

幸运的第三大街

The Luck of Third Street

Historical Archaeology Data Recovery Report for the Caltrans District 8 San Bernardino Headquarters Demolition Project (P36-010399, CA-SBR-10399H; P36-010400, CA-SBR-10400H; P36-010820, CA-SBR-10820H)

Old District 8 Office, 247 W. Third Street, San Bernardino, EA 08-482900

Prepared for:

David Bricker, Environmental Cultural Studies Chief
California Department of Transportation District 8
464 W. 4th Street, San Bernardino, California 92402

Prepared by:

Julia G. Costello, Ph.D., Principal Investigator
Foothill Resources, Ltd., P.O. Box 288, Mokelumne Hill, California 95245
and
Kevin Hallaran, M.A., and Keith Warren
Applied EarthWorks, Inc., 3292 E. Florida Ave., Hemet, California 92544

With contributions by:

Margie Akin, Ph.D.; Sabrina Carli; Deborah C. Cook; Pamela R. Easter;
Joan George; Sherri M. Gust, M.S.; Laramie Hickey-Friedman, M.S.;
Virginia Popper, Ph.D.; Karl J. Reinhard; Susan J. Smith, M.S.

USGS 7.5' San Bernardino South (1967, photorevised 1980): Township 1S, Range 4W
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macrobotanical remains, historical fauna, historical parasites

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SUMMARY OF FINDINGS

This report has been prepared for the California Department of Transportation to document cultural resource mitigation measures taken related to the demolition of the former District 8 Headquarters building in downtown San Bernardino. The project area encompasses approximately 7.7 acres and is bordered by Second Street to the south, Third Street to the north, Arrowhead Avenue on the west, and Warm Creek and Meadowbrook Park on the east.

The purpose of the investigations was to achieve compliance with the California Environmental Quality Act. A Phase II testing program identified six locations containing archaeological features potentially important under criteria for eligibility to the California Register of Historical Resources. A data recovery program was designed to retrieve the information from these remains prior to their destruction. This report presents the results of implementing that program. It includes information obtained during extensive documentary research, archaeological excavations, artifact identification and analysis, consultation with cultural communities, public outreach, and specialists' studies.

The general strategy for the placement of excavation areas was based on the results of the Phase II testing and the further likelihood of encountering intact archaeological deposits within the historical lot boundaries. The research design identified types of archaeological remains that were likely to contain important information, such as privies, refuse pits, cooking features, and sheet refuse (midden). As the daily activities that produce such features tend to occur a discrete distance from the main structures, principally in the rear lots, the strategy for feature discovery focused on those areas as well as areas that demonstrated archaeological potential during Phase II testing. Eight Phase III excavation areas, representing nearly 1.0 percent of the project area, were selectively stripped of overburden using two backhoes. Excavation area boundaries were refined through ongoing evaluations of stratigraphy, integrity, and resource potential.

At the end of the 2001 excavations, 60 features had been identified. Of these, 21 were determined to be legally important and were excavated in their entirety (see Table A). Excavation of important features was done by hand following natural soil layers, and soil was passed through 1/4-inch mesh screen. Standard stratigraphic recording methods were used, the relationships of soil layers and interfaces were charted on a matrix, and the resulting associations were identified according to activities and temporal "phases." Artifact assemblages were analyzed according to these associations. Four of the important features are related to the operations of the prominent Starke's Hotel between about 1885 and 1897. The remaining 17 features are associated with San Bernardino's Third Street Chinatown spanning the years between about 1880 and the 1930s. A list of important features that were excavated and analyzed as part of this study are presented in the following table.

Analysis of the recovered collections followed standard procedures for historical site archaeology, including functional classifications, determination of minimum numbers of items, and cross-matching between excavated strata. Specialists studied the recovered fauna, pollen, and macrofloral remains; parasites were identified in privy deposits; and fragile items were stabilized by conservators. The horde of more than 1,300 Asian coins from Privy 1035—the largest ever recovered from an excavation in North America—also was analyzed by a specialist.

Table A
Summary of Excavated Archaeological Features by Type and Association

EA ^a	Feature No.	Type	Association/Comments	Feature Construction	Artifact Fill/Abandonment	MNI ^a
Rancho Period Deposits						
8-1	1047	Bone concentration	Silted-over butchering remains	1840s	—	—
8-1	1048	Bone concentration	Silted-over butchering remains	1840s	—	—
8-1	1049	Bone concentration	Silted-over butchering remains	1840s	—	—
8-1	1050	Bone concentration	Silted-over butchering remains	1840s	—	—
Starke's Hotel/Bradford House Deposits						
5-1	1009	Privy	Starke's Hotel/Bradford House	1888–1894	1897	301
5-3	1022	Pit	Hotel refuse	1897	1897	222
5-1	1023	Privy	Hotel refuse	By 1885	1894	364
5-1	1025	Privy	Domestic refuse; Anglo hotel employees (?)	By 1885	1897	603
Chinatown						
Pits and Privies Filled with Artifacts						
7-1	1032	Pit	Mostly whole bottles	1920s	1920s	125
7-1	1035	Privy	Replaced Privy 1058, filled with building contents during demolition	ca. 1910	1944	6,801
7-1	1056	Privy	Earliest privy	1880s	ca. 1900	312
7-1	1058	Privy	Replaced Privy 1056	1900	ca. 1910	1,745
Sheet Refuse and Artifact-filled Drains						
7-1	1002	Drain	Wood-lined; filled with Sheet Refuse 1057	1880s	1910	480
7-1	1057	Sheet Refuse	Backyard midden, filled Drain 1002	1880s	1930s	403
7-1	1031	Drain	Contemporary with Drain 1002	1880s	1910	309
7-1	1060	Drain	Replaced by Drain 1002	ca. 1800	1870s	9
Cooking Structures						
7-1	1001	Roasting Oven	Stone floor; backyard	1880s	ca. 1930	49
7-1	1033	Cooking Feature	Backyard wok stove?	1880s	ca. 1900	45
8-1	1036	Roasting Oven	Brick; south of temple; replaced Roasting Oven 1001	ca. 1930	By 1944	44
Other Features						
8-1	1003	Building Footing	Wong Nim Store and Temple	By 1890	1944	—
8-1	1005	Dog Burial	Backyard; near fence line	By 1942	—	1
Total						11,813

a - EA = excavation area.

b - MNI = minimum number of items.

Interpretation of the recovered data was guided by topics posed in the research design, but ultimately focused on aspects of archaeology and history specific to this site. Deposits associated with Starke's Hotel in the 1890s revealed backyard activities of the hotel staff as well as the types of meals served from the kitchen. Interpretation of life in San Bernardino's Chinatown included topics of demographics, the Kuan Yin Temple, ceramic serving and storage vessels, pig roasting ovens, and foodways. A remarkably large number of artifacts were related to traditional gambling, and several sections of the report address this topic. Finally, the demise of the Chinese community is documented in historical and archaeological sources, providing closure to this important period of San Bernardino's past.

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For the success of the entire project, we are greatly indebted to Caltrans District 8 Archaeologist Dr. Karen K. Swope, who recognized the importance of the historic remains on the Headquarters Demolition Project block early and adeptly guided the research through its many bureaucratic stages. Her genuine interest in, and substantial knowledge of, San Bernardino's past facilitated our work immeasurably. Other Caltrans archaeologists who provided on-site support were Steve Hammond and Richard Olson. The talents of Caltrans' Public Information Officer Holly Kress also made our outreach to the press and public a great success.

The hard-working field crew is particularly acknowledged for their good-natured perseverance through heat, wind, and smog as well as for their gracious hospitality to our public visitors and the press. They are individually named in Chapter 1. Also critical to the success of the field work was the extensive and creative earthmoving carried out by Ray Woodruff and Randy Clayton, the talented heavy-machine operators of Eagle Construction in Hemet. Our thanks also go to Dwayne Anthony, who generously shared his knowledge of San Bernardino bottles.

Assistance with the documentary research was critical to the success of the project. Thanks to Chris Shovey and the other volunteers from the California Room, Norman Feldheim Central Public Library, San Bernardino; archivists Richard Hanks, Nathan Gonzales, Don McCue, and former archivist Christie Hammond at the A. K. Smiley Public Library in Redlands; Nick Cataldo of the San Bernardino Pioneer and Historical Society, especially for allowing the team after-hours access to inspect the Kuan Yin statue; Michele Nielsen, archivist at the San Bernardino County Museum for hours of fetching historical photographs; Dr. H. Vincent Moses and Marvin Powell of the Riverside Municipal Museum; as always, Dace Taube, archivist/librarian at the University of Southern California, Doheny Library, Special Collections, for allowing leisurely perusal of the TICOR Collection of historical photographs; Sarah Fitzgerald and Sheryl Davis of the Special Collections Library, Tomás Rivera Library, University of California, Riverside, for helping navigate the Harry W. Lawton Chinatown Research Collection. The staff at the Huntington Library, San Marino, was, as always, enormously hospitable and accommodating, and Bill Franks' knowledge of California history made our short visit productive.

Although he played no direct role in the current project, Harry W. Lawton, a historian associated with several departments at University of California, Riverside, deserves special recognition for his pioneering research into the San Bernardino Valley's Chinese heritage. Mr. Lawton first explored the valley's local Chinese communities as a journalist in a series of articles that appeared in the *Riverside Daily Enterprise* in 1959. Three decades later, as principal historian, he directed a research team charged with documenting the history of Riverside's Chinatown when historical archaeologists excavated that site in 1985. He also was a major contributor to

Wong Ho Leun: An American Chinatown (Great Basin Foundation 1987), the two-volume report generated by those excavations. That report, and most especially Mr. Lawton's contributions to it, have been instrumental in our discovery and understanding of the history of San Bernardino's early Chinese population.

This report simply would not have been possible without the assistance, expertise, and enthusiasm of the staff of the San Bernardino County Archives. Throughout the far-ranging research subjects addressed in this report—covering court proceedings, probates, tax records, deeds, leases, public works, censuses, historical maps and photographs, biographies, and myriad others—Anne Brandt, Kristina Lindgren, and James Hofer were always willing and eager to share the documents in their charge. In nearly 20 years of uncovering the minutiae of southern California history for reports such as these, the principal historian has never encountered a more knowledgeable, cooperative, organized, and genuinely eager-to-please team of professionals. This report is substantially enhanced by their efforts.

Finally, the interest and involvement of the Chinese American community was vital to our research. Suellen Cheng of the Chinese American Museum visited the site during the test excavations, provided critical guidance throughout the project, and facilitated contact with the Chinese Historical Society of Southern California (CHSSC). Eugene Moy, Past President and current board member of the CHSSC, supplied enthusiastic support for our studies, and CHSSC President Irvin R. Lai shared personal knowledge of historical Chinese life in California. Linda Po-Yin Chong, then Office Manager of CHSSC, offered assistance in our meetings and critical comments on an early draft of interview notes. Lin Wang of Far Western Anthropological Research Group, Inc. generously volunteered to translate the gravestone markings into English and the report headings into Chinese characters. To all these individuals who helped guide us with sensitivity through their ancestors' history, we are profoundly grateful.

J. C., K. H., K. W.

引言

1 INTRODUCTION

1.1 THE HEADQUARTERS PROJECT

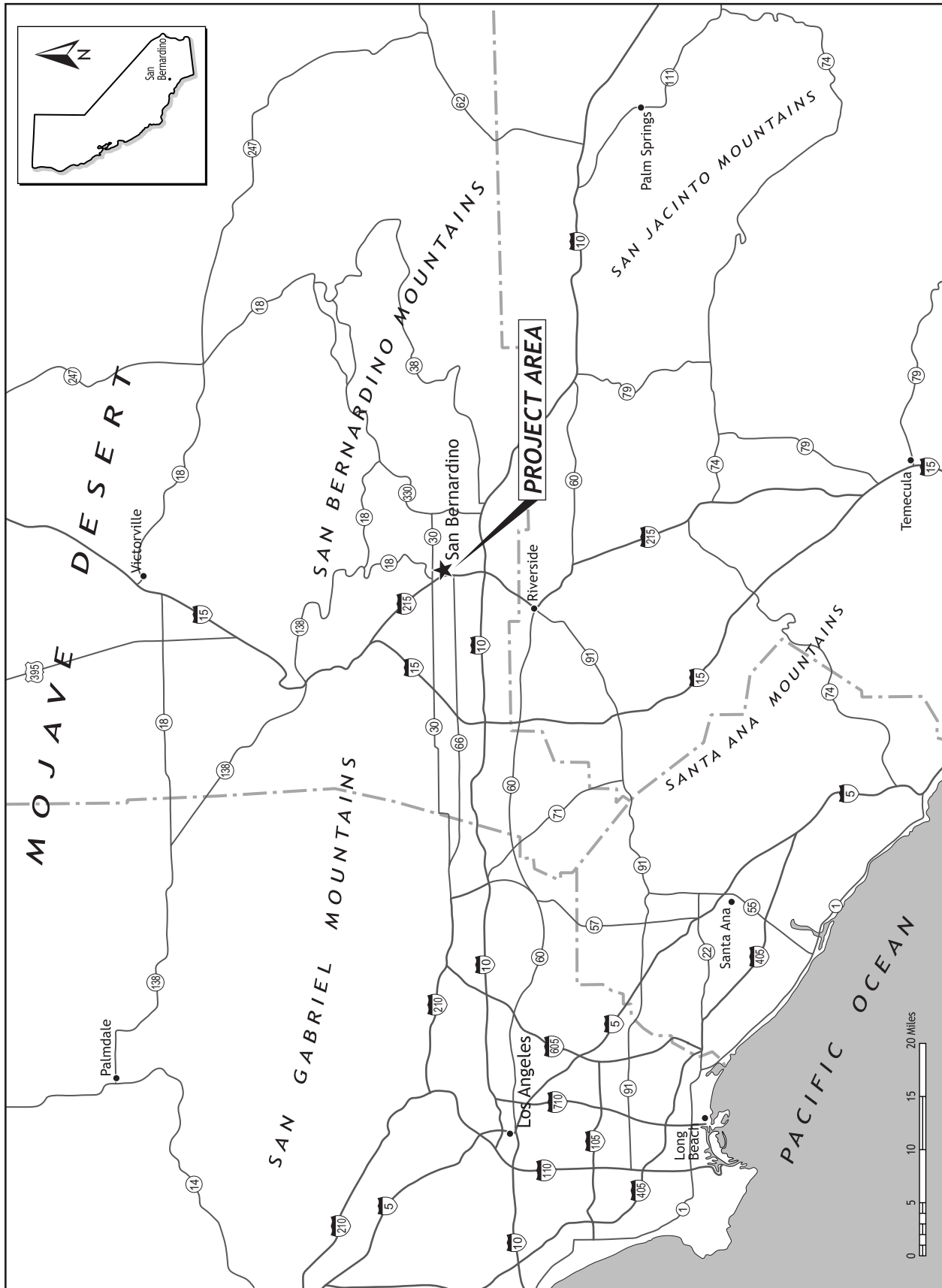
This report on archaeological findings has been prepared for District 8 of the California Department of Transportation (Caltrans) to document mitigation measures taken related to the demolition of the former District 8 Headquarters building in downtown San Bernardino (Figure 1-1). The purpose of the investigations reported herein was to achieve compliance with the California Environmental Quality Act (CEQA). The Phase II testing program (Costello et al. 2000) identified six locations that contained archaeological features potentially eligible to the California Register of Historical Resources (CRHR) (State of California 1993). Based on those findings, a data recovery program was designed to retrieve the information from these remains prior to their destruction. Two archaeological sites were identified: the northern portion of the block, including the location of Starke's Hotel and a portion of Chinatown (P36-010399, CA-SBR-10399H) and the location of a house and outbuildings in the southern portion of the block (P36-010400, CA-SBR-10400H).

This report presents the results of those efforts, which include documentary research, archaeological excavations, artifact identification and analysis, specialists' studies, and interpretations of the findings.

1.2 LOCATION AND SETTING

Caltrans proposes demolition of its former District 8 Headquarters facilities at 247 West Third street in the City of San Bernardino. Included in the project are the demolition of buildings and the removal of paved parking areas. The project area, depicted on the San Bernardino South USGS 7.5-minute quadrangle map, lies in Township 1 South, Range 4 West, San Bernardino Baseline and Meridian (Figure 1-2). It encompasses approximately 7.7 acres and is bordered by Second Street to the south, Third Street to the north, Arrowhead Avenue on the west, Meadowbrook Park on the east, and Warm Creek on the southeast (Figures 1-3, 1-4, and 1-5).

The project area lies within the San Bernardino Valley on stream terrace surfaces inset into the Cajon Creek fan, which extends from the southern front of the San Bernardino Mountains. Warm Creek, fed by springs and several upland drainages, forms the southeastern boundary of the project area. Most of the project area lies on a low terrace overlooking the modern channel of Warm Creek, while the northwestern edge of the project area lies on an adjacent and slightly higher terrace surface. The climate is Mediterranean with hot summers and an annual rainfall of about 10 inches. In the nineteenth century, the surrounding landscape was characterized by shrub and grasslands, while a riparian habitat thrived along Warm Creek. The banks of Warm Creek, and much of the eastern portion of the project area, were susceptible to seasonal flooding.



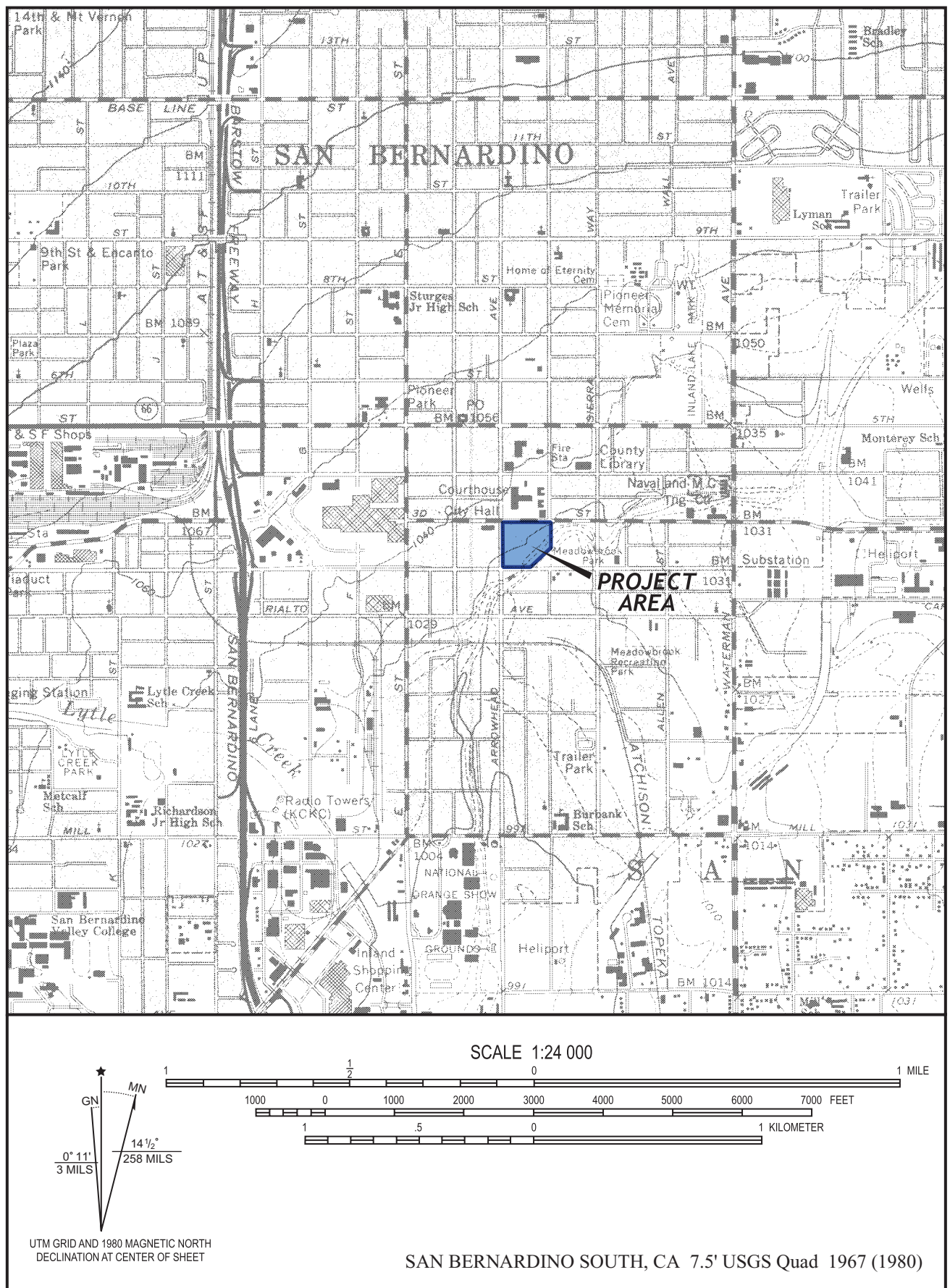
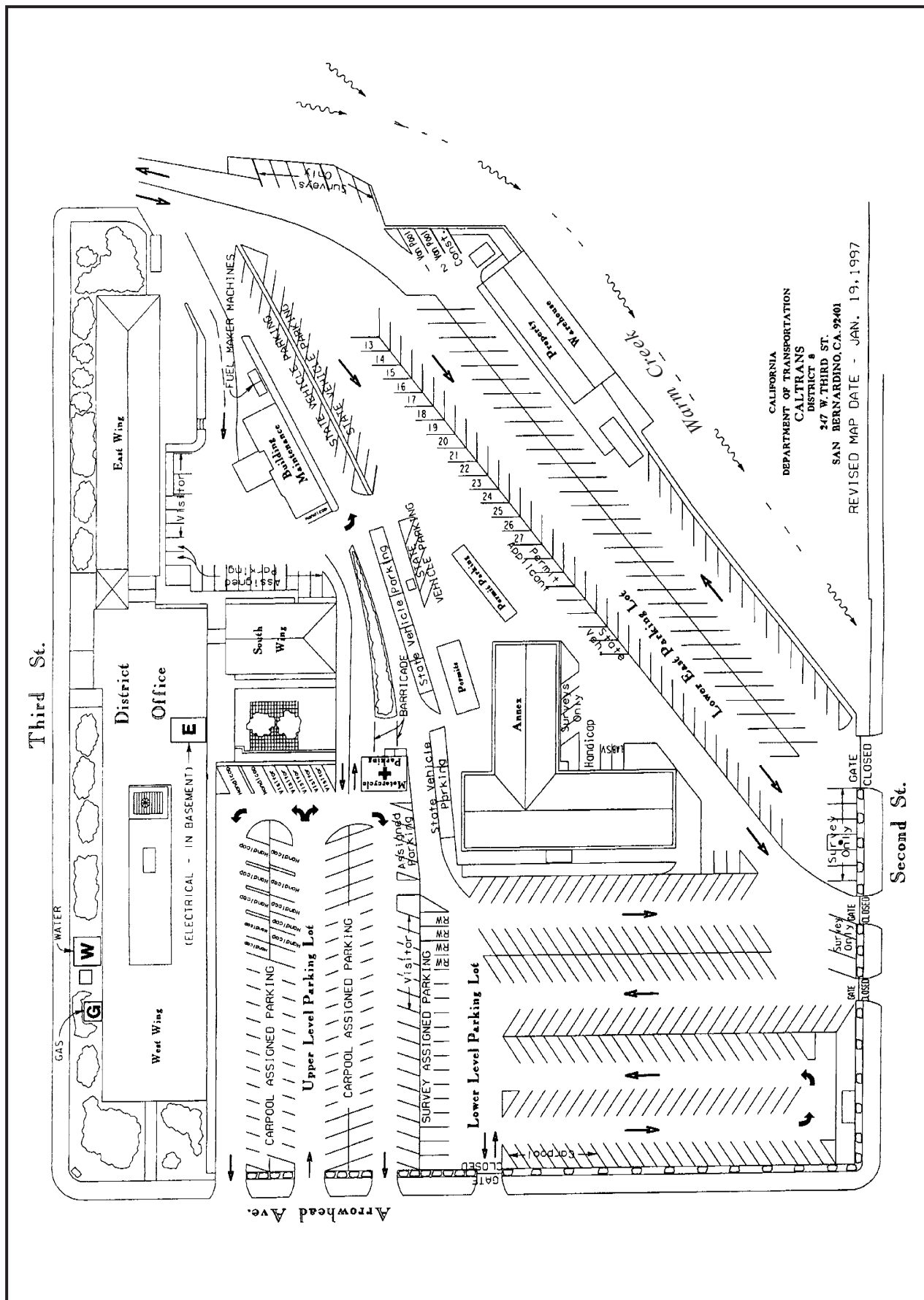


Figure 1-2 Location of the Caltrans District 8 complex.





Project Area Boundary

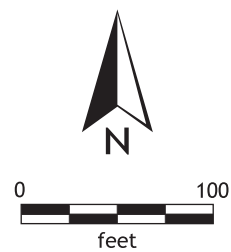


Figure 1-4 1990s aerial photograph of the Caltrans District 8 office complex.



Figure 1-5 Looking southwest over the western excavation area.

1.3 ARCHAEOLOGY AND THE LAW

CEQA mandates public disclosure of significant project impacts on archaeological sites and historical resources. Because Caltrans is the primary governmental agency regulating and funding the District 8 Headquarters Demolition Project, the principal legal and regulatory authorities governing management of cultural resources and historic preservation are the CEQA guidelines (California 2001).

CEQA specifies that: “A project that may cause a substantial adverse change in the significance of an historic resource is a project that may have a significant effect on the environment” (Section 21084.1). If the project has a potential to impact an archaeological site, the lead agency must determine whether the site is a historical resource (Section 15064.5[c][1]). Accordingly, archaeological sites are historical resources when they are “listed in, or determined eligible for listing in,” the CRHR (Section 15064.5[a]; State of California 1993). CRHR criteria define an “important” cultural resource as one which:

- (A) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- (B) Is associated with the lives of persons important in our past;

- (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- (D) Has yielded, or may be likely to yield, information important in prehistory or history.

If an archaeological resource is not important in terms of these criteria, it may be evaluated as a “unique” archaeological resource. In practice, most archaeological resources that meet the definition of a “unique” site also will meet the definition of a “historical resource.” If a site is neither a historical resource nor unique, it need not be considered further in the CEQA process. If the site is deemed important and if avoidance is not feasible, the lead agency must develop a plan for mitigating the effect of the project on the qualities that make the resource important.

Compliance with CEQA generally entails three phases of fieldwork: (1) discovery and identification of potentially important resources, (2) evaluation of the importance and integrity of the resources and assessment of impacts of the proposed project on the important elements of the resource, and (3) treatment to mitigate significant impacts. Under CEQA, each phase is documented and reviewed by state and lead agencies as applicable.

Archival research (Hallaran and Hamilton 1999) demonstrated that the project area potentially contained significant archaeological deposits as defined by the CEQA. A research design (Hamilton et al. 2000) was prepared identifying specific resources and outlining a testing program. The testing program, which was conducted between 17 June and 24 June 2000 (Costello et al. 2000), confirmed that intact significant features would be impacted by proposed project activities. Therefore, a data recovery program was undertaken between 10 September and 12 October 2001. This report documents the methods and results of that data recovery program, describes the important archaeological remains found, and interprets these remains in terms of the historical populations who once lived on the site.

1.4 KEY PERSONNEL

District 8 Archaeologist Karen K. Swope, Ph.D. oversaw and managed the project for Caltrans. Julia G. Costello, Ph.D., of Foothill Resources, Ltd. (Foothill), served as Principal Investigator and was responsible for all aspects of research, analysis, and report writing; she also served as principal author of this report. M. Colleen Hamilton, M.A., and Susan K. Goldberg, M.A., of Applied EarthWorks, Inc. (Æ) served as Project Managers, providing fiscal and contractual guidance. Project Historian Kevin Hallaran, M.A. (Æ), culled information from archives, compiled detailed site histories, and oversaw the accuracy of historical information throughout the report. Field Director Keith Warren (Æ) managed the complex activities of excavation, photographed artifacts, interpreted the stratigraphy, and wrote the sections on gambling and the end of an era. Laboratory Director Pamela R. Easter (Æ) organized both the field and postfield artifact processing, and, assisted by Joan George and Jerome Kelley, compiled the summary tables in Chapter 5 and the artifact catalog (Appendix E).

Those who assisted with the archaeological excavations include (all Æ personnel):

David Bircheff
Pamela R. Easter
Joan E. George
Stefanie Hooper
Tony Keith
Kristen Mercer
Rachael Nixon
Neil Rhodes
C. Dennis Taylor
Keith Warren
Trish Webb

Laboratory personnel (Æ) include:

Kholood Abdo-Hintzman
Stephanie Andrews
Pamela R. Easter
Joan E. George
William Gillean (Caltrans Student Assistant)
Jerome Kelley
Kristen Mercer
Rachael Nixon
Aimee Taliaferro
Gayla Young

Specialists who performed studies on particular assemblages or topics include:

Margie Akin, Ph.D.: Asian coin analysis
Deborah Cook (Foothill): census report analysis
Sherri M. Gust, M.S. (Cogstone Resource Management, Inc.): mammal bone analysis
Laramie Hickey-Friedman and Sabrina Carli: Chinese *kwat pai* tile conservation

Virginia S. Popper, Ph.D., and Steve L. Martin (Cotsen Institute of Archaeology, UCLA): analysis of macrobotanical remains (seeds)

Karl J. Reinhard, Ph.D (University of Nebraska, Lincoln): analysis of parasite remains

Peter D. Schulz, Ph.D.: fish bone analysis

Susan J. Smith, M.S. (Laboratory of Paleoecology, Northern Arizona University): analysis of pollen remains

Report graphics were prepared by Cari Inoway (Æ) and final editing and document production was done by Susan Rapp (Æ) assisted by Carol Brill (Æ).

1.5 REPORTS AND OTHER PRODUCTS

Two major products will result from the District 8 Headquarters Demolition Project mitigation program: the primary collection of artifacts and documentation (i.e., field notes, photographs, historical records, etc.), and this volume, which synthesizes and presents the data and findings. Other products include public outreach programs that allow the rich historical information to reach a public beyond academia and agencies, and involvement of the Chinese American community in studies of their heritage.

COLLECTIONS

The archaeological work produced a substantial collection of artifacts, field records, field and laboratory photographs, and copies of historical documents gathered during research. These artifacts and records constitute the important historical information that was recovered from the site. The collections, curated at the San Bernardino County Museum, are preserved to enable future researchers to study and interpret the data with new techniques and research questions. The artifacts also constitute the only physical remains of the site that will survive into the future—physical objects important not only for the information they contain but also as rare survivors of past cultures and activities. All District 8 Headquarters Demolition Project collections are prepared for permanent curation and adhere to the State of California’s standards as described in *Guidelines for the Curation of Archeological Collections* (State Historical Resources Commission [SHRC] 1993).

The archaeological and documentary collections are contained in 57 archive boxes and one specially built container for the remains of the metal box for *kwat pai* (tile/domino) pieces. The boxes contain more than 34,000 artifacts, representing nearly 12,000 individual items, soil samples, seed samples, shell, and faunal material; all are organized by archaeological feature. All field and laboratory analysis records have been reproduced on archivally stable paper. Most records exist in an electronic format as well, for ease of information access, and copies of these electronic files have been stored with the collection. The artifact and faunal catalogs were created using Microsoft Access, a database management program.

Color slides, black-and-white photographs, and digital images document both the fieldwork and the artifact collections. Negatives, proof sheets, and slides are stored in archivally stable plastic sheets that are kept in binders stored in archive boxes.

Also curated with the collection are copies of historical documents obtained as part of this study. Stored in two 3-inch three-ring binders, they include newspaper articles, probate inventories, census enumerations, maps, and photographs. This information constitutes the unpublished material assembled by Project Historian Kevin Hallaran. Like the artifacts themselves, future researchers can study these records and glean new insights into San Bernardino history.

REPORTS

This volume summarizes the results of the implementation of Caltrans' mitigation program. Here the archaeological and historical information is assembled, summarized, organized, and interpreted to satisfy legal mandates for data recovery. It includes all the information that an archaeologist would need in order to reconstruct the conduct of the investigation, to assess the accuracy of the interpretations, and to use the raw data for comparison with other sites. Chapter 1 provides an introduction to the District 8 Headquarters Demolition Project and the archaeological mitigation program, the project location and setting, legal mandates, and identifies key personnel involved. Chapter 2 provides the historical context for the remainder of the report, discussing the occupation and development of the land from the days of Mexican land grants through the demolition of Chinatown in the 1940s. Chapter 3 updates the research design and summarizes the general approach taken during the mitigation program. Chapter 4 describes the methods used for different components of the investigation, including documentary research, archaeological excavations, laboratory processing, and preparation for curation.

Chapter 5 contains details of the archaeological findings, such as what was discovered in each area, and details of what was recovered for those features determined to be important. Chapter 6, using the information from Chapter 5, addresses questions raised in the original research design. The wealth of information recovered is analyzed in a series of essays and sidebars that allow these artifacts and historical information to illuminate areas of the past. While Chapter 5 is designed for the archaeologist, Chapter 6 is written for the interested public who want to know what was found and how archaeology can enrich their understanding and appreciation of San Bernardino's history. A summary of findings and conclusions are provided in Chapter 7, followed by a complete bibliography of references cited throughout the report.

Several appendices to this report provide detailed information critical to the historical and archaeological studies. Appendix A.1 is the exhaustive chronology of events and documents that formed the basis for all historical interpretations; Appendix A.2 is the transcribed list of Chinese names found in the United States census reports. Appendices B and C contain lists of the identified archaeological features and evaluation sheets for those features that were tested and determined not important. Appendix D presents the reports of specialists who addressed particular assemblages, including faunal remains, pollen, seeds, and *kwat pai* tile (domino) conservation. The complete artifact catalog is provided as Appendix E.

PUBLIC OUTREACH

Efforts were made to encourage publicity and educational events during the fieldwork. The first week of October 2001 was determined to be the optimal week for receiving the public because after 3 weeks of fieldwork numerous features on the site were exposed and sufficient time remained in the field session so that visitors would not be on site while crews were under

pressure to finish all the final site details. Backdirt was moved aside, excavated areas were cleaned, and historical features were highlighted with strings or tape. A tour route was established, with observation areas delineated and dangerous locations roped off with flagging. All crew members were prepared to answer questions about the history of the remains they were investigating or the goals of research. Four tour books, consisting of loose-leaf notebooks with historical maps, photographs, and other visual aids describing the site history were prepared for visitors.

A press day was announced on 3 October 2001 by the Caltrans Office of Public Affairs inviting journalists to tour the site and laboratory between 9:00 a.m. and 12:00 p.m., and a press packet of information was prepared for this event. Responding were television Channels 4 (KNBC) and 7 (KABC) and the *San Bernardino Sun* and *Riverside Press-Enterprise*. Lengthy articles appeared in the two newspapers and were picked up by others (i.e., the *Sacramento Bee*). On 5 October, Channel 2 (KCBS) came to the site for additional coverage. The resulting news articles included an invitation to the general public to call and make reservations for a guided tour of the site and laboratory on 9 October. The response was an enthusiastic 214 people (Figure 1-6). Tours began at 45-minute intervals and lasted about 90 minutes. Archaeologists Costello, Swope, Warren, and Easter team-toured each group. Media coverage also caught the attention of National Geographic Television, which visited the site on Thursday, 11 October to interview the archaeologists and film activities and artifacts. The program aired in early November 2001. Subsequently, an article on the excavations appeared in *CT News* (Caltrans' in-house newsletter) and an article by Keith Warren appeared in *The Bulletin*, published by the Archaeological Survey Association of Southern California. *Inland Empire Magazine* also ran an article about the excavations in their March 2002 issue.



Figure 1-6 Visitors on site with project archaeologists on 9 October 2001 tour day.

This report also was designed to facilitate public dissemination of project findings. Technical reporting of information, required and important for scientific study, often obscures interesting findings. In this report, the historic context (Chapter 2) and interpretations (Chapter 6) sections were written with a general audience in mind. The historic setting provides background for the more detailed interpretive essays. In this latter section, topics are kept short and focus on particular aspects of archaeological and historical discovery. Historical photographs and maps are used liberally along with modern photographs of artifacts and fieldwork. With modification, Chapters 2 and 6 could be presented in printed form or electronically to a wide public audience.

CONTACT WITH THE CHINESE AMERICAN COMMUNITY

Efforts to contact descendants of San Bernardino Chinese residents began in 1999 prior to initiation of the testing phase of fieldwork. Most leads came from work done at Riverside Chinatown, where extensive outreach had been conducted within the Chinese community. In San Bernardino, however, project personnel were unable to establish contact with any direct descendants of historical residents. During the testing phase, Suellen Cheng of the Chinese American Museum visited the site and provided important opinions about several of the features being excavated.

When plans for the mitigation excavations began, formal contact was made with the Chinese Historical Society of Southern California (CHSSC), with Julia Costello serving as principal contact. Eugene Moy, Past President, was receptive and interested; he received copies of the material that had been gathered on the San Bernardino Chinese community. Members of the CHSSC received special invitations to attend the public viewing day on 9 October (see above), and several members toured the site. During analysis of the collection, correspondence was maintained via email, with Costello reporting on any finds, interpretations, and questions, and assisting with other topics raised by CHSSC members. Contact also was maintained with the Chinese American Museum through Suellen Cheng.

On 22 March 2002, a meeting was held so that project personnel and Chinese American citizens could discuss the project and its findings. Hosted by Suellen Cheng at the El Pueblo de Los Angeles Historical Monument, the CHSSC was represented by current President Irvin R. Lai, Past President Eugene Moy, and Office Manager Linda Po-Yin Chong. Representatives from the District 8 Headquarters Demolition Project team included Julia Costello, Keith Warren, and Kevin Hallaran. Topics addressed fell generally into two categories: (1) historical information sought by the archaeologists and historian to assist in their analysis, and (2) issues concerning immediate and long-term preservation and interpretation of the Chinese American past that are of importance to the modern community. Mr. Lai, born in Locke, California, in about 1930, provided important information on the use of “roasting ovens” such as those that were discovered on site as well as on gambling practices in Locke. Discussions then ensued about where the San Bernardino Chinatown archaeological collections might be curated. The CHSSC advocated keeping collections close to where they were excavated and hoped a facility could be found in San Bernardino. The Chinese American Museum was interested in obtaining the collection but did not have a facility available at the time of the meeting. The Chinese American representatives advocated educational and interpretive programs as appropriate mitigation measures; they were not in favor of “just another plaque.” Notes of this meeting are on file with Caltrans and with those who attended (Costello 2002).

考查地历史

2 HISTORIC CONTEXT

The historic setting for the project area is presented in this chapter. More detailed discussions on many historical topics are included in Chapter 6. The chronological listing of documents and historical events is included as Appendix A.1.

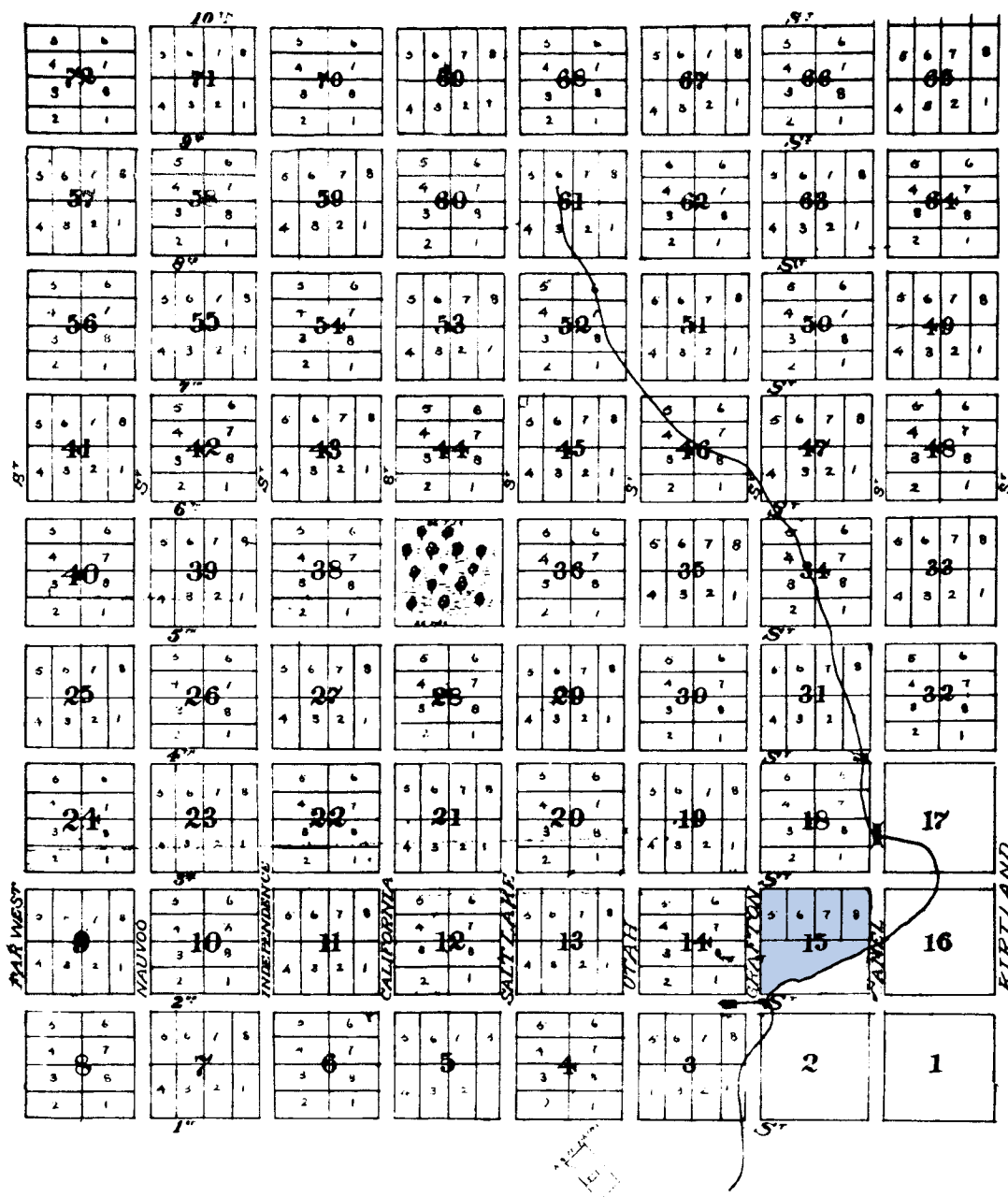
2.1 EARLY SETTLEMENT

The city of San Bernardino had its beginnings as a rancho to Mission San Gabriel near Los Angeles. The principal activity of the rancho was raising cattle for the beef and hide trades, an activity which by 1820 employed approximately 200 Native American neophytes who lived and worked on the ranch (Beattie and Beattie 1951:16). When the California missions were secularized in 1834, their lands, originally intended to revert back to their Native American inhabitants, were instead thrown open to ownership by private citizens. These lands were usually transferred through land grants made by the governor to individuals petitioning for such grants. One such grant was that of Rancho San Bernardino, awarded to Antonio María Lugo and his sons in 1842. Rancho activities centered on the cattle trade, which boomed throughout California in the years following the discovery of gold at Sutter's Mill. Cattle imports from the Midwest and even longhorn cattle from Texas—as many as 90,000 in 1852 alone—made their way to California via the emigrant trails (Cleland 1941:108–109). The Lúgos sold the rancho in 1851 to a group of pioneering Mormons led by Amasa Lyman and Charles Rich (San Bernardino County Recorder [SBCR] 1852–1854:24).

The project area lies in Township 1 South, Range 4 West (SBBM). General Land Office (GLO) surveys undertaken on numerous occasions between 1852 and 1879 generally were conducted outside of the project area. Indeed, surveys within the boundaries of the Rancho San Bernardino do not appear to have been done at all. Robinson (1948:209) explained that “in many cases Spanish or Mexican land grants cut into the townships and, where this is the case, the sections or parts of the sections which fall in the ranchos are omitted from the government maps of the townships.” None of the GLO maps shows any detail within the San Bernardino Rancho property beyond the location of the Mormon Stockade, which was built in 1851 out of fear of possible Indian attack. The earliest map of any detail is Henry G. Sherwood's plan for the City of San Bernardino done in 1853 (Figure 2-1). The plan featured an already standard Mormon north-south oriented grid pattern of 72 blocks, each block containing eight 1-acre lots (Hallaran 1990:20; Raup 1940:21). A town square, now called Pioneer Park, was set aside in Block 37. The project area lies in Block 15 of Sherwood's 1-acre survey in the extreme southeastern quarter of town.

THE LÚGO FAMILY AND RANCHO SAN BERNARDINO (1838–1851)

After the secularization of the missions in 1834, mission lands were thrown open to settlement through the Mexican land grant system. Among those who sought such a grant were Antonio



Shew. the City of San Bernardino was created (for de loto) this twentieth day of July 1890, at request of James S. Squire, and Chas. W. Squire.

R. D. Hopkins
Recorder of San Bernardino
County, Cal.



SCALE: 5 CHAINS TO AN INCH
Note: Each lot 1/4 mi. square and 1/4 mi. wide.

I have full and correct copy of the original recorded at the office of the Board of Supervisors this 16th day of November A.D. 1896.

A. J. McPhee
City Engineer

REF: SEE OF LOTS AND STREETS 5

Figure 2-1

Sherwood's plan of the city of San Bernardino with project area highlighted (San Bernardino County Recorder, Map Book 7:1).

María Lúgo and his sons Vicente, José del Carmen, and José María, along with his nephew, Diego Sepúlveda (Lúgo 1950:197).

Although not formally granted the land until 1842, the Lúgos and/or their representatives had been a presence in the San Bernardino Valley since the late 1830s. Under Mexican law, individuals were usually restricted to grants of 11 square leagues, or about 48,000 acres. However, anyone promoting a colony for settlers could receive larger grants proportional to the number of colonists enlisted. Such a colony plan was initiated by the Lúgo family about 1838. By the following year, 27 persons had applied for status as colonists (Beattie and Beattie 1951:40–41).

In 1839, the California governor granted José del Carmen Lúgo permission to settle the San Bernardino and Yucaipa valleys with the proposed colony (Beattie and Beattie 1951:40–41). The Lúgo brothers brought 4,000 head of cattle to San Bernardino in 1839 and built an adobe house on a section of the rancho called Agua Caliente near Warm Creek on the site of the present San Bernardino County Courthouse on Arrowhead Avenue, between Third and Fourth streets (Beattie and Beattie 1951:42), directly across the street north of the project area.

When the colony project failed, the Lúgos opted to apply for a land grant through the standard means. On 4 August 1842, Antonio María Lúgo and Judge Manuel Dominguez set about measuring the boundaries of the rancho, accompanied by two witnesses who doubled as cord bearers (Whitehead 1978:230). Cerrito Solo (now known as Slover Mountain) was chosen as the bearing from which all other measurements were taken. The two cord bearers, both on horseback, each carried one end of a braided leather cordel, 50 varas (or 139 feet) long. (One hundred cordels equaled 1 league.) One cord bearer then staked his end of the cordel to the ground, while the second rode past him to its full length. Leap-frogging past each other in this fashion, the riders measured the rancho. When the survey was completed, the rancho measured approximately 8 square leagues, or about 35,500 acres (Whitehead 1978:231). The maps that resulted from these rather crude surveys were known as *diseños* and became part of the official documents of a land grant (Figure 2-2).

In 1844 the Euro-American population of the entire San Bernardino Valley was estimated to be 125 individuals (Whitehead 1978:243–244). The population on the rancho alone that year numbered approximately 52: eight at Vicente Lúgo’s home near the present site of San Bernardino Valley College; 17 at José del Carmen’s residence near or in the old mission “asistencia” west of Redlands; 18 at Diego Sepúlveda’s home at Yucaipa; and nine at José María’s residence on the site of the historic San Bernardino County Courthouse (United States Works Progress Administration 1940:11, 15).

In the 1850 U.S. Census, the occupation of the three brothers was listed as “graziers.” José del Carmen, 38, and his wife Rafaela, also 38, lived with six children and two hired laborers, Alexander Martin from Illinois, and Marecares [?], a 40-year-old Native American woman. Vicente Lúgo, 28, and wife Andrea, 23, lived with their three children (all under the age of 10) and four laborers. José María, at 43 the eldest of the three Lúgo brothers, kept a crowded house near the banks of Warm Creek. Also present were his wife, María, age 39, 11 children, and four laborers (Newmark and Newmark 1929:101,102).

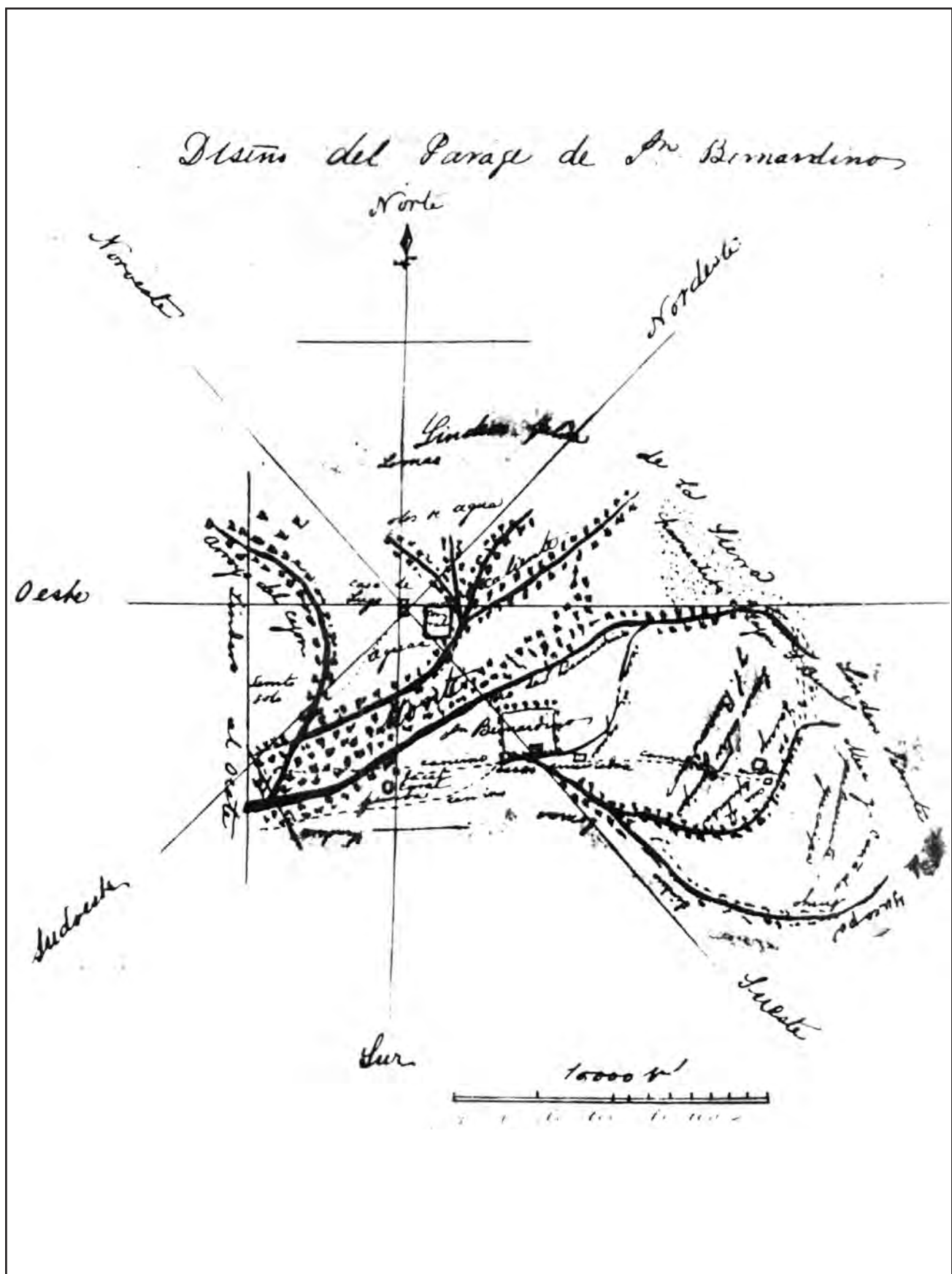


Figure 2-2 Diseño of Rancho San Bernardino (courtesy, Heritage Room of the A. K. Smiley Public Library, Redlands, California).

Because of the combined pressures of depredations by outlaws and Native American raiding parties entering the valley through Cajon Pass as well as the family's legal and political troubles in Los Angeles, the Lúgos made the decision in 1851 to sell the rancho and relocate the families to Los Angeles (Lúgo 1950:379). As it happened, at the same time a new contingent of pioneers was attempting to gain a foothold in southern California. A group of Utah Mormons, led by Amasa Mason Lyman and Charles Coulson Rich, was seeking to purchase a large amount of land to build an outpost of Zion.

LYMAN AND RICH: THE MORMON BEGINNINGS OF THE CITY OF SAN BERNARDINO (1851–1858)

As early as 1847, some members of the Church of Latter Day Saints had expressed interest in acquiring land in the San Bernardino Valley. Jefferson Hunt, a captain in the Mormon Battalion during the Mexican War, wrote to church patriarch Brigham Young about purchasing Isaac Williams' Rancho del Chino west of San Bernardino (Arrington 1974:155, citing Jefferson Hunt to Brigham Young, 14 May 1847). Around the same time, Company C of the Mormon Battalion was stationed at Cajon Pass defending the valley against the Native American horse and cattle raiding parties that used the pass as a highway from the desert beyond (Arrington 1974:155).

Despite Hunt's attempts to interest Young in forming a southern California colony, the patriarch remained hesitant. This hesitancy was based on concerns that he held for the still-fledgling Mormon religion: (1) Young felt that the church was still in its infancy and wanted to keep its members close to its spiritual and geographical center (Salt Lake City) for instruction and discipline; (2) he wanted the Saints as far as possible from the temptations of the secular world—temptations that could be found in considerable quantities in Gold Rush-era California; and (3) Utah was a safe haven from the persecutions that had dogged the Mormons across the length of the continent, freedom from which was less secure outside the borders of Utah (Arrington 1974:156).

Young was not oblivious to the practical advantages that establishing an outpost in southern California offered. A strategically placed Mormon outpost there would offer Utah-bound converts from Europe, Australia, and the Pacific Islands outfitting free from profiteering, provide much-needed respite and comfort after long sea voyages, and serve as a gathering place for converts before the grueling journey to Utah (Arrington 1974:156). Young's practicality eventually won out. In a meeting in his office on 23 February 1851, he informed Amasa Lyman and Charles Rich, both of whom had made previous journeys to southern California, that they would soon be leaving Salt Lake City to establish such an outpost in southern California (Arrington 1974:157).

"Outpost" was exactly what Young had in mind when he appointed Lyman and Rich to the task. His intentions and expectations were that 20 families would accompany the two apostles and populate the outpost. But when Young arrived at the rendezvous of the California-bound pioneers near Payson, Utah, he was surprised and dismayed to find 437 people assembled to receive his blessing. He was so "sick at the sight of so many Saints running off to California, chiefly after the god of this world" that he refused to address them (Arrington 1974:159, citing *Manuscript History of the Church, Brigham Young Period, 1844–1877*, 20 March 1851; Lyman 1996:39).

Nonetheless, the trek to California began on 24 March 1851 and included 150 wagons, 588 oxen, 336 cows, 21 calves, 107 horses, and 52 mules (Arrington 1974:159). Two and a half months later, on 9 June, Lyman and Rich emerged from the desert ahead of the main party and made camp in a sycamore grove near the south end of Cajon Pass. Over the next several days the remainder of the party joined them. The party camped in the grove throughout the summer of 1851 while Lyman and Rich tried to negotiate a land purchase (Arrington 1974:161).

Lyman and Rich left Utah fully expecting to quickly negotiate the purchase of Isaac Williams' Rancho del Chino. Indeed, as late as December 1850, Williams had written to Brigham Young trying to persuade the church patriarch to buy the ranch. However, when Lyman and Rich arrived at Chino, Williams informed them he had changed his mind (Arrington 1974:162).

When the deal with Williams collapsed, his brothers-in-law, the Lúgos, approached Lyman and Rich with an offer to sell Rancho San Bernardino. The purchase price for the entire estate was \$77,500—more than Lyman and Rich had planned to spend and decidedly more than the \$800 total cash assets of the entire company of Saints. But, after securing \$7,000 for a down payment from Bay Area Saints, the deal was struck. Lyman, Rich, the Lúgos, and Diego Sepúlveda signed the transfer deed on 26 February 1852 (SBCR 1852–1854:24). Lyman and Rich agreed to make biyearly payments to the Lúgos with an annual interest rate of 30 percent. A first installment of \$18,000 would be due on 1 March 1852; the \$52,500 remainder would come due on the same day in 1854. Although Lyman and Rich received help in meeting their debt from other Mormons over the ensuing years, there apparently was no official financial aid forthcoming from the church itself. The ranch—and the debt—were theirs alone (Arrington 1974:163, 165, 166).

The Saints had barely begun settling in on the rancho when word arrived from Los Angeles of a Native American uprising involving the Cahuilla, Quechan, and Cocopa, led by Antonio Garra, a Cupeño leader (Hopkins n.d.:23 November 1851; Phillips 1975:61, 71–94). Jefferson Hunt and several men set out the next day for the Colorado River to reconnoiter an area where the uprising reportedly was escalating. They returned the same evening, however, relaying the anxiety of outlying settlers. Another company of men was sent to the recently established military garrison at Rancho del Chino for extra arms and ammunition (Hopkins n.d.:24 November 1851).

A meeting was called on 24 November to discuss the proposition of erecting a fort or stockade for the defense of the colony. The decision to build was made the following day. Work often continued late into the night, and the stockade was completed on 15 December (Hopkins n.d.:15 December 1851). It enclosed 8 acres and was designed to house the entire population (Figures 2-3 and 2-4). The eastern wall and a few interior buildings of the stockade intersected the project area at the corner of modern Third Street and Arrowhead (C) Avenue at approximately the later site of Starke's Hotel. Despite the threat, several members of the colony opted to live outside the stockade, choosing instead a location on a small bluff or hill to the northeast. The location has been variously identified as either the site of the current Pioneer Memorial Cemetery or overlooking "Garner's Swamp," part of the site of Seccombe Lake Recreation Area (Belden 1960:S-6; Brown and Boyd 1922[1]:42).

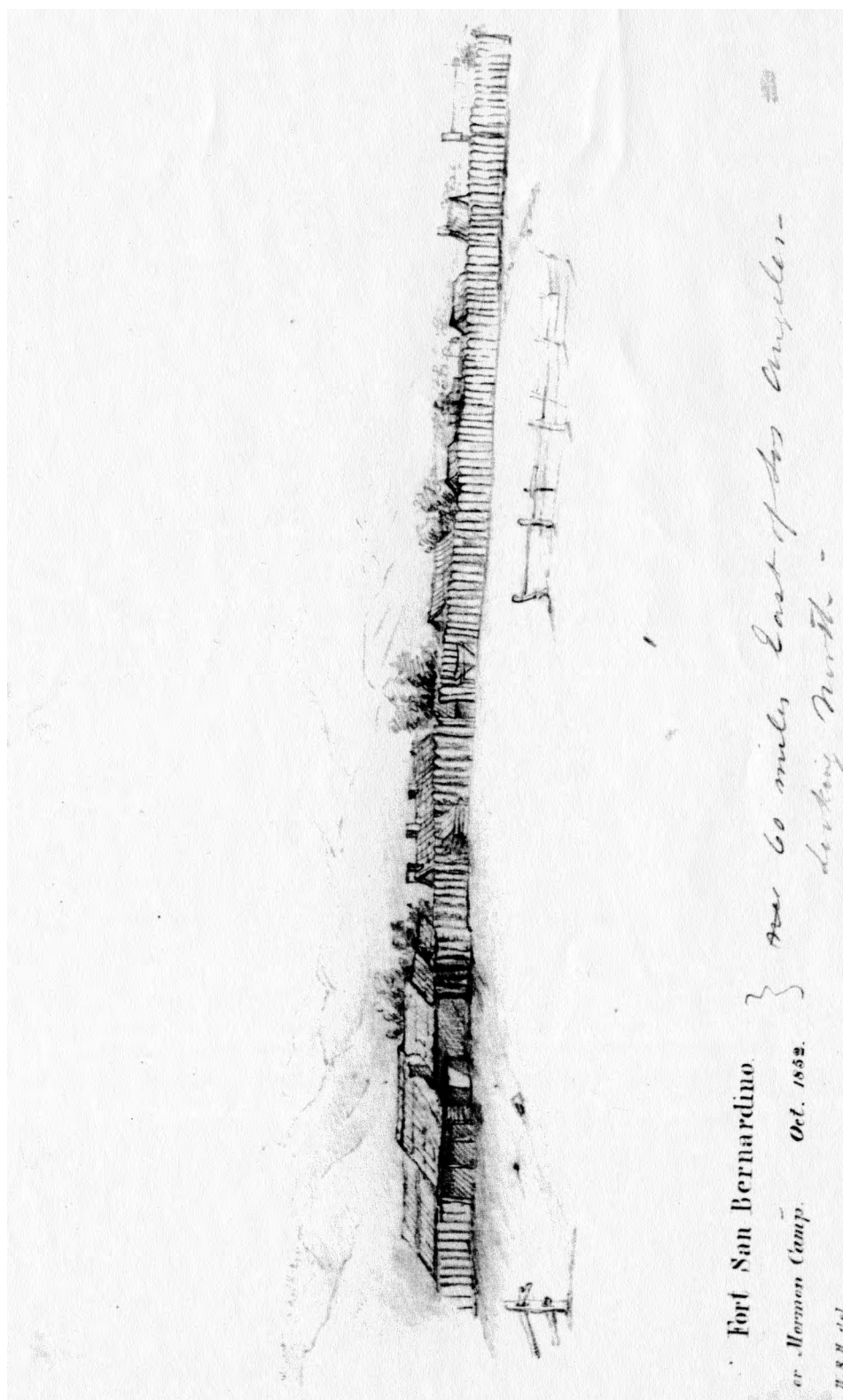


Figure 2-3 Fort San Bernardino, looking north, as depicted in an 1852 drawing (courtesy, Huntington Library, San Marino, California).

