in the 1840s and 50s. These objects were likely used by the Whites when they lived at the site.

Comparably dated deposits were also recovered at the Shepard site in close proximity to the house (Nassaney et al. 1998c:62). At the Shepard site, however, these ceramics were found associated with clay smoking pipe fragments and large quantities of animal bone. Both of these artifact classes are conspicuously absent from the sheet midden in Area 3. Thus, the contents of the midden are consistent with what we might expect from an Adventist household in the 1860s. The active avoidance of certain consumption practices (or the way the landscape was maintained) constitute choices made by James and Ellen G. White that served to create and display their social identities.

The more recent features identified on the south side of the house (trench for a telephone line, possible fence post) reflect the modernization of the property. Whereas the fence post may point to the subdivision of Lot 64, the phone line is only one of the many technological changes that occurred throughout America in the 20th century, including new techniques for heating and illuminating the home, as well as providing for water and the removal of waste. These transformations had significant impacts on the contents of the home, the organization of space within it, the visual landscape beyond the domestic sphere, and the ways in which the occupants conceived of themselves in relation to the external world. Schlereth (1992) has discussed some of the material ramifications of the introduction of the new home utilities that were adopted throughout the country, reaching most parts of suburban America by the 1920s.

Among these changes are alterations in the physical landscape both above and below the ground and the new relationship of the home to its surrounding neighborhood (Schlereth 1992:238). The household's interconnections with new utilities (e.g., electricity) made it less self-sufficient. With the later establishment of telephone lines, water main, and sewer, Americans became accustomed to think of "systems" as metaphors for modern life. Moreover, light, heat, and water were no longer the product of the homeowner, as they were commodities to be purchased from elsewhere. Although electricity was initially introduced to provide light, the advent of power outlets throughout the house led to a proliferation of various appliances (e.g., vacuum cleaners, washing machines, sewing machines, radios). These are goods that consumers were required to dispose of once they became non-functional and needed to be replaced by more "modern" counterparts.

One feature in this area relates directly to the period when individuals were responsible for supplying their own water. At the rear of the lot west of the fence we located a cistern constructed using cement plastered directly on the soil. The cistern was probably in use in the second half of the 19th century, based on its contents and method of construction. Its location suggests that it was used to water livestock rather than having a domestic function. By the time automobiles infiltrated the neighborhood (replacing horses) and water lines were laid down, the cistern would have been an archaic feature on the landscape. It could have continued to function well into the 20th century, however, if local women still considered it a good source of soft water for washing their hair and laundering clothes (see Schroeder 1991:106). This cistern should be investigated further to determine its vertical and horizontal extent and obtain a larger sample of its contents. We recommend that construction activities in this area be avoided until a more systematic examination can be conducted.

As previously mentioned, Area 4 also contained archaeological materials of interest. The construction of a garage in the 1920s and a retaining wall probably somewhat later have disturbed much of the 19th century landscape beyond more than 5 m west of the Whites' house. A 1 x 1 m excavation unit here exposed mixed deposits of predominantly 20th century materials. The backyard immediately west of the house, however, contains relatively undisturbed deposits to a depth of over 128 cm in some places. This area appears to have a high archaeological sensitivity based on geophysical and subsurface investigations. Although much of the upper soil horizon has been homogenized through gardening activities, deeper deposits clearly remain intact. One feature (3) detected with our geophysical equipment proved to be a large concentration of sheet metal at about 50 cm below the surface. We were unable to investigate the function of this deposit as we focused our efforts on an adjacent feature immediately to the west. Deeper excavations here exposed the remains of what appears to be a root cellar that was probably in use during the mid-19th century (ca. 1855-75), almost certainly by the Whites. In the fill of this cellar we recovered a wide range of late 19th century objects including ceramic pipe tiles, ceramic serving pieces (plates, bowls), canning jars, and other domestic debris.

The presence of canning jars came as no surprise; they are a common artifact found on 19th and 20th century historic sites (Powell 1981) and James White made mention of their use in 1867. Many households preserved their own foods in the 19th century, particularly those who were suspicious of the safety of packaged foods that were becoming increasingly available to the masses at this time (Cheryl Lyon-Jenness, personal communication, 1998). Home food preservation was also consistent with the Seventh-day Adventist orientation toward perfectionism and a proper diet which Ellen G. White advocated through her writings and the establishment of the Western Health Reform Institute. Numerous canning jars were also recovered from the Woodhams site in Plainwell, Michigan, that was occupied by predominantly working class families. While we lack reliable quantitative data, it appears that the majority of canning jars recovered from the Shepard site are associated with the period marked by economic decline; few, if any, jars were associated with the period of progressive agriculture when the site occupants were identifying with an emerging middle class. Members of the emerging middle class were able to purchase processed foods on a regular basis and were less skeptical about the safety of this new technology. Such consumer choices would have also represented the disposable income of upwardly mobile members of society. In contrast, canning may have come to be associated with the lower socioeconomic class, or in the case of the Seventh-day Adventists, a practice expressing a particular religious and ideological belief system.

Most of the canning jars recovered from the root cellar seem to post-date 1880, based on their association with ceramics and other dateable objects. There

is a good possibility that older deposits may lie below the deepest level of our excavations, since we have yet to reach sterile soil or the floor of this cellar. Clearly, no destructive activities should be conducted in this area of the site until future excavations can be used to determine the maximum horizontal and vertical dimensions of this root cellar, and obtain a larger sample of its contents.

Elsewhere in southwest Michigan we have observed a division of domestic and agricultural space, even on small urban farmsteads (Rotman and Nassaney 1997; Sayers and Nassaney 1997). For example, vegetable gardens may be consistently located opposite agricultural outbuildings such as barns and wagonsheds. This spatial separation may also betray a gender-based division of labor, illustrating how landscape is used to reproduce social relations between men and women (see also Rotman and Nassaney 1997). At the White house site, agricultural activities were conducted toward the rear of the property, while domestic chores took place closer to the house. Although James and Ellen G. White seem to have been equal partners in church-related activities, they may have maintained much more traditional roles and responsibilities within the household.

The placement of the Jonah Lewis well at the edge of Lot 3, where the entire neighborhood could have access to its cool, clean water also served to reinforce social relations within the community by integrating those who made use of it. The location of wells was often a contentious issue among farmers and their wives, since considerable time and effort was spent by women in hauling water in the 19th century. Further work needs to be conducted to evaluate the nature of spatial organization at the site and the way it served to create and reproduce social identities.

MANAGEMENT SUMMARY AND RECOMMENDATIONS

An intensive archaeological survey was conducted by the Department of Anthropology, Western Michigan University (WMU) at the site of the James and Ellen G. White house (20CA118) under a grant provided by the Historic Adventist Village. The survey tested the site for National Register eligibility using geophysical methods to identify subsurface anomalies followed by excavations to locate significant artifacts and features associated with the house's 19th century occupants. Previous background research and limited testing in 1996 showed that the site had the potential to yield information about its occupants through the identification and examination of potential archaeological remains of outbuildings, activities, and landscape features. The purpose of the work was to assist the Historic Adventist Village in preserving and interpreting a site associated with early Adventist pioneers in Battle Creek.

The 1998 field work consisted of geophysical prospecting and subsurface testing by personnel associated with WMU in conjunction with the WMU Archaeological Field School during May and June, 1998. Magnetometry, soil conductivity, and ground penetrating radar were used to survey eleven 10 x 10 m blocks. A total of 30 excavation units and STPs were dug based on the geophysical results, surficial evidence, previous testing in 1996, and the documentary record.

Seven features (including several dated to the 19th century) and numerous artifact concentrations were identified, recorded, and/or collected. Subsurface excavations located several areas of the site which are archaeologically sensitive. Remains of a cistern, a possible root cellar, and a sheet midden dateable to the 19th century in Areas 3 and 4 are likely associated with the White and Lewis families who lived here in the 1850s and 60s. There may also be some 19th century objects sealed beneath a clinker driveway in Area 1. Finally, a large trash deposit in Area 2 may contain objects related to an outbuilding that once stood on the northwest corner of Jonah Lewis's property.

We make the following specific and general recommendations for the James and Ellen G. White site (20CA118) based on our intensive survey:

1. Area 1 has a moderate archaeological sensitivity because objects associated with the earliest occupants of the site may lie sealed beneath the clinker driveway surface. Although any such objects are likely to be fragmentary, they would occur in relatively undisturbed context. Furthermore, given the high density of field stones in the subsoil of the site, we cannot rule out the possibility that evidence of a well may still exist until a more intensive survey strategy has been used to detect it, such as mechanical stripping of the upper soil horizons.

2. Area 2 provided evidence of a large trash pit designated Feature 1. This pit should be tested further or avoided, as it may contain deeply buried materials associated with mid-19th century activities that could be linked to Jonah Lewis and/or the Whites.

3. In Area 3 we identified a buried ground surface that was relatively undisturbed. This surface is associated with occasional 19th century objects, including some ceramic types manufactured in the 1840s and 50s that were likely used by the Whites. Efforts should be made to avoid any disturbance of this sheet midden. More horizontally-expansive excavations should be used to determine the extent of this feature and to recover a larger sample of artifacts.

The remains of a cistern were also identified in this area of the site. It should be investigated further to determine its vertical and horizontal extent and obtain a larger sample of its contents. We recommend that construction activities in this area be avoided until a more systematic examination can be conducted.

4. The backyard of the house in Area 4 has a very high archaeological sensitivity since it yielded remains of a root cellar, an as yet unexplored concentration of sheet metal, and scattered 19th century artifacts. No destructive activities should be conducted in this area of the site until future excavations can be used to expose this root cellar more fully, determine its maximum horizontal and vertical dimensions, and obtain a larger sample of its contents. Further work in this area also has the potential to contribute information on the physical appearance of the immediate door yard, which will aid Historic Adventist Properties in their restoration efforts (see Crawford & Stearns 1998).

5. The standing architectural remains at the site were outside of the purview of this study. Nevertheless, it has been demonstrated that the study of changes in the organization of internal space is extremely consistent with the landscape perspective adopted here (see Nassaney et al. 1998a). Therefore, we recommend continued study of the house as the largest artifact on the site, to better understand how it reflects changes in the social identities of the occupants over the past 143 years. This work may require further archaeological investigation in the cistern beneath the house and beneath the floorboards of the addition at the rear of the house which may have covered and effectively protected physical evidence of activities prior to 1861. Finally, no above ground evidence exists to guide reconstructions of the summer kitchen/woodshed (Crawford & Stearns 1998). Its size and exact location can only be determined through future archaeological investigation at the rear of the house.

6. In sum, our survey has identified several subsurface features that make the landscape potentially eligible for nomination to the National Register of Historic Places. To continue the investigations of archaeologically-sensitive areas and provide further data for research projects of local, regional, and national interest, the following survey and excavation strategies are proposed for the future:

(a) It would be useful to investigate a number of the enigmatic and identified features and possible outbuilding locations by opening up larger excavation units to better ascertain their function and recover a larger sample of associated artifacts. These goals should guide future work at the site as they are consistent with the broader preservation plans proposed for the house and associated landscape;

(b) Several geophysical anomalies that were not examined in 1998 may be profitably studied. Also, further geophysical work should be conducted after large, metallic objects (e.g., chain-link fences) have been removed from the site; and

(c) A better understanding of landscape changes at the site and the identities of its occupants must be developed within a comparative

perspective by juxtaposing our findings with those from other sites throughout the region.

REFERENCES CITED

A Lady's Friend
1846 Cisterns. *The Prairie Farmer*. Vol. 6, No. 4.

Adventist Historic Properties, Inc.
1990 The James and Ellen White Wood Street Home. Pamphlet published by Adventist Historic Properties, Inc., Loma Linda, CA.

Beattie, J. H.
1921 Home Storage of Vegetables. *U. S. Department of Agriculture Farmers' Bulletin* 879.

Beers, F. W.
1873 *Atlas of Calhoun County, Michigan*. F. W. Beers and Company, New York.

Bidwell, P. W., and J. I. Falconer
1925 *History of Agriculture in the North United States, 1620-1860*. The Carnegie Institution of Washington, Washington, D. C.

Brown, Frank
1998 The Vision Made Real: The History of the Mt. Zion AME Church. Manuscript in possession of the author, Battle Creek, Michigan.

Butler, Mary
1996 *Gold in Flakes*. Four volumes. Historical Society of Battle Creek.

Calhoun County Index of Deeds
1855 *Purchase of Lots 64 and 65 by James White from Cyrenius Smith* . Calhoun County Building, Marshall, Michigan.

Carson, Gerald
1957 *Cornflake Crusade*. Rinehart and Company, Inc., New York.

Coller Collection
1946 *Death Comes to Dr. Boldyreff, 73*. Unreferenced newspaper clipping in the Ross Coller collection, Willard Library, Battle Creek.

Cook, L., R. Yamin, and J. McCarthy
1996 Shopping as Meaningful Action: Toward a Redefinition of Consumption in Historical Archaeology. *Historical Archaeology* 30(4):50-65.

Cosgrove, D. E.
1984 *Social Formation and Symbolic Landscape*. Barnes and Noble Books, Totowa, New Jersey.

Crawford & Stearns
1998 *Preservation Assessment of the Ellen G. White House, Battle Creek, Michigan*. Crawford & Stearns, Architectects and Preservation Planners, Syracuse, New York. Report on file with the Adventist Heritage Ministry, Battle Creek, Michigan.

Cremin, William M.
1996 The Berrien Phase of Southwest Michigan: Proto-Potawatomi? In *Investigating the Archaeological Record of the Great Lake State: Essays in Honor of Elizabeth Baldwin Garland*, edited by M. Holman, J. Brashler, and K. Parker, pp. 383-413. New Issues Press, Western Michigan University.

Crumley, Carole, and William Marquardt (editors)
1987 *Regional Dynamics: Burundian Landscapes in Historical Perspective*. Academic Press, San Diego.

Davis, Jean, and Garth "Duff" Stoltz (editors)
1996 *Seventh-day Adventist Historical Landmarks in Battle Creek*. Pamphlet published by Benedict Printing, Battle Creek, Michigan.

Dunbar, W. F., and G. S. May
1995 *Michigan: A History of the Wolverine State*. W. B. Eerdmans Publishing Company, Grand Rapids, Michigan.

Ellen G. White Estate
1985 *Who Was Ellen G. White?* Pamphlet printed by Ellen G. White Estate, Washington, D. C.

Fuller, Robert C.
1989 *Alternative Medicine and American Religious Life*. Oxford University Press, New York.

Gray, Susan E.
1996 *The Yankee West: Community Life on the Michigan Frontier*. University of North Carolina Press, Chapel Hill.

Gregory, M.
1988 *The Forgotten Years of Battle Creek*. Kal-Gale Printing, Kalamazoo, MI.

Harvey, David
1973 *Social Justice and the City*. John Hopkins University Press, Baltimore.

Heimmer, D. H., and S. L. DeVore
1995 *Near-Surface, High Resolution Geophysical Methods for Cultural Resource Management and Archaeological Investigations*. Revised Edition. U. S. Department of the Interior, National Park Service, Denver, Colorado.

Jackson, J. B.
1984 *Discovering the Vernacular Landscape*. Yale University Press, New Haven.

Kelso, William, and Rachel Most (editors)
1990 *Earth Patterns: Essays in Landscape Archaeology*. University of Virginia Press, Charlottesville.

Knott, James Edward
1930 *Vegetable Growing*. Lea & Febiger, Philadelphia.

Leone, Mark
1984 Interpreting Ideology in Historical Archaeology: Using the Rules of Perspective in the William Paca Garden in Annapolis, Maryland. In *Ideology, Power, and Prehistory*, edited by D. Miller and C. Tilley, pp. 25-35. Cambridge University Press, Cambridge.

Lightfoot, Kent G., Antoinette Martinez, and Ann M. Schiff
1998 Daily Practice and Material Culture in Pluralistic Social Settings: An Archaeological Study of Culture Change and Persistence from Fort Ross, California. *American Antiquity* 63(2):199-222.

Lowe, Berenice Bryant
1976 *Tales of Battle Creek*. Albert L. and Louise B. Miller Foundation and the Historical Society of Battle Creek, Battle Creek, Michigan.

Mascia, Sara F.
1996 "One of the Best Farms in Essex County": The Changing Domestic Landscape of a Tenant Who Became an Owner. In *Landscape Archaeology: Reading and Interpreting the American Historical Landscape*, edited by R. Yamin and K. B. Metheny, pp. 147-174. University of Tennessee Press, Knoxville.

Meinig, Daniel W. (editor)
1979 *The Interpretation of Ordinary Landscapes: Geographical Essays*. Oxford University Press, New York.

Miller, George
1996 Historic Ceramics and Materials Identification Guide. Prepared for the Historic Ceramics Workshop presented at the 2nd annual meeting of the Historical Archaeology Conference of the Upper Midwest, Red Wing, Minnesota.

Miller, N. F., and K. L. Gleason (editors)
1994 *The Archaeology of Garden and Field*. University of Pennsylvania Press, Philadelphia.

Mrozowski, Stephen A.
1991 Landscapes of Inequality. In *Archaeology of Inequality*, edited by R. McGuire and R. Paynter, pp. 79-101. Basil Blackwell, Oxford, England.

Nassaney, Michael S. (editor)
1998 *Historical Archaeology in Battle Creek, Michigan: The 1996 Field Season at the Warren B. Shepard Site (20CA104)*. Archaeological Report No. 20, Department of Anthropology, Western Michigan University, Kalamazoo.

Nassaney, Michael S., Nicole Kuemin, and Daniel Sayers
1998a Landscape Reconstruction and Its Implications for Social Relations at the Shepard Site. In *Historical Archaeology in Battle Creek, Michigan: The 1996 Field Season at the Warren B. Shepard Site (20CA104)*, pp. 111-130. Archaeological Report No. 20, Department of Anthropology, Western Michigan University, Kalamazoo.

Nassaney, Michael S., and Carol Nickolai
1998 Selective Memories and Material Remains: Historical and Archaeological Investigations of the Warren B. Shepard Site (20CA104), Battle Creek, Michigan. Paper presented at the 1998 annual meeting of the Great Lakes American Studies Association, Miami University, Oxford, Ohio, March 6-7.

Nassaney, Michael S., and Robert Paynter
1995 Spatiality and Social Relations. Paper presented at the annual meeting of the Society for Historical Archaeology, Washington, D. C.

Nassaney, Michael S., Daniel Sayers, and Nicole Kuemin
1998b Research Findings: Features and Land-Use Patterns. In *Historical Archaeology in Battle Creek, Michigan: The 1996 Field Season at the Warren B. Shepard Site (20CA104)*, pp. 51-75. Archaeological Report No. 20, Department of Anthropology, Western Michigan University, Kalamazoo.

Nassaney, Michael S., Daniel Sayers, and Carol Nickolai
1998c Site Description and Historical Background. In *Historical Archaeology in Battle Creek, Michigan: The 1996 Field Season at the Warren B. Shepard Site (20CA104)*, pp. 5-24. Archaeological Report No. 20, Department of Anthropology, Western Michigan University, Kalamazoo.

Neumeyer, Elizabeth A.
1968 *Indian Removal in Michigan, 1833-1855*. M. A. thesis, Central Michigan University.

Newman, T. S.
1970 A Dating Key for Post-Eighteenth Century Bottles. *Historical Archaeology* 4:70-75.

Nickolai, Carol A.
1994 *Ella Sharp's Hillside Farm: Expressions of Class and Gender in Nineteenth Century Rural Michigan*. M.A. thesis, Department of Anthropology, Western Michigan University, Kalamazoo.

1997 The Remains of Religion: Some Preliminary Results from the Home of Ellen White, Prophetess of Seventh-day Adventism. Paper presented at the 3rd annual meeting of the Historical Archaeology Conference of the Upper Midwest, Red Wing, Minnesota.

Numbers, Ronald
1992 *Prophetess of Health: Ellen G. White and the Origins of Seventh-Day Adventist Health Reform*.. University of Tennessee Press, Knoxville.

Olsen, M. Ellsworth
1972 A History of the Origin and Progress of Seventh-Day Adventists. Originally published in 1925. AMS Press, New York

Patterson, Thomas C
1994 *The Theory and Practice of Archaeology: A Workbook*. Second Edition. Prentice Hall, Englewood Cliffs, New Jersey.

Paynter, Robert, Susan Hautaniemi, and Nancy Muller
1994 The Landscapes of the W.E.B. DuBois Boyhood Homesite: An Agenda for an Archaeology of the Color Line. In *Race*, edited by S. Gregory and R. Sanjek, pp. 285-318. Rutgers University Press, New Brunswick, New Jersey.

Peck, Lila Joan Bossert
1991 The Tabernacle Lights. *Heritage Battle Creek* 1:16-18.

Phillips, Danielle, and Tim McCauley
1998 Ellen G. White and the Seventh Day Adventist Community in Battle Creek, Michigan: A Material Biography. On file at the Department of Anthropology, Western Michigan University, Kalamazoo.

Powell, Terry J.
1981 Understanding Canning Jars. In *A Guide for Historical Archaeology in Illinois*, edited by C. E. Orser, Jr., pp. 49-59. Mid-American Research Center Research Paper No. 1. Mid-American Research Center and the Center for Urban Policy, Loyola University of Chicago.

Ratner, J. F.
1991 The Battle of the Creek or, the Invention of History. *Heritage Battle Creek* 1:60-65.

Rockwell, J.
1855 Rain Water. *The Prairie Farmer* 15(5):160-161.

Rotman, Deborah
1995 *Class and Gender in Southwestern Michigan: Interpreting Historical Landscapes*. M.A. thesis, Department of Anthropology, Western Michigan University, Kalamazoo.

Rotman, Deborah, and Michael S. Nassaney
1997 Class, Gender, and the Built Environment: Deriving Social Relations from Cultural Landscapes in Southwest Michigan. *Historical Archaeology* 31(2):42-62.

Sauck, William A.
1998 Appendix B: Geophysical Results. In *Historical Archaeology in Battle Creek, Michigan: The 1996 Field Season at the Warren B. Shepard Site (20CA104)*, pp. 149-176. Archaeological Report No. 20, Department of Anthropology, Western Michigan University, Kalamazoo.

Sayers, Daniel
1998 Gaining an Understanding of Mid-19th Century Political and Socio-Economic Transformations in Rural Southwest Michigan Through Historical Archaeology. Paper presented at the annual meeting of the Michigan Academy of Science, Arts and Letters, Alma, Michigan.

Sayers, Daniel O., and Jason Lapham
1996 Digging Through the Documents, Data and Dirt: The Forgotten Years of Warren Bronson Shepard. *Heritage Battle Creek* 7:38-45.

Sayers, Daniel O., and Michael S. Nassaney
1997 Spatial Organization of 19th Century Farmsteads: An Example from Southwest Michigan. Paper presented at the Third Annual Historical Archaeology Conference of the Upper Midwest, Red Wing, Minnesota, April 5.

Sayers, Daniel O., Michael S. Nassaney, and Christine McMillan
1998 Research Findings: Material Objects. In *Historical Archaeology in Battle Creek, Michigan: The 1996 Field Season at the Warren B. Shepard Site (20CA104)*, pp. 77-110. Archaeological Report No. 20, Department of Anthropology, Western Michigan University, Kalamazoo.

Schlereth, Thomas
1992 Conduits and Conduct: Home Utilities in Victorian America, 1876-1915. In *American Home Life, 1880-1930: A Social History of Spaces and Services*, edited by J. Foy and T. Schlereth, pp. 225-241. University of Tennessee Press, Knoxville.

Schroeder, Erich K.
1991 Brother Farmer . . . Build You a Cistern: A Comparison of cistern construction Methods as Revealed in the Historical and Archaeological Records. In *Landscape, Architecture, and Artifacts: Historical Archaeology of Nineteenth-Century Illinois*, edited by E. K. Schroeder, pp. 103-119. Illinois Cultural Resources Study No. 15. Illinois Historic Preservation Agency, Springfield.

Sharer, Robert J., and Wendy Ashmore
1993 *Archaeology: Discovering Our Past*. Second Edition. Mayfield, Mountain View, California.

Smith, B.
1843 Cement Cisterns. *The Prairie Farmer* 3(9):208-209.

Spencer-Wood, Suzanne
1991 Toward an Historical Archaeology of Materialistic Domestic Reform. In *The Archaeology of Inequality*, edited by R. McGuire and R. Paynter, pp. 231-286. Basil Blackwell, Oxford, England.

Spencer-Wood, Suzanne (editor)
1987 *Consumer Choice in Historical Archaeology*. Plenum Press, New York.

Stewart-Abernathy, Leslie
1986a *The Moser Farmstead*. Arkansas Archeological Survey Research Series No. 26. Fayetteville.

Stilgoe, J. R.
1982 *Common Landscape of America, 1580 to 1845*. Yale University Press, New Haven.

Strahan, J. L.
1917 Construction and Management of Root Cellars. *Cornell University Extension Bulletin 22*. Ithaca, NY.

Thomas, James M.
1871 *Battle Creek City Directory for 1871 and 1872 with a Historical Sketch of the City Past and Present*. Review and Herald Steam Book and Job Printing House, Battle Creek, Michigan.

Thompson, Homer C.
1939 *Vegetable Crops*. McGraw-Hill Book Company, Inc., New York.

Toulouse, Julian
1969 *Fruit Jars*. Nelson Inc., New Jersey.

United States Geological Survey
1985 Topographic Map of Battle Creek Quadrangle, Michigan. 7.5-Minute Series, 1:24,000. USGS, Washington, D.C.

von Frese, R. R. B., and Vergil E. Noble
1984 Magnetometry for Archaeological Exploration of Historical Sites. *Historical Archaeology* 18(2):38-53.

White, James
1867 Report from Brother White. *Advent Review and Sabbath Herald* 30:104, July 30. Battle Creek, Michigan.

White, William C.
1936 Sketches and Memories of James and Ellen G. White: XXX. Early Memories of Our First Home. *Advent Review and Sabbath Herald*, February 13. Battle Creek, Michigan.

Williams, P.
1978 *Staffordshire Romantic Transfer Prints*. Fountain House East, Jeffersontown, Kentucky.

Wilson, B.
1985 *The Rural Black Heritage between Chicago and Detroit, 1850-1929: A Photograph Album and Random Thoughts*. New Issues Press, Western Michigan University.

Yamin, Rebecca, and Karen Metheny (editors)
1996 *Landscape Archaeology*. University of Tennessee Press, Knoxville.

APPENDIX A

INFORMANTS CONSULTED DURING THE PROJECT

Ralph Benedict, Board member, Historic Adventist Village

Frank Brown, church historian, Mt. Zion AME Church, Battle Creek

Mary Butler, archivist, Historical Society of Battle Creek

Randy Case, architect, Architecture Design, Battle Creek

Jean Davis, Seventh-day Adventist research historian, Historic Adventist Village

Stan Hickerson, site supervisor, Historic Adventist Village

Cheryl Lyon-Jenness, landscape historian, Department of History, Western Michigan University

Diana Lynn, material culture specialist, Western Michigan University

APPENDIX B

ARTIFACT INVENTORY

This Appendix contains a listing of all artifacts recovered during the 1998 field season. The 10 columns are headed by abbreviations as follows (from left to right): Serial, Unit, Feature, Level, Material, Function, Description, Count, Weight, and Date. The following is a brief explanation of each column.

Serial: This refers to the serial number (in sequential order) of all separate proveniences from our excavations. Typically, it refers to all the materials from a single level from a particular excavation unit.

Unit: Each 50 x 50 cm, 1 x 1 m, and/or 1 x 2 m area excavated was given an excavation unit identification number based on its location on the site. This number refers to the coordinates of the southwest corner of the unit in reference to the site datum (see Figure 4-21).

Feature: Each cultural feature was assigned its own identification number.

Level: Excavations were conducted in no more that 10 cm arbitrary levels within cultural stratigraphic units. The first number represents the level, whereas the depth of the materials are indicated in parentheses as in, "2 (11-20)."

Material: This category lists the raw material of the objects or a group of objects.

Function: This category lists the likely function of the objects or a group of objects.

Description: This category provides further descriptions of the objects in question. Fragmentary materials are denoted by the abbreviation "frag."

Count: The number of objects within a designated group.

Weight: The total weight of the objects within a designated group.

Date: This category provides a date or date range for the production and possible use of a particular object.

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
1	N of brick		surface	ceramic	tableware	ww, platter, overglaze decal	13	296.5	1900-cur
1	N of brick		surface	ceramic	tableware	ww, platter, footring frags	9	73.5	1810-cur
1	N of brick		surface	ceramic	tableware	ww, frags	48	166.8	1810-cur
2	high area		surface	copper	clothing	button, 2 hole	1	3.2	
2	high area		surface	ceramic	furnishings	terra cotta frag, flowerpot	1	2.8	1700-cur
2	high area		surface	ceramic	furnishings	porcelain, hand painted, closed vessel	1	6.3	1825-cur
2	high area		surface	metal	hardware	misc.	2	44.4	
2	high area		surface	ceramic	kitchenware	lid frag, stoneware, albany slip brown glaze,	1	37.3	1805-1900
2	high area		surface	glass	kitchenware	clear, jar bottom, no pontil, frag	1	69.2	
2	high area		surface	ceramic	tableware	ww, frag, undec.	3	5.6	1810-cur
2	high area		surface	ceramic	tableware	porcelain, green stripes, frag	1	3.8	1820-cur
2	high area		surface	ceramic	tableware	ww, green glaze, molded, frag	1	5.5	1810-cur
2	high area		surface	ceramic	tableware	ww, hand painted plain, frag	1	3.5	1820-1890
2	high area		surface	ceramic	tableware	ww, "blue willow" border, frag	1	2.9	1840-cur
2	high area		surface	glass	unknown	blue, flat, frag	2	27.5	
2	high area		surface	glass	unknown	aqua, curved, frag	1	3.3	
2	high area		surface	glass	unknown	opaque green, curved, molded, frag	1	6.5	
2	high area		surface	glass	unknown	milk, curved, rim not threaded, frag	1	5.1	
2	high area		surface	glass	unknown	clear, shoulder, molded, frag	1	19.8	
2	high area		surface	glass	unknown	clear, neck not threaded, molded, frag	1	8.1	
2	high area		surface	glass	unknown	clear, rim, threaded, frag, container	1	8.7	
2	high area		surface	glass	unknown	solarized, rim not threaded, frag	1	7.8	
2	high area		surface	glass	unknown	lime green, rim of lid, frag	1	7.8	
2	high area		surface	glass	unknown	solarized, neck/rim not threaded, square, blo	1	12.3	
3	N1.25E6.5		1 (0-10)	glass	bottle	clear, curved, molded letters	3	11.8	
3	N1.25E6.5		1 (0-10)	glass	bottle	clear, slightly brown, curved	2	6.8	
3	N1.25E6.5		1 (0-10)	glass	bottle	clear, not threaded, rim frags	2	5.9	
3	N1.25E6.5		1 (0-10)	glass	bottle	clear, curved	36	53.5	
3	N1.25E6.5		1 (0-10)	brick	construction	frag.	18	17.1	
3	N1.25E6.5		1 (0-10)	concrete	construction	rough frag.	1	7.0	
3	N1.25E6.5		1 (0-10)	glass	construction	aqua, flat, window	3	3.2	
3	N1.25E6.5		1 (0-10)	glass	construction	cloudy, flat window, clear to aqua	8	6.1	
3	N1.25E6.5		1 (0-10)	plaster	construction	lathe? thin frags	15	31.6	
3	N1.25E6.5		1 (0-10)	metal	fasteners	nail frags/square head	6	12.5	
3	N1.25E6.5		1 (0-10)	charcoal	fuel	charcoal	18	7.0	
3	N1.25E6.5		1 (0-10)	clinker	fuel	clinker	6	152.6	
3	N1.25E6.5		1 (0-10)	coal	fuel	coal	9	6.7	
3	N1.25E6.5		1 (0-10)	ceramic	furnishings	terracotta flower pot frag	2	2.0	1700-cur
3	N1.25E6.5		1 (0-10)	glass	kitchenware	milk, flat	2	2.9	
3	N1.25E6.5		1 (0-10)	glass	leisure	brown, beer bottle frags	13	26.1	
3	N1.25E6.5		1 (0-10)	glass	lighting	clear, thin, curved, bulb/chimney	1	0.3	
3	N1.25E6.5		1 (0-10)	ceramic	tableware	white, undecorated frags, 1 rim, 1 foot	5	7.0	1810-cur
3	N1.25E6.5		1 (0-10)	ceramic	tableware	white, flow blue, frag	1	0.8	1844-1860
3	N1.25E6.5		1 (0-10)	ceramic	tableware	white cup frag, blue underglaze trans	1	1.2	1820-cur
3	N1.25E6.5		1 (0-10)	ceramic	tableware	white plate frag, blue underglaze trans, glaze	1	2.7	1820-cur

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
3	N1.25E6.5		1 (0-10)	glass	unknown	clear, flat	14	14.0	
3	N1.25E6.5		1 (0-10)	glass	unknown	solarized, curved	1	0.4	
3	N1.25E6.5		1 (0-10)	metal	unknown	unknown	3	13.4	
3	N1.25E6.5		1 (0-10)	plastic	unknown	red, green, black frags.	8	3.4	
3	N1.25E6.5		1 (0-10)	plastic	unknown	frags, 2 white, 1 yellow	3	0.8	
4	N1.5E39.5		1 (0-10)	bone	bone	frag	1	4.4	
4	N1.5E37.5		1 (0-10)	glass	bottles	clear curved frags	18	28.3	
4	N1.5E37.5		1 (0-10)	glass	bottles	green curved frags	8	9.0	
4	N1.5E37.5		1 (0-10)	metal	clothing	snaps, not pair, front "united carr", back "Dot	2	1.4	
4	N1.5E37.5		1 (0-10)	brick	construction	brick frag	1	0.5	
4	N1.5E37.5		1 (0-10)	glass	construction	clear, flat, window frag	10	6.9	
4	N1.5E39.5		1 (0-10)	metal	fasteners	2 screws, 4 round nails, 1 square	7	24.4	
4	N1.5E39.5		1 (0-10)	clinker	fuel	clinkers	6	40.4	
4	N1.5E39.5		1 (0-10)	slag	fuel	slag	17	61.0	
4	N1.5E39.5		1 (0-10)	slag	fuel	white, limestone-like slag	4	57.3	
4	N1.5E37.5		1 (0-10)	glass	kitchenware	white, opaque,"correl ware" molded	1	1.6	
4	N1.5E37.5		1 (0-10)	glass	kitchenware	milk, opaque frag	1	0.2	
4	N1.5E37.5		1 (0-10)	glass	leisure	brown, curved, beer bottle frag	11	10.4	
4	N1.5E37.5		1 (0-10)	metal	maint.+repair	clothes pin spring	1	3.4	
4	N1.5E39.5		1 (0-10)	metal	other food	tin foil	3	0.4	
4	N1.5E37.5		1 (0-10)	glass	unknown	cloudy, clear, curved frag	3	1.5	
4	N1.5E37.5		1 (0-10)	glass	unknown	blue/cobalt curved frag	1	1.0	
4	N1.5E39.5		1 (0-10)	metal	unknown	flat bands	2	10.3	
4	N1.5E37.5		1 (0-10)	metal	unknown	small balls corroded together,poss. shot	11	146.4	
4	N1.5E37.5		1 (0-10)	plastic	unknown	1 piece green, 1 piece brown	2	0.6	
4	N1.5E39.5		1 (0-10)	stone	unknown	frag, poss.mold?	1	19.0	
5	@N3.5E28		surface	ceramic	tableware	undecorated white frag	1	0.9	1810-cur
5	@N3.5E28		surface	ceramic	tableware	white, blue feather edge, plate?	1	8.6	1865-1895
6	N2.5E28		1 (0-10)	bone	bone	frag	1	1.1	
6	N2.5E28		1 (0-10)	glass	bottle	clear, curved frag	6	13.0	
6	N2.5E28		1 (0-10)	metal	fasteners	nails, roundheads	3	17.9	
6	N2.5E28		1 (0-10)	metal	fasteners	nails, squareheads	6	21.8	
6	N2.5E28		1 (0-10)	clinker	fuel	clinker	13	55.5	
6	N2.5E28		1 (0-10)	ceramic	furnishings	poss. floor tile, brown/yellow	1	0.9	
6	N2.5E28		1 (0-10)	ceramic	kitchenware	stoneware,albany slip, drk. brown frag	1	13.0	1805-1900
6	N2.5E28		1 (0-10)	glass	kitchenware	prob. mason lid liner frag	1	0.7	1869-cur
6	N2.5E28		1 (0-10)	glass	leisure	brown curved beer bottle frag	2	1.6	
6	N2.5E28		1 (0-10)	ceramic	tableware	white, undecorated, 1 rim	3	1.8	1810-cur
6	N2.5E28		1 (0-10)	ceramic	tableware	white, blue transfer, prob. cup	1	1.5	1820-cur
6	N2.5E28		1 (0-10)	ceramic	unknown	drk. brown frag	1	0.7	
6	N2.5E28		1 (0-10)	glass	unknown	clear, flat frag	3	2.6	
6	N2.5E28		1 (0-10)	glass	unknown	1 cloudy aqua, 1 cloudy pink frag	2	0.3	
6	N2.5E28		1 (0-10)	metal	unknown	flat sheets small	4	25.8	
7	N1.5E37.5		2 (10-15)	plastic	adornment	black, molded bead	1	4.3	
7	N1.5E37.5		2 (10-15)	bone	bone	frags	7	8.2	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
7	N1.5E37.5		2 (10-15)	metal	clothing	eyelets	7	5.5	
7	N1.5E37.5		2 (10-15)	metal	clothing	snaps	3	1.4	
7	N1.5E37.5		2 (10-15)	metal	clothing	buttons, sand dollar pattern	2	3.2	
7	N1.5E37.5		2 (10-15)	metal	clothing	hook and eyes, and buckle	3	2.3	
7	N1.5E37.5		2 (10-15)	glass	construct	clear, flat, window, frags	4	3.6	
7	N1.5E37.5		2 (10-15)	metal	fasteners	nails/screws	7	16.5	
7	N1.5E37.5		2 (10-15)	metal	fasteners	headless screws	2	3.4	
7	N1.5E37.5		2 (10-15)	concrete	furnishings	flower pot frags	2	2.5	
7	N1.5E37.5		2 (10-15)	glass	furnishings	clear, molded, base, decorative, frag	1	18.4	
7	N1.5E37.5		2 (10-15)	metal	hardware	flathead screwdriver/chisel	1	33.5	
7	N1.5E37.5		2 (10-15)	glass	leisure	brown, curved, beer bottle, frags	24	36.1	
7	N1.5E37.5		2 (10-15)	glass	lighting	clear, thin, frags, chimney/bulb	1	0.1	
7	N1.5E37.5		2 (10-15)	metal	other food	misc. foil frags	15	5.3	
7	N1.5E37.5		2 (10-15)	metal	other food	can pull tab	1	0.3	1962-cur
7	N1.5E37.5		2 (10-15)	metal	other food	pull tab frag	1	0.2	1962-cur
7	N1.5E37.5		2 (10-15)	glass	unknown	clear, curved, frags	33	37.4	
7	N1.5E37.5		2 (10-15)	glass	unknown	green, curved, frags	3	1.9	
7	N1.5E37.5		2 (10-15)	glass	unknown	cloudy, prob. burned, frags	8	17.2	
7	N1.5E37.5		2 (10-15)	glass	unknown	cobalt blue, curved, frags	1	0.2	
7	N1.5E37.5		2 (10-15)	metal	unknown	bent, flat, metal frag	1	0.7	
7	N1.5E37.5		2 (10-15)	metal	unknown	misc.	1	2.1	
7	N1.5E37.5		2 (10-15)	metal	unknown	flat, misc. frags	9	8.2	
7	N1.5E37.5		2 (10-15)	metal	unknown	misc.	2	3.2	
7	N1.5E37.5		2 (10-15)	plastic	unknown	frags	2	0.9	
7	N1.5E37.5		2 (10-15)	rubber	unknown	hollow ring	1	8.3	
8	N1.25E6.5		2 (10-20)	brick/mortar	construct	brick and mortar	5	3.5	
8	N1.25E6.5		2 (10-20)	metal	fasteners	nails	5	6.6	
8	N1.25E6.5		2 (10-20)	metal	fasteners	nails	3	11.3	
8	N1.25E6.5		2 (10-20)	clinker	fuel	clinkers	3	49.2	
8	N1.25E6.5		2 (10-20)	coal	fuel	coal	4	10.1	
8	N1.25E6.5		2 (10-20)	glass	kitchenware	milk, frag	1	0.5	
8	N1.25E6.5		2 (10-20)	glass	leisure	brown, curved, beer bottle	10	11.0	
8	N1.25E6.5		2 (10-20)	vinyl	recreation	record frag	1	0.4	
8	N1.25E6.5		2 (10-20)	ceramic	tableware	ww, undec, frag	1	0.2	1810-cur
8	N1.25E6.5		2 (10-20)	glass	unknown	clear, curved, frags	7	8.6	
8	N1.25E6.5		2 (10-20)	glass	unknown	solarized, square bottom, frag	1	5.1	
8	N1.25E6.5		2 (10-20)	glass	unknown	green, flat, frag	2	3.7	
8	N1.25E6.5		2 (10-20)	glass	unknown	cloudy, flat, frags	2	2.3	
8	N1.25E6.5		2 (10-20)	glass	unknown	cloudy, thin, molded, frags	1	0.5	
8	N1.25E6.5		2 (10-20)	glass	unknown	thick, fractured, frags	4	4.0	
10	N1.25E6.5		3 (20-30)	bone	bone	frag	1	29.1	
10	N1.25E6.5		3 (20-30)	metal	clothing	shank button	1	1.1	
10	N1.25E6.5		3 (20-30)	brick	construct	frags	17	33.1	
10	N1.25E6.5		3 (20-30)	glass	construct	clear, flat, window, frag	1	2.2	
10	N1.25E6.5		3 (20-30)	glass	construct	blue/green, window, frag	1	1.9	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
10	N1.25E6.5		3 (20-30)	glass	construct	cloudy, flat, window, frag	3	1.6	
10	N1.25E6.5		3 (20-30)	mortar	construct	frag	1	18.1	
10	N1.25E6.5		3 (20-30)	metal	fasteners	nails/tacks	8	15.4	
10	N1.25E6.5		3 (20-30)	glass	kitchenware	aqua, fruit jar frag	3	59.8	
10	N1.25E6.5		3 (20-30)	glass	leisure	brown, curved, beer bottle frag	3	1.9	
10	N1.25E6.5		3 (20-30)	metal	other food	foil frag	1	0.0	
10	N1.25E6.5		3 (20-30)	ceramic	tableware	ww, flow blue	1	0.4	1844-1860
10	N1.25E6.5		3 (20-30)	ceramic	unknown	dark brown terra cotta frag	2	2.1	
10	N1.25E6.5		3 (20-30)	glass	unknown	green, curved, frag	1	2.2	
10	N1.25E6.5		3 (20-30)	glass	unknown	clear, curved, frag	7	8.1	
10	N1.25E6.5		3 (20-30)	glass	unknown	cloudy, curved, frag	3	2.7	
10	N1.25E6.5		3 (20-30)	glass	unknown	light blue, prob jar frag	5	8.2	
10	N1.25E6.5		3 (20-30)	metal	unknown	frags	19	28.0	
10	N1.25E6.5		3 (20-30)	plastic	unknown	frag	1	0.0	
11	N2.5E28		2 (10-14)	bone	bone	frags	2	0.2	
11	N2.5E28		2 (10-14)	brick	construct	frags	7	10.0	
11	N2.5E28		2 (10-14)	concrete	construct	frags	1	7.3	
11	N2.5E28		2 (10-14)	glass	construct	cloudy, flat, window, frag	2	1.8	
11	N2.5E28		2 (10-14)	metal	fasteners	nails	4	10.8	
11	N2.5E28		2 (10-14)	clinker	fuel	clinkers	3	26.8	
11	N2.5E28		2 (10-14)	ceramic	furnishings	terra cotta flower pot frags	2	0.9	1700-cur
11	N2.5E28		2 (10-14)	glass	leisure	brown, curved, beer bottle frag	5	7.2	
11	N2.5E28		2 (10-14)	glass	lighting	clear, thin, frag, chimney/bulb	1	0.2	
11	N2.5E28		2 (10-14)	ceramic	tableware	ww, undec, frag	3	0.7	1810-cur
11	N2.5E28		2 (10-14)	glass	unknown	cloudy, curved, frag	1	1.8	
11	N2.5E28		2 (10-14)	glass	unknown	clear, curved, frag	13	13.6	
11	N2.5E28		2 (10-14)	glass	unknown	green, curved, frag	1	0.9	
11	N2.5E28		2 (10-14)	metal	unknown	very thin molded strips	7	0.2	
11	N2.5E28		2 (10-14)	metal	unknown	flat bands	1	37.0	
11	N2.5E28		2 (10-14)	plastic	unknown	frags	5	0.4	
11	N2.5E28		2 (10-14)	glass	vehicle	clear, shatterproof, frag	2	1.1	
12	N1.5E37.5		3 (15-27)	glass	adornment	black beads, 2 sizes	3	1.4	
12	N1.5E37.5		3 (15-27)	bone	bone	frag	2	23.3	
12	N1.5E37.5		3 (15-27)	metal	clothing	snaps, hook/eye, eyelets	9	2.2	
12	N1.5E37.5		3 (15-27)	metal	clothing	zipper pull "Talon"	1	4.5	
12	N1.5E37.5		3 (15-27)	metal	fasteners	screws	3	11.9	
12	N1.5E37.5		3 (15-27)	metal	fasteners	nails	12	33.1	
12	N1.5E37.5		3 (15-27)	slag	fuel	slag	40	60.5	
12	N1.5E37.5		3 (15-27)	metal	hardware	door handle	1	24.1	
12	N1.5E37.5		3 (15-27)	metal	hardware	wire	3	18.6	
12	N1.5E37.5		3 (15-27)	metal	hardware	barbed wire frag	2	7.9	
12	N1.5E37.5		3 (15-27)	metal	health/groom	barrette clip frag	1	0.6	
12	N1.5E37.5		3 (15-27)	metal	other food	foil frag	8	1.7	
12	N1.5E37.5		3 (15-27)	metal	other food	pull tab	1	0.4	1962-cur
12	N1.5E37.5		3 (15-27)	metal	personal	pocket knife frag	1	17.5	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
12	N1.5E37.5		3 (15-27)	ceramic	tableware	ww, undec, frag	4	3.7	1810-cur
12	N1.5E37.5		3 (15-27)	ceramic	tableware	ww, undec, very thin frag	1	0.8	1810-cur
12	N1.5E37.5		3 (15-27)	foil/fabric	unknown	frag of foil and fabric (and dirt)	17	60.0	
12	N1.5E37.5		3 (15-27)	glass	unknown	melted frags	3	2.1	
12	N1.5E37.5		3 (15-27)	glass	unknown	milk, square bottle frag	7	39.3	
12	N1.5E37.5		3 (15-27)	glass	unknown	cobalt blue, frags	4	1.9	
12	N1.5E37.5		3 (15-27)	glass	unknown	blue/green, curved, frag	3	4.0	
12	N1.5E37.5		3 (15-27)	glass	unknown	clear, curved, frag	18	27.5	
12	N1.5E37.5		3 (15-27)	glass	unknown	cloudy, curved, frag	6	3.3	
12	N1.5E37.5		3 (15-27)	glass	unknown	clear, flat, frag	8	3.3	
12	N1.5E37.5		3 (15-27)	glass	unknown	green, curved, frag	2	1.9	
12	N1.5E37.5		3 (15-27)	glass	unknown	brown, curved, frags	5	3.7	
12	N1.5E37.5		3 (15-27)	metal	unknown	balls, shot?	9	2.8	
12	N1.5E37.5		3 (15-27)	metal	unknown	misc.	31	95.7	
12	N1.5E37.5		3 (15-27)	metal	unknown	small frags, poss w/letters	1	0.4	
12	N1.5E37.5		3 (15-27)	plastic	unknown	frag	1	0.1	
13	N1.25E6.5		4 (30-40)	ceramic	construct	green glazed tile frag, prob floor	2	41.0	
13	N1.25E6.5		4 (30-40)	glass	construct	clear, flat, window, frag	5	12.1	
13	N1.25E6.5		4 (30-40)	stone	construct	flooring frag	1	26.8	
13	N1.25E6.5		4 (30-40)	metal	fasteners	nails	18	95.1	
13	N1.25E6.5		4 (30-40)	metal	hardware	wire frag	6	7.8	
13	N1.25E6.5		4 (30-40)	metal	health/groom	small foil bottle seal	1	0.2	
13	N1.25E6.5		4 (30-40)	metal	other food	bottle caps	3	5.9	
13	N1.25E6.5		4 (30-40)	glass	other kitchen	milk, lid liner frag	1	1.0	1869-cur
13	N1.25E6.5		4 (30-40)	metal	other kitchen	prob can frag	23	29.7	
13	N1.25E6.5		4 (30-40)	ceramic	tableware	ww, undec, rim frag	1	1.4	1810-cur
13	N1.25E6.5		4 (30-40)	chalk	unknown	triangular chalk frag	2	2.1	
13	N1.25E6.5		4 (30-40)	glass	unknown	brown, curved, frag	3	21.2	
13	N1.25E6.5		4 (30-40)	glass	unknown	green, curved, frag	4	38.4	
13	N1.25E6.5		4 (30-40)	glass	unknown	clear, curved, frag	8	18.7	
14	N1.25E6.5		5 (40-50)	metal	clothing	snap	1	2.7	
14	N1.25E6.5		5 (40-50)	metal	hardware	long spike w/washer	1	46.7	
14	N1.25E6.5		5 (40-50)	metal	hardware	bolt w/washer	1	37.2	
14	N1.25E6.5		5 (40-50)	metal	other food	foil	1	0.1	
14	N1.25E6.5		5 (40-50)	metal	unknown	flat metal frags	0	234.9	
15	N1.5E37.5		4 (27-32)	bone	bone	frags	8	12.9	
15	N1.5E37.5		4 (27-32)	metal	fasteners	nails	6	47.0	
15	N1.5E37.5		4 (27-32)	clinker	fuel	clinkers	30	126.9	
15	N1.5E37.5		4 (27-32)	ceramic	kitchenware	unglazed dk brown stoneware	1	1.1	
15	N1.5E37.5		4 (27-32)	glass	kitchenware	milk, frag	1	0.3	
15	N1.5E37.5		4 (27-32)	glass	kitchenware	green/blue frag, prob. fruit jar	6	3.3	
15	N1.5E37.5		4 (27-32)	glass	kitchenware	clear w/molded rim, curved	5	12.0	
15	N1.5E37.5		4 (27-32)	glass	kitchenware	aqua, fruit jar frag, "Nov 30, 1858"	8	16.3	
15	N1.5E37.5		4 (27-32)	glass	lighting	bulb/chimney	2	0.4	
15	N1.5E37.5		4 (27-32)	stone	misc	slate	2	0.8	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
15	N1.5E37.5		4 (27-32)	ceramic	tableware	ww, undec	4	3.3	1810-cur
15	N1.5E37.5		4 (27-32)	ceramic	tableware	ww, rim, dk gray underglaze on edge	6	4.2	1810-cur
15	N1.5E37.5		4 (27-32)	metal	unknown	non-iron frag	1	0.9	
15	N1.5E37.5		4 (27-32)	metal	unknown	frags	4	16.0	
16	N2.5E28		3 (14-24)	metal	adornment	clip earring frag	1	0.4	
16	N2.5E28		3 (14-24)	bone	bone	frags, many burned	86	55.0	
16	N2.5E28		3 (14-24)	glass	bottle	brown, poss beer bottle	1	1.4	
16	N2.5E28		3 (14-24)	metal	clothing	snaps	4	3.0	
16	N2.5E28		3 (14-24)	metal	clothing	eyelets	5	0.6	
16	N2.5E28		3 (14-24)	metal	clothing	hook/eye	2	0.7	
16	N2.5E28		3 (14-24)	metal	clothing	buckles	2	5.7	
16	N2.5E28		3 (14-24)	metal	clothing	heel of shoe	1	8.2	
16	N2.5E28		3 (14-24)	brick	construct	frags	37	45.2	
16	N2.5E28		3 (14-24)	metal	fasteners	nails	67	96.2	
16	N2.5E28		3 (14-24)	clinker	fuel	clinker	12	26.9	
16	N2.5E28		3 (14-24)	metal	furnishings	upholstry staples	6	5.3	
16	N2.5E28		3 (14-24)	metal	hardware	wire frags	2	0.9	
16	N2.5E28		3 (14-24)	metal	hunting	10 gauge shells, winchester/newclub	2	6.9	
16	N2.5E28		3 (14-24)	ceramic	kitchenware	stoneware, buff, albany slip	1	4.9	1830-1930
16	N2.5E28		3 (14-24)	ceramic	kitchenware	stoneware, unglazed, buff body	1	3.2	1830-1930
16	N2.5E28		3 (14-24)	glass	kitchenware	burned/melted clear glass	37	51.2	
16	N2.5E28		3 (14-24)	glass	kitchenware	aqua, prob fruit jar frags	3	2.1	
16	N2.5E28		3 (14-24)	glass	kitchenware	blue/green, prob fruit jar frags	4	3.1	
16	N2.5E28		3 (14-24)	glass	kitchenware	green/blue, prob fruit jar frags	1	2.4	
16	N2.5E28		3 (14-24)	ceramic	lighting	industrial/electric porcelain	3	2.4	
16	N2.5E28		3 (14-24)	ceramic	lighting	industrial porcelain	2	2.3	
16	N2.5E28		3 (14-24)	metal	misc	tiny hooks	2	0.9	
16	N2.5E28		3 (14-24)	ceramic	recreation	porcelain doll's arm frag	1	7.0	
16	N2.5E28		3 (14-24)	metal	repair	straight pin	1	0.1	
16	N2.5E28		3 (14-24)	ceramic	tableware	ww, undec. molded	5	14.0	1810-cur
16	N2.5E28		3 (14-24)	ceramic	tableware	ww, undec	5	5.8	1810-cur
16	N2.5E28		3 (14-24)	ceramic	tableware	ww, blue annular under 3 color decal	2	3.1	1900-cur
16	N2.5E28		3 (14-24)	glass	unknown	cloudy, curved, frags	10	12.9	
16	N2.5E28		3 (14-24)	glass	unknown	clear, flat and curved, frags	13	34.1	
16	N2.5E28		3 (14-24)	metal	unknown	frag	2	0.6	
16	N2.5E28		3 (14-24)	metal	unknown	frags	6	9.0	
16	N2.5E28		3 (14-24)	metal	unknown	frags	3	6.0	
16	N2.5E28		3 (14-24)	plastic	unknown	red, poss. reflector frag	1	0.3	
16	N2.5E28		3 (14-24)	plastic	unknown	white frag	1	0.1	
16	N2.5E28		3 (14-24)	glass	vehicle	shatterproof glass frag	1	0.4	
17	N1.5E37.5		5 (32-40)	bone	bone	frag	1	14.9	
17	N1.5E37.5		5 (32-40)	clinker	fuel	clinker	3	1.7	
17	N1.5E37.5		5 (32-40)	ceramic	tableware	ww, undec	1	1.1	1810-cur
17	N1.5E37.5		5 (32-40)	metal	unknown	frags	2	4.3	
18	N2.5E28		4 (24-33)	bone	bone	frags, incl jaw/teeth, some burned	19	13.9	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
18	N2.5E28		4 (24-33)	metal	clothing	shoe heel frag	2	8.2	
18	N2.5E28		4 (24-33)	metal	clothing	snap	1	0.7	
18	N2.5E28		4 (24-33)	metal	clothing	eyelet/grommet	1	0.2	
18	N2.5E28		4 (24-33)	metal	clothing	hook/eye frag	1	0.3	
18	N2.5E28		4 (24-33)	brick	construct	frag	2	9.0	
18	N2.5E28		4 (24-33)	glass	construct	window frag	4	5.9	
18	N2.5E28		4 (24-33)	metal	fasteners	nails	28	75.7	
18	N2.5E28		4 (24-33)	metal	fasteners	galvanized sqare nail	1	1.7	
18	N2.5E28		4 (24-33)	metal	fasteners	screw	1	2.4	
18	N2.5E28		4 (24-33)	metal	hardware	galvanized wire frag	1	0.7	
18	N2.5E28		4 (24-33)	metal	hardware	wire frag	2	0.8	
18	N2.5E28		4 (24-33)	ceramic	leisure	pipe stem	1	1.4	
18	N2.5E28		4 (24-33)	ceramic	tableware	ww, undec	3	4.0	1810-cur
18	N2.5E28		4 (24-33)	ceramic	tableware	ww, dk blue feather edge, molded	1	1.2	1841-1857
18	N2.5E28		4 (24-33)	ceramic	unknown	dk brown terra cotta, thin	3	1.2	
18	N2.5E28		4 (24-33)	glass	unknown	clear, burned/melted	8	11.0	
18	N2.5E28		4 (24-33)	metal	unknown	frag	14	22.6	
18	N2.5E28		4 (24-33)	stone	unknown	slate	2	4.7	
19	N0E18		1 (0-10)	tooth	bone	large tooth	1	8.1	
19	N0E18		1 (0-10)	glass	bottle	green, curved, frag	1	5.1	
19	N0E18		1 (0-10)	glass	bottle	green/blue, curved, frag	1	5.1	
19	N0E18		1 (0-10)	glass	bottle	brown, prob. beer bottle frag	2	1.2	
19	N0E18		1 (0-10)	glass	bottle	clear, curved, molded/threaded, frag	9	50.6	
19	N0E18		1 (0-10)	metal	clothing	shank button	1	0.5	
19	N0E18		1 (0-10)	brick	construc	frag	3	53.5	
19	N0E18		1 (0-10)	asphalt	construct	shingle frags	3	1.2	1910-cur
19	N0E18		1 (0-10)	metal	fasteners	screws	2	17.6	
19	N0E18		1 (0-10)	clinker	fuel	clinkers	2	9.1	
19	N0E18		1 (0-10)	ceramic	furnishings	buff body flower pot frag	4	48.7	1700-cur
19	N0E18		1 (0-10)	ceramic	furnishings	red body flower pot frag	1	3.7	1700-cur
19	N0E18		1 (0-10)	nut	natural	nut shell	1	0.8	
19	N0E18		1 (0-10)	ceramic	tableware	ww, badly spalled	2	0.6	1810-cur
19	N0E18		1 (0-10)	glass	unknown	blue/green, flat, frag	9	10.4	
19	N0E18		1 (0-10)	glass	unknown	clear, flat, frag	29	51.7	
19	N0E18		1 (0-10)	metal	unknown	frags	6	3.1	
19	N0E18		1 (0-10)	plastic	unknown	dk gray frag	1	0.4	
19	N0E18		1 (0-10)	plastic	unknown	frag	1	0.0	
20	N0E18		2 (10-20)	bone	bone	frag	2	0.5	
20	N0E18		2 (10-20)	bone	bone	frag	1	0.1	
20	N0E18		2 (10-20)	glass	bottle	green, curved, frag	5	12.0	
20	N0E18		2 (10-20)	glass	bottle	brown, prob. beer bottle frag	11	10.8	
20	N0E18		2 (10-20)	glass	bottle	lt green, curved, frag "contents"	9	50.9	
20	N0E18		2 (10-20)	graphite	communicate	pencil lead, oversize	1	5.2	
20	N0E18		2 (10-20)	glass	construct	lt blue/green window frag	9	17.7	
20	N0E18		2 (10-20)	mortar	construct	frag of cinder/floor tile	1	0.0	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
20	N0E18		2 (10-20)	metal	fasteners	nails	12	34.8	
20	N0E18		2 (10-20)	slag	fuel	slag	1	2.3	
20	N0E18		2 (10-20)	ceramic	furnishings	buff flower pot frag	9	164.8	1700-cur
20	N0E18		2 (10-20)	ceramic	furnishings	red body flower pot frag	1	2.8	1700-cur
20	N0E18		2 (10-20)	metal	hardware	copper wire, insulated	1	10.3	
20	N0E18		2 (10-20)	metal	hardware	wire	1	1.2	
20	N0E18		2 (10-20)	glass	health/groom	aqua, square, paneled bottle, frag	7	27.4	1867-1915
20	N0E18		2 (10-20)	glass	health/groom	green/blue, molded, frag	1	2.0	
20	N0E18		2 (10-20)	ceramic	kitchenware	buff stoneware, albany slip/salt glaze	1	14.4	1805-1930
20	N0E18		2 (10-20)	organic	natural	bug larvae?	1	0.4	
20	N0E18		2 (10-20)	organic	natural	fossilized shell	1	58.2	
20	N0E18		2 (10-20)	ceramic	tableware	ww, undec, frag	4	3.8	1810-cur
20	N0E18		2 (10-20)	glass	unknown	lt blue, frags	18	25.5	
20	N0E18		2 (10-20)	glass	unknown	green/blue, flat, frag	27	28.0	
20	N0E18		2 (10-20)	glass	unknown	clear, curved/flat, frag	70	117.3	
20	N0E18		2 (10-20)	glass	unknown	milk, frag	1	0.1	
20	N0E18		2 (10-20)	metal	unknown	frag	1	5.7	
20	N0E18		2 (10-20)	metal	unknown	fine, coiled wire	1	116.7	
20	N0E18		2 (10-20)	paper	unknown	cardboard frag	1	0.0	
20	N0E18		2 (10-20)	plastic	unknown	frag	2	0.0	
20	N0E18		2 (10-20)	plastic	unknown	frag	5	1.0	
21	N0E18		3 (20-30)	metal	fastener	nail	1	3.0	
21	N0E18		3 (20-30)	ceramic	furnishings	buff flower pot frag	1	2.3	1700-cur
22						missing?			
23	N1.25E6.5		8 (50-60)	bone	bone	frags	16	34.4	
23	N1.25E6.5		8 (50-60)	glass	bottle	clear, curved, some melted	20	174.0	
23	N1.25E6.5		8 (50-60)	glass	bottle	green, curved frag	1	6.4	
23	N1.25E6.5		8 (50-60)	glass	bottle	very melted	2	7.0	
23	N1.25E6.5		8 (50-60)	glass	bottle	brown, curved frag	2	11.4	
23	N1.25E6.5		8 (50-60)	metal	bottle	crown caps	16	72.9	1895-cur
23	N1.25E6.5		8 (50-60)	cotton	clothing	burned twine and fabric	21	5.1	
23	N1.25E6.5		8 (50-60)	wood	communicate	burned pencil, frag	5	3.7	
23	N1.25E6.5		8 (50-60)	ceramic	construct	green/blue glazed tile	1	77.0	
23	N1.25E6.5		8 (50-60)	ceramic	construct	white glazed tile frag, bathroom	9	307.4	
23	N1.25E6.5		8 (50-60)	glass	construct	blue/green window frag	2	11.4	
23	N1.25E6.5		8 (50-60)	mortar	construct	frags, 1 burned	5	89.8	
23	N1.25E6.5		8 (50-60)	metal	fasteners	nails	58	118.8	
23	N1.25E6.5		8 (50-60)	metal	fasteners	staples	3	8.4	
23	N1.25E6.5		8 (50-60)	charcoal	fuel	frag	1	1.3	
23	N1.25E6.5		8 (50-60)	ceramic	furnishings	orange flower pot frag	4	122.0	1700-cur
23	N1.25E6.5		8 (50-60)	metal	hardware	wire frag	4	6.9	
23	N1.25E6.5		8 (50-60)	metal	hardware	springs	6	5.2	
23	N1.25E6.5		8 (50-60)	metal	hardware	small hooks	5	4.2	
23	N1.25E6.5		8 (50-60)	metal	hardware	galvanized bolt w/threads	1	7.5	
23	N1.25E6.5		8 (50-60)	metal	hardware	hook w/decorative fastener	1	6.5	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
23	N1.25E6.5		8 (50-60)	metal	hardware	frag "HRD 8-39"	1	86.3	
23	N1.25E6.5		8 (50-60)	glass	kitchenware	fruit jar frags, bottom "1C2"	5	46.2	
23	N1.25E6.5		8 (50-60)	glass	kitchenware	milk frag, not lid liner	1	3.4	
23	N1.25E6.5		8 (50-60)	metal	misc	oval can	1	83.1	
23	N1.25E6.5		8 (50-60)	metal	misc	safety seal foil caps	2	0.0	
23	N1.25E6.5		8 (50-60)	metal	other food	can bottom	1	30.4	
23	N1.25E6.5		8 (50-60)	leather	unknown	folded sheet	1	8.0	
23	N1.25E6.5		8 (50-60)	metal	unknown	frag	10	92.4	
23	N1.25E6.5		8 (50-60)	unknown	unknown	frag, smooth and ###	10	5.4	
24	N25.5E32.5		1 (0-10)	plastic	adornment	red oblong bead	1	0.5	
24	N25.5E32.5		1 (0-10)	glass	bottle	clear, curved "PAT RAND July 28, 1928	1	12.2	
24	N25.5E32.5		1 (0-10)	glass	bottle	lt aqua, panel "KING" "SCO"	1	3.9	
24	N25.5E32.5		1 (0-10)	glass	bottle	olive, curved frag	2	3.4	
24	N25.5E32.5		1 (0-10)	glass	bottle	brown, prob beer bottle	3	2.8	
24	N25.5E32.5		1 (0-10)	glass	bottle	cobalt, curved, frag	3	2.8	
24	N25.5E32.5		1 (0-10)	metal	clothing	grommet	1	0.4	
24	N25.5E32.5		1 (0-10)	metal	clothing	silver button cover	1	3.0	
24	N25.5E32.5		1 (0-10)	metal	clothing	zipper bull "talon"	1	1.9	
24	N25.5E32.5		1 (0-10)	metal	clothing	snap	1	0.2	
24	N25.5E32.5		1 (0-10)	brick	construct	frags	22	107.3	
24	N25.5E32.5		1 (0-10)	glass	construct	lt green, prob window	15	25.2	
24	N25.5E32.5		1 (0-10)	glass	construct	breen/blue, window	47	45.7	
24	N25.5E32.5		1 (0-10)	metal	construct	spike	1	136.9	
24	N25.5E32.5		1 (0-10)	mortar	construct	frags	2	44.4	
24	N25.5E32.5		1 (0-10)	metal	fasteners	nails	74	248.3	
24	N25.5E32.5		1 (0-10)	metal	fasteners	staple	1	3.0	
24	N25.5E32.5		1 (0-10)	charcoal	fuel	charcoal	2	1.5	
24	N25.5E32.5		1 (0-10)	coal	fuel	coal	40	42.2	
24	N25.5E32.5		1 (0-10)	ceramic	furnishings	orange flower pot frag	6	8.6	1700-cur
24	N25.5E32.5		1 (0-10)	ceramic	furnishings	buff flower pot frag	4	3.8	1700-cur
24	N25.5E32.5		1 (0-10)	ceramic	furnishings	ww, blue sponge, 1/2 sphere	1	2.1	1830-1871
24	N25.5E32.5		1 (0-10)	glass	furnishings	swirled white/purple frag	1	5.2	
24	N25.5E32.5		1 (0-10)	plastic	health/groom	comb frag	1	2.7	
24	N25.5E32.5		1 (0-10)	ceramic	kitchenware	yellowware w/blue trim	1	0.5	1827-1922
24	N25.5E32.5		1 (0-10)	ceramic	kitchenware	yellowware frag	3	2.5	1827-1922
24	N25.5E32.5		1 (0-10)	ceramic	kitchenware	ww, cup, brown decal, blue/yellow overglaze	1	5.3	1900-cur
24	N25.5E32.5		1 (0-10)	ceramic	kitchenware	stoneware, albany slip/brown salt glaze	1	3.3	1805-1900
24	N25.5E32.5		1 (0-10)	glass	kitchenware	milk, curved, poss vessel	3	0.5	
24	N25.5E32.5		1 (0-10)	glass	kitchenware	aqua, fruit jar frags	7	33.3	
24	N25.5E32.5		1 (0-10)	plastic	misc	frags, milk ring, plant tag,	7	2.3	
24	N25.5E32.5		1 (0-10)	glass	other food	stirrer frag	1	0.3	
24	N25.5E32.5		1 (0-10)	metal	other food	can pull tab	1	0.8	1962-cur
24	N25.5E32.5		1 (0-10)	metal	other food	foil frags	3	1.2	
24	N25.5E32.5		1 (0-10)	metal	repair	safety pin head	1	0.5	
24	N25.5E32.5		1 (0-10)	ceramic	tableware	porcelain, undec, frag	4	3.6	1824-cur