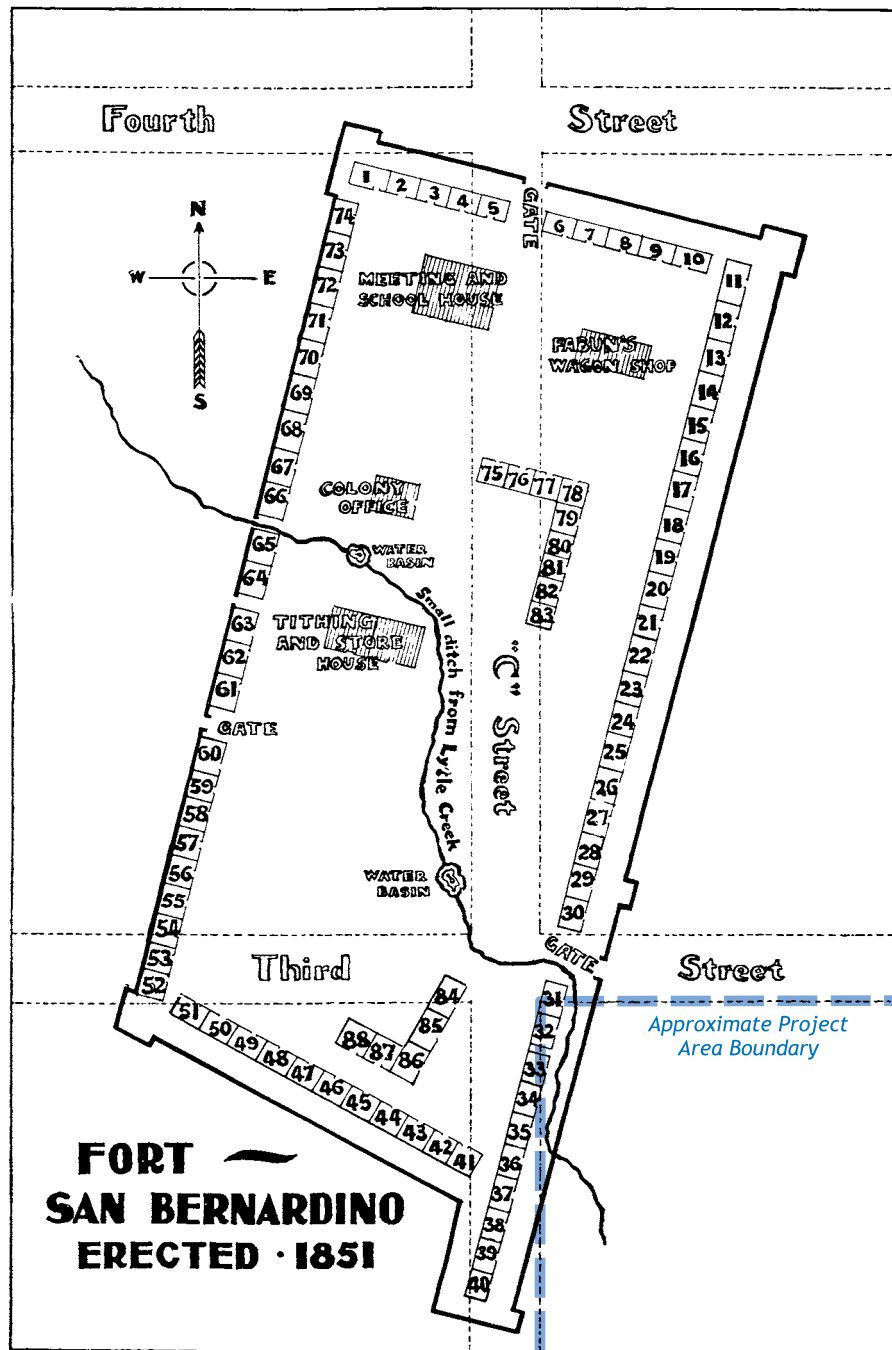


Figure 2-4 Plan map of Fort San Bernardino (adapted from Ingersoll 1904:132).

Some 50 years later in 1904, H. C. Rolfe, who had lived in the stockade as a teenager, probably helped in its construction, and later became one of San Bernardino's most respected jurists, described for Luther Ingersoll (1904) the construction of the stockade and life within it:

The Fort built by the San Bernardino colonists in the fall of 1851 was a palisade enclosure, or stockade on the east side and the two ends, made by splitting the trunks of cottonwood and large willow trees in halves, roughly facing them on the split side, straightening the edges so that they would fit closely as they stood upright side by side. These stakes were set some three feet in the ground and stood about 12 ft high—with the split sides facing in. This composed the outside stockade and was in the form of a parallelogram about three hundred feet in width by seven hundred feet in length. Small one-story houses of logs and of adobes were built inside in long rows parallel with the stockade, leaving some sixteen or eighteen feet clear space between each. The west side of the enclosure was made up of houses which had been built in various places before the necessity of fortification was realized and which were moved and placed with their outside walls adjoining so as to form a tight wall. Or, where this could not be done, separate barricading walls of logs laid up in blockhouse fashion were constructed so as to complete the stockade. There was no stockade outside of these houses. Many of the houses were merely continuous rows of rooms, the end walls forming partitions, while others were separate houses.

The principal entrance to the Fort was on the east side. This was located a little south of the center and the gates were made to open outward. Another gateway opened on the west side and one on the north end. The stockade at these gates turned in at right angles eight or ten feet, and was provided with loopholes for protection.

The houses on the north and east also stood well back from the direct line of the gateways which were about 12 ft wide. Loopholes were also placed a few feet apart all around the stockade. At each corner of the enclosure the stockade projected outward about eight feet, forming a sort of bastion with loopholes for the purpose of cross-firing along the sides and ends should an enemy elude the direct fire from the walls and stealthily creep up and attempt to set fire to the stockade. The bastion at the southeast corner was much larger than the others in order to enclose the row of houses on the east side which extended some twenty-five or thirty feet further south of a point of land that can still be seen just south of the present site of Starke's Hotel, and the southeast angle of the row of houses at this end. Another bastion also projected a short distance north of the gate on the east side, as this gate was in a hollow, or gully, that ran from the bench on which the Fort was built, down into the creek bottom, and the gate, being below the ground level, could not be protected from the corner bastions.

The south end of the Fort was not at right angles with the sides, but ran more northwesterly and southeasterly, on account of the rather deep gulch running in the same direction at that end of the structure. Part of the gulch can still be seen, although it is mostly filled up. The present gas factory stands on the southwest side of the gulch with some of the buildings extending over it. Its eastern wall stood along Warm Creek bench 760 ft, about northeast and southwest, and the enclosure was 320 ft in width. It crossed the present corners of C and Third streets. The southwest corner stood close upon the spot where now stands the city gas works. The northwest corner stood where the new Fourth Street school house now stands. The main entrance was eastward and stood in the center of what is now Third street, immediately in front of the Bradford House, better known as Starke's Hotel.

Within the Fort, a stream of water was brought for domestic purposes through a ditch from Garner's Springs or Lytle Creek. Had this water supply been cut off, water could easily have been obtained by digging wells 12 or 15 ft deep. In the northeastern corner a canvas pavilion was put up and used for school purposes, William Stout being the teacher, and also for church services. A small house used as a business office stood south of the pavilion, and still further south and within the line of houses was a three-roomed house which was used for storage purposes. In the southeast corner and also in the northeast corner were a few scattered houses, there not being room to place all of the houses in line. One of these houses was rebuilt from ruins of an old adobe ranch house that had been erected during the Mexican occupation.

A great many wagon beds with canvas covers, such as were used by the overland emigrants, were taken from the running gear and placed in convenient proximity to the houses for sleeping apartments. These made very comfortable substitutes for more commodious household accommodations.

Somewhat more than a hundred families occupied the Fort, together with a number of men without families and also a number of families that included several grown men. There were at least a hundred and fifty, and probably more, able-bodied men capable of performing good service in repelling an attack. . . . Everyone knew something about the use of firearms. With few exceptions all were tolerably expert in this line, and a number of the first settlers were "crack shots." Most of the men were well supplied with arms of their own, but to supply any deficiency a lot of muskets and of ammunition was sent to them from the small garrison of regular soldiers then stationed at Chino [Ingersoll 1904:132–145].

Ingersoll (1904:132, 139) provided a drawing of the stockade (see Figure 2-4), complete with a numbering system of the dwellings as well as a partial list of its occupants and the corresponding number of the dwelling in which they had resided during its occupation. The information included was probably gathered from the recollections of Rolfe and other members of the original Mormon pioneers who had chosen to remain in California after Brigham Young's 1857 recall of the Saints to Utah. The list of the stockade's occupants, mostly adult male heads of families, and corresponding dwelling numbers are provided in Table 2-1 (ordered numerically rather than the original alphabetical arrangement).

Antonio Garra, whose Indian uprising had precipitated the building of the fort, was soon captured, and on 27 January 1852, news of his execution in San Diego reached the San Bernardino colony (Hopkins n.d.:27 January 1852). Although the threat was over, most of the stockade residents (nearly 400 occupants) remained within its walls for the next two and a half years while their leaders proceeded with plans for the layout of the community. As the pioneers moved out into the surrounding area, the stockade was gradually dismantled (Lyman 1996:64).

In April 1853, San Bernardino County was created by an act of the California Legislature. The following September, newly elected County Surveyor Henry G. Sherwood commenced surveying the San Bernardino townsite. The plan for the town was based on that of Salt Lake City, which also had been surveyed by Sherwood (Beattie and Beattie 1951:212–213). It was a basic grid within 1 square mile with wide streets running in strict north-south and east-west directions. Each block within the grid contained 8 acres, and these were numbered from 1 to 72 (see Figure 2-1). Irrigation ditches ran along both sides of each street. Streets running

Table 2-1
Mormon Stockade Occupants

1. Samuel, Lafayette and Carlos Shepherd	39. Bishop William Crosby and Charles Crandel
2. W. V. Hakes	40. Bishop William Crosby and Charles Crandel
3. Unknown	41. Unknown
4. Joseph Mathews and William Mills	42. _____ Whitney
5. William Mathews and Morris Miner	43. Unknown
6. Unknown	44. Unknown
7. Unknown	45. Unknown
8. Unknown	46. Unknown
9. Unknown	47. Unknown
10. Unknown	48. Samuel Hofflin
11. Unknown	49. A. J. Cox, John Cook, and William and Albert Collins
12. Unknown	50. Unknown
13. Unknown	51. Benjamin Grouard
14. Unknown	52. Unknown
15. Unknown	53. Louis Glazer (residence)
16. Unknown	54. Louis Glazer (store) and Isaac Grundy
17. Unknown	55. Unknown
18. Unknown	56. Unknown
19. Unknown	57. Unknown
20. Unknown	58. Lucas Hoagland and Addison Pratt
21. Unknown	59. Montgomery E. Button
22. David Seely	60. Sidney Tanner
23. Unknown	61. Jefferson, Gilbert, and Marshall Hunt
24. Simeon Andrews	62. Capt. Jesse Hunter, William and Joseph Hyde, David Jones, and William Kartchner
25. Rupert Lee and Capt. Andrew Lytle	63. John Brown Sr., Alfred Bybee, and Charles Burke
26. Rupert Lee and Capt. Andrew Lytle	64. Sheldon Stoddard
27. Abner and Thomas Blackburn	65. Henry G. Sherwood and Quartus Sparks
28. _____ Aldridge	66. Unknown
29. Unknown	67. Albert Cummings, Orlando Carter, and J. J. Davidson
30. John, John Jr., Silas, and Moses Harris	68. Henry Rollins (residence)
31. Samuel Rolph	69. Henry Rollins (store) and Lizzie Flake Rowan
32. John Stuart, Archibald Sullivan, Truman Swarthout, William Stout, Bill Smith, Gilbert Summe, James Stewart, Daniel Taft	70. Jacob Casteel and Charles Crismon
33. Andrew P. deLin and Robert Egbert	71. Mrs. Tanner, Bishop Nathan Tenney, Daniel M. Thomas, Theodore Thorp, U. U. Tyler, Theodore Turley, and _____ Taylor
34. Unknown	72. Albert, Joseph, and Freeman Tanner
35. Gilbert E. Rolph	73. Albert, Joseph, and Freeman Tanner
36. Mrs. William Flake (widow) and George Garner	
37. Bishop William Crosby and Charles Crandel	
38. Bishop William Crosby and Charles Crandel	

east-west were numbered as follows: First Street on the south to Tenth Street on the north. North-south streets were given names having particular significance to the Mormons. From east to west they were: Kirtland, Camel, Grafton, Utah, Salt Lake, California, Independence, Nauvoo, and Far West. The town limits were defined by Kirtland, First, Far West, and Tenth. Kirtland would later be called A Street, and later still, Sierra Way; Camel would become B Street and later Mountain View Avenue; and Grafton later became C Street, and still later Arrowhead Avenue. Although frequently referred to as the “mile square” area of San Bernardino, the plan for the city was slightly larger, with the north-south axis being longer by one block than the east-west axis. The project area—bounded by Arrowhead (Grafton and C), Second, Mountain View (Camel and B [projected]), and Third streets, lies in Block 15 of Sherwood’s plan.

Initially welcomed to southern California by non-Mormons, as time progressed the colony of San Bernardino experienced more and more expressions of anti-Mormonism. Much of this antipathy sprang from within their own ranks. Apostates from the church spoke out vigorously against their former faith. Then in 1857, Brigham Young, anticipating a United States military invasion of Utah, issued a call to all Saints to return to the mountain valleys of Utah. When the order from Utah arrived in early November, approximately half of the San Bernardino Branch obeyed. Others opted to stay and became part of the increasingly diverse settlement.

2.2 DEVELOPMENT OF SAN BERNARDINO

For more than 20 years after the arrival of the Mormon settlers, the community of San Bernardino centered around the former site of the Mormon Fort, approximately in the area of the present Third Street and Arrowhead Avenue (formerly C Street) (see Figure 2-4) (Raup 1940:40). By the 1880s, the central business district, stymied by the low-lying lands along the banks of Warm Creek east of town, had gradually migrated farther west, centering along Third Street as far as F Street, west of Arrowhead Avenue. The business district west of Arrowhead Avenue was dotted with saloons, retail shops, and lumberyards (Donaldson 1991:4; Raup 1940:40; see also Sanborn maps [Figures 2-8 to 2-13]).

The Santa Fe Railroad's entry into town in the early 1880s and the subsequent growth in population and business prompted still further movement west to I Street to take advantage of the railroad station and railroad yards (Raup 1940:40). By 1900, fully 85 percent of the city's population was directly employed by the railroad; in 1940, 25 percent of the city's 40,000 residents were employed by the Santa Fe Railroad (Donaldson 1991:3). Although its influence declined in later decades, the Santa Fe Railroad's presence, especially with its large maintenance shops, initiated the economic growth of San Bernardino and transformed the city from a small town into a hub of transportation and commerce (Swope et al. 1997:15). A fuller treatment of the Santa Fe Railroad's impact on the development and growth of San Bernardino can be found in Swope et al. (1997).

Raup (1940:43) identified the city's main residential neighborhoods as being north of Third Street, while the more exclusive residential areas were even farther from the center of town. Prompted by the railroad's entry, the business and commercial district migrated to the western section of town to be nearer the Santa Fe rail yard and depot. In 1878, a laundry ordinance relegated San Bernardino's Chinese population to the east end of Third Street near the banks of Warm Creek (Thompson 1978:9–10, 12–13), an area considered uninhabitable by the business and commercial interests of the town. A portion of this area of Warm Creek near Third Street had only recently been vacated by local Native Americans after a smallpox epidemic in 1877 (Belden 1955a:50). Concentrations of Italians, Mexican nationals, and Mexican Americans, most of whom were employed by the railroad, lived in areas west of the tracks (Raup 1940:43). San Bernardino was, for a time, also known for a rather notorious red-light district in the area of First and D streets (with some overflow onto Second and Third streets) and Stoddard Avenue (Miles 1997:87, 88; Savage 1984:19). Even as late as 1940, the southeastern quarter of the city was characterized as a "slum . . . where houses are little more than one-room shacks" (Raup 1940:43).

Squaw Flat

No evidence of Native American presence during prehistoric or historical times was found in the project area. However, the east side of Warm Creek, just outside the project area, was favored by local Native Americans until 1877. In that year, a smallpox outbreak among the Indians gave them cause to abandon the camp. The area was known as Squaw Flat, and, for a good part of the nineteenth century and into the first decade of the twentieth century, it had an extremely unsavory reputation. It was, in L. Burr Belden's words, "a sink hole of humanity" (Belden 1955a:50). Most of Squaw Flat now lies within the boundaries of the city's Meadowbrook Park. For a time after the Americanization of San Bernardino, Squaw Flat's population consisted mainly of tramps, criminals in hiding, indigent Native Americans, and other society castoffs. In the late 1880s, Bakersfield editor George Weeks described the area:

Squaw Flat . . . was in the lower part of town. It was a low mesa ending abruptly on the banks of a sandy wash. Warm Creek, so called because one of its chief tributaries was a great mineral spring from which came a flood of hot water, ran close to the break of the mesa. The remainder of the wash was an expanse of sand covered with a heavy growth of aguamotes [?] and willows intermingled with patches of prickly pear cactus and occasional clumps of cottonwood trees.

Squaw Flat's close proximity to town made it an admirable camping place for both Indians and whites who for one reason or another desired to avoid too great publicity. People with due regard for their reputations, as well as their purses, gave the spot a wide berth although two well-traveled roads through it were perforce utilized by those who were under the necessity of so doing. But no one tarried here unduly [Belden 1955a:50].

Weeks then went on to describe a particularly horrific episode that reportedly took place at Squaw Flat while he was staying in San Bernardino. By his account, an unnamed white man had been accosted by some of the local Indian residents of the flat who insisted he go into town and buy them liquor. When he refused, he was bound, gagged, and "roasted" in his own fire. He died shortly after being discovered by a passerby. The morning following his death, seven Indians were found floating dead in an area known as the Sluice Box near the present intersection of Third and Waterman (Belden 1955a:50).

Aside from its notorious reputation, Squaw Flat was used as a dumping ground by city inhabitants for decades. In the first decade of the twentieth century, a cleanup of the flat was initiated by local society matron Mary Bennett Goodcell. Her desire was to remove the garbage and then landscape the area for use as a municipal park. Making use of two city wagons, local men and high school boys donated their time and labor to remove the accumulated tons of refuse. Also removed were the shacks and shanties that had been erected by squatters. Brush was cleared and burned, and Fresno scrapers were used to level off the terrain (Belden 1955b:22).

With the job of cleaning and clearing accomplished, the work of creating a park was begun. More trees were planted to supplement the native cottonwoods, a band shell was built, and a swimming hole was excavated in the creek bed. The completed park, named Meadowbrook, was the city's only public picnic ground for several years (Belden 1955b:22). In 1920, responding to an increase in auto tourism, the Chamber of Commerce promoted the establishment of a "motor harbor" [motor court] in the southeast section of Meadowbrook Park. By 1921, a campground for motoring tourists was established, complete with 70 lots, toilets, kitchen, laundry facilities, and piped water (Brown and Boyd 1922:194.)

From 1853 to 1878, Block 15 was owned in its entirety by a succession of owners, beginning with Bishop Crosby, then followed by John Lemon, Dudley and Elizabeth Pine, and finally August and Catherine Starke. For the most part, development of the block was centered on the four northern lots—Lots 5 through 8 (Figure 2-5). Development of the southern lots never went beyond a few isolated structures.

The 1871 bird's eye view of San Bernardino by Augustus Koch shows only Starke's Hotel and a large barn situated atop a bluff overlooking the southern half of the block, which appears to be a low-lying swamp (Figure 2-6). In 1878, Starke sold Lots 1, 2, 3, 4, 6, 7, and 8 to the livery firm of Alley and Cochrane. Alley and Cochrane were assessed in 1878 for unspecified improvements valued at \$25 on the "S ½ half of [Block] 15"; property included eight vehicles, harness and tack, 10 horses, and office fixtures. Also assessed were Lots 6, 7, and 8, and the unspecified improvements thereon (City of San Bernardino [SB City] 1878–1879:2). Although not itemized, the improvements must have included a reasonably substantial barn or stable large enough to accommodate horses, vehicles, and an office.

The circa 1880 Symes bird's eye view of San Bernardino shows a barn southeast of Starke's Hotel (although this may be associated with the hotel's operations) but no other structures that might be considered related to a commercial livery (Figure 2-7). Also in 1878, Alley and Cochrane were assessed for a stable in Lot 2 of Block 18, directly north and across Third Street from Starke's Hotel (SB City 1878–1879:2). (This may be the same as the Cole and Rourke/Cole and Stetson livery that appears on later Sanborn maps.) Although Alley and Cochrane obviously had some business-associated structures on Block 15, it may be that most of their property was used for pasturage and watering of stock. Alley and Cochrane sold their Block 15 property to Daniel Bradford about 1885, except for Lot 4, which reverted back to August Starke around the same time.

A dwelling and two barns were noted outside the project area in the southeast corner of Lot 1 on the 1894 Sanborn map, while most of the remainder of the lot outside the project area was taken up by the stream bed and banks of Warm Creek (see Figure 2-5). The structures may date to Alley and Cochrane's unspecified improvements of 1878. The property was owned by Daniel Bradford at this time, but what, if any, association he had with the structures was not determined. This southeastern corner of the lot (on the east side of Warm Creek) was subdivided around 1905 and owned by a series of owners until the 1930s. The remainder of the lot appears to have remained undeveloped until its use as a parking lot in the 1970s by Caltrans.

Like Lot 1, Lot 2 passed from Alley and Cochrane to Daniel Bradford about 1885. For the next 10 years no improvements are noted in county assessor's records (Figures 2-8, 2-9, 2-10, and 2-11). From 1897 through 1899 Bradford was assessed \$600 for land and \$125 for improvements, although the nature of the improvements was not specified (San Bernardino County Assessor [SBCA] 1895–1899:20). Later assessments combine all of Bradford's holdings in the block into a single dollar amount without breaking down land or improvements. Bradford's holdings passed to his daughter, Emeline Davis, after his death in 1903 (Figure 2-12). She sold them to Ralph Swing in 1920. By 1939, at least a portion of the lot was occupied by California Highway Commission's garage and repair shop, first depicted on the 1939 Sanborn map and still shown on the 1951 Sanborn map (Figure 2-13).

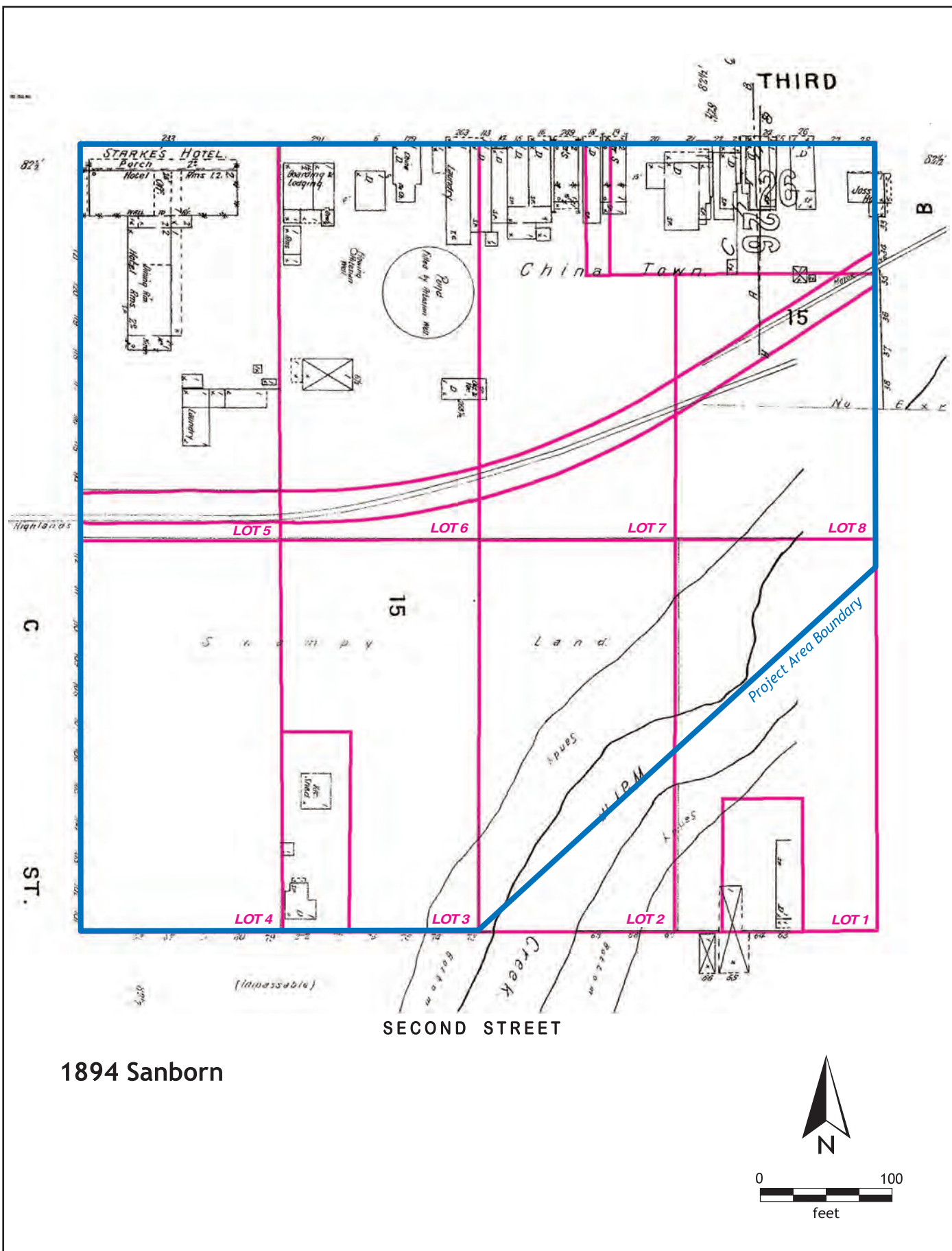


Figure 2-5 1894 Sanborn map of the project area with assessor's lots added.

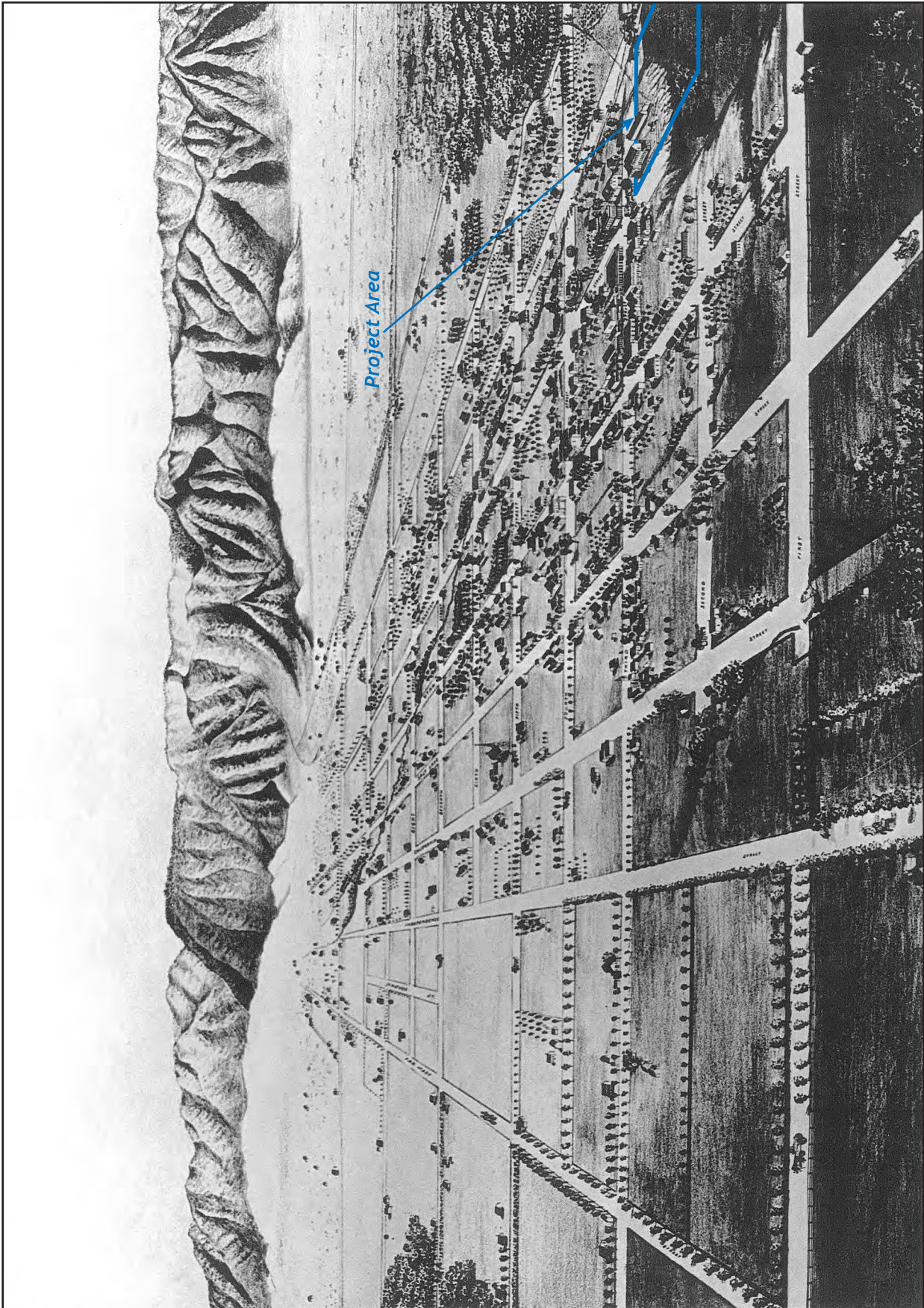


Figure 2-6 Bird's eye view of San Bernardino in 1871 by Augustus Koch (courtesy, San Bernardino County Archives).

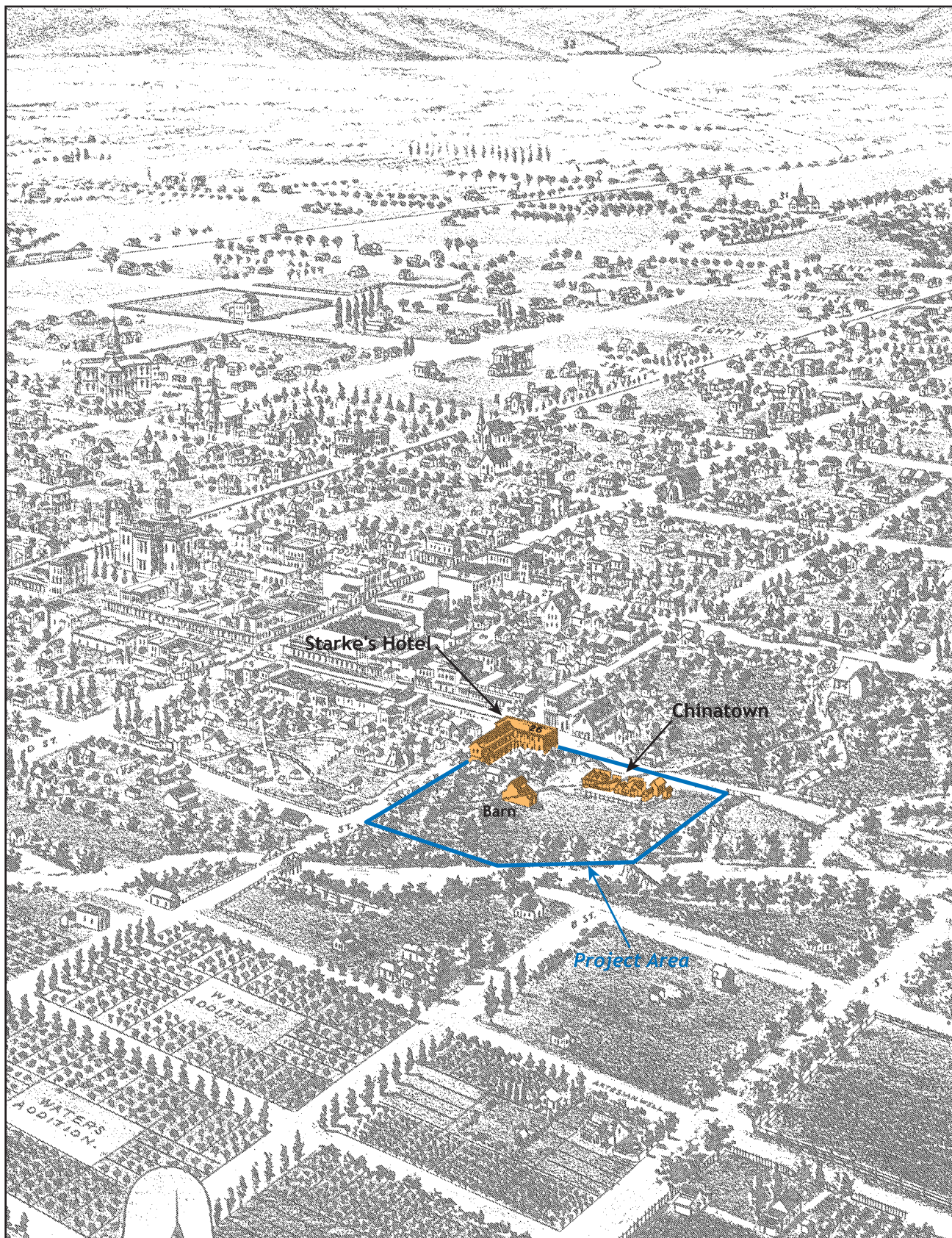


Figure 2-7 Portion of W. H. Symes & Co's. map of San Bernardino circa 1880; Starke's Hotel is No. 26 (courtesy, Heritage Room, A. K. Smiley Public Library, Redlands, California).

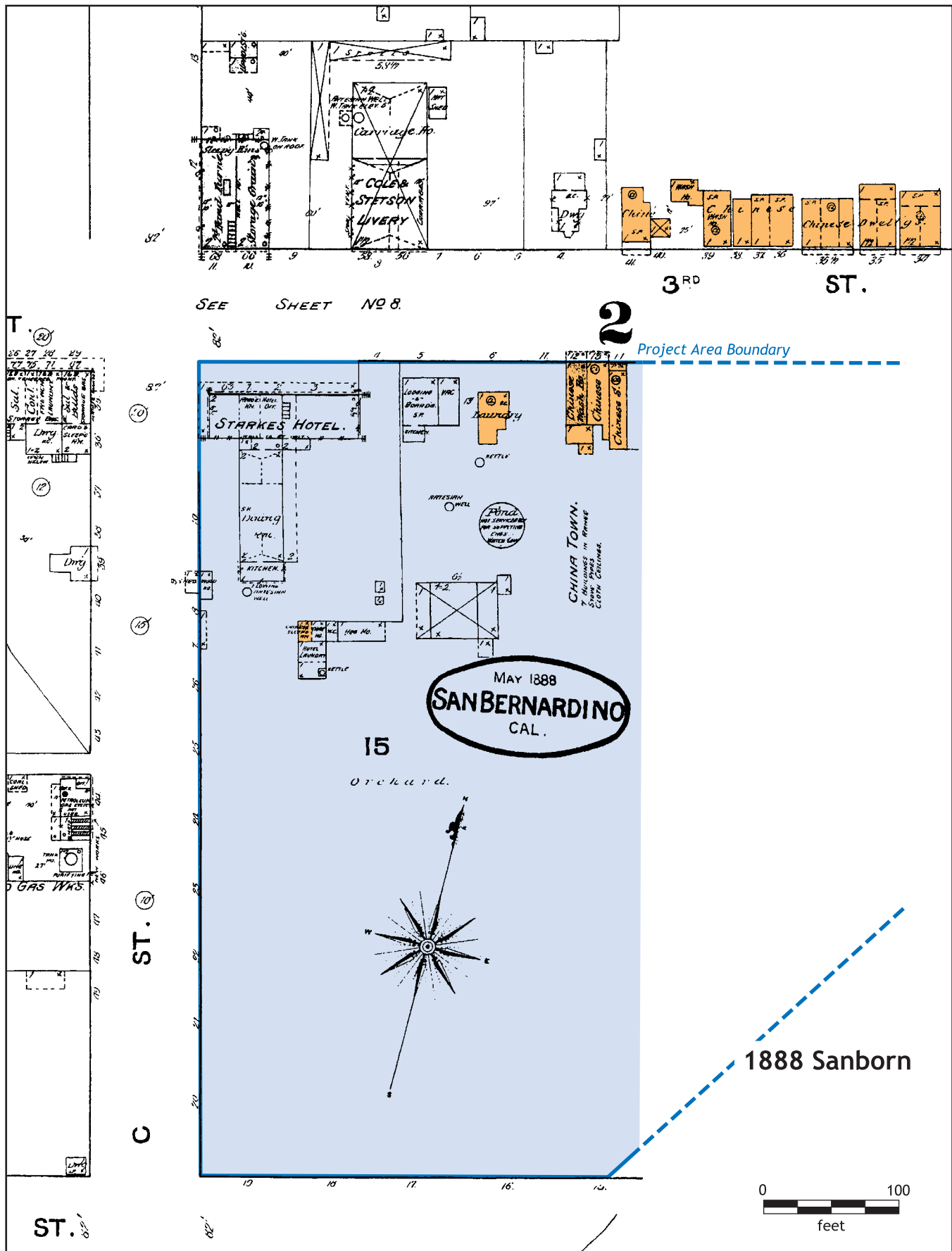


Figure 2-10 1888 Sanborn map of the project area with Chinese dwellings and businesses highlighted.

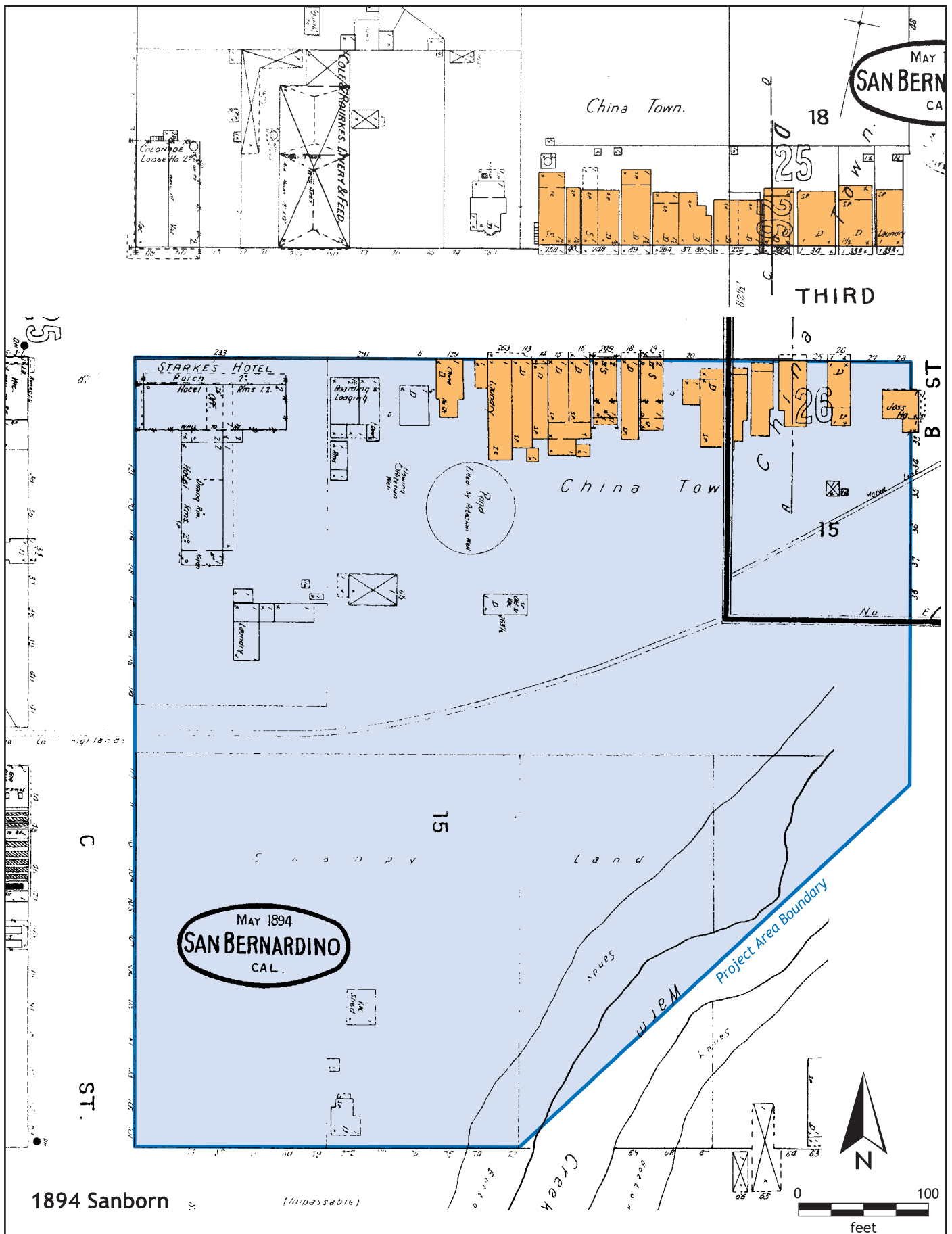


Figure 2-11 1894 Sanborn map of the project area with Chinese dwellings and businesses highlighted.

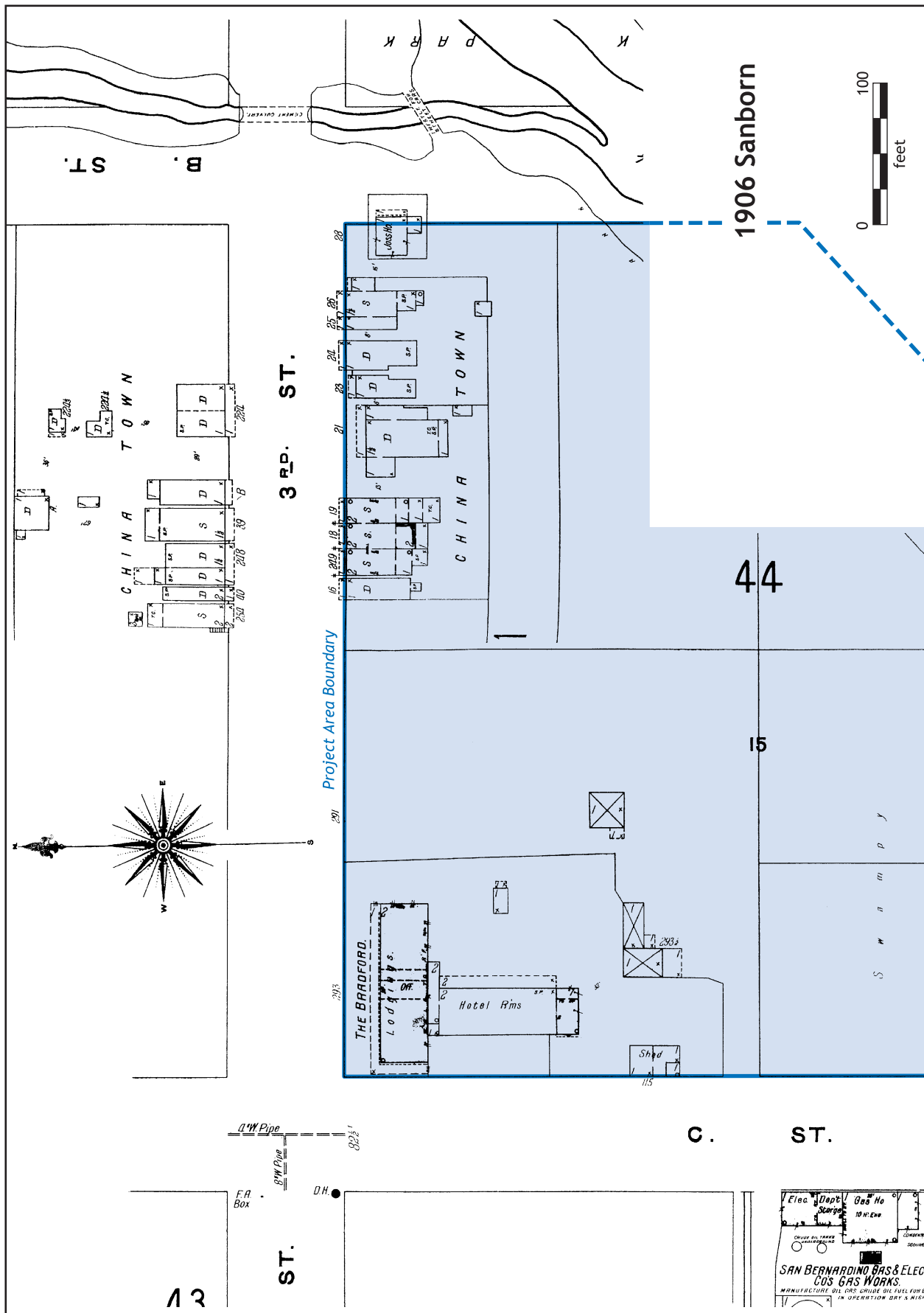


Figure 2-12 1906 Sanborn map of the project area.

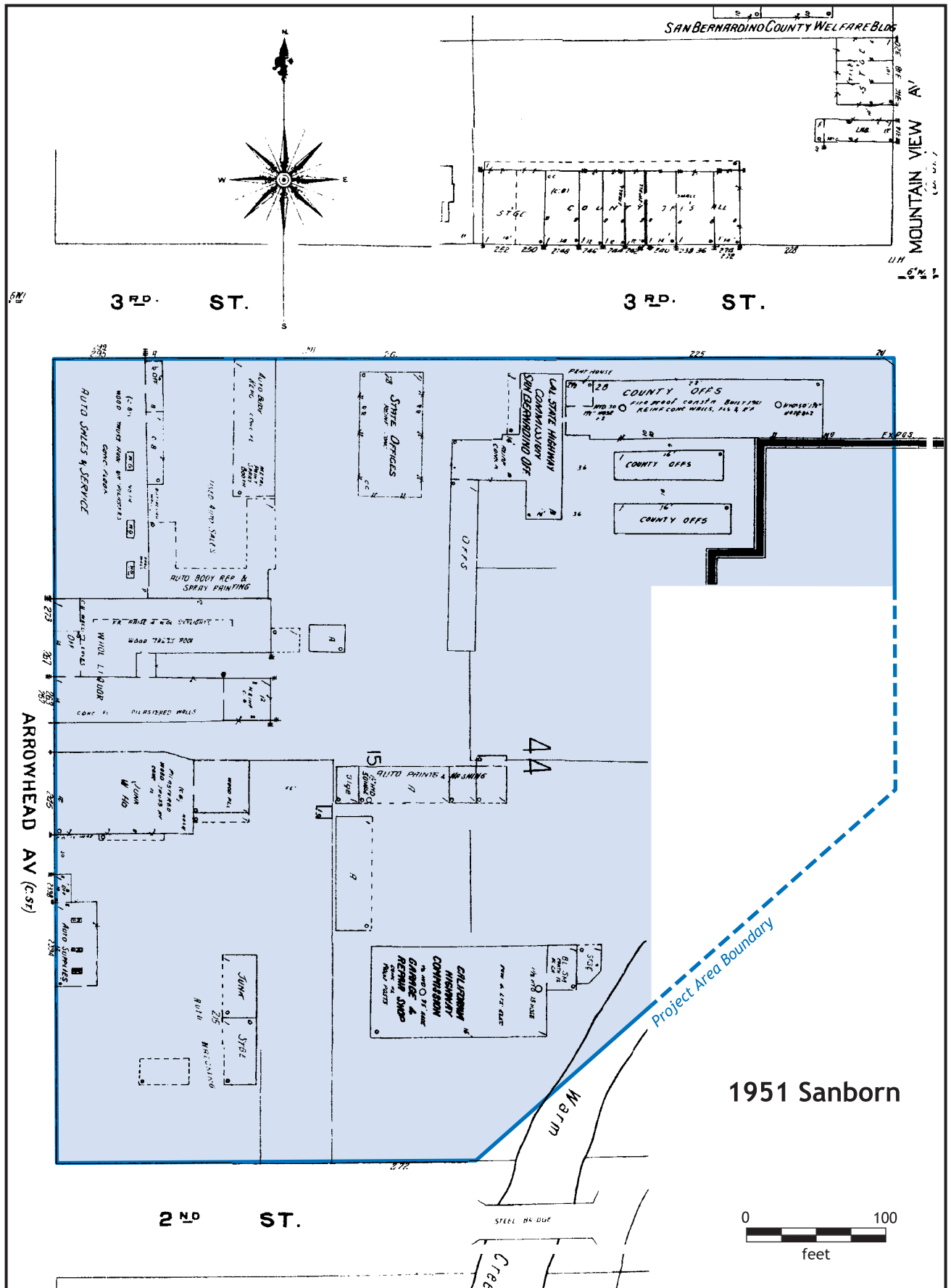


Figure 2-13 1951 Sanborn map of the project area.

By 1880, the low land in Lots 3 and 4 visible in the Koch view (see Figure 2-6) was reclaimed with orchards according to the 1880 Symes map (Figure 2-7) and the Sanborn map of 1887 (see Figure 2-9). The 1894 Sanborn showed the addition of three structures in the southwest quarter of the lot. A small single-story wood-frame dwelling was at the extreme southwest corner of the lot with an address of 78 Second Street. Behind the house was a privy, and still farther north was a vacant shed. The northern half of the lot was no longer planted with orchards but was described as “Swampy Land” (see Figure 2-11). The house and outbuildings may be associated with Sarah C. Wilson who, through a mortgage, had a business association with Daniel Bradford. She lost the property for nonpayment of taxes in 1890 and the property reverted to Bradford (SBCR 1890:146–150). After Bradford’s death, his daughter Emeline Davis was assessed for the property until 1909, when the owner was shown as Vicente (sometimes Becente) Salas and his wife Nettie (SBCA 1909–1913:33, 13; SBCA 1914:12; SBCA 1914–1918:26; SBCA 1918–1923:33). Vicente and Nettie Salas sold the property to Flora Ballestero in 1924 (SBCA 1924–1929:33). Ballestero only held the property for a short time, selling it in 1925 to Max Aron, a junk and auto scrap dealer (SBCA 1924–1929:33). The lot remained a scrap yard until at least the mid-1950s when the California Division of Highways consolidated their holdings in Block 15. A portion of Lot 3 was designated archaeological site P36-010400 (CA-SBR-10400H) during this investigation.

THE HOTELS

Lot 5 of Block 15 was the site of San Bernardino’s first hotel. Maintained by various owners between 1853 and 1923, the first of these hotels was called the San Bernardino House (*Los Angeles Star* 22 October 1853:n.p., cited by Lyman 1996:132ff) but was also known informally as the Bishop’s Tavern or the Bishop’s Hotel. In succeeding years it took on the name of each owner, and so also was called Pine’s Hotel, Starke’s Hotel, and Bradford House, or simply the Bradford. (A fuller discussion of the Starke and Bradford eras appears in Chapter 6 of this report.) A second hostelry was located in Lot 6 beginning about 1888. Between then and around 1920, that hotel was operated by several proprietors and known by several names, including the French Hotel, Allemand House, Pacific Hotel, and Sunrise Hotel.

Bishop’s Tavern

During the occupation of the stockade, Mormon Bishop William Crosby had occupied dwellings 37–40 along the southern section of the fort’s eastern wall near the present intersection of Arrowhead Avenue and Third Street (see Figure 2-4). On 24 August 1854 after the completion of the city survey, Crosby purchased all of Block 15 from Lyman and Rich (along with Lots 7 and 8 in Block 27) for \$650 (SBCR 1852–1854:15). Presumably, he continued to live in the same buildings and may have moved them the short distance to the northwest corner of Block 15 (in Lot 5) to conform to the city’s grid pattern. As early as October 1853, even before he had purchased the property, Crosby’s home was serving as a hotel of sorts—the first in San Bernardino. In a letter to the *Los Angeles Star* on 22 October, a lodger complimented the “ample and varied provision” of Crosby’s “San Bernardino House” (*Los Angeles Star* 22 October 1853:n.p., cited by Lyman 1996:132ff). Judge Benjamin Hayes, in town in February 1854 to conduct court proceedings, wrote, “Put up at the Bishop’s tavern. His lady. Negro servants. Good table. The Bishop himself a Mississippian” (Hayes 1929:104).

This first incarnation of Crosby's hotel/tavern was apparently a log structure. Judge W. D. Frazee wrote that in September 1854, "Doctor [A. S. St. Clair] . . . put up in Bishop Crosby's log cabin tavern" while traveling to San Francisco (Haenszel n.d.:2, citing Frazee 1876:83). But, by the following month when Judge Hayes passed through town again, Crosby had apparently built a "new hotel" out of adobe (Figure 2-14). "At least one hundred new buildings have been put up within the last four months; principally adobe—some of them very fine. We noticed particularly the mansion of President [Amasa] Lyman and the new hotel of our excellent host, Bishop Crosby" (Haenszel 1985a:3, citing Hayes 9 October 1854, *Southern Californian*:n.p.). Lyman suggests that the structure was a substantial one, able to accommodate not only the Crosbys, but also a dozen or so of his African-American servants (former slaves), hotel guests, and the occasional court proceedings of Judge Hayes (Lyman 1996:131–132, 197).

Pine's Hotel

Bishop Crosby was among those who heeded Brigham Young's 1857 call for the Saints to return to Utah. He sold the entirety of the Block 15 property to John Lemon for \$1,650 on 2 December 1857 (the deed also included all of Block 2 and the east half of Lot 8 in Block 14) (SBCR 1857:170). Lemon appears to have leased the property soon after to Dudley and Elizabeth Pine; Ingersoll (1904:162) stated that the Pines opened "Pine's Hotel" in 1858. It was probably soon after opening the hotel that Pine either added a second story of adobe or replaced the original entirely with a two-story adobe structure (Haenszel 1985a:4).

The Pines did not actually complete the purchase of the hotel until July 1863, when through Lemon's agent, Aeneas Quin (with Lemon's power of attorney), they bought all of Block 15, all of Block 2, and the eastern half of Lot 8 in Block 14 for \$2,000 (SBCR 1863:14).

Only one account of the Pines' operation was found during research, which gives the impression that, at least early on, it was a fairly rustic but comfortable establishment (Figure 2-15). In 1864, R. A. de St. Georges wrote of a trip to the Holcomb Valley mining district in the San Bernardino Mountains for *Alta California*.

I left [Los Angeles] for San Bernardino and put up at the hotel kept by a Mr. Dudley Pine. From some remarks that had been made in my presence by some Los Angelinans, respecting the rooms and creature comforts of this establishment, I had made my mind to put up with dirty rooms, dirty beds, and mean cooking, but I was agreeably disappointed, for both Mr. and Mrs. Pine deserve credit for their excellent table and sleeping apartments. . . . On the 5th of July, after attending a ball at Pine's Hotel, on the previous, we took the wagon road for Holcomb Valley [*Alta California* 1864, cited by Haenszel 1985b:20–21].

The Pines operated the hotel until April 1867 when they announced their retirement from the hotel business. They relocated for a time to a Santa Barbara area hot springs because of Dudley's poor health. During their years of management, the Pine's Hotel had become a center of San Bernardino social life (*San Bernardino Guardian* [*Guardian*] 1867a:2).

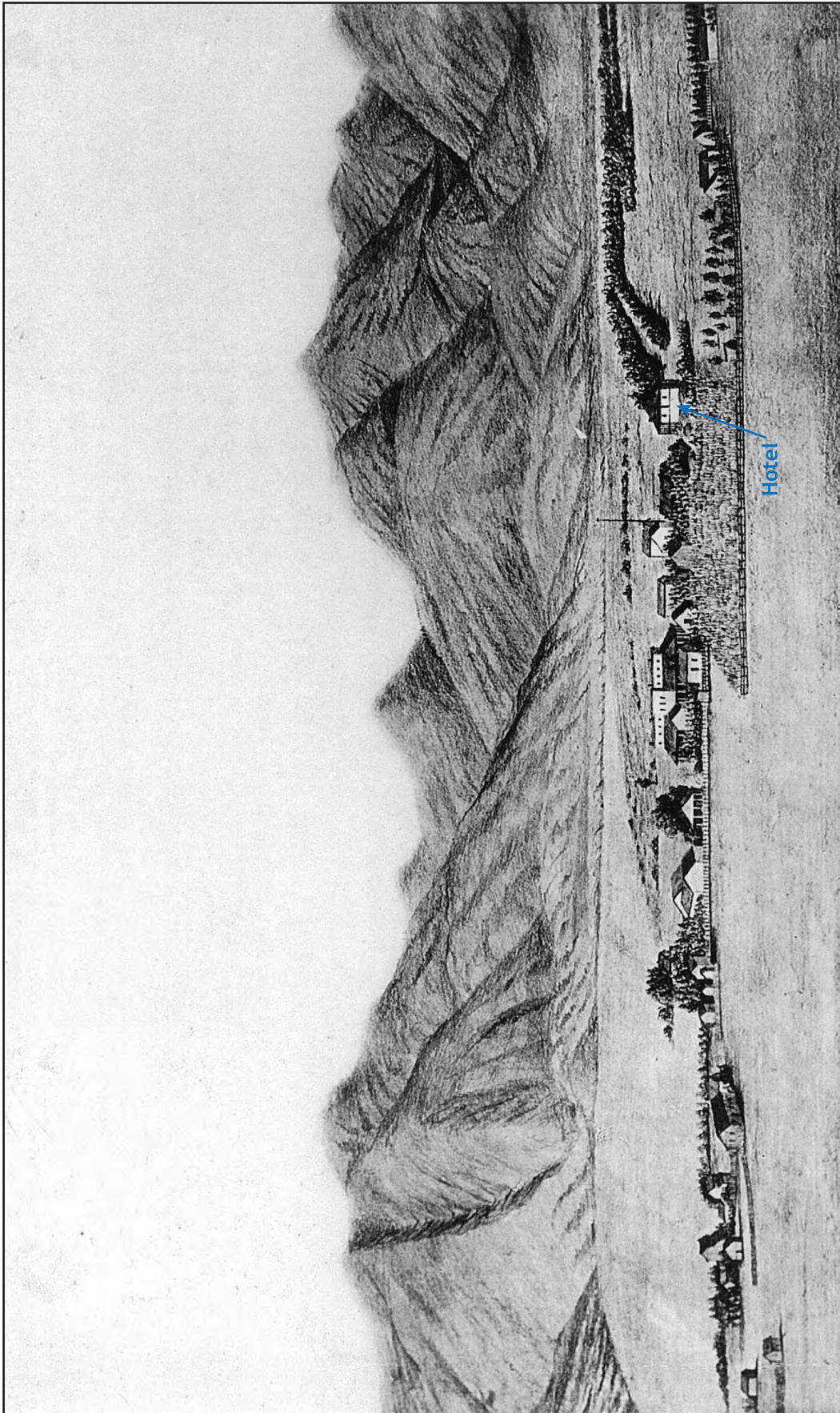


Figure 2-14 Sketch of San Bernardino at the end of Mormon occupation. At the right, overlooking Warm Creek, is the hotel of Bishop William Crosby (courtesy, San Bernardino County Archives).