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
24	N25.5E32.5		1 (0-10)	ceramic	tableware	ww, undec, frag	28	27.1	1810-cur
24	N25.5E32.5		1 (0-10)	ceramic	tableware	ww, undec, frag, rim/foot ring	11	17.8	1810-cur
24	N25.5E32.5		1 (0-10)	ceramic	tableware	ironstone, undec, mug frag	5	15.1	1840-1930
24	N25.5E32.5		1 (0-10)	ceramic	tableware	ww, undec, handle frag	1	2.4	1810-cur
24	N25.5E32.5		1 (0-10)	ceramic	tableware	ww, slight blue pooling, scalloped rim	2	1.5	1844-1860
24	N25.5E32.5		1 (0-10)	ceramic	tableware	porcelain, bone, marley w/gold band	1	2.7	1880-cur
24	N25.5E32.5		1 (0-10)	ceramic	tableware	ww, frag, rim, gray underglaze print	1	1.0	1829-cur
24	N25.5E32.5		1 (0-10)	ceramic	tableware	ww, blue underglaze, cable?	2	1.0	1820-cur
24	N25.5E32.5		1 (0-10)	ceramic	tableware	ww, marley, powder blue print (Medici?)	1	0.9	1840-1860
24	N25.5E32.5		1 (0-10)	ceramic	tableware	ww, plate, dk blue underglaze farm scene	2	3.1	1820-cur
24	N25.5E32.5		1 (0-10)	glass	unknown	blue/green, curved frag	8	6.5	
24	N25.5E32.5		1 (0-10)	glass	unknown	blue/green, curved, patina	7	10.7	
24	N25.5E32.5		1 (0-10)	glass	unknown	lt blue, curved, frag, patina	14	13.3	
24	N25.5E32.5		1 (0-10)	glass	unknown	cloudy, translucent lt blue, frag	3	2.1	
24	N25.5E32.5		1 (0-10)	glass	unknown	clear, thick, pressed/curved	3	2.0	
24	N25.5E32.5		1 (0-10)	glass	unknown	melted frag	1	1.9	
24	N25.5E32.5		1 (0-10)	glass	unknown	highly patinated frag	3	15.0	
24	N25.5E32.5		1 (0-10)	glass	unknown	solarized, curved and flat	19	31.9	
24	N25.5E32.5		1 (0-10)	glass	unknown	clear, curved frags	92	70.0	
24	N25.5E32.5		1 (0-10)	metal	unknown	frag	7	160.4	
24	N25.5E32.5		1 (0-10)	plastic	unknown	white frag	2	0.3	
24	N25.5E32.5		1 (0-10)	glass	vehicle	shatterproof frag	2	1.0	
25	N25.5E32.5		2 (10-20)	bone	bone	frag	24	53.9	
25	N25.5E32.5		2 (10-20)	glass	bottle	olive, curved frag	2	1.9	
25	N25.5E32.5		2 (10-20)	glass	bottle	amber, frag, poss beer	9	16.7	
25	N25.5E32.5		2 (10-20)	glass	bottle	brown, patina, curved frag	2	1.1	
25	N25.5E32.5		2 (10-20)	metal	clothing	snap	1	0.4	
25	N25.5E32.5		2 (10-20)	metal	clothing	latch plate from purse	1	1.2	
25	N25.5E32.5		2 (10-20)	plastic	clothing	button	1	0.4	
25	N25.5E32.5		2 (10-20)	shell	clothing	buttons	3	1.0	
25	N25.5E32.5		2 (10-20)	asphalt	construct	shingles	3	10.6	1910-cur
25	N25.5E32.5		2 (10-20)	brick	construct	frag	11	28.7	
25	N25.5E32.5		2 (10-20)	mortar	construct	frag	3	29.5	
25	N25.5E32.5		2 (10-20)	metal	fasteners	nails	184	463.5	
25	N25.5E32.5		2 (10-20)	metal	fasteners	screw	1	2.9	
25	N25.5E32.5		2 (10-20)	metal	fasteners	nut/bolt	1	11.7	
25	N25.5E32.5		2 (10-20)	clinker	fuel	clinkers	6	63.4	
25	N25.5E32.5		2 (10-20)	coal	fuel	coal	24	81.1	
25	N25.5E32.5		2 (10-20)	slag	fuel	slag	1	8.2	
25	N25.5E32.5		2 (10-20)	ceramic	furnishings	buff/orange flower pot frags	11	21.3	1700-cur
25	N25.5E32.5		2 (10-20)	metal	hardware	hook/eye	4	14.4	
25	N25.5E32.5		2 (10-20)	metal	hardware	bolt/washer	3	9.6	
25	N25.5E32.5		2 (10-20)	metal	hardware	wire frag	3	5.8	
25	N25.5E32.5		2 (10-20)	metal	hardware	ring, toy tire?	1	7.3	
25	N25.5E32.5		2 (10-20)	metal	hardware	pipe elbow	1	140.1	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
25	N25.5E32.5		2 (10-20)	metal	hardware	frag	1	16.9	
25	N25.5E32.5		2 (10-20)	metal	hardware	latch plate from door lock	1	5.2	
25	N25.5E32.5		2 (10-20)	glass	health/groom	neck/rim bottle	1	25.4	1880-1920
25	N25.5E32.5		2 (10-20)	glass	health/groom	frag neck/rim bottle, solarized	1	4.8	
25	N25.5E32.5		2 (10-20)	glass	health/groom	solarized, curved, frag	20	30.6	
25	N25.5E32.5		2 (10-20)	glass	health/groom	blue, rim frag, curved	2	9.0	
25	N25.5E32.5		2 (10-20)	ceramic	kitchenware	stoneware, buff salt glaze/albany slip	1	2.3	1805-1900
25	N25.5E32.5		2 (10-20)	ceramic	kitchenware	stoneware, alkali dk brown glaze	1	3.6	1840-1940
25	N25.5E32.5		2 (10-20)	ceramic	kitchenware	yellowware frag	2	1.6	1830-1940
25	N25.5E32.5		2 (10-20)	ceramic	kitchenware	stoneware, buff body/glaze frag	1	4.8	1820-1900
25	N25.5E32.5		2 (10-20)	ceramic	kitchenware	yellowware, yellow/orange glaze	1	0.6	1830-1940
25	N25.5E32.5		2 (10-20)	glass	kitchenware	milk, jar lid liner	9	11.8	1869-cur
25	N25.5E32.5		2 (10-20)	ceramic	leisure	pipe bowl frag	1	1.3	
25	N25.5E32.5		2 (10-20)	plastic	misc	frags	15	3.7	
25	N25.5E32.5		2 (10-20)	shell	misc	frag	5	1.0	
25	N25.5E32.5		2 (10-20)	slate	misc	frag	1	0.3	
25	N25.5E32.5		2 (10-20)	metal	other food	foil frags	9	0.7	
25	N25.5E32.5		2 (10-20)	metal	other food	can pull tab	3	1.8	1962-cur
25	N25.5E32.5		2 (10-20)	ceramic	recreation	porcelain doll head frag	1	4.4	1825-cur
25	N25.5E32.5		2 (10-20)	metal	recreation	skate key	1	6.3	
25	N25.5E32.5		2 (10-20)	ceramic	tableware	buff body, yellow/brown mottle glaze, frag	2	2.4	1840-1910
25	N25.5E32.5		2 (10-20)	ceramic	tableware	ww, red/blue/green dec, frag	1	0.7	1829-cur
25	N25.5E32.5		2 (10-20)	ceramic	tableware	ww, blue flower, slight flow, frag	1	0.8	1844-1860
25	N25.5E32.5		2 (10-20)	ceramic	tableware	ww overglaze floral decal, cup, frag	1	1.1	1900-cur
25	N25.5E32.5		2 (10-20)	ceramic	tableware	ww, slate blue glaze, poss annular frag	1	1.4	1880-1930
25	N25.5E32.5		2 (10-20)	ceramic	tableware	ww, red trans, frag	1	<0.1	1829-cur
25	N25.5E32.5		2 (10-20)	ceramic	tableware	ww, blue stipple print, frag	1	1.6	1820-cur
25	N25.5E32.5		2 (10-20)	ceramic	tableware	porcelain, print, frag	1	0.4	1825-cur
25	N25.5E32.5		2 (10-20)	ceramic	tableware	porcelain, floral decal, frag	1	3.8	1900-cur
25	N25.5E32.5		2 (10-20)	ceramic	tableware	ww, blue on edge, some flow, frag	1	0.5	1840-1866
25	N25.5E32.5		2 (10-20)	ceramic	tableware	ww, cream glaze, blue frag, closed?	1	1.8	
25	N25.5E32.5		2 (10-20)	ceramic	tableware	ironstone frag, undec	9	5.7	1840-cur
25	N25.5E32.5		2 (10-20)	ceramic	tableware	ww, blue trans, frag	1	0.5	1820-cur
25	N25.5E32.5		2 (10-20)	ceramic	tableware	ww, annular green, frag	1	2.1	1870-cur
25	N25.5E32.5		2 (10-20)	ceramic	tableware	ww, slightly blue, frag	1	1.5	1840-1890
25	N25.5E32.5		2 (10-20)	ceramic	tableware	ww, undec, frag	66	76.4	1810-cur
25	N25.5E32.5		2 (10-20)	glass	unknown	melted frags	15	10.7	
25	N25.5E32.5		2 (10-20)	glass	unknown	bright opaque blue, Depression	3	2.3	1920-1940
25	N25.5E32.5		2 (10-20)	glass	unknown	comfl blue, molded flowers, Depression	1	0.6	1920-1940
25	N25.5E32.5		2 (10-20)	glass	unknown	lt blue, curved, frag	13	19.3	
25	N25.5E32.5		2 (10-20)	glass	unknown	aqua, curved, frag	18	27.9	
25	N25.5E32.5		2 (10-20)	glass	unknown	dk blue/green, curved, frag	2	3.2	
25	N25.5E32.5		2 (10-20)	glass	unknown	green/blue frag	78	96.4	
25	N25.5E32.5		2 (10-20)	glass	unknown	clear, frag	149	159.3	
25	N25.5E32.5		2 (10-20)	glass	unknown	clear, molded, frag	6	24.4	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
25	N25.5E32.5		2 (10-20)	metal	unknown	frag	33	244.4	
25	N25.5E32.5		2 (10-20)	plastic	unknown	frags	9	1.0	
26	N10.5E24		1 (0-10)	bone	bone	frags	5	167.6	
26	N10.5E24		1 (0-10)	glass	bottle	amber, bottle, poss beer	4	9.7	
26	N10.5E24		1 (0-10)	metal	clothing	buckle	1	4.1	
26	N10.5E24		1 (0-10)	brick	construct	frags	14	48.9	
26	N10.5E24		1 (0-10)	glass	construct	blue/green window, frag	7	19.3	
26	N10.5E24		1 (0-10)	metal	fasteners	nails	14	76.8	
26	N10.5E24		1 (0-10)	charcoal	fuel	charcoal	7	8.3	
26	N10.5E24		1 (0-10)	coal	fuel	coal	11	11.7	
26	N10.5E24		1 (0-10)	metal	hardware	wire frag	2	5.1	
26	N10.5E24		1 (0-10)	metal	hardware	frag	1	7.2	
26	N10.5E24		1 (0-10)	metal	hardware	cap to tube, painted	1	3.2	
26	N10.5E24		1 (0-10)	ceramic	kitchenware	stoneware, gray, albany slip/buff glaze	1	37.0	1805-1900
26	N10.5E24		1 (0-10)	ceramic	kitchenware	stoneware, albany/olive glaze	1	10.6	1805-1900
26	N10.5E24		1 (0-10)	vinyl	recreation	record frags	2	0.9	
26	N10.5E24		1 (0-10)	ceramic	tableware	ironstone, undec, frag	1	1.7	1842-cur
26	N10.5E24		1 (0-10)	ceramic	tableware	ww, undec, frag	14	11.8	1810-cur
26	N10.5E24		1 (0-10)	glass	unknown	pale yellow, flat, frag	1	19.6	
26	N10.5E24		1 (0-10)	glass	unknown	milk, curved, frag	1	0.3	
26	N10.5E24		1 (0-10)	glass	unknown	solarized, curved, frag	2	3.1	
26	N10.5E24		1 (0-10)	glass	unknown	clear frags	16	11.3	
26	N10.5E24		1 (0-10)	metal	unknown	frag	2	5.7	
26	N10.5E24		1 (0-10)	metal	unknown	melted lead	1	56.1	
26	N10.5E24		1 (0-10)	wood	unknown	wood	8	6.8	
27	N2.5E28		5 (35-45)	glass	construct	clear, window	1	0.5	
28	N0E18		3 (20-30)	brick	construct	frags	14	36.6	
28	N0E18		3 (20-30)	glass	construct	green/blue window frag	3	1.8	
28	N0E18		3 (20-30)	glass	construct	blue/green window, frag	2	4.1	
28	N0E18		3 (20-30)	glass	construct	clear, window, frag	5	4.5	
28	N0E18		3 (20-30)	glass	construct	lt green/yellow window frag	2	2.6	
28	N0E18		3 (20-30)	metal	fasteners	nails	3	4.9	
28	N0E18		3 (20-30)	ceramic	furnishings	orange flower pot frag	3	6.5	1700-cur
28	N0E18		3 (20-30)	metal	hardware	wire frag	3	12.9	
28	N0E18		3 (20-30)	ceramic	tableware	ironstone, undec, frag	1	2.4	1842-cur
29	N25.5E32.5		wallscrape	bone	bone	frag	4	1.1	
29	N25.5E32.5		wallscrape	bone	bone	frag	1	0.3	
29	N25.5E32.5		wallscrape	glass	bottle	lt green, panel/bottom, frag	3	3.7	
29	N25.5E32.5		wallscrape	brick	construct	frag	2	5.7	
29	N25.5E32.5		wallscrape	glass	construct	clear, window	2	2.2	
29	N25.5E32.5		wallscrape	metal	fasteners	nails	9	12.1	
29	N25.5E32.5		wallscrape	metal	hardware	galvanized wire	1	0.4	
29	N25.5E32.5		wallscrape	glass	health/groom	solarized, rectangular bottle frag	3	11.6	
29	N25.5E32.5		wallscrape	ceramic	tableware	ww, undec, molded frag	5	3.6	
29	N25.5E32.5		wallscrape	ceramic	tableware	ww, plate, frag	1	1.2	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
29	N25.5E32.5		wallscrape	glass	unknown	clear, curved, frag	3	7.4	
29	N25.5E32.5		wallscrape	glass	unknown	lt blue, flat, frag	1	0.3	
29	N25.5E32.5		wallscrape	glass	unknown	aqua, curved, frag	1	4.5	
29	N25.5E32.5		wallscrape	glass	unknown	milk, flat, frag	1	0.2	
30	N1.25E6.5		7 (60-70)	glass	bottle	amber, curved, frag	1	3.3	
30	N1.25E6.5		7 (60-70)	ceramic	construct	green glazed tile, frag	1	30.8	
30	N1.25E6.5		7 (60-70)	ceramic	construct	white glaze tile frag	1	3.1	
30	N1.25E6.5		7 (60-70)	glass	construct	clear, window	2	2.0	
30	N1.25E6.5		7 (60-70)	plaster	construct	frags	2	11.3	
30	N1.25E6.5		7 (60-70)	unknown	construct	unknown, with ###	26	19.2	
30	N1.25E6.5		7 (60-70)	metal	fasteners	nails	10	37.5	
30	N1.25E6.5		7 (60-70)	metal	hardware	wire frag	2	41.1	
30	N1.25E6.5		7 (60-70)	metal	hardware	wire frag	3	20.9	
30	N1.25E6.5		7 (60-70)	glass	kitchenware	molded, yellow frag	1	2.5	
30	N1.25E6.5		7 (60-70)	metal	misc	foil safety seal	1	<0.1	
30	N1.25E6.5		7 (60-70)	metal	other food	crwon bottle caps	5	25.6	
30	N1.25E6.5		7 (60-70)	glass	unknown	aqua, curved, frag	1	0.7	
30	N1.25E6.5		7 (60-70)	metal	unknown	frag	1	378.2	
30	N1.25E6.5		7 (60-70)	metal	unknown	sheets of galvanized, roofing?	7	100.7	
30	N1.25E6.5		7 (60-70)	metal	unknown	frags	10	203.5	
30	N1.25E6.5		7 (60-70)	metal	unknown	spiral rod	1	20.3	
30	N1.25E6.5		7 (60-70)	metal	unknown	metal rod in sewn fabric case	1	12.1	
31	N25.5E32.5		3 (20-30)	bone	bone	frag	13	10.7	
31	N25.5E32.5		3 (20-30)	glass	bottle	olive, bottom, frag	1	19.7	
31	N25.5E32.5		3 (20-30)	plastic	clothing	button	1	0.3	
31	N25.5E32.5		3 (20-30)	shell	clothing	buttons	3	1.1	
31	N25.5E32.5		3 (20-30)	asphalt	construct	shingles	1	1.1	1910-cur
31	N25.5E32.5		3 (20-30)	brick	construct	frag	10	318.9	
31	N25.5E32.5		3 (20-30)	glass	construct	green, window, frag	>20	70.9	
31	N25.5E32.5		3 (20-30)	glass	construct	clear, window frag	28	23.9	
31	N25.5E32.5		3 (20-30)	mortar	construct	frag	1	10.7	
31	N25.5E32.5		3 (20-30)	metal	fasteners	nails	>20	381.7	
31	N25.5E32.5		3 (20-30)	metal	fasteners	staple	1	6.5	
31	N25.5E32.5		3 (20-30)	metal	fasteners	threaded bolt	1	7.2	
31	N25.5E32.5		3 (20-30)	clinkers	fuel	clinkers	4	81.1	
31	N25.5E32.5		3 (20-30)	coal	fuel	coal	16	69.5	
31	N25.5E32.5		3 (20-30)	ceramic	furnishings	buff flower pot frag	1	1.2	1700-cur
31	N25.5E32.5		3 (20-30)	ceramic	furnishings	porcelain, pink/gold edge, frag	1	1.0	1880-cur
31	N25.5E32.5		3 (20-30)	ceramic	furnishings	porcelain, fan pull frag	1	5.2	1825-cur
31	N25.5E32.5		3 (20-30)	glass	furnishings	opaque blue frag, closed vessel	1	1.6	
31	N25.5E32.5		3 (20-30)	metal	hardware	metal w/hole and nail	1	21.7	
31	N25.5E32.5		3 (20-30)	metal	hardware	ring/washer	1	7.1	
31	N25.5E32.5		3 (20-30)	metal	hardware	flat disks	2	3.7	
31	N25.5E32.5		3 (20-30)	metal	hardware	spark plug	1	10.4	
31	N25.5E32.5		3 (20-30)	metal	hardware	galvanized frag	4	8.1	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
31	N25.5E32.5		3 (20-30)	soapstone	hardware	lumber pencil	1	0.5	
31	N25.5E32.5		3 (20-30)	glass	health/groom	clear, base, frag, "W.T.&" "Pats" "22.7/B"	1	2.1	
31	N25.5E32.5		3 (20-30)	ceramic	kitchenware	grey body, grey/white glaze, frag	2	3.4	
31	N25.5E32.5		3 (20-30)	ceramic	kitchenware	redware, brown alkali glaze	1	11.6	
31	N25.5E32.5		3 (20-30)	ceramic	kitchenware	stoneware, buff, albany slip	3	2.3	1805-1900
31	N25.5E32.5		3 (20-30)	glass	kitchenware	milk, jar liners	3	6.8	
31	N25.5E32.5		3 (20-30)	plastic	kitchenware	brown stirrer frag	1	0.2	
31	N25.5E32.5		3 (20-30)	ceramic	leisure	pipe stem	1	5.5	
31	N25.5E32.5		3 (20-30)	ceramic	leisure	pipe bowl frag	1	1.4	
31	N25.5E32.5		3 (20-30)	glass	leisure	amber, curved, poss beer	3	7.9	
31	N25.5E32.5		3 (20-30)	ceramic	lighting	industrial porcelain frag	1	2.2	
31	N25.5E32.5		3 (20-30)	glass	lighting	clear, chimney glass	4	0.5	
31	N25.5E32.5		3 (20-30)	shell	misc	lg shell	1	17.3	
31	N25.5E32.5		3 (20-30)	metal	other food	foil safety seal	4	0.6	
31	N25.5E32.5		3 (20-30)	metal	other food	zinc jar cap w/Boyd's liner	1	47.1	
31	N25.5E32.5		3 (20-30)	plastic	other food	white spiral, frag	1	0.3	
31	N25.5E32.5		3 (20-30)	ceramic	recreation	unglazed buff marble	1	3.3	
31	N25.5E32.5		3 (20-30)	ceramic	tableware	ww, undec, frag	42	49.1	1810-cur
31	N25.5E32.5		3 (20-30)	ceramic	tableware	ironstone, undec, frag	8	16.1	1842-cur
31	N25.5E32.5		3 (20-30)	ceramic	tableware	ww, brown stripe, frag	1	2.2	1828-cur
31	N25.5E32.5		3 (20-30)	ceramic	tableware	ww, blue trans, frag	2	2.4	1820-cur
31	N25.5E32.5		3 (20-30)	ceramic	tableware	ww, yellow glaze w/blue stripe frag	3	1.3	1810-cur
31	N25.5E32.5		3 (20-30)	ceramic	tableware	ww, rim, blue trans, frag	1	1.1	1820-cur
31	N25.5E32.5		3 (20-30)	ceramic	tableware	ww, brown trans, cup rim	1	1.0	1828-cur
31	N25.5E32.5		3 (20-30)	ceramic	tableware	ww, olive stipple trans, frag	1	0.1	1828-cur
31	N25.5E32.5		3 (20-30)	ceramic	tableware	porcelain, gilded, decal, marley frag	4	4.9	1900-cur
31	N25.5E32.5		3 (20-30)	ceramic	tableware	porcelain, decal, frag	1	2.8	1900-cur
31	N25.5E32.5		3 (20-30)	glass	unknown	bright blue opaque, curved, frag	2	0.3	
31	N25.5E32.5		3 (20-30)	glass	unknown	melted, frag	8	10.1	
31	N25.5E32.5		3 (20-30)	glass	unknown	lt blue, curved, frag	6	16.4	
31	N25.5E32.5		3 (20-30)	glass	unknown	lime green, curved, frag	1	0.3	
31	N25.5E32.5		3 (20-30)	glass	unknown	cobalt blue, curved, frag	1	1.8	
31	N25.5E32.5		3 (20-30)	glass	unknown	green, curved, frag	1	2.4	
31	N25.5E32.5		3 (20-30)	glass	unknown	solarized, curved, frag	9	10.8	
31	N25.5E32.5		3 (20-30)	glass	unknown	blue/green, flat, frag	3	10.1	
31	N25.5E32.5		3 (20-30)	glass	unknown	green/blue, curved, frag	8	3.1	
31	N25.5E32.5		3 (20-30)	glass	unknown	aqua, curved, frag	14	21.2	
31	N25.5E32.5		3 (20-30)	glass	unknown	clear, curved, frag	>20	128.3	
31	N25.5E32.5		3 (20-30)	glass	unknown	milk, molded, frag	2	12.9	
31	N25.5E32.5		3 (20-30)	metal	unknown	frag	8	71.0	
31	N25.5E32.5		3 (20-30)	metal	unknown	mesh disk	1	0.1	
31	N25.5E32.5		3 (20-30)	mica	unknown	frag	1	<0.1	
31	N25.5E32.5		3 (20-30)	slate	unknown	frag	1	0.4	
32	N6E39.5		1 (0-10)	brick	construct	frag	4	9.0	
32	N6E39.5		1 (0-10)	concrete	construct	frag	6	110.2	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
32	N6E39.5		1 (0-10)	glass	construct	clear, window, frag	4	3.0	
32	N6E39.5		1 (0-10)	glass	construct	green, window, frag	2	1.3	
32	N6E39.5		1 (0-10)	plaster	construct	frag	1	3.0	
32	N6E39.5		1 (0-10)	metal	fasteners	nails	2	4.7	
32	N6E39.5		1 (0-10)	clinkers	fuel	clinkers	9	88.2	
32	N6E39.5		1 (0-10)	ceramic	furnishings	orange flower pot frag, molded	1	6.3	1700-cur
32	N6E39.5		1 (0-10)	chalk	misc	chalk/limestone	2	8.9	
32	N6E39.5		1 (0-10)	metal	other food	foil safety seal	1	<0.1	
32	N6E39.5		1 (0-10)	plastic	other food	stirrer frag	1	<0.1	
32	N6E39.5		1 (0-10)	ceramic	tableware	ww, undec, frag	3	3.8	1810-cur
32	N6E39.5		1 (0-10)	glass	unknown	clear, curved, frag	2	4.9	
32	N6E39.5		1 (0-10)	glass	unknown	clear, molded, frag	1	0.5	
32	N6E39.5		1 (0-10)	glass	unknown	blue/green, curved, frag	1	2.1	
32	N6E39.5		1 (0-10)	metal	unknown	cap?	1	0.4	
32	N6E39.5		1 (0-10)	plastic	unknown	frag	1	<0.1	
33	N0E18		4 (30-40)	brick	construct	frags	3	10.0	
33	N0E18		4 (30-40)	metal	fasteners	nails	1	1.4	
33	N0E18		4 (30-40)	clinkers	fuel	clinkers	4	4.4	
34	N6E39.5		2 (10-20)	bone	bone	frag	1	0.3	
34	N6E39.5		2 (10-20)	brick	construct	frag	4	108.0	
34	N6E39.5		2 (10-20)	concrete	construct	frag	13	570.0	
34	N6E39.5		2 (10-20)	glass	construct	clear, window frag	3	3.9	
34	N6E39.5		2 (10-20)	metal	fasteners	tack w/grips	1	2.8	
34	N6E39.5		2 (10-20)	clinkers	fuel	clinkers	5	29.7	
34	N6E39.5		2 (10-20)	metal	hardware	wire	1	0.6	
34	N6E39.5		2 (10-20)	metal	recreation	toy gun	1	50.3	
34	N6E39.5		2 (10-20)	ceramic	tableware	ww, undec, frag	1	0.5	
34	N6E39.5		2 (10-20)	glass	unknown	clear, curved, frag	5	4.2	
35	N10.5E24		2 (10-23)	bone	bone	burned frag	2	0.8	
35	N10.5E24		2 (10-23)	glass	bottle	amber, curved, poss beer	5	6.2	
35	N10.5E24		2 (10-23)	glass	bottle	lt blue, curved, frag	6	19.7	
35	N10.5E24		2 (10-23)	glass	bottle	lt green, panel bottle frag	4	16.6	
35	N10.5E24		2 (10-23)	ceramic	construct	large tile/pipe frag	1	505.2	
35	N10.5E24		2 (10-23)	glass	construct	green, window, frag	6	13.5	
35	N10.5E24		2 (10-23)	wood	construct	frag	9	7.1	
35	N10.5E24		2 (10-23)	metal	fasteners	nails	14	86.6	
35	N10.5E24		2 (10-23)	metal	fasteners	bolt	1	30.5	
35	N10.5E24		2 (10-23)	metal	hardware	wire frags	2	25.0	
35	N10.5E24		2 (10-23)	glass	lighting	clear, chimney, frag	2	0.4	
35	N10.5E24		2 (10-23)	metal	other food	foil safety seal	2	0.2	
35	N10.5E24		2 (10-23)	metal	other food	pull tab	1	0.8	1962-cur
35	N10.5E24		2 (10-23)	ceramic	tableware	ww, undec, frag	2	3.4	
35	N10.5E24		2 (10-23)	ceramic	tableware	ironstone, undec, frag	1	1.1	
35	N10.5E24		2 (10-23)	glass	unknown	olive, curved, frag	1	1.6	
35	N10.5E24		2 (10-23)	glass	unknown	solarized, curved, frag	5	23.1	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
35	N10.5E24		2 (10-23)	glass	unknown	clear, curved, frag	23	28.6	
35	N10.5E24		2 (10-23)	metal	unknown	frag	3	17.3	
35	N10.5E24		2 (10-23)	metal	unknown	metal and mica	1	5.1	
35	N10.5E24		2 (10-23)	plastic	unknown	frag	2	1.5	
36	N25.5E32.5		4 (30-37)	bone	bone	frag	7	45.7	
36	N25.5E32.5		4 (30-37)	glass	bottle	clear, milk bottle threaded neck, frag	7	22.4	
36	N25.5E32.5		4 (30-37)	glass	bottle	rectangular, bottom, amber, frag	5	28.4	
36	N25.5E32.5		4 (30-37)	metal	clothing	buckle, for tightening	1	0.8	
36	N25.5E32.5		4 (30-37)	plastic	clothing	button	1	0.5	
36	N25.5E32.5		4 (30-37)	lead/graphit	communicate	pencil lead	3	2.7	
36	N25.5E32.5		4 (30-37)	brick	construct	frag	9	69.5	
36	N25.5E32.5		4 (30-37)	concrete	construct	frag	1	15.9	
36	N25.5E32.5		4 (30-37)	glass	construct	green, window, frag	35	64.2	
36	N25.5E32.5		4 (30-37)	metal	fasteners	nails	>20	471.9	
36	N25.5E32.5		4 (30-37)	metal	fasteners	staples	2	7.0	
36	N25.5E32.5		4 (30-37)	metal	fasteners	screw	1	2.7	
36	N25.5E32.5		4 (30-37)	clinkers	fuel	clinkers	10	56.3	
36	N25.5E32.5		4 (30-37)	coal	fuel	coal	1	39.8	
36	N25.5E32.5		4 (30-37)	ceramic	furnishings	buff flower pot frags	2	56.5	1700-cur
36	N25.5E32.5		4 (30-37)	ceramic	furnishings	porcelain, fan pull frag	2	17.4	1825-cur
36	N25.5E32.5		4 (30-37)	metal	hardware	small doorknob	1	12.6	
36	N25.5E32.5		4 (30-37)	metal	hardware	disks	2	7.2	
36	N25.5E32.5		4 (30-37)	metal	hardware	galvanized frags	5	13.0	
36	N25.5E32.5		4 (30-37)	metal	hardware	decorative hook	1	34.1	
36	N25.5E32.5		4 (30-37)	metal	hardware	prob sewing machine parts	3	6.4	
36	N25.5E32.5		4 (30-37)	metal	hardware	tool handle	1	81.7	
36	N25.5E32.5		4 (30-37)	metal	hardware	keyhole plate	1	16.4	
36	N25.5E32.5		4 (30-37)	glass	health/groom	panel bottle, "Corma" frag	1	2.2	1867-1915
36	N25.5E32.5		4 (30-37)	ceramic	kitchenware	grey stoneware, salt glaze/albany slip	1	39.3	1805-1900
36	N25.5E32.5		4 (30-37)	ceramic	kitchenware	redware, brown salt glaze	2	5.0	1800-1900
36	N25.5E32.5		4 (30-37)	ceramic	kitchenware	buff stoneware, salt glaze/albany slip	3	4.2	1805-1900
36	N25.5E32.5		4 (30-37)	ceramic	kitchenware	grey stoneware, yellow/brown/silver alkali	2	7.2	1800-1900
36	N25.5E32.5		4 (30-37)	glass	lighting	clear, bulbs/chimney, frag	7	1.1	
36	N25.5E32.5		4 (30-37)	ceramic	misc	buff terra cotta jar neck	1	1.1	1700-cur
36	N25.5E32.5		4 (30-37)	glass	other food	milk, jar liner frag	1	5.1	
36	N25.5E32.5		4 (30-37)	metal	other food	foil safety seal	1	0.1	
36	N25.5E32.5		4 (30-37)	ceramic	recreation	unglazed marble	1	2.8	
36	N25.5E32.5		4 (30-37)	metal	recreation	whistle	1	12.4	
36	N25.5E32.5		4 (30-37)	ceramic	tableware	ww, undec, frag	17	47.3	1810-cur
36	N25.5E32.5		4 (30-37)	ceramic	tableware	ironstone, undec, frag	8	21.2	1842-cur
36	N25.5E32.5		4 (30-37)	ceramic	tableware	ww, unmolded shell edge, frag	1	3.5	1874-1884
36	N25.5E32.5		4 (30-37)	ceramic	tableware	porcelain, handpainted over trans, frag	1	2.2	1825-cur
36	N25.5E32.5		4 (30-37)	ceramic	tableware	porcelain, blue marley	1	2.1	1825-cur
36	N25.5E32.5		4 (30-37)	ceramic	tableware	ww, pink glaze frag	1	0.9	1810-cur
36	N25.5E32.5		4 (30-37)	ceramic	tableware	ww, polychrome trans, frag	1	3.4	1828-cur

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
36	N25.5E32.5		4 (30-37)	ceramic	tableware	porcelain, floral decal, frag	1	0.5	1900-cur
36	N25.5E32.5		4 (30-37)	ceramic	tableware	porcelain w/gold band, frag	1	1.2	1880-cur
36	N25.5E32.5		4 (30-37)	ceramic	tableware	ww, blue and green bands, frag	2	6.5	1828-cur
36	N25.5E32.5		4 (30-37)	ceramic	tableware	porcelain, floral decal, frag	1	2.6	1900-cur
36	N25.5E32.5		4 (30-37)	ceramic	tableware	ww, grey stipple trans, frag	1	1.5	1828-cur
36	N25.5E32.5		4 (30-37)	ceramic	tableware	ww, yellow w/blue edge lid, frag	1	5.1	1880-1940
36	N25.5E32.5		4 (30-37)	ceramic	tableware	ww, rim, gold band, frag	1	1.4	1880-cur
36	N25.5E32.5		4 (30-37)	ceramic	tableware	ww, rim, gold band, molded, frag	1	4.3	1880-cur
36	N25.5E32.5		4 (30-37)	glass	tableware	clear, tempered plate, frag	1	29.2	
36	N25.5E32.5		4 (30-37)	glass	unknown	clear, curved, frag	>20	162.2	
36	N25.5E32.5		4 (30-37)	glass	unknown	yellow/brown, curved, frag	1	1.7	
36	N25.5E32.5		4 (30-37)	glass	unknown	green, curved, frag,	1	0.7	
36	N25.5E32.5		4 (30-37)	glass	unknown	lt blue, curved, frag	8	6.6	
36	N25.5E32.5		4 (30-37)	glass	unknown	solarized, curved, frag	6	21.2	
36	N25.5E32.5		4 (30-37)	glass	unknown	aqua, curved, frag	10	15.2	
36	N25.5E32.5		4 (30-37)	glass	unknown	blue/green, curved, frag	12	18.8	
36	N25.5E32.5		4 (30-37)	metal	unknown	frag	27	669.6	
37	N23E26		1 (0-10)	metal	adornment	twisted metal set w/rhinestones	1	5.4	
37	N23E26		1 (0-10)	bone	bone	frags	14	21.1	
37	N23E26		1 (0-10)	glass	bottle	lt blue, rim, frag	1	4.5	
37	N23E26		1 (0-10)	glass	bottle	clear, neck, frag	1	6.8	
37	N23E26		1 (0-10)	glass	bottle	amber, curved, poss beer	4	4.8	
37	N23E26		1 (0-10)	glass	bottle	clear, bottom, frag	1	15.9	
37	N23E26		1 (0-10)	metal	clothing	snaps	3	2.4	
37	N23E26		1 (0-10)	metal	clothing	hook/eye	1	0.2	
37	N23E26		1 (0-10)	plastic	clothing	bottom	1	1.5	
37	N23E26		1 (0-10)	vinyl	clothing	frags w/sewing	2	0.2	
37	N23E26		1 (0-10)	lead/graphit	communicate	pencil lead	1	1.3	
37	N23E26		1 (0-10)	asphalt	construct	shingles	3	6.2	1910-cur
37	N23E26		1 (0-10)	glass	construct	frag	1	3.0	
37	N23E26		1 (0-10)	glass	construct	aqua, window, frag	29	54.2	
37	N23E26		1 (0-10)	glass	construct	green/blue, window, frag	15	17.6	
37	N23E26		1 (0-10)	metal	fasteners	nails	>20	255.3	
37	N23E26		1 (0-10)	metal	fasteners	galvanized nail	3	8.3	
37	N23E26		1 (0-10)	metal	fasteners	screw	1	5.3	
37	N23E26		1 (0-10)	charcoal	fuel	charcoal	7	16.4	
37	N23E26		1 (0-10)	slag	fuel	slag	7	30.9	
37	N23E26		1 (0-10)	ceramic	furnishings	orange flower pot frag	2	11.5	1700-cur
37	N23E26		1 (0-10)	metal	hardware	ring for holding	1	27.8	
37	N23E26		1 (0-10)	glass	health/groom	bottom, and part side panel, rect.	1	18.8	1865-1915
37	N23E26		1 (0-10)	glass	kitchenware	milk, curved, frag	2	1.9	
37	N23E26		1 (0-10)	glass	kitchenware	milk, frag, Depression	1	1.6	1920-1940
37	N23E26		1 (0-10)	glass	kitchenware	stoneware, brown salt/albany slip	1	4.6	1805-1900
37	N23E26		1 (0-10)	glass	lighting	light bulb frag	5	1.2	
37	N23E26		1 (0-10)	metal	other food	pull tabs	1	1.5	1962-cur

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
37	N23E26		1 (0-10)	metal	other food	foil safety seal	15	3.0	
37	N23E26		1 (0-10)	metal	other food	pull ring	1	0.5	
37	N23E26		1 (0-10)	ceramic	recreation	unglazed marble	1	3.0	
37	N23E26		1 (0-10)	metal	recreation	toy jack	1	1.8	
37	N23E26		1 (0-10)	metal	repair	sewing machine part	1	1.9	
37	N23E26		1 (0-10)	ceramic	tableware	ww, undec, frag	23	23.3	1810-cur
37	N23E26		1 (0-10)	ceramic	tableware	porcelain, molded, large handle frag	1	15.9	1825-cur
37	N23E26		1 (0-10)	ceramic	tableware	porcelain, grey on one side, frag	1	0.5	1825-cur
37	N23E26		1 (0-10)	glass	tableware	ww, green trans, frag	2	0.4	1828-cur
37	N23E26		1 (0-10)	glass	tableware	ww, red trans, frag	1	0.2	1828-cur
37	N23E26		1 (0-10)	fabric	unknown	frag, felt	1	<0.1	
37	N23E26		1 (0-10)	glass	unknown	clear, curved, frag	31	56.1	
37	N23E26		1 (0-10)	glass	unknown	yellow/green, flat, frag	17	30.3	
37	N23E26		1 (0-10)	glass	unknown	aqua, curved, frag	4	7.8	
37	N23E26		1 (0-10)	glass	unknown	cobalt, curved, frag	5	5.8	
37	N23E26		1 (0-10)	glass	unknown	milk, curved, frag	2	1.9	
37	N23E26		1 (0-10)	glass	unknown	blue, curved, frag	1	0.3	
37	N23E26		1 (0-10)	glass	unknown	dk aqua, curved, frag	3	5.2	
37	N23E26		1 (0-10)	glass	unknown	teal, curved, Depression	1	4.2	1920-1940
37	N23E26		1 (0-10)	glass	unknown	solarized, curved, frag	8	14.1	
37	N23E26		1 (0-10)	glass	unknown	amythest, curved, frag	4	17.4	1880-1925
37	N23E26		1 (0-10)	metal	unknown	frags	27	89.4	
37	N23E26		1 (0-10)	plastic	unknown	frags	11	1.4	
37	N23E26		1 (0-10)	plastic	unknown	frag	2	<0.1	
37	N23E26		1 (0-10)	glass	vehicle	shatterproof, frag	4	3.1	
38	N23E26		2 (10-20)	metal	adornment	arrow/flower, molded, frag	1	0.5	
38	N23E26		2 (10-20)	metal	ammunition	small unmarked cartridge	1	0.5	
38	N23E26		2 (10-20)	bone	bone	frag	4	4.0	
38	N23E26		2 (10-20)	glass	bottle	greenish, partial neck/rim, frag	2	25.6	
38	N23E26		2 (10-20)	glass	bottle	blue, curved, frag	10	21.7	
38	N23E26		2 (10-20)	metal	clothing	grommets	2	0.4	
38	N23E26		2 (10-20)	metal	clothing	hook for shoelaces	1	0.5	
38	N23E26		2 (10-20)	glass	construct	green/blue, window, frag	5	8.0	
38	N23E26		2 (10-20)	glass	construct	blue/green, window, frag	10	16.7	
38	N23E26		2 (10-20)	metal	fasteners	nails	>20	324.9	
38	N23E26		2 (10-20)	metal	fasteners	screw w/nut	1	18.3	
38	N23E26		2 (10-20)	metal	fasteners	galvanized nails	3	8.4	
38	N23E26		2 (10-20)	metal	fasteners	galvanized nail w/washer	1	6.4	
38	N23E26		2 (10-20)	metal	hardware	hook/eye	1	2.5	
38	N23E26		2 (10-20)	metal	hardware	gear	1	3.5	
38	N23E26		2 (10-20)	glass	health/groom	perfume bottle, clear	1	39.4	1920-cur
38	N23E26		2 (10-20)	ceramic	kitchenware	stoneware, grey slip glaze	1	1.7	
38	N23E26		2 (10-20)	glass	lighting	decorative mini light bulbs	4	0.6	
38	N23E26		2 (10-20)	metal	other food	foil safety seal	1	<0.1	
38	N23E26		2 (10-20)	glass	recreation	marble, blue w/swirl	1	3.5	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
38	N23E26		2 (10-20)	ceramic	tableware	ww, undec, frag	14	22.0	
38	N23E26		2 (10-20)	ceramic	tableware	ironstone, undec, frag	4	17.6	1842-cur
38	N23E26		2 (10-20)	ceramic	tableware	ironstone, molded, cup rim frag	1	6.0	1842-cur
38	N23E26		2 (10-20)	ceramic	tableware	porcelain, undec, frag	1	1.6	1825-cur
38	N23E26		2 (10-20)	ceramic	tableware	porcelain, decal, frag	1	0.3	1900-cur
38	N23E26		2 (10-20)	ceramic	tableware	ww, molded, gild rim band, cup, frag	2	2.8	1880-cur
38	N23E26		2 (10-20)	ceramic	tableware	ww, blue trans, frag	1	0.3	1820-cur
38	N23E26		2 (10-20)	glass	unknown	aqua, curved, frag	3	7.0	
38	N23E26		2 (10-20)	glass	unknown	green/blue, curved, frag	2	1.8	
38	N23E26		2 (10-20)	glass	unknown	blue/green, curved frag	4	15.5	
38	N23E26		2 (10-20)	glass	unknown	milk, curved, frag	4	9.2	
38	N23E26		2 (10-20)	glass	unknown	opaque lime, curved, Depression	3	17.1	1920-1940
38	N23E26		2 (10-20)	glass	unknown	solarized, curved, frag	7	10.8	
38	N23E26		2 (10-20)	glass	unknown	clear, curved, frag	25	40.2	
38	N23E26		2 (10-20)	metal	unknown	long band	1	72.8	
38	N23E26		2 (10-20)	metal	unknown	frag	8	31.0	
38	N23E26		2 (10-20)	plastic	unknown	frag	1	<0.1	
38	N23E26		2 (10-20)	plastic	unknown	frag	3	1.0	
38	N23E26		2 (10-20)	plastic	unknown	triangle, grey/pink mottle	1	0.4	
39	N6E39.5		3 (20-29)	fabric	construct	carpet yarn	1	0.2	
39	N6E39.5		3 (20-29)	glass	construct	green, window, frag	3	13.5	
39	N6E39.5		3 (20-29)	mortar	construct	frag	11	307.4	
39	N6E39.5		3 (20-29)	plaster	construct	frag, painted green	2	9.5	
39	N6E39.5		3 (20-29)	metal	fasteners	nails	1	4.7	
39	N6E39.5		3 (20-29)	ceramic	tableware	porcelain, rim w/gold band, frag	1	2.4	1880-cur
39	N6E39.5		3 (20-29)	ceramic	tableware	ironstone, undec, frag	1	0.4	1842-cur
39	N6E39.5		3 (20-29)	ceramic	unknown	dk grey body tile	1	5.4	
39	N6E39.5		3 (20-29)	glass	unknown	clear, curved, frag	3	8.7	
39	N6E39.5		3 (20-29)	plastic	unknown	frag	6	0.1	
39	N6E39.5		3 (20-29)	plastic	unknown	black disk, perforated, bug poison?	1	10.5	
40	N6E39.5		4 (29-40)	concrete	construct	frag	7	125.8	
40	N6E39.5		4 (29-40)	metal	gas	nails	1	1.1	
40	N6E39.5		4 (29-40)	plastic	other food	twinkie wrapper	1	0.3	
40	N6E39.5		4 (29-40)	ceramic	tableware	ww, undec, frag	2	0.9	1810-cur
40	N6E39.5		4 (29-40)	glass	unknown	blue/green, flat, frag	1	1.6	
41	N25.5E32.5		5 (37-47)	metal	ammunition	cartridge "UMC 38 S+W"	1	2.7	
41	N25.5E32.5		5 (37-47)	bone	bone	frags	22	60.0	
41	N25.5E32.5		5 (37-47)	metal	clothing	purse frame w/twist clasp	1	28.6	
41	N25.5E32.5		5 (37-47)	metal	clothing	hanger frag	1	36.6	
41	N25.5E32.5		5 (37-47)	metal	clothing	grommets	1	0.1	
41	N25.5E32.5		5 (37-47)	lead/graphit	communicate	pencil lead frag	1	1.0	
41	N25.5E32.5		5 (37-47)	brick	construct	frags	10	99.4	
41	N25.5E32.5		5 (37-47)	glass	construct	lt green, window frag	>20	89.1	
41	N25.5E32.5		5 (37-47)	plaster	construct	frags	9	118.3	
41	N25.5E32.5		5 (37-47)	clinkers	fuel	clinkers	8	42.2	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
41	N25.5E32.5		5 (37-47)	coal	fuel	coal	3	65.9	
41	N25.5E32.5		5 (37-47)	slag	fuel	slag	2	3.9	
41	N25.5E32.5		5 (37-47)	metal	fur	cast piece w/face and leaves	1	4.8	
41	N25.5E32.5		5 (37-47)	ceramic	furnishings	orange flower pot frag	2	7.4	1700-cur
41	N25.5E32.5		5 (37-47)	metal	gas	nails	>20	796.0	
41	N25.5E32.5		5 (37-47)	fabric	hardware	small tangle of twine	1	3.5	
41	N25.5E32.5		5 (37-47)	metal	hardware	spring frag	4	13.8	
41	N25.5E32.5		5 (37-47)	metal	hardware	rivet	1	1.3	
41	N25.5E32.5		5 (37-47)	metal	hardware	fine mesh frag	1	0.6	
41	N25.5E32.5		5 (37-47)	glass	health/groom	panel bottle "Our extracts guaranteed pure a	2	40.6	1865-1915
41	N25.5E32.5		5 (37-47)	ceramic	kitchenware	yellowware, blue/white bands, frag	1	4.9	1840-1930
41	N25.5E32.5		5 (37-47)	ceramic	kitchenware	stoneware, salt glaze/albany slip	1	3.2	1805-1900
41	N25.5E32.5		5 (37-47)	ceramic	lighting	industrial porcelain	1	1.1	
41	N25.5E32.5		5 (37-47)	glass	lighting	light bulb frag	2	3.0	
41	N25.5E32.5		5 (37-47)	glass	lighting	chimney, clear, frag	10	3.6	
41	N25.5E32.5		5 (37-47)	glass	other food	green/yellow fruit jar frag	4	7.4	
41	N25.5E32.5		5 (37-47)	glass	other food	lt aqua, fruit jar frag	19	53.8	
41	N25.5E32.5		5 (37-47)	metal	other food	roll back can lid, frag	1	2.5	
41	N25.5E32.5		5 (37-47)	rubber	other food	rubber ring frag	3	2.0	
41	N25.5E32.5		5 (37-47)	metal	repair	safety pin frag	1	0.4	
41	N25.5E32.5		5 (37-47)	shell	shell	frags	1	2.5	
41	N25.5E32.5		5 (37-47)	ceramic	tableware	ironstone, undec, frag	3	17.6	
41	N25.5E32.5		5 (37-47)	ceramic	tableware	ww, undec, frag	26	30.3	1810-cur
41	N25.5E32.5		5 (37-47)	ceramic	tableware	porcelain, molded, frag	2	3.9	1825-cur
41	N25.5E32.5		5 (37-47)	ceramic	tableware	ww, molded, green annular, frag	1	5.0	1828-cur
41	N25.5E32.5		5 (37-47)	ceramic	tableware	ironstone, 3 brown, 1 green band, frag	1	6.3	1842-cur
41	N25.5E32.5		5 (37-47)	ceramic	tableware	ww, floral decal, frag	2	9.2	1900-cur
41	N25.5E32.5		5 (37-47)	ceramic	tableware	ww, irridescent marbling, frag	2	1.1	1900-cur
41	N25.5E32.5		5 (37-47)	ceramic	tableware	ww, blue trans, frag	1	0.4	1820-cur
41	N25.5E32.5		5 (37-47)	ceramic	tableware	ww, gold floral decal, frag	1	0.7	1900-cur
41	N25.5E32.5		5 (37-47)	ceramic	tableware	ww, grey stipple trans, frag	3	1.2	1828-cur
41	N25.5E32.5		5 (37-47)	glass	unknown	dk amber, curved, frag	3	19.8	
41	N25.5E32.5		5 (37-47)	glass	unknown	blue, curved, frag	12	16.6	
41	N25.5E32.5		5 (37-47)	glass	unknown	lime green, curved rag	1	1.2	
41	N25.5E32.5		5 (37-47)	glass	unknown	milk, curved, frag	6	6.7	
41	N25.5E32.5		5 (37-47)	glass	unknown	solarized, curved, frag	11	29.0	
41	N25.5E32.5		5 (37-47)	glass	unknown	clear, curved, frag	>20	138.3	
41	N25.5E32.5		5 (37-47)	glass	unknown	dk aqua, curved, frag	11	23.7	
41	N25.5E32.5		5 (37-47)	glass	unknown	green, curved, frag	15	37.6	
41	N25.5E32.5		5 (37-47)	glass	unknown	aqua, curved, frag	14	49.0	
41	N25.5E32.5		5 (37-47)	metal	unknown	frag	>20	319.5	
41	N25.5E32.5		5 (37-47)	metal	unknown	melted lead	4	38.7	
41	N25.5E32.5		5 (37-47)	metal	unknown	galvanized frag	11	30.9	
42	N1.25E6.5	1	8 (50-60)	leather	clothing	shoe frags	2	3.3	
42	N1.25E6.5	1	8 (50-60)	plaster	construct	frags	4	9.1	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
42	N1.25E6.5	1	8 (50-60)	metal	fasteners	nails	>20	169.1	
42	N1.25E6.5	1	8 (50-60)	clinkers	fuel	clinkers	1	15.3	
42	N1.25E6.5	1	8 (50-60)	metal	hardware	D ring	1	5.9	
42	N1.25E6.5	1	8 (50-60)	metal	hardware	wire	16	51.7	
42	N1.25E6.5	1	8 (50-60)	metal	hardware	springs	2	7.1	
42	N1.25E6.5	1	8 (50-60)	metal	health/groom	small spray can	1	48.4	
42	N1.25E6.5	1	8 (50-60)	metal	other food	crown bottle caps	10	43.5	1895-cur
42	N1.25E6.5	1	8 (50-60)	metal	other food	burner part	1	123.2	
42	N1.25E6.5	1	8 (50-60)	metal	unknown	frag	>20	263.1	
42	N1.25E6.5	1	8 (50-60)	metal	unknown	band frags	3	59.8	
42	N1.25E6.5	1	8 (50-60)	metal	unknown	zinc frag	1	4.8	
42	N1.25E6.5	1	8 (50-60)	metal	unknown	cone shaped inc, reflector?	1	23.7	
42	N1.25E6.5	1	8 (50-60)	metal	unknown	round metal, dorrknob?	1	8.6	
42	N1.25E6.5	1	8 (50-60)	unknown	unknown	cardboard stuff w/####	1	2.3	
42	N1.25E6.5	1	8 (50-60)	vinyl	unknown	frags w/sewing holes	4	0.7	
42	N1.25E6.5	1	8 (50-60)	wood	unknown	partially burned frags	5	56.4	
43	N23E26		3 (20-30)	bone	bone	frag	15	32.4	
43	N23E26		3 (20-30)	fabric	clothing	eyelet reinforcers	2	0.7	
43	N23E26		3 (20-30)	glass	construct	green, window, frag	13	29.6	
43	N23E26		3 (20-30)	metal	fasteners	nails	>20	441.8	
43	N23E26		3 (20-30)	metal	fasteners	galvanized nail frag	3	9.2	
43	N23E26		3 (20-30)	metal	fasteners	screws w/nuts	2	105.7	
43	N23E26		3 (20-30)	clinkers	fuel	clinkers	7	12.2	
43	N23E26		3 (20-30)	ceramic	furnishings	buff flower pot frag	1	2.4	1700-cur
43	N23E26		3 (20-30)	metal	hardware	large hook	1	80.5	
43	N23E26		3 (20-30)	glass	health/groom	bottom, narrow rect panel, clear	1	30.0	
43	N23E26		3 (20-30)	ceramic	kitchenware	stoneware, salt glaze/albany slip	1	5.5	1805-1900
43	N23E26		3 (20-30)	glass	kitchenware	clear, stirrer, frag	1	0.5	
43	N23E26		3 (20-30)	ceramic	leisure	pipe stem frag	1	1.9	
43	N23E26		3 (20-30)	ceramic	lighting	light bulb socket, porcelain	2	56.6	
43	N23E26		3 (20-30)	glass	lighting	chimney glass frags	3	0.8	
43	N23E26		3 (20-30)	metal	lighting	gas light key	1	6.0	
43	N23E26		3 (20-30)	metal	other food	crown bottle caps	1	3.6	1895-cur
43	N23E26		3 (20-30)	ceramic	rec	porcelain, doll arm, frag	1	2.4	1825-cur
43	N23E26		3 (20-30)	ceramic	tableware	ironstone, undec, frag	4	5.7	1842-cur
43	N23E26		3 (20-30)	ceramic	tableware	ww, brown glaze, frag	1	0.6	1828-cur
43	N23E26		3 (20-30)	ceramic	tableware	ww, molded, marley frag	1	5.4	1810-cur
43	N23E26		3 (20-30)	ceramic	tableware	ww, scalloped and gold edge, frag	1	1.5	1880-cur
43	N23E26		3 (20-30)	ceramic	tableware	porcelain, gold edge, frag	2	1.4	1880-cur
43	N23E26		3 (20-30)	ceramic	tableware	porcelain, brown/yellow, frag	1	0.5	1825-cur
43	N23E26		3 (20-30)	ceramic	tableware	ww, undec, frag	21	47.9	1810-cur
43	N23E26		3 (20-30)	glass	unknown	amber, curved frag	4	11.6	
43	N23E26		3 (20-30)	glass	unknown	aqua, curved, frag	4	8.4	
43	N23E26		3 (20-30)	glass	unknown	blue/green, curved, frag	14	27.5	
43	N23E26		3 (20-30)	glass	unknown	clear, curved, frag	26	68.3	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
43	N23E26		3 (20-30)	metal	unknown	frag	13	57.0	
43	N23E26		3 (20-30)	metal	unknown	galvanized frag	2	10.0	
43	N23E26		3 (20-30)	stone	unknown	large cylinders	2	25.9	
44	N6E39.5		5 (29-44)	concrete	construct	frag	8	394.5	
44	N6E39.5		5 (29-44)	glass	construct	green, window, frag	11	10.5	
44	N6E39.5		5 (29-44)	metal	fasteners	nails	1	6.3	
44	N6E39.5		5 (29-44)	metal	other food	pull tab	1	0.3	1962-cur
44	N6E39.5		5 (29-44)	ceramic	tableware	ww, undec, frag	6	17.4	1810-cur
44	N6E39.5		5 (29-44)	glass	unknown	clear, curved, frag	3	2.1	
44	N6E39.5		5 (29-44)	glass	unknown	blue/green, flat, frag	4	6.3	
44	N6E39.5		5 (29-44)	plastic	unknown	frag	1	0.4	
45	N1.25E6.5		9 (60-70)	metal	clothing	buckles	2	35.9	
45	N1.25E6.5		9 (60-70)	ceramic	construct	green glaze tile frag	1	5.4	
45	N1.25E6.5		9 (60-70)	glass	construct	green, window, frag	2	7.7	
45	N1.25E6.5		9 (60-70)	metal	fasteners	nails	23	52.4	
45	N1.25E6.5		9 (60-70)	metal	hardware	D rings	2	23.4	
45	N1.25E6.5		9 (60-70)	metal	other food	crown bottle caps	1	6.2	1895-cur
45	N1.25E6.5		9 (60-70)	glass	unknown	clear, curved, frag	3	14.0	
45	N1.25E6.5		9 (60-70)	leather	unknown	frags, many sewn	>20	36.9	
45	N1.25E6.5		9 (60-70)	metal	unknown	fabric wrapped large ring	1	146.3	
45	N1.25E6.5		9 (60-70)	metal	unknown	frag	>20	274.4	
45	N1.25E6.5		9 (60-70)	metal	unknown	bolts through fabric	4	9.1	
45	N1.25E6.5		9 (60-70)	metal	unknown	zinc frag	11	12.6	
45	N1.25E6.5		9 (60-70)	wood	unknown	fumed frags	4	21.8	
46	N23E16		1 (0-10)	glass	bottle	amber, curved frag	5	14.2	
46	N23E16		1 (0-10)	glass	bottle	neck w/metal screw top	1	41.5	
46	N23E16		1 (0-10)	metal	clothing	grommet	1	0.3	
46	N23E16		1 (0-10)	plastic	clothing	button	1	0.7	
46	N23E16		1 (0-10)	asphalt	construct	shingles	11	42.1	1910-cur
46	N23E16		1 (0-10)	glass	construct	green, window, frag	17	24.6	
46	N23E16		1 (0-10)	metal	fasteners	nails	3	4.8	
46	N23E16		1 (0-10)	metal	fasteners	galvanized nail	4	13.1	
46	N23E16		1 (0-10)	metal	fasteners	screws w/nuts	3	56.1	
46	N23E16		1 (0-10)	ceramic	furnishings	orange flower pot frag	4	6.4	1700-cur
46	N23E16		1 (0-10)	ceramic	furnishings	stoneware, "antiqued" flower pot	1	24.0	
46	N23E16		1 (0-10)	metal	hardware	pipe fitting, threaded	1	200.3	
46	N23E16		1 (0-10)	metal	health/groom	lipstick tube	1	14.8	
46	N23E16		1 (0-10)	ceramic	kitchenware	stoneware, salt glaze/albany slip	1	15.8	1805-1900
46	N23E16		1 (0-10)	glass	lighting	light bulb frag	1	<0.1	
46	N23E16		1 (0-10)	paper	misc	tag "Gift of 7th Day Adventist Church"	1	0.1	
46	N23E16		1 (0-10)	metal	other food	can pieces	2	11.7	
46	N23E16		1 (0-10)	metal	other food	foil	1	2.6	
46	N23E16		1 (0-10)	ceramic	recreation	ww, doll tea cup	1	4.7	1810-cur
46	N23E16		1 (0-10)	ceramic	tableware	ww, undec, frag	4	16.4	1810-cur
46	N23E16		1 (0-10)	ceramic	tableware	porcelain, undec, frag	1	4.8	1825-cur