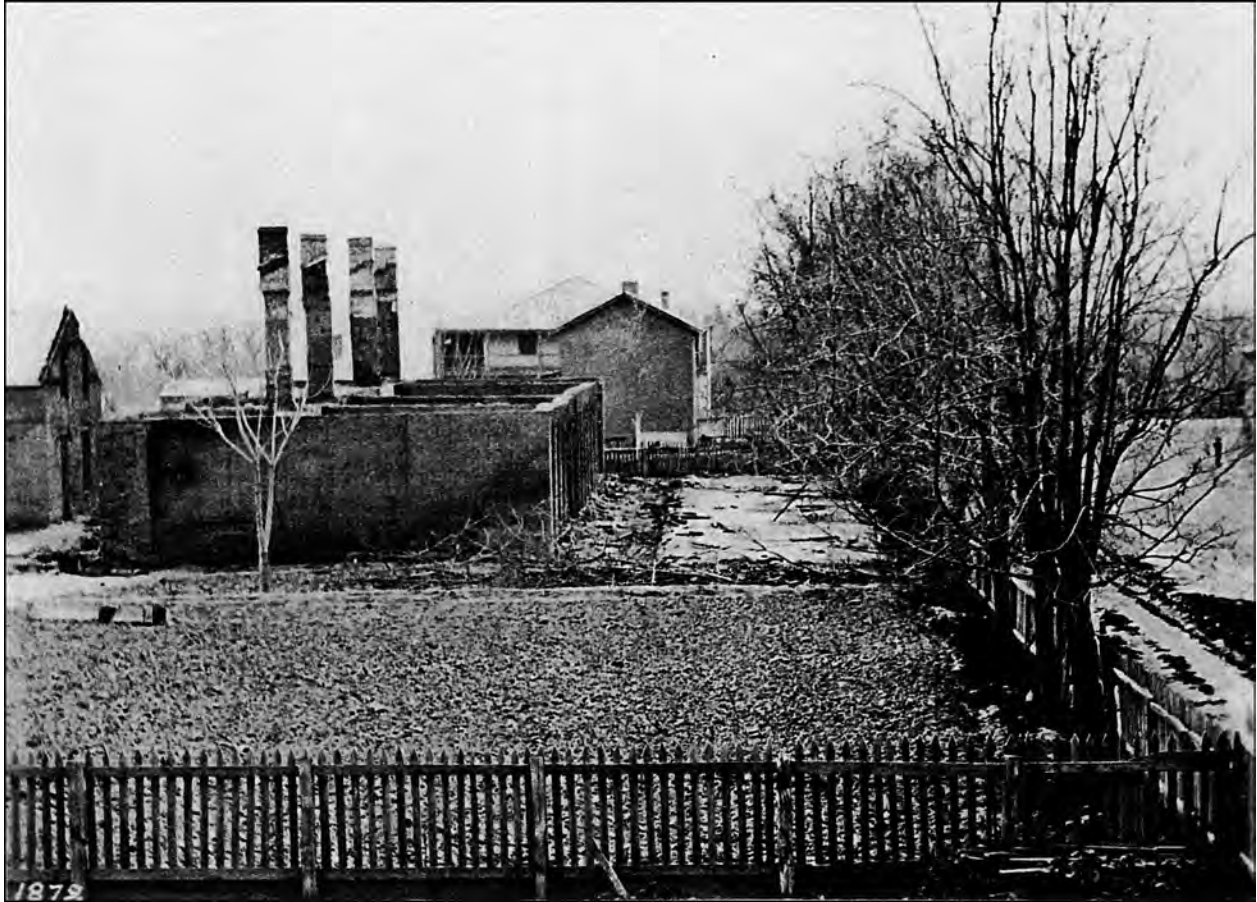
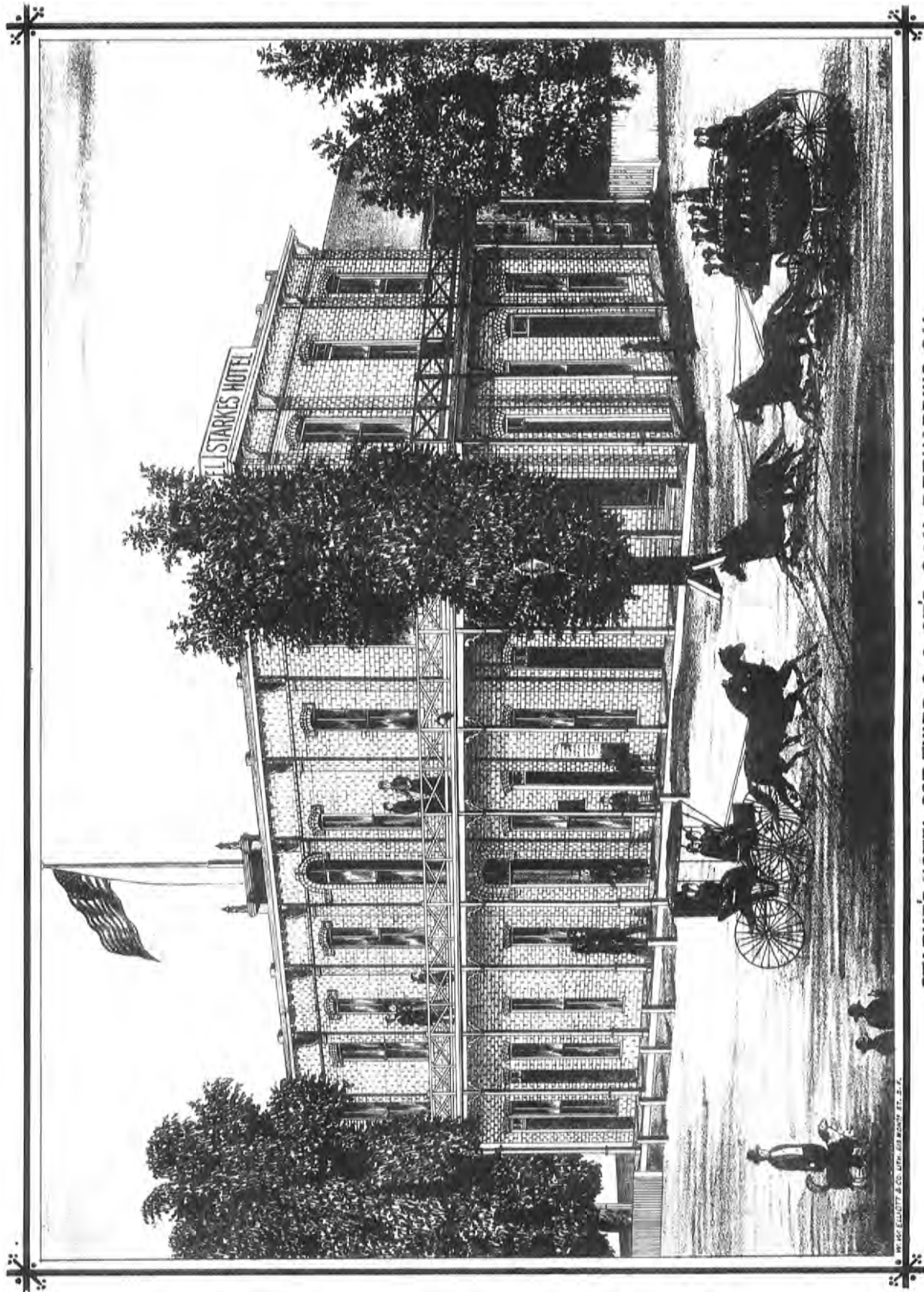


Figure 2-15 1865 photograph of portions of Block 18 and Block 15, looking north from a point on Block 18 directly north of the project area. The structure at the extreme left was thought by George Beattie (1932:n.p.) to be the adobe structure built by the Lúgos in 1839. The ruins of the Amasa Lyman home with its four chimneys is at left center. In the center of the photograph is the two-story Mormon Council House. Visible beyond the Council House (and across Third Street) is the second story of Pine’s Hotel (courtesy, San Bernardino County Archives, San Bernardino, California).

Starke’s Hotel

Dudley and Elizabeth Pine completed the sale of the hotel to August and Catherine Starke in January 1868. The price was \$4,000 (SBCR 1868:138). Perhaps in order to capitalize on the reputation that the Pine’s Hotel had established during their tenure, the Starkes continued operating it as the Pine’s Hotel. It was not until the spring of 1870 that advertisements indicate a name change to “Starke’s Hotel” (Haenszel 1985a:5; *Guardian* 1870:4).

Throughout the 1870s, Starke’s Hotel built a reputation as one of San Bernardino’s finest. Additions and improvements were made and, indeed, in 1880, a new 50-room red brick hotel was built, replacing the old adobe structure (Figures 2-9 and 2-16) (Haenszel 1985a:5; *San Bernardino Sun [Sun]* 1938). The Starkes continued to operate the hotel until 1897, when financial problems—namely the failure to pay taxes—put the hotel into foreclosure. Although they retained a right of redemption and had to file suit in court to enforce it, evidence suggests



STARKE'S HOTEL, COR. THIRD & C. ST'S SAN BERNARDINO, CAL.

A. STARKE, PROPRIETOR.

Figure 2-16 Lithograph of Starke's Hotel (adapted from Elliott 1883).

that the Starkes never again set foot in the hotel as proprietors (San Bernardino County Superior Court [Superior Court] 1899). August's death in 1900, within months of the court's decision, probably precluded any hope of final redemption of the property.

Even as August and Catherine Starke were battling him in court, Daniel M. Bradford (who, by a complicated set of business transactions, became ensconced as the hotel's proprietor) was making improvements to the hotel; in 1898, before final adjudication of the Starke's suit, he changed the name of the hotel to the "Bradford House" (Bushnell 1898:110). Bradford's daughter and son-in-law, Emeline and Charles Davis, managed the hotel. When Bradford died in 1903, his daughter Emeline inherited the hotel. She continued to operate it until at least 1910. Although she maintained ownership of the property until 1920, management of the house fell to others and indications are that the hotel had been reduced to a boarding house. In 1920, she sold the property to Ralph Swing. Soon after, Swing demolished the hotel and developed the property for other commercial uses, mainly as new and used automobile dealerships.

The French Hotel

In 1888, a second hotel labeled "Lodging & Board'g." appeared for the first time on the Sanborn maps in Lot 6 of Block 15 along Third Street. This was virtually next door to Starke's Hotel (see Figure 2-10). In 1888 this hotel was a single-story structure with an attached kitchen at the rear. It is not known who the proprietors were or what it was called at this early date, but the property was apparently owned by Daniel Bradford. Assessment records for 1888 were unavailable, but court documents (i.e., Case No. 2334 [Superior Court 1888a]), show Bradford was the owner of at least a portion of the Block 15 frontage on Third Street. Bradford was assessed for Lots 6, 7, and 8 the following year.

Bradford, and later his daughter, continued to own the property until about 1920, when Mrs. Davis sold the lots to Ralph Swing. Indications are that in the intervening years the hotel was leased to various proprietors. In 1893 the hotel's address was listed as 291 Third Street and was called the French Hotel, operated by Messrs. Pommier and Pernin. They advertised "good French dinner[s]-25 cents; rates per day \$1, per week \$5, rooms 25 cents per night" (F. L. Morrill and Company 1893:49, 146). By 1894, the hotel had expanded into the building next door (which had been vacant in 1888) with a second story and additional rooms at the rear of the original structure (see Figure 2-11).

By 1901 the French Hotel had become Allemand House, operated by Peter Allemand at 291 Third Street (Tigner 1901:n.p.) (Figure 2-17). In 1913, K. Hirata was listed as the proprietor of what was now called the Hotel Pacific, apparently a boarding house; the address had been changed to 293 Third Street (San Bernardino Directory Company [SBDC] 1913:316). Earl Buie wrote in 1967 of the discovery of a photograph of the Pacific during the demolition of a house on Lúgo Street that showed a sign written in English, Spanish, and Chinese touting the affordability of rooms and meals (Buie 1967:B-1, B-7). That photograph was not located during research for the current project. Beginning in 1914 the hotel's name has changed to the Sunrise Hotel, although no proprietor is listed (SBDC 1914:271). In 1916, the Sunrise Hotel's proprietor was J. Iyemura (SBDC 1916:88). There are no directory listings for the hotel or for 293 Third Street beginning in 1920.

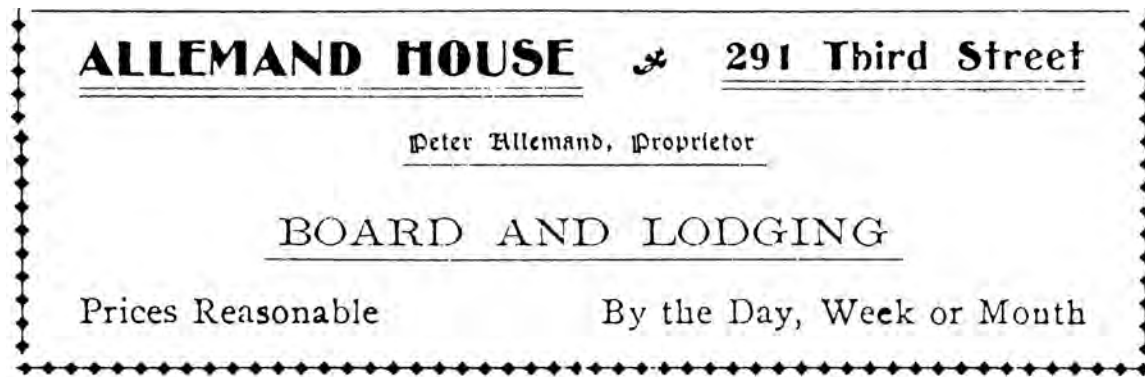


Figure 2-17 1901 advertisement for Allemand House, Peter Allemand's hotel, which also was known as the French Hotel and Sunrise Hotel (Tigner 1901:n.p.).

2.3 THE RAILROAD

At the western boundary of Block 15, just north of the division line (in Lot 5) between the northern and southern lots, the tracks of the San Bernardino, Arrowhead & Waterman Railroad (also called the Kohl Road, the Harlem [Springs] Motor Road, and the Highlands Motor Road, and designated as archaeological site P36-010820, CA-SBR-10820H) entered the project area. The tracks followed a gentle arc to the northeast, then exited the block at a point just south of the Chinese Temple (“Joss Ho[use]”) before it crossed B Street (Mountain View) on its way to the Harlem Springs recreational area (see Figure 2-11).

The San Bernardino, Arrowhead & Waterman Railroad Company, a local transit company, was incorporated on 28 October 1887 with one thousand shares of stock having a par value of \$100 each. In 1888 the company received a franchise from the county to build a narrow-gauge steam line from the city to Harlem Hot Springs (Electric Railway Historical Association [ERHA] n.d.; Swett 1967:23). The franchise term, like that of the parent company, was for a period of 50 years. Construction began in January 1888 and was completed six months later in June. The terminal, engine house, car barns, and stables were built on 6.25 acres at the southeast corner of A (Sierra Way) and Seventh streets (across from Pioneer Cemetery). A horse car line was initiated in June 1888 to transport passengers from the terminal to the central downtown district. The city-center depot, built and owned by the San Bernardino and Redlands Railroad Company (with which the San Bernardino, Arrowhead & Waterman Railroad Company shared track), was located at Third Street between E and F streets. Because the depot serviced travel to Riverside, Redlands, San Bernardino, and Harlem, it was dubbed the Union Motor Depot (Swett 1967:23). Most of the company's initial rolling stock for the steam line was purchased secondhand and consisted of a 14-ton coal-burning engine and two open passenger cars. Total track length was estimated at 6 miles (Swett 1967:23).

By 1893 profits had proved elusive for the San Bernardino, Arrowhead & Waterman Railroad Company. In March, operation of the line was halted, ostensibly for the repair of equipment; for the next year, the line operated only sporadically. Some of the blame was placed on the company's single coal-burning engine, which consumed \$320 worth of coal a month. The expense was high because the coal was imported at a rate of \$14–18 per ton from Australia. One immediate casualty of the San Bernardino, Arrowhead & Waterman Railroad Company's hard

times was the closure and removal of the horse car line in January 1894. The financial situation did not improve. In September 1894, the San Bernardino, Arrowhead & Waterman Railroad Company announced its insolvency (Swett 1967:23).

Finally, in November 1895, the San Bernardino, Arrowhead & Waterman Railroad Company sold all of its stock to brothers Oscar and Walter Kohl and their brother-in-law John Andreson (Walter and Oscar Kohl were married to Andreson's sisters, Frances and Emma). When the company had suspended its operations in 1893, Walter had taken it upon himself to make an independent study of the San Bernardino, Arrowhead & Waterman Railroad Company's problems. He eventually concluded that the root of the problem was the expense of relying on a coal-burning engine. In the Kohls' minds, the problem was not insurmountable. They decided to buy the company. With the purchase of the company's stock completed in 1895, the problem was solved by converting the engine to oil fuel. Along with the engine, the rolling stock of the railroad also included five coaches and a few freight cars. A second engine was added in 1896 (Swett 1967:27, 28).

The Kohl brothers next took over the mortgage on the moribund Harlem Hot Springs Resort. With a \$10,000 expenditure they upgraded the resort into a first-class facility. They built bath houses fed by the natural 122-degree waters of the spring, a plunge, a two-story pavilion for dancing and skating parties, a steam-driven merry-go-round, a restaurant, and offices, all of which were lit by electric lights (Swett 1967:27).

In 1902, competition with the San Bernardino Valley Traction Company convinced them to electrify the line. San Bernardino Valley Traction Company had announced in March its intention to build an extension of its line to Highland. In July the Kohls requested a franchise allowing them to switch from steam to electrical power, permission to extend the line to Highland, and permission to install track from A and Fourth streets, west on Fourth to E Street, and south to a terminal on Third Street. San Bernardino Valley Traction Company was vying for some portions of these same franchises (Swett 1967:28).

Anticipating the awarding of the franchises in their favor, the Kohls set about making preparations to electrify the San Bernardino, Arrowhead & Waterman Railroad. Logging crews were sent to local mountains to cut utility poles and railroad ties. To accommodate the new cars, the road had to be widened to standard gauge; this work began in November 1902. They had placed their order for new cars the month before (Swett 1967:28).

With much of the preparatory work nearing completion, the San Bernardino Board of Trustees decided to award the franchise for the electric railway to the San Bernardino Valley Traction Company for \$50 (Swett 1967:28 [Swett does not say when this decision was made]). One local newspaper suggested that, "This indicates the San Bernardino Valley Traction Company and the Kohls have reached an agreement" (Swett 1967:28, citing an unacknowledged newspaper). On 7 April 1903, the San Bernardino Valley Traction Company purchased all of the San Bernardino, Arrowhead & Waterman Railroad's capital stock (Swett 1967:38). Walter Kohl said later,

After six years of operating the Harlem motor road, I had it in such good shape financially that it was ready to be converted into standard gauge and taken into good society. In short, the SBVT wanted it and was willing to pay a good price. . . . Negotiations followed and swung back and forth until I finally agreed to sell. I had to

sell or else face a dog fight. So, I retired from railroading with a net profit of \$30,000. A year later we also sold Harlem Springs, also at a good profit [Swett 1967:28, quoting Walter Kohl].

San Bernardino Valley Traction Company completed the work begun by the Kohls, extending the line to Highland and Patton in 1903 (ERHA n.d.). San Bernardino Valley Traction Company operated the line until 1911. On 15 February, the company announced it would consolidate with Henry E. Huntington's Pacific Electric Railway Company (ERHA n.d.). Pacific Electric rebuilt the line in 1915 at a cost of \$105,000.

Ridership diminished as a consequence of increasing use of personal automobile transportation. In 1913 ridership had been 220,612; by 1918 it had dropped to 98,548; and in 1926 it was a mere 30,129. In June 1924, the branch line to Patton was closed and night service to Highland was discontinued. In 1926 the line took in \$3,281, with expenses calculated at \$4,470. Finally, in July 1936, passenger service over the line was abandoned completely by Pacific Electric (ERHA n.d.).

2.4 CHINATOWN

CIVILIZED—We are surely in the fair way to attain a high tone civilization, as our good burg has been visited by a delegation of Chinese who propose to make their residence among us, and do the washing for the 'melikan' man [*Guardian* 1867c:n.p.].

With this cynically tongue-in-cheek announcement, San Bernardino's first Chinese residents were welcomed in August 1867. Where they came from is not known, nor precisely how many they were. Three years later, the 1870 U.S. Census counted 17 Chinese in the town of San Bernardino. Two were employed at Starke's Hotel, adjacent to the area that would eventually become the site of the city's Chinatown; 11 lived in five attached buildings in an unknown location; three were living with families in town, probably employed as domestic labor; and one was working as a cook for an army unit stationed nearby (U.S. Census Bureau 1870, cited by Thompson 1978:3). By the time of the next census in 1880, the Chinese population had grown somewhat—123 individuals lived within the boundaries of San Bernardino County (which, until 1893, also included the city of Riverside and a portion of what was to become Riverside County). In the city of San Bernardino, the Chinese had settled in the area of Third Street between Arrowhead (C Street) and Mountain View (B Street) avenues in 1878 (Figures 2-10, 2-11, 2-18, and 2-19). In Block 15, the Chinese settled on the northern portions of Lots 7 and 8 fronting on Third Street. In 1890, their numbers had reached 700 in the county, which still included the city of Riverside as well as the city of Redlands, both of which had sizeable Chinese populations in 1890 (Thompson 1978:3; U.S. Census Bureau 1880).

CHINESE IN THE INLAND EMPIRE

By the time the Central Pacific Railroad was completed in 1869, the Chinese population of California had reached 63,000. Approximately 90 percent of these had come from the southern Chinese province of Guangdong near the Pearl River Delta on the South China Sea (Lawton 1959, 1987a:141; Phillips 1996b:303). Of those who settled in southern California, most ad come from in or around the farming village of Gom-Benn. For five generations men of

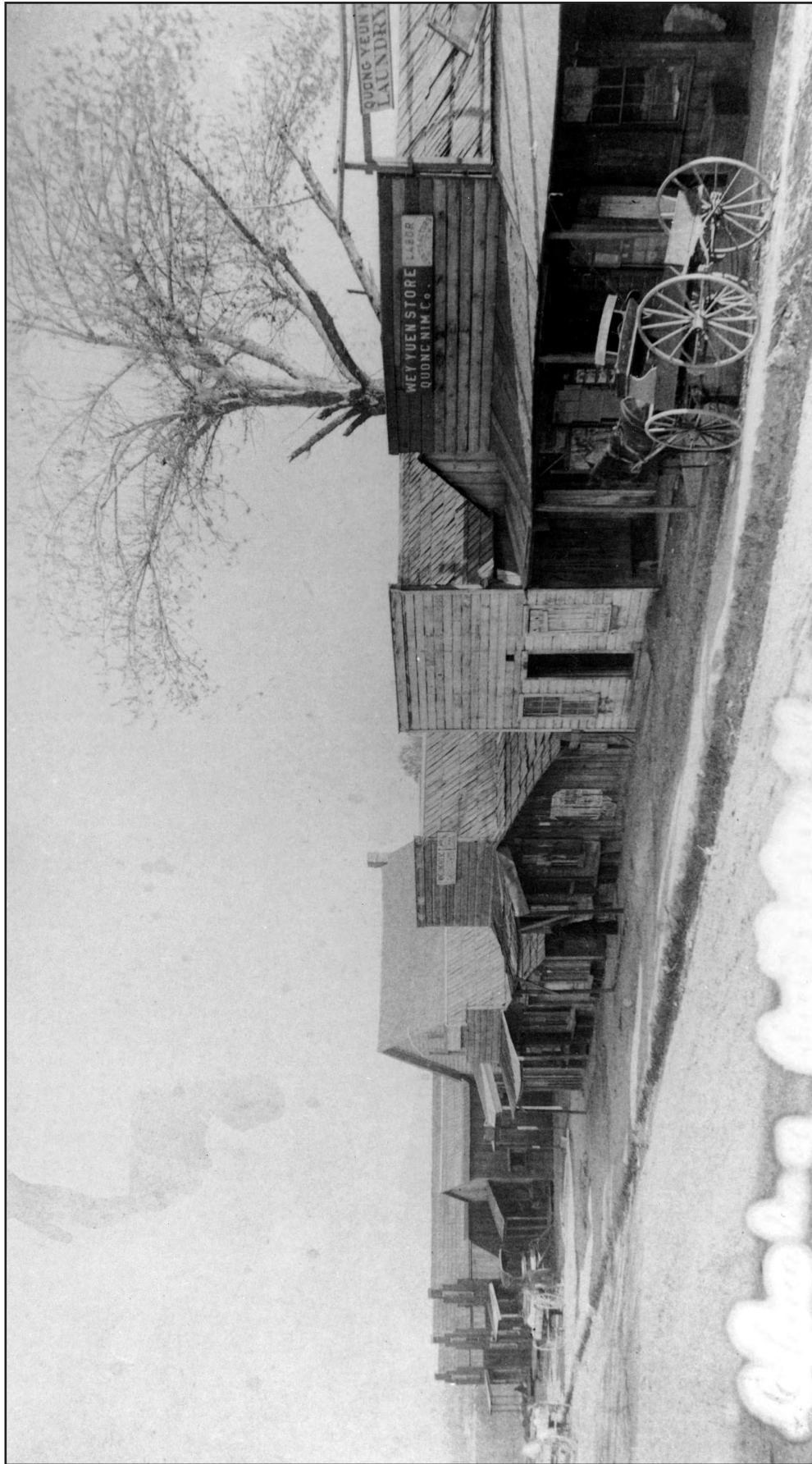


Figure 2-18 A view of the project area on the south side of Third Street in Chinatown during the late 1800s (courtesy, Special Collections Library, University of California, Riverside).

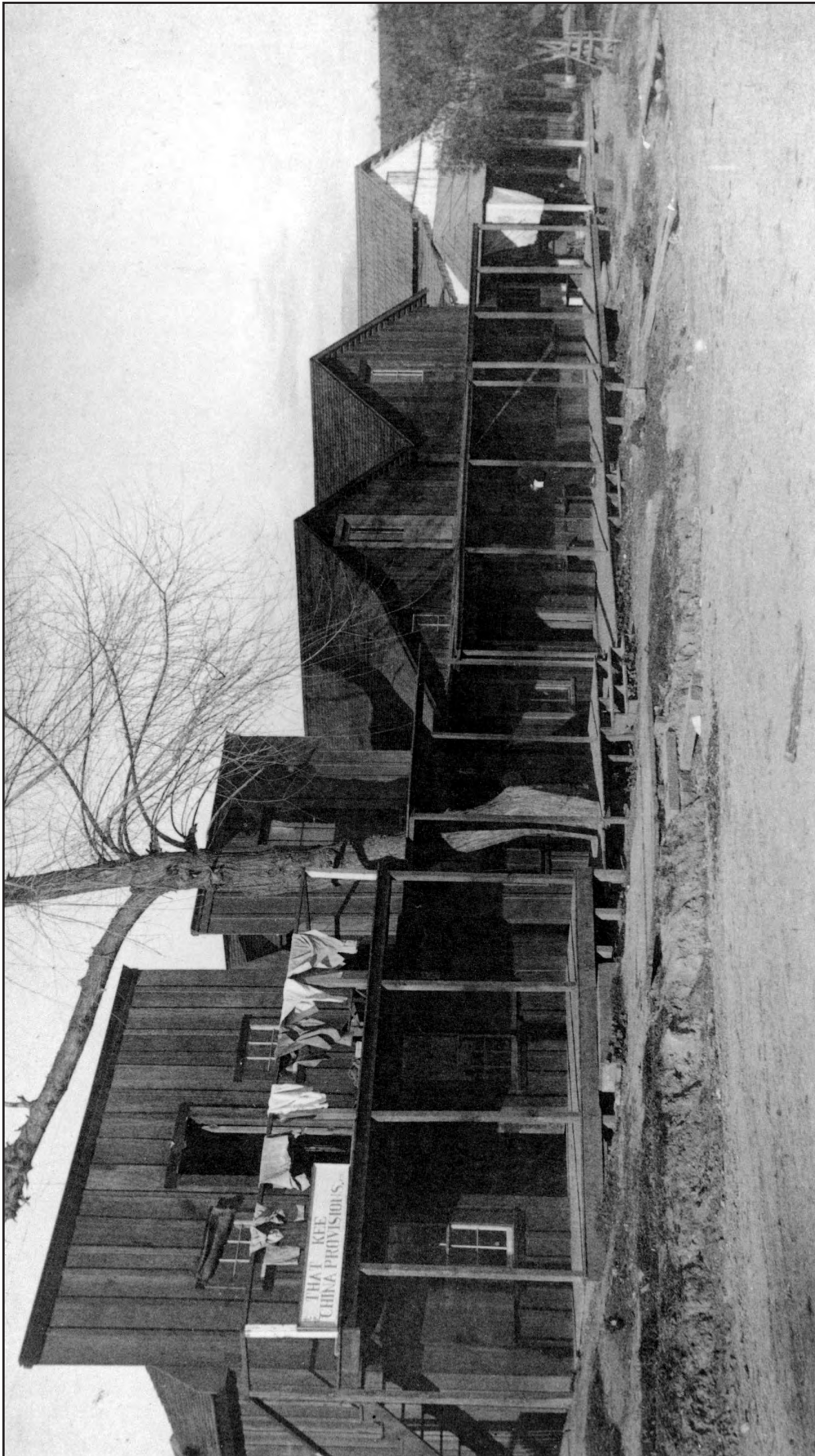


Figure 2-19 A view of the north side of Third Street in Chinatown just north of the project area during the late 1800s (courtesy, Special Collections Library, University of California, Riverside).

Gom-Benn came to America to escape poverty, bandits, political corruption and upheaval, and crop failures. Most came expecting to return to the homes and families left behind to live in comfort from the wealth accumulated by their labors in the United States (Lawton 1987a:141, 143).

Coming to the United States initially during the Gold Rush of 1849, the Chinese were soon relegated to a laboring class by racist exclusionary laws that severely restricted their ability to own or work mining claims. Dwindling finances stalled the construction of the Central Pacific Railroad in 1865. Euro-American workmen demanding high wages (even when they accepted railroad work) often hired on only to get a free ride as far as the Virginia City, Nevada, silver strike. In that same year, Charles Crocker, one of the Central Pacific's "Big Four," proposed using Chinese laborers to complete the railroad. When opposed, Crocker countered, "They built the Great Wall of China, didn't they?" (Ambrose 2000:150). The initial crew of 50 Chinese proved such a success that by the end of 1865, 7,000 Chinese were laboring for the Central Pacific. By completion in 1869, nearly 10,000 more had been recruited directly from China (Ambrose 2000:152; Bean and Rawls 1983:172–173). Charles Nordhoff noted in 1873 that the Chinese were "accurate, painstaking and trustworthy" laborers, while "white laborers are—as in every thinly settled country—unsteady and hard to keep" (Nordhoff 1873:133).

In 1876 and 1877, Chinese laborers were instrumental in constructing the Southern Pacific Railroad (SPRR) through San Timoteo Canyon and San Geronio Pass (Padon and Swope 1997:11). The California Southern Railroad (later the Santa Fe) began construction in 1881 from Colton to Riverside via the Box Springs Grade using a primarily Chinese workforce (*Riverside Press and Horticulturalist* 1882a, 1882b). After completion of these railroads, out-of-work Chinese soon became the major source of labor in the region's burgeoning citrus groves and were used in several aspects of the industry throughout the 1880s and into the 1890s. In its early years, the Chinese were an essential ingredient in the success of the citrus industry. Their attraction, from the grower's standpoint, was predictable: they worked well and hard for low wages, and they rarely complained (H. Vincent Moses, Senior Curator of History, Riverside Municipal Museum, personal communication 2000).

Despite the pleas of large farmers dependent on cheap Chinese labor, the Chinese Exclusion Act of 1882 became federal law on 6 May. The law brought an end to the free immigration of Chinese to the United States allowed by the Burlingame Treaty. The act prohibited Chinese immigration for a period of 10 years. In 1888, the Scott Act forbade the reentry of Chinese who had left the country and tried to return. Upon expiration of the 1882 Exclusion Act, the Geary Act of 1892 extended the prohibition for an additional 10 years. The Geary Act also required laborers to obtain certificates proving legal residence within 1 year of enactment or face deportation. Then, in 1904, the exclusion of the Chinese became permanent by an indefinite extension of the Geary Act (Bean and Rawls 1983:197; Salyer 1996:309–310). The exclusionary policies of the United States were at least partially effective: in 1880 Chinese in the United States numbered 105,465; in 1890, 89,863; by 1920 the number had fallen to 61,639. Not until 1943, when the United States formed a wartime alliance with China, were the exclusion acts repealed by executive order of President Franklin Roosevelt (Salyer 1996:309).

Gradually the Chinese disappeared from the citrus orchards, replaced by Japanese labor. Some moved into the cities where larger concentrations of their own countrymen offered some

semblance of home and greater opportunities for self-employment. Some eventually grew too old for manual labor or simply passed away. Others took up farming, usually on land Euro-Americans maintained could not be farmed. Still others returned to their homeland. By 1941, only a handful of Chinese, mostly old men, still called San Bernardino's Third Street home.

2.5 MODERN DEVELOPMENT OF THE NEIGHBORHOOD

In 1920, Emeline Davis sold all of her interests in Lot 15, including the hotel property, to Ralph E. Swing, a San Bernardino attorney who later represented California in the United States Senate (SBCA 1918–1923:33). Swing demolished the old two-story brick hotel the same year and replaced it with a one-story structure, which over the next 40 years was home to a number of automobile dealerships—mainly Chevrolet (Palmer 1985:C-3). In 1932, Swing sold Lot 5 to E. M. Miller, who in turn sold it to Relvert and Company in 1935 (SBCA 1930–1935:19). Relvert and Company paid assessments on the property through 1940, when they transferred it to Everett Swing (SBCA 1936–1941:18, 1942–1947:18). No information about Miller or Relvert and Company was uncovered during research, although they may have operated auto dealerships. Haenszel (n.d., 1985a:7) mentions several auto dealerships that were devoted to Chevrolet sales including Bronson and Lange Chevrolet, Jones Chevrolet, Mid-Valley Chevrolet, and finally, Jack Coyle Chevrolet. The dealership building occupied approximately all of the northern half of Lot 5 east to the Lot 6 division line according to a 1939 aerial photograph (Figure 2-20) and the 1951 Sanborn map (Figure 2-13). The western section apparently was devoted to new car sales, while the eastern portion was set apart for used cars, mechanics' bays, body shop, and auto spray painting.

The aerial photo and Sanborn map (Figures 2-20 and 2-13) also show other commercial establishments in Lots 4 and 5 directly south of the dealership fronting along Arrowhead Avenue. Within Lot 5, and apparently sharing a party wall with the auto dealership, was a liquor wholesale warehouse facility. The liquor wholesaler, Levi Simon Company, Ltd., was separated by a driveway from a junk warehouse in the northwest corner of Lot 4. This warehouse may or may not have been associated with an auto wrecking yard, auto supplies store, and a second junk storage building located south and southeast, occupying portions of Lot 4 and extending, apparently, into the eastern section of Lot 3. The auto dealership building was demolished in 1961 (Haenszel 1985a:7). Presumably these other businesses—the liquor wholesaler, auto supplies dealer, and the junk and auto wrecking businesses—were likewise demolished at around the same time.

2.6 CONSOLIDATION BY CALTRANS

Beginning in the 1920s, the State of California began buying piecemeal portions of lots in Block 15. In 1924 the state acquired a portion of Lots 7 and 8 (those portions not owned by Wong Nim and the Pacific Electric Railway rights-of-way) (SBCA 1924–1929:33). In 1925, the first buildings of the California Division of Highways (now Caltrans) regional offices were constructed on Block 15 (Anonymous 1927:8–9; *Sun* 1944a:11). The original office complex (built 1927) was a Spanish Colonial Revival-style building designed by San Bernardino architect Howard E. Jones and built by local contractor George Herz and Company. The office floor space was described as 80 by 85 feet. The building also had basement storage space complete with a large fireproof vault.

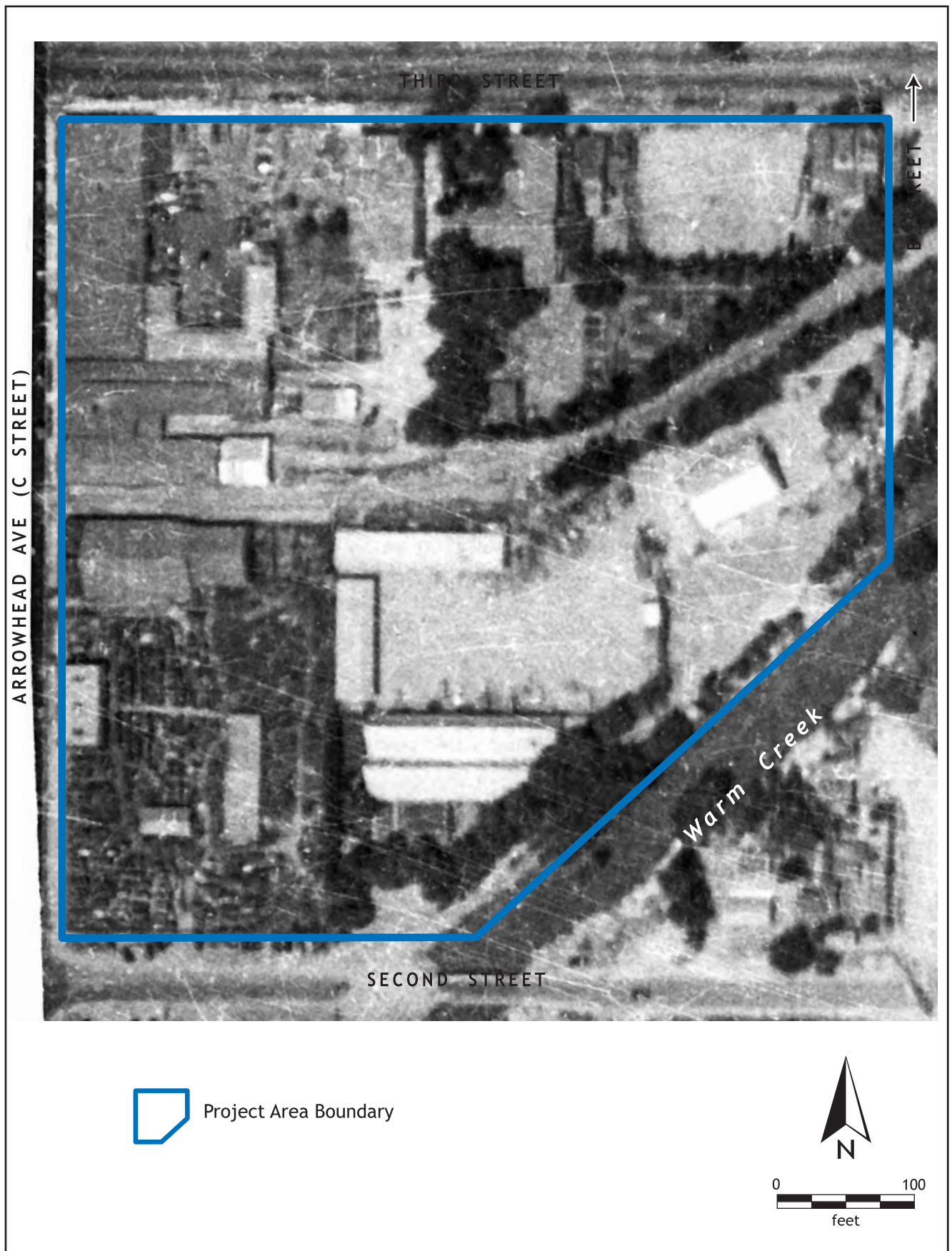


Figure 2-20 1938 aerial photograph of the Caltrans District 8 office complex (courtesy, San Bernardino Flood Control District).

Elsewhere on the site were a 60 by 140-foot shop and a truck shed measuring 26 by 126 feet. Both were built by Los Angeles contractors Houghton and Anderson. The shop and truck shed were adjacent to the Pacific Electric Railway tracks and were serviced by a short spur line (Anonymous 1927:8). Ralph Swing sold that portion of Lot 6 not in the Pacific Electric Railway right-of-way to the state in 1929 (SBCA 1930:19). In March 1944, the state purchased the remainder of Lots 7 and 8 from Wong Nim's estate for \$10,800. The state's property (including the new purchase) was described as:

extend[ing] from Third Street to Second Street where the equipment department shops are located and covers approximately three-quarters of the block.

Immediately to the east of the state highway building is a structure which was occupied by the Chinese and which is believed to be more than 75 years old.

The other building acquired by the state is on the southwest corner of Mountain View avenue and Third street. The portion of the building in the rear is the Chinese joss house in which an altar still exists [Sun 1944a].

Thus, it would appear that the only structures associated with Chinatown that remained on the south side of Third Street in early 1944 were Wong Sam's building on the west and several buildings near Wong Nim's store and temple on the east side. Wong Sam and Wong Nim were both prominent Chinese businessmen in San Bernardino and will be discussed at length later in this report.

The acquired land was slated for an expansion of the existing highway building, a task that division engineer E. Q. Sullivan said would have to wait until after the war was over. The Wong Nim properties were demolished in 1944 (Holland 1944:13; Sun 1944a). The contents of the temple were sold to William Berg, a city health inspector and antique collector, who announced plans to erect a replica of the temple in his back yard on Foothill Boulevard. The Kuan Yin goddess was given to San Bernardino restaurateur Bing Wong by Wong Nim's grandson Lim Dawg. Bing Wong housed it in a place of revered prominence in his Cathay Inn restaurant on Highland Avenue in San Bernardino (recently razed) for many years (Anderson and Lawton 1987:42). Lot 3 was acquired in the late 1930s or early 1940s (SBCA 1942–1947:18).

Right-of-way maps on file at Caltrans provided the following details of land acquisition by the state between 1924 and 1971. Most of Lot 7, the southern two-thirds of Lot 8, the eastern two-thirds of Lot 3, and those portions of Lots 1 and 2 north of Warm Creek were obtained by the Division of Highways from Ralph E. Swing *et ux.* through a grant deed filed in 1924. By 1951 the state owned all of Block 15 but for two parcels (Lot 5 and the southern portion of Lot 6) and the rights-of-way still maintained by the Pacific Electric (see Figure 2-13). Those parcels in Lots 5 and 6 were obtained from Everett H. Swing in 1959 through a Final Order of Condemnation. The railroad right-of-way was not officially obtained from Southern Pacific Transportation Company until 1971 (through a quitclaim transaction), although it had certainly been appropriated for use long before this date.

In 1951–1952, a \$500,000 expansion of the highway building took place. A two-story reinforced office wing was added to the east side of the existing building, and a small one-story addition was made to the rear. The expansion allowed the Division of Highways to consolidate all of its

regional personnel and departments under one roof. Prior to this, the division had been housing personnel in rented office spaces in the city's central business district and in army barracks-type buildings elsewhere on the property (Standing 1952:50–51; *Sun* 1952). In 1959, a western addition to the office building brought the structure to its current footprint (California Department of Transportation 1959).

In 1970, Earl Buie reported that during excavations at the Division of Highways facilities by Pacific Pipeline Construction Company of Santa Fe Springs, workers uncovered horse and mule shoes (possibly related to Alley and Cochrane's early use of the property), bottles (one embossed with "Cochran and Cantell, Belfast," another reading "... patented 1853," and an octagonal bottle with a "clock dial" equipped with a cap and arrow that pointed to the clock numerals (suggesting a medicine bottle designed to indicate when the next dosage was due [cf. Fike 1987:187; Wilson and Wilson 1971:101, 146]) (Buie 1970).

At about the same time as the state's purchase of the Wong Nim property, the County of San Bernardino acquired the row of attached brick buildings on the north side of Third Street that had once been occupied by the Chinese (*Sun* 1944a). The county had been renting the buildings since 1942 from owner N. E. Van Ness. In May 1944, the county and Van Ness entered into an agreement whereby Van Ness would renovate the property for use as office space and lease it to the county for \$200 a month for a period of 1 year. An option for a second year was included. At the end of the 2 years, the county could then purchase the property for \$19,200 plus 60 percent of the cost of renovation. The property was described as 255 feet of frontage along Third Street extending 150 feet north on Mountain View. The buildings included 18,000 [square] feet (*Sun* 1942). These brick buildings, the last remnants of San Bernardino's Chinatown, were demolished in August 1960 to make room for an extension of the courthouse lawn and parking lot (Unprovenanced newsclipping in "Redlands Chinatown Scrapbook," on file at A. K. Smiley Public Library, Redlands, California).

In May 1980, during repaving of the courthouse parking area, preparatory earthmoving activity exposed several deposits of historical artifacts from the Chinatown period. Word of the deposits spread into the local "treasure hunting" community. By the next day, "a small army of collectors wielding shovels, trowels, and picks [were] digging into the lot hoping to find 'treasure' left behind by Chinese residents 40 to 100 years ago" (Metz 1980:B-1, B-4). Despite the protests of County Museum Director Gerald Smith, the "army" of treasure hunters, which was estimated at more than 30 individuals, was allowed to descend on the site, some of whom were seen digging until as late as 2:00 a.m. One so-called treasure pit was measured at 8 feet in diameter and 4 feet deep. "The best locations seemed to be along the former bed of Warm Springs and in circles where privies once stood" (Metz 1980:B-1, B-4). Among the artifacts in the assemblage were "bottles," "opium bottles," "master ink bottles," "soy sauce jars," Chinese coins, an 1893 U.S. dime, and a saloon token with the address "412 3rd Street" (Metz 1980:B-1, B-4).

These findings heralded the rich archaeological remains that would be scientifically excavated some 20 years later.

项目设计

3 RESEARCH DESIGN

The research design identifies the types of archaeological properties thought to be present in the project area, the historic contexts within which the significance of these properties are evaluated, and research questions that the properties' data sets can reasonably address. A good research design does just what its name implies—it guides how the archaeological work is planned and carried out so that the maximum amount of relevant information can be obtained. Archaeology is, by its nature, a destructive process, and a location can only be excavated once. As it is not possible to record every possible variable about every soil layer and artifact relationship, the research design defines what the possibilities of the site are, what the archaeologists should look for, and what should be recorded and recovered. The research design proposed before the site was excavated (Hamilton et al. 2000) borrowed heavily from studies at the Metropolitan Water District of Southern California (Costello et al. 1996; Costello et al. 1998) and a research design for the Woolen Mills Chinatown developed by Anmarie Medin and Julia Costello (Allen et al. 2002). As that pre-excavation version included possibilities that were not realized during fieldwork, it is revised here to address what was actually found on the site.

3.1 ARCHAEOLOGICAL RESOURCES

The clarity of the archaeologists' view into the past is dependent on the preservation of soil strata, features, and artifact collections in the field; the care taken in their excavation; and the determination of their historic associations. The nature of archaeological processes and property types applied for the San Bernardino Headquarters Demolition Project is briefly summarized here.

ARCHAEOLOGICAL FORMATION PROCESSES

Archaeological sites are formed by natural and cultural processes. These processes are recorded in distinctive soil strata, physical features of construction, evidence of destruction and modification, and other changes in site structure. Excavation of a site involves working backwards from the top down, identifying the history of site events in reverse. Layers of construction fill, old ground levels, building foundations, pits, water systems, and other "contexts" of a site (commonly referred to as features or strata) are archaeologically identified in relation to neighboring "contexts." These contexts can be depicted on a matrix where their physical and temporal relationships can be organized and interpreted (Harris 1979, 1989). Artifacts recovered during excavation are associated with specific contexts such as construction fill, a layer of refuse once covering a backyard, or household rubbish dumped into an abandoned privy. Particularly in urban settings, contexts (and their associated artifacts) that can be associated with a short time period and a specific household or neighborhood provide the most accurate information on the past.

Virtually all of the archaeological features (contexts) analyzed for the District 8 Headquarters Demolition Project were associated with the hotels, boarding houses, and other commercial/

residential establishments that once lined Third Street (the exception is the Rancho Period butchering remains). Some individual features can be distinguished as representing either a domestic or a commercial association; however, this is difficult when multiple functions are potentially represented. For example, hotels such as Starke's offered overnight rooms, residential accommodations, housed the Starke family, had lodging facilities for some employees, and served both commercial and public functions (dining, bath house, public meetings, and other events). Commercial buildings in Chinatown also typically included a residence for the owner and frequently sleeping quarters for lodgers or employees.

PROPERTY TYPES

Four archaeological property types are represented in the project area: refuse deposits, architectural remnants, fill or landscape elements, and remains of urban infrastructure. Examples of these property types are referred to as "features" in the text.

Refuse deposits refer to both hollow, rubbish-filled features and sheet refuse. Hollow, rubbish-filled features are excavated holes in the ground filled with the refuse and by-products of daily living. Before organized refuse collection, hollow features (pits) were used as receptacles for discarded ceramics, food scraps (bone, shell, or plant refuse), glass containers, broken personal items, interior furnishings, and household products. Hollow features built for nonrubbish use, such as privies or wells, were frequently filled with trash when they were no longer being used in their initial capacity. Primary deposits in privies—human waste—often contain unique information on the health of the resident population. Refuse-filled hollow features provide collections of artifacts associated with a specific household over a short period of time. Sheet refuse, the second type of refuse deposit, is the accumulation of rubbish on a ground surface. Deposits of this nature can provide evidence of long-term changes and information on activities that occurred in yard areas.

Architectural remains describe evidence of once-standing structures or buildings. In the current project area, such remains included footings for buildings and remains of Chinese cooking facilities. Fill or landscape elements describe intentional building up or modification of the local terrain in order to raise or lower the existing grade. The result is an altered landscape typical of the changing urban environment through time. Fill and the artifacts contained within it may have been imported to the site or represent cutting activities in other areas of the site. These activities were commonly recorded across the project area. Urban infrastructure systems encountered within the District 8 Headquarters Demolition Project area include utility trenches, water drains, and a railroad spur.

3.2 RESEARCH THEMES

Historic contexts provide the information necessary to understand and justify the significance of a historic property (Townsend et al. 1993). These contexts can take many forms and in many cases are overlapping. They can include historical setting, culture histories, and theoretical research domains. Historic contexts presented in Chapter 2 summarize the historical setting and events that shaped the project area properties: prehistoric occupation, early settlement, hotels and residences, transportation, Chinatown, and modern development.

Any phase of the historic context may be represented on the site by archaeological properties (discussed above). The significance of these archaeological properties are partially determined by factors standard to all CEQA projects: their period of significance; their association with significant dates, persons, and cultural groups; their builders or designers; and their potential to yield information. Archaeological properties are most frequently determined significant under this last topic, Criterion D, addressing information linked to theories or paradigms that drive the scientific study of past societies. Research areas currently being studied by historical archaeologists working in urban contexts include modernism (the cultural transition driven by the Industrial Revolution) and Victorianism (a strong value system that was particularly manifest in homes). These approaches were nicely articulated by Adrian and Mary Praetzellis for the Metropolitan Water District of Southern California Headquarters Project in Los Angeles (Costello et al. 1996:38–40). Two other topics, ethnic display/boundary maintenance and urban geography, are discussed below in more detail.

ETHNIC DISPLAY AND BOUNDARY MAINTENANCE

Archaeologists and historians have been focusing on sites and histories of the overseas Chinese for the past several decades. Faced at home with overpopulation, a shortage of land, periodic crop failures, and political ills, nineteenth-century Chinese became adept at making temporary homes in foreign lands. Throughout the Pacific Rim they took advantage of available job markets, and it was typical for men to work abroad to support families at home.

Chinese workers were drawn to California, which they called *Gum Saan* (Golden Mountain), in large numbers after 1848. Working as gold miners, railroad workers, agricultural laborers, laundrymen, cigar manufacturers, factory workers, and vegetable sellers, they took advantage of opportunities and filled available niches in the economy. Like many emigrant groups, they encouraged friends, family, and villagers from home to join them and developed cultural communities within their host societies. Here they spoke their own language, maintained their social and religious rituals, and shared traditional foods and feast days. Chinatowns served not only their own residents but also rural nationals from the surrounding region. Banding together provided some insulation from what was frequently a hostile host society. The Chinatowns of nineteenth-century America were made up mostly of men who supported paternal families and often wives and children residing in their home villages.

In addition to a strong allegiance to their homeland, a number of factors discouraged Chinese workers from remaining permanently in *Gum Saan*. Familial duties required that sons (and sons' wives) live with and take care of elderly parents as well as the shrines and memories of paternal ancestors. Men could not bring their wives abroad and abandon these obligations and, therefore, opted for periodic trips home where they would attend to necessary duties, often fathering another child before returning. Merchant families were notable exceptions to this pattern as all members were involved in running the business. Chinese in America also were subjected to overt discrimination and violence, anti-immigration laws, and an atmosphere of hostility that drove many back home. Some, of course, did stay: wives joined husbands, brides arrived, families were established, and children were raised. And others—both married and single—simply never returned to China.

Previous archaeological studies in other urban Chinatowns have provided us with enormous knowledge of the material culture of this ethnic group. Extensive excavations conducted in the following towns have resulted in detailed reports of the historical and archaeological findings: Lovelock, Nevada (Hattori et al. 1979); El Paso, Texas (Staski 1985); Phoenix, Arizona (Rogge et al. 1992); and Riverside (Great Basin Foundation 1987), Los Angeles (Costello et al. 1998; Costello 1999; Greenwood 1996), Redlands (Padon and Swope 1997), Ventura (Bente 1976; Chace 1976), Walnut Grove (Costello and Maniery 1987; Maniery and Costello 1986), San Francisco (Garaventa and Pastron 1983; Pastron et al. 1981), San Jose (Allen et al. 2002), Weaverville (Brott 1982), and Sacramento (Felton et al. 1984; Praetzellis and Praetzellis 1982, 1990, 1997), California. Some large excavations—such as that in the Tucson, Arizona, Chinatown—have only been reported in short articles (Lister and Lister 1989; Olsen 1978). Others, such as the extensive excavations in San Jose's Plaza Chinatown and in the Chinatown area of San Luis Obispo, have produced collections that have never been analyzed (Roop 1988).

All of the comprehensive reports cited above include histories of the individual Chinatowns. Most of the findings are presented as catalogs of the array of goods imported from China and used by these overseas communities; some are very well illustrated. A smaller number of these studies are based on excavations and analyses of artifact features associated with individual households or events at a specific time. These studies can be used to address more specific cultural questions concerning internal differences and similarities both within and between Chinatowns as well as issues regarding the cultural practices of Chinatown residents. Excavation of the IJ56 Block in Sacramento recovered features related to residences and shops of Chinese merchants in the mid-1850s (Praetzellis and Praetzellis 1982). Analyses demonstrated how merchants' efforts to create a traditional Chinese environment enhanced their influence on both the Chinese and Anglo-European communities. Later excavations in this same block recovered deposits from both merchants and residents, and subsequent interpretations demonstrated how non-Chinese artifacts were used to emphasize traditional practices and boundaries (Praetzellis and Praetzellis 1997).

Recent excavations in Los Angeles recovered three rich artifact deposits filled in 1919 that related to a complex of vegetable sellers' residences, cook house, stables, and warehouses (Costello 1999; Costello et al. 1998). At least 12 such compounds covered half of the Los Angeles Chinatown in 1906. These all-male enterprises were remarkable for the lack of decorative furnishings and general diversity of goods that characterize other parts of Chinatown. Although artifacts demonstrated bulk purchasing and a generally Spartan existence, the porcelain dishes were more expensive than those used in Chinatown as a whole. At the top of their profession, the lack of display goods reflected not their lack of means but the egalitarian nature of their working and living situation that made demonstrations of status differences unnecessary.

The San Bernardino Chinatown contains artifact deposits identifiable by both a short time span and by household. The community was founded in the late 1870s, and a portion of it was occupied by Wong Nim and others until as late as 1944. Within this time span, deposits were associated with households for specific time periods, therefore allowing for comparisons of change over time. All of this is discussed in Chapters 5 and 6.

Beliefs, cultural attitudes, and values are not directly accessible through archaeological data (Binford 1962, 1965). Ian Hodder, however, pointed out that ethnicity is an appropriate subject

for archaeological studies if it is defined as the “*mechanism* by which interest groups use culture to symbolize their within-group organization in opposition to and in competition with other interest groups” (1979:452, emphasis in original). Ethnic groups cannot be defined by a checklist of activities and artifacts because the system is changeable, not static; superficial but visible aspects of a group may change without affecting that group’s identity (Barth 1969; Spicer 1971:798). Ethnicity is a function of self-identification and ascription, not objective identification from outside (Barth 1969). Spicer (1971:798) pointed out that “what becomes meaningful is probably a function of the oppositional process,” and Barth (1969:15) likewise placed the emphasis on “the ethnic boundary that defines the group.” Therefore, it is ethnic strategies such as boundary maintenance, expressed in patterns of behavior that took material form, that can be studied archaeologically.

Much has been written by ethnographers on ethnicity as a social process among the overseas Chinese. On the community relations level, it has been noted that where the host people have been hostile to Chinese traditional values, behaviors and organization among the immigrants have been reinforced (Coughlin 1960:192; Glick 1942:647–675). Conversely, where relations have been good, outward signs of Chinese ethnicity have become less noticeable (Amyot 1973:82). In personal interaction across ethnic lines, John Omohundru (1978:130) reported that Chinese merchants “advertise their ethnic distinctiveness and consequently shift the stress inherent in face-to-face commercial transactions at the ethnic group level.” In this way, each party involved in the transaction has mutually understood expectations of the other which help to regularize their business relationships. The Chinese merchant community itself has strong reasons for preserving its ethnic boundaries: “the reason is business, the method is to organize an entire commercial ethnic group” (Omohundru 1981:84). The commercial advantages of exclusiveness include the ability to deter competition, fix prices, obtain credit, and settle disputes informally.

Merchants were the usual choice to represent the Chinese community as a whole to local government officials and other influential bodies (Coughlin 1960:80; Glick 1938:74; Lai 1988:191). The Chinese middleman was often someone with ties to specific native individuals whom he could call upon when needed (Omohundru 1981:114). When not excluded by law or practice, Chinese businessmen became involved with local government and could serve as official intermediaries by virtue of their bilingualism and their positions of respect in both communities (Glick 1938:740). It is clear that a Chinese merchant’s ethnicity involved more than cultural display for its own sake. The emphasis on ethnic differences will vary “from time to time, from situation to situation, depending on the way they interpret their interests” (Coughlin 1960:191–192). As an active force, ethnicity can be a strategy for both survival and economic advancement.

URBAN GEOGRAPHY

Archaeological resources can help us to understand characteristics of the natural environment as well as landscape modifications made during the historic period. They can aid in understanding beginnings of urban planning and infrastructure—water supply and storage, trash and sewage disposal, flood protection, fire protection, and drainage. Features related to water supply and waste disposal can incorporate public and individual private adaptations to basic needs in urban areas, and are often linked to social and political status in neighborhoods [Bell 1987:57].

Civic improvements that are carried out by government agencies generally are planned and well documented. In western cities of the late nineteenth and early twentieth centuries, these projects often were undertaken on a large scale to overcome natural disadvantages of a city's site. Sacramento, for example, was a classic "instant city" that sprang up to take advantage of a particular historical phenomenon—the Gold Rush. Situated at the junction of two seasonally flooding rivers, the city was assaulted by several major floods that, for a time, threatened its status as regional commercial center and state capital. The city's reaction was to raise the level of its business district by as much as 16 feet. The progress and process of street raising are generally well documented in contemporary primary and secondary sources (e.g., Lagomarsino 1969). The responses of the citizenry itself, however, are largely unknown since this level of activity occurred one parcel at a time and varied significantly throughout the city in spite of city ordinances that attempted to regulate them (Praetzellis 1991).

Although San Bernardino was not subjected to such large-scale improvement projects as portions of Sacramento, laws and regulations were set up by the city that were imperfectly complied with and enforced. Archaeology is the only method of examining the responses of individual residents to some legal norms established by the city. For example, in many cities "earth closets" (i.e., privies dug directly into the ground) were outlawed in the 1880s, and historical records document many sewer hook-ups at this time. Two recent excavations in San Bernardino show that urban households in this city were continuing to use earth privies well into the twentieth century. Of the 11 privies excavated at the Santa Fe Yards site (Swope et al. 1997), one was filled in 1892, one in 1899, five between 1900 and 1910, and three between 1914 and 1916. Another privy yielded no temporally diagnostic artifacts. Bottle dates for privies from the Superblock site excavations indicate that of the 11 privies identified there, four were pre-1900, six dated between 1900 and 1910, and one may have been filled as late as 1928 (Doolittle and Majewski 1997). Similar examples of ad hoc drainage, fire protection, and refuse disposal have been discovered archaeologically. In the mixed-use neighborhood that became the Caltrans District 8 Headquarters, how did residents respond to city ordinances? Did residents keep prohibited livestock, engage in unlawful activities, and build or use facilities that did not "meet code"?

3.3 PREVIOUS INVESTIGATIONS IN THE PROJECT VICINITY

Information about neighborhood formation (i.e., residential differentiation and the emergence of homogeneous neighborhoods along social and economic lines) also can be obtained from archaeological resources. It is not always possible, nor is it necessarily always desirable, to orient urban archaeological research to features within a particular parcel with well-defined historical associations and occupants. This theme directs research away from the household and asks what process differentiated neighborhoods from each other. Separating the influences of ethnicity and economics on a neighborhood level has proved difficult (Cheek and Friedlander 1990). These methodological problems must be overcome, however, in order to do what Salwen (1978) described as archaeology *of* the city rather than merely archaeology *in* the city.

The discussions above included reference to historical archaeological studies at sites located from the American West to the East Coast of the United States to the South Pacific. Previous relevant archaeological work in the vicinity of the District 8 Headquarters Demolition Project is of particular importance for its geographical proximity. Padon and Swope's (1997) excavations

in Redlands' Chinatown recovered four substantive artifact "trash" deposits containing refuse dating to as late as the 1930s and which included distinctive Chinese artifacts. A privy filled with trash in the 1930s also contained important information on previous Chinese occupants, although it had been severely pothunted in the 1960s and 1970s. Three other features containing Chinese artifacts yielded no temporally diagnostic items. One of the largest collections of Chinese material resulted from excavations by the Great Basin Foundation at the site of the Riverside Chinatown. The resulting two-volume publication contains invaluable historical research and reports on the archaeological findings (Great Basin Foundation 1987).

In recent years, Doolittle and Majewski (1997) reported on archaeological testing and excavations conducted in downtown San Bernardino that documented ethnicity and the district's transformation from a residential to a commercial area. Research and excavations of the Santa Fe Yards site by Swope et al. (1997) also found evidence of Mexican cuisine being adopted by the city's population. In addition, this project documented San Bernardino's rise as a center of rail transportation for inland southern California as well as other characteristics of this San Bernardino neighborhood.

3.4 PUBLIC INTERPRETATION

Public laws, such as CEQA, help to ensure that cultural resources are not destroyed without attempting to mitigate their loss to public concerns. For archaeological resources in the past, these concerns often have been narrowly defined as their scientific research potential. As a result, many fascinating and important discoveries made by archaeologists have been confined to highly technical reports circulated among a small group of professionals.

This is now changing. There is a growing consensus among agencies that when public funds are expended to protect resources in the public interest, the public should receive some direct benefit. In keeping with this philosophy, several avenues of public interpretation were pursued during the District 8 Headquarters Demolition Project.

FIELD VISITS

Site excavations were planned to facilitate field visits by Caltrans officials, the general public, and the Chinese community.

THE PRINTED WORD

The Caltrans Office of Public Affairs prepared a press packet and arranged for site visits by local newspaper and television journalists. This resulted in local coverage (*Riverside Press Enterprise* 2001) as well as the story being picked up by the Associated Press (2001). Field Director Keith Warren also authored an article that appeared in a professional newsletter (Warren 2002), and Caltrans covered the story in its own in-house publication (California Department of Transportation 2001).

PUBLIC TALKS

The archaeologists involved in the project have been invited by the San Bernardino Historical Society and the Chinese Historical Society of Southern California to present the project findings.

MUSEUM DISPLAYS

Several of the artifacts were specifically prepared for use in a museum display: strings of Asian coins, *kwat pai* gambling tiles, an intact *kwat pai* box with an x-ray showing its contents, and a Chinese stoneware storage jar with bowl lid and plaster sealant.

TEACHING AIDS

Unprovenienced items were collected during fieldwork for use in interpretive venues such as classrooms and lectures.

WEB ACCESS

This document also was designed so that portions of the report could be adapted for web page presentation, possibly through the Historical Society of Southern California.

REPORT ACCESS

This report will be available on CD ROM at a nominal cost to ensure that it is accessible to those who have an interest in the project.

勘 查 方 案

4 RESEARCH METHODS

The preceding chapters outlined the historic context from which the location of potentially intact archaeological resources were predicted. They also provided the research and theoretical framework to evaluate resource importance. This chapter summarizes prior research on this site and then details the methods used for the documentary, ethnographic, archaeological, and laboratory research and analysis.

4.1 SUMMARY OF PHASE II RESEARCH

Archival research completed in 1999 (Hallaran and Hamilton 1999) demonstrated that the project area potentially contained significant archaeological resources related to the San Bernardino Chinatown, Starke's Hotel, and other historical occupations. A research design was prepared identifying specific resources that could contribute important information on the past (Hamilton et al. 2000). Included in this was a Phase II testing program designed to ascertain the presence of important archaeological deposits and to assess their integrity. The results of that testing program were presented in an abbreviated report along with recommendations for a final treatment plan for the site (Costello et al. 2000).

Phase II fieldwork was conducted between 17 and 24 June 2000 by Applied EarthWorks, Inc. under the direction of Dr. Julia Costello of Foothill Resources, Ltd. Areas identified in the research design as having potential to contain extant important archaeological remains were carefully stripped using a backhoe to remove asphalt and overburden. The 10 test areas identified in the testing plan were examined, along with four new test areas added during fieldwork (Figure 4-1). Seven individual historical features of potential importance were found during the fieldwork along with locations where undisturbed nineteenth-century ground remained intact. In these latter locations, the possibility for discovering additional important features appeared to be high. Backhoe trenches cross-cutting stream terraces revealed no evidence of prehistoric occupation or use of the study area. Evaluation of the findings resulted in identification of six excavation areas that appeared to contain intact archaeological features with the potential to address important questions about local and state history. Four of these areas addressed remains associated with Chinatown (1870s–1940s), one with the Mormon Fort San Bernardino (1851–1854), and one with a dwelling on Second Street (1894–1924).