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
46	N23E16		1 (0-10)	ceramic	tableware	ww, lt green glaze, molded, cup frag	2	3.3	1810-cur
46	N23E16		1 (0-10)	fabric	unknown	mesh fabric	1	1.3	
46	N23E16		1 (0-10)	glass	unknown	lime green, curved, frag	6	4.7	
46	N23E16		1 (0-10)	glass	unknown	dk aqua, flat, frag	4	14.9	
46	N23E16		1 (0-10)	glass	unknown	blue/green, curved, frag	5	18.9	
46	N23E16		1 (0-10)	glass	unknown	milk, curved, frag	1	1.4	
46	N23E16		1 (0-10)	glass	unknown	clear, curved, frag	22	72.4	
46	N23E16		1 (0-10)	plastic	unknown	frag	3	0.3	
46	N23E16		1 (0-10)	plastic	unknown	frag	1	1.7	
46	N23E16		1 (0-10)	metal	vehicle	handle to scraper	1	20.2	
47	N23E16		2 (10-22)	metal	hardware	washer	1	2.9	
47	N23E16		2 (10-22)	glass	health/groom	tiny bottle, threaded	1	14.7	1920-cur
47	N23E16		2 (10-22)	ceramic	kitchenware	stoneware, grey/albany slip	1	43.4	1805-1900
47	N23E16		2 (10-22)	metal	other food	can frags	10	32.2	
47	N23E16		2 (10-22)	metal	other food	foil	2	0.5	
47	N23E16		2 (10-22)	ceramic	tableware	ww, vivid blue "chinese" trans, frag	2	1.8	1820-cur
47	N23E16		2 (10-22)	glass	unknown	amber, curved frag	2	7.4	
47	N23E16		2 (10-22)	glass	unknown	clear, curved, frag	2	16.9	
48	N23E26		4 (30-43)	bone	bone	frag	9	22.6	
48	N23E26		4 (30-43)	glass	construct	lt green, window, frag	16	38.7	
48	N23E26		4 (30-43)	metal	fasteners	nails	>20	1265.7	
48	N23E26		4 (30-43)	metal	fasteners	threaded bolt	1	33.0	
48	N23E26		4 (30-43)	slag	fuel	frag	1	1.1	
48	N23E26		4 (30-43)	ceramic	furnishings	buff flower pot frag	3	47.0	1700-cur
48	N23E26		4 (30-43)	glass	health/groom	frag, clear panel bottle, embossed	1	8.4	1880-1915
48	N23E26		4 (30-43)	ceramic	kitchenware	stoneware, brown salt glaze/albany slip	2	54.4	1805-1900
48	N23E26		4 (30-43)	ceramic	kitchenware	stoneware, albany slip	1	52.7	1805-1900
48	N23E26		4 (30-43)	ceramic	kitchenware	yellowware frag	1	1.2	1840-1930
48	N23E26		4 (30-43)	ceramic	lighting	porcelain insulator "Pat Feb 9 1920"	1	70.1	1920-cur
48	N23E26		4 (30-43)	plastic	misc	ribbon	1	<.1	
48	N23E26		4 (30-43)	ceramic	tableware	ww, undec, frag	9	12.2	1810-cur
48	N23E26		4 (30-43)	ceramic	tableware	porcelain, molded/decal, frag	2	4.9	1900-cur
48	N23E26		4 (30-43)	ceramic	tableware	ww, powder blue floral trans, frag	1	2.2	1820-cur
48	N23E26		4 (30-43)	ceramic	tableware	ww, blue trans, frag	1	0.2	1820-cur
48	N23E26		4 (30-43)	ceramic	tableware	ww, molded, blue wash, frag	1	4.0	1820-cur
48	N23E26		4 (30-43)	ceramic	tableware	ww, silver decal, gold band, molded, frag	1	39.0	1900-cur
48	N23E26		4 (30-43)	glass	unknown	clear, curved, frag	6	35.3	
48	N23E26		4 (30-43)	glass	unknown	solarized, curved, frag	7	28.6	
48	N23E26		4 (30-43)	glass	unknown	clear, flat, frag	2	1.8	
48	N23E26		4 (30-43)	glass	unknown	lt blue, curved, frag	1	10.3	
48	N23E26		4 (30-43)	glass	unknown	cobalt, curved, frag	1	0.7	
48	N23E26		4 (30-43)	glass	unknown	green, flat, frag	2	2.8	
48	N23E26		4 (30-43)	glass	unknown	aqua, curved, frag	6	21.4	
48	N23E26		4 (30-43)	metal	unknown	frag	20	230.5	
49	N23E16		3 (22-32)	ceramic	tableware	ww, undec, frag	1	3.3	1810-cur

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
49	N23E16		3 (22-32)	metal	unknown	can frag, w/waxed paper	5	27.5	
50	N25.5E32.5		6 (37-41)	bone	bone	frag	3	5.0	
50	N25.5E32.5		6 (37-41)	brick	construct	frag	2	23.2	
50	N25.5E32.5		6 (37-41)	metal	construct	window caning	1	1.1	
50	N25.5E32.5		6 (37-41)	metal	fasteners	nails	>20	584.4	
50	N25.5E32.5		6 (37-41)	metal	fasteners	threaded screw	1	4.4	
50	N25.5E32.5		6 (37-41)	clinkers	fuel	clinkers	3	90.9	
50	N25.5E32.5		6 (37-41)	metal	hardware	hook	1	1.8	
50	N25.5E32.5		6 (37-41)	metal	hardware	piece of plug	1	0.8	
50	N25.5E32.5		6 (37-41)	glass	other food	milk, lid liners	6	22.6	1869-cur
50	N25.5E32.5		6 (37-41)	glass	repair	base/partial panel bottle "..wing" "...chine oil'	1	29.3	1865-1915
50	N25.5E32.5		6 (37-41)	ceramic	tableware	porcelain, melted, frag	1	1.2	1825-cur
50	N25.5E32.5		6 (37-41)	ceramic	tableware	ww, undec, frag	2	2.0	1810-cur
50	N25.5E32.5		6 (37-41)	ceramic	tableware	ironstone, undec, frag	1	0.8	1842-cur
50	N25.5E32.5		6 (37-41)	glass	unknown	lt blue, curved, frag	1	0.8	
50	N25.5E32.5		6 (37-41)	glass	unknown	aqua, curved, frag	7	14.1	
50	N25.5E32.5		6 (37-41)	glass	unknown	clear, curved, frag	8	10.9	
50	N25.5E32.5		6 (37-41)	glass	unknown	solarized, curved, frag	1	1.0	
50	N25.5E32.5		6 (37-41)	glass	unknown	amber, curved frag	1	1.6	
50	N25.5E32.5		6 (37-41)	leather	unknown	frag	2	1.5	
50	N25.5E32.5		6 (37-41)	metal	unknown	frag	11	13.4	
50	N25.5E32.5		6 (37-41)	metal	unknown	melted lead	3	56.7	
51	N23E26		5 (43-50)	bone	bone	frag	3	33.8	
51	N23E26		5 (43-50)	ceramic	construct	rough redware pipe frag	1	56.7	1860-cur
51	N23E26		5 (43-50)	metal	fasteners	nails	>20	187.4	
51	N23E26		5 (43-50)	clinkers	fuel	clinkers	3	24.0	
51	N23E26		5 (43-50)	slag	fuel	slag	2	225.4	
51	N23E26		5 (43-50)	metal	other food	can frag	>20	177.4	
51	N23E26		5 (43-50)	ceramic	tableware	ironstone, undec, frag	1	12.0	1842-cur
51	N23E26		5 (43-50)	glass	unknown	amber, curved frag	2	8.2	
51	N23E26		5 (43-50)	glass	unknown	clear, curved, frag	2	3.0	
51	N23E26		5 (43-50)	glass	unknown	lt blue, curved, frag	1	5.1	
51	N23E26		5 (43-50)	glass	unknown	aqua, curved, frag	1	7.7	
51	N23E26		5 (43-50)	glass	unknown	amythest, curved, frag	1	6.3	1880-cur
51	N23E26		5 (43-50)	metal	unknown	frag	7	81.0	
51	N23E26		5 (43-50)	metal	unknown	zinc frag	4	7.0	
51	N23E26		5 (43-50)	metal	unknown	copper wire	1	0.4	
51	N23E26		5 (43-50)	metal	unknown	cylindar	1	1.0	
51	N23E26		5 (43-50)	plastic	unknown	frag	1	0.3	
51	N23E26		5 (43-50)	shell	unknown	frag	1	0.5	
52	N6E23		1 (+10-0)	glass	health/groom	sm rect bottle bottom, frag	1	1.4	
52	N6E23		1 (+10-0)	ceramic	tableware	ww, undec, frag	2	1.0	1810-cur
52	N6E23		1 (+10-0)	glass	unknown	clear, curved, frag	6	5.7	
52	N6E23		1 (+10-0)	glass	unknown	clear, flat, frag	1	0.5	
52	N6E23		1 (+10-0)	metal	unknown	frag	3	6.5	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
52	N6E23		1 (+10-0)	wood	unknown	frag	2	6.3	
53	N1.25E6.5		10 (70-80)	glass	bottle	melted, rim, frag	1	4.2	
53	N1.25E6.5		10 (70-80)	brick	construct	frag	1	44.2	
53	N1.25E6.5		10 (70-80)	plaster	construct	frag	4	25.0	
53	N1.25E6.5		10 (70-80)	wood	construct	siding	10	97.2	
53	N1.25E6.5		10 (70-80)	metal	fasteners	nails	2	59.6	
53	N1.25E6.5		10 (70-80)	metal	hardware	buckle	1	33.5	
53	N1.25E6.5		10 (70-80)	metal	health/groom	spray can	1	170.6	
53	N1.25E6.5		10 (70-80)	metal	recreation	rim and tire	16	291.0	
53	N1.25E6.5		10 (70-80)	glass	unknown	amber, curved frag	1	16.0	
53	N1.25E6.5		10 (70-80)	glass	unknown	clear, curved, frag	2	10.8	
53	N1.25E6.5		10 (70-80)	metal	unknown	lids?doorknobs?	3	80.5	
54	N10.5E24		3 (23-60)	brick	construct	large frag	9	>620.0	
54	N10.5E24		3 (23-60)	ceramic	construct	ugly floor tile	1	1.6	
54	N10.5E24		3 (23-60)	coal	fuel	coal	5	28.1	
54	N10.5E24		3 (23-60)	metal	hardware	heavy wire	1	220.0	
54	N10.5E24		3 (23-60)	glass	health/groom	long blown neck/rim, blue	1	25.5	
54	N10.5E24		3 (23-60)	ceramic	kitchenware	stoneware, clear glaze/salt glaze	1	0.5	1800-cur
54	N10.5E24		3 (23-60)	ceramic	tableware	ww, undec, frag	1	0.3	1810-cur
54	N10.5E24		3 (23-60)	cardboard	unknown	frag	2	0.3	
54	N10.5E24		3 (23-60)	fabric	unknown	felted/knitted	2	1.4	
54	N10.5E24		3 (23-60)	glass	unknown	amber, curved frag	9	16.4	
54	N10.5E24		3 (23-60)	glass	unknown	br green, curved, frag	1	0.3	
54	N10.5E24		3 (23-60)	glass	unknown	olive, curved, frag	1	1.4	
54	N10.5E24		3 (23-60)	glass	unknown	cobalt, curved, frag	1	0.5	
54	N10.5E24		3 (23-60)	glass	unknown	milk, flat, frag	1	0.2	
54	N10.5E24		3 (23-60)	glass	unknown	clear, curved, frag	19	34.1	
54	N10.5E24		3 (23-60)	glass	unknown	blue/green, flat, frag	7	4.1	
54	N10.5E24		3 (23-60)	metal	unknown	frag	10	63.8	
54	N10.5E24		3 (23-60)	paper	unknown	wax paper frag	1	<0.1	
54	N10.5E24		3 (23-60)	plastic	unknown	frag	1	0.1	
54	N10.5E24		3 (23-60)	vinyl	unknown	frag	1	0.4	
54	N10.5E24		3 (23-60)	wood	unknown	frag	5	31.0	
55	N23E16		4 (32-52)	ceramic	construct	redware pipe frag	1	19.3	
55	N23E16		4 (32-52)	linoleum	construct	linoleum floor frag	23	24.2	
55	N23E16		4 (32-52)	metal	construct	insulated wire	1	3.3	
55	N23E16		4 (32-52)	metal	fasteners	nails	1	11.5	
55	N23E16		4 (32-52)	clinkers	fuel	clinkers	1	8.0	
55	N23E16		4 (32-52)	ceramic	furnishings	orange flower pot frag	18	194.4	1700-cur
55	N23E16		4 (32-52)	fabric	hardware	braided rope	1	101.9	
55	N23E16		4 (32-52)	metal	hardware	springs	2	6.3	
55	N23E16		4 (32-52)	ceramic	kitchenware	stoneware, handle, brown, frag	1	20.4	
55	N23E16		4 (32-52)	glass	lighting	light bulb frags	2	0.9	
55	N23E16		4 (32-52)	metal	misc	tape holder	1	21.8	
55	N23E16		4 (32-52)	glass	other food	amber bottle necks, prob bleach	7	320.8	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
55	N23E16		4 (32-52)	glass	other food	amber bottle bottoms, prob bleach	3	71.1	
55	N23E16		4 (32-52)	glass	other food	amber curved frags, bleach and beer	17	175.4	
55	N23E16		4 (32-52)	glass	other food	aqua, fruit jar frags	2	83.5	
55	N23E16		4 (32-52)	glass	other food	milk, lid liners	1	6.1	1869-cur
55	N23E16		4 (32-52)	metal	other food	foil	2	1.8	
55	N23E16		4 (32-52)	metal	other food	can frags	3	177.2	
55	N23E16		4 (32-52)	metal	other food	crown bottle cap	1	4.0	1895-cur
55	N23E16		4 (32-52)	plastic	other food	plastic Dairy Queen spoon frag	1	1.7	
55	N23E16		4 (32-52)	glass	recreation	milk w/blue swirl	1	4.7	
55	N23E16		4 (32-52)	plastic	repair	plastic clorox bottle top	1	4.5	
55	N23E16		4 (32-52)	ceramic	tableware	ironstone, tureen frag, decal	2	196.8	1900-cur
55	N23E16		4 (32-52)	ceramic	tableware	porcelain, undec, frag	2	11.5	1825-cur
55	N23E16		4 (32-52)	glass	unknown	clear, curved, frag	7	96.4	
55	N23E16		4 (32-52)	glass	unknown	cobalt, curved, frag	1	6.1	
55	N23E16		4 (32-52)	glass	unknown	milk, curved, frag	1	9.4	
55	N23E16		4 (32-52)	metal	unknown	frag	22	256.7	
56	N25.5E32.5		7 (41-57)	metal	agriculture	hoe	1	373.3	
56	N25.5E32.5		7 (41-57)	bone	bone	frags	6	23.0	
56	N25.5E32.5		7 (41-57)	bone	bone	frags	29	58.6	
56	N25.5E32.5		7 (41-57)	glass	bottle	clear, square bottle bottom, frag	1	8.4	
56	N25.5E32.5		7 (41-57)	glass	bottle	clear, rectangular bottle bottom, frag	1	3.6	
56	N25.5E32.5		7 (41-57)	glass	bottle	bottom and 1/2 bottle	3	119.1	modern
56	N25.5E32.5		7 (41-57)	plastic	clothing	button	1	0.3	
56	N25.5E32.5		7 (41-57)	shell	clothing	shell button	1	0.3	
56	N25.5E32.5		7 (41-57)	shell	clothing	button	1	0.5	
56	N25.5E32.5		7 (41-57)	brick	construct	frag	9	170.7	
56	N25.5E32.5		7 (41-57)	ceramic	construct	stoneware pipe frag	3	88.7	
56	N25.5E32.5		7 (41-57)	glass	construct	window, frag	>20	201.9	
56	N25.5E32.5		7 (41-57)	glass	construct	window, frag	16	28.9	
56	N25.5E32.5		7 (41-57)	unknown	construct	wall covering	1	0.4	
56	N25.5E32.5		7 (41-57)	metal	fasteners	nails	>20	329.0	
56	N25.5E32.5		7 (41-57)	metal	fasteners	nails	>20	596.1	
56	N25.5E32.5		7 (41-57)	metal	fasteners	screw	1	2.8	
56	N25.5E32.5		7 (41-57)	charcoal	fuel	charcoal	3	1.5	
56	N25.5E32.5		7 (41-57)	clinkers	fuel	clinkers	5	42.1	
56	N25.5E32.5		7 (41-57)	ceramic	furnishings	buff flower pot frag	1	52.7	1700-cur
56	N25.5E32.5		7 (41-57)	metal	hardware	coiled wire	1	56.5	
56	N25.5E32.5		7 (41-57)	metal	hardware	decorative bracket/plant hangers	1	122.2	
56	N25.5E32.5		7 (41-57)	metal	hardware	iron	1	5.5	
56	N25.5E32.5		7 (41-57)	metal	hardware	galvanized pipe joint frag	1	315.4	
56	N25.5E32.5		7 (41-57)	ceramic	kitchenware	yellowware frag	1	0.9	1830-1940
56	N25.5E32.5		7 (41-57)	ceramic	leisure	pipe stem frag	1	1.4	
56	N25.5E32.5		7 (41-57)	glass	lighting	clear, chimney, frag	7	3.0	
56	N25.5E32.5		7 (41-57)	glass	lighting	clear, chimney, frag	2	1.9	
56	N25.5E32.5		7 (41-57)	plastic	lighting	early electric insulator "Jones Bros Holloway	1	15.0	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
56	N25.5E32.5		7 (41-57)	glass	other food	yellow/green, fruit jar frags	22	49.8	
56	N25.5E32.5		7 (41-57)	ceramic	recreation	porcelain, peach, doll part	1	4.1	1825-cur
56	N25.5E32.5		7 (41-57)	soil	sample	soil sample	1	17.7	
56	N25.5E32.5		7 (41-57)	ceramic	tableware	ww, undec, frag	36	107.6	1810-cur
56	N25.5E32.5		7 (41-57)	ceramic	tableware	ironstone, undec, frag	2	9.9	1842-cur
56	N25.5E32.5		7 (41-57)	ceramic	tableware	ww, floral decal, molded rim, frag	1	12.1	1900-cur
56	N25.5E32.5		7 (41-57)	ceramic	tableware	porcelain cup frag, floral decal	1	32.1	1900-cur
56	N25.5E32.5		7 (41-57)	ceramic	tableware	ww, copper lustre band, frag	1	6.7	1790-1930
56	N25.5E32.5		7 (41-57)	ceramic	tableware	ww, red trans, frag	1	0.2	1828-cur
56	N25.5E32.5		7 (41-57)	ceramic	tableware	porcelain, blue, frag	1	1.8	1825-cur
56	N25.5E32.5		7 (41-57)	ceramic	tableware	ww, burned, frag	5	6.4	1810-cur
56	N25.5E32.5		7 (41-57)	ceramic	tableware	ww, blue trans (~Medici) no glaze, frag	1	2.4	1820-cur
56	N25.5E32.5		7 (41-57)	ceramic	unknown	porcelain, undec, frag	1	1.5	1825-cur
56	N25.5E32.5		7 (41-57)	glass	unknown	solarized, curved, frag	4	37.7	
56	N25.5E32.5		7 (41-57)	glass	unknown	olive, curved, frag	4	31.7	
56	N25.5E32.5		7 (41-57)	glass	unknown	amber, curved frag	4	21.6	
56	N25.5E32.5		7 (41-57)	glass	unknown	milk, flat, frag	4	3.1	
56	N25.5E32.5		7 (41-57)	glass	unknown	cobalt, curved, frag	1	3.7	
56	N25.5E32.5		7 (41-57)	glass	unknown	clear, curved, frag	36	103.9	
56	N25.5E32.5		7 (41-57)	glass	unknown	aqua, curved, frags	6	28.8	
56	N25.5E32.5		7 (41-57)	glass	unknown	blue/green, curved, frags	28	79.3	
56	N25.5E32.5		7 (41-57)	glass	unknown	green, flat, frags	1	3.0	
56	N25.5E32.5		7 (41-57)	glass	unknown	milk, curved, frag	1	0.6	
56	N25.5E32.5		7 (41-57)	glass	unknown	clear, curved, frag	9	11.1	
56	N25.5E32.5		7 (41-57)	glass	unknown	blue/green, curved, frags	10	36.5	
56	N25.5E32.5		7 (41-57)	glass	unknown	solarized, curved, frag	6	43.6	
56	N25.5E32.5		7 (41-57)	metal	unknown	frag	>20	194.3	
56	N25.5E32.5		7 (41-57)	metal	unknown	galvanized frags	4	5.6	
56	N25.5E32.5		7 (41-57)	metal	unknown	metal pipe	2	6.2	
56	N25.5E32.5		7 (41-57)	metal	unknown	frags	>20	381.2	
56	N25.5E32.5		7 (41-57)	metal	unknown	galvanized frags	9	26.3	
56	N25.5E32.5		7 (41-57)	metal	unknown	wing nut on frag	1	142.2	
56	N25.5E32.5		7 (41-57)	mica	unknown	frag	1	<0.1	
56	N25.5E32.5		7 (41-57)	mica	unknown	frags	2	1.0	
56	N25.5E32.5		7 (41-57)	shell	unknown	frag	1	1.0	
56	N25.5E32.5		7 (41-57)	wood	unknown	charred frags	2	0.8	
57	N23E26		6 (50-62)	bone	bone	frags	2	0.8	
57	N23E26		6 (50-62)	shell	clothing	shank button	1	2.1	
57	N23E26		6 (50-62)	glass	construct	window, frag	4	6.2	
57	N23E26		6 (50-62)	metal	fasteners	nails	13	48.2	
57	N23E26		6 (50-62)	metal	fasteners	screw	1	3.9	
57	N23E26		6 (50-62)	ceramic	furnishings	buff flower pot frag	3	60.6	1700-cur
57	N23E26		6 (50-62)	ceramic	hardware	redware doorknob frag	1	7.3	
57	N23E26		6 (50-62)	metal	hardware	springs	23	51.1	
57	N23E26		6 (50-62)	metal	hardware	bail handle	1	3.8	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
57	N23E26		6 (50-62)	metal	recreation	1/2 of toy gun	1	197.7	
57	N23E26		6 (50-62)	ceramic	tableware	ww, blue sponge, rim frag	1	1.7	1840-1930
57	N23E26		6 (50-62)	ceramic	tableware	ww, undec, frag	4	8.2	1810-cur
57	N23E26		6 (50-62)	glass	unknown	solarized, curved, frag	1	2.0	
57	N23E26		6 (50-62)	glass	unknown	blue/green, curved, frags	1	8.4	
57	N23E26		6 (50-62)	metal	unknown	frag	27	183.8	
57	N23E26		6 (50-62)	metal	unknown	zinc sheet	1	20.9	
58	N6E29		1 (0-10)	bone	bone	frag	2	4.5	
58	N6E29		1 (0-10)	metal	fasteners	nails	2	2.6	
58	N6E29		1 (0-10)	clinkers	fuel	clinkers	2	12.2	
58	N6E29		1 (0-10)	glass	unknown	clear, curved, frag	2	10.7	
58	N6E29		1 (0-10)	glass	unknown	blue/green, curved, frags	1	2.2	
59	N6E29		2 (10-20)	clinkers	fuel	clinkers	2	15.3	
59	N6E29		2 (10-20)	ceramic	tableware	ww, undec, frag	1	10.5	1810-cur
59	N6E29		2 (10-20)	fossil	unknown	fossil	1	6.7	
60	N6E29		3 (20-30)	bone	bone	frag	1	0.5	
60	N6E29		3 (20-30)	brick	construct	frag	1	1.0	
61	N6E29		4 (30-40)	brick	construct	frag	1	0.1	
61	N6E29		4 (30-40)	metal	fasteners	nails	2	3.0	
61	N6E29		4 (30-40)	clinkers	fuel	clinkers	1	0.4	
62	N6E35		1 (0-10)	mortar	construct	frag	1	13.4	
62	N6E35		1 (0-10)	metal	fasteners	nails	3	8.1	
62	N6E35		1 (0-10)	clinkers	fuel	clinkers	5	7.7	
62	N6E35		1 (0-10)	ceramic	tableware	ww, undec, frag, burned	4	2.1	1810-cur
62	N6E35		1 (0-10)	glass	unknown	clear, curved, frag	2	1.8	
62	N6E35		1 (0-10)	glass	unknown	milk, curved, frag	1	0.3	
63	N6E35		2 (10-20)	brick	construct	frag	1	0.7	
63	N6E35		2 (10-20)	clinkers	fuel	clinkers	4	4.6	
63	N6E35		2 (10-20)	glass	unknown	clear, curved, frag	2	3.3	
63	N6E35		2 (10-20)	glass	unknown	dk olive, curved, frag	1	1.4	
64	N6E35		3 (20-30)	glass	bottle	amber glass neck w/metal screw top	1	20.6	
64	N6E35		3 (20-30)	asphalt	construct	shingles	3	5.7	1910-cur
64	N6E35		3 (20-30)	brick	construct	frag	1	1.4	
64	N6E35		3 (20-30)	concrete	construct	frag	1	40.7	
64	N6E35		3 (20-30)	plaster	construct	frag	1	9.9	
64	N6E35		3 (20-30)	glass	unknown	clear, curved, frag	1	1.5	
64	N6E35		3 (20-30)	glass	unknown	green/blue, curved, frag	1	3.3	
64	N6E35		3 (20-30)	metal	unknown	frag	3	2.2	
65	N6E35		4 (30-40)	bone	bone	frag	4	1.5	
65	N6E35		4 (30-40)	brick	construct	frag	6	16.9	
65	N6E35		4 (30-40)	glass	construct	window, frag	2	1.4	
65	N6E35		4 (30-40)	metal	fasteners	nails	1	0.6	
65	N6E35		4 (30-40)	clinkers	fuel	clinkers	4	2.3	
65	N6E35		4 (30-40)	metal	other food	foil	1	0.2	
65	N6E35		4 (30-40)	ceramic	tableware	ww, undec, frag	1	0.1	1810-cur