4.2 DOCUMENTARY RESEARCH

Substantial documentary research was conducted in preparation for the Phase II testing at the site (Hallaran and Hamilton 1999). Subsequent research was focused on topics suggested by the archaeological findings, particularly the historical occupants of the project area. The analysis of census material was extremely useful in illuminating aspects of this historical population.

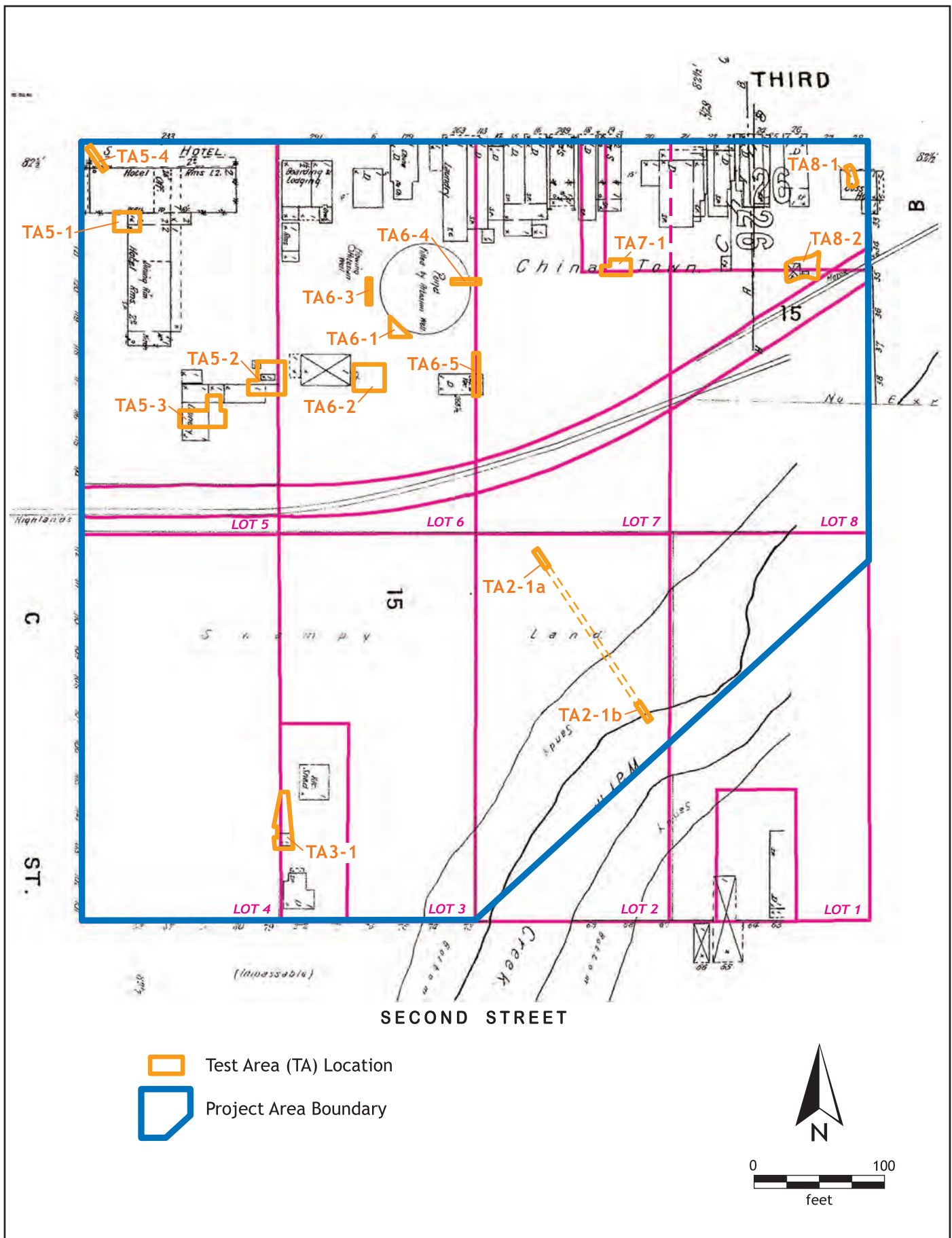


Figure 4-1 Phase II test areas shown on 1894 Sanborn map with 1913 assessor's lot boundaries added.

ARCHIVES AND INSTITUTIONS

The history of the Caltrans District 8 Headquarters site presented here is the product of research undertaken at a number of institutions and archival repositories. Research began with the records and literature review provided by Caltrans, which was acquired from the San Bernardino Archeological Information Center of the California Historical Resources Information System at the San Bernardino County Museum in Redlands.

Primary and secondary sources were examined at local history collections housed by various city and county agencies. The California Room of the Norman Feldheim Central Public Library in San Bernardino maintains collections of early city directories, Sanborn Fire Insurance Company maps (on microfilm), photographs, secondary literature, and an expansive collection of reference files. The Heritage Room of the A. K. Smiley Public Library in Redlands also has a collection of secondary literature and historical maps as well as the Steele Collection of historical photographs. The Riverside Municipal Museum's collection of secondary literature and its archival collections related to Riverside's historical Chinatown also were examined.

The Tomás Rivera Library at the University of California, Riverside was surveyed for relevant material, as were the university's Special Collections Library and the Science Library's map collections. Especially important to the current research was the Harry W. Lawton Chinatown Research Collection at the Special Collections Library, which contains approximately 25 linear feet of material gathered during the research and archaeological excavation of Riverside's historical Chinatown in 1985. Although the collection contains relatively few historical photographs, it proved to be the source of several images contained in this report, including two of only three images known to exist of San Bernardino's historical Chinatown. Most helpful, perhaps, in terms of research potential were the extensive clipping files collected by Lawton and others from a number of regional newspapers dating from the 1860s. Although its focus is largely on Riverside, the two-volume report generated by the excavations (*Wong Ho Leun: An American Chinatown* [Great Basin Foundation 1987]) is actually regional in nature and was extremely useful in providing summary documents and important aids to identify other pertinent primary and secondary sources.

By far the most important sources of historical information were found in the holdings of the San Bernardino County Archives. This comprehensive repository contains the official records of county agencies dating back to the early Mormon period. Housed here are the archives of the County's Assessor's Office, Recorder's Office, and Superior Court (among other offices); historical maps, photographs, and other images; U.S. Census rolls (on microfilm); and some early city records.

Portions of the historical sections dealing with the Lúgo family and Mormon period were derived from Hallaran's 1990 master's thesis in history. Dr. Karen K. Swope, Caltrans District 8 Archaeologist, kindly offered her expertise and insights into San Bernardino history and opened Caltrans' map files for researchers' use.

Historiography

The history of the San Bernardino Valley and its principal city have been the subjects of historical inquiry for more than a century. For 50+ years, George and Helen Beattie's *Heritage of the Valley: San Bernardino's First Century* (1951) has remained the best single volume on the subject. Earlier treatments like Wallace W. Elliott's *History of San Bernardino and San Diego Counties, California* (1883) are essentially promotional literature of the "mug book/subscription" variety. More comprehensive is Luther A. Ingersoll's *Century Annals of San Bernardino County* (1904), a subscription history that offers important pioneer reminiscences unavailable elsewhere and other glimpses into the early days of the city. Yet another subscription history, John Brown, Jr.'s and James Boyd's three-volume *History of San Bernardino and Riverside Counties* (1922) is reasonably comprehensive. Both men were sons of valley pioneers; however, Boyd's pride in being the area's "first anti-Chinese man" probably explains the absence of any mention of the role Chinese played in the growth of the area in more than 1,000 pages of text. The most comprehensive treatment of the Mormon period of San Bernardino's formative years is Edward Leo Lyman's *San Bernardino: The Rise and Fall of a California Community* (1996). *San Bernardino, California: Settlement and Growth of a Pass-Site City* by H. F. Raup (1940) is an important monograph on the development of the city from a geographer's viewpoint.

Despite more than 100 years of historical writing about San Bernardino, very little secondary literature exists to tell the story of San Bernardino's pioneer Chinese inhabitants. Two exceptions, however, are truly outstanding. Richard D. Thompson's 1978 article on the founding of the Third Street Chinatown community, although brief, provided an important starting point for research on the current project. *Wong Ho Leun: An American Chinatown* (Great Basin Foundation 1987), focuses mainly on the Chinese community of nearby Riverside, California. The volumes grew out of archaeological excavations conducted at Riverside in 1985.

ANALYSIS OF UNITED STATES CENSUS REPORTS

Interpretation of the archaeological remains and historical documentation of the San Bernardino Chinatown required knowledge of the demographics of the Chinese population. This is best obtained from U.S. Census records that are compiled every 10 years. Three evenly spaced years were selected to represent the evolution of the community: 1880, the first enumeration year after the founding of the Third Street Chinatown; 1900, the height of Chinatown's development; and 1920, when the population was in decline.

The census reports are organized by enumeration districts, which do not necessarily correspond to modern geographic landmarks (such as streets and city limits) and change for each decade. Copies of the actual census sheets were studied by Project Historian Kevin Hallaran, and those pages, including Chinese names thought to be within the town of San Bernardino, were copied. This population included the residents of the Third Street Chinatown as well as those living in other parts of San Bernardino.

As the analysis of the entries proceeded, this census list was refined and several entries were eventually eliminated when it was determined that the individuals were living peripherally to the

town itself. Two of these—the community of vegetable growers along Waterman Street in 1880, and a similar settlement farther out of town in 1900—have been retained as examples of these typical population groups. Although these vegetable-selling communities were not in San Bernardino proper, their residents were undoubtedly among the regular customers of the town's establishments. The results of this study are presented in Chapter 6.

Transcription of Census Data

Transcription of the data began by using copies of the original census sheets. However, portions of the data on the copies were not legible due to poor quality of the original, and other sources were sought by historian Deborah Cook of Foothill Resources. These included: (1) the 1880 U.S. Census obtained on CD ROM; (2) the National Index Family History Resource File CD ROM set produced by the Church of Jesus Christ of Latter-Day Saints; and (3) online digital images of actual federal census pages at the Ancestry.com website.

Digital images of actual census pages, available on the Internet at the Ancestry.com website, were consulted to assist in verifying illegible data on the copies of the 1900 and 1920 census. Images were not available for the 1880 census. This source also was used to view data on adjacent pages to determine the nature of neighboring households, which was particularly useful in identifying occupations of Chinese enumerated in the 1900 census. The Ancestry.com website provided geographic boundaries for enumeration districts. This feature was helpful in determining the location of some households not described on the copies. This feature was not available for the 1880 census.

The transcribed data were crosschecked to guarantee accuracy of data transcription. This was effected by one person reading data from the transcribed version while the other person followed on the original copies. Errors found during this check were corrected.

Developing the Database

A Microsoft Works database was set up for each census year being transcribed. Column headings were selected for each year as they appeared on the original census sheets. Three headings were added to assist in analysis of the data: location, page, and census taker's initials. Data entered into the location column are based on selected geographic areas established during this study. The page number is the number that appears on the census sheet containing the entry. The census taker's initials were added to provide a basis for analyzing reliability of the data. A column was eliminated from the database if no entry appeared in that column on the original census. Abbreviations were used for much of the data transcribed to allow for ease of entry into the databases. A key to the abbreviations was compiled for each year. The complete transcriptions are presented in Appendix A.2 along with a comprehensive key.

4.3 ARCHAEOLOGICAL EXCAVATIONS

Based on documentary evidence, known land-use patterns, site formation processes, urban land development, and the results of Phase II testing, a treatment plan was prepared to guide data recovery excavations (Costello et al. 2000). To focus excavations efficiently, methods were implemented for predicting the location of important archaeological remains and for determining

their potential research value. The excavation evaluation strategy outlined below relied heavily upon research values developed by the Anthropological Study Center at Sonoma State University during Caltrans' Cypress Freeway Project (Praetzelis 2001) and implemented during historical archaeological investigations of the Metropolitan Water District of Southern California's Headquarters Facility Project (Costello et al. 1996).

STRATEGY AND RESULTS

The general strategy for the placement of excavation areas was based on the results of the Phase II testing and the further likelihood of encountering intact archaeological deposits within the historical lot boundaries. Generally, daily activities that produce features such as privies, refuse pits, cooking features, and sheet refuse (midden) tend to occur a discrete distance from the main structure, primarily along the rear margin of the property. Because such features are expected to lie principally in the rear lots, the strategy for feature discovery focused on those areas as well as areas that demonstrated archaeological potential during Phase II testing. Eight excavation areas were selected guided by criteria developed in the research design (Figure 4-2).

The excavation areas, representing 0.098 percent of the project area, were selectively stripped of overburden using two backhoes equipped with smooth-bladed buckets and a front-end loader to remove backdirt (Figure 4-3). The boundaries of excavation areas were refined as stratigraphy, integrity, and resource potential were evaluated by the principal investigator (Costello), field director (Warren), and Caltrans archaeologist (Swope). Management of the backdirt and anticipation of problems with access to the excavation area, which in some locations reached 4 feet deep, were important parts of field logistics. Accommodations for a press day and public day also affected choices of when specific excavation areas were opened.

At the end of the excavations, 60 features had been identified. Of these, 34 (52%) were identified as being potentially important and were archaeologically tested. Of those tested, 21 were evaluated as important (Figure 4-4). A list of all identified features is presented in Appendix B, and the eligible features are discussed in detail in Chapter 5.

IDENTIFYING AND DOCUMENTING THE FEATURES

Once historical features were exposed in plan view, a preliminary assessment of quantity, integrity, age, and association was made (see QIVA discussion below). If the feature was determined to be potentially important, data recovery procedures were implemented. Manual excavations were carried out according to standard stratigraphic techniques, that is, according to physical layers of deposition. To document site stratigraphy, Æ used a recording system formulated by the Department of Urban Archaeology at the Museum of London (Schofield 1980), formalized by Edward Harris (1989), and adapted to historic-period urban sites in California by Adrian and Mary Praetzelis of the Anthropological Studies Center at Sonoma State University. This approach to the task of recording an archaeological site is governed by the concept of archaeological stratification and the definition of context, a term applied to the physical evidence of an individual action or event in the history of a site. By extension, context also refers to the process of that event, for instance the filling of a ditch. Such physical evidence can take the form of layers representing periodic accumulation, cut features representing

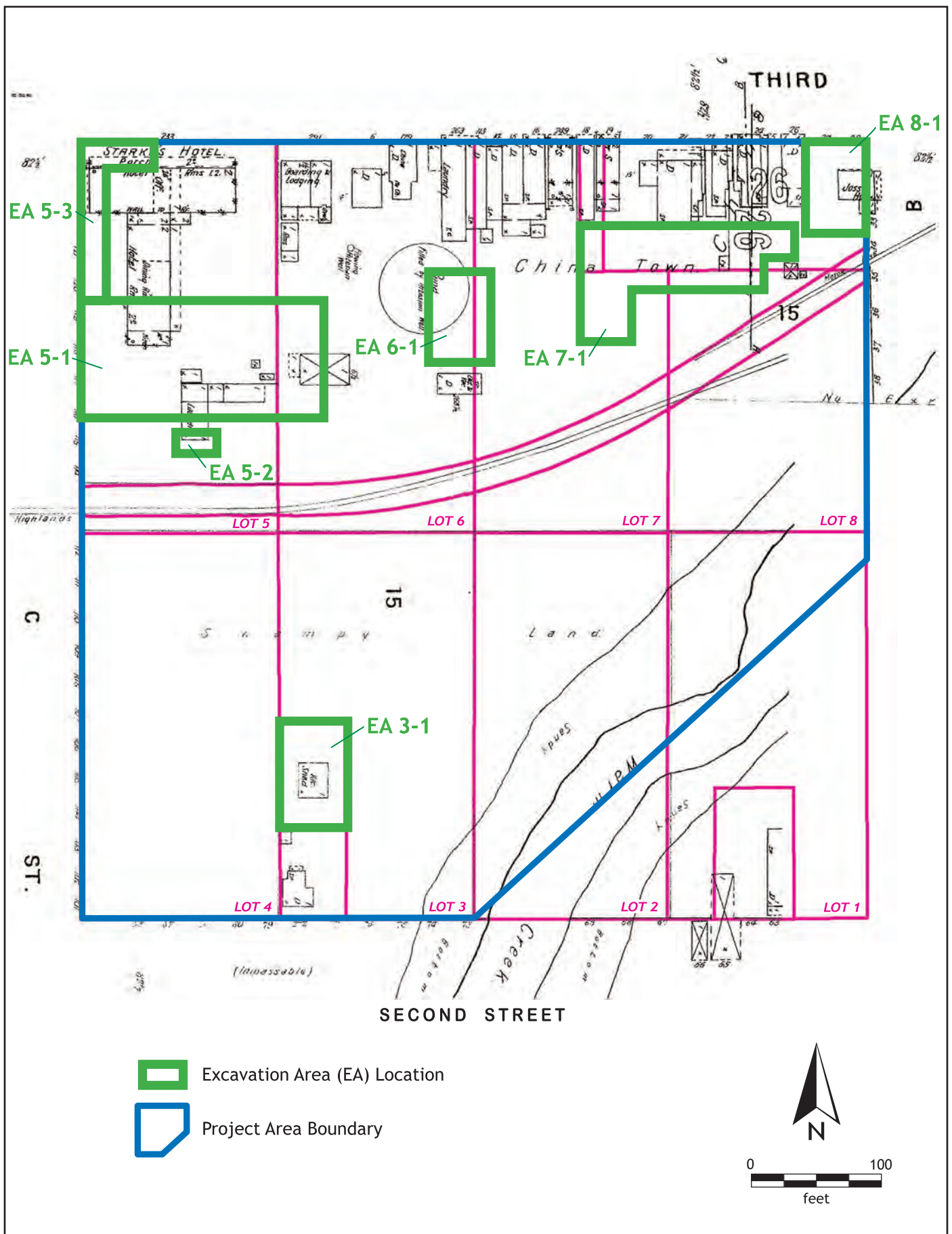


Figure 4-2 Excavation areas shown on 1894 Sanborn map with 1913 assessor's lot boundaries added.



Figure 4-3 Backhoe removing overlying soils in Excavation Area 7-1.

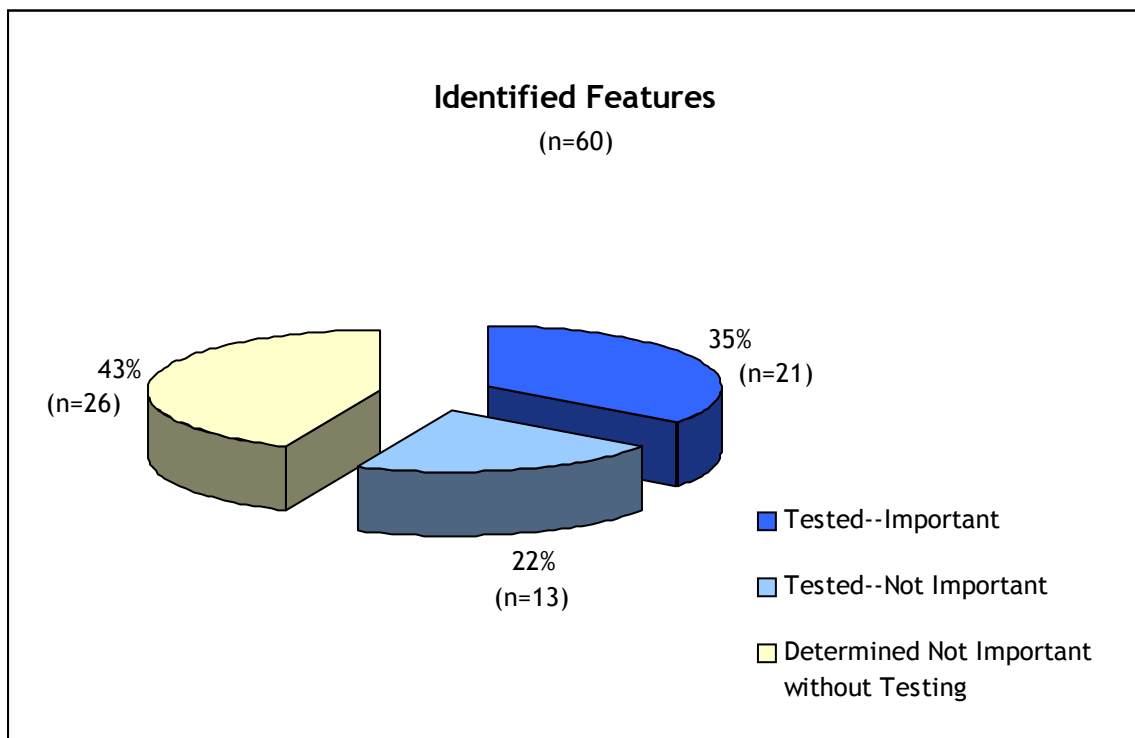


Figure 4-4 Results of feature identification and testing.

intrusions into the ground surface, and walls and surfaces representing structures. The term “context” was deliberately chosen over layer, deposit, or feature because in England it is a neutral term that does not have specific implications for interpretation. When used in conjunction with stratification, context also refers to the relationship of a part to the whole. A context, in that case, is the basic unit of division of the recorded stratification. The sum of these physically interrelated units of stratification constitutes the history of the site (Schofield 1980:3). In the United States, particularly in the field of cultural resources management and National Register of Historic Places (NRHP) evaluations, the word “context” is widely used to describe the setting (both historical and physical) of a particular resource. To avoid confusion, therefore, for this report the words “layer” and “stratum” also are used.

To document archaeological excavations, context forms were used to cross reference all relevant excavation information. Contexts are generally divided into numerically ordered “cuts” and “layers.” Cuts refer to hollow features such as pits, privies, wells, cisterns, trenches, and also to some structural components such as construction trenches. Layers include various fills within cuts, wood or brick linings, sheet refuse, and other types of horizontal stratigraphy found at a site. Each archaeological stratigraphic event (context) was assigned a unique cut or layer number and these data were entered on the relevant tracking sheet (Figures 4-5 and 4-6).

Context sheets record detailed information about each cut and layer. Specific data recorded on the cut sheet include the size and shape of the cut that formed the original hole in the ground, a summary of all the layers found within it, and a preliminary interpretation of the feature’s structure, content, and function. Unlike the cut sheet, the layer sheet describes the single depositional event; soil composition, color, and compaction; a summary of artifacts found within the layer; and an interpretation of the layer itself. The layer sheet also depicts the stratigraphic relationships between related contexts.

Context sheets assist with efficient ordering and documentation of archaeological data and facilitate assessment of feature significance during fieldwork. They are also invaluable interpretive documents for postfield analysis. This meticulous recording system reduces errors by providing a series of cross checks on each aspect of the site’s structure. It also simplifies the construction of a Harris Matrix, or flow chart, that represents the totality of the depositional sequence and archaeological relationship developed during site formation (Harris 1979, 1989).

The stratigraphy of a site, represented in a schematic form in the Harris Matrix, describes chronological relationships between various deposits. Relationships between contiguous deposits can be developed into collective units of analytical data. The analyst works with a graphic that demonstrates the position of an individual deposit temporally and physically within a site. Specific properties of individual contexts can be isolated, facilitating explicit comparisons with any or all of the contexts represented in the matrix. Examples of this concept will be presented in Chapter 5.

In general, each artifact-filled feature was drawn in plan and then sectioned in half following natural stratigraphic layers (Figure 4-7). Features were investigated through hand excavation, and the soil was passed through 1/4-inch hardware mesh. Artifacts were bagged by material type within each context, and the bags were marked with the complete provenience, excavators’ name(s), and the date. On completion of a layer, excavators assigned a new context number.

Applied Earthworks, Inc. AE-DIST8HQ-1		Cut # 1036	
Block	Lot Wong Nim	Type Well/SMOKER	

(SEE SEPARATE SHEET OF GRAPH PAPER FOR EXTENDED PROFILE)

Shape	CIRCULAR
Depth	~29"
Sides	VERTICAL
Lining	BRICKS
Siltation	/
HAZARDOUS MATERIAL	
Layers	Bag #
2097	SEE LOG
2098	↓
2099	
2095	
2105	
2133	
2135	
Recovery	
Sterile	SEE LOG
Low X	
Moderate	
High	
Photos	Roll#
Section	24 25 310
Other	29 30 09
Discards	—

Harris Matrix on reverse of Layer Sheet # 2097	
Interpretation: <u>COOKING FEATURE?</u> AFTER EXCAVATING WESTERN HALF OF CUT 1036 IT HAS BEEN DETERMINED THAT THIS FEATURE IS A SMOKER. POST AND LINTEL OPENING ON THE SOUTHERN EDGE CONSISTED OF A MILLING/GRINDING STONE (RECOVERED WITH LAYER 2098) AND THE METAL SHEET SHOWN IN PROFILE. THE BRICKS (LAYER 2097) SHOW EVIDENCE OF HEAT EXPOSURE AT ~1 FOOT ABOVE CHARCOAL LENS AND THE EARTH BELOW AND AROUND CHARCOAL ALSO SHOWED EVIDENCE OF HEAT EXPOSURE. THE CHARCOAL LAYER CONTINUES TO THE SOUTH OUTSIDE THE OPENING WHERE ANOTHER MILLING STONE IS LOCATED.	
Notes continued on reverse of Layer Sheet #	
Construction date? UNKNOWN	Deposition TPQ? UNKNOWN IN FIELD
Recognizable theme? COOKING FEATURE	Excavator TW, JLG
Historic association? CHINATOWN	Date 10301

Figure 4-5 Example of cut context form used for archaeological excavations at the project site.

Applied Earthworks, Inc. CALTRANS DISTRICT 8 HQ			Layer #	
Block	Lot WONG NIM	Cut # 1036	2099	
Color MEDIUM BROWN			Type FILL	
Composition CLAYEY FINE GRAIN SANDY SILT			Excavation	
Inclusions A FEW YELLOWISH BROWN SILTY CLAY POCKETS			Mechanical	
Compaction MODERATE Thickness 20" - 23"			Pick	
Previous layer(s) (interfacing with this layer) <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 50px; height: 30px;"></div> <div style="border: 1px solid black; width: 50px; height: 30px; text-align: center;">2097</div> <div style="border: 1px solid black; width: 50px; height: 30px; text-align: center;">2098</div> </div>			Shovel	
Harris Matrix This layer is <div style="border: 1px solid black; width: 50px; height: 30px; text-align: center;">2099</div>			Trowel X	
			Not excav.	
Next layer(s) (interfacing with this layer) <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 50px; height: 30px;"></div> <div style="border: 1px solid black; width: 50px; height: 30px; text-align: center;">2095</div> <div style="border: 1px solid black; width: 50px; height: 30px;"></div> </div>			Screen	
Artifact Inventory <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> Ceramic <input type="checkbox"/> Earthenware <input type="checkbox"/> refined <input type="checkbox"/> unrefined <input type="checkbox"/> early glazed <input type="checkbox"/> stoneware <input type="checkbox"/> porcelain <input type="checkbox"/> decorated* <input type="checkbox"/> Asian - stoneware <input type="checkbox"/> Asian - porcelain </div> <div style="width: 33%;"> Glass <input type="checkbox"/> flat glass <input type="checkbox"/> tableware Bottles/Jars <input type="checkbox"/> hand tooled <input type="checkbox"/> ABM (automatic bottle machine) </div> <div style="width: 33%;"> Metal <input type="checkbox"/> forged nails <input type="checkbox"/> cut nails <input type="checkbox"/> wire nails <input type="checkbox"/> hardware <input type="checkbox"/> cans <input checked="" type="checkbox"/> NAIL </div> <div style="width: 33%;"> Building Materials <input type="checkbox"/> adobe <input type="checkbox"/> sheet metal <input checked="" type="checkbox"/> brick <input type="checkbox"/> concrete/cement <input type="checkbox"/> ceramic roofing tiles </div> <div style="width: 33%;"> Other <input type="checkbox"/> clay pipes <input type="checkbox"/> toys <input type="checkbox"/> leather <input type="checkbox"/> buttons <input type="checkbox"/> prehistoric <input type="checkbox"/> flora <input type="checkbox"/> faunal <input type="checkbox"/> opium <input type="checkbox"/> gaming </div> </div> Summary abundant bricks, fallen from upper wall GLASS "JEWEL" SHELL FRAG			1/4 1/8	
			Wet Not	
			Sample Bag #	
			Privy	
			Column	
			Seed	
			Float	
			Pollen	
			Other	
			* describe below	
			SEE LOG	
			Recovery	
Makers Marks	Disturbed		Sterile	
TPQ	Bioturbation		Low X	
Basis	Pot hunted		Moderate	
Interpretation: THIS LAYER CONSISTED OF A MODERATELY COMPACTED MEDIUM BROWN SANDY SILT WITH 2-3% SUB-ANGULAR GRAVELS. THIS LAYER IS LOCATED WITHIN THE INSIDE OF THE FEET -VS- 2098 WHICH CONSISTED OF THE FILL BETWEEN THE BRICKS. APPROXIMATELY 40+ BRICKS WERE REMOVED WITHIN THIS LAYER, ALL OF WHICH WERE IN RANDOM PLACEMENT. MANY OF THE BRICKS HAD PLASTER REMAIN ON THEIR SIDES.			High	
			Photos	Roll#
			Start	23.24 DS
			Section	24.25 D6
			End	29.30 D9
			Other	
			Discards	
			Excavator	
Recognizable theme?	COOKING FEATURE		J. GEORGE, T. WEBB	
Historic association?	CHINATOWN		Date	10-5-01

Figure 4-6 Example of layer form used for archaeological excavations at the project site.



Figure 4-7 Archaeologist David Bircheff exposing Privy 1035.

This process was repeated until all cultural layers within the deposit were removed, a point identified by contact with undisturbed soil. Field technicians, the field director, and the principal investigator were involved in a continuous assessment of each feature excavation that facilitated evaluation, excavation, and processing.

Each half-excavated feature was drawn in cross-section and photographed to illustrate the stratigraphic relationships of the various contexts. At this stage of excavation, the artifacts and the contexts were evaluated for importance using a set of values, including quantity, integrity, variety, and association, hereafter referred to as QIVA. The artifacts were taken to the field laboratory and spread out on sorting screens by context. Deposition dates for artifact deposits were determined through examination of artifacts using standard reference material and the expertise of the field crew. All of the evaluation criteria were then summarized on an evaluation form (Appendix C). If a collection was determined to be potentially important, the second half of the feature was then excavated in a fashion similar to the first. If a collection failed to meet QIVA criteria, it was disposed of and the feature was abandoned. Excavated materials from potentially significant deposits were taken to the laboratory for cleaning, processing, analysis, and final significance evaluation.

FIELD ARTIFACT DISCARD POLICY

Not all artifacts recovered from important features were sent to the laboratory for cataloging and analysis. Although this practice is universal on archaeological excavations, the discard procedures followed on the District 8 Headquarters Demolition Project site were guided by an articulated policy developed for use on urban sites of the historic period (Praetzellis and Costello

2002). Under this policy, certain types of materials are recorded in field notes but not removed to the laboratory for further analysis. Decisions as to what materials are not collected are based on several criteria: lack of long-term research value; poor archaeological or historical context; and practical considerations such as excessive quantities, manageability, poor condition, and health and safety risks.

Materials lacking research value or manageability include:

- ◆ Construction materials such as brick, lumber, and concrete;
- ◆ Noncultural items such as rocks, stones, and tree parts;
- ◆ Amorphous lumps of metal not potentially identifiable;
- ◆ Nondiagnostic metal can parts (seams, openings, and other identifying portions were collected, portions sufficient to analyze types and quantities); and
- ◆ Artifact fragments smaller than a dime.

VALUES OF SIGNIFICANCE (QIVA)

Excavation focused on those archaeological deposits with the greatest potential for generating data that will contribute to a broader understanding of important local historical events, trends, or themes. These deposits were evaluated for significance as defined in CEQA and the NRHP criteria (36 CFR 60.4). The strategy for assessing significance of a feature or deposit follows the approach used by Costello et al. (1996) for historical archaeological investigations in downtown Los Angeles. To be considered significant, features or deposits had to contain a sufficient quantity and variety of artifacts, possess integrity, and show demonstrable historical association. The values of quantity, integrity, variety, and association (QIVA) are described in greater detail below.

Quantity

Quantity refers to the absolute number and frequency of artifacts within a deposit. Sufficient numbers of artifacts are needed to yield valid interpretations of the behaviors they represent. The actual quantity is not a set variable because the overall quantity will vary depending on the availability of consumer goods and the social mechanisms influencing reuse and disposal.

Integrity

Integrity refers not only to a physically intact deposit (i.e., with undisturbed stratigraphy) but also to what James Deetz (1977) has termed “focus.” By focus, Deetz refers to the level of clarity with which archaeological remains can be seen to represent a particular deposit, episode, or event. Archaeological remains that represent several activities, events, or themes that cannot be separated from one another are said to lack focus. Where focus is lacking as the result of disturbance, the phenomenon also lacks integrity (Costello et al. 1996:49). Vital to this interpretation of integrity is the aspect of historical context and association.

Variety

This value refers to the diversity of artifact classes within a deposit. A lack of variety does not necessarily mean a deposit is not significant, however. A feature containing a singular deposit of unusual artifacts or unique but uniform information on underrepresented social groups can make a significant contribution.

Association

A phenomenon must have a strong relationship with an individual household, commercial establishment, neighborhood, ethnic or socioeconomic group, specific property use, or significant event in the community to possess historical context and associative value.

Other Values

Also inherent in significance is age. Criteria for the CRHR specify that “sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource” (State of California 1993:4852[d][2]). The CRHR criteria recommend that sites or resources be at least 50 years old to be considered eligible for inclusion on the register. Generally, historical remains less than 50 years old must be of exceptional importance to be deemed significant.

4.4 LABORATORY PROCESSING AND ANALYSIS

Materials recovered in the field from discrete features (cuts) were processed and sorted in the field laboratory utilizing a set of standard methods outlined below. Upon conclusion of fieldwork, all collections evaluated as important were transported to Æ’s permanent historical archaeology laboratory in Hemet, California. Here collections for specialists were separated and dispersed; the remaining artifacts were classified, identified by function, dated, and a minimum number of items (MNI) was determined. The entire collection from each feature was laid out by functional type and photographed, and artifacts were then prepared for final curation.

FIELD LABORATORY

The modified approach to CEQA compliance requires prompt analysis and evaluation of discovered features and deposits so that timely decisions about significance can be made in the field. To facilitate that process, Æ established a field laboratory and water screening station at the project site for preliminary artifact identification and analysis (Figure 4-8). As material arrived at the field laboratory, each bag was logged in on the field check sheet and given a unique number. Priorities for artifact identification were based on values of significance: quantity, integrity, variety, and clear associative values. While initial artifact assessments were made in the field, re-evaluation continued throughout the later sorting and analysis processes. These observations were recorded on the Cut Evaluation Sheet (see Appendix C).

The priority proveniences requiring further evaluation were laid out on screens and immediately examined for any temporally diagnostic artifacts that could be quickly dated. The intent was to



Figure 4-8 Initial identification and evaluation of material recovered from excavated features took place in the field laboratory.

provide a terminus post quem (TPQ) for each feature to aid in determining its degree of historical association. TPQ is the point in time after which a deposition must have been made. If Layer A contained an artifact first manufactured in 1906, the layer cannot have been deposited before that year. Basic references used in the field to date artifacts and to identify the products they may have contained included Fike (1987), Gates and Ormerod (1982), Godden (1964), DeBolt (1994), Kovel and Kovel (1986), and Toulouse (1971). Artifact dates were recorded on a form appended to the Cut Evaluation Sheet.

Feature evaluations were made by the principal investigator, field director, and laboratory director, and their assessments were recorded on the Cut Evaluation Sheet. For those features determined ineligible, the artifact collections were culled for items potentially useful for interpretive or educational purposes, and the remaining artifacts were deposited in the excavation area to be backfilled.

Material recovered from each eligible feature was washed and processed separately to prevent mixing of proveniences. Artifact assemblages initially sorted in the field were examined for fragile objects and artifacts that required special handling (e.g., glass with paper labeling, painted bisque, gilt on ceramics, and fragile shell buttons). These fragile items were gently dry brushed, tagged, and bagged separately, then reunited with the rest of the provenience as it was rebagged. After field washing, materials remained on processing racks until thoroughly dry. Then the provenienced materials were rebagged and tagged in preparation for transportation to the permanent laboratory for detailed analysis.

Diagnostic artifacts discovered during earthmoving activities or associated with features determined unimportant were collected for display and educational purposes. These included selected ceramics, whole bottles and bottle fragments, both unusual and typical items, and objects exhibiting marks, embossments, or decorations. These artifacts were washed, then sorted by general provenience and material types. A selection of these items was displayed in screens at the lab, serving as an educational collection of the types of artifacts that were being recovered that visitors could view and handle. At the end of the field season, all of these recovered items not associated with important features were inventoried, packaged in archive boxes, and delivered to Caltrans for continued interpretive use.

INITIAL CLASSIFICATION

Once transported to the laboratory, the assemblage from each feature was first sorted by material type. Preliminary sort classes included glass, ceramic, bone, shellfish, metal, building material (brick, concrete, wood, etc.), and miscellaneous small items requiring special treatment (e.g., tobacco pipes, buttons, clothing fasteners, marbles, or toys). Each fragment was labeled with the layer number so that pieces from each feature's layers could be compared and fitted together. Identification of cross matches showed which layers were associated and aided in determining the depositional sequences and final phasing. If pieces from one object were found distributed in several different, undisturbed layers, then these layers were all deposited at the same time. Postdepositional events such as looting or heavy bioturbation also can account for artifact distribution and are assigned to the appropriate cultural phase.

Manufacturers' marks, product embossments, and consumer labeling criteria were recorded and researched as necessary. Finally, all cross-matched vessels were identified. Collections of artifacts from individual features were then photographed, and the artifacts were returned to their provenience bags. Artifacts from layers and cuts were compared to identify similar or companion fragments from other proveniences. Once matches were established, the MNI was estimated and recorded (see discussion below). Individual objects (represented by multiple pieces) were cataloged as separate items.

Glass

The glass was first sorted into flat or curved categories representing either window glass (construction-related); fragments of bottles, jars, and serving vessels (subsistence-related); or other items such as lamp chimney glass. It was then sorted according to functional categories that included tableware, servingware, and drinking vessels. Where possible, the vessel shape, finish type, distinguishing marks, decorations, and embossments were recorded. In the case of bottles and jars, the original content (e.g., liquor, soda, condiment, medicine, food) was determined where possible.

Ceramic

Similarly, whole ceramics and fragmented vessels were sorted by origin (Chinese, British, etc.); vessel function and type; paste, firing, and glaze characteristics; and decorative techniques. Ceramics from layers within features were compared to identify similar or companion fragments from other proveniences. All whole vessels, manufacturers' marks, Chinese character marks,

and decorative patterns were described and researched (i.e., transfer-printed patterns, hand-painted Asian motifs, decorative relief, and painted patterns). The assemblage then was counted, weighed, tagged, and cataloged. The Chinese ceramic vessel types included porcelain tableware in decorative patterns of Four Flowers, Celadon, and Bamboo. Chinese brown-glazed stoneware vessels included large and small storage jars, straight-sided jars, large globular and barrel jars, wide-mouth jars, soy sauce jars, and liquor bottles.

Bone

All bone recovered from important features was retained for detailed analysis. It was initially sorted into two broad categories—fish and terrestrial fauna—and cataloged (gross count and weight) by provenience. The collection was carefully packaged to prevent breakage and shipped to specialists for species identification. Terrestrial faunal remains were forwarded to Sherri M. Gust for identification. The fish bone was examined by Peter D. Schulz, Ph.D.

Shell

Shell, like bone, was identified by genus and sorted by provenience. The MNI was estimated for the assemblage based on physical attributes such as presence of hinges. The entire assemblage was counted, weighed, tagged, and cataloged.

Metal

Where possible, metal was sorted by type of alloy and functional class. However, the bulk of the metal artifacts were badly corroded, and the general term “ferrous metal” was applied. Complete nails, spikes, wire, nuts and bolts, and hardware were sorted by length, gauge, and diameter. Corroded nails were sorted into large (3.0–4.5-inch), medium (1.25–2.75-inch), and small (1.0-inch) sizes; spikes were 5.0 inches or greater in length. Metal items were examined for identifiable marks, manufacturing attributes (e.g., opium tin strips, can seams), and product identification (e.g., patent numbers). The assemblage was then counted, weighed, tagged, and cataloged. The MNI was identified by provenience. All amorphous/unidentifiable metal was counted, weighed, described, recorded, and labeled for discard.

Construction Material

Miscellaneous building material is best described as residual building construction and/or demolition debris (i.e., brick, concrete, frame siding, metal beams, rebar). Generally, the floor plans and superstructures already had been documented or were represented on available Sanborn Fire Insurance maps. These materials were sorted by debris type, manufacturing techniques, fragmentation, and identifiable product markings. Further documentation and research was conducted on all materials with identifiable marks (e.g., bricks); these were then counted, weighed, tagged, and cataloged.

Specialty Items

A soil block measuring approximately 10 by 8 by 15 inches was excavated from Privy 1035, Layer 2082. This sample had a large quantity of Asian coins visible upon excavation and was

carefully extracted and packaged in the field. The bulk sample was delivered to Margie Akin, Ph.D., specialist in Asian coins, for detailed analysis.

Other specialty items discovered during excavation were sent to Objects Conservator Laramie Hickey-Friedman. These items included 53 wooden tiles (dominoes) and two metal tile boxes recovered from Privy 1035 and a basketry fragment recovered from Privy 1056. Her report is found in Appendix D.

Miscellaneous Artifacts

Miscellaneous artifacts generally include all other cultural materials such as personal hygiene objects (combs, buttons/fasteners, shoes, textiles) and toys (marbles, doll parts). These artifacts were sorted by material type, function, and recognizable attributes. Where present, product embossments and patent data were documented and researched. All items were counted, weighed, measured, tagged, and cataloged.

Soil Samples

Samples taken from feature layers were dispersed to specialists for pollen and macrobotanical analysis. Their reports are included in Appendix D, while their findings have been incorporated into sections of this report. Flotation samples were sent to Virginia Popper, Ph.D., a paleoethnobotanist at University of California, Los Angeles. Pollen samples went to Scott Anderson, Ph.D., and Susan J. Smith, of Northern Arizona University at Flagstaff. Parasitic samples were sent to Karl J. Reinhard, Ph.D., of University of Nebraska, Lincoln.

FUNCTIONAL ANALYSIS

The Caltrans District 8 San Bernardino Headquarters Demolition Project artifact assemblage was sorted and cataloged (in a Microsoft Access database) based on a hierarchical system of classification intended to reflect an object's functional relationship to its manufacture, procurement, and use. Initial sorting was based on broad functional classes as recommended by Stanley South (1977). Artifacts were separated into broad functional groupings and then were further subdivided by category and type. The latter two steps in the classification system reflected standard use of an object and, at times, a secondary use. The resulting system allowed for consolidating large quantities of like artifacts under descriptive headings that would allow for the interpretation of features and research themes represented within the study area.

Artifacts were first sorted under group headings that reflect broad historical themes of study (i.e., domestic, structural, commercial, personal, leisure and recreation, transportation, and industrial). Domestic or residential groups then were subdivided into categories reflecting daily activities such as food preparation and consumption. Assemblages generated by domestic use were classified under subsistence activities and were divided into categories reflecting the object "type" (container, drinking vessel, serving, tableware/flatware, cleaning, kitchen, etc.). The final tier in this descriptive classification is intended to describe the object itself (i.e., plate, cup, stemware, tableware, button, shellfish, liquor bottle). Table 4-1 illustrates the hierarchy of the classificatory system and provides a breakdown of descriptive terminology.

Table 4-1
Historical Artifact Functional Categories

Group/Category	Type	Object Examples
Activities		
Commerce		Coin, bank, scale pan, token, weight, scale
Firearms		Gun, knife
	Ammunition	Cartridge, casing, bullet, head, shell, shot
Pets		Bird feeder, dog collar, tag, pet care, pet burial
Communication		Document, insulator, telephone, newspaper
	Writing	Pen, pencil, ink bottle, slate, pencil lead
Farming/Gardening		Farming, livestock, irrigation equipment, well/pump part, gardening tool, pesticide, sprinkler, hose, terra cotta pot
Undifferentiated		Undifferentiated
Commercial		
Commercial		Written, photographic, label
Undifferentiated		Undifferentiated
Domestic		
Clothing/Maintenance		Needle, bluing ball, clothes pin, straight and safety pins, washboard, needle threader, thimble, clothes hanger, shoe polish
	Ironing	Iron
Food Preparation/Consumption	Container	Soda and mineral water, milk, condiments (mustard, capers, ketchup), baby bottle, spice tin, olla
	Drinking vessel	Tumbler, stemware, pilsner glass, goblet, shot glass
	Kitchen	Baking pan, skillet, pot, pie plate, tea kettle, mixing bowl, juicer, can opener, griddle
	Serving	Footed dish, decanter, teapot, pitcher, cruet, platter, sugar bowl, trivet, butter dish, salt shaker, creamer, compote dish, fluted nappy, serving spoon and fork
	Tableware/Flatware	Plate, dish, saucer, cup, mug, bowl, teaspoon, china, spoon, fork, knife, cutlery handle
	Tableware/Serving	Dish, hollow, undetermined fragment (i.e., rim, base, etc.)
Food Refuse		Pit, seed, bean, nut shell
	Bone	Other, fish
	Shell	Clam, egg, shellfish, oyster
Food Packing/Storage		Can key
	Container	Jar, crock, can, tin, jug, canning jar, spouted jar, tea caddy
	Closure	Lid, lid liner, stopper, jar lid
Household/Furnishing		Furniture, vase, figurine, picture, clock, mirror, stove part, caster, hook, trunk latch
	Lamp	Chimney (rim), shade, font, globe, burner, base
Household/Maintenance		Paint can, furniture polish, glue, light bulb, sewing machine oil, poison
	Cleaning	Broom, dust pan, sponge, mop, bucket, bleach (Clorox, Purex)
Undifferentiated		Undifferentiated

Table 4-1 (continued)
Historical Artifact Functional Categories

Group/Category	Type	Object Examples
Industrial		
Industrial		Battery, battery core, crucible, slag, kiln furniture
Machinery		Gear
Undifferentiated		Undifferentiated
Leisure and Recreation		
Collecting		Stalactite, coral
Games	Gaming piece	Dice, checker, marble, jack, poker chip, ggp, domino, gaming coin
Social Drugs		Spittoon, corkscrew, bottle opener
	Alcohol container	Bottle, can, flask (wine, ale/beer, champagne, gin, brandy, whiskey, Chinese liquor bottle)
	Closure	Cork, crown cap, Hutchinson stopper
	Smoking accessories	Pipe, opium accessories, ashtray, lighter, tobacco tin
Sports		Fishing tackle, pole, reel, baseball, bat, ball, croquet ball
Undifferentiated		Undifferentiated
Personal		
Accouterments		Purse, hat pin, hair accessories, watch, fan, pocket knife, jack knife, bead
	Jewelry	Inset, earring, necklace, ring, brooch, cuff link, bracelet, collar stud
Clothing/Footwear		Shoe, garment, belt, lace
	Fastener	Button, grommet/eyelet, rivet, clasp, clip, hook and eye, snap, belt buckle, garter fastener, stud, suspenders
Grooming	Toiletry	Perfume bottle, comb, brush, chamber pot, cosmetics, cold cream, shaving accessories, toothbrush, basin, soap dish, hair tonic and coloring
Health/Medicine		Syringe, eyeglasses, eyeglass lens, eye dropper
	Container	Bottle (medicine, bitters, extract), Jamaica ginger, jar, aspirin tin, pill bottle, vial, Vaseline, toothpowder, Bromo-Seltzer, mineral water
Toys		Doll, tea set, toy truck and car, toy gun
Religious		Crucifix, rosary beads, medallion, statue
Undifferentiated		Undifferentiated
Structural		
Building Material		Brick, flat glass, concrete, lumber, fencing, roofing, flooring, tile (roof, floor, misc.), asphalt, cinder block, mortar, plaster, screen, sewer pipe
	Electrical	Fuse, insulator, plug, wire
	Plumbing	Pipe, hose fitting, bibb, plunger
Fixtures		Toilet, sink, cabinet
Tools/Hardware		Door knob, hinge, bracket, screw, nut, staple, washer, coat hook, drawer handle, hammer, screw driver, file, paint brush, door key, latch, lock
Nails		All nails
Undifferentiated		Undifferentiated

Table 4-1 (continued)
Historical Artifact Functional Categories

Group/Category	Type	Object Examples
Transportation		
Transportation	Animal	Horseshoe, harness part, carriage/wagon part, saddle part, wheel
	Mechanical	Railroad spike, spark plug, license, battery, headlight, handle bar, pedal, wheel/tire
Undifferentiated		Undifferentiated
Undetermined Use		
		Identified items with more than one potential original use
Miscellaneous Bead		Bead with more than one potential original use
Miscellaneous Bottle, Jar, Can		Bottle, jar, carboy, finishes (containers and fragments with unidentified contents)
Miscellaneous Closure		Closure (cap, top, lid) associated with contents of undetermined use
Miscellaneous Metal Item		Wire, sheet metal, tube, bell, ring, rod, spring, chain, mesh (items with more than one potential original use)

MINIMUM NUMBER OF ITEMS (MNI)

Another valuable tool used to analyze artifact collections is the MNI. (Most of the procedures described here were formalized by Erica Gibson of the Anthropological Study Center, Sonoma State University and appear in Costello [1999:34–36].) Although there may be hundreds of ceramic fragments in a single layer, they may represent only several vessels. By quantifying artifacts in a standard manner, researchers can make reliable comparisons between features on a site, between different layers within a feature, and between sites.

After cross matching was completed, the artifacts were cataloged and MNIs were determined. Each intact object (e.g., a complete unbroken bottle) received an MNI of 1. Items that cross matched and were reconstructable with no missing pieces also were assigned an MNI of 1. The remaining artifacts were carefully studied to ascertain whether non-cross-matching fragments could be from the same vessel.

Artifacts that always would have been used together also received an MNI of one (e.g., teapot and lid, both the lid and dish of a soap-dish drainer). As a result, certain objects of different materials can be combined and given an MNI of one (e.g., a glass nursing bottle and its associated ceramic cap, a glass beer bottle and its associated crown cap). Examples of items that are often considered a set but not always used or even purchased together are a cup and saucer or a slop bowl and pitcher. Shoes were given MNIs based on pairs (e.g., three shoes, two left and one right have an MNI of two). Some artifact categories are not amenable to statistical analysis and are not included in many of the artifact summary tables of Chapter 5. Building material in general was counted in the field and, unless marked, was not brought to the laboratory for cataloging. Most building material does not lend itself to estimating MNI counts, for example fragments of lumber (what sizes were the original boards and timbers?), fragments of concrete (how to count floors, walls, or footings?), and fragments of window glass (what was the size of the finished pane?). While some building materials, such as bricks and nails, can produce MNI

counts, computing their relative presence in statistical analyses of artifact collections tells us little about the lives of the nearby residents and frequently obscures other more important relationships between categories.

DATING AND OTHER IDENTIFICATION

Historical artifacts were examined for physical attributes, decorative patterns, or product information that reflected the manufacturing date or period of use. Ceramic vessel styles and decorative techniques changed rapidly during the late nineteenth and early twentieth centuries. These items provided indicators of chronology and economic status within the larger community.

Decorative elements considered to be temporal indicators include geometric or stylized floral motifs, painted designs, and transfer-printed or decal-decorated elements. Specific colors or combinations of colors reflect peaks in British ceramic popularity. For example, multicolor transfer prints were produced after the 1860s. By the 1880s, manufacturers introduced decal design applications that quickly superseded transfer-printed wares; their production continued into the early 1900s. Similarly, combinations of decorative methods are indicative of chronology and economic status.

Detailed analysis of the ceramic assemblage included identification and evaluation of manufacturers' marks. Many guides are available for the identification of British and American makers' marks, and these were employed to determine production dates. The McKinley Tariff Act provides an end date for the manufacture of some vessels. The act, passed in 1891, required that the country of origin be printed on imported vessels (e.g., "Made in China"). It follows that vessels without a stamp of origin predate 1891. A combination of the above indicators of chronology were utilized to narrow the production date of ceramics.

A variety of Asian porcelain vessels were recovered from the project area, particularly bowls, (small, medium, and large), cups, spoons, and teapots. The dominant varieties of vessel patterns are Four Flowers, Celadon, and Bamboo (see discussion in Chapter 6 under "Chinese Meals"). Also recovered in abundance was a variety of Chinese food and food-storage vessels. The containers, in a wide variety of sizes, were predominantly molded stoneware with a brown glaze.

Analysis of glass bottles was succinctly described by Erica Gibson:

Glass artifacts with embossments and/or makers' marks were researched to determine place of origin, contents, and production-date ranges. Date ranges are based on when the company was formed, when it changed ownership or moved to a new address as listed in the embossment, and when the product was patented. By using both the bottle manufacturer and the bottle contents manufacturer, date ranges were narrowed. For example, a bottle manufactured by Illinois Glass Co. (1873–1890) and produced for C. F. Heinzeman at 122 North Main St. (1875–1896) would have a date range of 1875–1890. Additionally, temporally diagnostic manufacturing techniques were studied. For instance, the crown cap was introduced in 1892; if a bottle company was in business from 1880 through 1920, and the bottle had a crown finish, a beginning date of 1892 would be assigned. Finally, some glass items retain patent dates (e.g., glass illuminators), which were recorded [Costello 1999:26].

The laboratory staff researched all manufacturers' marks, embossments, and product information represented in the collection of diagnostic bottles and bottle fragments recovered. Using standard references (Bender 1986; Fike 1987; Jones and Sullivan 1989; Toulouse 1971), researchers often were able to determine manufacturing dates, vessel contents, and place of production. In the text, inscriptions will be presented in upper and lower case as they appear on the object, with periods used for missing letters, brackets for assumed letters, back slashes to indicate a new line, and double back slashes for a different side.

In an attempt to identify product marks exhibited on bottles and other artifacts recovered, resources housed at the California Room of the Feldheim Public Library in San Bernardino were consulted. City, county, and business directories were reviewed for product information, including manufacturers' name, business address, and advertisements. The presence and absence of specific local companies in the directories were noted for the period between 1871 and 1930. Where a manufacturer or producer was identified, bracket dates were established and used to provide a relative date of manufacture for the subject product. Rachael Nixon, archaeological technician, conducted this research.

Color was used to date items, when applicable. Sun-colored amethyst glass dates from the 1880s to 1918, while straw-colored glass is diagnostic of the period between 1914 and the 1930s. Differences in the two glass colors is the result of neutralizing agents employed to produce clear glass. Bottle glass from the former period turns "amethyst" after exposure to ultraviolet rays, as a reaction of manganese dioxide to sunlight. After 1918, manganese dioxide was replaced by selenium as demanded by the war effort. Selenium's reaction to sunlight resulted in glass turning a straw color or light pink over time. Other colors of glass indicative of age include black or very dark olive green. Representative of early nineteenth-century technology, these colors are produced by impurities in natural silica used to manufacture bottle glass. When coupled with imperfections, such as irregular thickness, bubbles, and wavy textures, they can be identified as hand-crafted vessels.

Other items were examined for manufacturing marks, patent identification, and temporally diagnostic attributes (e.g., brick impressions, molded electric insulator patent numbers, and tobacco pipe embossments). As appropriate, these were identified using standard reference guides. Where additional information might be found through archival research, studies were undertaken. Presentation of artifact marks (embossing, maker's marks) follows guidelines established in *Historical Archaeology* (2001:148).

FAUNAL MATERIAL by Sherri M. Gust

Faunal assemblages are impacted by factors that affect the survival of bone, factors that affect recovery, and factors that affect the choice of foodstuffs (Reitz 1987). The nineteenth and early twentieth century faunal bone recovered from sites in California to date has generally been well preserved and the techniques used for excavation have been similar, both factors making assemblages analytically comparable. The complete faunal study of the San Bernardino material is presented in Appendix D of this report; methods of faunal analysis have been extracted from this and are presented below.

Data Collection Methods

Taxon, element, and other data were recorded for all faunal specimens. The comparative collections of the analysts; the California Academy of Sciences; the Museum of Anthropology of the University of California, Davis; and the George C. Page Museum and Natural History Museum of Los Angeles County were used for identification. Mammals and chickens were identified by Sherri Gust of Cogstone Resource Management, Inc. Daniel Guthrie of the William Keck Science Center at the Claremont Colleges identified all other birds. Fishes were identified by Peter D. Schulz of Bienes, Schulz, and West. Christopher Shaw of the George C. Page Museum assisted Gust in identifying the amphibians and reptiles.

The number of identified specimens (NISP) is a count of the identified fragments of bone. The MNI was calculated by analysis unit as specified. Relative age and size were taken into account. MNI is the number of individual whole animals of a species as counted by the largest number of a single portion of a single element from one side of the body.

Calculation of Butchering Units and Meat Weights for Mammals

The appropriate parameter for historical faunal studies is the unit of consumer acquisition (Huelsbeck 1991). There are some forms of meat, such as sausage, bacon, and liver, that do not contain bones and are thus “invisible” in the archaeological record. These do not appear to have been major sources of meat for most consumers (Strickert 1856). Bones of cattle and pigs were quantified using the steak-equivalents method (Gust 1996). Each cut unit of bone was measured in inches from cut surface to cut surface. The number of steak-equivalents for each retail meat cut was then multiplied by a calculated factor to determine the amount of meat weight represented. The calculated factor was determined by taking the average carcass weight for each type of animal, dividing it by proportional percentages for each retail cut, then dividing each retail cut by the potential number of steaks for each retail cut. Weights of average, good-grade carcasses were used as proxies for the undeveloped livestock of the nineteenth century. Percentage of meat weight of wholesale and retail cuts and the usual number of steaks in a cut were taken from meat science and farming sources.

For small mammals, birds, and reptiles the minimum number of individuals present were calculated. The minimum number of individuals is the appropriate unit of consumer acquisition of these animals since they were only available as whole carcasses, whether hunted or purchased, until about 1920 in California. Meat weights were calculated by multiplying the number of individuals times an average dressed weight. The meat weights were obtained from a variety of sources (New Mexico Wildlife Federation n.d.; White 1953). Weight estimations for the fish were derived either from bone-dimension to live-weight regressions provided by Casteel (1972) or by extrapolation from known-weight museum specimens (Schulz 1997). Fresh fish was generally offered to the consumer whole for home processing, although larger fish might be processed by the fish market. The most common salt fish (cod and salmon) were gutted, decapitated, and sometimes processed further before salting. For small mammals, birds, reptiles, and fishes, the live weights obtained were then reduced by half to approximate dressed meat weight.

Prices of Domestic Meat Animals

Rankings of retail prices for domestic meat animals were developed (Gust 1996) following the methodology of Schulz and Gust (1983). A summary of the results is provided below.

For beef, the rankings indicate the highest-priced meat section to be the short loin until relatively recently, when flank became number one. Sirloin and rib rankings indicate some differences of opinion by various authors as to which was preferred, but both are relatively expensive. Round, rump, and chuck were ranked about equal and are moderately priced cuts. Inexpensive cuts were plate/brisket/navel, shanks, and neck.

Mutton, while rare today, was a common meat in the nineteenth century. Lamb was relatively rare in markets before 1900, but from that time until the 1920s lamb increased in popularity until it constituted almost 90 percent of sheep meat (Horlacher 1927). This fact is reflected in the data for the rankings as no price data for mutton could be found after about 1920.

The mutton rankings indicate that leg was the most expensive cut into the early twentieth century. Loin and rib were generally second and third in price, but there was considerable waffling between these two. In the same time period in which mutton was declining in popularity, there was a definite shift in the price rankings that brought rib to number one, followed by loin and then leg. Shoulder was moderately priced, followed by breast and then neck.

Pork rankings are based only on data for fresh pork, which is fairly limited, with very little nineteenth-century data available. Almost all cuts of pork were available cured and were ranked in the same order seen for fresh pork but were slightly more expensive. Loin was the highest ranked cut overall, followed by ham. The shoulder, picnic ham, and spareribs were moderately priced and rank together. Jowls and feet were least expensive.

LABORATORY DISCARD POLICY

Some types of materials from important features were discarded after being analyzed, cataloged, counted, and weighed in the laboratory. The rationale and procedures for this are articulated in the discard procedures followed on the Metropolitan Water District of Southern California Headquarters Project site, a policy developed for use on urban sites of the historic period (Praetzellis and Costello 2002). The discarded types of materials lacked long-term research values, were present in excessive quantity, were in poor condition, and/or posed health and safety risks. The discarded types included the following items:

- ◆ Window glass;
- ◆ Glass lamp chimney body fragments, nondiagnostic bottle fragments, and nondiagnostic glass fragments;
- ◆ Nails (after being identified by type and given MNI totals);
- ◆ All leather and textiles (leather requires treatment with potentially hazardous and flammable material in order to be preserved);

- ◆ Metal scraps, sheets, strips, and wire;
- ◆ Corroded nontemporally diagnostic ferrous items including wire, pipes, cans and lids, bolts, tubes, pans, and straps;
- ◆ Slag and amorphous metal and glass; and
- ◆ Large items for which curation was a problem (for example, sewer pipe).

During laboratory analysis, specific soil layers, and occasionally entire features, were sometimes reevaluated as failing to meet research design criteria. Artifacts associated with these strata or features also were discarded; individual items or groups of artifacts were retained if they exhibited educational potential.

4.5 CURATING THE COLLECTION

Artifact curation procedures followed the *Guidelines for the Curation of Archeological Collections* (California Department of Parks and Recreation 1993). More than 32,000 artifacts, representing in excess of 10,000 individual items are stored in 58 boxes organized by archaeological feature. In addition, the District 8 Headquarters Demolition Project collections include soil samples, seed samples, shell, animal bone, and five boxes of program documentation (field, laboratory, and photographic records). The *kwat pai* (domino) pieces and a stabilized metal box are stored in specially built conservation boxes. Preserved strings of Asian coins also are boxed for curation until they can be displayed. All field and laboratory analysis records have been reproduced on archivally stable paper and are stored in stable containers. Most records exist in an electronic format as well for ease of information access.

The collection has been curated by Caltrans at the San Bernardino County Museum, a facility that meets all standards established by the above guidelines.

勘 查 结 果

5 RESULTS OF EXCAVATIONS

5.1 INTRODUCTION

This section presents the historical and archaeological findings from the District 8 Headquarters Demolition Project on a lot-by-lot and feature-by-feature basis. Presented this way, the data from field records, historical documents, and recovered artifacts are easily available to researchers. The tables and graphics concisely present what was found and the methods used to deduce who produced the artifact deposits and when. This presentation format also cleanly separates the data from the interpretations, which are found in Chapter 6.

The historical association of an archaeological feature is what links the remains with real people, and this is tracked largely through land ownership. The project block was divided into eight lots when it was laid out in 1853; all but the southeastern portions of Lots 1 and 2 are within the project area (see Figure 2-5). As a result of documentary research and a field testing program, the archaeological excavations were focused on areas most likely to produce important findings: portions of Lots 3, 5, 6, 7, and 8 (see Figures 4-1 and 4-2). At the conclusion of the test excavations, it was estimated that 37 features would be identified in the field, that about half of these (16) would be archaeologically tested, and that half of those tested (8) would be important and therefore completely recovered. This proved to be an underestimation by about a factor of two.

In total, 60 historical features were identified; 34 of these were tested through partial excavation (Table 5-1). Of the 34 that were partly excavated, 21 were determined to be legally important and subsequently recovered in their entirety (Table 5-2). Research questions used to determine which features could contribute important information on the past are presented in Chapter 3, while other criteria (QIVA) appear in Chapter 4 (see Section 4.3, “Archaeological Excavations”). The evaluation sheets for those features determined not important are presented in Appendix C.

Two of the lots tested (Lot 3 and Lot 6) did not include any features evaluated as important. The findings on these lots are therefore briefly presented in this introduction. Lot 5 contained four important features, all related to the operations of Starke’s Hotel (later the Bradford House) on the Third Street frontage of that lot. The northern portions of Lots 7 and 8 encompass much of the southern half of San Bernardino’s historic Chinatown, land that was surveyed as two separate parcels in 1900 and purchased by Chinese residents. Referred to as the Chinatown Lot, 15 diverse features were found associated with this vicinity.

CHAPTER ORGANIZATION

The presentation of documentary, field, and artifact data has been standardized to match other similar analyses of historic-period sites. This straightforward and complete presentation facilitates comparison not only of features within the project area, but also between other sites both within and outside of California. Much of the following section is adapted from a report

prepared for the Metropolitan Water District of Southern California (Costello et al. 1998) in a section largely written by Grace H. Ziesing.

Table 5-1
Summary of Tested Features

Feature Number	Lot	Type	Evaluation	
			Important	Not Important
1000	3	Privy		X
1001	Chinatown	Roasting oven	X	
1002	Chinatown	Drain	X	
1003	Chinatown	Footing	X	
1005	Chinatown	Dog burial	X	
1007	5, 6	Railroad spur		X
1009	5	Privy	X	
1014	6	Pit		X
1017	6	Pit		X
1022	5	Pit	X	
1023	5	Privy	X	
1025	5	Privy	X	
1030	Chinatown	Pit		X
1031	Chinatown	Drain	X	
1032	Chinatown	Pit	X	
1033	Chinatown	Cooking feature	X	
1035	Chinatown	Privy	X	
1036	Chinatown	Roasting oven	X	
1042	Chinatown	Pit		X
1043	Chinatown	Pit		X
1044	Chinatown	Pit		X
1045	Chinatown	Pit		X
1047	Chinatown	Pit	X	
1048	Chinatown	Pit	X	
1049	Chinatown	Pit	X	
1050	Chinatown	Pit	X	
1051	3	Pit		X
1052	3	Pit		X
1053	3	Pit		X
1054	3	Pit		X
1055	3	Pit		X
1056	Chinatown	Privy	X	
1057	Chinatown	Sheet refuse	X	
1058	Chinatown	Privy	X	
1059	Chinatown	Pit		X
1060	Chinatown	Drain	X	
Total			21	15

Table 5-2
Important Archaeological Features

Location/ Feature Number	Feature Type	Volume ^a (cubic feet)	TPQ ^b	Artifact Count	MNI ^c
Lot 5 (Starke's Hotel/Bradford House)					
1009	Privy	31.50	1891	1,459	301
1022	Pit	21.60	1891	5,623	222
1023	Privy	31.50	1880	1,776	364
1025	Privy	128.60	1895	1,127	603
Chinatown					
1001	Roasting oven	N/A	—	59	49
1002	Drain	10.00	1885	1,274	480
1003	Footing	N/A	—	0	—
1005	Dog burial	N/A	—	0	1
1031	Drain	10.00	—	895	309
1032	Pit	8.20	1872	1,504	125
1033	Cooking feature	N/A	—	49	45
1035	Privy	57.75	1925	15,610	6,801
1036	Roasting oven	N/A	1927	182	44
1047	Bone pit	N/A	—	0	—
1048	Bone pit	N/A	—	0	—
1049	Bone pit	N/A	—	0	—
1050	Bone pit	N/A	—	0	—
1056	Privy	26.25	1870s	1,171	312
1057	Sheet refuse	N/A	—	1,033	403
1058	Privy	26.35	1880	2,344	1,745
1060	Drain	N/A		11	9
Total				34,117	11,813

a - N/A = Volume measurement not applicable.

b - TPQ = *terminus post quem* (date after which the artifacts were deposited into the feature).

c - MNI = minimum number of items.

The sections on Lot 5 and Chinatown begin with a short narrative summary of the history of each lot's ownership, occupants, and significant archaeological findings. A base map depicts archaeological features found on the lot, identifying those that were tested and, of those tested, which ones were determined to be important and therefore fully excavated and studied. The base map also shows the location of each lot relative to the project boundaries. Important lot features and their attributes are summarized in a table, and a matrix depicts their interrelationships.

Documentary findings for each lot are then presented, excerpted from the more complete documents list in Appendix A. These primary data are frequently omitted from historical archaeological reports, yet are just as critical to accurate interpretations as proper identification of soil strata and artifacts. The chronological summary of documents is preceded by a condensed

abstract of the occupation and use of the lot and of its sequence of ownership. Abbreviated citations in this section are presented in full in the references section of the report.

Following the introduction for Lot 5 and Chinatown are detailed descriptions of each excavated feature. Each feature description is divided into three sections.

Abstract

This consists of a short abstract of the feature's physical aspects, archaeological context, dating and historical associations, and major artifact attributes.

Photograph

The artifact collections from most features are presented in a photograph where items are grouped by functional type. Omitted from this portrait are those items recorded and abandoned in the field (construction material, amorphous metal, etc.), and faunal and floral remains that had been sent to specialists. The image provides a visual record of the overall size, condition, and complexity of the collection.

Profile Drawing and Strata Analysis

Field information is presented in a composite figure dominated by the feature's profile drawing. This profile was drawn in the field when the feature was half excavated, and each stratum (layer/context) is identified with a unique number. Using excavation information and artifact data from laboratory study of cross matching and dating, the strata are assigned a cultural phase using a standard Harris Matrix (Harris 1989). These phases, depicted on a schematic of the section drawing, become the units of all subsequent analyses. All numbered strata associated with excavated features are listed on the Cut Evaluation Sheets in Appendix C.

The numbering of phases, which represent stages of the feature's life, were standardized.

- ◆ Phase A represents the construction of the feature.
- ◆ Phase B represents the use of the feature.
 - B1 = Slow accumulation (primary material in the bottom of privies; silt in drains).
 - B2 = Secondary use (refuse disposal).
 - B3, B4, etc. = Other secondary use (more than one refuse dumping episode).
- ◆ Phase C represents demolition or abandonment of the feature; modern intrusions.

All artifacts recovered from a feature are associated with a particular stratum, which has been assigned to a specific phase. A feature is determined to be important if it contains a phase that can address research questions and satisfies conditions of QIVA (see Chapter 4).

Artifact Tables

Each feature's artifact collection is summarized in six topical tables that are consistently numbered throughout the report (Artifact Tables 1–6, listed below). For clarity, table

identification includes the feature designation (e.g., Privy 1035 tables are identified as Artifact Table 1, Artifact Table 2a, etc.). The specialists' studies of faunal and floral remains are presented in these tables, their findings are included in the narrative abstract, and their interpretations are incorporated into essays in Chapter 6. Individual feature sections do not necessarily have every table; only those relevant to collections from that feature are presented. Also, for some features, additional versions of Tables 1 and 3b have been produced to display collections associated with individual soil layers or combinations of layers. The complete listing of all artifacts from important collections is found in Appendix E.

- ◆ Artifact Table 1—Descriptive Artifact List
- ◆ Artifact Table 2 Series—Biological Remains
 - 2a. Faunal Remains
 - 2a-1. Numbers of Identified Specimens
 - 2a-2. Meat Weight by Economics
 - 2b. Shellfish Remains
 - 2c. Floral Remains
 - 2c-1. Macrofloral remains
 - 2c-2. Pollen remains
- ◆ Artifact Table 3 Series—Functional Categories
 - 3a. Selected Artifact Categories by Group
 - 3b. Summary of Selected Artifact Categories
- ◆ Artifact Table 4 Series—Food Preparation and Consumption Vessels
 - 4a. Food Preparation and Consumption Items by Function
 - 4b. Food Preparation and Consumption Vessels by Material
 - 4c. Decoration on Food Preparation and Consumption Vessels
- ◆ Artifact Table 5—Social Drugs
- ◆ Artifact Table 6 Series—Date and Origin of Marked/Datable Items
 - 6a. Ceramic Items
 - 6b. Glass Items
 - 6c. Miscellaneous Items

Artifact Table 1 is the most comprehensive. In this table, artifacts are grouped by major functional categories, briefly described, and assigned a total number of pieces (“count”) as well as an MNI represented by those pieces (see discussion on determining MNI in Chapter 4, Section 4.4, “Laboratory Processing and Analysis”). Biological remains, which are not amenable to MNI tabulation, are presented in Artifact Table 2.

Historical archaeologists commonly compare the percent occurrence of functional classes of artifacts when comparing sites and assemblages; these are presented in Artifact Table 3. Artifact Table 3a provides totals for artifacts in the most inclusive group classifications: activities, domestic, leisure and recreation, personal, and undefined. Artifact Table 3b includes descriptive categories under group headings from Artifact Table 1. These are the most useful and

appropriate classifications for making comparisons between intraproject assemblages and with similar collections from other sites.

In Table 3a, artifact counts and MNI totals for the “structural” group is omitted; in Table 3b, totals for categories under the structural group also are not included. These types of artifacts are not useful for determining site activities through their relative presence and also do not lend themselves to MNI estimates from fragments (see Chapter 4.4). The listing of structural elements recovered is presented in Table 1, however; and any noteworthy aspects identified during excavation are discussed in Chapter 5.

Artifact Table 4 summarizes information on vessels related to food preparation and consumption, a popular and productive topic for archaeological study. Table 4a presents the vessels by function, Table 4b by fabric, and Table 4c by decoration. The relative presence and types of social drugs (Artifact Table 5) are also common topics of analysis for historical period artifact assemblages.

The Artifact Table 6 series provides detailed information on artifacts marked by the vessel manufacturer or subsequent merchant who used the vessel. The style and content of these markings provide clues to when the item was made, who made it, and/or what the contents of the vessels were. Marked artifacts are particularly valuable for dating strata and thereby the phases with which strata are associated. Information on marks and mark references is also valuable to other historical archaeologists who are researching similar artifacts. Additional information on marked artifacts can be found under their catalog number in Appendix E.

LOTS 3 AND 6

Portions of Lots 3 and 6 were investigated, and several testable features were identified in each area. However, none of these features contained artifact assemblages that satisfied criteria for importance as defined in the research design and QIVA standards. The work carried out in these areas, therefore, is only briefly summarized below. Historical details on the property can be found in Appendix A, while the evaluation sheets for tested features are provided in Appendix C.

Lot 3 was the location of a single-family private residence (Figure 5-1). Planted out in orchards by 1887, ownership transferred several times before a dwelling was built by 1894, at which time the land was owned by local entrepreneurs D. M. Bradford and P. Ferguson. Between 1909 and 1913 a parcel with the house and outbuildings was carved out of Lot 3 and sold to Vicente and Nettie Salas. The Salases sold the lot in 1924 and the house was razed soon afterward. The six privies found within the Salas lot were half excavated (cut vertically to provide a full profile) and the artifacts were laid out and examined. The artifact content of all the privies was low (Table 5-3), and many could only be generally dated. None satisfied the QIVA criteria.

Excavations in the rear of Lot 6 concentrated on outbuildings associated with the hotels on the Third Street frontage (Figure 5-2). Although the eastern portion of Lot 6 once contained a laundry and other buildings associated with Chinatown, earlier test excavations showed that this area had been destroyed by later construction on the site. Archaeological work was therefore concentrated around the barn and outbuildings associated with either Starke’s Hotel/Bradford House on Lot 5 or the series of small hotels and boarding houses adjacent to Starke’s Hotel on the east. Of the three features located and tested, none satisfied QIVA criteria (Table 5-4).

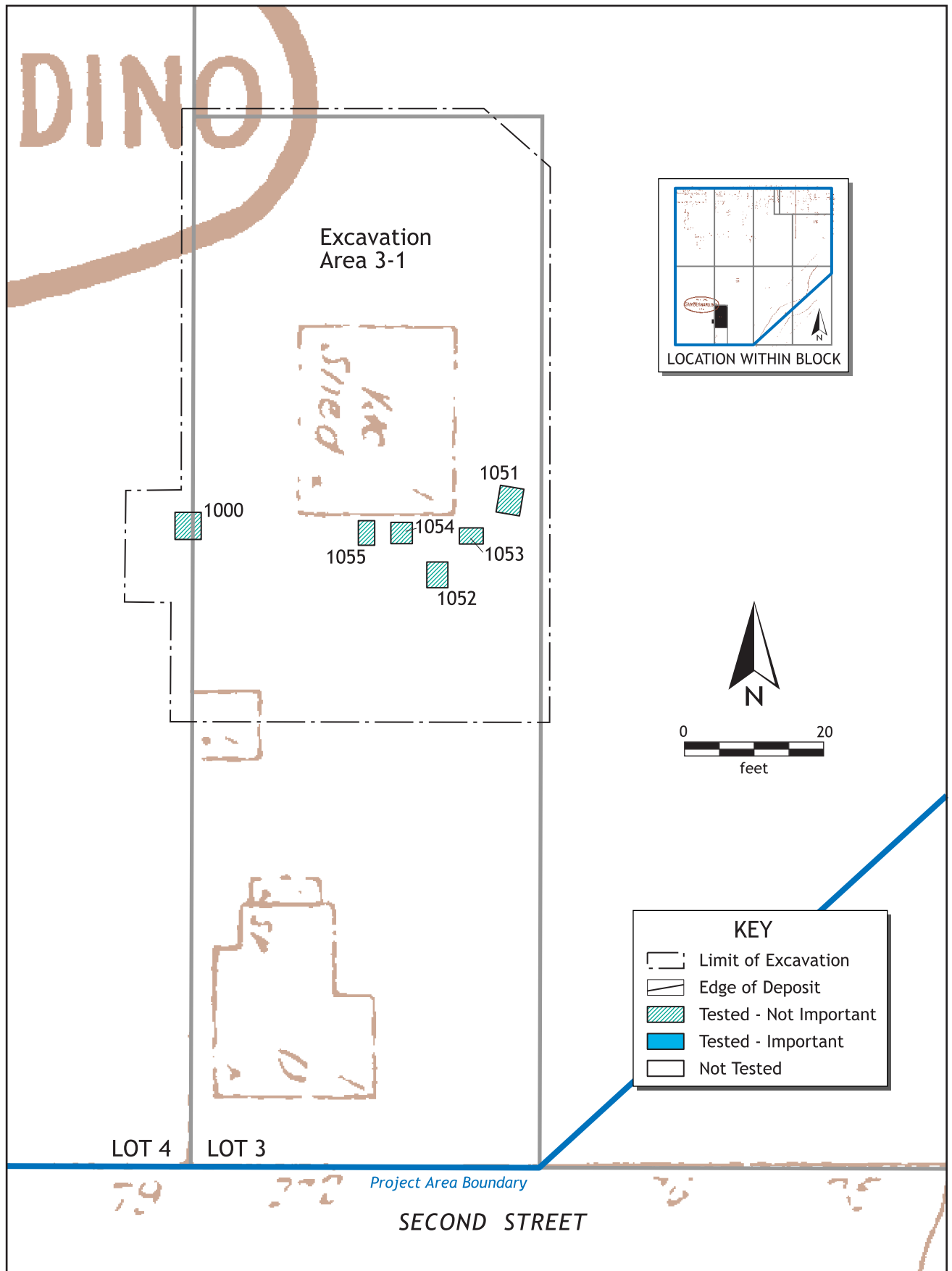


Figure 5-1 Excavation Area 3-1 superimposed on the 1894 Sanborn Map.

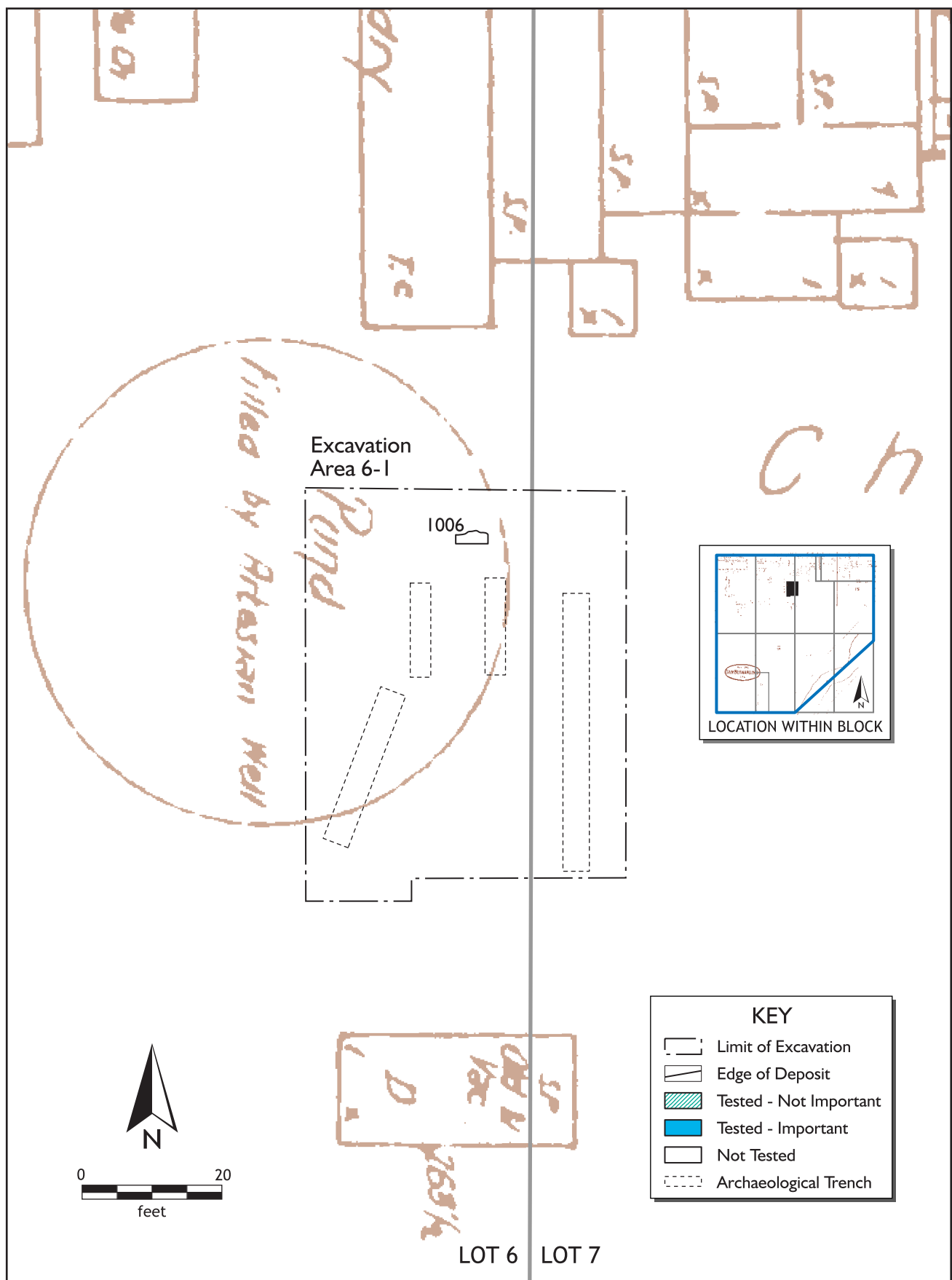


Figure 5-2 Excavation Area 6-1 superimposed on the 1894 Sanborn Map.

Table 5-3
Lot 3 Tested Archaeological Features

Type	No.	Construction Description (Phase A)	Phase A Date	Use/ Abandonment/ Fill (Phase B)	Phase B Date	Evaluation
Privy	1000	Rectangular pit 4.6 x 3.0 x 1.5 feet deep	Post-1901	Low quantity of domestic refuse	Post-1901	Not important
Privy	1051	Rectangular pit 2.6 x 3.0 x 2.5 feet deep	Post-1889	Low quantity of domestic refuse	Post-1889	Not important
Privy	1052	Rectangular pit 2.6 x 3.0 x 2.7 feet deep	Post-1915	Low quantity of domestic refuse	Post-1915	Not important
Privy	1053	Rectangular pit 2.6 x 3.0 x 1.3 feet deep	Post-1915	Low quantity of domestic refuse	Post-1915	Not important
Privy	1054	Rectangular pit 2.6 x 3.0 x 3.7 feet deep	Post-1885	Low quantity of domestic refuse	Post-1885	Not important
Privy	1055	Rectangular pit 3.0 x 2.0 x 1.3 feet deep	Post-1880	Low quantity of domestic refuse	Post-1880	Not important

Table 5-4
Lot 6 Tested Archaeological Features

Type	No.	Construction Description (Phase A)	Phase A Date	Use/ Abandonment/ Fill (Phase B)	Phase B Date	Evaluation
Pit	1014	Rectangular pit 4.0 x 3.5 x 2.3 feet deep	Early twentieth century	Low quantity of domestic refuse and construction debris	Early twentieth century	Not important
Pit	1017	Circular pit 5.0 foot diameter x 18.0 inches deep	Early twentieth century	Sterile construction pit	Early twentieth century	Not important

5.2 STARKE'S HOTEL/BRADFORD HOUSE (LOT 5)

NARRATIVE SUMMARY

For 70 years—from the 1850s to the 1920s—Lot 5 of Block 15 was the site of hotels and lodging houses. The first of these was run by William Crosby, who converted his residence into a tavern/hotel within the walls of the Mormon Stockade. With the completion of the town survey in 1854, Crosby purchased all of Block 15 (comprising eight 1-acre lots) and continued to operate the hostelry until 1857 (Figure 5-3). Crosby then sold the block to John Lemon, who within a year relinquished the property to Dudley and Elizabeth Pine. As Pine's Hotel, the rustic inn was enlarged to a two-story adobe building and became one of San Bernardino's leading hotels and social centers. In 1867 the Pines sold the hotel to August and Catherine Starke, who enlarged the facility with a two-story wooden wing. Starke's Hotel came to be considered the town's finest establishment, boasting 60 guest rooms, a barroom, a ladies parlor, a ballroom, and other amenities. In 1878, the Starkes sold off the seven other lots in Block 15, retaining only Lot 5.

The three privies and single pit excavated on this lot (Table 5-5 and Figure 5-4) are associated with an L-shaped building to the rear of Starke's Hotel that serviced the hotel employees. The original Sanborn mapmaker apparently mislocated these interior-block structures about 15 feet northeast, an error not uncommon where property lines were unmarked (see Figure 5-3).

Table 5-5
Lot 5 Tested Archaeological Features

Type	No.	Construction Description (Phase A)	Phase A Date	Use/ Abandonment/ Fill (Phase B)	Phase B Date	Evaluation
Privy	1009	Unlined, possible multi-seater (10.0 x 3.0 x 1.0 feet deep)	By 1894	B2. Refuse from 1897 site improvements	1897	Important
Pit	1022	Rectangular pit (4.3 x 3.3 x 1.9 feet deep)	1897	B2. Refuse from 1897 site improvements	1897	Important
Privy	1023	Unlined, possible 2-seater (6.9 x 3.0 x 1.8 feet deep)	By 1885	B2. Refuse from 1897 site improvements	1894	Important
Privy	1025	Unlined, possible multi-seater (10.8 x 3.3 x 3.9 feet deep)	By 1885	B1. Accumulated during period of use	1897	Important

The L-shaped building first appears on the 1885 Sanborn map identified as a laundry facility; it is described in more detail on the 1887 Sanborn map as including Chinese "sleeping rooms," a storeroom, a hog house, and a "W.C." (Privy 1025). The 1880 census identifies four Chinese staff in residence, one of them the laundryman.

At the northern side of the laundry building, two small outbuildings connected by a shed awning are depicted on the 1885 Sanborn map (they are shown as detached buildings on subsequent Sanborn maps). The southernmost of these has been identified as Privy 1023, while the northern structure may have been a bathhouse. Although this may be the bathhouse mentioned in 1871, it is remote from the hotel itself and more likely served the non-Chinese hotel employees. A sewer

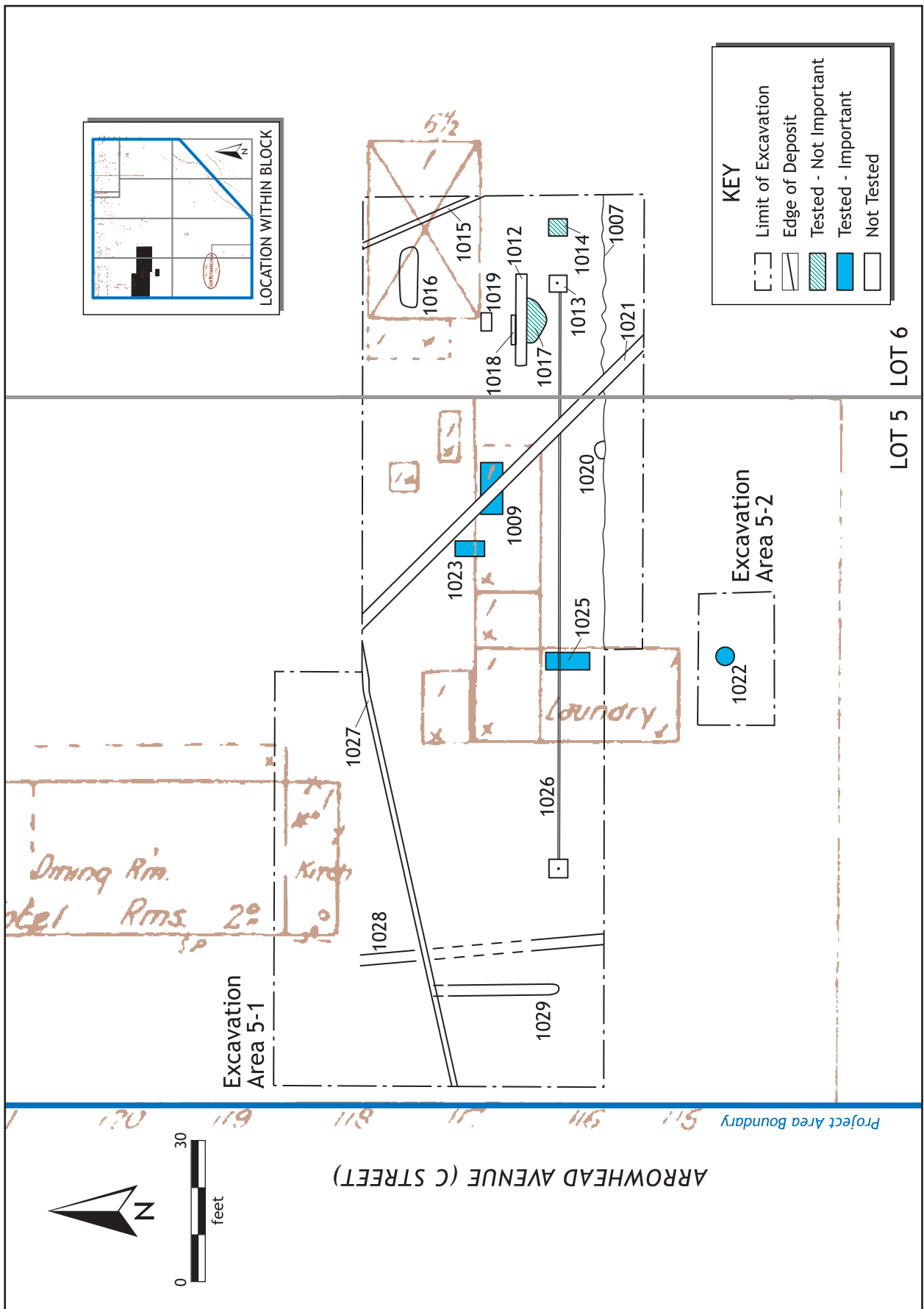


Figure 5-3 Excavation Areas 5-1 and 5-2 superimposed on the 1894 Sanborn Map.

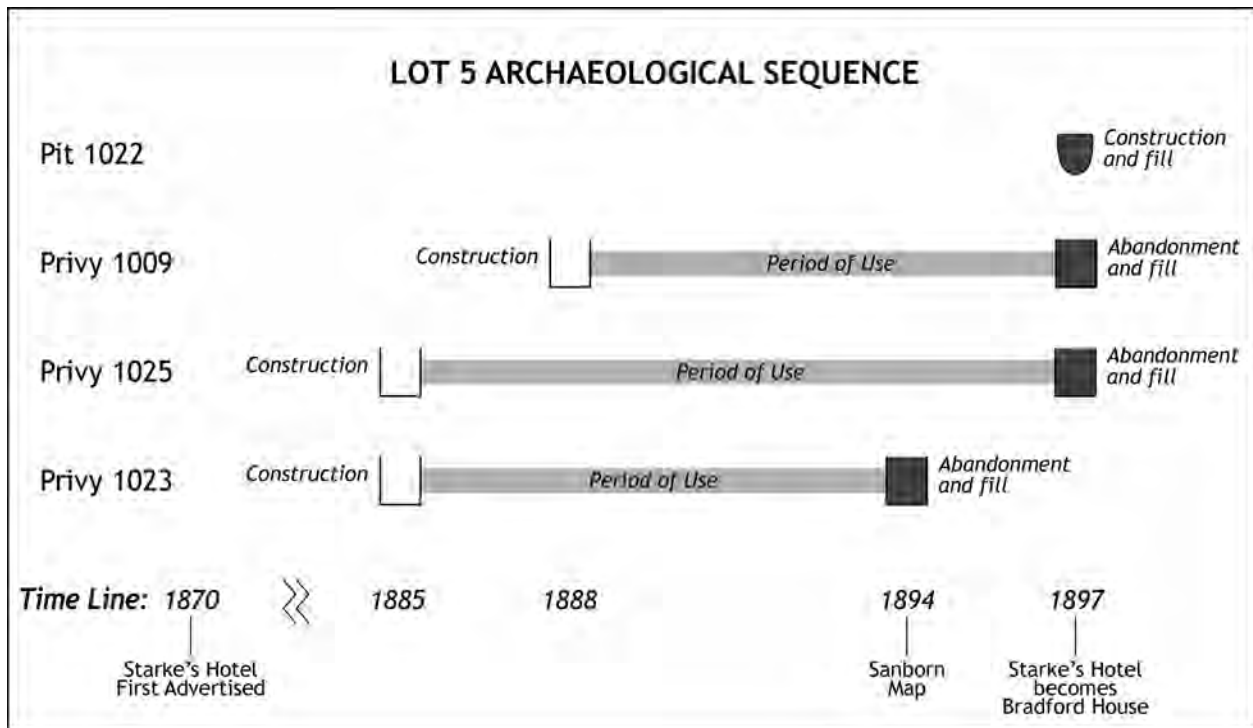


Figure 5-4 Sequence of Lot 5 feature construction and use.

line was installed down C Street (Arrowhead Avenue) in 1889, and the hotel was certainly connected. Privy 1025 and Privy 1023, however, continued to serve employees working in the backyard areas.

In 1891 the L-shaped building still contained the hotel laundry and hog house, although the sleeping rooms were converted into a storeroom, and new quarters for the Chinese workers were built close by to the southwest. By 1894 the Chinese quarters were gone, the laundry was the only room in the building with a specified use, and the hog house appears to have been converted for human use. Privy 1023 was abandoned, replaced by Privy 1009 adjacent to the east. The bathhouse north of Privy 1023 remained.

Finally, in 1896, the hotel was seized and foreclosed on for nonpayment of state and county taxes in the amount of \$164.93. The following year the hotel fell into the hands of local businessman Daniel M. Bradford, who began operating the hotel as Bradford House, managed by his daughter and son-in-law, Emeline and Charles Davis. Detailed lists of improvements in that year suggest that the backyard privies (Privies 1009 and 1025) were finally filled and closed. Cleanup also involved excavation of a trash pit (Pit 1022) that was filled with hotel garbage and rubbish.

In 1906, the entire L-shaped building was being used for animals, and the W.C., for the first time, was no longer distinguished as a separate structure (see Figures 2-10, 2-12, and 2-13). Bradford's death in 1903 left the hotel in the hands of his daughter, Emeline Davis. The hotel's fortunes apparently slipped in the following years. Mrs. Davis continued its operation until around 1922, not as a hotel but rather as a boarding house. In 1923 Mrs. Davis sold Lot 5 to Ralph Swing, who demolished the hotel and all its related structures almost immediately.

ABSTRACT OF DOCUMENTARY RESEARCH FOR LOT 5

Addresses

1885–1891	1/2/3 Third Street
1894	233 Third Street
1906	293 Third Street
1910–1913	296 Third Street

Occupation and Use

1839–1851	Rancho San Bernardino property
1851–1853	Northwest section crossed by eastern and southern walls of Mormon Stockade
1853–1857	William Crosby and family, hotel/tavern
1858–1867	Dudley and Elizabeth Pine, hotel
1867–1896	August and Catherine Starke and family, hotel
1897–1903	Daniel M. Bradford, Emeline M. Davis (nee Bradford), and Charles H. Davis (manager), hotel
1903–1906	Charles Davis and Emeline M. Davis, hotel
1906–1912	Emeline M. Davis, hotel/boarding house
1913– ?	Frances Martinez, manager, boarding house
1923	Ralph Swing demolishes all hotel buildings

Ownership

1839–1851	Rancho home of José María Lúgo family
1851–1854	Amasa Lyman and Charles Rich
1854–1857	William Crosby
1857–1863	John Lemon
1863–1868	Dudley and Elizabeth Pine
1868–1896	August and Catherine Starke
1896–1897	Series of San Bernardino County delinquent tax sales
1897–1903	Daniel M. Bradford
1903–1921	Emeline M. and Charles H. Davis (Charles dies 1906)
1923–1933	Ralph Swing
1933–1935	E. M. Mills (or Miller)
1935–1949	Relvert and Company, Inc.
1949–1958	Everett Swing
ca. 1958	California Division of Highways

Summary of Documents

1839	Antonio María Lúgo family—The home of son, José María Lúgo, is located approximately on the site of the San Bernardino Courthouse (father Antonio María; sons).
1852	Deed—February 26—Lúgos and Sepúlveda to Amasa Mason Lyman and Charles C. Rich, Rancho San Bernardino (SBCR 1852–1854:24).
1854	Deed—August 24—Lyman and Rich to William Crosby, all of Block 15 (Lots 1–8) (SBCR 1852–1854:15).
1857	Deed—December 2—William Crosby to John Lemon, all of Block 15 (Lots 1–8) (SBCR 1857:170).
1863	Deed—July—John Lemon to Dudley and Elizabeth Pine, all of Block 15 (Lots 1–8) (Ingersoll 1904:162; SBCR 1863:14).
1867	August and Catherine Starke’s advertised as new proprietors.
1868	Deed—July 23—Dudley and Elizabeth Pine to August and Catherine Starke, all of Block 15 (Lots 1–8) (SBCR 1868:138).
1869	Two-story wooden addition built: 24 rooms, dining room, parlor, kitchen.
1870	Census—Ninth Census of the United States lists the following at Starke’s Hotel: August Starke/male/age 46/hotel keeper/white* Kate Starke/female/wife/age 22/housekeeper/white* Catherine Starke/female/age 3/attending school/white

Thomas Starke/male/age 5/12/at home/white
 Anna Starke/female/age 9/attending school/white
 Steven Hubbell/male/age 29/attorney/white
 Thomas Grindley/male/age 34/physician/white*
 Thomas Peters/male/age 28/stage driver/white
 Stewart Wall/male/age 35/city marshall/white
 Mariette Peters/female/age 18/keeping house/white
 Charles Cluskey/male/age 63/miner/white
 Edward Harris/male/age 28/barkeeper/white
 Oliver Wozencraft/male/age 24/bartender/white
 Nicholas Churchill/male/age 23/U.S. asst. assessor/white
 Maggie Lynch/female/age 25/waitress in hotel/white*
 Hellen [sic] Lynch/female/age 28/domestic servant/white*
 John Banninger/male/age 40/farm laborer/white*
 Robert Lewis/male/age 28/waiter in hotel/white
 Sam Sing/male/age 22/waiter in hotel/Chinese*
 Sam See/male/age 28/cook in hotel/Chinese*

*Ages of these individuals were circled on enumeration sheet. Reason not known.

- 1871 Bath house added, heated by artesian well (*Guardian* 1871:3).
- 1878 Assessment—May—August Starke is assessed only for Lot 5 (\$1,500), its improvements (\$2,500), plus personal property (\$1,635), including: one coach, one wagon, hogs, five horses, harness, and furniture (Town of San Bernardino [SB Town] 1878:59).
- 1878 Assessment—October—August Starke is assessed only for Lot 5 (\$1,200) and its improvements (\$3,000), plus personal property (\$1,325), including a stage, hogs, hotel furniture, saloon fixtures and stock, and a piano (SB City 1878–1879:105).
- 1880 Old adobe building demolished and two-story brick building erected.
- 1880 Census—Tenth Census of the United States lists the following at Starke’s Hotel:
 - August Starke/male/age 56/married/hotel keeper
 - Kate Starke/female/wife/age 42/married/housekeeper
 - Augustus H. Starke/male/son/age 28/single/hotel clerk
 - Kate Starke/female/daughter/age 12/at school
 - Thomas Starke/male/son/age 10/at school
 - William Starke/male/son/age 5
 - Frank Starke/male/son/age 3
 - Anna Starke/female/step-daughter/single/age 18/at home
 - Joseph S. Alley/male/age 40/boarder/single/miner
 - Ah Jim/male/age 26/boarder/single/laundryman
 - Charlie Ho/male/age 23/boarder/single/hotel cook
 - Ah Ying/male/age 28/boarder/single/gardener
 - Ah Sing/male/age 25/boarder/single/hotel cook
- 1881 Assessment—August Starke assessed for Lot 5 (\$1,200), improvements (\$2,500) and personal property (\$1,826), including furniture, a piano, a sewing machine, liquor and cigars, 16 hogs, and lumber and bricks (\$500) (SB City 1881–1882:57).
- 1885 Sanborn map—see Figure 2-8.
- 1887 Sanborn map—see Figure 2-9.
- 1888 Sanborn map—same as 1887 map.
- 1888 Court Case—February—San Bernardino Artificial Stone and Improvement Company awarded city contract for the laying of sewer pipe on C Street, including along Starke’s Hotel frontage. Work is completed by March 1889 (Superior Court 1888d).
- 1889 Directory—*San Bernardino City and County Directory* (Flagg and Walker 1889:131)—Starke’s Hotel, corner of Third and C streets.
- 1889–1890 Assessment—August Starke assessed for land (\$5,250), property (\$890), and improvements (\$3,000) on Lots 4 and 5, including furniture, fixtures, piano, and sewing machine (SB City 1889–1890:93).
- 1889–1890 Court Case—September—Suit against August Starke (and others) refusing to pay assessments for the laying of sewer pipes on C Street. Starke’s assessment was \$291.41. Court found in favor of Starke (Superior Court 1888d, 1889:388).

- 1891 Sanborn map shows no apparent changes to the hotel. The Chinese have been removed from the L-shaped structure to a building a few feet southwest.
- 1894 Sanborn map—see Figure 2-11.
- 1895 Assessment—to August Starke, combined assessment for Lots 4 and 5, Land \$2,500/Improvements \$3,000 (SBCA 1895–1899:20).
- 1896 Assessment—to August Starke, combined assessment for Lots 4 and 5, Land \$2,000/Improvements \$2,500 (SBCA 1895–1899:20).
- 1896 Certificate of Sale—July 3—San Bernardino County Tax Collector, Truman Reeves, sells Starke’s Hotel property—Lots 4 and 5—to the State of California for delinquent taxes and penalties by the Starkes. Amount of taxes owed is \$164.93 (SB County 1896:729).
- 1897 Assessment—to August Starke—Combined assessments for Lots 4 and 5, Land \$2,000/Improvements \$2,500 (SBCA 1895–1899:20).
- 1897 Court Case—March 9—San Bernardino National Bank purchases the hotel property (Lots 4 and 5), subject to the redemption rights of the Starkes (Superior Court 1899).
- 1897 Court Case—September 9—Louie M. Twogood enters into an agreement with August and Catherine Starke giving the Starkes an option for the next 2 years to purchase from Ms. Twogood all of Lots 4 and 5 in Block 15.
- 1897 Court Case—September 10—Louie Twogood effects redemption of the property by paying \$1,325.00 to the San Bernardino National Bank (Superior Court 1899).
- 1897 Deed—September 28—Louie M. Twogood to D. M. Bradford, Lots 4 and 5 (SBCR 1897b:159).
- 1897–1899 Court Case—October—Bradford makes numerous repairs and improvements to hotel (Superior Court 1899).
- 1897 Court Case—October 14—A. J. Twogood pays San Bernardino County Treasurer (acting for the State Controller’s Office) the sum of \$386.00 for Lots 4 and 5. Transaction is made using two instruments—33140 (\$245.33) and 33141 (\$140.67) (SBCR 1897c:44).
- 1898 Assessment—to August Starke, Lot 5 only, Land \$1,200/Improvements \$1,000 (SBCA 1895–1899:20).
- 1898 Directory—*San Bernardino County Directory*—Hotel listed as “Bradford House,” corner of Third and C streets (Bushnell 1898:110). C. H. Davis is the proprietor. Street address is given as 293 Third St. (Bushnell 1898:111).
- 1899 Assessment—to August Starke, Lot 5 only, Land \$1,200/Improvements \$1,000 (SBCA 1895–1899:20).
- 1900 Deed—January 31—August and Catherine Starke enter into an agreement with Wong See of Riverside agreeing to “make, execute, and deliver” to free of encumbrances the “property known as the Starke Hotel Property,” and including all of Lots 4 and 5. “At such time as the said Wong See, his agent or attorney shall demand of us such deed and tender and pay to such sums of money as by decree of the Superior Court of the County of San Bernardino, State of California, in that certain case now pending in said court, entitled A. Starke and Catherine Starke vs. D. M. Bradford and Louie M. Twogood, shall be required to be by us paid to the said D. M. Bradford or Louie M. Twogood, or both of them in redemption of said property herein above described, from said D. M. Bradford and Louis [sic] M. Twogood, or either of them, said sum to be so applied” (SBCR 1900a:90–92).
- 1900 Court Case—February 3—Superior Court orders Bradford to deliver a deed of conveyance to the Starkes upon their “paying to the defendant Louie M. Twogood, whatever sum of money may remain unpaid to her upon her mortgage upon said property executed by D. M. Bradford, not exceeding \$2,794.50, and that the overplus to make the total sum of \$2,794.50 remaining after payment of the said mortgage shall be paid to the said defendant D. M. Bradford,” payment to be made within 20 days of decree (Superior Court 1899).
- 1900 Sexton’s Record—May 18—Pioneer Cemetery: August Starke dies in San Bernardino, age 76.
- 1900 Census—Twelfth Census of the United States lists the following at Starke’s Hotel, now called Bradford House:
Daniel M. Bradford/male/head of household/age 78/landlord/white/widowed
Chas. H. Davis/male/head/age 54/lodging house/white/married
Emiline [sic] M. Davis/female/wife/age 44/no occupation/white/married
Napoleon Hicks/male/head/age 61/grocer/white/married
Marti ? Hicks/female/wife/age 35/no occupation/white/married

- Catherine Starke/female/head/age 62/apartment [listed under occupation]/white/ widowed
 ? McDonald/male/lodger/age 27/salesman/white/single
 Wm. D. Bloodworth/male/head/age 38/miner/white/married
 Cora Bloodworth/female/wife/age 30/no occupation/white/married
 Annie Gussaroff/female/head/age 36/"here for health"/white/married
 Rosetta Gussaroff/female/daughter/age 13/no occupation/white/single
 Alice Davis/female/daughter/age 14/at school/white/single
 Daniel Davis/male/son/age 12/at school/white/single
 Charles Davis/male/son/age 9/at school/white/single
- 1900 Assessment—to D. M. Bradford, combined assessment for Lots 1–6 and portions of Lots 7 and 8, \$8,289 (no breakdown of lots or improvements) (SBCA 1900–1904:23).
- 1901 Assessment—to D. M. Bradford, combined assessment for Lots 1–6 and portions of Lots 7 and 8, \$8,289 (no breakdown of lots or improvements) (SBCA 1900–1904:23).
- 1902 Assessment—to D. M. Bradford, combined assessment for Lots 1–6 and portions of Lots 7 and 8, \$8,289 (no breakdown of lots or improvements) (SBCA 1900–1904:23).
- 1903 Assessment—to D. M. Bradford, combined assessment for Lots 1–6 and portions of Lots 7 and 8, \$8,289 (no breakdown of lots or improvements) (SBCA 1900–1904:23).
- 1903 Sexton's Record—June 1—Pioneer cemetery: Catherine Starke dies in San Bernardino, age 62.
- 1903 Probate Record—October 9—D. M. Bradford dies in San Bernardino. His will leaves his entire estate to his daughter Emeline M. Davis; her husband, Charles H. Davis, is named executor (Superior Court 1903:76–78, 1906a:94–95).
- 1904 Assessment—Heirs of D. M. Bradford for Lots 1–6 and portions of Lots 7 and 8, \$8,289 (no breakdown of lots or improvements) (SBCA 1900–1904:23).
- 1905 Assessment—Heirs of D. M. Bradford; no amounts shown for lot or improvements (SBCA 1905–1909:24).
- 1906 Will/Probate Record—January 6—Charles H. Davis dies, wife Emeline named heir and executrix. Real property included several lots in San Bernardino, including a 50 percent interest in Lots 4 and 5 of Block 15, and a lot in Laguna Beach, California. Personal property consisted of a piano and cash valued at \$6,576.51 (Superior Court 1906a:207–208, 1906b:151–152).
- 1906 Assessment—Heirs of D. M. Bradford; no amounts shown for lot or improvements (SBCA 1905–1909:24).
- 1906 Sanborn map shows no significant changes to the hotel, except its name is now "The Bradford." A single-story shake-roofed shed has been added adjacent to C Street (Arrowhead Avenue) in the southern end of the lot; the privy/bathhouse has been moved yet again, in a northerly direction; the L-shaped building has apparently been converted to a stable. The hotel's address is noted as 293 Third Street.
- 1907 Assessment—to Mrs. E. M. Davis; no amounts shown for lot or improvements (SBCA 1905–1909:24).
- 1908 Assessment—to Mrs. E. M. Davis; no amounts shown for lot or improvements (SBCA 1905–1909:24).
- 1909 Assessment—to Mrs. E. M. Davis, Parcel 504 (Lot 5), except for railroad right-of-way; no amounts shown (SBCA 1909–1913:27).
- 1910 Directory—*San Bernardino City Directory*—296 Third Street listed as the "Bradford House" under the classified heading of "Furnished Rooms"; Mrs. Emmaline [sic] M. Davis is proprietor; living with her are Alice Davis and Charles H. Davis, Jr. (SBDC 1910:62–63, 283).
- 1910 Census—Thirteenth Census of the United States lists the following at Bradford House, listed as 293 Third Street:
 Emeline M. Davis/female/head/age 53/widow/keeper/rooming house/white
 Alice Davis/female/daughter/age 24/single/no occupation/white
 Charles H. Davis/male/son/age 20/single/student/white
 William Dangerfield/male/head/age 44/married/boilermaker/railroad/white
 Lila R. Dangerfield/female/wife/age 25/married/no occupation/white
 Eloise Dangerfield/female/daughter/age 2/single/no occupation/white
 Edward W. Dodge/male/head/age 56/married/contractor/railroad/white
 Alice Dodge/female/wife/age 39/married/private nurse/white
 Isaac A. Hindbigler(?) /male/head/age 38/married/teamster/ice company/white

	Anna B. Hindbigler(?)/female/wife/age 34/married/no occupation/white
	Virgil E. Hindbigler(?)/male/son/age 7(?)/single/no occupation/white
	Lawrence W. Hindbigler(?)/male/son/age 6/12/single/no occupation/white
	Emily M. Sundell/female/head/age 24/single/private nurse/white
	Anna W. Ray/female/lodger/age 24/married/no occupation/white
	Marriette Cook/female/lodger/age 54/single/seamstress-piecework/white
	Louella Cardell/female/lodger/age 54/married/private servant/white
1911–1913	Assessment—to Mrs. E. M. Davis, Parcel 504 (Lot 5), except for railroad right-of-way; no amounts shown (SBCA 1909–1913:27).
1913–1914	Directory— <i>San Bernardino City Directory</i> —296 Third Street listed as a boarding house (“furnished rooms”) operated by Frances Martinez (SBDC 1913:316).
1914–1919	Assessment—to Mrs. E. M. Davis, Parcel 508, except for railroad right-of-way (SBCA 1914–1918:26).
1919	Assessment—to Mrs. E. M. Davis, Parcel 508, except for railroad right-of-way; assessed \$830 for land, \$500 for improvements (SBCA 1918–1923:33).
1920	Assessment—to Mrs. E. M. Davis, Parcel 508, except for railroad right-of-way; assessed \$830 for land, \$500 for improvements (SBCA 1918–1923:33).
1921–1922	Assessment—to Mrs. E. M. Davis, Parcel 508 (SBCA 1918–1923:33).
1923	Assessment—to Mrs. E. M. Davis, Parcel 508 (Davis portion of Lot 5 sold to Ralph Swing in 1923); assessed \$830 for land, no improvements shown; Swing apparently had Starke’s Hotel/Bradford House demolished soon after purchase (SBCA 1918–1923:33).
1924–1925	Assessment—Parcel 508, portion north of railroad right-of-way assessed to Ralph Swing; land \$2,000, no improvements (SBCA 1924–1929:33).
1926	Assessment—Parcel 508, portion north of railroad right-of-way assessed to Ralph Swing; land \$3,330, no improvements (SBCA 1924–1929:33).
1927–1928	Assessment—Parcel 508, portion north of railroad right-of-way assessed to Ralph Swing; land \$6,660, improvements \$5,500 (SBCA 1924–1929:33).
1928	Directory— <i>San Bernardino and Colton City Directory</i> —295 Third Street, Bronson and Lange, Inc., Chevrolet sales and service dealer operating on property (SBDC 1928:97).
1929	Assessment—Parcel 508, portion north of railroad right-of-way assessed to Ralph Swing; land \$6,660, improvements \$7,500 (SBCA 1924–1929:33).
1930	Assessment—Parcel 508 assessed to Swing; land \$6,660, improvements \$7,500 (SBCA 1930–1935:19).
1931–1933	Assessment—Parcel 508 assessed to Swing; land \$8,490, improvements \$7,500 (SBCA 1930–1935:19).
1934	Assessment—Parcel 508 assessed to E. M. Mills (or Miller); \$7,590 for land, \$6,000 for improvements (SBCA 1930–1935:19).
1935	Assessment—portion north of railroad right-of-way assessed to Relvert and Company, Inc., automobile sales and service (SBCA 1930–1935:19, 1936–1941:18).
1939	Sanborn map—295 Third Street: Map shows hotel has been replaced with an automobile dealership; 263 C Street (Arrowhead Avenue): another structure abuts the southern boundaries of the auto business, although its function is not legible; south of this building, a third structure at 263 Arrowhead Avenue houses a wholesale liquor dealer; the small structure to its rear, on Lot 6, may be associated with this business.
1949	Assessment—Lot 5 north of railroad right-of-way assessed to Everett Swing; land \$13,710, improvements \$11,250 (SBCA 1949–1951:1).
1950	Assessment—Lot 5 north of railroad right-of-way assessed to Everett Swing; land \$13,710, improvements \$11,250 (SBCA 1949–1951:1).
1951	Assessment—Lot 5 north of railroad right-of-way assessed to Everett Swing; land \$13,710, improvements \$11,250 (SBCA 1949–1951:1).
1951	Sanborn map shows no substantial changes to auto dealership since 1939; the building at 273/267 Arrowhead Avenue (“C” Street) is a wholesale liquor distributor.
1959	Photograph—Western addition to Department of Transportation’s existing structure brings building to its current footprint (Caltrans District 8 Surveys photograph dated 12 December 1959).

PRIVY 1009

Privy 1009, a two- or three-seater, was 10 feet long by 3 feet wide; only 1 foot of its depth was preserved. Shovel marks clearly could be seen in the sides of the feature, and the surrounding 2 inches of soil exhibited a green stain (common in this site vicinity). The artifacts in the privy appear to have been dumped in as part of one episode, likely the site renovations that took place in 1897 (Phase B, Layer 2063; Figures 5-5 and 5-6). In the mid-twentieth century, the privy was cut through by a modern utility trench, destroying about one-third of its contents. An unknown amount of the upper portion of the feature also was destroyed by modern grading.

One problematic partial ceramic basemark (Cat. No. 167; see Table 5-15) is identified by Godden (1964:340 [2124]) as having been manufactured between 1930 and 1935: T[RADE MARK] / TH[OMAS HUGHES AND SON LTD]. Although the lettering was incomplete, the design matches the illustration exactly. The sherd, however, could not have intruded into the privy from later deposits; when the Bradford Hotel was demolished in 1924, commercial automobile-related facilities occupied the corner until the 1960s. Also, there were no other artifacts in the collection inconsistent with a fill date of 1897. An explanation was found in the preceding Thomas Hughes' mark (Godden 1964:339 [2123]) which while dated from 1910 to 1930, is described as having "an earlier version occurring from 1895 *without* 'Ltd.' and 'Made in England'" (emphasis in original). Mark 2124 must also have had an earlier version occurring at about the same time.



Figure 5-5 Privy 1009 artifact collection grouped by functional category (scale = 12 inches).

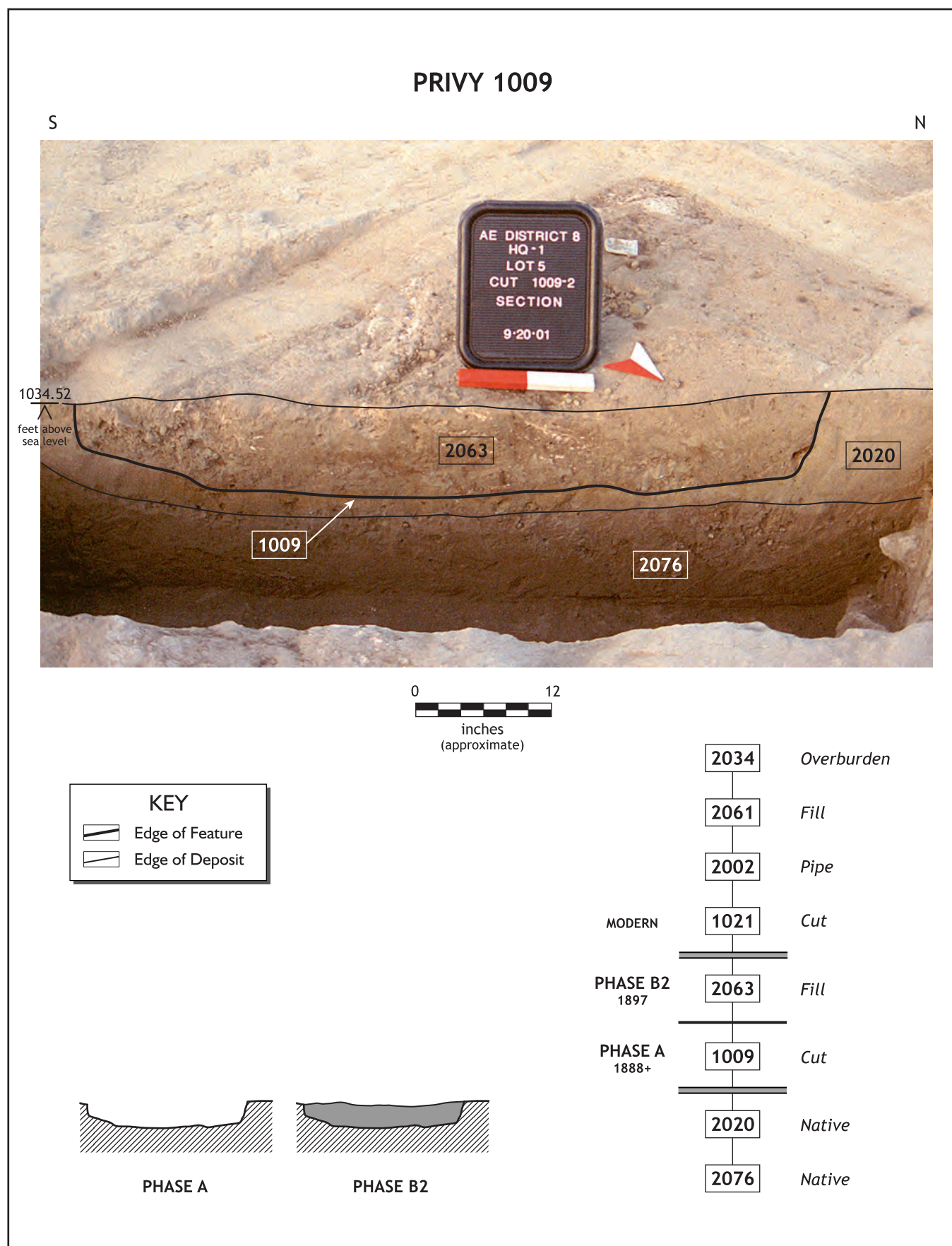


Figure 5-6 Privy 1009 section drawing and Harris matrix.

Details of the artifact collection from Privy 1009 are presented in the following tables. Briefly, the artifact assemblage is dominated by items associated with food preparation and consumption, the majority being undecorated utilitarian whitewares. Personal items ranked next in frequency, including whole and fragmentary evidence of 11 medicine bottles, 24 buttons and fasteners, 1 toothbrush, and 1 hair tonic bottle. Also present were 6 whole and 14 fragmented alcohol bottles and fragments representing 3 clay pipes. Overall, the collection is quite utilitarian and practical, with sturdy ceramics and a modest amount of personal goods. The TPQ for the deposit is 1891. The hotel wares may have been directly discarded during the 1897 cleanup, or reused and then thrown away by hotel employees. No Chinese artifacts were present in the feature, suggesting that the privy had either been cleaned out or rebuilt after the Chinese laundry workers left (between 1888 and 1891). Privy 1009 contained little nondomestic animal bone. Beef, pork, mutton, and chicken bones account for almost 90 percent of the sample. Most of the cuts are from high-priced meats.