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
65	N6E35		4 (30-40)	glass	unknown	amber, curved, frag	1	0.8	
66	N6E35		5 (40-45)	brick	construct	frag	6	59.9	
66	N6E35		5 (40-45)	glass	construct	window, frag	5	4.2	
66	N6E35		5 (40-45)	clinkers	fuel	clinkers	3	7.2	
66	N6E35		5 (40-45)	ceramic	tableware	ww, undec, frag	1	0.8	1810-cur
67	N6E23		2 (0-10)	glass	bottle	blue/green, threaded neck, frag	1	1.6	
67	N6E23		2 (0-10)	graphite	communicate	pencil lead frag	1	<0.1	
67	N6E23		2 (0-10)	brick	construct	frag	1	1.5	
67	N6E23		2 (0-10)	glass	construct	window, frag	7	7.2	
67	N6E23		2 (0-10)	plaster	construct	frag	1	6.0	
67	N6E23		2 (0-10)	glass	lighting	clear, chimney/bulb, frag	1	0.1	
67	N6E23		2 (0-10)	metal	other food	foil	2	<0.1	
67	N6E23		2 (0-10)	ceramic	tableware	ww, undec, frag	2	1.9	1810-cur
67	N6E23		2 (0-10)	glass	unknown	solarized, curved, frag	3	2.9	
67	N6E23		2 (0-10)	glass	unknown	amber, curved, frag	3	2.9	
67	N6E23		2 (0-10)	glass	unknown	lt green, curved, frag	1	0.3	
67	N6E23		2 (0-10)	glass	unknown	clear, curved, frag	13	17.7	
67	N6E23		2 (0-10)	metal	unknown	frag	3	57.3	
67	N6E23		2 (0-10)	plastic	unknown	frag	4	0.3	
67	N6E23		2 (0-10)	wood	unknown	frag	6	2.9	
68	N25.5E32.5		8 (57-70)	bone	bone	frags	6	39.9	
68	N25.5E32.5		8 (57-70)	plastic	clothing	shank button w/fleur-di-lis	1	3.9	
68	N25.5E32.5		8 (57-70)	brick	construct	frags	6	41.1	
68	N25.5E32.5		8 (57-70)	ceramic	construct	stoneware pipe	2	1131.7	
68	N25.5E32.5		8 (57-70)	concrete	construct	frag	4	23.3	
68	N25.5E32.5		8 (57-70)	glass	construct	window, frag	27	62.8	
68	N25.5E32.5		8 (57-70)	metal	fasteners	nails	>20	412.1	
68	N25.5E32.5		8 (57-70)	coal	fuel	coal	4	42.4	
68	N25.5E32.5		8 (57-70)	ceramic	kitchenware	yellowware frag	1	2.4	1830-1940
68	N25.5E32.5		8 (57-70)	glass	lighting	clear, bulb, frag	2	0.7	
68	N25.5E32.5		8 (57-70)	metal	misc	small decorative bit, threaded	1	2.1	
68	N25.5E32.5		8 (57-70)	ceramic	recreation	porcelain, doll frag	1	0.2	1825-cur
68	N25.5E32.5		8 (57-70)	ceramic	tableware	ww, undec, frag	8	11.9	1810-cur
68	N25.5E32.5		8 (57-70)	ceramic	tableware	ironstone, undec, frag	2	2.9	1842-cur
68	N25.5E32.5		8 (57-70)	ceramic	tableware	ironstone, molded/decaled, frag	1	7.1	1900-cur
68	N25.5E32.5		8 (57-70)	ceramic	tableware	porcelain, pink, decal, creamer	6	84.3	1900-cur
68	N25.5E32.5		8 (57-70)	ceramic	unknown	buff, stoneware "Newark"	1	7.9	
68	N25.5E32.5		8 (57-70)	glass	unknown	lt blue, curved, frag	6	27.9	
68	N25.5E32.5		8 (57-70)	glass	unknown	blue/green, curved, frags	2	54.9	
68	N25.5E32.5		8 (57-70)	glass	unknown	aqua, curved, frag	3	7.8	
68	N25.5E32.5		8 (57-70)	glass	unknown	green/blue, curved, frag	17	34.4	
68	N25.5E32.5		8 (57-70)	glass	unknown	clear, curved, frag	20	38.5	
68	N25.5E32.5		8 (57-70)	glass	unknown	cloudy, curved, frag	2	1.9	
68	N25.5E32.5		8 (57-70)	glass	unknown	milk, flat, frag	2	3.8	
68	N25.5E32.5		8 (57-70)	glass	unknown	cobalt, flat, frag	1	2.2	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
68	N25.5E32.5		8 (57-70)	glass	unknown	olive, curved, frags	2	17.3	
68	N25.5E32.5		8 (57-70)	metal	unknown	frag	25	241.8	
68	N25.5E32.5		8 (57-70)	metal	unknown	galvanized frags	6	13.4	
69	N25.5E32.5		9 (70-82)	bone	bone	frags	2	27.6	
69	N25.5E32.5		9 (70-82)	brick	construct	frags	2	8.7	
69	N25.5E32.5		9 (70-82)	ceramic	construct	stoneware pipe frag	1	166.6	
69	N25.5E32.5		9 (70-82)	glass	construct	window, frag	5	7.8	
69	N25.5E32.5		9 (70-82)	plaster	construct	frags	1	9.8	
69	N25.5E32.5		9 (70-82)	metal	fasteners	nails	>20	337.4	
69	N25.5E32.5		9 (70-82)	clinkers	fuel	clinkers	4	25.1	
69	N25.5E32.5		9 (70-82)	ceramic	kitchenware	redware, base frag	1	25.2	
69	N25.5E32.5		9 (70-82)	ceramic	kitchenware	stoneware, yellow/brown, albany slip	1	26.9	1805-1900
69	N25.5E32.5		9 (70-82)	ceramic	tableware	ww, undec, frag	5	17.4	1810-cur
69	N25.5E32.5		9 (70-82)	ceramic	tableware	ww, blue trans, frag	1	2.4	1820-cur
69	N25.5E32.5		9 (70-82)	ceramic	unknown	redware, alkali glaze, frag	1	2.2	
69	N25.5E32.5		9 (70-82)	glass	unknown	cobalt, flat, frag	2	11.7	
69	N25.5E32.5		9 (70-82)	glass	unknown	blue/green, curved, frags	4	6.3	
69	N25.5E32.5		9 (70-82)	glass	unknown	clear, curved, frag	4	9.2	
69	N25.5E32.5		9 (70-82)	glass	unknown	amber, curved, frag	1	2.3	
69	N25.5E32.5		9 (70-82)	metal	unknown	frag	15	117.5	
69	N25.5E32.5		9 (70-82)	metal	unknown	galvanized frags	4	3.9	
69	N25.5E32.5		9 (70-82)	metal	unknown	frags, large	2	>600.0	
70	N23E46		1 (0-10)	brick	construct	frags	4	18.3	
70	N23E46		1 (0-10)	concrete	construct	frags	3	116.4	
70	N23E46		1 (0-10)	glass	construct	window, frag	9	7.5	
70	N23E46		1 (0-10)	plaster	construct	frags	5	17.4	
70	N23E46		1 (0-10)	metal	fasteners	nails	10	57.5	
70	N23E46		1 (0-10)	coal	fuel	coal	4	52.0	
70	N23E46		1 (0-10)	ceramic	furnishings	orange, flower pot frags	3	12.3	1700-cur
70	N23E46		1 (0-10)	glass	recreation	green marble	1	5.0	
70	N23E46		1 (0-10)	metal	recreation	toy wheel	1	11.5	
70	N23E46		1 (0-10)	ceramic	tableware	ww, undec, frag	3	3.0	1810-cur
70	N23E46		1 (0-10)	glass	unknown	milk, molded, frag	1	1.9	
70	N23E46		1 (0-10)	glass	unknown	amber, curved, frag	1	1.7	
70	N23E46		1 (0-10)	glass	unknown	blue/green, curved, frags	2	1.9	
70	N23E46		1 (0-10)	glass	unknown	clear, curved, frag	9	19.9	
70	N23E46		1 (0-10)	metal	unknown	shiny aluminum	1	4.2	
71	N20E35		1 (0-11)	bone	bone	frag	2	2.5	
71	N20E35		1 (0-11)	plastic	clothing	buttons	2	1.1	
71	N20E35		1 (0-11)	brick	construct	frag	1	0.5	
71	N20E35		1 (0-11)	ceramic	construct	stoneware pipe frag	2	13.3	
71	N20E35		1 (0-11)	metal	fasteners	tack	1	2.4	
71	N20E35		1 (0-11)	glass	unknown	amber, curved, frag	1	1.1	
71	N20E35		1 (0-11)	glass	unknown	clear, curved, frag	5	7.5	
71	N20E35		1 (0-11)	glass	unknown	solarized, curved, frag	1	2.7	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
71	N20E35		1 (0-11)	glass	unknown	blue/green, curved, frags	3	8.2	
71	N20E35		1 (0-11)	metal	unknown	frag	1	4.3	
71	N20E35		1 (0-11)	plastic	unknown	frag	5	0.2	
72	N25.5E32.5		10 (82-90'	metal	agriculture	rake	1	67.3	
72	N25.5E32.5		10 (82-90'	brick	construct	frags	1	15.4	
72	N25.5E32.5		10 (82-90'	glass	construct	window, frag	6	13.6	
72	N25.5E32.5		10 (82-90'	mortar	construct	frags	1	8.8	
72	N25.5E32.5		10 (82-90'	metal	fasteners	nails	>20	214.8	
72	N25.5E32.5		10 (82-90'	clinkers	fuel	clinkers	2	14.1	
72	N25.5E32.5		10 (82-90'	coal	fuel	coal	1	3.0	
72	N25.5E32.5		10 (82-90'	ceramic	hardware	redware, alkali glaze, frag	1	4.8	
72	N25.5E32.5		10 (82-90'	glass	lighting	clear, chimney/bulb, frag	1	0.4	
72	N25.5E32.5		10 (82-90'	glass	other food	milk, lid liner, frag	1	1.9	1869-cur
72	N25.5E32.5		10 (82-90'	ceramic	recreation	porcelain, doll frag	1	3.5	1825-cur
72	N25.5E32.5		10 (82-90'	ceramic	tableware	ww, undec, frag	5	10.4	1810-cur
72	N25.5E32.5		10 (82-90'	ceramic	tableware	ironstone, molded, frag	2	19.5	1842-cur
72	N25.5E32.5		10 (82-90'	ceramic	tableware	ironstone, brown/green bands, frag	1	2.5	1880-1940
72	N25.5E32.5		10 (82-90'	glass	unknown	aqua, curved, frag	2	44.4	
72	N25.5E32.5		10 (82-90'	glass	unknown	clear, curved, frag	6	35.5	
72	N25.5E32.5		10 (82-90'	glass	unknown	green/blue, curved, frag	4	10.6	
72	N25.5E32.5		10 (82-90'	metal	unknown	frag	>20	1075.2	
72	N25.5E32.5		10 (82-90'	metal	unknown	zinc sheets	10	72.1	
73	N13.5E11		1 (0-10)	brick	construct	frag	1	1.8	
73	N13.5E11		1 (0-10)	fabric	construct	shag carpet yarns	2	0.2	
73	N13.5E11		1 (0-10)	glass	construct	window, frag	4	4.2	
73	N13.5E11		1 (0-10)	ceramic	tableware	ww, undec, frag	7	10.4	1810-cur
73	N13.5E11		1 (0-10)	ceramic	tableware	ww, flow blue, frag	1	0.6	1844-1890
73	N13.5E11		1 (0-10)	glass	unknown	milk, curved, frag	3	4.6	
73	N13.5E11		1 (0-10)	glass	unknown	clear, curved, frag	2	6.2	
73	N13.5E11		1 (0-10)	glass	unknown	amber, curved, frag	1	1.5	
74	N13.5E11		2 (10-20)	brick	construct	frag	5	6.0	
74	N13.5E11		2 (10-20)	ceramic	construct	stoneware pipe frag	1	4.7	
74	N13.5E11		2 (10-20)	glass	construct	window, frag	8	5.4	
74	N13.5E11		2 (10-20)	m	fasteners	nails	4	15.6	
74	N13.5E11		2 (10-20)	coal	fuel	coal	1	0.7	
74	N13.5E11		2 (10-20)	fabric	hardware	twine	1	1.2	
74	N13.5E11		2 (10-20)	ceramic	tableware	ww, undec, frag	5	3.1	1810-cur
74	N13.5E11		2 (10-20)	glass	unknown	amber, curved, frag	1	2.8	
74	N13.5E11		2 (10-20)	glass	unknown	blue/green, curved, frags	3	2.0	
74	N13.5E11		2 (10-20)	glass	unknown	clear, curved, frag	3	4.8	
75	N23E46		2 (10-20)	concrete	construct	frag	2	46.9	
75	N23E46		2 (10-20)	glass	construct	window, frag	4	8.2	
75	N23E46		2 (10-20)	m	fasteners	nails	23	73.5	
75	N23E46		2 (10-20)	coal	fuel	coal	13	89.4	
75	N23E46		2 (10-20)	ceramic	kitchenware	yellowware, frag	3	9.8	1830-1940