Table 5-6
Privy 1009 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Activities				
Commerce		Silver alloy coin quarter	1	1
Communication	Writing	Graphite pencil lead	1	1
Domestic				
Food Packing/Storage	Closure	White glass lid liner	1	1
Food Preparation/ Consumption	Drinking Vessel	Clear glass goblet	7	1
	Drinking Vessel	Clear glass stemware	2	2
	Drinking Vessel	Clear glass tumbler	16	2
	Serving	Semi-porcelain hollow	1	1
	Serving	White improved earthenware bowl	14	4
	Serving	White improved earthenware dish	1	1
	Serving	White improved earthenware hollow	4	4
	Serving	White improved earthenware pitcher	56	4
	Tableware/Flatware	Ferrous knife	1	1
	Tableware/Flatware	Metal spoon	1	1
	Tableware/Flatware	Porcelain cup	2	1
	Tableware/Flatware	White improved earthenware bowl	2	2
	Tableware/Flatware	White improved earthenware cup	3	3
	Tableware/Flatware	White improved earthenware dish	1	1
	Tableware/Flatware	White improved earthenware hollow	1	1
	Tableware/Flatware	White improved earthenware plate	74	39
	Tableware/Flatware	White improved earthenware saucer	12	6
	Tableware/Flatware	White improved earthenware dish	23	21
	Tableware/Flatware	White improved earthenware hollow	171	28
<i>Food Preparation/Consumption Total</i>			<i>392</i>	<i>123</i>

Table 5-6 (continued)
Privy 1009 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Household/Furnishing	Lamp	Clear glass compote	15	1
		Clear glass mirror	1	1
		Lead decorative number	5	1
		White glass lamp globe	2	1
	Household/Furnishing Total			23
Leisure and Recreation				
Social Drugs	Alcohol Container	Amber glass alcohol bottle	42	1
	Alcohol Container	Brown glass alcohol bottle	14	4
	Alcohol Container	Clear glass alcohol bottle	39	4
	Alcohol Container	Olive glass alcohol bottle	49	7
	Alcohol Container	Stoneware alcohol bottle	6	3
	Alcohol Container	Stoneware bottle	1	1
	Smoking Accessories	Ball clay pipe	5	3
Social Drugs Total			156	23
Personal				
Clothing/Footwear	Fastener	Bone button	2	2
	Fastener	Ferrous button	2	2
	Fastener	Metal button	2	2
	Fastener	Metal rivet	1	1
	Fastener	Metal stud	2	2
	Fastener	Porcelain button	8	8
	Fastener	Shell button	7	7
Clothing/Footwear Total			24	24
Grooming	Toiletry	Aqua glass hair vigor bottle	1	1
	Toiletry	Bone toothbrush	3	1
Grooming Total			4	2
Health/Medicine	Container	Aqua glass medicinal bottle	1	1
	Container	Brown glass medicinal bottle	1	1
	Container	Clear glass medicinal bottle	8	6
	Container	Cobalt glass medicinal bottle	1	1
	Container	Light aqua glass medicinal bottle	4	2
Health/Medicine Total			15	11
Structural				
Building Material		Ceramic brick	1	1
		Clear glass flat	27	—
		Light aqua glass flat	48	—
Building Material Total			76	1
Nails		Ferrous large nail	11	11
		Ferrous medium nail	54	54
		Ferrous nail	183	—
		Ferrous small nail	12	12
Nails Total			260	77

Table 5-6 (continued)
Privy 1009 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Undetermined Use				
Miscellaneous Bottle, Jar, Can		Amber glass bottle	7	1
		Aqua glass bottle	7	2
		Blue glass bottle	1	1
		Brown glass bottle	15	1
		Clear glass bottle	29	5
		Dark aqua glass bottle	9	1
		Dark olive glass bottle	4	1
		Ferrous can	18	—
		Green glass bottle	1	1
		Light aqua glass bottle	30	6
		Light green glass bottle	9	2
		Light olive glass bottle	19	1
		Light turquoise glass bottle	1	1
		Olive glass bottle	22	1
<i>Miscellaneous Bottle, Jar, Can Total</i>			<i>172</i>	<i>24</i>
Miscellaneous Closure		Metal/cork closure	1	1
Miscellaneous Metal Item		Ferrous buckle	1	1
		Ferrous handle	1	1
		Ferrous rod	5	1
		Ferrous tack	1	1
<i>Miscellaneous Metal Item Total</i>			<i>8</i>	<i>4</i>
Undifferentiated		Bone/antler undefined	1	1
		Clear glass hollow	315	—
		Lime	6	—
		Stoneware hollow	2	2
		White glass hollow	1	1
<i>Undifferentiated Total</i>			<i>325</i>	<i>4</i>
Privy 1009 Total			1,459	301

Table 5-7
Privy 1009 Artifact Table 2a-1: Animals Represented by NISP

Common Name	Scientific Name	Count
Mammals		
Major Meat Mammals		
Cow	<i>Bos taurus</i>	82
Sheep	<i>Ovis aries</i>	52
Pig	<i>Sus scrofa</i>	38
Minor Meat Mammals		
Cottontail rabbit	<i>Sylvilagus</i> sp.	2
Jackrabbit	<i>Lepus californicus</i>	7

Table 5-7 (continued)
Privy 1009 Artifact Table 2a-1: Animals Represented by NISP

Common Name	Scientific Name	Count
Mammals (continued)		
Incidental Mammals		
Rat	<i>Rattus rattus</i>	9
Mole	<i>Scapanus latimanus</i>	1
<i>Mammals Total</i>		<i>191</i>
Domestic Poultry		
Chicken	<i>Gallus gallus</i>	31
Turkey	<i>Meleagris gallopavo</i>	4
Duck	<i>Anas platyrhyncha</i>	4
<i>Domestic Poultry Total</i>		<i>39</i>
<i>Privy 1009 Total</i>		<i>230</i>

Table 5-8
Privy 1009 Artifact Table 2a-2: Meat Weight by Economics

Meat Type	Price Group/Cut	Meat Weight (lb)	Percent within Type	Percent within Price Group	Percent of Total
Beef	High			96	
	Porterhouse	35.1	66.9		
	Sirloin	5.4	10.3		
	Prime rib	10.1	19.2		
	Moderate			—	
	Low			4	
	Foreshank	1.9	3.6		
	<i>Beef Total</i>	<i>52.5</i>	<i>100.0</i>	100	62
Mutton	High			69	
	Loin	3.6	28.3		
	Sirloin	1.3	10.2		
	Leg	3.8	29.9		
	Moderate			26	
	Rib	1.4	11.0		
	Shoulder	1.9	15.0		
	Low			6	
	Hindshank	0.5	3.9		
	Foreshank	0.2	1.6		
	Neck	0.0	0.0		
	<i>Mutton Total</i>	<i>12.7</i>	<i>100.0</i>	100	15

Table 5-8 (continued)
Privy 1009 Artifact Table 2a-2: Meat Weight by Economics

Meat Type	Price Group/Cut	Meat Weight (lb)	Percent within Type	Percent within Price Group	Percent of Total
Pork	High			20	
	Sirloin	2.8	14.2		
	Loin	1.1	5.6		
	Moderate			53	
	Rump	6.0	30.4		
	Shoulder butt	1.4	7.1		
	Picnic	3.0	15.2		
	Low			27	
	Belly	1.4	7.1		
	Neck	0.3	1.5		
	Hindshank	3.0	15.2		
	Foreshank	0.3	1.3		
	Jowl	0.5	2.4		
	<i>Pork Total</i>	<i>19.7</i>	<i>100.0</i>	100	23
<i>All Meat Types Total</i>		<i>84.9</i>			
High Price Group Total			74%		
Moderate Price Group Total			16%		
Low Price Group Total			9%		

Table 5-9
Privy 1009 Artifact Table 3a: Selected Artifact Categories by Group

	Count	MNI	Percent of MNI
Activities	2	2	0.9
Domestic	416	128	58.4
Leisure and Recreation	156	23	10.5
Personal	43	37	16.9
Structural (omitted)	—	—	—
Undetermined Use (selective)	181	29	13.2
<i>Privy 1009 Total^a</i>	<i>798</i>	<i>219</i>	<i>99.9</i>

a - Total percentage less than 100 is due to rounding.

Table 5-10
Privy 1009 Artifact Table 3b: Summary of Selected Artifacts by Category

Category	MNI	Percent
Building Material (omitted)	—	—
Clothing/Footwear	24	11.0
Commerce	1	0.5
Communication	1	0.5
Food Packing/Storage	1	0.5
Food Preparation/Consumption	123	56.2
Grooming	2	0.9
Health/Medicine	11	5.0
Household/Furnishing	4	1.8
Miscellaneous Bottle, Jar, Can	24	11.0
Miscellaneous Closure	1	0.5
Miscellaneous Metal Item	4	1.8
Nails (omitted)	—	—
Social Drugs	23	10.5
Undifferentiated (omitted)	—	—
<i>Privy 1009 Total^a</i>	<i>219</i>	<i>100.2</i>

a - Total percentage greater than 100 is due to rounding.

Table 5-11
Privy 1009 Artifact Table 4a: Food Preparation and Consumption Vessels by Function

Type	MNI	Percent
Cups and Mugs	4	3.3
Drinking Vessel (tumblers, stemware, etc.)	5	4.0
Serving (platter, covered dishes, etc.)	14	11.4
Tableware (plates, bowls, saucers, etc.)	49	39.8
Flatware (fork, knife, spoon, etc.)	2	1.6
Tableware/Serving	49	39.8
<i>Privy 1009 Total^a</i>	<i>123</i>	<i>99.9</i>

a - Total percentage less than 100 is due to rounding.

Table 5-12
Privy 1009 Artifact Table 4b: Food Preparation and Consumption Vessels by Material

Material	MNI	Percent
Ceramic		
Porcelain	1	0.8
Semi-porcelain	1	0.8
White Improved Earthenware	114	92.7
Glass	5	4.0
Metal	2	1.6
<i>Privy 1009 Total^a</i>	<i>123</i>	<i>99.9</i>

a - Total percentage less than 100 is due to rounding.

Table 5-13
Privy 1009 Artifact Table 4c: Decoration on Food Preparation and Consumption Vessels

Material	Object	Type of Decoration	MNI
Ceramic			
Porcelain	Cup	Undecorated	1
Semi-porcelain	Hollow	Undecorated	1
White Improved Earthenware	Bowl	Undecorated	6
White Improved Earthenware	Cup	Undecorated	3
White Improved Earthenware	Dish	Molded	1
White Improved Earthenware	Dish	Undecorated	22
White Improved Earthenware	Hollow	Blue Transfer	1
White Improved Earthenware	Hollow	Undecorated	32
White Improved Earthenware	Pitcher	Molded	4
White Improved Earthenware	Plate	Undecorated	39
White Improved Earthenware	Saucer	Undecorated	6
Glass			
Clear Glass	Goblet	Undecorated	1
Clear Glass	Stemware	Undecorated	2
Clear Glass	Tumbler	Undecorated	1
Clear Glass	Tumbler	Pressed, Paneled	1
Metal			
Ferrous	Knife	Undecorated	1
Metal	Spoon	Undecorated	1
Privy 1009 Total			123

Table 5-14
Privy 1009 Artifact Table 5: Social Drugs

Social Drug	MNI	Percent
Alcohol Container		
Alcohol Bottle	19	82.6
Bottle	1	4.4
<i>Alcohol Container Total</i>	<i>20</i>	<i>87.0</i>
Smoking Accessories		
Pipe	3	13.0
Privy 1009 Total	23	100.0

Table 5-15
Privy 1009 Artifact Table 6a: Date and Origin of Marked/Datable Ceramic Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI ^a
146	ca. 1885	...N STONE CHINA / (circle with crowns)	Knowles, Taylor, and Knowles	East Liverpool, OH	Gates and Ormerod 1982:119	1
147		...ONSTONE...(arched)			Not found	1
148	>1891	RO... / (standing Royal Coat of Arms) / A... / ENGLAND	Alfred Meakin	Staffordshire, England	Godden 1964:425; Kovel and Kovel 1986:229	1
149		(impressed) “U”? “M”?			Not found	1
150	>1891	...CHINA...			Kovel and Kovel 1986:229	1
152		...C... / (standing lion Royal Coat of Arms)...			Not found	1
153		...TONE CH...(arched)			Not found	1
154		...STON... / (standing lion Royal Coat of Arms) / ...FR...			Not found	1
155		(partial lion Royal Coat of Arms) / ST[ONE]			Not found	1
156	1860–1894	S / THOMAS HUGHES / (arrow dot arrow) / BURSLEM	Thomas Hughes	Staffordshire, England	Godden 1964:339	1
157	>1891	...ENGL... (within lines/band)			Godden 1964:11; Kovel and Kovel 1986:229	1
158		BA? / IR...			Not found	1
160		...(right side, Royal Coat of Arms) / ...SON			Not found	1
161	>1891	G?... / ENGL...	?poss. J. and G. Meakin		Godden 1964:11	1
163	1875	AL... / -...	?poss. Alfred Meakin		Godden 1964:425	1
164	1819–1864	(banner end) / (wing w/branches)	W. Adams and Sons	Staffordshire, England	Praetzelis 1983:4, 89	1
165	1860–1894	THOMAS... / (arrow)... / BUR[SLEM]	Thomas Hughes	Staffordshire, England	Godden 1964:339	1
166	1860–1894	...HES / ...???	?poss. Thomas Hughes	Staffordshire, England	Godden 1964:339	1

Table 5-15 (continued)
Privy 1009 Artifact Table 6a: Date and Origin of Marked/Datable Ceramic Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI^a
167	1930–1935	(shield w/dots) / T... / TH...	Thomas Hughes and Sons, LTD.	Staffordshire, England	Godden 1964:340	1
169	1876–1878	POW... (within banner)	Powell and Bishop	Staffordshire, England	Godden 1964:509	1
170	>1891	THOMAS...(in banner) / (seated Royal Coat of Arms) / TRADE (anchor) MARK / ENGLAND (in banner)	?poss. Thomas Hughes	Staffordshire, England	Godden 1964:11; Kovel and Kovel 1986:229	1
171	1870–1889	ROYAL IR[ONESTONE] / (standing Royal Coat of Arms) / CHARLES MEAKIN / ENGLAND	Charles Meakin	Staffordshire, England	Godden 1964:426	1
180		...ENTO...			Not found	1
186	>1891	ROYAL IRONSTONE CHINA / (standing British Royal Coat of Arms) CHARLES MEAKIN / ENGLAND	Charles Meakin	Staffordshire, England	Godden 1964:426; Kovel and Kovel 1986:229	1
188	ca. 1851–1882	...EDWARDS & SON / ...ALEHALL (embossed) / (...partial crown, partial unicorn)	James Edwards and Son	Staffordshire, England	Godden 1964:230, 231	1
190	ca. 1890+	IRO[NSTONE] / (standing British Royal Coat of Arms) / J & G ...[MEAKIN] / HA[NLEY] / EN[GLAND]	J. and G. Meakin	Staffordshire, England	Godden 1964:427	1
196	1881–1904	HOTEL	Burford Brothers	East Liverpool, OH	Gates and Ormerod 1982:29	1
202	>1891	IRONSTONE CHINA / (standing Royal Coat of Arms) J & G MEAKIN / HANLEY / ENGLAND	J. and G. Meakin	Staffordshire, England	Godden 1964:427; Kovel and Kovel 1986:229	1
203	ca. 1870	(standing Royal Coat of Arms) / ROYAL / PATENT IRONSTONE / BURGESS & GODDARD	Burgess and Goddard	Longton, England	Wetherbee 1980:27	1

a - MNI = minimum number of items.

Table 5-16
Privy 1009 Artifact Table 6b: Date and Origin of Marked/Datable Glass Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI ^a
6	>1888	HH.	J. Heinz Company	Sharpsburg, PA	Toulouse 1971:236	1
23	1882–1909	I.R. BRUNN / IMPORTER / SAN BERNARDINO (circular)	I. R. Brunn	San Bernardino, CA	McKenney 1882; SBDC 1909:47	1
26	1882–1886	TOWNE & WALDRIP / DRUGGISTS / SAN BERNARDINO, CAL	Towne & Waldrip	San Bernardino, CA	McKenney 1882; White 1886:50	1
54		...OU?...				1
61		...MP...				1
66	1857–1935	PAT 5MO778 / WT & CO	Whittall-Tatum and Company	Millville, NJ	Toulouse 1971:544	1
67	1854–1940	C / AYER / 14	J. C. Ayer & Co.	Lowell, MA	Larry's Antiques and Bottles n.d.	1
72	1884	THE DUFFY MALT WHISKEY COMPANY / ROCHESTER N.Y. (around company monogram)	Walter B. Duffy Distilling Company	Rochester, NY and Baltimore, MD	Schulz et al. 1980:27	1
73	1882–1920	D.O.C. // 2 (stylized)	D. O. Cunningham Glass Company	Pittsburgh, PA	Toulouse 1971:163	1

a - MNI = minimum number of items.

Table 5-17
Privy 1009 Artifact Table 6c: Date and Origin of Marked/Datable Miscellaneous Items

Cat. No.	Date Range	Description	Maker	Origin	Reference	MNI ^a
0223		(Anchor Lying on side) F EXTRA-FINE LONDON			Not found	1
0227	1876	UNITED STATES...DOL... (encircling eagle) // ...1876... (encircling?)	Date on coin	U.S.A.	American Coin 2001	1

a - MNI = minimum number of items.

PIT 1022

Pit 1022 also is associated with hotel activities. A roughly rectangular refuse pit south of the laundry complex, it measures 4.0 by 3.0 feet and is 1.8 feet deep. Constructed and rapidly filled in one phase, the deposit is dominated by a large amount of butchered food bone—primarily beef bone (63%)—with small amounts of mutton, pork, chicken, and turkey. In addition, the nature of the beef bone is unusual. Fully adult cows and bulls are represented in the sample rather than the typical subadult steers. The large stewing/braising cuts of meat are in contrast to the other three hotel deposits. These meats are mostly moderately to low-priced.

Also noted are a variety of food preparation and consumption items that include four fragments of glass goblets, four whiteware platters, four whiteware dishes, and six whiteware plates. Of the seven basemarks represented in the collection, six were from Burgess and Goddard Company dating to circa 1870. These likely were the hotel tablewares procured in that time period. The final basemark dates to circa 1891 and provides the TPQ for the deposit. Whole and fragmentary artifacts representing eight alcohol bottles also were recovered. The pit yielded a low frequency of personal and household furnishing items; however, the recovery of metal container fragments and nails was high. No Chinese artifacts were recovered. Pit 1022, like Privies 1009, 1023, and 1025, appears to be associated with the employees of Starke's Hotel. It is suggested that this refuse deposit was made after the Chinese employees had left and during the transition from the Starkes to Bradford in 1897.

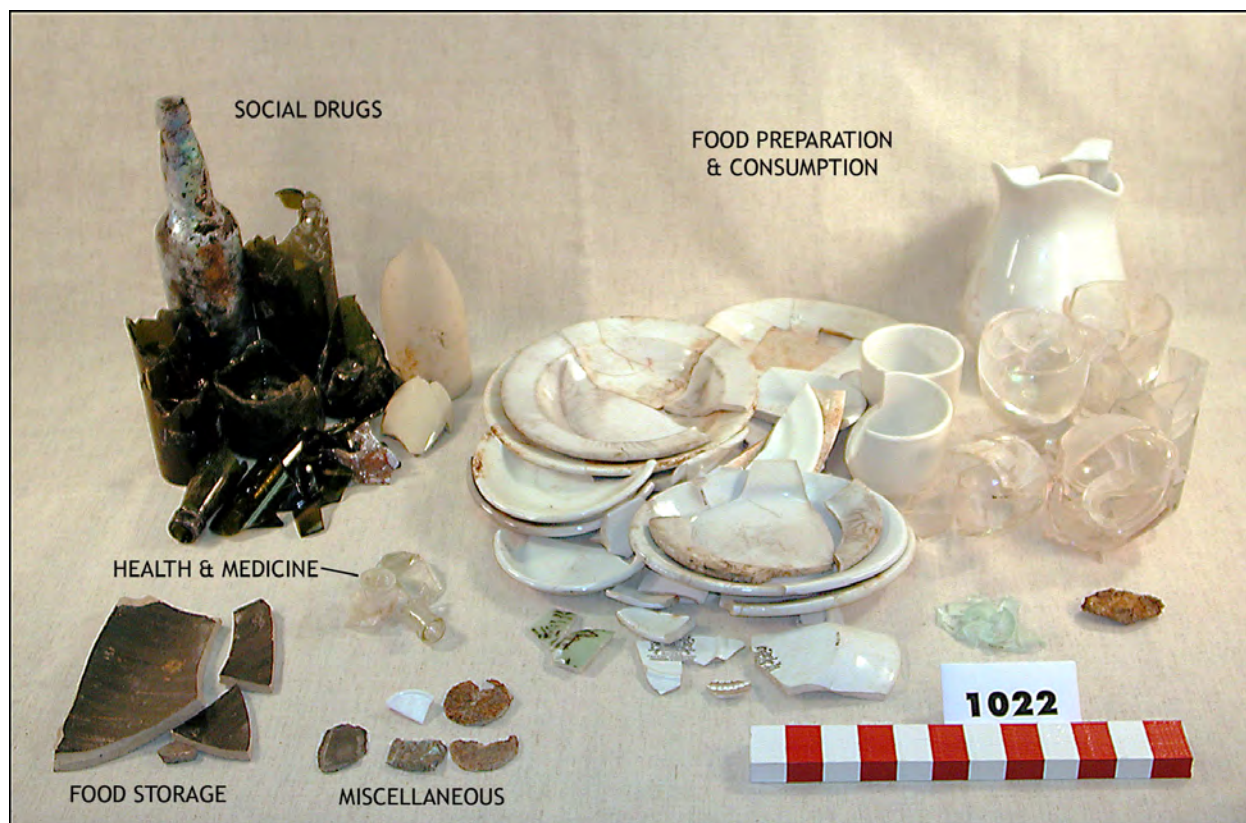


Figure 5-7 Pit 1022 artifact collection grouped by functional category (scale = 12 inches).

PIT 1022

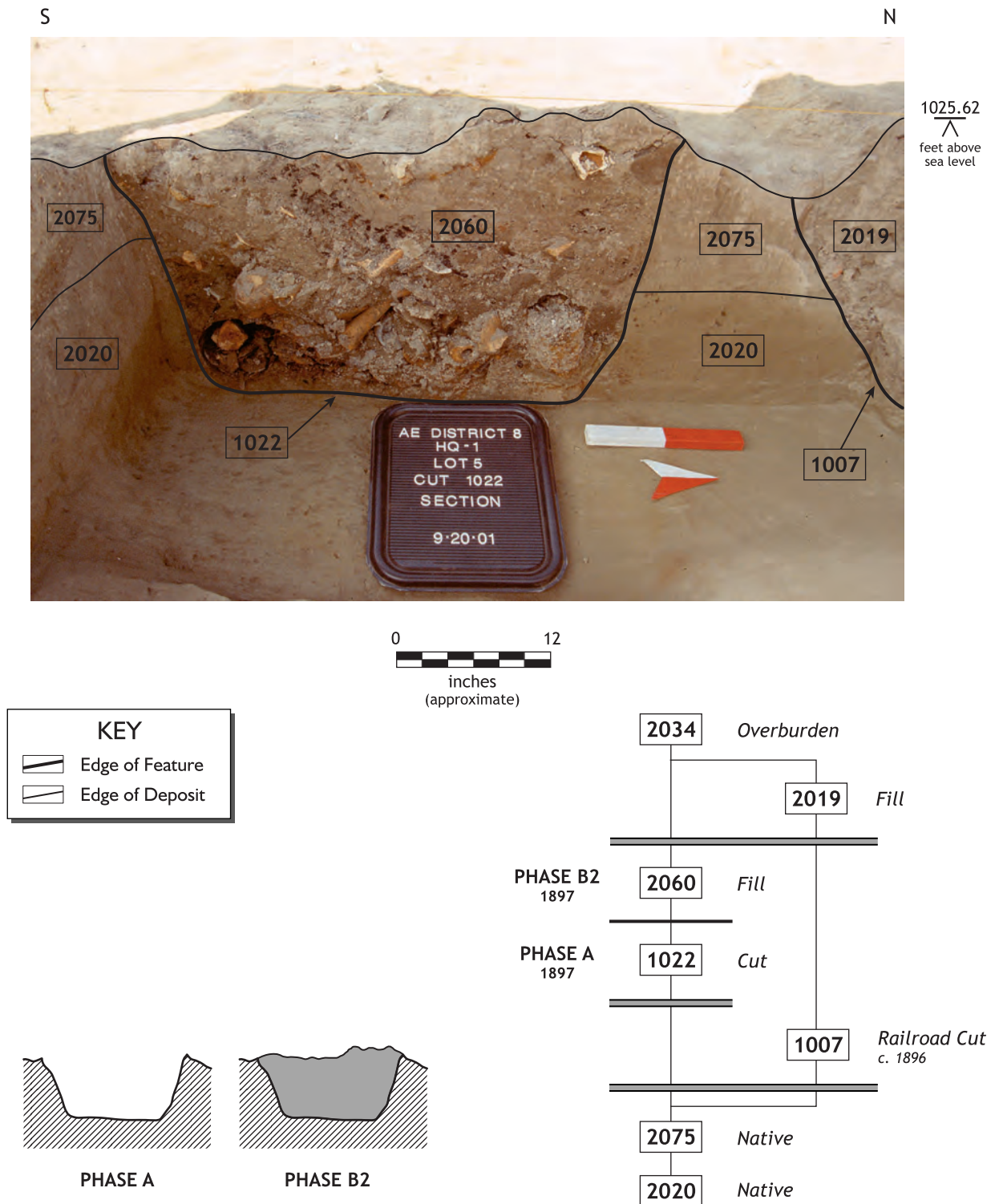


Figure 5-8 Pit 1022 section drawing and Harris matrix.

Table 5-18
Pit 1022 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Activities				
Communication	Writing	Slate	1	1
Domestic				
Food Packing/Storage	Container	Chinese brown glazed stoneware medium storage jar	1	1
	Container	Stoneware crock	3	1
<i>Food Packing/Storage Total</i>			4	2
Food Preparation/Consumption	Container	Light aqua glass soda bottle	14	2
	Drinking Vessel	Clear glass goblet	75	4
	Drinking Vessel	Clear glass tumbler	11	1
	Kitchen	Ferrous baking pan	10	1
	Serving	Porcelain pitcher	6	1
	Serving	White improved earthenware dish	3	1
	Serving	White improved earthenware platter	14	4
	Serving	White improved earthenware serving bowl	13	2
	Serving	White improved earthenware serving dish	12	4
	Tableware/Flatware	Ferrous spoon	1	1
	Tableware/Flatware	White improved earthenware bowl	3	2
	Tableware/Flatware	White improved earthenware plate	9	4
	Tableware/Flatware	White improved earthenware saucer	4	2
	Tableware/Serving	White improved earthenware dish	2	2
	Tableware/Serving	White improved earthenware hollow	4	1
<i>Food Preparation/Consumption Total</i>			181	32
Household/Furnishing		Ferrous bracket	1	1
		Ferrous hook	1	1
	Lamp	Ferrous lamp base	16	1
<i>Household/Furnishing Total</i>			18	3
Leisure and Recreation				
Social Drugs	Alcohol Container	Brown glass alcohol bottle	3	2
	Alcohol Container	Dark olive glass alcohol bottle	12	2
	Alcohol Container	Olive glass alcohol bottle	50	3
	Alcohol Container	Stoneware ale bottle	4	1
<i>Social Drugs Total</i>			69	8
Personal				
Clothing/Footwear		Metal buckle	1	1
Grooming	Toiletry	White improved earthenware chamber pot lid	2	1
Health/Medicine	Container	Clear glass medicinal bottle	4	1
Structural				
Building Material		Clay brick	3	1
		Light aqua glass flat	6	—
<i>Building Material Total</i>			9	1

Table 5-18 (continued)
Pit 1022 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Nails		Ferrous large nail	6	6
		Ferrous medium nail	165	155
		Ferrous small nail	1	1
<i>Nails Total</i>			<i>172</i>	<i>162</i>
Undetermined Use				
Miscellaneous Bottle, Jar, Can		Aqua glass bottle	1	1
		Clear glass bottle	30	3
		Ferrous can	4,970	—
		Ferrous/fabric can	11	1
<i>Miscellaneous Bottle, Jar, Can Total</i>			<i>5,012</i>	<i>5</i>
Miscellaneous Closure		Ferrous lid	3	2
		White glass lid	1	1
<i>Miscellaneous Closure Total</i>			<i>4</i>	<i>3</i>
Miscellaneous Metal Item		Ferrous preform	122	—
		Ferrous undefined	1	1
		Metal rod	1	1
		Metal wire	1	—
<i>Miscellaneous Metal Item Total</i>			<i>125</i>	<i>2</i>
Undifferentiated		Clear glass hollow	21	—
<i>Pit 1022 Total</i>			<i>5,623</i>	<i>222</i>

Table 5-19
Pit 1022 Artifact Table 2a-1: Animals Represented by NISP

Common Name	Scientific Name	Count
Major Meat Mammals		
Cow	<i>Bos taurus</i>	243
Sheep	<i>Ovis aries</i>	81
Pig	<i>Sus scrofa</i>	52
<i>Major Meat Mammals Total</i>		<i>376</i>
Birds		
Chicken	<i>Gallus gallus</i>	3
Turkey	<i>Meleagris gallopavo</i>	2
Wild duck, type unknown	Anatidae	1
<i>Birds Total</i>		<i>6</i>
California Fishes		
Surf perch	Embiotocidae	1
Bony fishes	Teleostei	1
<i>Fish Total</i>		<i>2</i>
<i>Pit 1022 Total</i>		<i>384</i>

Table 5-20
Pit 1022 Artifact Table 2a-2: Meat Weight by Economics

Meat Type	Price Group/Cut	Meat Weight (lb)	Percent within Type	Percent within Price Group	Percent of Total
Beef	High			21	
	Porterhouse	64.8	10.0		
	Sirloin	17.6	2.7		
	Prime rib	51.8	8.0		
	Moderate			26	
	Round	81.9	12.6		
	Rump	31.2	4.8		
	Chuck	39.0	6.0		
	Rib	15.6	2.4		
	Low			53	
	Hindshank	158.9	24.5		
	Brisket	3.5	0.5		
	Foreshank	77.7	12.0		
	Neck	106.8	16.5		
	<i>Beef Total</i>	<i>648.8</i>	<i>100.0</i>	100	85
Mutton	High			76	
	Loin	4.4	8.3		
	Leg	35.9	67.9		
	Moderate			7	
	Rib	0.5	0.9		
	Shoulder	3.2	6.0		
	Low			17	
	Hindshank	4.5	8.5		
	Foreshank	3.1	5.9		
	Neck	1.3	2.5		
	<i>Mutton Total</i>	<i>52.9</i>	<i>100.0</i>	100	7
Pork	High			15	
	Sirloin	0.7	1.1		
	Loin	3.9	6.3		
	Ham	4.6	7.6		
	Moderate			71	
	Rump	39.0	64.1		
	Shoulder butt	4.2	6.9		
	Low			14	
	Neck	0.5	0.8		
	Hindshank	8.1	13.2		
	<i>Pork Total</i>	<i>60.9</i>	<i>100.0</i>	100	8
<i>All Meat Types Total</i>		762.6			
High Price Group Total		24			
Moderate Price Group Total		28			
Low Price Group Total		48			

Table 5-21
Pit 1022 Artifact Table 3a: Selected Artifact Categories by Group

	Count	MNI	Percent of MNI
Activities	1	1	1.7
Domestic	203	37	62.7
Leisure and Recreation	69	8	13.6
Personal	7	3	5.1
Structural (omitted)	—	—	—
Undetermined Use (selective)	5,141	10	16.9
<i>Pit 1022 Total</i>	<i>5,421</i>	<i>59</i>	<i>100.0</i>

Table 5-22
Pit 1022 Artifact Table 3b: Summary of Selected Artifacts by Category

Category	MNI	Percent
Building Material (omitted)	—	—
Clothing/Footwear	1	1.7
Communication	1	1.7
Food Packing/Storage	2	3.4
Food Preparation/Consumption	32	54.2
Grooming	1	1.7
Health/Medicine	1	1.7
Household/Furnishing	3	5.1
Miscellaneous Bottle, Jar, Can	5	8.5
Miscellaneous Closure	3	5.1
Miscellaneous Metal Item	2	3.4
Nails (omitted)	—	—
Social Drugs	8	13.6
Undifferentiated (omitted)	—	—
<i>Pit 1022 Total^a</i>	<i>59</i>	<i>100.1</i>

a - Total percentage greater than 100 is due to rounding.

Table 5-23
Pit 1022 Artifact Table 4a: Food Preparation and Consumption Vessels by Function

Type	MNI	Percent
Container	2	6.3
Drinking Vessel (tumblers, stemware, etc.)	5	15.6
Kitchen (pot, baking pan, mixing bowl, etc.)	1	3.1
Serving (platter, covered dishes, etc.)	12	37.5
Tableware (plates, bowls, saucers, etc.)	8	25.0
Flatware (fork, knife, spoon, etc.)	1	3.1
Tableware/Serving	3	9.4
<i>Pit 1022 Total</i>	<i>32</i>	<i>100.0</i>

Table 5-24
Pit 1022 Artifact Table 4b:
Food Preparation and Consumption Vessels by Material

Material	MNI	Percent
Ceramic		
Porcelain	1	3.1
White Improved Earthenware	22	68.8
Glass	7	21.9
Metal		
Ferrous	2	6.3
<i>Pit 1022 Total^a</i>	<i>32</i>	<i>100.1</i>

a - Total percentage greater than 100 is due to rounding.

Table 5-25
Pit 1022 Artifact Table 4c: Decoration on Food Preparation and Consumption Vessels

Material	Object	Type of Decoration	MNI
Ceramic			
Porcelain	Pitcher	Decorative handle	1
White Improved Earthenware	Bowl	Undecorated	2
White Improved Earthenware	Dish	Undecorated	3
White Improved Earthenware	Hollow	Undecorated	1
White Improved Earthenware	Plate	Undecorated	4
White Improved Earthenware	Platter	Undecorated	4
White Improved Earthenware	Saucer	Undecorated	2
White Improved Earthenware	Serving bowl	Undecorated	2
White Improved Earthenware	Serving dish	Undecorated	3
Glass			
Clear Glass	Goblet	Undecorated	4
Clear Glass	Tumbler	Pressed	1
Light Aqua Glass	Soda bottle	Undecorated	2
Metal			
Ferrous	Baking pan	Undecorated	1
Ferrous	Spoon	Undecorated	1
<i>Pit 1022 Total</i>			<i>32</i>

Table 5-26
Pit 1022 Artifact Table 5: Social Drugs

Social Drug	MNI	Percent
Alcohol Container		
Alcohol Bottle	7	87.5
Ale Bottle	1	12.5
<i>Pit 1022 Total</i>	<i>8</i>	<i>100.0</i>

Table 5-27
Pit 1022 Artifact Table 6a: Date and Origin of Marked/Datable Ceramic Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI^a
2780		...YLOR / ...ES.			Not found	1
2784	ca. 1870	...(standing Royal Coat of Arms) / ROYAL / PATENT IRONSTONE / BURGESS & GODDARD	Burgess & Goddard	Staffordshire, England	Wetherbee 1980:27	1
2788	ca. 1870	(standing Royal Coat of Arms) / [ROYA]L / [PATENT IRON]STONE / [BURGESS & GOD]DARD	Burgess & Goddard	Staffordshire, England	Wetherbee 1980:27	1
2790	ca. 1870	(Royal Coat of Arms) / ROYAL / [PATEN]T IRONSTONE / [BURGE]SS & GODDARD	Burgess & Goddard	Staffordshire, England	Wetherbee 1980:27	1
2791	ca. 1870	(standing Royal Coat of Arms) / ROYAL / PATENT IRONSTONE / BURGESS & GODDARD	Burgess & Goddard	Staffordshire, England	Wetherbee 1980:27	1
2792	>1891	IRONSTONE CHINA / (standing Royal Coat of Arms) / ALFRED MEAKIN / ENGLAND	Alfred Meakin	Staffordshire, England	Godden 1964:425, Kovel and Kovel 1986:229	
2793	ca. 1870	(standing Royal Coat of Arms) / ROYAL / [PATE]NT IRONSTONE / [BU]RGESS & GODDARD	Burgess & Goddard	Staffordshire, England	Wetherbee 1980:27	1
2795		H...			Not found	1
2796		T. G. / CO.			Not found	1
2797	>1891	ROYAL IRONSTONE CHINA / (standing Royal Coat of Arms) / CHARLES MEAKIN / ENGLAND	Charles Meakin	Staffordshire, England	Godden 1964:426, Kovel and Kovel 1986:229	
2801	ca. 1870	(Royal Coat of Arms) / ROYAL / PATENT IRONSTONE / BURGESS & GODDARD	Burgess & Goddard	Staffordshire, England	Wetherbee 1980:27	1
2802	ca. 1846–1916	IRONSTONE CHINA / FEE... // COCHRA[N]... / (Royal Coat of Arms) / IMPERIAL / IRONSTONE CHINA	R. Cochran & Co.	Glasgow, Scotland	Birks 2003	1

a - MNI = minimum number of items.

PRIVY 1023

This rectangular, unlined privy measures 6.0 by 3.0 feet and is 1.8 feet deep. Likely a two-seater, it was constructed by 1885 as it appears in the Sanborn map of that year. The edges of the feature were stained green in an unexplained and identical manner to Privy 1009. The two soil strata identified during manual excavation (Layers 2068 and 2072) were consolidated into a single depositional phase following cross matching in the laboratory. The assemblage from Privy 1023, although thought to have been deposited slightly earlier, is similar to Privies 1009 and 1025.

As shown in the following tables, the collection contains a variety of material which includes 27 alcohol containers, 20 medicine bottles, and 91 items associated with clothing and footwear (Figure 5-9). Whitewares are generally utilitarian and include whole and fragmentary evidence of three bowls, three dishes, and a plate and saucer. Several personal items such as toothbrush fragments, a hair pin, a pocket knife, and fragments of an ivory fan also were recovered. The deposition also contained 24 lead bullets and 34 metal bullet casings. The TPQ for the deposit is



Figure 5-9 Privy 1023 artifact collection grouped by functional category (scale = 12 inches).

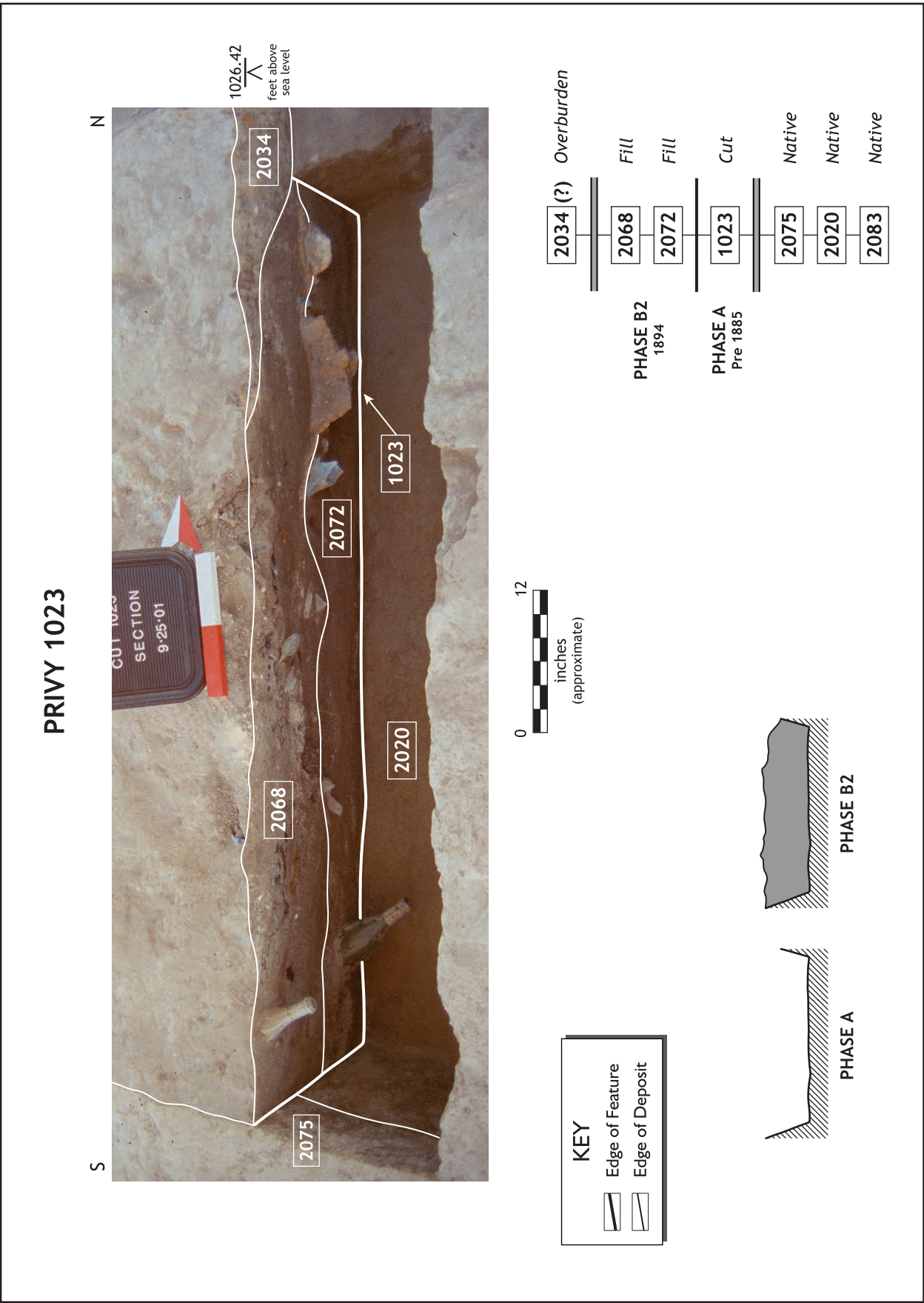


Figure 5-10 Privy 1023 section drawing and Harris matrix.

1880. No Chinese artifacts were present. Privy 1023 has little beef and pork, but high numbers of chicken, pigeon, and other bird bones. Almost 28 percent of the chicken bones are from subadult chickens. Moderately priced cuts of beef make up most of the meat represented. Privy 1023 appears to have been abandoned by 1894 and replaced by Privy 1009. Around this time, female hotel employees replaced Chinese workers.

Table 5-28
Privy 1023 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Activities				
Communication	Writing	Light aqua glass ink bottle	20	1
		Slate pencil	4	4
Communication Total			24	5
Farming/Gardening		Ferrous handle	5	1
		Ferrous shovel head	1	—
		Ferrous/wood handle	4	—
Farming/Gardening Total			10	1
Firearms	Ammunition	Lead bullet	24	24
	Ammunition	Metal cartridge	1	1
	Ammunition	Metal case	37	34
Firearms Total			62	59
Domestic				
Clothing Maintenance		Metal safety pin	2	1
		Metal straight pin	4	4
Clothing Maintenance Total			6	5
Food Preparation/Consumption	Container	Aqua glass bottle	19	2
	Container	Aqua glass mineral bottle	18	1
	Container	Aqua glass soda bottle	6	2
	Drinking Vessel	Clear glass goblet	28	2
	Drinking Vessel	Clear glass stemware	12	2
	Kitchen	White improved earthenware bowl	1	1
	Kitchen	White improved earthenware bowl	1	1
	Serving	Clear glass cruet	18	1
	Serving	White improved earthenware hollow	25	2
	Tableware/Flatware	Metal teaspoon	1	1
	Tableware/Flatware	White improved earthenware bowl	1	1
	Tableware/Flatware	White improved earthenware dish	3	3
	Tableware/Flatware	White improved earthenware plate	1	1
	Tableware/Flatware	White improved earthenware saucer	4	1
	Tableware/Serving	White improved earthenware hollow	6	3
Food Preparation/Consumption Total			143	23
Household/Furnishing		Aqua glass mirror	7	1
		White improved earthenware hollow	1	1
		Yellow ware hollow	2	1
		Lamp	Clear glass lamp chimney	44
Household/Furnishing Total			54	6
Leisure and Recreation				
Games	Gaming Piece	Clear glass marble	1	1
		Ceramic marble	2	2
Games Total			3	3

Table 5-28 (continued)
Privy 1023 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Social Drugs	Alcohol Container	Amber glass alcohol bottle	2	2
	Alcohol Container	Aqua glass alcohol bottle	1	1
	Alcohol Container	Brown glass alcohol bottle	42	3
	Alcohol Container	Dark olive glass alcohol bottle	99	1
	Alcohol Container	Light green glass alcohol bottle	78	3
	Alcohol Container	Olive glass alcohol bottle	261	11
	Alcohol Container	Stoneware ale bottle	41	5
	Alcohol Container	Very dark olive glass alcohol bottle	1	1
	Smoking Accessories	Ball clay pipe	2	2
Social Drugs Total			527	29
Personal				
Accouterments		Black celluloid hairpin	2	2
		Ferrous pocket knife	1	1
		Ivory fan	7	1
	Jewelry	Clear glass inlay	1	1
	Jewelry	Metal stud	1	1
Accouterments Total			12	6
Clothing/Footwear		Metal screw	3	3
	Fastener	Black glass button	1	1
	Fastener	Black porcelain button	1	1
	Fastener	Ferrous button	2	2
	Fastener	Ferrous fastener	2	1
	Fastener	Metal button	4	4
	Fastener	Metal clasp	5	4
	Fastener	Metal fastener	1	1
	Fastener	Metal grommet	14	14
	Fastener	Metal rivet	3	3
	Fastener	Porcelain button	32	32
	Fastener	Shell button	25	25
	Clothing/Footwear Total			93
Grooming	Toiletry	Bone toothbrush	2	1
	Toiletry	Bone toothbrush head	1	1
	Toiletry	Clear glass bottle	2	2
	Toiletry	White improved earthenware box	1	1
Grooming Total			6	5
Health/Medicine		Black celluloid finish	1	1
		Stoneware jug	1	1
	Container	Aqua glass bottle	11	1
	Container	Aqua glass medicinal bottle	23	2
	Container	Clear glass medicinal bottle	30	11
	Container	Cobalt glass medicinal bottle	13	2
	Container	Stoneware medicinal bottle	4	2
Health/Medicine Total			83	20
Toys		Porcelain doll head	1	1
Structural				
Building Material		Aqua glass flat	59	—
		Clay brick	29	2
		Clear glass flat	15	—
		Concrete brick	1	1
		Light aqua glass flat	19	—
Building Material Total			123	3

Table 5-28 (continued)
Privy 1023 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Nails		Ferrous nail	94	47
Tools/Hardware		Ferrous bolt	1	1
		Ferrous hardware	4	5
		Ferrous hinge	1	1
		Ferrous hook	1	1
		Ferrous spike	1	1
		Ferrous undefined	1	—
<i>Tools/Hardware Total</i>			9	9
Undetermined Use				
Miscellaneous Bottle, Jar, Can		Aqua glass bottle	4	2
		Blue glass bottle	75	1
		Clear glass bottle	4	3
		Light aqua glass bottle	41	5
		Light blue glass bottle	3	1
		Light green glass bottle	1	1
		Metal can	3	2
<i>Miscellaneous Bottle, Jar, Can Total</i>			131	15
Miscellaneous Closure		Clear glass lid	4	2
Miscellaneous Metal Item		Brass alloy tack	1	1
		Ferrous bar	3	2
		Ferrous blade	1	1
		Ferrous fastener	1	1
		Ferrous handle	7	1
		Ferrous ring	2	1
		Ferrous rod	3	3
		Ferrous tack	10	10
		Lead undefined	5	—
		Metal disk	1	1
		Metal staple	2	2
		Metal tube	2	2
		Metal undefined	1	1
		Metal wire	1	1
		Metal/wood undefined	1	1
<i>Miscellaneous Metal Item Total</i>			41	28
Undifferentiated		Aqua glass bottle	30	1
		Clear glass handle	1	1
		Clear glass undefined	207	1
		Light aqua glass undefined	96	—
		Light green glass hollow	14	1
		Porcelain hollow	1	1
		Undefined	1	1
<i>Undifferentiated Total</i>			350	6
Privy 1023 Total			1,776	364

Table 5-29
Privy 1023 Artifact Table 2a-1: Animals Represented by NISP

Common Name	Scientific Name	Count
Mammals		
Major Meat Mammals		
Cow	<i>Bos taurus</i>	24
Pig	<i>Sus scrofa</i>	19
Incidental Mammals		
Cat	<i>Felis catus</i>	4
Pocket gopher	<i>Thomomys</i> sp.	1
<i>Mammals Total</i>		<u>48</u>
Birds		
Domestic Poultry		
Chicken	<i>Gallus gallus</i>	136
Turkey	<i>Meleagris gallopavo</i>	4
Pigeon	<i>Columba livia</i>	18
Duck	<i>Anas platyrhyncha</i>	5
Goose	<i>Anser anser</i>	1
Wild Game Birds		
Duck, type unknown	Anatidae	1
Quail	<i>Callipepla</i> sp.	6
<i>Birds Total</i>		<u>171</u>
Amphibians		
Red-spotted toad	<i>Bufo punctatus</i>	28
<i>Privy 1023 Total</i>		<u>247</u>

Table 5-30
Privy 1023 Artifact Table 2a-2: Meat Weight by Economics

Meat Type	Price Group/Cut	Meat Weight (lb)	Percent within Type	Percent within Price Group	Percent of Total
Beef	High			41	
	Porterhouse	16.9	17.7		
	Sirloin	8.6	9.0		
	Prime rib	13.3	13.9		
	Moderate			47	
	Round	12.6	13.2		
	Rump	10.6	11.0		
	Chuck	14.0	14.6		
	Rib	8.1	8.5		
	Low			12	
	Hindshank	4.1	4.3		
	Brisket	4.8	5.0		
	Neck	2.8	2.9		
	<i>Beef Total</i>	<u>95.8</u>	<u>100.0</u>	100	60

Table 5-30 (continued)
Privy 1023 Artifact Table 2a-2: Meat Weight by Economics

Meat Type	Price Group/Cut	Meat Weight (lb)	Percent within Type	Percent within Price Group	Percent of Total
Pork	High			28	
	Sirloin	6.9	10.8		
	Loin	7.6	11.9		
	Ham	3.2	5.1		
	Moderate			45	
	Rump	3.4	5.3		
	Shoulder butt	6.4	10.1		
	Picnic	19.1	30.0		
	Low			27	
	Belly		0.0		
	Neck	0.8	1.2		
	Hindshank	8.3	13.1		
	Foreshank	4.1	6.4		
	Feet	4.0	6.2		
	<i>Pork Total</i>	<i>63.7</i>	<i>100.0</i>	100	40
<i>All Meat Types Total</i>		<i>159.5</i>			
High Price Group Total		35%			
Moderate Price Group Total		46%			
Low Price Group Total		18%			

Table 5-31
Privy 1023 Artifact Table 3a: Selected Artifact Categories by Group

	Count	MNI	Percent of MNI
Activities	96	65	21.1
Domestic	293	34	11.0
Leisure and Recreation	530	32	10.4
Personal	195	123	39.9
Structural (selective)	9	9	2.9
Undetermined Use (selective)	176	45	14.6
<i>Privy 1023 Total^a</i>	<i>1,209</i>	<i>308</i>	<i>99.9</i>

a - Total percentage less than 100 is due to rounding.

Table 5-32

Privy 1023 Artifact Table 3b: Summary of Selected Artifacts by Category

Category	MNI	Percent
Accouterments	6	1.9
Building Material (omitted)	—	—
Clothing Maintenance	5	1.6
Clothing/Footwear	91	29.5
Communication	5	1.6
Farming/Gardening	1	0.3
Firearms	59	19.2
Food Preparation/Consumption	23	7.5
Games	3	1.0
Grooming	5	1.6
Health/Medicine	20	6.5
Household/Furnishing	6	1.9
Miscellaneous Bottle, Jar, Can	15	4.9
Miscellaneous Closure	2	0.6
Miscellaneous Metal Item	28	9.1
Nails (omitted)	—	—
Social Drugs	29	9.4
Tools/Hardware	9	2.9
Toys	1	0.3
Undifferentiated (omitted)	—	—
Privy 1023 Total^a	308	99.8

a - Total percentage less than 100 is due to rounding.

Table 5-33

Privy 1023 Artifact Table 4a: Food Preparation and Consumption Vessels by Function

Type	MNI	Percent
Container	5	21.7
Drinking Vessel (tumblers, stemware, etc.)	4	17.4
Kitchen (pot, baking pan, mixing bowl, etc.)	1	4.4
Serving (platter, covered dishes, etc.)	3	13.0
Tableware (plates, bowls, saucers, etc.)	6	26.1
Flatware (fork, knife, spoon, etc.)	1	4.4
Tableware/Serving	3	13.0
Privy 1023 Total	23	100.0

Table 5-34

Privy 1023 Artifact Table 4b: Food Preparation and Consumption Vessels by Material

Material	MNI	Percent
Ceramic		
White Improved Earthenware	12	52.2
Glass	10	43.5
Metal	1	4.3
Privy 1023 Total	23	100.0

Table 5-35

Privy 1023 Artifact Table 4c: Decoration on Food Preparation and Consumption Vessels

Material	Object	Type of Decoration	MNI
Ceramic			
White Improved Earthenware	Bowl	Undecorated	2
White Improved Earthenware	Dish	Blue transfer	1
White Improved Earthenware	Dish	Undecorated	2
White Improved Earthenware	Hollow	Brown transfer	1
White Improved Earthenware	Hollow	Hand painted	1
White Improved Earthenware	Hollow	Undecorated	3
White Improved Earthenware	Plate	Molded	1
White Improved Earthenware	Saucer	Undecorated	1
Glass			
Aqua Glass	Bottle	Undecorated	2
Aqua Glass	Mineral Bottle	Undecorated	1
Aqua Glass	Soda Bottle	Undecorated	2
Clear Glass	Cruet	Press mold	1
Clear Glass	Goblet	Press mold	2
Clear Glass	Stemware	Undecorated	1
Clear Glass	Stemware	3 etched rim bands	1
Metal	Teaspoon	Undecorated	1
Privy 1023 Total			23

Table 5-36

Privy 1023 Artifact Table 5: Social Drugs

Social Drug	MNI	Percent
Alcohol Container		
Alcohol Bottle	22	75.9
Ale Bottle	5	17.2
<i>Alcohol Container Total</i>	27	93.1
Smoking Accessories		
Pipe	2	6.9
Privy 1023 Total	29	100.0

Table 5-37

Privy 1023 Artifact Table 6a: Date and Origin of Marked/Datable Ceramic Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI ^a
322	>1891	J. M. & SON (crown & circle w/knot)	John Meir & Son	Staffordshire, England	Cushion 1959:249; Kovel and Kovel 1986:229	1
323	>1891	THOMAS FURNIVAL & SONS (in banner) / (seated Royal Coat of Arms) / TRADE (anchor) MARK / ENGLAND (in banner)	Thomas Furnival & Sons	Staffordshire, England	Godden 1964:263–264; Kovel and Kovel 1986:229	1
326	1869–1923	GROSVENOR / 4 / GLASGOW	F. Grosvenor & Sons	Glasgow, Scotland	Wilson 1981:30	2
328	1827–1918	lion in circle (impressed)		Germany	Schulz et al. 1980:115	1
410		AT. / 8			Not found	1

a - MNI = minimum number of items.

Table 5-38
Privy 1023 Artifact Table 6b: Date and Origin of Marked/Datable Glass Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI^a
263		...SE...R'S...CE...AM... /			Not found	1
264		...IB. ...			Not found	1
271		DR HENRY'S BOTAN[IC] / PREPARATIONS	Unknown		Fike 1987:166	1
275	1857–1935	W.T. & CO.	Whitall-Tatum & Co.	Millville, NJ	Toulouse 1971:544	1
394	Est. 1859 ca. 1870	PHALON & SON / PERFUMER / NEW YORK	Phalon & Son	New York	Fike 1987:176	1
296	1856–	ESS. BOUQUET / LUBIN // HP	Lubin	Paris, France	Costello et al. 1998:209	1
300	1852 (adv.)	E.G. LYONS & CO. / ESS / JAMAICA GINGER / S.F.	E. G. Lyons	San Francisco	Fike 1987:129	1
308		H. BOWMAN / DRUGGIST / 913 (in beaker) / BROADWAY (in beaker) / OAKLAND // B	Unknown		Toulouse 1971:57	1
390	ca. 1880	LGCO	Louisville Glass Works (Co.)	Louisville, KY	Toulouse 1971:323	1
395	ca. 1870– 1923	DYOTTVILLE GLASS WORKS / PHILADA	Dyottville Glass Works	Philadelphia, PA	Toulouse 1971:171	1
396	ca. 1870– 1879	(star on shoulder) // C & I	Cunningham & Ihmsen	Pittsburgh, PA	Toulouse 1971:132	1
400	1854– 1940s	AYER	J. C. Ayer & Co.	Lowell, MA	Larry's Antiques and Bottles n.d.	—

a - MNI = minimum number of items.

Table 5-39
Privy 1023 Artifact Table 6c: Date and Origin of Marked/Datable Miscellaneous Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI^a
0414	1861– 1910	T D	T. Davidson & Co.	Glasgow, Scotland	Bradley 2000:117	1
0415	1861– 1910	T D	T. Davidson & Co.	Glasgow, Scotland	Bradley 2000:117	1
0425		G.B. Kent & Co. (floral motif) LONDON			Not found	1

a - MNI = minimum number of items.

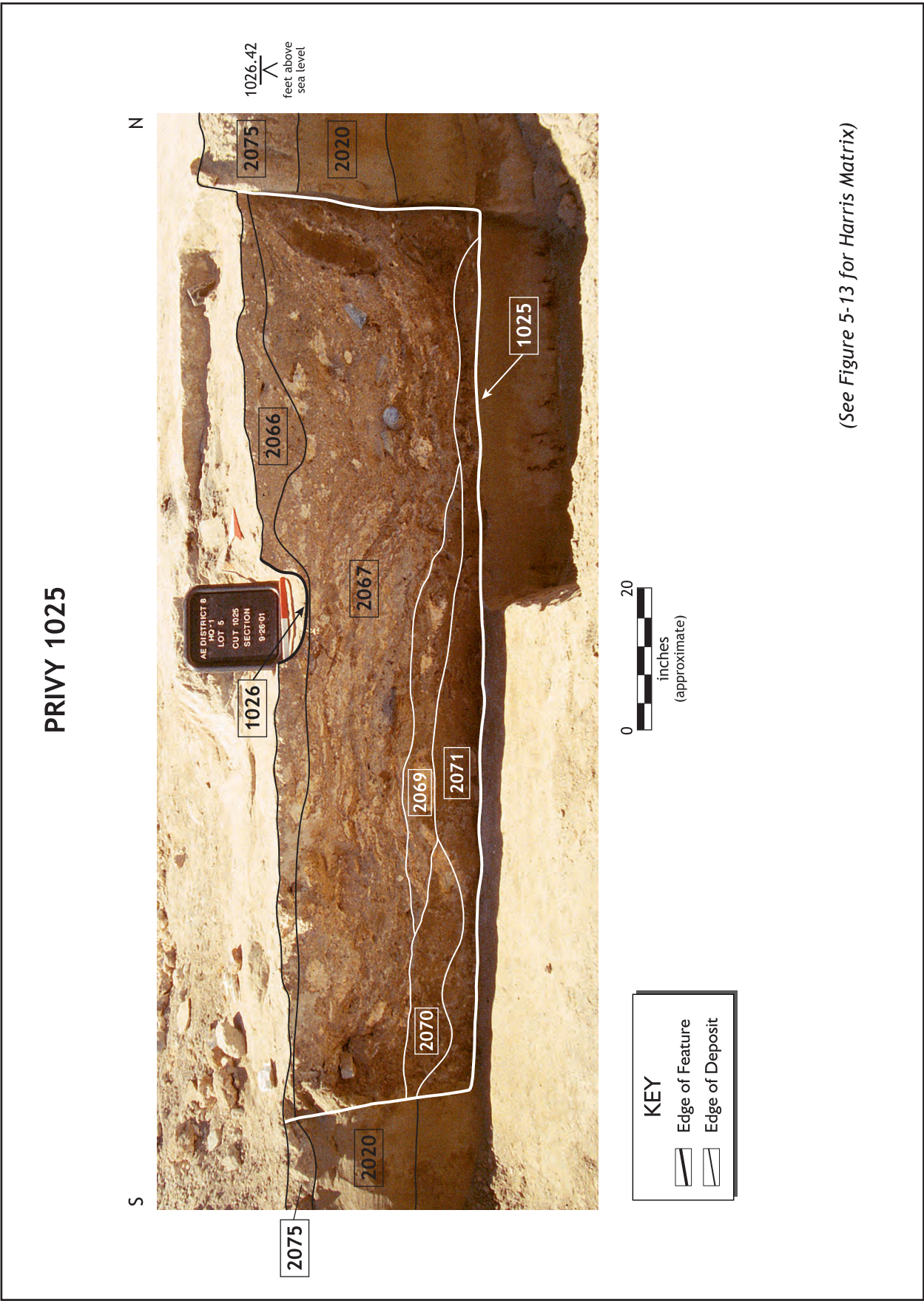
PRIVY 1025

The 1888 Sanborn map depicts a W.C. (water closet) in the laundry building south of Starke's Hotel (see Figure 2-11). Water closets were generally an improvement on the privy and utilized a basic flush mechanism. The slow accumulation of material within a vault suggests that this feature actually was a privy and was perhaps misidentified by the Sanborn assessor as a water closet. Privy 1025 was a rectangular unlined privy measuring 10.0 by 3.0 feet and 3.8 feet deep, and cut on an east-west axis by a modern utility trench (Figure 5-12). Earlier deposits associated with the initial period of use (by 1888) may have been subject to routine clean-out.

The fill at abandonment appears to have accumulated slowly between 1894 and 1897 (Phase B1) (Figure 5-13). As the following tables show, many of the items recovered are related to medicine. Included in the health and medicine category (MNI = 65) are five whole bottles of "Injection Brou" and six whole pharmaceutical bottles from San Bernardino druggists. Social drugs are represented by 36 whole and fragmentary alcohol bottles and 4 whole snuff bottles. A total of 165 clothing items were recovered and included 106 porcelain buttons and 24 shell buttons. Fragments representing three glass goblets and two tumblers are in the food preparation and consumption group. Whitewares are undecorated utilitarian pieces and include whole and fragmentary evidence of eight plates, two saucers, and two bowls. Other items recovered



Figure 5-11 Privy 1025 artifact collection by functional category (scale = 12 inches).



PRIVY 1025

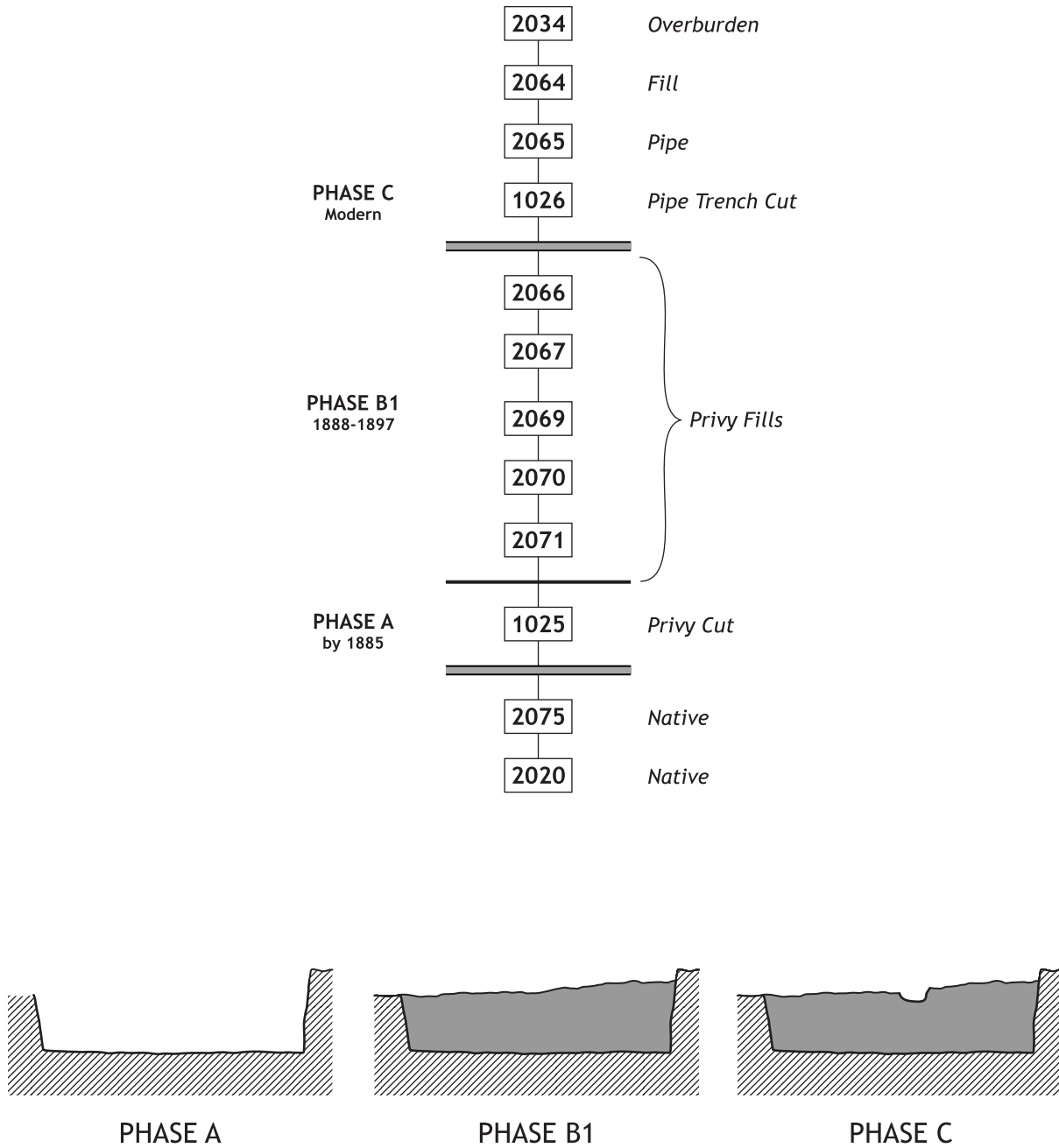


Figure 5-13 Privy 1025 Harris matrix.

were three pocket knives, two whole perfume bottles, and four bone toothbrushes. Privy 1025 had distinctive 1/2-inch-thick porterhouse steaks, lamb and pork chops, veal, and quail. Most of the meats were from high-priced cuts.

Lime was found throughout the fill, suggesting odor control of the active privy. The discarded, perhaps deliberately hidden, medicine and alcohol bottles found in between layers of lime and organic material suggest disposal into an active privy. Only one fragment of a Chinese jar was recovered. Privy 1025, like Privies 1009 and 1023, was utilized after the Chinese workers left the hotel around 1894. The TPQ of 1895 supports the conclusion that the privy remained in use until Starke's Hotel became Bradford House in 1897.

Four soil samples were sent to specialists for pollen and macrofloral analysis. The botanical data produced unique signatures that separated the Euro-American hotel Privy 1025 from the Chinese privies. Diets at the Euro-American hotel included a large quantity of fruit, especially blackberries. Figs, grapes, and tomatoes are well represented; plants in the legume family, such as peas and beans, also may have been common fare. These samples contain almost exclusively fruit seeds, with a few weed seeds, chili pepper, some carbonized rind/seedcoat, and very little charcoal. Blackberry seeds constitute 97 percent of the total seeds. The paucity of other plant parts and wood charcoal from the privy flotation samples suggests that Privy 1025 was largely composed of feces and was not a site of general refuse disposal. The weedy seeds and plant parts may represent wind-blown contamination. Most of the wood is pine and conifer (fragments too small to allow positive identification as pine). The greatest variety of pollen types in the project came from this privy, with particularly high values of Hi-Spine Asteraceae, grasses, cereal grasses, and corn. Corn was documented only in the hotel privy and only in the pollen results. Although corn was probably grown locally and eaten at the hotel, the pollen occurrence was interpreted to reflect animal feed used at the hotel's adjacent barns and stables. The highest values of the possible poppy type in the project area were from two of the adjacent Privy 1025 samples; the source of these is not known.

Two samples of primary deposits from Privy 1025 also were examined for parasites; none were identified.

Table 5-40
Privy 1025 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Activities				
Commerce		Silver coin	3	3
Communication		Newspaper	1	0
	Writing	Ferrous pen nib	1	1
	Writing	Graphite pencil lead	3	2
	Writing	Slate pencil	2	2
<i>Communication Total</i>			<u>7</u>	<u>5</u>
Firearms	Ammunition	Metal case	3	2
	Ammunition	Metal shell	1	1
<i>Firearms Total</i>			<u>4</u>	<u>3</u>
Domestic				
Clothing Maintenance		Ferrous safety pin	1	1
Food Packing/Storage	Container	Chinese brown glazed stoneware hollow	1	1
	Container	White improved earthenware crock	1	1
<i>Food Packing/Storage Total</i>			<u>2</u>	<u>2</u>

Table 5-40 (continued)
Privy 1025 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Food Preparation/Consumption	Container	Aqua glass soda bottle	1	1
	Container	Clear glass condiment jar	1	1
	Container	Light aqua glass bottle	8	1
	Container	Light green glass soda bottle	1	1
	Drinking Vessel	Clear glass goblet	15	3
	Drinking Vessel	Clear glass stemware	8	1
	Drinking Vessel	Clear glass tumbler	7	2
	Kitchen	Ferrous corkscrew	2	1
	Kitchen	White improved earthenware bowl	1	1
	Serving	Clear glass compote	26	1
	Serving	Porcelain pitcher	22	1
	Serving	White improved earthenware serving dish	7	3
	Tableware/Flatware	Bone/metal knife handle	2	2
	Tableware/Flatware	Ferrous knife	2	1
	Tableware/Flatware	Silver plate spoon	1	1
	Tableware/Flatware	White improved earthenware bowl	8	2
	Tableware/Flatware	White improved earthenware mug	1	1
	Tableware/Flatware	White improved earthenware plate	10	8
	Tableware/Flatware	White improved earthenware saucer	5	2
	Tableware/Serving	Porcelain hollow	1	1
	Tableware/Serving	Semi-porcelain hollow	1	1
	Tableware/Serving	White improved earthenware hollow	21	4
<i>Food Preparation/Consumption Total</i>			<i>151</i>	<i>40</i>
Household/Furnishing		Ferrous stove shovel	2	1
	Lamp	Clear glass lamp chimney	39	2
<i>Household/Furnishing Total</i>			<i>41</i>	<i>3</i>
Household/Maintenance		Clear glass light bulb	4	1
Undifferentiated		Bone implement	1	1
Leisure and Recreation				
Collecting		Quartz crystal	1	1
Games	Gaming Piece	Multicolor glass marble	2	2
	Gaming Piece	Porcelain china marble	6	6
	Gaming Piece	Stone marble	1	1
<i>Games Total</i>			<i>10</i>	<i>10</i>
Social Drugs	Alcohol Container	Amber glass alcohol bottle	56	9
	Alcohol Container	Brown glass alcohol bottle	14	14
	Alcohol Container	Clear glass alcohol bottle	2	2
	Alcohol Container	Dark green glass alcohol bottle	3	2
	Alcohol Container	Dark olive glass alcohol bottle	1	1
	Alcohol Container	Green glass alcohol bottle	4	1
	Alcohol Container	Olive glass alcohol bottle	21	5
	Alcohol Container	Olive/brown glass alcohol bottle	1	1
	Alcohol Container	Stoneware ale bottle	1	1
	Smoking Accessories	Ball clay pipe	7	4
	Smoking Accessories	Ball clay pipe stem	3	2
	Smoking Accessories	Brown glass snuff bottle	4	4
	Smoking Accessories	Metal cigar case	2	1
<i>Social Drugs Total</i>			<i>119</i>	<i>47</i>
Undifferentiated		Metal/wood harmonica	4	1

Table 5-40 (continued)
Privy 1025 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Personal				
Accouterments		Bone pocketknife	1	1
		Ferrous pocketknife	1	1
		Ferrous/shell pocketknife	1	1
		Ferrous/wood pocketknife	1	1
		Metal/gold locket	3	1
	Jewelry	Bone cuff link	4	4
	Jewelry	Onyx bracelet	1	1
	Jewelry	Shell cuff link	2	1
<i>Accouterments Total</i>			<i>14</i>	<i>11</i>
Clothing/Footwear		Leather/metal shoe	32	1
	Fastener	Bone button	8	8
	Fastener	Ferrous buckle	4	4
	Fastener	Ferrous button	2	2
	Fastener	Ferrous fastener	3	2
	Fastener	Hard rubber button	4	4
	Fastener	Metal buckle	2	2
	Fastener	Metal button	1	1
	Fastener	Metal clip	1	1
	Fastener	Metal eyelet	1	1
	Fastener	Metal fastener	10	8
	Fastener	Metal/fabric button	1	1
	Fastener	Porcelain button	106	106
	Fastener	Shell button	25	24
<i>Clothing/Footwear Total</i>			<i>200</i>	<i>165</i>
Grooming	Toiletry	Aqua glass extract bottle	1	1
	Toiletry	Bone toothbrush	4	3
	Toiletry	Clear glass bottle	1	1
	Toiletry	Clear glass perfume bottle	2	2
	Toiletry	Ferrous blade	1	1
	Toiletry	Hard rubber comb	1	1
	Toiletry	White improved earthenware basin	14	1
	Toiletry	White improved earthenware chamber pot	35	1
	Toiletry	White improved earthenware round box	2	1
<i>Grooming Total</i>			<i>60</i>	<i>12</i>
Health/Medicine		Clear glass eyeglass lens	2	2
		Hard rubber syringe	3	2
	Container	Aqua glass extract bottle	17	2
	Container	Aqua glass medicinal bottle	9	9
	Container	Brown glass medicinal bottle	1	1
	Container	Clear glass medicinal bottle	115	49
	Container	Clear glass vial	6	1
	Container	Light aqua glass bottle	1	1
	Container	Light aqua glass medicinal bottle	4	2
	Container	Light green glass medicinal bottle	1	1
<i>Health/Medicine Total</i>			<i>159</i>	<i>70</i>
Toys		Porcelain doll foot	1	1
		Porcelain doll part	1	1
<i>Toys Total</i>			<i>2</i>	<i>2</i>

Table 5-40 (continued)
Privy 1025 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Undifferentiated		Bone (?) decorative	1	1
		Clear glass decorative box	1	1
<i>Undifferentiated Total</i>			2	2
Structural				
Building Material		Aqua glass flat	3	—
		Clay brick	6	3
		Clear glass flat	7	—
		Light aqua glass flat	5	—
<i>Building Material Total</i>			21	3
Nails		Ferrous large nail	37	37
		Ferrous medium nail	131	131
		Ferrous small nail	20	20
		Ferrous tack	2	1
<i>Nails Total</i>			190	189
Tools/Hardware		Ferrous hook	2	1
		Ferrous spike	2	2
		Ferrous washer	1	1
		Metal key	3	3
<i>Tools/Hardware Total</i>			8	7
Undetermined Use				
Miscellaneous Bead		Clear glass bead	1	1
		White glass bead	1	1
<i>Miscellaneous Bead Total</i>			2	2
Miscellaneous Bottle, Jar, Can		Aqua glass bottle	5	1
		Brown glass bottle	13	1
		Clear glass bottle	10	2
		Light aqua glass bottle	13	2
		Light green glass bottle	16	1
<i>Miscellaneous Bottle, Jar, Can Total</i>			57	7
Miscellaneous Closure		Ceramic stopper	1	1
		Clear glass lid	1	1
		Clear glass stopper	1	1
		Cork stopper	1	1
		Cork/metal stopper	1	1
		Ferrous cap	5	2
<i>Miscellaneous Closure Total</i>			10	7
Miscellaneous Metal Item		Brass alloy undefined	12	—
		Ferrous handle	1	1
		Ferrous rod	1	1
		Ferrous undefined	1	1
		Metal fastener	1	1
<i>Miscellaneous Metal Item Total</i>			16	4
Undifferentiated		Bone band	2	2
		Composition undefined	1	—
		Lead ball	1	1
		Lime/newspaper	32	—
		Light green glass hollow	1	1
		Wood	1	1
<i>Undifferentiated Total</i>			38	5
Privy 1025 Total			1,127	603

Table 5-41 Privy 1025 Artifact Table 2a-1: Animals Represented by NISP		
Common Name	Scientific Name	Count
Mammals		
Major Meat Mammals		
Cow	<i>Bos taurus</i>	253
Sheep	<i>Ovis aries</i>	108
Pig	<i>Sus scrofa</i>	55
Incidental Mammals		
Cat	<i>Felis catus</i>	29
Rat	<i>Rattus rattus</i>	54
Pocket gopher	<i>Thomomys</i> sp.	16
<i>Mammals Total</i>		<u>515</u>
Birds		
Domestic Poultry		
Chicken	<i>Gallus gallus</i>	468
Turkey	<i>Meleagris gallopavo</i>	1
Duck	<i>Anas platyrhyncha</i>	10
Wild Game Birds		
Duck, type unknown	Anatidae	15
Quail	<i>Callipepla</i> sp.	17
<i>Birds Total</i>		<u>511</u>
<i>Privy 1025 Total</i>		<u>1,026</u>

Table 5-42 Privy 1025 Artifact Table 2a-2: Meat Weight by Economics					
Meat Type	Price Group/Cut	Meat Weight (lb)	Percent within Type	Percent within Price Group	Percent of Total
Beef	High			77	
	Porterhouse	168.3	65.2		
	Sirloin	12.8	5.0		
	Prime rib	18.0	7.0		
	Moderate			16	
	Round	2.6	1.0		
	Rump	9.6	3.7		
	Chuck	4.4	1.7		
	Rib	24.2	9.4		
	Low			7	
	Hindshank	9.1	3.5		
	Brisket	4.7	1.8		
	Foreshank	4.3	1.7		
	<i>Beef Total</i>	<u>258.0</u>	<u>100.0</u>	100	83
Mutton	High			67	
	Loin	10.6	36.1		
	Sirloin	1.0	3.4		
	Leg	8.2	27.9		
	Moderate			26	
	Rib	5.6	19.0		
	Shoulder	2.1	7.1		

Table 5-42 (continued)
Privy 1025 Artifact Table 2a-2: Meat Weight by Economics

Meat Type	Price Group/Cut	Meat Weight (lb)	Percent within Type	Percent within Price Group	Percent of Total
Mutton (continued)					
	Low			6	
	Hindshank	0.5	1.7		
	Brisket	0.8	2.7		
	Foreshank	0.2	0.7		
	Neck	0.4	1.4		
	<i>Mutton Total</i>	<i>29.4</i>	<i>100.0</i>	100	9
Pork	High			67	
	Sirloin	4.4	18.3		
	Loin	7.4	30.5		
	Ham	4.4	18.3		
	Moderate			23	
	Rump	2.5	10.4		
	Picnic	3.0	12.5		
	Low			10	
	Neck	0.1	0.5		
	Hindshank	2.3	9.6		
	<i>Pork Total</i>	<i>24.1</i>	<i>100.0</i>	100	8
All Meat Types Total		311.5			
High Price Group Total		75%			
Moderate Price Group Total		17%			
Low Price Group Total		7%			

Table 5-43
Privy 1025 Artifact Table 2c-1a: Plant Material from Soil Samples

Material Type	Common Name	Absolute Counts and Weights				Material Density (count/liter)			
		EB Number	3182	3183	3184	3185	3182	3183	3184
		Layer	2067	2067	2067	2067	2067	2067	2067
<i>Amaranthus</i> sp.	Pigweed, amaranth		—	1	—	—	—	1	—
<i>Capsicum</i> sp.	Chile pepper		—	—	2	—	—	—	2
<i>Chenopodium</i> sp.	Goosefoot		—	2	—	—	—	2	—
<i>Ficus carica</i>	Fig		29	201	185	1	145	223	206
<i>Lycopersicon lycopersicum</i>	Tomato		37	32	4	13	185	36	4
<i>Portulaca oleracea</i>	Common purslane		—	1	—	—	—	1	—
<i>Rubus</i> sp.	Blackberry		349	714	71,300	1,004	1,745	793	79,222
<i>Sambucus</i> sp.	Elderberry		—	—	40	—	—	—	44
<i>Vitis vinifera</i>	Grape		22	16	655	32	110	18	728
Unknown Type 4			—	—	1	2	—	—	1
Unidentifiable Seeds			10	—	1	4	50	—	1
<i>Seed Total</i> ^a			<i>447</i>	<i>967</i>	<i>72,188</i>	<i>1,056</i>	<i>2,235</i>	<i>1,074</i>	<i>80,209</i>
Plant Parts									
Wood ^b			0.02	0.01	0.05	0.01	0.100	0.012	0.052
Rind cf.			—	—	11	1	—	—	12.222
Unidentifiable Plant Parts			—	—	—	2	—	—	—

a - Seed total includes unknown types and unidentifiable seeds and fragments.

b - Weight (grams/liter).

Table 5-44
Privy 1025 Artifact Table 2c-1b: Charcoal from Soil Samples

Material Type	Absolute Counts and Weights							
	3182		3183		3184		3185	
	Ct.	Wt.	Ct.	Wt.	Ct.	Wt.	Ct.	Wt.
EB Number	2067		2067		2067		2067	
Layer								
Conifer	0	0.00	1	<0.01	1	<0.01	0	0.00
Diffuse	0	0.00	0	0.00	0	0.00	1	0.01
<i>Pinus</i> sp.	1	0.02	0	0.00	0	0.00	0	0.00
Indeterminate	0	0.0	1	<0.01	2	<0.01	0	0.00
Total Identified	1	0.02	2	0.01	2		1	0.01
Total Wood Charcoal	—	0.02	—	0.01	—	0.05	—	0.01

Table 5-45
Privy 1025 Artifact Table 2c-2: Pollen Recovered from Soil Samples

	Cut	1025	1025	1025	1025
	Layer	2067	2067	2067	2067
	Sample	6010	6001	6007	6004
Pollen Concentration ^a		4,001.5	4,904.8	2,508.4	5,419.1
Taxa Richness ^b		25.0	34.0	20.0	16.0
Spore Richness ^c		3.0	3.0	3.0	3.0
Tracers		84	56	114	53
Pollen Sum		268	219	228	229
Degraded		10.4	8.7	13.2	12.2
Abies		X ^d	X		
<i>Tsuga</i>			X		
<i>Pinus</i>		2.2	0.9	5.3	0.9
Cupressaceae		2.2	0.5	1.8	3.5
<i>Quercus</i>			1.4		
Rhamnaceae		1.5	9.1	1.3	1.7
Rosaceae		9.7	3.7	4.4	
Rosaceae, cf. <i>Rubus</i> or <i>Prunus</i>		3.7	4.6	3.5	1.3
Other Rosaceae			0.5		
Artemisia				1.3	
Cheno-Am		5.2	0.9	7.9	24.9
Hi-Spine Asteraceae		12.7	16.0	6.1	32.8
Asteraceae, <i>Lactuca</i> type		0.1	0.1		0.1
Asteraceae spiny type					0.1
Asteraceae type C		0.1	0.1	0.1	
<i>Ambrosia</i> type		0.7	2.3	0.9	
Poaceae		7.1	8.2	8.3	5.2
Large Poaceae		11.9	6.8	12.3	
Brassicaceae		4.5	10.5	14.9	10.5
Fabaceae			1.8	0.9	0.4
Nyctaginaceae			X	X	
Malvaceae, cf. <i>Sphaeralcea</i>		X	X		
Onagraceae		X	X	0.4	
Euphorbiaceae			0.5		0.9

Table 5-45 (continued)
Privy 1025 Artifact Table 2c-2: Pollen Recovered from Soil Samples

<i>Cut</i>	1025	1025	1025	1025
<i>Layer</i>	2067	2067	2067	2067
<i>Sample</i>	6010	6001	6007	6004
Eriogonum	3.7	4.6	0.4	X
Polemoniaceae			X	
Caryophyllaceae		0.5		
Caprifoliaceae, cf. <i>Lonicera</i>	X	0.5		
Cholla	X	X		
Agave	3.0	0.5	6.1	X
Zea	11.9	7.8	1.8	
Apiaceae		0.9		0.9
<i>Erodium</i>	X	0.9		
Unknown 6029 cf. Capparaceae	0.7	3.2		
Unknown 6027 cf. Papaveraceae, tricolpate	0.7	0.5		
Unknown 6027b, tricolpate (tricolporate), prolate, perforate	0.4	0.5		
Unknown 6001 non-umbel		0.5		
Unknown 6021 P3			0.4	
Unknowns Undifferentiated	7.5	3.7	8.8	4.4
Total Aggregates ^c				0.4
Hi-Spine Asteraceae aggregates				1(8)
Spores ^f				
Small brown monoporate spore	1	1	1	1
Trilete Spore, psilate, in perine	3			3
Trilete Spore, psilate		3		
Monolete Spore		3		
Bottle Spores			2	1
Diporate Cylindrical Spore	3		2	

a - Concentration is an estimate of the number of pollen grains contained in a cubic centimeter of sample sediment (gr/cc), based on an initial tracer concentration of 25,084 *Lycopodium* spores and a sample size of 20 cc.

b - Taxa richness is the number of pollen types identified in a sample out of a total of 51 known pollen types.

c - Spore richness is the number of different spore types identified in a sample out of a total of 8 spores plus the root hyphae category.

d - X notes taxa identified during 100x scans or taxa presence in sterile samples.

e - Pollen aggregate notation shows the number of aggregates and the size of the largest aggregate in parentheses.

f - Spore values assigned per the following subjective rating of abundance: 1 common, 2 present, 3 rare.

Table 5-46
Privy 1025 Artifact Table 3a: Selected Artifact Categories by Group

	Count	MNI	Percent of MNI
Activities	14	11	2.7
Domestic	200	48	11.8
Leisure and Recreation	133	58	14.3
Personal	438	262	64.5
Structural (selective)	8	7	1.7
Undetermined Use (selective)	85	20	4.9
Privy 1025 Total^a	878	406	99.9

a - Total percentage less than 100 is due to rounding.

Table 5-47
Privy 1025 Artifact Table 3b: Summary of Selected Artifacts by Category

Category	MNI	Percent
Accouterments	11	2.7
Building Material (omitted)	—	—
Clothing Maintenance	1	0.2
Clothing/Footwear	165	40.6
Collecting	1	0.2
Commerce	3	0.7
Communication	5	1.2
Firearms	3	0.7
Food Packing/Storage	2	0.5
Food Preparation/Consumption	40	9.9
Games	9	2.2
Grooming	12	3.0
Health/Medicine	70	17.2
Household/Furnishing	3	0.7
Household/Maintenance	1	0.2
Miscellaneous Bead	2	0.5
Miscellaneous Bottle, Jar, Can	7	1.7
Miscellaneous Closure	7	1.7
Miscellaneous Metal Item	4	1.0
Nails (omitted)	—	—
Social Drugs	47	11.6
Tools/Hardware	7	1.7
Toys	2	0.5
Undifferentiated (selective)	4	1.0
<i>Privy 1025 Total^a</i>	<i>406</i>	<i>99.7</i>

a - Total percentage less than 100 is due to rounding.

Table 5-48
Privy 1025 Artifact Table 4a: Food Preparation and Consumption Vessels by Function

Type	MNI	Percent
Container	4	10.0
Cups and Mugs	1	2.5
Drinking Vessel (tumblers, stemware, etc.)	6	15.0
Kitchen (pot, baking pan, mixing bowl, etc.)	2	5.0
Serving (platter, covered dishes, etc.)	5	12.5
Tableware (plates, bowls, saucers, etc.)	12	30.0
Flatware (fork, knife, spoon, etc.)	4	10.0
Tableware/Serving	6	15.0
<i>Privy 1025 Total</i>	<i>40</i>	<i>100.0</i>

Table 5-49
Privy 1025 Artifact Table 4b:
Food Preparation and Consumption Vessels by Material

Material	MNI	Percent
Ceramic		
Porcelain	2	5.0
Semi-porcelain	1	2.5
White Improved Earthenware	21	52.5
Glass	11	27.5
Metal	5	12.5
<i>Privy 1025 Total</i>	<i>40</i>	<i>100.0</i>

Table 5-50
Privy 1025 Artifact Table 4c: Decoration on Food Preparation and Consumption Vessels

Material	Object	Type of Decoration	MNI
Ceramic			
Porcelain	Hollow	Molded	1
Porcelain	Pitcher	Undecorated	1
Semi-porcelain	Hollow	Molded	1
White Improved Earthenware	Bowl	Blue transfer	1
White Improved Earthenware	Bowl	Undecorated	2
White Improved Earthenware	Hollow	Blue transfer	1
White Improved Earthenware	Hollow	Gilded	2
White Improved Earthenware	Hollow	Undecorated	1
White Improved Earthenware	Mug	Undecorated	1
White Improved Earthenware	Plate	Blue transfer	2
White Improved Earthenware	Plate	Undecorated	6
White Improved Earthenware	Saucer	Undecorated	2
White Improved Earthenware	Serving Dish	Undecorated	1
White Improved Earthenware	Serving Dish	Molded	1
White Improved Earthenware	Serving Dish	Undecorated	1
Glass			
Aqua Glass	Soda Bottle	Undecorated	1
Clear Glass	Compote	Undecorated	1
Clear Glass	Condiment Jar	Undecorated	1
Clear Glass	Goblet	Fluted	3
Clear Glass	Stemware	Undecorated	1
Clear Glass	Tumbler	Paneled	2
Light Aqua Glass	Bottle	Undecorated	1
Light Green Glass	Soda Bottle	Undecorated	1
Metal			
Bone Metal	Knife Handle	Undecorated	2
Ferrous	Corkscrew	Undecorated	1
Ferrous	Knife	Undecorated	1
Silver Plate	Spoon	Undecorated	1
<i>Privy 1025 Total</i>			<i>40</i>

Table 5-51
Privy 1025 Artifact Table 5: Social Drugs

Social Drug	MNI	Percent
Alcohol Container		
Alcohol Bottle	35	74.5
Ale Bottle	1	2.1
<i>Alcohol Container Total</i>	<i>36</i>	<i>76.6</i>
Smoking Accessories		
Cigar Case	1	2.1
Pipe	4	8.5
Pipe Stem	2	4.3
Snuff Bottle	4	8.5
<i>Smoking Accessories Total</i>	<i>11</i>	<i>23.4</i>
<i>Privy 1025 Total</i>	<i>47</i>	<i>100.0</i>

Table 5-52
Privy 1025 Artifact Table 6a: Date and Origin of Marked/Datable Ceramic Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI^a
2921		IRONSTONE CHINA / (standing Royal Coat of Arms) / ...			Not found	1
3059	?1870– ?1889	(edge of scroll) // ...KIN	?Charles Meakin	Staffordshire, England	Godden 1964:426	—
3068		??? CHINA / ???			Not found	—
3074	1853– 1859	J. B. THORN / CHEMIST / LONDON / JOHN A. TARRANT / NEW YORK. / SOLE AGENT / FOR THE / UNITED STATES	The Tarrant Co.	New York, NY	Fike 1987:48	1
3076	>1891	IRONSTONE CHINA / (standing Royal Coat of Arms) / J. & G. MEA[KIN] / HAN[LEY] / EN[GLAND]	J. & G. Meakin	Staffordshire, England	Godden 1964:427, Kovel and Kovel 1986:229	1
3077	1846– 1918	COCHRAN	R. Cochran & Co.	Glasgow, Scotland	Cushion 1959:86	1
3080		(standing Royal Coat of Arms) / STONE CHINA / BURGESS. BURSLEM.	?Burgess	Burslem, England	Not found	—
3286	1880– 1887	(standing Royal Coat of Arms) / OPAQUE PORCELAIN / EDWARD CLARKE & CO / BURSLEM	Edward Clarke & Co.	Burslem, England	Godden 1964:147	1

a - MNI = minimum number of items.

Table 5-53
Privy 1025 Artifact Table 6b: Date and Origin of Marked/Datable Glass Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI^a
2914	1879–1907	C & CO.	Cunninghams & Co.	Pittsburgh, PA	Toulouse 1971:119	1
2948	? Before 1916	M	Maryland Glass Corp.	Baltimore, MD	Toulouse 1971:339	1
2952	?–1899	LUNDBORG / NEW YORK	John M. Lundborg	New York, NY	Fike 1987:171	1
2954	1832–1886	McC	Wm. McCully	Pittsburgh, PA	Toulouse 1971:351	1
2965	1875–1906	LEGARE ALLEN / DRUGGIST / SAN BERNARDINO // WT & CO	Legare Allen	San Bernardino, CA	Anthony 2001; SBDC 1906	1
2973	ca. 1870–1900	ROWLAND & CRAIG / CITY / PHARMACY / B w/C / SAN / BERNARDINO // D	Davey & Moore, LTD.	Middlesex, England	Toulouse 1971:153	1
2974	1882	ALLEN & PEACOCK / DRUGGIST / A & P (decorative) / SAN BERNARDINO / CAL // WT & CO	Allen & Peacock	San Bernardino, CA	Anthony 2001; SBDC 1906	1
2976	1875–1906	LEGARE ALLEN / DRUGGIST / SAN BERNARDINO	Legare Allen	San Bernardino, CA	McKenney 1882	1
2977	1882–1886	TOWNE & WALDRIP / DRUGGIST / SAN BERNARDINO // WT & CO	Towne & Waldrip	San Bernardino, CA	McKenney 1882; White 1886:50	1
2979	1875–1906	LEGARE ALLEN / DRUGGIST / SAN BERNARDINO	Legare Allen	San Bernardino, CA	Anthony 2001; SBDC 1906	1
2995	1853 (adv.)	PARIS / INJECTION BROU / 102 RUE RICHELIEU	Unknown	Paris, France	Fike 1987:168	1
2996	1853 (adv.)	PARIS / INJECTION BROU / 102 RUE RICHELIEU	Unknown	Paris, France	Fike 1987:168	1
2997	1853 (adv.)	PARIS / INJECTION BROU / 102 RUE RICHELIEU	Unknown	Paris, France	Fike 1987:168	1
2998	1853 (adv.)	PARIS / INJECTION BROU / 102 RUE RICHELIEU	Unknown	Paris, France	Fike 1987:168	1
2999	1832–1886	G. G. BURNETT / APOTHECARY / 327 MONTGOMERY St S.F. // McC	Wm. McCully	Pittsburgh, PA	Toulouse 1971:351	1

Table 5-53
Privy 1025 Artifact Table 6b: Date and Origin of Marked/Datable Glass Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI^a
3005	1846–1881	POND’S EXTRACT / 1846	Pond’s Extract Co.	New York, NY	Fike 1987:120	1
3006	1846–1881	POND’S EXTRACT / 1846	Pond’s Extract Co.	New York, NY	Fike 1987:120	1
3010	Intro. 1872	DR. A. BOSCHEE’S / GERMAN SYRUP // L.M. GREEN // PROPRIETOR	L.M. Green	Woodbury, NJ	Fike 1987:224	1
3011	1879–1907	C & CO	Cunninghams & Co.	Pittsburgh, PA	Toulouse 1971:119	1
3016	1853–1871/75 (adv.)	CHARLES ELLIS SON & CO PHILA	Charles Ellis Son & Co.	Philadelphia, PA	Fike 1987:58	1
3017	1882–1887	AUC. WINKLER / S.B. / SODA WORKS	Auc. Winkler Soda Works	San Bernardino, CA	McKenney 1882; F.L. Morrill and Company 1887	1
3018	1895 (adv.)	NICHOLS’ / INFALIBLE / INJECTION	Langley & Michaels	San Francisco, CA	Fike 1987:174	1
3021	1852–1885	SEE THAT EACH CORK IS BRANDED // DUBLIN / & / BELFAST	Cantrell & Cochrane	Dublin & Belfast, Ireland	Maloney n.d.	1
3027		VALENTINE’S / MEAT JUICE			Wilson and Wilson 1971:130	1
3030	1870–1900	Snuff bottle, no mark			Ferraro and Ferraro 1964:65	1
3031	1870–1900	Snuff bottle, no mark			Ferraro and Ferraro 1964:65	1
3032	1870–1900	Snuff bottle, no mark			Ferraro and Ferraro 1964:65	1
3035		E.M. & CO.			Toulouse 1971:180	1
3044	1871–1879	MILLER’S / EXTRA / TRADE (shield) MARK (in banner) E MARTIN & CO / OLD BOURBON	E. Martin & Co.		Polak 1997:128	1
3045	1871–1879	MILLER’S / EXTRA / TRADE (shield) MARK (in banner) E MARTIN & CO / OLD BOURBON	E. Martin & Co.		Polak 1997:128	1
3046	1871–1879	MILLER’S / EXTRA / TRADE (shield) MARK (in banner) E MARTIN & CO / OLD BOURBON	E. Martin & Co.		Polak 1997:128	1

Table 5-53
Privy 1025 Artifact Table 6b: Date and Origin of Marked/Datable Glass Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI ^a
3047	1871–1879	MILLER'S / EXTRA / TRADE (shield) MARK (in banner) E MARTIN & CO / OLD BOURBON	E. Martin & Co.		Polak 1997:128	1
3048	1871–1879	MILLER'S / EXTRA / TRADE (shield) MARK (in banner) E MARTIN & CO / OLD BOURBON	E. Martin & Co.		Polak 1997:128	1
3052	ca. 1895–1904	M.G. CO	Modes Glass Co.	Cicero, IN	Toulouse 1971:360	1
3247		KEARNEY & CO / NEW YORK.	Kearney & Co.	New York, NY	Fike 1987:66	1
3273	1856–	LUBIN / PARFUMEUS / PARIS // HP	Lubin	Paris, France	Costello et al. 1998:209	
3278		PARIS / INJECTION BROU / 158	Unknown	Paris, France	Fike 1987:168	1

Table 5-54
Privy 1025 Artifact Table 6c: Date and Origin of Marked/Datable Miscellaneous Items

Cat. No.	Date Range	Description	Maker	Origin	Reference	MNI ^a
3112	Pat. 1851	N.R.CO. / GOODYEAR PAT 1851	N. R. Company		Luscomb 1967:170	4
3152		EXTRA FINE SABLE / ...			Not found	1
3153		WIRE DRAWN LONDON			Not found	1
3155	1805–1955	GLASGOW // ...TS W. WHITE	William White	Glasgow, Scotland	Bradley 2000:117	1
3157	1847–1967	T D // MCDUGALL / GLASGOW	Duncan McDougall & Co.	Glasgow, Scotland	Bradley 2000:117	1
3158	1805–1955	T D // W. WHITE	William White	Glasgow, Scotland	Bradley 2000:117	1
3160	1872	UNITED STATES OF AMERICA // (seated liberty motto) / 1872 half dollar	U.S. Mint		Travers 2000:116	1
3161	1876	UNITED STATES OF AMERICA / (seated liberty) / 1876 // ONE DIME (in wreath)	U.S. Mint		Travers 2000:80	1
3162	Unreadable	UNITED STATES OF AMERICA / ? / (date unreadable) // ONE DIME (in wreath)	U.S. Mint			1
3182		INVICIA			Not found	1
3191	Unknown	ROGERS S...	William Rogers Manufacturing Co.	Connecticut	Berge 1980:263	1

a - MNI = minimum number of items.

5.3 CHINATOWN (LOTS 7 AND 8)

NARRATIVE SUMMARY

This section particularly addresses the northern portions of Lots 7 and 8 that were eventually purchased by Wong Nim in 1900, representing about half of that part of Chinatown that was south of Third Street (Figure 5-14). The documentation on Chinatown, however, is generally not specific as to addresses or even to which side of the street an establishment was located. As a result, many references to events taking place throughout Chinatown are included in the summary below.

The future site of Chinatown was an embankment of Warm Creek that flooded seasonally. Directly upslope was the Rancho San Bernardino adobe residence of José María Lúgo and his wife María. The rancho first was granted to José María's father, Don Antonio María Lúgo, in 1842; it was the home of José María, his wife María, their 11 children, several laborers, and his brothers until 1851. The remains of butchered cattle embedded in the banks of Warm Creek are evidence of the *matanzas* (cattle butchering) to feed the Lúgo household. When the town of San Bernardino was laid out in 1853, the streamside location was included in Block 15, a marginal area largely undeveloped until the late 1870s.

Chinese first took up residence in San Bernardino in August 1867; by 1880, their population in the county had grown to about 150. At first they were dispersed throughout the community, operating laundries, growing and marketing vegetables, and working as restaurant and hotel employees or as domestic servants or farm laborers. Only after 1878, when a city ordinance was enacted prohibiting the operation of laundries (particularly Chinese laundries) within the town limits, did a distinctly Chinese quarter spring up. After being cited and fined, laundrymen Quong Tung Hang, Hop Sing, and others dismantled their wash houses and moved them onto Third Street between Starke's Hotel and Warm Creek, giving rise to San Bernardino's Chinatown.

It is supposed (although documentation has proved elusive) that the Chinese—unable by law to own real estate—rented the Third Street properties from landowners such as August Starke, Alley and Cochrane, Daniel Bradford, and the Wozencraft family. When California-born Wong Nim bought portions of Bradford's property fronting Third Street in 1900, he rented most of the property to other Chinese. By some accounts, San Bernardino County's Chinese population may have peaked at as many as 600 individuals by the turn of the twentieth century. Chinatown, with its shops, boarding houses, gambling parlors, temple, labor contractors, and other establishments, served the regional Chinese community and provided camaraderie and a sense of home to this virtually all-male population. Chinatown had electricity by 1893 and piped water by 1900. Human waste disposal was managed by construction of backyard privies. A series of three outhouses was discovered in the excavation area (Figure 5-15; Table 5-55). The earliest, Privy 1056, was constructed in about 1880. In 1900, Wong Nim purchased the northern portions of Lots 7 and 8 and a fence was constructed along the southern boundary, excluding Privy 1056. In this year, therefore, replacement Privy 1058 likely was constructed, in turn replaced by a larger and improved (wood-lined) facility, Privy 1035, around 1910.

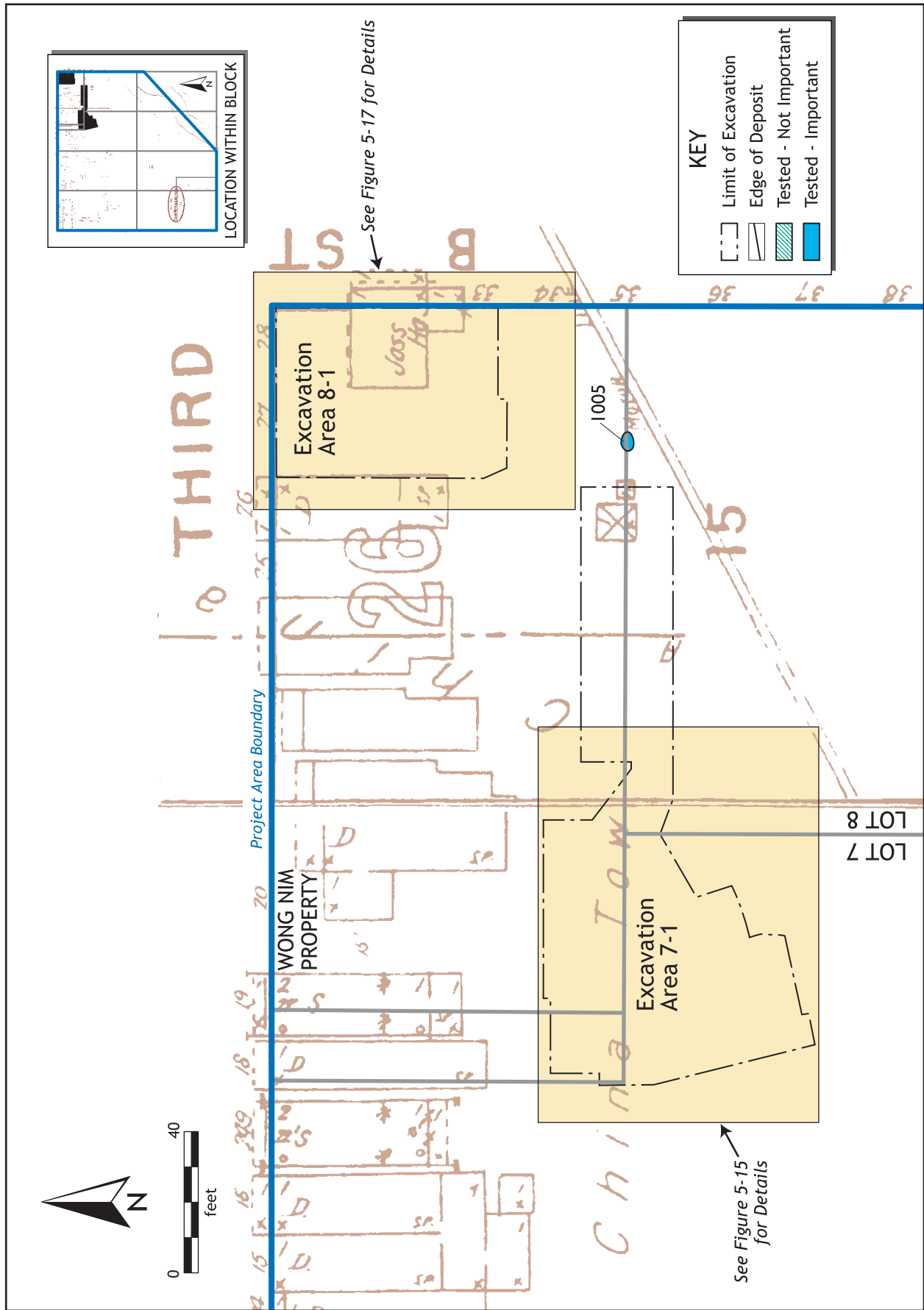


Figure 5-14 Excavation Areas 7-1 and 8-1 superimposed on the 1894 Sanborn Map.

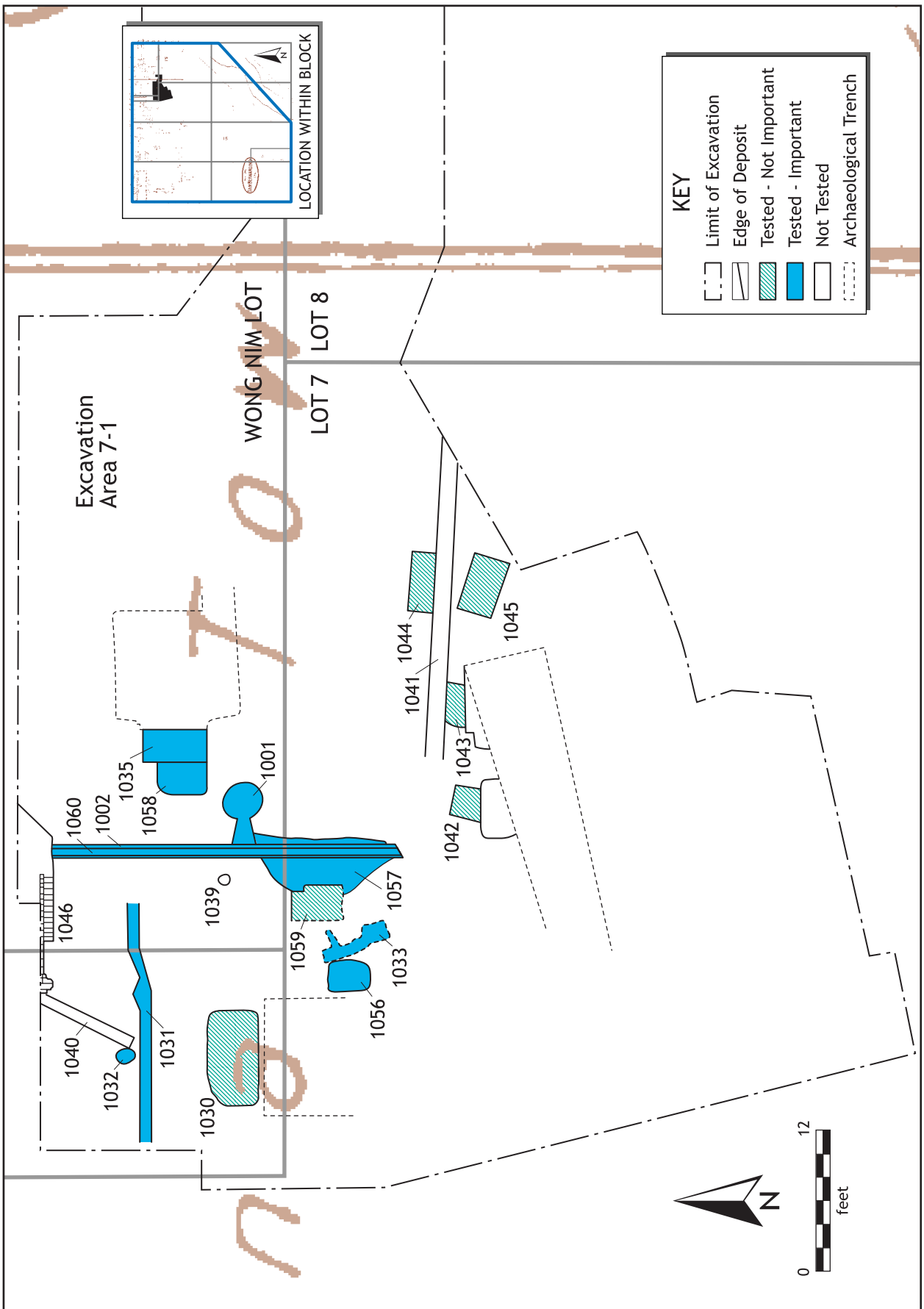


Figure 5-15 Detail of Excavation Area 7-1 superimposed on the 1894 Sanborn Map.

In excavating the Chinatown backyards, water drains and outside cooking features also were discovered along with general domestic refuse. When the laundrymen moved to Third Street in 1878, they constructed shallow trenches that drained into Warm Creek to carry off wastewater from their businesses and dwellings (Drains 1002, 1060, and 1031). In 1900, laundries were still the largest employer in Chinatown, but only one small enterprise remained by 1920. Sometime between these dates (circa 1910), the drains were abandoned and filled with refuse from the backyard. Much of this refuse was ash and charcoal from the large roasting oven (Roasting Oven 1001) where pigs and other meats were cooked for sale by local merchants and for community events. The importance of this activity in Chinatown is demonstrated by construction of a new roasting oven in about 1930 (Roasting Oven 1036), during the declining days of Chinatown, next to Wong Nim's store and the Kuan Yin Temple (Figures 5-16 and 5-17).



Figure 5-16 Overview of Excavation Area 8-1.

Wong Nim, born in Alameda County, California, arrived in San Bernardino about 1875, working first as a laundryman and later opening a mercantile shop while also acting as a labor contractor. He is said to have brought with him a statue of the goddess Kuan Yin, for whom he erected a temple on the north side of Third Street. In 1890 the temple was relocated to the south side of Third Street at the rear of Wong's Wey Yuen company store (Foundation 1003). Wong remained on the corner of Third and B streets until his death at age 89 in 1941, having earned by that time the honorary title of "Mayor of Chinatown." The pet dog buried at the rear of this residence (Dog Burial 1005) may have been his.

By the time of Wong Nim's death, there was little left of the once bustling Chinatown (Figure 5-18). In the 1920s, some of Chinese on the north side of Third Street were displaced

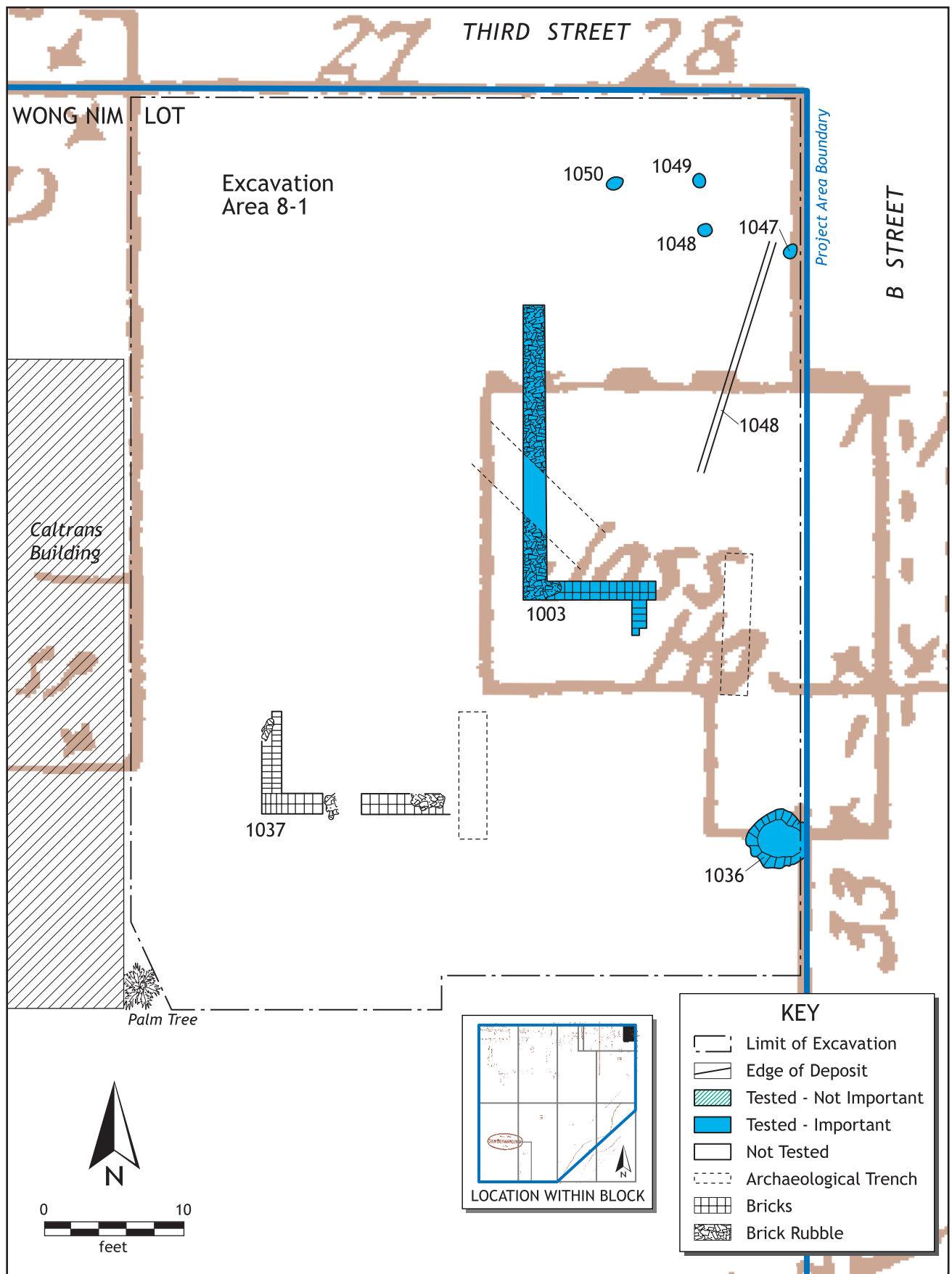


Figure 5-17 Detail of Excavation Area 8-1 superimposed on the 1894 Sanborn Map.

CHINATOWN ARCHAEOLOGICAL SEQUENCE

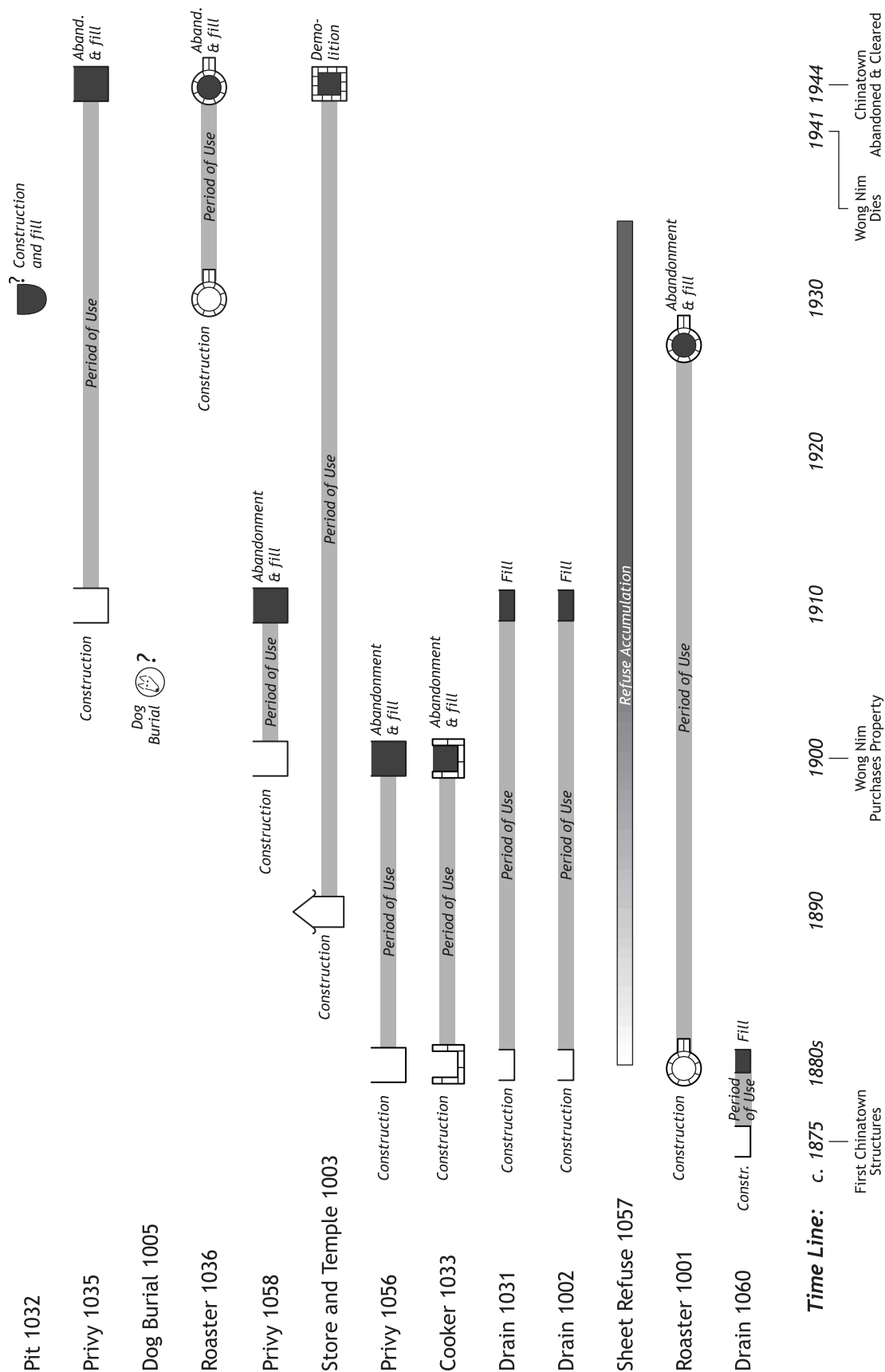


Figure 5-18 Sequence of Chinatown feature construction and use.

when the new county courthouse was built. On the south side of Third Street, the California Highway Commission began developing the portion of old Chinatown west of the parcel owned by Wong. At about the same time, structures on the middle portion of Wong Nim's lot apparently were demolished (see Figure 2-21). When the State of California purchased Wong Nim's property from his estate in 1943, all of the remaining buildings on his property were demolished. Privy 1035 was filled at this time with debris from the abandoned buildings. All that remained of Chinatown were four brick structures on the north side of Third Street remodeled as county government offices. These last historic remnants were removed in the 1960s to make way for an expansion of the county courthouse parking lot.

Table 5-55
Chinatown Tested Archaeological Features

Type	No.	Construction Description (Phase A)	Phase A Date	Use/Abandonment/ Fill (Phase B)	Phase/ Date	Evaluation
Roasting Oven	1001	Rock-lined keyhole-shaped cooker 3.5 ft diameter	1880s	B1. Charcoal, ash	1930	Important
Drain	1002	Redwood lined linear drain 27.0 x 0.7 x 0.5 ft deep	1880s	B2. Backyard refuse	1910	Important
Footing	1003	Red brick footing of store and temple	By 1890	Demolished	1944	Important
Dog Burial	1005	Small canine pet burial pit	By 1942	N/A	N/A	Important
Pit	1030	Rectangular refuse pit 7.5 x 5.0 x 1.0 ft deep	1950s	Domestic refuse, burning	1950s	Not Important
Drain	1031	Unlined linear drain 20.0 x 0.7 x 0.5 ft deep	1880s	B2. Backyard refuse	1910	Important
Pit	1032	Circular refuse pit 2.0 ft diameter x 1.2 ft deep	1920s	N/A	N/A	Important
Cooking Feature	1033	Brick rectangular feature, ash filled	1880s	B1. Charcoal and ash B2. Abandoned	B2. by 1900	Important
Privy	1035	Rectangular, redwood lined, possible 2-seater 6.0 x 3.0 x 3.5 ft deep	ca. 1910	B1. Primary B2. Clean out of buildings	B2. 1944	Important
Roasting Oven	1036	Circular, mud-mortared red brick cooker 3.5 ft diameter x 2.5 ft deep	ca. 1930	B1. Charcoal and ash B2. Demolition C. Demolition debris	B2. by 1944 C. 1944	B1. Important C. Not Important
Footing	1037	Linear brick footing, likely of building facing Third Street	1880s	Demolished	1930s	Not Important
Pit	1042	Square pit 3.5 x 3.5 x 0.4 ft deep	Unknown	Virtually sterile sands	Unknown	Not Important
Pit	1043	Square pit 3.5 x 3.5 x 0.9 ft deep	Unknown	Virtually sterile sands	Unknown	Not Important
Pit	1044	Square pit 4.0 x 4.0 x 1.0 ft deep	Unknown	Virtually sterile sands	Unknown	Not Important
Pit	1045	Rectangular pit 5.0 x 2.5 x 0.3 ft deep	Unknown	Virtually sterile sands	Unknown	Not Important

Table 5-55 (continued)
Chinatown Tested Archaeological Features

Type	No.	Construction Description (Phase A)	Phase A Date	Use/Abandonment/ Fill (Phase B)	Phase B Date	Evaluation
Pit	1047	Circular pit 1.0 ft diameter x 1.0 ft deep	1840s	Cattle skull	N/A	Important
Pit	1048	Circular pit 1.0 ft diameter x 1.0 ft deep	1840s	Cattle skull	N/A	Important
Pit	1049	Circular pit 1.0 ft diameter x 1.0 ft deep	1840s	Cattle skull	N/A	Important
Pit	1050	Circular pit 1.0 ft diameter x 1.0 ft deep	1840s	Cattle skull	N/A	Important
Privy	1056	Roughly square pit 3.5 x 2.5 x 3.0 ft deep	1880s	B1. Primary refuse	B1. 1880s	Important
				B2. Domestic refuse	B2. 1900	Important
				C. Demolition	C. 1940s	Important
Sheet Refuse	1057	Amorphous sheet refuse 12.0 x 5.0 x 0.8 ft deep	1890s	B1. Cooking residue and backyard refuse	1880s– 1930s	Important
Privy	1058	Unlined privy 3.7 x 2.5 x 3.0 ft deep	1900	B2. Domestic refuse	1910	Important
Pit	1059	Amorphous pit 3.0 x 3.0 x 1.0 ft deep	Modern	Modern disturbance	1960s+	Not Important
Drain	1060	Linear unlined drain 27.0 x 0.7 x 0.5 ft deep	ca. 1880	B1. Siltation	1880s	Important

ABSTRACT OF DOCUMENTARY RESEARCH FOR LOTS 7 AND 8

Addresses

1887	6 and 11 [in Lot 6]; 12, 13, 14 Third Street (west to east) (Sanborn)
1888	6 and 11 [in Lot 6]; 12, 13, 14 Third Street (west to east) (Sanborn)
1891	6 and 11 [in Lot 6]; 12, 113, 14 Third Street (west to east) (Sanborn)
1894	6 and 129 [in Lot 6]; 263, 113, 14, 15, 16, 249[?], 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28 Third Street (west to east) (Sanborn)
1906	16, 249, 18, 19, 21, 23, 24, 25, 26, 28 Third Street (west to east) (Sanborn)
1906	213, 244, 249, 251, 252 Third Street (Directory)
1910	212, 213, 215, 228, 245, 246, 249 Third Street (Census)
1910	213, 215, 244, 245, 249, 254 Third Street (Directory)
1913	201, 225, 231, 244, 245, 246, 248, 249, 250 Third Street (Directory)
1920	201, 245 Third Street (Census)
1920	201, 245, 249 Third Street (Directory)
1926	229 Third Street (Directory)
1928	201, 245, 247 Third Street (Directory)
1933	210 (probable transposition of 201), 245, 247 Third Street (Directory)
1936	201, 245, 247 Third Street (Directory)
1942	201, 245, 247 Third Street (Directory)
1944	201, 245, 247 Third Street (Directory)

Occupation and Use

1839–1851	Rancho San Bernardino property; home to José María Lúgo (son of grantee Antonio María Lúgo) and family (wife María, 11 children, and four laborers [1850]).
1853–1878	Undeveloped portion of Block 15.
1878	Chinese community established.
1900–1941	Wong Nim purchases most of Chinatown on south side of Third Street.
1924	California Highway Commission purchases west end of Chinatown (south side of Third Street) and builds offices and maintenance shops.
1938	Middle portion of Chinatown (south side of Third Street) demolished.
1940s	Remaining Chinatown structures on north side of Third Street redeveloped into county offices.
1943–1944	Wong Nim dies in 1941; buildings on remainder of his property demolished by California Division of Highways.

Ownership

1839–1851	Rancho home of José María Lúgo family
1851	Amasa Lyman and Charles Rich
1854	William Crosby
1857	John Lemon
1863	Dudley and Elizabeth Pine
1868–1878	August and Catherine Starke
1878–ca. 1888	Alley and Cochrane
ca. 1885–1903	Daniel M. Bradford
1900	Wong Sue (portion) (owned one day)
1900–1941	Wong Nim (portion)
1903–1905	Wong Sing (portion); acquired by Wong Nim in 1903
1941–1943	Wong Nim estate
1943	California Division of Highways/Caltrans

Summary of Documents

1839	Map, Diseño [copy]—Rancho San Bernardino, Heritage Room, A. K. Smiley Public Library, Redlands, California.
1852	Deed—26 February—Lúgos and Sepúlveda to Amasa Mason Lyman and Charles C. Rich, Rancho San Bernardino (SBCR 1852–1854:24).
1854	Deed—24 August—Lyman and Rich to William Crosby, all of Block 15 (Lots 1–8) (SBCR 1852–1854:15).
1857	Deed—2 December—William Crosby to John Lemon, all of Block 15 (Lots 1–8) (SBCR 1857:170).
1863	Deed—6 August—John Lemon to Dudley and Elizabeth Pine, all of Block 15 (Lots 1–8) (SBCR 1863:14).
1868	Deed—23 July—Dudley and Elizabeth Pine to August and Catherine Starke, all of Block 15 (Lots 1–8) (SBCR 1868:138).
1878	Court Case—County court indicts several Chinese for maintaining nuisances (laundries), among them Quang Tung Hang (Superior Court 1878).
1878	<i>San Bernardino Weekly Times</i> [<i>Weekly Times</i>]—19 October—item reporting that laundrymen Quong Tung Hang, Hop Sing, and others have built shanties “just below Starke’s [Hotel].” (First report of structures in what would become Chinatown) (<i>Weekly Times</i> 1878c.)
1878–1879	Assessment—Alley and Cochrane are assessed all of Lots 6, 7, and 8 (\$1,000), improvements (\$400), and six vehicles, nine horses, three Spanish horses, and harness (\$1,160) (SB Town 1878–1879:79).