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
75	N23E46		2 (10-20)	ceramic	tableware	ww, undec, frag	6	4.5	1810-cur
75	N23E46		2 (10-20)	chalk	unknown	frag	1	1.3	
75	N23E46		2 (10-20)	glass	unknown	amber, curved, frag	2	8.8	
75	N23E46		2 (10-20)	glass	unknown	clear, curved, frag	6	21.8	
75	N23E46		2 (10-20)	glass	unknown	green/blue, curved, frag	2	3.0	
76	N23E16		5 (52-93)	metal	adornment	copper necklace	2	3.6	
76	N23E16		5 (52-93)	glass	bottle	rect bottom frag	1	42.6	
76	N23E16		5 (52-93)	metal	clothing	buttons	1	3.5	
76	N23E16		5 (52-93)	shell	clothing	buttons	1	0.7	
76	N23E16		5 (52-93)	metal	communicate	pencil sharpener	1	7.7	
76	N23E16		5 (52-93)	metal	construct	"faucetqueen" filter	1	9.4	
76	N23E16		5 (52-93)	ceramic	kitchenware	stoneware, buff/brown	1	18.1	
76	N23E16		5 (52-93)	ceramic	recreation	porcelain, doll frag	1	8.8	1825-cur
76	N23E16		5 (52-93)	metal	recreation	foil candy wrapper	1	0.9	
76	N23E16		5 (52-93)	ceramic	tableware	ironstone, undec, frag	9	45.8	1842-cur
76	N23E16		5 (52-93)	ceramic	tableware	ironstone, decaled, frag	7	56.0	1900-cur
76	N23E16		5 (52-93)	ceramic	tableware	ww, blue trans, frag	1	5.1	1820-cur
76	N23E16		5 (52-93)	ceramic	tableware	porcelain, molded, frag	1	2.1	1825-cur
76	N23E16		5 (52-93)	ceramic	tableware	ww, green glaze, frag	1	2.3	
76	N23E16		5 (52-93)	glass	tableware	"moonstone" depression glass frag	2	66.4	1941-1946
76	N23E16		5 (52-93)	ceramic	unknown	porcelain, hand painted, frag	1	5.9	1825-cur
76	N23E16		5 (52-93)	metal	vehicle	seat belt buckle	1	85.7	
77	N25.5E32.5		11 (57-67)	bone	bone	frag	1	27.7	
77	N25.5E32.5		11 (57-67)	glass	bottle	cobalt, push up bottom, frag	1	73.9	1880-1913
77	N25.5E32.5		11 (57-67)	brick	construct	frag	1	27.7	
77	N25.5E32.5		11 (57-67)	glass	construct	window, frag	3	3.5	
77	N25.5E32.5		11 (57-67)	metal	fasteners	nails	9	111.8	
77	N25.5E32.5		11 (57-67)	charcoal	fuel	frag	5	8.1	
77	N25.5E32.5		11 (57-67)	clinkers	fuel	clinkers	1	33.6	
77	N25.5E32.5		11 (57-67)	glass	health/groom	neck, square bottle	1	10.4	
77	N25.5E32.5		11 (57-67)	metal	other food	can parts	19	265.3	
77	N25.5E32.5		11 (57-67)	ceramic	tableware	ww, lt blue trans, frag	1	4.6	1820-1860
77	N25.5E32.5		11 (57-67)	ceramic	tableware	ww, undec, frag	2	8.0	1810-cur
77	N25.5E32.5		11 (57-67)	ceramic	tableware	ironstone, undec, frag	1	7.0	1842-cur
77	N25.5E32.5		11 (57-67)	glass	unknown	clear, curved, frag	5	39.1	
78	N23E46		3 (20-30)	brick	construct	frags	2	1.9	
78	N23E46		3 (20-30)	glass	construct	window, frag	4	2.2	
78	N23E46		3 (20-30)	plaster	construct	frag	3	26.7	
78	N23E46		3 (20-30)	metal	fasteners	nails	18	30.1	
78	N23E46		3 (20-30)	clinkers	fuel	clinkers	3	4.9	
78	N23E46		3 (20-30)	coal	fuel	coal	2	2.2	
78	N23E46		3 (20-30)	rubber	hardware	hard washer	1	0.8	
78	N23E46		3 (20-30)	ceramic	tableware	ironstone, undec, tea cup frag	2	12.6	1842-cur
78	N23E46		3 (20-30)	ceramic	tableware	ww, undec, frag	1	1.9	1810-cur
78	N23E46		3 (20-30)	glass	unknown	clear, curved, frag	8	11.3	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
78	N23E46		3 (20-30)	plastic	unknown	frag	1	<0.1	
78	N23E46		3 (20-30)	plastic	unknown	frag	1	0.2	
79	N25.5E32.5		12 (68-78)	coal	fuel	frag	1	17.3	
79	N25.5E32.5		12 (68-78)	ceramic	tableware	ww, undec, frag	1	0.3	1810-cur
79	N25.5E32.5		12 (68-78)	metal	tableware	teaspoon	1	19.3	
79	N25.5E32.5		12 (68-78)	glass	unknown	clear, curved, frag	2	25.8	
79	N25.5E32.5		12 (68-78)	glass	unknown	blue/green, curved, frags	3	2.5	
79	N25.5E32.5		12 (68-78)	metal	unknown	frag	5	31.9	
80	N13.5E11		3 (20-30)	glass	construct	window, frag	8	7.9	
80	N13.5E11		3 (20-30)	metal	fasteners	nails	13	52.0	
80	N13.5E11		3 (20-30)	ceramic	tableware	ww, undec, frag	7	6.4	1810-cur
80	N13.5E11		3 (20-30)	ceramic	tableware	ww, blue glaze, frag	1	1.7	1820-cur
80	N13.5E11		3 (20-30)	ceramic	tableware	ww, lt blue trans, frag	1	0.3	1820-1860
80	N13.5E11		3 (20-30)	ceramic	tableware	ww, burned, frag	1	2.6	
80	N13.5E11		3 (20-30)	glass	unknown	milk, curved, frag	4	2.0	
80	N13.5E11		3 (20-30)	glass	unknown	amber, curved, frag	1	2.5	
80	N13.5E11		3 (20-30)	glass	unknown	clear, curved, frag	14	18.5	
80	N13.5E11		3 (20-30)	metal	unknown	foil candy wrapper	1	0.3	
80	N13.5E11		3 (20-30)	plastic	unknown	frag	1	1.5	
81	N13.5E11		4 (30-40)	glass	adornment	blue bead, plain	1	0.6	
81	N13.5E11		4 (30-40)	brick	construct	frags	5	11.4	
81	N13.5E11		4 (30-40)	glass	construct	window, frag	6	11.8	
81	N13.5E11		4 (30-40)	metal	fasteners	nails	19	41.2	
81	N13.5E11		4 (30-40)	clinkers	fuel	clinkers	2	11.6	
81	N13.5E11		4 (30-40)	ceramic	kitchenware	yellowware, frag	1	8.5	1830-1940
81	N13.5E11		4 (30-40)	ceramic	leisure	pipe stem frag	2	2.8	
81	N13.5E11		4 (30-40)	glass	lighting	bulb frag	2	0.7	
81	N13.5E11		4 (30-40)	ceramic	tableware	ww, undec, frag	6	5.9	1810-cur
81	N13.5E11		4 (30-40)	ceramic	tableware	ironstone, undec, frag	2	2.5	1842-cur
81	N13.5E11		4 (30-40)	glass	tableware	amythest, molded, frag	4	16.0	
81	N13.5E11		4 (30-40)	glass	tableware	clear, molded, frag	1	18.1	
81	N13.5E11		4 (30-40)	glass	unknown	milk, flat, frag	1	0.6	
81	N13.5E11		4 (30-40)	glass	unknown	blue/green, curved, frags	2	7.3	
81	N13.5E11		4 (30-40)	glass	unknown	green/blue, curved, frag	5	29.8	
81	N13.5E11		4 (30-40)	glass	unknown	amber, curved, frag	1	6.7	
81	N13.5E11		4 (30-40)	glass	unknown	clear, curved, frag	4	6.6	
82	N32E26.5		1 (0-10)	bone	bone	frag	3	2.8	
82	N32E26.5		1 (0-10)	metal	clothing	grommet	1	0.3	
82	N32E26.5		1 (0-10)	metal	clothing	buttons	1	2.3	
82	N32E26.5		1 (0-10)	metal	clothing	snaps	2	1.8	
82	N32E26.5		1 (0-10)	plastic	communicate	pen barrel	1	3.4	1958-cur
82	N32E26.5		1 (0-10)	glass	construct	window, frag	10	18.5	
82	N32E26.5		1 (0-10)	stone	construct	marble tile	2	6.0	
82	N32E26.5		1 (0-10)	metal	fasteners	nails	>20	136.5	
82	N32E26.5		1 (0-10)	metal	fasteners	bolt	1	48.9	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
82	N32E26.5		1 (0-10)	clinkers	fuel	clinkers	6	14.1	
82	N32E26.5		1 (0-10)	metal	hardware	galvanized washer	1	2.7	
82	N32E26.5		1 (0-10)	metal	hardware	hook w/washer	1	1.9	
82	N32E26.5		1 (0-10)	plastic	health/groom	comb frags	2	7.8	
82	N32E26.5		1 (0-10)	glass	lighting	bulb frag	1	0.1	
82	N32E26.5		1 (0-10)	metal	misc	foil candy wrapper	6	0.6	
82	N32E26.5		1 (0-10)	metal	misc	pull tabs	1	0.2	1962-cur
82	N32E26.5		1 (0-10)	paper	misc	wax paper	6	0.9	
82	N32E26.5		1 (0-10)	plastic	misc	straw	1	<0.1	
82	N32E26.5		1 (0-10)	ceramic	tableware	porcelain, undec, frag	2	3.6	1825-cur
82	N32E26.5		1 (0-10)	ceramic	tableware	porcelain, colored, frag	1	7.1	1825-cur
82	N32E26.5		1 (0-10)	ceramic	tableware	ww, undec, frag	27	46.1	1810-cur
82	N32E26.5		1 (0-10)	ceramic	tableware	ww, lt blue trans, frag	2	6.9	1820-1860
82	N32E26.5		1 (0-10)	fabric	unknown	frags	4	2.5	
82	N32E26.5		1 (0-10)	glass	unknown	milk, curved, frag	3	16.9	
82	N32E26.5		1 (0-10)	glass	unknown	clear, curved, frag	36	90.7	
82	N32E26.5		1 (0-10)	glass	unknown	blue/green, curved, frags	14	31.2	
82	N32E26.5		1 (0-10)	glass	unknown	amber, curved, frag	6	21.9	
82	N32E26.5		1 (0-10)	glass	unknown	olive, curved, frag	1	2.8	
82	N32E26.5		1 (0-10)	glass	unknown	green, curved, frag	1	2.3	
82	N32E26.5		1 (0-10)	glass	unknown	pink, molded, frag	2	8.7	
82	N32E26.5		1 (0-10)	metal	unknown	frag	9	56.4	
82	N32E26.5		1 (0-10)	plastic	unknown	frags	8	7.3	
82	N32E26.5		1 (0-10)	shell	unknown	frag	1	0.1	
83	N20E35		2 (11-20)	bone	bone	frag	2	3.3	
83	N20E35		2 (11-20)	glass	construct	window, frag	11	9.8	
83	N20E35		2 (11-20)	metal	fasteners	nails	31	87.6	
83	N20E35		2 (11-20)	coal	fuel	coal	16	49.8	
83	N20E35		2 (11-20)	ceramic	furnishings	orange flower pot frags	7	33.4	1700-cur
83	N20E35		2 (11-20)	ceramic	hardware	stoneware pipe frags	>20	187.6	
83	N20E35		2 (11-20)	metal	hardware	misc, frag	5	42.8	
83	N20E35		2 (11-20)	glass	lighting	small bulb frag	5	0.8	
83	N20E35		2 (11-20)	glass	misc	tiny vial frag	5	1.8	
83	N20E35		2 (11-20)	metal	misc	foil candy wrapper	1	0.3	
83	N20E35		2 (11-20)	ceramic	recreation	unglazed buff marble	1	3.6	
83	N20E35		2 (11-20)	ceramic	tableware	ww, undec, frag	19	27.7	1810-cur
83	N20E35		2 (11-20)	ceramic	tableware	ww, blue trans, frag	1	1.9	1820-cur
83	N20E35		2 (11-20)	glass	unknown	green/blue, curved, frag	10	13.3	
83	N20E35		2 (11-20)	glass	unknown	blue/green, curved, frags	2	7.0	
83	N20E35		2 (11-20)	glass	unknown	clear, curved, frag	24	28.6	
83	N20E35		2 (11-20)	glass	unknown	green, curved, frag	1	0.9	
84	N23E46		4 (30-39)	bone	bone	frag	1	14.2	
84	N23E46		4 (30-39)	concrete	construct	frag	2	18.9	
84	N23E46		4 (30-39)	metal	fasteners	nails	1	0.8	
84	N23E46		4 (30-39)	clinkers	fuel	clinkers	3	20.2	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
84	N23E46		4 (30-39)	coal	fuel	coal	6	4.6	
84	N23E46		4 (30-39)	glass	unknown	clear, flat, frag	1	0.9	
85	N6E23		3 (10-20)	bone	bone	frag	9	37.7	
85	N6E23		3 (10-20)	asphalt	construct	shingle frags	1	1.1	1910-cur
85	N6E23		3 (10-20)	brick	construct	frag	2	49.0	
85	N6E23		3 (10-20)	glass	construct	window, frag	4	3.4	
85	N6E23		3 (10-20)	mortar	construct	frag	1	9.7	
85	N6E23		3 (10-20)	clinkers	fuel	clinkers	1	15.8	
85	N6E23		3 (10-20)	plastic	furnishings	geranium leaf	1	0.9	
85	N6E23		3 (10-20)	ceramic	kitchenware	yellowware, frag	1	0.9	1830-1940
85	N6E23		3 (10-20)	metal	misc	foil candy wrapper	3	0.5	
85	N6E23		3 (10-20)	vinyl	recreation	record frag	7	5.1	
85	N6E23		3 (10-20)	shell	shell	frag	1	2.2	
85	N6E23		3 (10-20)	ceramic	tableware	ww, undec, frag	2	4.1	1810-cur
85	N6E23		3 (10-20)	ceramic	tableware	ironstone, decal/gilt, frag	1	4.5	1900-cur
85	N6E23		3 (10-20)	glass	unknown	milk, flat, frag	2	3.7	
85	N6E23		3 (10-20)	glass	unknown	thick, lt green, curved, frag	1	28.8	
85	N6E23		3 (10-20)	glass	unknown	clear, curved, frag	10	20.2	
85	N6E23		3 (10-20)	metal	unknown	frag	6	23.5	
85	N6E23		3 (10-20)	plastic	unknown	frag	4	0.5	
85	N6E23		3 (10-20)	plastic	unknown	yellow, frag	1	0.2	
85	N6E23		3 (10-20)	wood	unknown	frag	5	10.5	
85	N6E23		3 (10-20)	glass	vehicle	shatterproof, frag	1	2.0	
86	N6E23		4 (20-30)	bone	bone	frags	7	13.7	
86	N6E23		4 (20-30)	brick	construct	frags	5	58.1	
86	N6E23		4 (20-30)	concrete	construct	frags	2	19.6	
86	N6E23		4 (20-30)	glass	construct	window, frag	10	11.2	
86	N6E23		4 (20-30)	metal	fasteners	nails	23	70.9	
86	N6E23		4 (20-30)	metal	fasteners	screw	1	7.1	
86	N6E23		4 (20-30)	metal	hardware	coat hook	1	56.0	
86	N6E23		4 (20-30)	metal	hardware	spring	1	36.6	
86	N6E23		4 (20-30)	metal	hardware	faucet assembly	1	267.9	
86	N6E23		4 (20-30)	glass	health/groom	solarized, neck/lip, bottle frag	1	13.5	1880-1913
86	N6E23		4 (20-30)	glass	health/groom	neck/lip, bottle frag "Homeop..."	1	8.3	1880-1915
86	N6E23		4 (20-30)	ceramic	kitchenware	yellowwware, green sponge, frag	2	35.8	
86	N6E23		4 (20-30)	ceramic	kitchenware	cream porcelain frag	1	17.2	
86	N6E23		4 (20-30)	ceramic	kitchenware	stoneware frag	1	2.2	
86	N6E23		4 (20-30)	glass	kitchenware	aqua, fruit jar frag	6	39.5	
86	N6E23		4 (20-30)	glass	lighting	clear, chimney frag	3	1.3	
86	N6E23		4 (20-30)	nutshells	misc	nutshells	8	11.6	
86	N6E23		4 (20-30)	plastic	misc	straw frag	1	0.1	
86	N6E23		4 (20-30)	vinyl	recreation	record frags	3	3.9	
86	N6E23		4 (20-30)	ceramic	tableware	ww, undec, frag	9	15.2	
86	N6E23		4 (20-30)	ceramic	tableware	ironstone, undec, frag	1	0.6	
86	N6E23		4 (20-30)	ceramic	tableware	ww, blue trans, frag	1	2.8	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
86	N6E23		4 (20-30)	ceramic	tableware	porcelain, molded/gilded/decaled, frag	1	9.3	
86	N6E23		4 (20-30)	ceramic	tableware	porcelain, undec, frag	3	9.4	
86	N6E23		4 (20-30)	ceramic	tableware	ww, decal, frag	1	0.4	
86	N6E23		4 (20-30)	ceramic	tableware	ww, grey/green stipple trans, frag	1	4.3	
86	N6E23		4 (20-30)	glass	unknown	lt green, curved, frag	4	33.0	
86	N6E23		4 (20-30)	glass	unknown	blue/green, curved, frags	7	9.4	
86	N6E23		4 (20-30)	glass	unknown	clear, curved, frag	>20	163.3	
86	N6E23		4 (20-30)	glass	unknown	milk, flat, frag	2	1.7	
86	N6E23		4 (20-30)	glass	unknown	lt blue milk, curved, frag	4	44.1	
86	N6E23		4 (20-30)	glass	unknown	cobalt, curved, frag	1	1.4	
86	N6E23		4 (20-30)	glass	unknown	solarized, curved, frag	3	8.6	
86	N6E23		4 (20-30)	glass	unknown	amber, curved, frag	5	5.6	
86	N6E23		4 (20-30)	metal	unknown	galvanized frag	7	17.8	
86	N6E23		4 (20-30)	metal	unknown	frag	5	91.8	
86	N6E23		4 (20-30)	mica	unknown	frags	2	<0.1	
86	N6E23		4 (20-30)	paper	unknown	waxed paper frags	12	<0.1	
86	N6E23		4 (20-30)	plastic	unknown	frags	4	1.5	
86	N6E23		4 (20-30)	plastic	unknown	frag	1	0.7	
86	N6E23		4 (20-30)	styrofoam	unknown	frags	2	<0.1	
87	N23E46		5 (39-52)	glass	construct	window, frag	1	0.5	
87	N23E46		5 (39-52)	metal	fasteners	nails	1	1.6	
87	N23E46		5 (39-52)	clinkers	fuel	clinkers	2	9.7	
87	N23E46		5 (39-52)	ceramic	furnishings	orange flower pot frag	1	3.2	1700-cur
88	N25.5E32.5		13 (78-90)	bone	bone	frag	3	14.0	
88	N25.5E32.5		13 (78-90)	ceramic	construct	stoneware pipe frag	12	1172.2	
88	N25.5E32.5		13 (78-90)	glass	construct	window, frag	9	9.5	
88	N25.5E32.5		13 (78-90)	mortar	construct	frag	1	24.1	
88	N25.5E32.5		13 (78-90)	metal	fasteners	nails	11	73.8	
88	N25.5E32.5		13 (78-90)	coal	fuel	frag	2	19.3	
88	N25.5E32.5		13 (78-90)	glass	health/groom	neck/rim bottle frag	1	3.3	1880-1915
88	N25.5E32.5		13 (78-90)	glass	lighting	clear, chimney frag	1	0.4	
88	N25.5E32.5		13 (78-90)	ceramic	tableware	ironstone, undec, frag	2	5.7	1842-cur
88	N25.5E32.5		13 (78-90)	ceramic	tableware	ww, undec, frag	3	4.8	1810-cur
88	N25.5E32.5		13 (78-90)	ceramic	tableware	ww, green trans, frag	1	0.3	1829-cur
88	N25.5E32.5		13 (78-90)	ceramic	tableware	ironstone, undec, frag	1	2.6	1842-cur
88	N25.5E32.5		13 (78-90)	glass	unknown	olive, curved, frag	1	11.9	
88	N25.5E32.5		13 (78-90)	glass	unknown	amber, curved, frag	1	1.3	
88	N25.5E32.5		13 (78-90)	glass	unknown	clear, curved, frag	8	24.0	
88	N25.5E32.5		13 (78-90)	glass	unknown	green/blue, curved, frag	3	5.8	
88	N25.5E32.5		13 (78-90)	metal	unknown	frag	23	191.1	
89	N20E35		3 (20-31)	bone	bone	frag	5	3.9	
89	N20E35		3 (20-31)	glass	construct	window, frag	25	26.3	
89	N20E35		3 (20-31)	metal	fasteners	nails	>20	128.3	
89	N20E35		3 (20-31)	metal	fasteners	screw	1	16.0	
89	N20E35		3 (20-31)	metal	fasteners	bolt/nut	1	14.8	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
89	N20E35		3 (20-31)	ceramic	furnishings	orange flower pot frag	11	24.0	1700-cur
89	N20E35		3 (20-31)	glass	lighting	clear, chimney frag	1	0.8	
89	N20E35		3 (20-31)	glass	lighting	blue, chimney frag	1	0.1	
89	N20E35		3 (20-31)	metal	misc	bell	1	3.5	
89	N20E35		3 (20-31)	ceramic	recreation	porcelain, doll frag	2	1.9	1825-cur
89	N20E35		3 (20-31)	metal	recreation	game piece	1	7.3	
89	N20E35		3 (20-31)	ceramic	tableware	ww, undec, frag	13	22.7	1810-cur
89	N20E35		3 (20-31)	ceramic	tableware	ironstone, undec, frag	6	4.8	1842-cur
89	N20E35		3 (20-31)	ceramic	tableware	ww, undec, blue pooling, frag	2	11.2	1844-1860
89	N20E35		3 (20-31)	ceramic	tableware	ww, blue trans, frag	2	1.7	1820-cur
89	N20E35		3 (20-31)	ceramic	tableware	ww, lt blue trans, multi-side cup frag	1	6.0	1820-1860
89	N20E35		3 (20-31)	glass	unknown	aqua, curved, frag	1	7.3	
89	N20E35		3 (20-31)	glass	unknown	clear, curved, frag	17	31.7	
89	N20E35		3 (20-31)	glass	unknown	green/blue, curved, frag	5	6.3	
89	N20E35		3 (20-31)	glass	unknown	green, curved, frag	1	3.2	
89	N20E35		3 (20-31)	metal	unknown	frag	12	17.5	
90	N13.5E11		5 (40-50)	brick	construct	frag	1	7.2	
90	N13.5E11		5 (40-50)	concrete	construct	frag	6	307.2	
90	N13.5E11		5 (40-50)	glass	construct	window, frag	9	15.5	
90	N13.5E11		5 (40-50)	metal	fasteners	nails	13	35.3	
90	N13.5E11		5 (40-50)	coal	fuel	coal	3	14.3	
90	N13.5E11		5 (40-50)	glass	lighting	clear, chimney frag	1	0.3	
90	N13.5E11		5 (40-50)	ceramic	tableware	ww, undec, frag	6	58.3	1810-cur
90	N13.5E11		5 (40-50)	ceramic	tableware	ww, burned, frag	1	1.6	1810-cur
90	N13.5E11		5 (40-50)	glass	unknown	lt blue, curved, frag	2	3.4	
90	N13.5E11		5 (40-50)	glass	unknown	green/blue, curved, frag	1	1.1	
90	N13.5E11		5 (40-50)	glass	unknown	clear, curved, frag	2	3.6	
90	N13.5E11		5 (40-50)	glass	unknown	yellow, molded, frag	1	11.6	
91	N25.5E32.5		14 (90-10	metal	ammunition	shell, "winchester no 12 new rival"	1	3.6	
91	N25.5E32.5		14 (90-10	bone	bone	frag	2	2.0	
91	N25.5E32.5		14 (90-10	glass	bottle	neck rim, green	1	24.0	1840-1913
91	N25.5E32.5		14 (90-10	brick	construct	frag	10	129.2	
91	N25.5E32.5		14 (90-10	glass	construct	window, frag	19	58.6	
91	N25.5E32.5		14 (90-10	metal	fasteners	nails	13	127.9	
91	N25.5E32.5		14 (90-10	charcoal	fuel	charcoal	6	1.9	
91	N25.5E32.5		14 (90-10	plastic	health/groom	comb frag	1	0.2	
91	N25.5E32.5		14 (90-10	glass	kitchenware	milk, lid liners	2	5.8	1869-cur
91	N25.5E32.5		14 (90-10	glass	kitchenware	blue/green, fruit jar, frag	7	114.0	
91	N25.5E32.5		14 (90-10	glass	kitchenware	aqua, fruit jar frags	>20	654.8	
91	N25.5E32.5		14 (90-10	glass	kitchenware	aqua "mason pat nov 30 1858" frag	3	50.5	
91	N25.5E32.5		14 (90-10	glass	kitchenware	aqua, ll" frag	1	13.8	
91	N25.5E32.5		14 (90-10	glass	kitchenware	aqua "t" frag	1	2.4	
91	N25.5E32.5		14 (90-10	glass	kitchenware	aqua "ball mason" frag	2	226.3	
91	N25.5E32.5		14 (90-10	glass	lighting	clear, chimney frag	2	1.9	
91	N25.5E32.5		14 (90-10	metal	misc	can parts	8	330.1	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
91	N25.5E32.5		14 (90-10	ceramic	tableware	ww, undec, frag	7	9.0	1810-cur
91	N25.5E32.5		14 (90-10	ceramic	tableware	ironstone, undec, frag	3	3.6	1842-cur
91	N25.5E32.5		14 (90-10	ceramic	tableware	ww, blue trans, frag	2	0.9	1820-cur
91	N25.5E32.5		14 (90-10	ceramic	tableware	ww, decal/paint overglaze, frag	1	8.6	1900-cur
91	N25.5E32.5		14 (90-10	ceramic	unknown	redware, alkali glaze	1	7.3	
91	N25.5E32.5		14 (90-10	glass	unknown	dk olive, curved, frag	1	6.0	
91	N25.5E32.5		14 (90-10	glass	unknown	lt blue, curved, frag	4	19.7	
91	N25.5E32.5		14 (90-10	glass	unknown	clear, curved, frag	11	9.8	
91	N25.5E32.5		14 (90-10	metal	unknown	frag	18	118.7	
91	N25.5E32.5		14 (90-10	metal	unknown	galvanized frag	6	7.0	
92	N20E35		4 (31-41)	bone	bone	frag	2	0.7	
92	N20E35		4 (31-41)	brick	construct	frags	4	2.2	
92	N20E35		4 (31-41)	glass	construct	window, frag	3	6.2	
92	N20E35		4 (31-41)	metal	fasteners	nails	6	18.1	
92	N20E35		4 (31-41)	charcoal	fuel	charcoal	1	0.4	
92	N20E35		4 (31-41)	clinkers	fuel	clinkers	7	3.7	
92	N20E35		4 (31-41)	glass	lighting	clear, bulb, frags	1	0.4	
92	N20E35		4 (31-41)	ceramic	tableware	ww, burned, frag	1	1.1	1810-cur
92	N20E35		4 (31-41)	ceramic	tableware	ironstone, undec, frag	6	5.0	1842-cur
92	N20E35		4 (31-41)	ceramic	tableware	ww, lt blue trans, frag	1	0.1	1820-1860
92	N20E35		4 (31-41)	glass	unknown	aqua, curved, frag	2	2.9	
92	N20E35		4 (31-41)	glass	unknown	blue/green, curved, frags	7	3.4	
92	N20E35		4 (31-41)	glass	unknown	yellow, curved, frag	1	0.2	
93	N13.5E11		6A (50-60	brick	construct	frag	1	7.2	
93	N13.5E11		6A (50-60	concrete	construct	frag	2	110.6	
93	N13.5E11		6A (50-60	metal	fasteners	nails	7	29.6	
93	N13.5E11		6A (50-60	ceramic	tableware	yellowware frag, brown/yellow glaze	1	2.6	1840-1910
93	N13.5E11		6A (50-60	glass	unknown	blue/green, flat, frag	2	2.8	
94	N13.5E11		6B (50-60	metal	fasteners	nails	1	5.7	
94	N13.5E11		6B (50-60	glass	unknown	blue/green, flat, frag	1	1.0	
95	N32E26.5		2 (10-20)	metal	adornment	metal and glass bead, earring frag	1	0.5	
95	N32E26.5		2 (10-20)	plastic	adornment	black bead	1	0.9	
95	N32E26.5		2 (10-20)	bone	bone	frags	14	28.7	
95	N32E26.5		2 (10-20)	glass	bottle	neck/rim, frag	1	10.7	1920-cur
95	N32E26.5		2 (10-20)	metal	clothing	snaps	6	6.5	
95	N32E26.5		2 (10-20)	metal	commerce	lincoln penny	1	2.3	
95	N32E26.5		2 (10-20)	brick	construct	frag	1	3.7	
95	N32E26.5		2 (10-20)	glass	construct	window, frag	22	24.7	
95	N32E26.5		2 (10-20)	vinyl	construct	wall covering frag	1	0.2	
95	N32E26.5		2 (10-20)	metal	fasteners	nails	>20	127.2	
95	N32E26.5		2 (10-20)	metal	fasteners	screws	2	19.8	
95	N32E26.5		2 (10-20)	metal	fasteners	galvanized nails	1	1.9	
95	N32E26.5		2 (10-20)	ceramic	furnishings	orange flower pot frag	1	4.5	1700-cur
95	N32E26.5		2 (10-20)	plastic	furnishings	wind chime frags	2	31.3	
95	N32E26.5		2 (10-20)	metal	hardware	coat hook	1	55.1	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
95	N32E26.5		2 (10-20)	ceramic	kitchenware	stoneware, buff/dk brown, frag	1	2.9	
95	N32E26.5		2 (10-20)	glass	lighting	clear, chimney frag	3	0.9	
95	N32E26.5		2 (10-20)	glass	lighting	clear/white bulb frag	1	0.4	
95	N32E26.5		2 (10-20)	metal	misc	fine link chain	3	8.1	
95	N32E26.5		2 (10-20)	metal	misc	foil	1	0.3	
95	N32E26.5		2 (10-20)	metal	misc	pull tabs	3	2.3	1962-cur
95	N32E26.5		2 (10-20)	paper	misc	waxed paper	1	<0.1	
95	N32E26.5		2 (10-20)	plastic	misc	cap	1	0.7	
95	N32E26.5		2 (10-20)	shell	shell	snail shells	9	4.0	
95	N32E26.5		2 (10-20)	ceramic	tableware	ww, undec, frag	10	17.5	1810-cur
95	N32E26.5		2 (10-20)	ceramic	tableware	ww, pink w/silver edge, frag	1	14.7	1880-cur
95	N32E26.5		2 (10-20)	ceramic	tableware	ww, undec, burned, frag	2	7.6	1810-cur
95	N32E26.5		2 (10-20)	ceramic	tableware	porcelain, gold edge, frag	1	0.8	1880-cur
95	N32E26.5		2 (10-20)	ceramic	tableware	porcelain, green edge, rim, frag	1	4.4	1825-cur
95	N32E26.5		2 (10-20)	ceramic	tableware	porcelain, green paint, rim, frag	1	4.0	1825-cur
95	N32E26.5		2 (10-20)	ceramic	tableware	ww, lt blue trans, frag	1	0.6	1820-1860
95	N32E26.5		2 (10-20)	ceramic	tableware	ww, blue sponge, frag	1	0.8	1840-1930
95	N32E26.5		2 (10-20)	ceramic	tableware	ww, flow blue, frag	1	0.8	1844-1860
95	N32E26.5		2 (10-20)	ceramic	tableware	porcelain, decal, frag	1	0.2	1900-cur
95	N32E26.5		2 (10-20)	fabric	unknown	frag	2	2.1	
95	N32E26.5		2 (10-20)	fabric	unknown	yarn	1	0.9	
95	N32E26.5		2 (10-20)	foam	unknown	frag	2	0.3	
95	N32E26.5		2 (10-20)	glass	unknown	milk, curved, frag	2	4.6	
95	N32E26.5		2 (10-20)	glass	unknown	dk olive, curved, frag	1	2.2	
95	N32E26.5		2 (10-20)	glass	unknown	cobalt, curved, frag	1	0.8	
95	N32E26.5		2 (10-20)	glass	unknown	amber, curved, frag	5	6.6	
95	N32E26.5		2 (10-20)	glass	unknown	green, curved, frag	2	5.3	
95	N32E26.5		2 (10-20)	glass	unknown	blue/green, curved, frags	7	12.0	
95	N32E26.5		2 (10-20)	glass	unknown	lt blue, curved, frag	2	73.0	
95	N32E26.5		2 (10-20)	glass	unknown	clear, curved, frag	31	75.1	
95	N32E26.5		2 (10-20)	metal	unknown	frag	28	122.3	
95	N32E26.5		2 (10-20)	plastic	unknown	frag	11	31.1	
95	N32E26.5		2 (10-20)	styrofoam	unknown	frag	1	0.1	
95	N32E26.5		2 (10-20)	unknown	unknown	dk stuff w/ ###	8	1.8	
95	N32E26.5		2 (10-20)	wood	wood	cut, frag	10	84.8	
96	N25.5E32.5		15 (101-1	bone	bone	frag	5	24.6	
96	N25.5E32.5		15 (101-1	glass	bottle	clear, milk bottle, frag	1	219.8	1880-1913
96	N25.5E32.5		15 (101-1	leather	clothing	shoe heel	1	42.1	
96	N25.5E32.5		15 (101-1	glass	communicatio	clear glass inkwell	1	98.6	1880-1913
96	N25.5E32.5		15 (101-1	glass	construct	window frag	7	13.7	
96	N25.5E32.5		15 (101-1	metal	fasteners	nails	12	58.8	
96	N25.5E32.5		15 (101-1	ceramic	kitchenware	stoneware, brown/albany slip	1	3.1	1805-1900
96	N25.5E32.5		15 (101-1	glass	kitchenware	aqua, fruit jar, frag	>20	339.6	
96	N25.5E32.5		15 (101-1	glass	kitchenware	blue/green, fruit jar, frag	15	196.9	
96	N25.5E32.5		15 (101-1	glass	kitchenware	blue/green, fruit jar, "SO", frag	1	10.6	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
96	N25.5E32.5		15 (101-1	glass	kitchenware	aqua, fruit jar, frag	3	234.5	
96	N25.5E32.5		15 (101-1	glass	kitchenware	aqua "Ball Mason", fruit jar, frag	3	242.9	
96	N25.5E32.5		15 (101-1	glass	kitchenware	aqua, "Ball", fruit jar, frag	1	36.7	
96	N25.5E32.5		15 (101-1	glass	kitchenware	aqua, "ll", fruit jar, frag	1	3.7	
96	N25.5E32.5		15 (101-1	glass	lighting	clear, chimney frag	2	0.5	
96	N25.5E32.5		15 (101-1	slate	misc	frag	1	1.8	
96	N25.5E32.5		15 (101-1	ceramic	tableware	ironstone, undec, frag	5	11.5	1842-cur
96	N25.5E32.5		15 (101-1	ceramic	tableware	ww, undec, frag	1	1.8	1810-cur
96	N25.5E32.5		15 (101-1	ceramic	tableware	ww, green stipple, "Dost thou L..", frag	2	7.6	1829-cur
96	N25.5E32.5		15 (101-1	ceramic	tableware	ww, blue sponge, frag	1	1.2	1840-1930
96	N25.5E32.5		15 (101-1	glass	unknown	clear, curved, frag	13	142.3	
96	N25.5E32.5		15 (101-1	glass	unknown	green/blue, embossed, frag	2	9.2	
96	N25.5E32.5		15 (101-1	glass	unknown	lt blue, curved, frag	6	41.2	
96	N25.5E32.5		15 (101-1	glass	unknown	solarized, curved, frag	1	4.2	
96	N25.5E32.5		15 (101-1	glass	unknown	clear, pressed, frag	1	17.4	
96	N25.5E32.5		15 (101-1	metal	unknown	frag	11	213.0	
96	N25.5E32.5		15 (101-1	wood	wood	frag	2	5.1	
97	N32E26.5		3 (20-30)	bone	bone	frag	1	0.6	
97	N32E26.5		3 (20-30)	metal	clothing	snaps	3	3.8	
97	N32E26.5		3 (20-30)	metal	clothing	hook/eye frag	1	0.3	
97	N32E26.5		3 (20-30)	plastic	clothing	button	1	0.2	
97	N32E26.5		3 (20-30)	metal	commerce	lincoln penny	1	3.1	1967
97	N32E26.5		3 (20-30)	graphite/lea	communicatio	pencil lead	1	0.2	
97	N32E26.5		3 (20-30)	paper	communicatio	burned newspaper	>20	1.1	
97	N32E26.5		3 (20-30)	ceramic	construct	small tiles	5	4.9	
97	N32E26.5		3 (20-30)	glass	construct	window, frag	5	8.5	
97	N32E26.5		3 (20-30)	unknown	construct	tile, not ceramic	2	1.7	
97	N32E26.5		3 (20-30)	metal	fasteners	nails	35	107.0	
97	N32E26.5		3 (20-30)	metal	fasteners	galvanized nails	1	2.5	
97	N32E26.5		3 (20-30)	metal	fasteners	screws	1	1.8	
97	N32E26.5		3 (20-30)	charcoal	fuel	charcoal	6	10.7	
97	N32E26.5		3 (20-30)	metal	furnishings	caster wheel	1	163.1	
97	N32E26.5		3 (20-30)	metal	hardware	hinge	1	4.7	
97	N32E26.5		3 (20-30)	ceramic	kitchenware	stoneware frag	1	5.0	
97	N32E26.5		3 (20-30)	glass	lighting	small decorative light bulbs	5	4.4	
97	N32E26.5		3 (20-30)	metal	misc	screw on lids	3	19.7	
97	N32E26.5		3 (20-30)	metal	misc	can tops	2	20.0	
97	N32E26.5		3 (20-30)	metal	misc	foil frags	4	0.6	
97	N32E26.5		3 (20-30)	metal	misc	pull tabs	4	1.6	1962-cur
97	N32E26.5		3 (20-30)	metal	misc	foil frags	1	8.0	
97	N32E26.5		3 (20-30)	plastic	misc	frags, some melted	6	9.5	
97	N32E26.5		3 (20-30)	plastic	misc	frag, some melted	2	1.6	
97	N32E26.5		3 (20-30)	styrofoam	misc	frags	3	0.2	
97	N32E26.5		3 (20-30)	plastic	other food	straw frag	1	0.1	
97	N32E26.5		3 (20-30)	glass	recreation	marble, milk	1	3.4	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
97	N32E26.5		3 (20-30)	metal	recreation	jack plug, eg headphones/speaker	1	3.3	
97	N32E26.5		3 (20-30)	shell	shell	frag	3	7.5	
97	N32E26.5		3 (20-30)	ceramic	tableware	ironstone, undec, frag	5	33.4	1842-cur
97	N32E26.5		3 (20-30)	ceramic	tableware	ww, undec, frag	10	21.4	1810-cur
97	N32E26.5		3 (20-30)	ceramic	tableware	ww, blue glaze, frag	1	0.4	1810-cur
97	N32E26.5		3 (20-30)	glass	tableware	Fire King ceramic plate, decal, frag	1	29.8	1935-1970
97	N32E26.5		3 (20-30)	glass	tableware	frag, milk fire king style, frag	2	5.4	1935-1970
97	N32E26.5		3 (20-30)	fabric	unknown	frags, some melted	7	3.2	
97	N32E26.5		3 (20-30)	glass	unknown	amber, curved, frag	5	5.8	
97	N32E26.5		3 (20-30)	glass	unknown	clear, curved, frag	28	68.2	
97	N32E26.5		3 (20-30)	glass	unknown	amythest, curved, frag	1	4.6	
97	N32E26.5		3 (20-30)	glass	unknown	green/blue, curved, frag	4	11.8	
97	N32E26.5		3 (20-30)	glass	unknown	blue/green, curved, frag	8	8.2	
97	N32E26.5		3 (20-30)	metal	unknown	frag	>20	157.3	
97	N32E26.5		3 (20-30)	misc	unknown	melted glass/ plastic, metal	10	25.7	
97	N32E26.5		3 (20-30)	glass	vehicle	shatterproof, frag	3	7.7	
98	N3.5E36.5		1 (0-43)	bone	bone	frag	1	5.7	
98	N3.5E36.5		1 (0-43)	glass	health/groom	neck/part shoulder, bottle, frag	1	26.3	1880-1913
98	N3.5E36.5		1 (0-43)	ceramic	tableware	ironstone, undec, frag	1	5.3	1842-cur
98	N3.5E36.5		1 (0-43)	metal	unknown	frag	1	45.9	
99	N6E23		5 (40-50)	plaster	construct	frag	1	5.0	
99	N6E23		5 (40-50)	metal	fasteners	nails	3	9.9	
99	N6E23		5 (40-50)	metal	fasteners	screws	1	2.2	
99	N6E23		5 (40-50)	ceramic	furnishings	orange flower pot frag	1	1.7	1700-cur
99	N6E23		5 (40-50)	fabric	furnishings	upholstry cord	1	1.7	
99	N6E23		5 (40-50)	ceramic	tableware	ww, lt blue trans, frag	1	4.0	1820-1860
99	N6E23		5 (40-50)	glass	unknown	clear, curved, frag	5	18.0	
99	N6E23		5 (40-50)	glass	unknown	blue/green, curved, frag	1	4.9	
100	N5.5E23		1 (0-30)	bone	bone	frag	1	0.2	
100	N5.5E23		1 (0-30)	glass	bottle	neck/rim, unthreaded, bottle	1	23.1	1880-1913
100	N5.5E23		1 (0-30)	glass	bottle	heavy bottom, rect, clear, frag	1	19.8	1903-cur
100	N5.5E23		1 (0-30)	brick	construct	frag	2	6.4	
100	N5.5E23		1 (0-30)	concrete	construct	frag	1	11.2	
100	N5.5E23		1 (0-30)	metal	construct	insulated wire	1	1.3	
100	N5.5E23		1 (0-30)	metal	fasteners	nails	4	21.5	
100	N5.5E23		1 (0-30)	clinkers	fuel	clinkers	2	50.4	
100	N5.5E23		1 (0-30)	nutshell	nutshell	frag	1	5.6	
100	N5.5E23		1 (0-30)	ceramic	tableware	ww, undec, frag	3	3.1	1810-cur
100	N5.5E23		1 (0-30)	ceramic	tableware	ww, blue sponge, frag	1	2.2	1840-1930
100	N5.5E23		1 (0-30)	glass	unknown	clear, curved, frag	5	6.6	
100	N5.5E23		1 (0-30)	glass	unknown	green, curved, frag	1	0.8	
100	N5.5E23		1 (0-30)	glass	unknown	aqua, curved, frag	1	2.6	
100	N5.5E23		1 (0-30)	glass	unknown	green/blue, curved, frag	2	2.2	
100	N5.5E23		1 (0-30)	glass	unknown	clear, teardrop shape, frag	1	1.0	
100	N5.5E23		1 (0-30)	plastic	unknown	frag	1	<0.1	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
101	N5.5E23		2 (30-40)	glass	bottle	lt green, curved, bottom frag	1	22.2	1913-cur
101	N5.5E23		2 (30-40)	asphalt	construct	shingle frags	3	1.2	1910-cur
101	N5.5E23		2 (30-40)	brick	construct	frag	3	65.5	
101	N5.5E23		2 (30-40)	metal	fasteners	nails	18	49.8	
101	N5.5E23		2 (30-40)	metal	hardware	ballpine hammer head	1	227.0	
101	N5.5E23		2 (30-40)	ceramic	kitchenware	redware, frag	1	5.0	
101	N5.5E23		2 (30-40)	ceramic	kitchenware	stoneware, albany slip, frag	1	16.1	1805-1900
101	N5.5E23		2 (30-40)	ceramic	kitchenware	stoneware, buff/albany slip, frag	1	13.0	1805-1900
101	N5.5E23		2 (30-40)	glass	lighting	clear, bulb, frag	2	0.3	
101	N5.5E23		2 (30-40)	ceramic	tableware	ironstone, undec, frag	2	7.7	1842-cur
101	N5.5E23		2 (30-40)	ceramic	tableware	ironstone, blue trans frag	1	0.2	1842-cur
101	N5.5E23		2 (30-40)	ceramic	tableware	ironstone, copper flower, frag	1	1.3	1800-1900
101	N5.5E23		2 (30-40)	ceramic	tableware	ww, undec, frag	1	0.5	1810-cur
101	N5.5E23		2 (30-40)	glass	unknown	blue/green, curved, frag	2	3.9	
101	N5.5E23		2 (30-40)	glass	unknown	green/blue, curved, frag	6	11.8	
101	N5.5E23		2 (30-40)	glass	unknown	amber, curved, frag	2	4.2	
101	N5.5E23		2 (30-40)	glass	unknown	lt purple, pressed, frag	3	15.3	
101	N5.5E23		2 (30-40)	glass	unknown	clear, curved, frag	18	47.7	
101	N5.5E23		2 (30-40)	metal	unknown	frag	1	16.7	
101	N5.5E23		2 (30-40)	plastic	unknown	frag	7	0.9	
102	cistern		survey	bone	bone	frag	1	2.9	
102	cistern		survey	glass	bottle	complete, clear, oval	1	149.4	1880-1913
102	cistern		survey	metal	fasteners	nails	1	6.2	
102	cistern		survey	glass	health/groom	bottom/sides of rect bottle, gradated, frag	1	9.7	1913-now
102	cistern		survey	fabric	misc	lace edged fabric frag	2	6.4	
102	cistern		survey	glass	misc	vial	1	9.3	
102	cistern		survey	ceramic	tableware	ironstone, undec, frag	1	12.3	1842-cur
102	cistern		survey	ceramic	tableware	ironstone, cobalt flowers, flow, frag	1	7.2	1844-1860
102	cistern		survey	glass	unknown	cobalt, frag	1	13.1	
103	N13.5E11		7A (60-70	bone	bone	frag	1	1.3	
103	N13.5E11		7A (60-70	metal	fasteners	nails	2	4.3	
103	N13.5E11		7A (60-70	ceramic	tableware	ww, undec, frag	1	5.7	1810-cur
103	N13.5E11		7A (60-70	glass	unknown	blue/green, flat, frag	1	2.3	
104	N6E33		1 (0-40)	bone	bone	frag	2	9.4	
104	N6E33		1 (0-40)	brick	construct	frag	1	1.8	
104	N6E33		1 (0-40)	concrete	construct	frag	1	7.5	
104	N6E33		1 (0-40)	glass	construct	window, frag	3	2.7	
104	N6E33		1 (0-40)	metal	fasteners	nails	1	2.8	
104	N6E33		1 (0-40)	clinkers	fuel	clinkers	3	12.2	
104	N6E33		1 (0-40)	metal	misc	foil	1	0.7	
104	N6E33		1 (0-40)	metal	misc	pull tabs	1	0.4	1962-cur
104	N6E33		1 (0-40)	ceramic	tableware	ww, undec, frag	1	10.3	1810-cur
104	N6E33		1 (0-40)	glass	unknown	green, curved, frag	2	6.7	
104	N6E33		1 (0-40)	glass	unknown	clear, curved, frag	6	9.6	
104	N6E33		1 (0-40)	glass	unknown	milk, flat, frag	1	0.4	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
104	N6E33		1 (0-40)	plastic	unknown	frag	2	0.2	
104	N6E33		1 (0-40)	wood	wood	frag, cut	1	1.5	
105	N32E26.5		4 (30-40)	ceramic	adornment	ww, beads	2	0.9	
105	N32E26.5		4 (30-40)	metal	adornment	necklace clasp	1	2.0	
105	N32E26.5		4 (30-40)	metal	adornment	safety pin w/beads	1	0.7	1980s
105	N32E26.5		4 (30-40)	bone	bone	frags	3	4.2	
105	N32E26.5		4 (30-40)	glass	bottle	clear, bottle, round	1	58.2	1920-cur
105	N32E26.5		4 (30-40)	metal	clothing	snaps	3	6.2	
105	N32E26.5		4 (30-40)	metal	clothing	buttons	2	4.2	
105	N32E26.5		4 (30-40)	metal	clothing	eyelets	3	1.0	
105	N32E26.5		4 (30-40)	metal	commerce	lincoln penny	1	3.0	1981
105	N32E26.5		4 (30-40)	metal	commerce	quarter	1	5.6	1970
105	N32E26.5		4 (30-40)	graphite/lea	communicatio	pencil lead	1	0.2	
105	N32E26.5		4 (30-40)	metal	communicatio	paperclip	1	0.5	
105	N32E26.5		4 (30-40)	ceramic	construct	tile	1	1.9	
105	N32E26.5		4 (30-40)	metal	fasteners	nails	8	21.9	
105	N32E26.5		4 (30-40)	metal	fasteners	screws	2	18.6	
105	N32E26.5		4 (30-40)	ceramic	furnishings	ww, horse statue leg	1	3.6	
105	N32E26.5		4 (30-40)	ceramic	furnishings	orange flower pot frag	1	1.1	1700-cur
105	N32E26.5		4 (30-40)	glass	furnishings	bead on pin, Christmas decoration	1	0.3	
105	N32E26.5		4 (30-40)	metal	hardware	hinge	1	30.0	
105	N32E26.5		4 (30-40)	metal	hardware	corner cover	1	4.0	
105	N32E26.5		4 (30-40)	metal	health/groom	ace bandage fastener	1	0.2	
105	N32E26.5		4 (30-40)	glass	lighting	clear, bulb, frag	1	0.1	
105	N32E26.5		4 (30-40)	glass	lighting	melted, small decorative light bulbs	22	26.8	
105	N32E26.5		4 (30-40)	metal	misc	screw on caps	15	85.5	
105	N32E26.5		4 (30-40)	metal	misc	large battery, duracell	1	137.5	
105	N32E26.5		4 (30-40)	metal	misc	pull tabs	1	0.4	1962-cur
105	N32E26.5		4 (30-40)	metal	misc	can top w/pull tab hole	1	8.5	
105	N32E26.5		4 (30-40)	metal	other food	foil Kraft cheese packet	1	0.9	
105	N32E26.5		4 (30-40)	plastic	other food	mustard packet	1	0.3	
105	N32E26.5		4 (30-40)	glass	recreation	marbles	3	13.6	
105	N32E26.5		4 (30-40)	hair	recreation	doll hair	2	<0.1	
105	N32E26.5		4 (30-40)	wood	recreation	charred toy wheels	2	0.4	
105	N32E26.5		4 (30-40)	metal	repair	clothes hanger frags	14	96.3	
105	N32E26.5		4 (30-40)	metal	repair	clothes pin spring	1	2.4	
105	N32E26.5		4 (30-40)	metal	repair	perforated metal top, from cleaner	1	3.3	
105	N32E26.5		4 (30-40)	ceramic	tableware	ww, undec, burned, frag	1	1.3	1810-cur
105	N32E26.5		4 (30-40)	metal	tableware	serving spoon	1	24.6	
105	N32E26.5		4 (30-40)	fabric	unknown	felt frags	10	3.6	
105	N32E26.5		4 (30-40)	glass	unknown	clear, curved, frag	>20	333.4	
105	N32E26.5		4 (30-40)	glass	unknown	green, curved, frag	2	117.9	
105	N32E26.5		4 (30-40)	glass	unknown	amber, curved, frag	2	14.3	
105	N32E26.5		4 (30-40)	glass	unknown	milk, flat, frag	1	2.2	
105	N32E26.5		4 (30-40)	glass	unknown	clear, shattered, curved, frag	15	90.0	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
105	N32E26.5		4 (30-40)	metal	unknown	frag	23	30.6	
105	N32E26.5		4 (30-40)	plastic	unknown	melted frags	8	13.2	
105	N32E26.5		4 (30-40)	plastic	unknown	frag	1	0.1	
105	N32E26.5		4 (30-40)	plastic	unknown	frag	1	0.1	
106	N25.5E32.5		16(110-12	metal	adornment	pin part of round button badge	1	0.4	
106	N25.5E32.5		16(110-12	bone	bone	frags	2	47.9	
106	N25.5E32.5		16(110-12	leather	clothing	shoe parts	2	0.4	
106	N25.5E32.5		16(110-12	shell	clothing	buttons	1	0.2	
106	N25.5E32.5		16(110-12	glass	construct	window, frag	1	24.0	
106	N25.5E32.5		16(110-12	glass	construct	window, frag	10	15.5	
106	N25.5E32.5		16(110-12	wood	construct	frags	5	50.7	
106	N25.5E32.5		16(110-12	metal	fasteners	nails	7	71.1	
106	N25.5E32.5		16(110-12	clinkers	fuel	clinkers	4	4.1	
106	N25.5E32.5		16(110-12	glass	jar	bottom, "MPCo" "x empire pe 32"	1	335.4	1903-cur
106	N25.5E32.5		16(110-12	glass	kitchenware	clear, fruit jar, "Mason"	4	267.2	1903-cur
106	N25.5E32.5		16(110-12	glass	kitchenware	lt green, fruit jar, "mason, pat...1858"	3	48.5	
106	N25.5E32.5		16(110-12	glass	kitchenware	milk, jar lid liner	2	30.1	
106	N25.5E32.5		16(110-12	glass	kitchenware	lt green, neck/rim, threaded, frag	1	23.4	1920-cur
106	N25.5E32.5		16(110-12	glass	kitchenware	aqua, threaded top,fruit jar, frag	3	83.1	
106	N25.5E32.5		16(110-12	glass	kitchenware	dk green/blue, incl base, fruit jar frags	5	151.0	
106	N25.5E32.5		16(110-12	glass	kitchenware	lt blue, incl neck, fruit jar, frag	18	88.3	
106	N25.5E32.5		16(110-12	glass	kitchenware	dk aqua, fruit jar frag	12	79.7	
106	N25.5E32.5		16(110-12	glass	kitchenware	dk green/blue, incl base, fruit jar frags	21	384.6	1903-cur
106	N25.5E32.5		16(110-12	glass	kitchenware	dk blue/green, pat. 1858, fruit jar frags	8	50.9	
106	N25.5E32.5		16(110-12	glass	kitchenware	dk green fruit jar frags	10	47.4	
106	N25.5E32.5		16(110-12	glass	kitchenware	lt green fruit jar frags	9	152.3	
106	N25.5E32.5		16(110-12	metal	kitchenware	zinc fruit jar lid	2	11.7	
106	N25.5E32.5		16(110-12	glass	lighting	light bulb frags	7	0.2	
106	N25.5E32.5		16(110-12	metal	other food	can frags	17	173.1	
106	N25.5E32.5		16(110-12	metal	repair	safety pin frag	1	0.2	
106	N25.5E32.5		16(110-12	shell	shell	eggshell	1	0.1	
106	N25.5E32.5		16(110-12	shell	shell	eggshell	21	1.1	
106	N25.5E32.5		16(110-12	ceramic	tableware	ww, undec, frag, bowl	1	65.9	1810-cur
106	N25.5E32.5		16(110-12	ceramic	tableware	ww, undec, frag	8	28.9	1810-cur
106	N25.5E32.5		16(110-12	ceramic	tableware	ww, copper lustre band, frag, plate	1	15.8	1790-1930
106	N25.5E32.5		16(110-12	ceramic	tableware	ww, polychrome transfer, frag	4	128.9	1835-cur
106	N25.5E32.5		16(110-12	ceramic	tableware	ww, green floral trans, molded, frag	4	258	1829-cur
106	N25.5E32.5		16(110-12	glass	tableware	clear, pressed candy dish frag	2	23.8	
106	N25.5E32.5		16(110-12	glass	tableware	clear, pressed pitcher frag	3	150.8	
106	N25.5E32.5		16(110-12	glass	tableware	clear, shallow bowl, frag	1	102.7	
106	N25.5E32.5		16(110-12	glass	unknown	clear, flat, frag	3	0.7	
106	N25.5E32.5		16(110-12	glass	unknown	aqua, curved, frag	1	8.7	
106	N25.5E32.5		16(110-12	glass	unknown	cobalt, flat, frag	1	10.9	
106	N25.5E32.5		16(110-12	glass	unknown	amber, flat, frag	1	4.2	
106	N25.5E32.5		16(110-12	glass	unknown	aqua, curved, frag	2	13.6	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
106	N25.5E32.5		16(110-12	glass	unknown	green/blue, curved, frag	2	14.4	
106	N25.5E32.5		16(110-12	glass	unknown	lt blue/green, curved, frag	1	10.2	
106	N25.5E32.5		16(110-12	glass	unknown	clear, curved, frag	1	48.0	
106	N25.5E32.5		16(110-12	glass	unknown	clear, curved, frag	16	79.9	
106	N25.5E32.5		16(110-12	glass	unknown	amber, flat, frag	2	17.5	
106	N25.5E32.5		16(110-12	glass	unknown	milk, curved, frag	1	0.8	
106	N25.5E32.5		16(110-12	glass	unknown	thin irridescent, curved, frag	2	1.6	
106	N25.5E32.5		16(110-12	leather	unknown	frags	7	4.4	
106	N25.5E32.5		16(110-12	metal	unknown	copper wire	1	<0.1	
106	N25.5E32.5		16(110-12	metal	unknown	frag	6	210.7	
106	N25.5E32.5		16(110-12	metal	unknown	melted metal/clinkers	1	50.8	
107	Not assigned								
108	N13.5E11		8A (70-80	stone	misc	fossilized mushroom	1	1.7	
108	N13.5E11		8A (70-80	ceramic	tableware	ww, blue trans, frag	1	0.4	1820-cur
108	N13.5E11		8A (70-80	metal	unknown	frags	3	6.8	
109	N20E33		1 (0-10)	brick	construct	frag	4	3.9	
109	N20E33		1 (0-10)	glass	construct	window, frag	1	0.3	
109	N20E33		1 (0-10)	clinkers	fuel	clinkers	1	10.1	
109	N20E33		1 (0-10)	glass	unknown	clear, curved, frag	1	2.1	
109	N20E33		1 (0-10)	plastic	unknown	frag	1	<0.1	
110	N25.5E32.5		17 (90-10(	graphite/lea(	communicatio	pencil lead	1	1.8	
110	N25.5E32.5		17 (90-10(	glass	construct	window, frag	1	0.6	
110	N25.5E32.5		17 (90-10(	glass	lighting	chimney, frag	5	0.8	
110	N25.5E32.5		17 (90-10(	metal	unknown	frag	19	59.2	
111	N22E42		1 (0-11)	metal	ammunition	small guage shell	1	0.5	
111	N22E42		1 (0-11)	metal	communicatio	pen nib "faber"	1	0.7	
111	N22E42		1 (0-11)	asphalt	construct	shingle frag	16	22.3	1910-cur
111	N22E42		1 (0-11)	brick	construct	frag	8	31.8	
111	N22E42		1 (0-11)	concrete	construct	frag	3	45.8	
111	N22E42		1 (0-11)	glass	construct	window, frag	20	21.3	
111	N22E42		1 (0-11)	plaster	construct	frag	2	1.8	
111	N22E42		1 (0-11)	metal	fasteners	nails	23	72.9	
111	N22E42		1 (0-11)	coal	fuel	coal	2	23.6	
111	N22E42		1 (0-11)	ceramic	furnishings	flower pot frag	2	1.4	1700-cur
111	N22E42		1 (0-11)	metal	furnishings	corner guard	1	4.6	
111	N22E42		1 (0-11)	metal	hardware	grommet	1	0.1	
111	N22E42		1 (0-11)	metal	hardware	ring	1	0.3	
111	N22E42		1 (0-11)	ceramic	tableware	porcelain, undec, frag	1	2.1	1825-cur
111	N22E42		1 (0-11)	ceramic	tableware	porcelain, blue, frag	1	0.3	1825-cur
111	N22E42		1 (0-11)	ceramic	unknown	industrial porcelain frag	2	1.9	
111	N22E42		1 (0-11)	glass	unknown	melted frags	2	12.5	
111	N22E42		1 (0-11)	glass	unknown	clear, curved, frag	5	7.8	
111	N22E42		1 (0-11)	glass	unknown	lt blue, curved, frag	1	1.0	
111	N22E42		1 (0-11)	glass	unknown	green, curved, frag, prob closed vessel	1	1.5	
111	N22E42		1 (0-11)	plastic	unknown	frag	2	0.2	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
111	N22E42		1 (0-11)	plastic	unknown	frag	1	0.3	
112	N13.5E11		9A (80-90	metal	fasteners	nails	3	10.2	
113	N20E33		2 (11-22)	metal	clothing	shank button w/anchor	1	0.9	
113	N20E33		2 (11-22)	charcoal	communicatio	drawing pencil	1	9.6	
113	N20E33		2 (11-22)	stone	communicatio	slate	1	0.2	
113	N20E33		2 (11-22)	brick	construct	frag	2	5.0	
113	N20E33		2 (11-22)	glass	construct	window, frag	12	27.1	
113	N20E33		2 (11-22)	metal	fasteners	nails	12	32.4	
113	N20E33		2 (11-22)	charcoal	fuel	charcoal	2	1.0	
113	N20E33		2 (11-22)	ceramic	recreation	ironstone toy tea cup frag	1	4.8	1842-cur
113	N20E33		2 (11-22)	ceramic	tableware	ww, undec, frag	8	4.6	1810-cur
113	N20E33		2 (11-22)	ceramic	tableware	ww, blue trans, frag	2	3.0	1820-cur
113	N20E33		2 (11-22)	glass	unknown	clear, curved, frag	7	2.5	
113	N20E33		2 (11-22)	glass	unknown	milk, flat, frag	1	0.2	
114	N13.5E11		10A(90-1(	metal	fasteners	nails	6	11.7	
114	N13.5E11		10A(90-1(	ceramic	tableware	ww, blue trans, frag	1	0.7	
114	N13.5E11		10A(90-1(	glass	unknown	cloudy, curved, frag	1	1.1	
115	N22E42		2 (11-22)	plastic	clothing	button	1	0.6	
115	N22E42		2 (11-22)	asphalt	construct	shingle frag	14	39.1	
115	N22E42		2 (11-22)	brick	construct	frag	11	85.3	
115	N22E42		2 (11-22)	glass	construct	window, frag	31	24.3	
115	N22E42		2 (11-22)	metal	construct	window screen frag	1	0.1	
115	N22E42		2 (11-22)	mortar	construct	frag	5	15.8	
115	N22E42		2 (11-22)	metal	fasteners	nails	>20	145.0	
115	N22E42		2 (11-22)	metal	fasteners	galvanized nails	4	16.8	
115	N22E42		2 (11-22)	coal	fuel	coal	6	14.1	
115	N22E42		2 (11-22)	metal	hardware	curtain tie back/coat hook	1	30.6	
115	N22E42		2 (11-22)	glass	kitchenware	milk, lid liner frag	3	26.3	1869-cur
115	N22E42		2 (11-22)	metal	kitchenware	zinc fruit jar lid frag	12	14.2	
115	N22E42		2 (11-22)	ceramic	tableware	ww, undec, frag	4	2.5	1810-cur
115	N22E42		2 (11-22)	ceramic	tableware	ironstone, undec, frag	1	6.7	1842-cur
115	N22E42		2 (11-22)	ceramic	tableware	ww, slate blue glaze, frag	2	0.3	1810-cur
115	N22E42		2 (11-22)	ceramic	tableware	ww, blue trans, frag	1	0.4	1820-cur
115	N22E42		2 (11-22)	ceramic	tableware	porcelain, undec, frag	2	2.5	1825-cur
115	N22E42		2 (11-22)	glass	unknown	milk, curved, frag	2	0.7	
115	N22E42		2 (11-22)	glass	unknown	aqua, curved, frag	2	8.4	
115	N22E42		2 (11-22)	glass	unknown	lt blue, curved, frag	4	13.7	
115	N22E42		2 (11-22)	glass	unknown	gren/blue, curved, frag	10	6.5	
115	N22E42		2 (11-22)	glass	unknown	solarized, curved, frag	3	5.6	
115	N22E42		2 (11-22)	glass	unknown	clear, curved, frag	25	23.1	
115	N22E42		2 (11-22)	metal	unknown	frag	3	53.5	
115	N22E42		2 (11-22)	metal	unknown	galvanized frags	2	1.5	
115	N22E42		2 (11-22)	plastic	unknown	frag	4	<0.1	
116	N32E26.5		5 (40-50)	metal	adornment	chain	1	0.5	
116	N32E26.5		5 (40-50)	metal	adornment	clip on earring	1	9.2	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
116	N32E26.5		5 (40-50)	bone	bone	bone	6	45.0	
116	N32E26.5		5 (40-50)	fabric	clothing	frag	5	30.8	
116	N32E26.5		5 (40-50)	metal	clothing	snaps	3	3.8	
116	N32E26.5		5 (40-50)	metal	commerce	lincoln penny	1	3.1	1975
116	N32E26.5		5 (40-50)	paper	communicatio	newspaper/catalog frags	2	<0.1	
116	N32E26.5		5 (40-50)	glass	construct	window, frag	3	4.3	
116	N32E26.5		5 (40-50)	metal	fasteners	nails	5	10.9	
116	N32E26.5		5 (40-50)	foil	kitchenware	top of Kraft cheese packet	1	0.2	
116	N32E26.5		5 (40-50)	metal	misc	foil	1	9.4	
116	N32E26.5		5 (40-50)	metal	misc	pull tabs	3	1.0	1962-cur
116	N32E26.5		5 (40-50)	metal	misc	large battery	1	123.0	
116	N32E26.5		5 (40-50)	glass	unknown	green, curved, shattered, frag	2	5.0	
116	N32E26.5		5 (40-50)	glass	unknown	clear, curved, frag	4	17.2	
116	N32E26.5		5 (40-50)	metal	unknown	frags	1	2.4	
116	N32E26.5		5 (40-50)	plastic	unknown	frag	1	0.2	
116	N32E26.5		5 (40-50)	unknown	unknown	frag	2	0.3	
117	N25.5E32.5	4	18(100-11	glass	construct	window, frag	1	3.0	
117	N25.5E32.5	4	18(100-11	ceramic	tableware	ww, lt blue trans, frag	1	2.3	1820-1860
117	N25.5E32.5	4	18(100-11	glass	unknown	lt green, curved, frag	1	2.1	
117	N25.5E32.5	4	18(100-11	metal	unknown	frag	2	7.8	
118	N25.5E32.5	4	19(118-12	charcoal	fuel	charcoal	3	5.8	
118	N25.5E32.5	4	19(118-12	glass	kitchenware	blue/green, fruit jar frag	1	87.6	1880-1920
118	N25.5E32.5	4	19(118-12	glass	kitchenware	aqua, fruit jar, "pat 1858" frag	6	149.3	
118	N25.5E32.5	4	19(118-12	glass	tableware	clear, cut glass w/handle, frag	3	137.8	
118	N25.5E32.5	4	19(118-12	glass	unknown	clear, curved, frag	1	9.3	
118	N25.5E32.5	4	19(118-12	metal	unknown	frag	6	137.9	
119	N4.25E37.5		28 cm bd	ceramic	tableware	ww, coffee mug w/handle, frag	3	28.3	1810-cur
120	N22E42		3 (22-30)	bone	bone	frag	7	10.1	
120	N22E42		3 (22-30)	asphalt	construct	shingle frag	1	1.8	1910-cur
120	N22E42		3 (22-30)	brick	construct	frag	2	7.8	
120	N22E42		3 (22-30)	glass	construct	window, frag	9	7.2	
120	N22E42		3 (22-30)	mortar	construct	frag	1	14.7	
120	N22E42		3 (22-30)	metal	fasteners	nails	24	66.1	
120	N22E42		3 (22-30)	coal	fuel	coal	5	13.8	
120	N22E42		3 (22-30)	ceramic	kitchenware	stoneware, albany slip	1	8.4	1805-1900
120	N22E42		3 (22-30)	glass	lighting	clear, chimney, frag	4	1.5	
120	N22E42		3 (22-30)	glass	unknown	lt green, curved, frag	1	4.8	
120	N22E42		3 (22-30)	glass	unknown	blue/green, curved, frag	4	6.2	
120	N22E42		3 (22-30)	glass	unknown	clear, curved, frag	1	1.2	
121	N20E33		3 (22-31)	bone	bone	frag	1	0.9	
121	N20E33		3 (22-31)	metal	clothing	snaps	1	0.8	
121	N20E33		3 (22-31)	brick	construct	frag	1	3.4	
121	N20E33		3 (22-31)	glass	construct	window, frag	4	3.3	
121	N20E33		3 (22-31)	metal	fasteners	nails	6	31.0	
121	N20E33		3 (22-31)	glass	lighting	clear, chimney, frag	1	0.1	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
121	N20E33		3 (22-31)	ceramic	tableware	ironstone, undec, frag	2	1.1	1842-cur
121	N20E33		3 (22-31)	ceramic	tableware	ww, grey stipple, frag	3	1.3	1829-cur
121	N20E33		3 (22-31)	glass	unknown	blue/green, curved, frag	2	4.7	
121	N20E33		3 (22-31)	glass	unknown	clear, curved, frag	2	1.8	
121	N20E33		3 (22-31)	glass	unknown	lt blue, curved, frag	1	1.4	
121	N20E33		3 (22-31)	glass	unknown	green/blue, curved, frag	1	1.2	
122	N32E38		1 (0-10)	bone	bone	frag	1	0.2	
122	N32E38		1 (0-10)	metal	clothing	button	1	0.4	
122	N32E38		1 (0-10)	asphalt	construct	shingle frag	2	0.7	1910-cur
122	N32E38		1 (0-10)	glass	construct	window, frag	13	12.2	
122	N32E38		1 (0-10)	wood	construct	plywood particle board frag	1	8.5	
122	N32E38		1 (0-10)	metal	fasteners	nails	16	29.2	
122	N32E38		1 (0-10)	metal	fasteners	screws	2	6.8	
122	N32E38		1 (0-10)	ceramic	furnishings	flower pot frag	2	2.2	1700-cur
122	N32E38		1 (0-10)	ceramic	kitchenware	stoneware, albany slip	1	40.4	1805-1900
122	N32E38		1 (0-10)	glass	lighting	small decorative bulb frag	1	1.0	
122	N32E38		1 (0-10)	plastic	misc	twistie	1	0.1	
122	N32E38		1 (0-10)	plastic	misc	thin ribbon/easter grass	1	<0.1	
122	N32E38		1 (0-10)	ceramic	tableware	ironstone, undec, frag	5	1.5	1842-cur
122	N32E38		1 (0-10)	ceramic	tableware	ww, undec, frag	5	7.8	1810-cur
122	N32E38		1 (0-10)	ceramic	tableware	ww, molded dots at rim, frag	1	3.0	1810-cur
122	N32E38		1 (0-10)	ceramic	tableware	ww, blue annular, frag	1	0.3	1820-cur
122	N32E38		1 (0-10)	foil	unknown	frags, w/UPC	4	0.3	
122	N32E38		1 (0-10)	glass	unknown	amber, curved, frag	1	2.0	
122	N32E38		1 (0-10)	glass	unknown	lt green, curved, frag	1	0.4	
122	N32E38		1 (0-10)	glass	unknown	clear, curved, frag	4	4.4	
122	N32E38		1 (0-10)	plastic	unknown	frags	11	2.1	
123	N32E38		2 (10-20)	bone	bone	frag	2	4.7	
123	N32E38		2 (10-20)	metal	communicatio	paper clips	1	0.4	
123	N32E38		2 (10-20)	fabric	construct	carpet yarn	1	<0.1	
123	N32E38		2 (10-20)	glass	construct	window, frag	2	2.1	
123	N32E38		2 (10-20)	metal	fasteners	nails	13	34.7	
123	N32E38		2 (10-20)	ceramic	furnishings	flower pot frag	2	7.0	
123	N32E38		2 (10-20)	metal	hardware	1/2 of glass clippers	1	109.1	
123	N32E38		2 (10-20)	ceramic	kitchenware	stoneware, brown glaze, frag	2	19.4	
123	N32E38		2 (10-20)	ceramic	kitchenware	stoneware, clear/albany slip, frag	1	3.0	1805-1900
123	N32E38		2 (10-20)	plastic	misc	candy wrapper	1	0.2	
123	N32E38		2 (10-20)	plastic	misc	frag of flat of plants	1	1.6	
123	N32E38		2 (10-20)	ceramic	tableware	porcelain, undec, frag	1	2.1	1825-cur
123	N32E38		2 (10-20)	ceramic	tableware	ww, undec, frag	4	3.2	1810-cur
123	N32E38		2 (10-20)	ceramic	tableware	ww, undec, frag	1	5.4	1810-cur
123	N32E38		2 (10-20)	foam	unknown	foam w/foil	1	0.2	
123	N32E38		2 (10-20)	glass	unknown	milk, flat, frag	2	1.8	
123	N32E38		2 (10-20)	glass	unknown	amber, curved, frag	1	1.4	
123	N32E38		2 (10-20)	glass	unknown	lt blue, curved, frag	3	8.4	

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
123	N32E38		2 (10-20)	glass	unknown	clear, curved, frag	9	9.4	
123	N32E38		2 (10-20)	plastic	unknown	frag	4	1.9	
124	N22E42		4 (34-44)	glass	construct	window, frag	2	0.8	
124	N22E42		4 (34-44)	metal	fasteners	nails	7	21.3	
124	N22E42		4 (34-44)	coal	fuel	coal	1	0.7	
124	N22E42		4 (34-44)	glass	unknown	lt blue, curved, frag	1	1.0	
124	N22E42		4 (34-44)	glass	unknown	clear, curved, molded, frag	1	1.8	
125	N22E42		5 (44-53)	metal	fasteners	nails	2	4.2	
126	N32E38		3 (20-30)	bone	bone	frag	1	1.1	
126	N32E38		3 (20-30)	glass	bottle	base/sides, green	1	22.1	1810-1870
126	N32E38		3 (20-30)	glass	clothing	milk, shank button	1	0.5	
126	N32E38		3 (20-30)	glass	construct	window, frag	7	9.1	
126	N32E38		3 (20-30)	plaster	construct	frag w/paper, pink paint	1	10.6	
126	N32E38		3 (20-30)	metal	fasteners	nails	6	27.5	
126	N32E38		3 (20-30)	plastic	kitchenware	Raggedy Ann brand ramen noodle packet	1	1.3	
126	N32E38		3 (20-30)	plastic	misc	ribbon/easter grass	1	<0.1	
126	N32E38		3 (20-30)	foil	other food	foil w/coupon for Chiquita juice	1	0.9	9/30/1992
126	N32E38		3 (20-30)	ceramic	tableware	ww, undec, frag	4	7.3	1810-cur
126	N32E38		3 (20-30)	glass	unknown	clear, curved, frag	9	8.4	
126	N32E38		3 (20-30)	glass	unknown	lt blue, curved, frag	1	1.1	
126	N32E38		3 (20-30)	plastic	unknown	frag	2	0.2	
127	N20E29		2 (12-20)	metal	hardware	decorative metal	1	15.3	
127	N20E29		2 (12-20)	foil	misc	foil	2	0.5	
127	N20E29		2 (12-20)	plastic	unknown	frag	3	<0.1	
128	N22E42		6 (34-45)	asphalt	construct	shingle frag	7	1.8	
128	N22E42		6 (34-45)	brick	construct	frag	3	5.5	
128	N22E42		6 (34-45)	glass	construct	window, frag	1	1.6	
128	N22E42		6 (34-45)	metal	fasteners	nails	2	3.3	
128	N22E42		6 (34-45)	fabric	unknown	frag	1	0.1	
128	N22E42		6 (34-45)	plastic	unknown	frag	1	<0.1	
128	N22E42		6 (34-45)	wood	unknown	charred, frag	1	1.4	
129	N20E35		1 (0-27)	asphalt	construct	shingle frag	1	3.6	1910-cur
129	N20E35		1 (0-27)	glass	construct	window, frag	3	9.4	
129	N20E35		1 (0-27)	metal	fasteners	nails	2	1.2	
129	N20E35		1 (0-27)	ceramic	tableware	ww, undec, frag	5	4.0	1810-cur
129	N20E35		1 (0-27)	ceramic	tableware	ww, blue trans, frag	1	0.3	1820-cur
129	N20E35		1 (0-27)	glass	unknown	clear, curved, frag	4	18.5	
129	N20E35		1 (0-27)	metal	unknown	frag	3	50.5	
130	N20E29		3 (20-30)	brick	construct	frag	2	1.0	
130	N20E29		3 (20-30)	glass	construct	window, frag	3	1.9	
130	N20E29		3 (20-30)	metal	fasteners	nails	4	7.2	
130	N20E29		3 (20-30)	charcoal	fuel	charcoal	1	8.3	
130	N20E29		3 (20-30)	ceramic	tableware	ironstone, undec, frag	5	1.9	1842-cur
130	N20E29		3 (20-30)	ceramic	tableware	ironstone, decal, frag	1	1.6	1900-cur
130	N20E29		3 (20-30)	ceramic	tableware	ironstone, undec, burned, frag	1	0.4	1842-cur

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
130	N20E29		3 (20-30)	glass	unknown	olive, curved, frag	1	3.5	
130	N20E29		3 (20-30)	glass	unknown	milk, flat, frag	2	1.1	
130	N20E29		3 (20-30)	glass	unknown	clear, curved, frag	5	6.1	
130	N20E29		3 (20-30)	glass	unknown	green/blue, curved, frag	1	1.6	
130	N20E29		3 (20-30)	glass	unknown	lt blue, curved, frag	1	0.7	
130	N20E29		3 (20-30)	stone	unknown	slate frag	1	0.5	
131	N20E25		2 (27-37)	brick	construct	frag	1	6.5	
131	N20E25		2 (27-37)	glass	construct	window, frag	1	1.8	
131	N20E25		2 (27-37)	metal	fasteners	nails	3	24.7	
131	N20E25		2 (27-37)	glass	kitchenware	milk, lid liner frag	1	0.6	1869-cur
131	N20E25		2 (27-37)	ceramic	tableware	ww, undec, frag	2	2.9	1810-cur
131	N20E25		2 (27-37)	ceramic	tableware	stoneware, albany slip	1	32.1	1805-1900
131	N20E25		2 (27-37)	glass	unknown	clear, curved, frag	1	1.9	
131	N20E25		2 (27-37)	glass	unknown	green/blue, curved, frag	1	2.5	
132	N32E38		4 (32-40)	bone	bone	frag	2	2.4	
132	N32E38		4 (32-40)	brick	construct	frag	1	1.9	
132	N32E38		4 (32-40)	glass	construct	window, frag	1	1.0	
132	N32E38		4 (32-40)	metal	fasteners	nails	1	2.0	
132	N32E38		4 (32-40)	sponge	misc	natural sponge, poss loofah	11	3.4	
132	N32E38		4 (32-40)	glass	unknown	lt blue, curved, frag	1	1.6	
132	N32E38		4 (32-40)	glass	unknown	clear, curved, frag	1	0.8	
132	N32E38		4 (32-40)	metal	unknown	frag	2	234.9	
132	N32E38		4 (32-40)	plastic	unknown	large sheet	1	1.8	
133	N20E29		4 (30-42)	bone	bone	frag	1	0.2	
133	N20E29		4 (30-42)	brick	construct	frag	1	0.5	
133	N20E29		4 (30-42)	glass	construct	window, frag	1	0.4	
133	N20E29		4 (30-42)	metal	fasteners	nails	9	20.1	
133	N20E29		4 (30-42)	coal	fuel	coal	3	2.8	
133	N20E29		4 (30-42)	glass	lighting	clear, chimney/bulb, frag	1	<0.1	
133	N20E29		4 (30-42)	glass	unknown	solarized, curved, frag	1	2.5	
134	N1.5E23		1 (0-20)	metal	commerce	penny, wheat back	1	3.0	
134	N1.5E23		1 (0-20)	brick	construct	frag	2	30.8	
134	N1.5E23		1 (0-20)	glass	construct	window, frag	1	0.9	
134	N1.5E23		1 (0-20)	plaster	construct	frag	2	3.3	
134	N1.5E23		1 (0-20)	metal	fasteners	nails	2	7.1	
134	N1.5E23		1 (0-20)	ceramic	tableware	porcelain, decal, frag	1	3.7	1900-cur
134	N1.5E23		1 (0-20)	ceramic	tableware	ww, undec, frag	2	3.3	1810-cur
134	N1.5E23		1 (0-20)	cardboard	unknown	frag	1	0.3	
134	N1.5E23		1 (0-20)	metal	unknown	frag	4	16.7	
134	N1.5E23		1 (0-20)	plastic	unknown	Raggedy Ann brand ramen noodle packet	3	0.2	
135	N25.5E32.5	4	128cm bd	glass	kitchenware	aqua, fruit jar "1858", frag	1	22.8	
135	N25.5E32.5	4	128cm bd	ceramic	tableware	irtonstone, molded pitcher handle frag	1	114.8	1842-cur
135	N25.5E32.5	4	128cm bd	metal	tableware	salt/pepper shaker, * pattern	1	13.2	
136	N25.5E32.5	4	120cm bd	bone	bone	frag	2	23.9	
136	N25.5E32.5	4	120cm bd	glass	bottle	solarized, neck, frag	1	4.9	1880-1913

Serial	Unit	Fea	Level	Material	Function	Description	Count	Weight	Date
136	N25.5E32.5	4	120cm bd	ceramic	tableware	ironstone, molded, pitcher spout	1	85.9	1842-cur
136	N25.5E32.5	4	120cm bd	ceramic	tableware	ww, undec, frag	1	19.2	1810-cur
136	N25.5E32.5	4	120cm bd	ceramic	tableware	ww, gold/decal, saucer, frag	5	70.6	1900-cur
136	N25.5E32.5	4	120cm bd	ceramic	tableware	ww, floral decal, cup, frag	1	6.1	1900-cur
136	N25.5E32.5	4	120cm bd	ceramic	tableware	ww, polychrom trans, saucer, frag	1	80.9	1835-cur
136	N25.5E32.5	4	120cm bd	glass	tableware	clear, pressed, bowl, frag	1	12.0	
136	N25.5E32.5	4	120cm bd	glass	unknown	aqua, curved, frag	4	182.1	
136	N25.5E32.5	4	120cm bd	glass	unknown	green, curved, frag	1	2.6	
136	N25.5E32.5	4	120cm bd	glass	unknown	dk blue/green, curved, frag	3	31.7	
136	N25.5E32.5	4	120cm bd	glass	unknown	green/blue, curved, frag	5	10.0	
136	N25.5E32.5	4	120cm bd	glass	unknown	clear, curved, frag	1	5.5	
136	N25.5E32.5	4	120cm bd	glass	unknown	lt blue/green, curved, frag	1	8.1	
136	N25.5E32.5	4	120cm bd	leather	unknown	shoe frag, machine sewn	2	5.2	
136	N25.5E32.5	4	120cm bd	metal	unknown	frag	2	8.9	
136	N25.5E32.5	4	120cm bd	wood	unknown	frag	7	1.0	

Total Number of Objects	>10,029
Total Weight of Objects	>63,907.7