- 1880 Map—Syme’s Birdseye View of City of San Bernardino: Row of at least six buildings fronting Third Street on the south side of street; fenced yard to rear. First illustrative depiction of Chinatown.
- 1880 Census—Tenth Census of the United States lists the following. Street addresses are not given, and in some cases street names are illegible. All Chinese enumerated during the census are not listed below. Those listed were proximate to Starke’s Hotel on the enumeration sheets, implying that they were residing in households (Numbers 2 and 3) situated along Third Street.
- Household 2**
 Sam Lee/male/age18/boarder/single/laundryman
 Wong Yo/male/age 23/ boarder/single/washerman
 Wong Yang/male/age 20/boarder/married/ironer (presser)
 Wong See Song/male/age 22/boarder/married/washerman
 Wong Quay/male/age 20/boarder/single/washerman
 Wong Song/male/age 23/boarder/single/washerman
 Ah Ye/male/age 24/boarder/single/washerman
- Household 3**
 Yee Kee/Head[?]/male/age 40/married/merchant
 Mrs. Yee Kee/wife/female/age 30/married/housekeeper
 Ah Soo/male/age 42/boarder/single/no occupation shown
 Ah Yen/male/age 30/boarder/single/barber
- 1882 Emeline Bradford, daughter of Daniel M. Bradford and future wife of Charles H. Davis, organizes a Chinese mission school in the basement of the Congregational Church in San Bernardino (Crafts 1906:90).
- 1887–1888 Sanborn map
- 12 Third Street**, a single-story clapboard structure labeled “Chinese Wash Ho[use].”
- 13 Third Street**, a single-story clapboard structure with shingle roof and only the label “Chinese.” No use description is shown.
- 14 Third Street**, Chinese store, also single-story, clapboard and shingled; 13 and 14 share a common wall.
- There is no exposure into Lot 8, but a notation reads “China Town/7 buildings in range/stove pipes/cloth ceilings.” First indication of a distinctly Chinese quarter.
- 1887 Directory—*San Bernardino City and County Directory* lists the following Chinese merchants in Chinatown block. In most cases no street addresses are given:
- Je Chong & Company, Third St., between B and C—tea, provisions, labor contracts (F. L. Morrill and Company 1887:34, 72).
- Quong Ye On, Third St., between B and C—Chinese and Japanese goods, labor contracts (F. L. Morrill and Company 1887:50, 72).
- That Kee, Third St., between B and C—Chinese provisions (F. L. Morrill and Company 1887:59, 72).
- Wing Lung Kee & Company, Third St., between, B and C—Chinese provisions and labor contracts (F. L. Morrill and Company:34, 66).
- Chung Tung Hang, Third St., between B and C—laundry (F. L. Morrill and Company 1887:72).
- Quong Yuen Hi, Third St., between B and C—laundry (F. L. Morrill and Company:72).
- Som Kee, 93 Third St.—laundry (F. L. Morrill and Company:72).
- 1887 *Weekly Times* and/or *San Bernardino Daily Courier* [*Daily Courier*] report on opening of a Chinese labor bureau and newsstand operated by Sun San Yuen; the funeral of a Chinese, the victim of an opium overdose; white harassment of Chinese; opium use; complaints against Chinese laundries; Ninth Circuit Court’s vacating of anti-Chinese laundry ordinance in Napa; a Chinese festival; a land lease for a new Chinatown location.
- 1888 San Bernardino, Arrowhead and Waterman Railroad is built. Line passes through Block 15 from east to west along the center of the block, arcing to the northeast and exiting block just south of Chinese temple. The line is taken over by the Pacific Electric Railway Company in 1911.

- 1888 Court Document—20 December—D. M. Bradford is accused of maintaining a nuisance on his premises on “the South side of Third Street between ‘B’ and ‘C’” by allowing a Chinese laundry to operate there (Superior Court 1888a).
- 1888 Court Document—26 December—Ah You and Ne Yah are accused of maintaining a public nuisance by operating a wash house “in and upon the Bradford property between [on] Third street and C street . . . and Warm Creek” (Superior Court 1888c).
- 1888 *Weekly Times* and/or *Daily Courier* report on the burning of the Bradford home on Third, across from Starke’s Hotel; police raid on fan tan game; attempt at arson in Chinatown and rescue of white perpetrator by police from angry Chinese mob; complaints against Chinese laundries.
- 1889 *San Bernardino City and County Directory* fails to list Chinese merchants in town.
- 1889–1890 Assessment—Six Chinese are assessed for property. Locations are not given. They are:
 Quong Woo, \$100, personal property and a wash house;
 Yuen Wo, \$100, fixtures, a wagon, and a horse;
 Wong Lung Ku, \$1000, personal property, goods and merchandise
 That Kee, \$150, personal property and goods in stock;
 Quong Yet Oh, \$500, personal property, drugs and clothing;
 Lin Sing, personal property, goods and merchandise (SB City 1889–1890:125).
- 1889 *Daily Courier* reports the opening of Dr. Fong Wing’s office at No. 9 Chinatown.
- 1890 *Daily Courier*—20 December—“The location of the Joss house has been changed from the Wozencraft property to a lot at the extreme eastern end of Chinatown and on the south side of Third street” (*Daily Courier* 1890:3). The “Wozencraft property” was located on the north side of Third Street directly opposite the project area.
- 1891 Sanborn map—No changes from 1888 except for the presence of the tracks of the San Bernardino, Arrowhead and Waterman railroad crossing the southern end of the lots.
- 1892 *San Bernardino Weekly Times* and/or *Daily Courier* report on the opening of Dr. Wong Poo Shai’s dispensary on Third Street in the central business district; several months later, Dr. Wong moves offices to Chinatown.
- 1893 *San Bernardino County Directory* fails to list Chinese in 200 block of Third Street.
- 1893 *Daily Courier* (1893a:3) mention in an article of electric lights “now” illuminating Chinatown.
- 1893 *Weekly Times* and/or *Daily Courier* report Mock Chuck, proprietor of a hotel and restaurant in the central business district, is fined for selling liquor; a brawl in Mock Chuck’s restaurant; Mock Chuck’s arrest and trial for operating a house of prostitution; police raids on opium dens on B Street near Third, and arrest of white youth; arrest of Bronco Charley, a local character, for fighting with Chinese; closing of Mock Chuck’s hotel.
- 1894 Sanborn map—Shows six complete buildings and portions of two others, all fronting on Third Street. From west to east they are:
113 Third St. (straddling the division line between Lots 6 and 7)—a one-story shake-roofed dwelling;
14 Third St.—a one-story shake-roofed dwelling;
15 Third St.—a one-story shake-roofed dwelling;
16 Third St.—a one-story shake-roofed dwelling;
249 Third St.—a two-story store with noncombustible shingle-roof;
18 Third St.—a one-story shake-roofed dwelling;
19 Third St.—a two-story story with noncombustible shingle-roof;
20–21 Third St.—(straddling the division line between Lots 7 and 8)—a one-story shake-roofed dwelling;
22 Third St.—an alleyway;
23 Third St.—a one-story shake-roofed dwelling; a fence runs south from the dwelling several feet to a small one-story shake-roofed structure, possibly a privy;
24 Third St.—a one-story shake-roofed dwelling;
25 Third St.—vacant lot;

- 26 Third St.**—a one-story shake-roofed dwelling; south of 26 Third is a barn/stable with a small attached structure, possibly a shed or privy;
- 27 Third St.**—a vacant lot; and
- 28 Third St.**—possibly the address for Wong Nim’s “Joss Ho[use]” which appears for the first time on this Sanborn edition, possibly for the vacant property fronting on Third. The “Joss House” actually appears to front on B Street (Mountain View Avenue), but is not numbered. The “Joss House,” or Chinese temple, was dedicated to and housed a statue of Kuan Yin.
- 1894–1895 Court case—Wong Nim sues E. A. Phillips for nonpayment of fees charged by Wong in his capacity as a labor contractor. Phillips had contracted with Wong for several Chinese laborers to work on his ranch in West Highlands for \$1,050, but had paid Wong only a portion (Superior Court 1894–1895).
- 1894 *Daily Courier* reports another attempt to burn down Chinatown; Chinese elude arrest when police raid fan tan game; following night 23 Chinese arrested in a police raid on a fan tan game; Ah Sua convicted of assault on fellow Chinese with a hatchet.
- 1895 Assessment—to D. M. Bradford and P. Ferguson: land \$4,800, improvements \$1,600 (SBCA 1895–1899:20).
- 1896–1899 Assessment—to D. M. Bradford as follows: 1896—Land \$4,800/Improvements \$1,600; 1897—Land \$3,650/Improvements \$900; 1898—Land \$1,865/ Improvements \$700; 1899—Land \$1,565/Improvements \$700 (SBCA 1895–1899:20).
- 1900 Deed—2 April—D. M. Bradford to Wong Sue for \$1,000, portions of Lots 7 and 8. Sale includes “the right to receive through the water pipes upon said premises water necessary for use thereon as the same is now piped thereon from the surplus appurtenant to said place.” Property is described as follows: “Commencing at the northeast corner of Block 15 . . . and running thence two hundred and eighteen (218) feet five inches to the north west corner of the first two story brick building: thence south one hundred (100) feet: thence east two hundred and eighteen (218) feet five inches to B Street: thence north one hundred (100) feet to the place of beginning” (SBCR 1900b:121).
- San Bernardino County Assessor describes the same property as the north 100 feet of Lot 8.
- 1900 Deed—3 April—Wong Sue to Wong Nim for one dollar, portions of Lots 7 and 8, bought from D. M. Bradford the day before (SBCR 1900a:382).
- 1900 Census—Twelfth Census of the United States. No street numbers given, although streets are mentioned in some cases. Very little information is included on individual Chinese residents.

Third Street

No Household Number

Chin Wong
 Sun Wong
 Chin Yip
 Yon Wong
 Sang Wong
 Ong Joi
 Herbert Ming
 Lam Wo
 Fung Tong
 Chin Hain(?)
 Sam Joe
 Si Wong Pa/female/wife

170 Third Street

Joe Quatra/Head/male/age 50/widowed/laborer
 Goy Wong

No Household Number

Gon Wong
 Minn Wong

- Lung Wong
740 Third Street
Wong Hangout/proprietor/male/age 38/single/Sing Lee Laundry
Wong Sin/partner/male/age 34/married/partner in Sing Lee Laundry
Wong Wo/male/age 33/single/employee at Sing Lee Laundry
Ah Lon/male/age 41/married/employee at Sing Lee Laundry
Wang La Pong/male/age 48/married/employee at Sing Lee Laundry
- 1900–1905 Assessment—Wong Nim assessed for lot and improvements: 1900—Land \$465/Improvements \$400; 1901—Land \$465/Improvements \$400; 1902—no amounts shown; 1903—no amounts shown; 1905—no amounts shown (SBCA 1900–1904:23).
- 1903 Assessment—to Wong Sing; portion of Lot 7 (West 18 feet, East 68 feet 5 inches, North 100 feet) (SBCA 1900–1904:22).
- 1903 Probate/Will—D. M. Bradford dies on 9 October 1903, leaving all of his property to his daughter, Emeline M. Davis (Superior Court 1903:76–78, 1906a:94–95).
- 1905–1908 Assessment—to Wong Nim, portion of Lot 8 (East 50 feet, North 100 feet) (SBCA 1905–1909:24).
- 1905–1908 Assessment—to Wong Nim, portion of Lot 7 (West 18 feet, East 68 feet 5 inches, North 100 feet) (SBCA 1905–1909:24).
- 1906 Directory—*San Bernardino City Directory* lists the following Chinese individuals and businesses living/operating on Third Street (SBDC 1906:236):
251 Third St., Wong Chong, restaurant, residence same.
249 Third St., Wong Gee, manager, Quong Chin Chung (no separate listing).
213 Third St., Wong King Ching, Chinese herbs.
244 Third St., Wong Tong and Yee Yick Company, general merchandise.
252 Third St., Wong Yuen, barber, residence same.
- 1906 Sanborn map—several changes from 1894. From west to east, they are:
16 Third St., building (north–south) has been shortened on the southern end but a small addition has been built in the area left vacant by the larger removal.
249 Third St. has a small addition on the southern end of the building.
18 Third St. has apparently been widened (to the west) so as to share a common wall with number 249 and lengthened on the south end; one of the southern extensions features a second story.
19 Third St. has a one-story addition at the south end of the building. The fence beginning in Lot 8 continues a westerly line behind the buildings of Lot 7. Information on the remaining structures of Lot 7 (i.e., numbers 113, 14, and 15) was not available;
26 Third St. has been expanded to include part of the vacant lot at number 25, and two small additions have been built, one on the south end of 26 is shown, and a second on the north east side of 26. From the rear of 26 Third Street, a fence or wall has been built running south (probably) to near the railroad right-of-way, and then west in a straight line behind the other buildings of “China Town” (words appear within the fence line).
28 Third St. (the “Joss Ho[use]”) remains unchanged except for a fence or wall around the building.
- 1909–1913 Assessment—to Wong Nim **Parcel 512** (portion of Lot 7) (SBCA 1909–1913:27).
- 1909–1913 Assessment—to Wong Nim, **Parcel 513** (portion of Lot 8) (SBCA 1909–1913:24).
- 1910 Census—Thirteenth Census of the United States lists the following:
212 Third St.
Wong Poo Sai/Head/male/age 62/married/physician/renter
Ng Hue(?)/wife/female/age 39/married/no occupation
Wing Poi Tong/son/age 10/single/no occupation
213 Third St.
Wong Tung Si/Head/male/age 45/married/retail grocer/renter

- Wong [illegible]/lodger/male/age 54/married/ranch laborer
Wong Yen/lodger/male/age 48/married/no occupation
215 Third St.
Wong Sang/head/male/age 39/married/proprietor of retail drug store/renter
Wong Yon How (?)/hired man/male/age 50/single/cook in a restaurant
228 Third St.
Wong Nim/head/male/age 54/married/retail grocer/renter.
230 Third St.
Wong Chung/head/age 55/married/retail grocer/renter
Lee Won/lodger/age 60/married/barber
Lee You/lodger/age 52/single/ranch laborer
245 Third St.
Wong Hand/head/male/age 46/proprietor of retail grocery/renter
Wong Tong Din/partner/male/age 44/proprietor of retail grocery/renter
Wong Toy/lodger/male/age 58/married/ranch laborer
Wong Tong/lodger/male/age 50/married/ranch laborer
Wong Moi(?)/lodger/male/age 50/married/ranch laborer
Wong Chin/lodger/male/age 35/married/occupation unknown
Wong Lun/lodger/male/age 23/married/ranch laborer
246 Third Street
Wong Tong/Head/male/age 49/married/retail grocer/renter
Wong Si Ku/hired man/male/age 41/married/bookkeeper in retail store
Wong Sing/partner/male/age 40/married/retail grocer
Ung Tong/lodger/male/age 60/married/no occupation
Wong Din/lodger/male/age 53/married/cook in a railroad camp
Wong Si You/lodger/male/age 63/married/farm laborer
249 Third St.
Wong Chin/head/male/age 49/married/proprietor of retail grocery/renter
Wong Gee/partner/male/age 39/married/worker in retail grocery
- 1910 Directory—*San Bernardino City Directory* lists the following Chinese individuals and businesses living and operating on Third Street (SBDC 1910:274).
213 Third St., Tie Yaw Company, Chinese merchandise
215 Third St., Wong Nim Company, Chinese merchandise
244 Third St., Wong Tong and Yee Yick Company, Chinese merchandise
245 Third St., Gee Chong & Company, Chinese merchandise
249 Third St., Quon Chin Chung Company, Chinese merchandise
254 Third St., That Kee Company, Chinese merchandise
- 1911 Ike Wines, a “common laborer,” is tried for the murder of Mah Wing, an elderly chair mender and the caretaker of the temple, during Chinese New Year. The body is found with six stab wounds and a crushed skull just inside the door of the temple. His pockets had been rifled. Testimony during the coroner’s inquest indicates temple was located in southeast corner of building shared with Wey Yuen Company store. Wine’s first trial ends in a hung jury. A second jury finds Wines, age 51, guilty of second-degree murder. Judge Bledsoe sentences him to 25 years in San Quentin (Superior Court 1911a, 1911b).
- 1913 Directory—*San Bernardino City Directory* lists the following:
201 Third St., Wey Yuen Company, produce
225 Third St., Denocia Minjares
231 Third St., Velino Minjares
244 Third St., Quong Yick, general merchandise
245 Third St., Je Chong & Company, general merchandise, and Wong Poo Sai, Chinese herbs

- 246 Third St.**, Yaw Lee Company, groceries
248 Third St., Han Lee Company, general merchandise, and Quong Di Tong Company, Chinese herbs
249 Third St., Wong Tong, general merchandise, and Quong Ching Tong Company, general merchandise
250 Third St., New China Restaurant
269 1/2 Third St., Macario Ojeda
- 1914–1918 Assessment—to Wong Nim, **Parcel 513** (portion of Lot 8) as follows: 1914—Land \$2,500/Improvements \$2,000; 1915—Land \$2,500/Improvements \$1,500; 1916—Land \$1,000/Improvements \$1,500; 1917—Land \$500/Improvements \$500/Personal property \$500; 1918—Land \$500/Improvements \$500/Personal property \$500 (SBCA 1914–1918:26).
- 1914–1918 Assessment—to Wong Nim, **Parcel 512** (SBCA 1909–1913:26).
- 1919–1923 Assessment—to Wong Nim, **Parcel 512** (SBCA 1918–1923:26).
- 1920 Census—Fourteenth Census of the United States lists the following:
201 Third St.
Wong Nim/head/male/age 64/married/born California/ merchant-general merchandise/owns home
236 Third St.
John Wong Hing/Head/male/age 52/married/proprietor of a grocery/renter Quan Woo/lodger/male/age 54/married/peddler/vegetable wagon
238 Third St.
Wong Moi/head/male/age 46/married/proprietor retail dry goods and grocery/renter
245 Third St.
Wong Hing/head/male/age 56/married/merchant—general merchandise/renter Sam Wong/partner/male/age 45/married/merchant—general merchandise
Wong Tong/[?]/male/age unknown/single/merchant—general merchandise
246 Third St.
Yaw Lee/head/male/age 53/married/proprietor of a retail shop/rented home)
248 Third St.
May Wong/head/male/age 46/married/ proprietor of a retail shop/rented home
Low Hing/lodger/male/age 50/married/restaurant cook
[?] Jung/lodger/male/age 60/married/proprietor of drug store
- 1920 Directory—*San Bernardino City Directory* (Los Angeles Directory Company [LADC] 1920:343) lists the following:
201 Third St., Chinese Joss House (“Wong Nim, r[esidence] 201 3d” [LADC 1920:277]).
236 Third St., On Lee, Chinese merchandise
238–40 Third St., Chung Lee, Chinese merchandise
244 Third St., Juong Lick, merchandise
245 Third St., Je Chong & Company, Chinese merchandise
246 Third St., Yo Lee, Chinese merchandise
248 Third St., Juong D. Tong Company, herbs
249 Third St., Quong Chin Chong, merchandise
250 Third St., Vacant
270 Third St., County garage
- 1924 Directory—*San Bernardino City Directory* lists the following addresses on Third Street (between Mountain View and Arrowhead) (LADC 1924:513):
201 Third St., Wey Yuen Company, Chinese merchandise
229 Third St., Antonio Contreras (Contreras is a blacksmith with Pacific Electric Railway Company. His wife is Cenobia [LADC 1924:102])
245 Third St., J. E. Chong & Company, grocer
249 Third St., Quong Chong and Nong Tong (no occupations)

- 1925 *California Highways*—California Highway Commission builds first structures (Anonymous 1927).
- 1926 Directory—*San Bernardino and Colton City Directory* lists the following Third Street addresses (between Mountain View and Arrowhead):
229 Third St., Antonio Contreras (no occupation shown, wife Senovia)
275 Third St., Guadalupe Casas (no occupation shown, wife Refugia) (LADC 1926:88)
- 1927 *California Highways*—California Division of Highways builds office complex in Mission Revival style (Anonymous 1927).
- 1928 Directory—*San Bernardino and Colton City Directory* (SBDC 1928:513) lists the following addresses in its householders directory, Third Street (between Mountain View and Arrowhead):
201 Third St., Wey Yuen & Company, Chinese merchandise
245 Third St., Gee Chung & Company, Chinese merchandise
247 Third St., California Highway Commission
- 1933 Directory—*San Bernardino City Directory* (1933:426) lists the following:
210 Third St., Wey Yuen & Company, Oriental goods (The number is a probable transposition of 201 Third St.)
245 Third St., Gee Chong & Company, Oriental goods
247 Third St., State Highway Commission [California Division of Highways]
253 Third St., R. F. Uyeda, no occupation shown
- 1930–1932 Utilities assessment—to Wong Nim; improvements \$500; property measured at East 50.6 feet, North 100 feet, except for railroad right-of-way (SB City 1930–1935:257).
- 1933–1935 Utilities assessment—to Wong Nim; land is assessed at \$720/2160[?], improvements at \$400 (SB City 1930–1935:257).
- 1930–1935 Assessment—to Wong Nim: 1930—Land \$2,700/Improvements \$500; 1931—Land \$2,700/Improvements \$500; 1932—Land \$2,700/Improvements \$500; 1933—Land \$2,160/Improvements \$400; 1934—Land \$2,160/Improvements \$400; 1935—Land \$2,160/Improvements \$400 (SBCA 1930–1935:19).
- 1933–1935 Utilities assessment—to Wong Nim: land is assessed at \$2,160, improvements at \$200 (SB City 1930–1935:253).
- 1936 Directory—*San Bernardino City Directory* lists the following:
201 Third St., Wey Yuen & Company, Oriental goods (Wong Nim, secretary)
245 Third St., Gee Chong & Company, Oriental goods
247 Third St., California Division of Highways
- 1939 Sanborn map—Lot 8 appears to be vacant along the northern frontage on Third Street. Wong Nim’s shop/Chinese temple is not shown but may be obscured by an inset map of an unassociated section of San Bernardino. 251 Third Street is a portion of the California Division of Highways facility.
- 1941 Sexton’s Record, Mountain View Cemetery, San Bernardino—Wong Nim dies in San Bernardino, age 89, on 10 December.
- 1942 Directory—*San Bernardino City Directory* lists the following:
201 Third St., Wong Nim
245 1/2 Third St., Gee Chung & Company, Oriental goods
247 Third St., California Division of Highways
- 1943 Probate—December—Wong Nim’s property in Lots 7 and 8 auctioned to the State of California for \$10,800 (Superior Court 1943a, 1943b).
- 1944 Directory—*San Bernardino City Directory* lists the following:
201 Third St., Vacant
245 Third St., Vacant
247 Third St., California Division of Highways
- 1944 Assessment—March—Wong Nim’s portion of lot is noted as sold to State of California by Estate of Wong Nim for use of Division of Highways (SBCA 1942–1947:18). Wong Nim’s structures demolished soon after sale to state.

FOOTING 1003: WONG NIM STORE AND KUAN YIN TEMPLE

A series of red brick and mortar footings discovered in the northwest corner of the block are the remains of the Wong Nim Store and attached Kuan Yin Temple (see Figure 5-17). The majority of the original brick work was removed or destroyed during demolition in 1944, and only a portion of the store foundation remained intact, including an 8-foot portion of the southern store footing and the southwest building corner. The footing consisted of two courses of common red brick bound by Roman cement. A section of the west wall remained only as a “robber trench.” The bricks had been removed (probably for reuse) during demolition and only the rubble-filled footing trench remained. A representative sample of the intact bricks was collected. A few miscellaneous bones were recovered from the footing of the Chinese store, including a portion of a sheep pelvis, sheep ribs, and a bone from the undershell of a softshell turtle.

Another brick alignment (Footing 1037), apparently also a footing, was found west of the store and temple. This may have belonged to the easternmost frame building facing Third Street (see Figure 5-17)

DOG BURIAL 1005

A small pit containing the remains of a domesticated dog was discovered and excavated during Phase II testing (Figure 5-19). The pit was 5 feet north of the Wong Nim back lot line and 49 feet west of the eastern property line. The small dog, with collar buckled on, was placed in a pit approximately 18 inches square and 9 inches deep. Once placed in the pit, the remains were covered with a 1/8-inch-thick ferrous sheet. The bottom of the burial pit appears to have been



Figure 5-19 Dog Burial 1005 is the complete skeleton of a 6–9-month-old female puppy.

approximately 18 inches below the Chinatown historic surface. The remains are the complete skeleton of an older puppy (about 6–9 months old). There was no visible trauma that might have caused death. By laying out the bones of the forelimb, it was determined that the dog was about 12 inches high at the shoulder. This is about the size of a terrier or other small breed. The skull did not show any specializations, like a short face, that might indicate a specific breed.

PIT 1032

Pit 1032 is a small refuse pit 25 feet north of the rear lot line (see Figure 5-15). The roughly conical pit, which contained a large quantity of alcohol containers, measured 2.0 feet in diameter at the surface and was 1.2 feet deep. It was constructed and filled in one phase. The majority of the alcohol containers were of olive glass (MNI = 24); the pit also included fragments of 10 brown glass alcohol containers and four Chinese brown glazed stoneware bottles. Alcohol containers contributed an MNI of 47 to the feature total of 125. The majority of these containers have brandy or champagne finishes, which suggests the consumption of wine and hard liquor rather than beer. Other items recovered include fragments representing eight storage jars, one coin, and two *zhu* (small glass bead-like playing pieces). Nails and a small quantity of can fragments also were recovered. The TPQ of 1872 obtained from the single marked bottle is augmented with information from manufacturing techniques noted on the collection of bottles. These include hand-tooled and hand-applied finishes, techniques that were in use up until the 1920s. Pit 1032 contained a small sample of bone: 3 beef bones, 22 pork bones, 16 chicken bones, 1 goose bone, and 9 fish bones (including 1 puffer bone) were recovered; the collection was too small to warrant further analysis. While the large open Privy 1035 appears to have accommodated the items cleaned out of the structures, the small and densely packed Pit 1032 reflects a care in disposal that was not necessary during this abandonment period.



Figure 5-20 Pit 1032 artifact collection grouped by functional category (scale = 12 inches).

Figure 5-21 Pit 1032 section drawing and Harris matrix.

Table 5-56
Pit 1032 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Activities				
Communication	Writing	Aqua glass ink bottle	3	1
Domestic				
Food Packing/Storage	Closure	Chinese brown glazed stoneware medium storage jar lid	1	1
	Closure	Chinese brown glazed stoneware small storage jar lid	1	1
	Container	Chinese brown glazed stoneware medium storage jar	46	4
	Container	Chinese brown glazed stoneware small storage jar	2	1
	Container	Chinese brown glazed stoneware soy sauce jar	1	1
<i>Food Packing/Storage Total</i>			<i>51</i>	<i>8</i>
Food Preparation/Consumption	Container	Light aqua glass condiment bottle	32	1
	Container	Olive glass soda bottle	2	2
	Kitchen	Chinese brown glazed stoneware shallow pan	7	2
	Tableware/Flatware	Chinese porcelain bowl	2	1
	Tableware/Flatware	Chinese porcelain spoon	1	1
<i>Food Preparation/Consumption Total</i>			<i>44</i>	<i>7</i>
Household/Maintenance		Clear glass light bulb	11	1
Leisure and Recreation				
Games	Gaming Piece	Asian coin	1	1
	Gaming Piece	Cobalt glass <i>zhu</i>	1	1
	Gaming Piece	White glass <i>zhu</i>	1	1
<i>Games Total</i>			<i>3</i>	<i>3</i>
Social Drugs	Alcohol Container	Amber glass alcohol bottle	28	1
	Alcohol Container	Brown glass alcohol bottle	174	10
	Alcohol Container	Chinese brown glazed stoneware liquor bottle	107	4
	Alcohol Container	Dark olive glass alcohol bottle	157	3
	Alcohol Container	Evergreen glass alcohol bottle	26	1
	Alcohol Container	Green glass alcohol bottle	17	1
	Alcohol Container	Light green glass alcohol bottle	63	2
	Alcohol Container	Light olive glass alcohol bottle	26	1
	Alcohol Container	Olive glass alcohol bottle	532	24
<i>Social Drugs Total</i>			<i>1,130</i>	<i>47</i>
Personal				
Clothing/Footwear	Fastener	Leather and metal grommet	7	7
	Fastener	Porcelain button	1	1
	Fastener	Shell button	1	1
<i>Clothing/Footwear Total</i>			<i>9</i>	<i>9</i>
Structural				
Building Material		Light aqua glass flat	2	—
Nails		Ferrous large nail	2	1
		Ferrous medium nail	54	46
<i>Nails Total</i>			<i>56</i>	<i>47</i>
Undetermined Use				
Miscellaneous Bottle, Jar, Can		Ferrous can	190	1
Miscellaneous Metal Item		Ferrous rod	5	1
Pit 1032 Total			1,504	125

Table 5-57
Pit 1032 Artifact Table 3a: Selected Artifact Categories by Group

	Count	MNI	Percent of MNI
Activities	3	1	1.3
Domestic	106	16	20.5
Leisure and Recreation	1,133	50	64.1
Personal	9	9	11.5
Structural (omitted)	—	—	—
Undetermined Use (selective)	195	2	2.6
<i>Pit 1032 Total</i>	<i>1,446</i>	<i>78</i>	<i>100.0</i>

Table 5-58
Pit 1032 Artifact Table 3b: Summary of Selected Artifacts by Category

Category	MNI	Percent
Building Material (omitted)	—	—
Clothing/Footwear	9	11.5
Communication	1	1.3
Food Packing/Storage	8	10.3
Food Preparation/Consumption	7	9.0
Games	3	3.8
Household/Maintenance	1	1.3
Miscellaneous Bottle, Jar, Can	1	1.3
Miscellaneous Metal Item	1	1.3
Nails (omitted)	—	—
Social Drugs	47	60.3
<i>Pit 1032 Total^a</i>	<i>78</i>	<i>100.1</i>

a - Total percentage greater than 100 is due to rounding.

Table 5-59
Pit 1032 Artifact Table 4a: Food Preparation and Consumption Vessels by Function

Type	MNI	Percent
Container	3	42.9
Kitchen (pot, baking pan, mixing bowl, etc.)	2	28.6
Tableware (plates, bowls, saucers, etc.)	1	14.3
Flatware (fork, knife, spoon, etc.)	1	1
<i>Pit 1032 Total^a</i>	<i>7</i>	<i>100.1</i>

a - Total percentage greater than 100 is due to rounding.

Table 5-60
Pit 1032 Artifact Table 4b:
Food Preparation and Consumption Vessels by Material

Material	MNI	Percent
Ceramic		
Chinese Brown Glazed Stoneware	2	28.6
Chinese Porcelain	2	28.6
Glass	3	42.9
<i>Pit 1032 Total^a</i>	7	100.1

a - Total percentage greater than 100 is due to rounding.

Table 5-61
Pit 1032 Artifact Table 4c: Decoration on Food Preparation and Consumption Vessels

Material	Object	Type of Decoration	MNI
Ceramic			
Chinese Brown Glazed Stoneware	Shallow Pan	Undecorated	2
Chinese Porcelain	Bowl	Bamboo	1
Chinese Porcelain	Spoon	Four Flowers	1
Glass			
Light Aqua Glass	Condiment Bottle	Undecorated	1
Olive Glass	Soda Bottle	Undecorated	2
<i>Pit 1032 Total</i>			7

Table 5-62
Pit 1032 Artifact Table 5: Social Drugs

Social Drug	MNI	Percent
Alcohol Container		
Alcohol Bottle	43	91.5
Liquor Bottle	4	8.5
<i>Pit 1032 Total</i>	47	100.0

Table 5-63
Pit 1032 Artifact Table 6b: Date and Origin of Marked/Datable Glass Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI^a
2837	1857–present	[SANF]ORD'S	Sanford Ink Co.	Chicago, IL	Sanford Corporation 2002	1
2847		(?foreign) KI0B (B) N (M) AVN (?) / (starburst in center) // P.F. H...ERING			Not found	1
2869	1872–1913	N & Co / 3173 (mold #s)	Nuttall & Co.	Lancaster, England	Toulouse 1971:380	1

a - MNI = minimum number of items.

PRIVY 1035

Privy 1035 is the third and last in a series of three backyard outhouses (see Figure 5-18). The earliest privy, Privy 1056, was constructed about 1880 and was replaced by Privy 1058 in 1900. Privy 1058 was in turn replaced by the larger and improved (wood-lined) Privy 1035 around 1910. Privy 1035 contained important artifact deposits associated with the occupation of Chinatown and represents the bulk of the San Bernardino Chinatown collection (Figure 5-22). Located 15 feet north of the Wong Nim property rear lot line, the redwood-lined privy measured 6.0 by 3.0 feet and was 3.6 feet deep. The artifacts from Privy 1035 are associated with three phases: construction, primary use, and abandonment and fill (Figures 5-23 and 5-24).

The abandonment-and-fill assemblage is dominated by Chinese gaming pieces, including 1,199 zinc coins (*wen*) stored in a small jar, 1,380 glass counters (*zhu*), 53 wood tiles (dominoes; *kwat p'ai*), and 18 dice (*shik tsai*). Some 578 white porcelain buttons also were recovered and were likely used in gaming. Only one zinc coin and two *zhu* were recovered from the Phase B1 (primary use) deposits. The remainder of the items associated with gaming were included in Phase B2 (abandonment and fill).

Among the other Phase B2 artifacts were many food preparation and consumption items, including whole and fragmentary evidence representing 21 Chinese porcelain bowls, 6 porcelain spoons, 9 glass tumblers, and 12 milk bottles. Kitchen items included three enamelware pots, one enamelware kettle, and one fry pan. A large quantity of whole and fragmentary food storage



Figure 5-22 Privy 1035 artifact collection grouped by functional category (scale = 12 inches).

PRIVY 1035



Figure 5-23 Privy 1035 section drawing.

PRIVIES 1035 and 1058

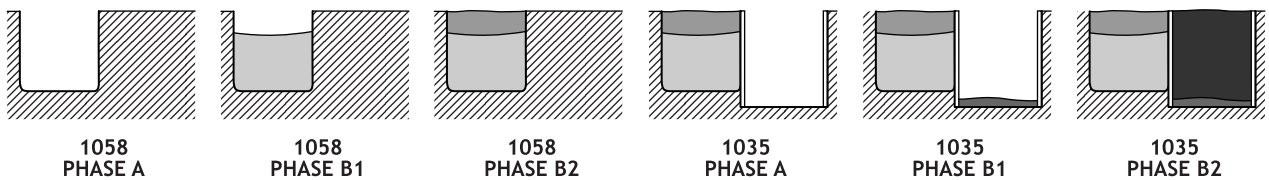
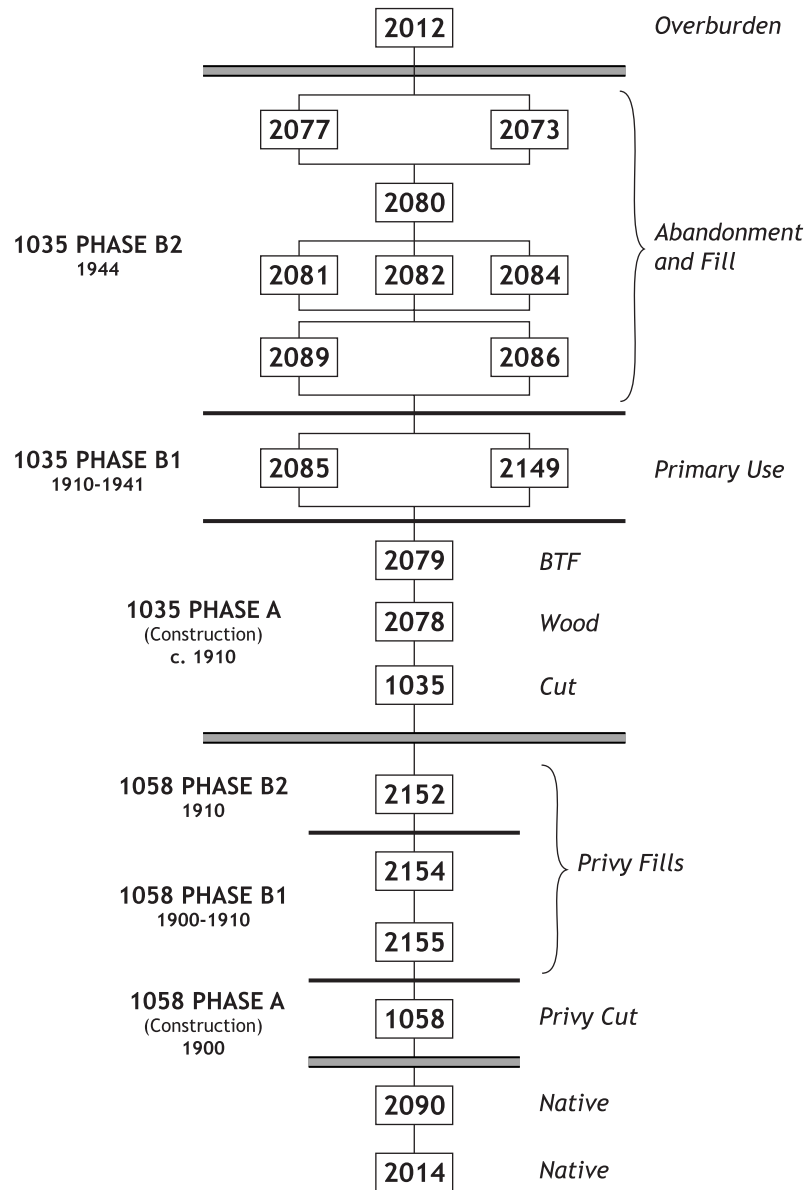


Figure 5-24 Harris matrix for Privies 1035 and 1058.

vessels also was recovered (Figure 5-22). The majority of the 81 items were Chinese brown glazed stoneware vessels. One fragmentary globular jar had Chinese characters on the shoulder, which translate as “One Hundred Thousand Pearls (or Treasures), Nine Rivers” (see Figure 6-23). The social drug category included whole and fragmentary evidence of 6 Chinese liquor bottles, 22 glass liquor bottles, and 19 items of opium paraphernalia. Communications are represented by one fragmentary and three whole ink bottles, one slate pencil, one graphite pencil, and one celluloid fountain pen. Also recovered were a pocket watch, a cuff link, and a harmonica. Forty-one whole and fragmentary medicine bottles were recovered from Privy 1035; 21 of these were recovered from Phase B1, which may suggest secretive behavior by one of Chinatown’s residents. Of the 6,801 items recovered, only 208 were from Phase B1.

Bones of domestic birds outnumber those of major meat animals in this trash deposit. Incidental animals include the local red-spotted toad and rattlesnake. A fair number of fish are represented, including some imported Chinese fishes. Pork accounted for about 40 percent of the meat by weight. Almost half of the cuts of meat represented were from moderately priced retail meats.

Two soil samples were sent to specialists for macrofloral and pollen analysis, one from Layer 2084, a secondary trash deposit, and the other from underlying Layer 2085, the primary privy deposit. The redwood-lined privy was the most recent Chinese privy sampled and was in use from circa 1910 to 1944. A greater variety of 23 pollen types was recovered from the secondary deposit (Layer 2084) compared to the 13 taxa identified in Layer 2085. The sample from the primary privy deposit (Layer 2085) yielded the maximum pollen concentration value of 32,000 grams per cubic centimeter out of all 10 samples analyzed, and this sample was almost pure mustard pollen (87% of the pollen count). The maximum concentration from this layer means that there was an exponential abundance of mustard pollen. Agave also was high in Layer 2085 at 5 percent compared to 3 percent in Layer 2084.

Privy 1035 follows a pattern of macrofloral remains similar to Privies 1056 and 1058. Figs dominate the samples at about 45 percent of the seeds from Cut 1035. Blackberry seeds are negligible in Layer 2084 but account for about 22 percent in Layer 2085. Layer 2085 is a primary privy deposit with few of the larger cultigens (possible mung bean and wheat) and many wild and weedy types. The charcoal is diverse, with a high proportion of sycamore, buckthorn, rose family, and diffuse-type wood. Layer 2084 contained mixed secondary refuse from abandoned buildings, which may explain why most of the remains were carbonized. Small seeds typical of privy deposits (chili pepper, fig, and blackberry), larger seeds of cultigens (cereal fragments, wheat, and cucurbit), and seeds from wild and weedy plants (many, but not all, carbonized) were recovered. These seeds were burned before disposal in the privy, possibly from cooking accidents, burning refuse, and/or burned privies or structures. The charcoal diversity is similar to Layer 2085, although this is the only sample from the site with oak and Type B charcoal.

Samples of the primary deposit were examined for parasites. Privy 1035 contained 1,065 ascarid eggs and 710 whipworm eggs per milliliter of sediment. These fecal-borne roundworm eggs are nearly ubiquitous in urban historic sites, and these numbers are not high for latrine sediments. Also identified were eggs of *Clonorchis sinensis*, the Chinese liver fluke.

The TPQ for the deposit is 1925. Privy 1035 was probably constructed around 1910 (Phase A), when it replaced Privy 1058. The privy was subsequently in use (Phase B1) up until the abandonment of Chinatown in 1941. During site clearance in 1944, material left in the abandoned buildings apparently was thrown into the open privy (Phase B2).

Table 5-64
Privy 1035 Artifact Table 1: Descriptive Artifact List

Privy 1055 Artifact Table 1: Descriptive Artifact List				
Group and Category	Type	Description	Count	MNI
Activities				
Commerce		Copper alloy coin penny (1887)	1	1
		Silver alloy coin quarter (1901)	1	1
Commerce Total			2	2
Communication		Brass alloy paper fastener	51	48
		Ferrous paper clip	1	1
	Writing	Clear glass ink bottle	13	2
	Writing	Clear glass master ink bottle	1	1
	Writing	Ferrous box	3	1
	Writing	Light aqua glass ink bottle	1	1
	Writing	Hard rubber fountain pen	1	1
	Writing	Rubber pencil eraser	1	1
	Writing	Slate pencil	1	1
	Writing	Slate	1	1
	Writing	Wood/metal/graphite pencil	4	1
	Communication Total			78
Farming/Gardening		Ferrous pick head	1	1
		Ferrous shovel head	2	1
Farming/Gardening Total			3	2
Firearms	Ammunition	Metal cartridge case	1	1
		Metal casing	2	2
Firearms Total			3	3
Domestic				
Clothing Maintenance		Clear glass shoe polish bottle	1	1
		Shoe polish	3	1
Clothing Maintenance Total			4	2
Food Packing/Storage	Closure	Aqua glass stopper	1	1
	Closure	Chinese brown glazed stoneware medium storage jar lid	41	16
	Closure	Chinese brown glazed stoneware small storage jar lid	5	4
	Closure	Chinese brown glazed stoneware straight sided jar lid	7	5
	Closure	Chinese porcelain medium storage jar lid	1	1
	Closure	Chinese stoneware medium storage jar lid	4	1
	Closure	Clear glass stopper	1	1
	Closure	Plaster sealant	2	1
	Container	Chinese brown glazed stoneware hollow	2	2
	Container	Chinese brown glazed stoneware large storage jar	204	4
	Container	Chinese brown glazed stoneware lug	1	—
	Container	Chinese brown glazed stoneware medium storage jar	551	25

Table 5-64 (continued)
Privy 1035 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Food Packing/Storage (continued)	Container	Chinese brown glazed stoneware small storage jar	41	12
	Container	Chinese brown glazed stoneware small storage jar and lid	9	1
	Container	Chinese brown glazed stoneware soy sauce jar	9	5
	Container	Chinese brown glazed stoneware straight sided jar	2	2
	Container	Chinese brown glazed stoneware straight sided jar and lid	32	1
	Container	Chinese porcelain jar	2	1
	Container	Chinese stoneware ginger jar	7	1
	Container	Chinese stoneware straight sided jar	1	1
	Container	Stoneware crock	1	1
	Container	Stoneware medium storage jar	1	1
<i>Food Packing/Storage Total</i>			925	87
Food Preparation/Consumption	Container	Amethyst glass creamer bottle	1	1
	Container	Amethyst glass milk bottle	39	2
	Container	Aqua glass bottle	1	1
	Container	Clear glass bottle	30	3
	Container	Clear glass canning jar and lid	2	1
	Container	Clear glass condiment jar	12	1
	Container	Clear glass creamer bottle	1	1
	Container	Clear glass milk bottle	71	10
	Container	Light aqua glass mineral water bottle	1	1
	Container	Light green glass jar	1	1
	Drinking Vessel	Clear glass cordial	2	1
	Drinking Vessel	Clear glass goblet	1	1
	Drinking Vessel	Clear glass tumbler	85	9
	Kitchen	Enamelware kettle	1	1
	Kitchen	Enamelware large sauce pan	1	1
	Kitchen	Enamelware pot	2	1
	Kitchen	Enamelware sauce pan	1	1
	Kitchen	Ferrous burner	2	1
	Kitchen	Ferrous can opener	2	2
	Kitchen	Ferrous element	14	1
	Kitchen	Ferrous fry pan	1	1
	Kitchen	Ferrous kitchen fork	1	1
	Kitchen	Ferrous meat hook	1	1
	Kitchen	Ferrous sauce pot	1	1
	Kitchen	Ferrous tube pan	2	1
	Kitchen	Metal ladle	1	1
	Serving	Chinese porcelain serving bowl	16	1
	Serving	Chinese porcelain serving dish	3	1
	Serving	Chinese porcelain teapot	32	2
	Serving	Chinese porcelain teapot lid	1	1
	Serving	Chinese porcelain teapot lug	1	1
	Serving	Semi-porcelain teapot	1	1
	Serving	White improved earthenware bowl	1	1

Table 5-64 (continued)
Privy 1035 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Food Preparation/Consumption (continued)	Serving	White improved earthenware dish	2	2
	Serving	White improved earthenware lid	1	1
	Tableware/Flatware	Chinese porcelain bowl	83	22
	Tableware/Flatware	Chinese porcelain cup	9	4
	Tableware/Flatware	Chinese porcelain dish	10	2
	Tableware/Flatware	Chinese porcelain hollow	7	2
	Tableware/Flatware	Chinese porcelain small dish	6	1
	Tableware/Flatware	Chinese porcelain small plate	1	1
	Tableware/Flatware	Chinese porcelain spoon	13	7
	Tableware/Flatware	Chinese porcelain tiny bowl	1	1
	Tableware/Flatware	Chinese porcelain tiny cup	2	1
	Tableware/Flatware	Ferrous knife	1	1
	Tableware/Flatware	Japanese porcelain cup	2	1
	Tableware/Flatware	Semi-porcelain bowl	1	1
	Tableware/Flatware	Semi-porcelain hollow	1	—
	Tableware/Flatware	White improved earthenware bowl	1	1
	Tableware/Flatware	White improved earthenware dish	1	1
	Tableware/Flatware	White improved earthenware plate	6	4
	Tableware/Serving	Semi-porcelain hollow	1	1
	Tableware/Serving	White improved earthenware dish	1	1
	Tableware/Serving	White improved earthenware hollow	5	2
<i>Food Preparation/Consumption Total</i>			<i>487</i>	<i>112</i>
Household/Furnishing		Clear glass hollow	2	2
		Clear glass vase	1	1
		Japanese porcelain decorative vessel	4	1
		Light aqua glass mirror	1	1
		Porcelain decorative	2	1
		Semi-porcelain box	2	1
		White glass undefined	1	1
	Lamp	Clear glass lamp chimney	53	5
	Lamp	Ferrous lamp	13	1
<i>Household/Furnishing Total</i>			<i>79</i>	<i>14</i>
Household/Maintenance		Black glass light bulb base	1	1
		Clear glass light bulb	42	1
		Dark purple glass light bulb	1	1
		Glass/Metal light bulb	1	1
		Metal/glass flashlight	5	2
<i>Household/Maintenance Total</i>			<i>50</i>	<i>6</i>
Undifferentiated		Chinese porcelain hollow	2	2
		Semi-porcelain undefined	1	1
		White improved earthenware hollow	1	1
<i>Undifferentiated Total</i>			<i>4</i>	<i>4</i>
Industrial				
Industrial		Ceramic kiln furniture	2	2
		Graphite battery core	1	1
		Metal/graphite battery core	20	11
<i>Industrial Total</i>			<i>23</i>	<i>14</i>

Table 5-64 (continued)
Privy 1035 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Machinery		Ferrous wheel	1	1
		Ferrous wheeled device	1	1
<i>Machinery Total</i>			2	2
Leisure and Recreation				
Collecting		Rocks	2	2
Games	Gaming Piece	Asian coin	1,321	1,320
	Gaming Piece	Black glass <i>zhu</i>	40	40
	Gaming Piece	Bone Chinese dice	17	17
	Gaming Piece	Bone dice	1	1
	Gaming Piece	Ceramic marble	1	1
	Gaming Piece	Multicolor glass <i>zhu</i>	572	572
	Gaming Piece	White glass <i>zhu</i>	773	768
	Gaming Piece	Wood tile	53	53
	Metal Box	Storage box for wood tiles	—	2
<i>Games Total</i>			2,778	2,774
Social Drugs	Alcohol Container	Brown glass alcohol bottle	63	11
	Alcohol Container	Chinese brown glazed stoneware liquor bottle	8	7
	Alcohol Container	Clear glass alcohol bottle	6	3
	Alcohol Container	Dark brown glass alcohol bottle	20	2
	Alcohol Container	Dark green glass alcohol bottle	5	1
	Alcohol Container	Dark olive glass alcohol bottle	36	3
	Alcohol Container	Light olive glass alcohol bottle	8	2
	Alcohol Container	Olive glass alcohol bottle	122	5
	Alcohol Container	Stoneware ale bottle	1	1
	Closure	Cork stoppers	4	2
	Closure	Ferrous crown cap	28	28
	Smoking Accessories	Brass alloy opium tin	9	2
	Smoking Accessories	Brass alloy opium tin strip	11	3
	Smoking Accessories	Ceramic opium pipe bowl	25	13
	Smoking Accessories	Clear glass opium lamp chimney	9	4
<i>Social Drugs Total</i>			355	87
Undifferentiated		Nickel/wood harmonica	1	1
Personal				
Accouterments		Black glass bead	1	1
		Brass alloy pocket watch	1	1
		Ferrous pocket knife	1	1
		Glass/metal hat pin	1	1
	Jewelry	Brass alloy cuff link	1	1
<i>Accouterments Total</i>			5	5
Clothing/Footwear		Metal shoe tack	1	1
	Fastener	Bone button	4	4
	Fastener	Metal button	4	3
	Fastener	Metal disk	1	1
	Fastener	Porcelain button	581	578
	Fastener	Shell button	4	3
<i>Clothing/Footwear Total</i>			595	590

Table 5-64 (continued)
Privy 1035 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Grooming	Toiletry	Bone Chinese toothbrush	5	1
	Toiletry	Bone toothbrush	2	1
	Toiletry	White improved earthenware ewer	46	1
Grooming Total			53	3
Health/Medicine	Container	Aqua glass Chinese medicine vial	5	3
	Container	Aqua glass medicinal bottle	1	1
	Container	Clear glass extract bottle	2	2
	Container	Clear glass medicinal bottle	85	41
	Container	Ferrous aspirin tin	2	2
	Container	Ferrous pill box	1	1
	Container	Light aqua glass Chinese medicine vial	9	3
	Container	Light aqua glass medicinal bottle	1	1
Health/Medicine Total			106	54
Structural				
Building Material		Aqua glass flat	9	—
		Asphalt	1	—
		Clay brick	84	—
		Light aqua glass flat	176	2
		Light green glass flat	105	—
		Mortar	9	—
		Plaster	3	—
		Plaster undefined	2	—
	Plumbing	Ceramic sewer pipe	1	—
	Plumbing	Ferrous sewer pipe	1	1
Building Material Total			391	3
Nails		Ferrous large nail	44	43
		Ferrous large tack	2	2
		Ferrous medium nail	3,784	2,434
		Ferrous nail/hook	2	2
		Ferrous small nail	180	180
		Ferrous staple	1	1
		Ferrous tack	197	197
Nails Total			4,210	2,859
Tools/Hardware		Enameled metal doorknob	1	1
		Ferrous chisel	1	1
		Ferrous door hinge	1	1
		Ferrous door key	1	1
		Ferrous hardware	3	2
		Ferrous hinges	1	1
		Ferrous hook	1	1
		Ferrous latch	1	1
		Ferrous lock	1	1
		Ferrous screw eye	1	1
		Ferrous staple	2	2
		Ferrous strap hinge	1	1
		Ferrous undefined	1	—
		Ferrous/metal eye screw	1	1
		Tools/Hardware Total		

Table 5-64 (continued)
Privy 1035 Artifact Table 1: Descriptive Artifact List

Army 1955 Artifact Table 1: Descriptive Artifact List				
Group and Category	Type	Description	Count	MNI
Undetermined Use				
Miscellaneous Bottle, Jar, Can		Amethyst glass bottle	12	2
		Aqua glass bottle	2	2
		Aqua glass bottle/jar	2	2
		Blue glass bottle	1	1
		Brown glass bottle	25	1
		Clear glass bottle	125	11
		Clear glass bottle/jar	320	2
		Clear glass hollow	5	1
		Cobalt glass bottle	3	1
		Dark evergreen glass bottle	4	2
		Dark green glass bottle	3	1
		Evergreen glass bottle	19	4
		Ferrous bottle/can	1	1
		Ferrous can	3,781	—
		Ferrous can seal	3	3
		Ferrous can/box	2	1
		Ferrous large round can	5	3
		Ferrous oval can	5	4
		Ferrous rectangular can	3	3
		Ferrous round can	2	2
		Green glass bottle	20	3
		Light aqua glass bottle	7	3
		Light aqua glass bottle/jar	3	2
		Light green glass bottle	5	2
		Light olive glass bottle	1	1
Miscellaneous Bottle, Jar, Can Total			4,359	58
Miscellaneous Closure		Cork stopper	1	1
		Ferrous cap	15	9
		Ferrous wheeled device	2	1
		Metal cap	1	1
Miscellaneous Closure Total			19	12
Miscellaneous Metal Item		Ferrous and metal hook	1	1
		Ferrous band	10	2
		Ferrous box	46	2
		Ferrous box/amorphous	1	1
		Ferrous flat band	2	1
		Ferrous handle	17	8
		Ferrous hollow	3	2
		Ferrous hook	2	—
		Ferrous large preform	20	—
		Ferrous pipe	3	1
		Ferrous preform	613	—
		Ferrous rod	4	2
		Ferrous strap	1	1
		Ferrous tubing	18	1
		Ferrous undefined	16	1
		Ferrous wire	234	—

Table 5-64 (continued)
Privy 1035 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Miscellaneous Metal Item (continued)		Metal band	3	—
		Metal container	4	1
		Metal tube	1	1
		Metal wire	1	—
<i>Miscellaneous Metal Item Total</i>			<i>1,000</i>	<i>25</i>
Undifferentiated		Blue green glass hollow	7	1
		Ceramic undefined	3	2
		Chinese porcelain hollow	2	1
		Clear glass hollow	5	—
		Ferrous undefined	1	—
		Hard rubber tube	4	1
		Lead amorphous	3	—
		Lead	1	—
		Lead undefined	4	—
		Redwood	15	—
		Rubber hose	12	1
		Steatite undefined	1	—
		Undefined	1	—
<i>Undifferentiated Total</i>			<i>59</i>	<i>6</i>
Total			15,610	6,801

Table 5-65
Privy 1035 Artifact Table 2a-1: Animals Represented by NISP

Common Name	Scientific Name	Count
Mammals		
Major Meat Mammals		
Cow	<i>Bos Taurus</i>	75
Sheep	<i>Ovis aries</i>	6
Pig	<i>Sus scrofa</i>	290
Minor Meat Mammals		
Deer	<i>Odocoileus hemionus</i>	5
Cottontail rabbit	<i>Sylvilagus</i> sp.	1
Incidental Mammals		
Rat	<i>Rattus rattus</i>	57
Mole	<i>Scapanus latimanus</i>	1
<i>Mammals Total</i>		<i>435</i>
Birds		
Domestic Poultry		
Chicken	<i>Gallus gallus</i>	605
Turkey	<i>Meleagris gallopavo</i>	61
Pigeon	<i>Columba livia</i>	1
Duck	<i>Anas platyrhyncha</i>	32
Goose	<i>Anser anser</i>	2
Wild Game Birds		
Duck, type unknown	Anatidae	2
<i>Birds Total</i>		<i>703</i>

Table 5-65 (continued)
Privy 1035 Artifact Table 2a-1: Animals Represented by NISP

Common Name	Scientific Name	Count
Amphibians/Reptiles		
Amphibians		
Red-spotted toad	<i>Bufo punctatus</i>	3
Reptiles		
Rattlesnake	<i>Crotalus atrox</i>	1
Western pond turtle	<i>Clemmys marmorata</i>	6
<i>Amphibians/Reptiles Total</i>		<u>10</u>
Fish		
California Fishes		
Yellowtail	<i>Seriola lalandi</i>	1
Rockfish	<i>Sebastes</i> sp.	2
Wrasse	Labridae	2
White seabass	<i>Atractoscion nobilis</i>	2
White croaker	<i>Genyonemus lineatus</i>	1
Ocean whitefish	<i>Caulolatilus princeps</i>	1
Petrale sole	<i>Eopsetta jordani</i>	1
Flatfishes	Pleuronectiformes	2
Chinese Fishes (imported)		
Snapper	<i>Lutjanus</i> sp.	1
Puffers	Tetraodontidae	6
Indeterminate Fishes		
Croaker, type unknown	Sciaenidae	4
Bony fishes	Teleostei	64
Scales	Teleostei	41
<i>Fish Total</i>		<u>128</u>
<i>Privy 1035 Total</i>		<u>1,276</u>

Table 5-66
Privy 1035 Artifact Table 2a-2: Meat Weight by Economics

Meat Type	Price Group/Cut	Meat Weight (lb)	Percent within Type	Percent within Price Group	Percent of total
Beef	High			41	
	Porterhouse	16.9	17.7		
	Sirloin	8.6	9.0		
	Prime rib	13.3	13.9		
	Moderate			47	
	Round	12.6	13.2		
	Rump	10.6	11.0		
	Chuck	14.0	14.6		
	Rib	8.1	8.5		
	Low			12	
	Hindshank	4.1	4.3		
	Brisket	4.8	5.0		
	Neck	2.8	2.9		
	<i>Beef Total</i>	<u>95.8</u>	<u>100.0</u>	100	60

Table 5-66 (continued)
Privy 1035 Artifact Table 2a-2: Meat Weight by Economics

Meat Type	Price Group/Cut	Meat Weight (lb)	Percent within Type	Percent within Price Group	Percent of total
Pork	High			28	
	Sirloin	6.9	10.8		
	Loin	7.6	11.9		
	Ham	3.2	5.1		
	Moderate			45	
	Rump	3.4	5.3		
	Shoulder butt	6.4	10.1		
	Picnic	19.1	30.0		
	Low			27	
	Neck	0.8	1.2		
	Hindshank	8.3	13.1		
	Foreshank	4.1	6.4		
	Feet	4.0	6.2		
	<i>Pork Total</i>	<i>63.7</i>	<i>100.0</i>	100	40
<i>All Meat Types Total</i>		<i>159.5</i>			
High Price Group Total		35%			
Moderate Price Group Total		46%			
Low Price Group Total		18%			

Table 5-67
Privy 1035 Artifact Table 2c-1a: Plant Material from Soil Samples

Material Type	Common Name	EB Number Layer	Absolute Counts and Weights		Material Density (count/liter)	
			3186	3187	3186	3187
			2084	2085	2084	2085
<i>Amaranthus</i> sp.	Pigweed, amaranth		37	3	15.42	1.50
<i>Brassica</i> sp.	Mustard		3	—	1.25	—
<i>Calandrinia</i> sp.	Red Maid		—	1	—	0.50
<i>Capsicum</i> sp.	Chile pepper		2	35	0.83	17.50
Cereal frag.			4	—	1.67	—
Cheno-Ams	?		—	3	—	1.50
<i>Chenopodium</i> cf. <i>ambrosiodes</i>	Mexican tea		10	—	4.17	—
<i>Chenopodium</i> sp.	Goosefoot		—	1	—	0.50
Cucurbitaceae	Squash/gourd family		1	—	0.42	—
<i>Ficus carica</i>	Fig		114	110	47.50	55.00
<i>Lycopersicon lycopersicum</i>	Tomato		—	1	—	0.50
<i>Malva parviflora</i>	Cheeseweed		1	5	0.42	2.50
Poaceae fragments	Grass family		—	1	—	0.50
<i>Polygonum</i> sp.	Knotweed		9	8	3.75	4.00
<i>Portulaca oleracea</i>	Common purslane		15	—	6.25	—
<i>Rubus</i> sp.	Blackberry		3	56	1.25	28.00
Scrophulariaceae cf.	Figwort family		5	—	2.08	—
<i>Triticum</i> sp.	Wheat		1	1	0.42	0.50

Table 5-67 (continued)
Privy 1035 Artifact Table 2c-1a: Plant Material from Soil Samples

Material Type	Common Name	EB Number Layer	Absolute Counts and Weights		Material Density (count/liter)	
			3186	3187	3186	3187
			2084	2085	2084	2085
<i>Vitis vinifera</i>	Grape		—	6	—	3.00
<i>Vulpia/Festuca</i> sp.	Fescue grass		1	—	0.42	—
Unknown Type 1			4	—	1.67	—
Unknown fruit 2			1	—	0.42	—
Unidentifiable seeds			30	22	12.50	11.00
<i>Seed Total</i> ^a			241	253	100.42	126.50
Plant Parts						
Wood ^b			2.44	0.87	1.017	0.433
Amorphous ^b			0.01	—	0.005	—
Monocotyledon stem			1	—	0.417	—
Rind cf.			4	—	1.667	—

a - Seed total includes unknown types and unidentifiable seeds and fragments.

b - Weight (grams/liter)

Table 5-68
Privy 1035 Artifact Table 2c-1b: Charcoal from Soil Samples

Material Type	EB Number Layer	3186		3187	
		2084		2085	
		Ct.	Wt. (g)	Ct.	Wt. (g)
Conifer					
Diffuse		1	0.01	1	0.01
Non-pine conifer		1	0.01	2	0.04
<i>Pinus</i> sp.		1	0.02	1	0.01
<i>Platanus</i> sp.		3	0.19	3	0.10
<i>Quercus</i> sp.		3	0.10	—	—
Rhamnaceae		3	0.14	5	0.15
Rosaceae cf.		3	0.09	4	0.08
<i>Salix</i> / <i>Populus</i>					
Type B		1	0.03	—	—
Indeterminate		3	0.20	4	0.03
Monocotyledon Stem		1	0.07	—	—
Total Identified		20	0.86	20	0.42
Total wood charcoal			2.44		0.87

Table 5-69
Privy 1035 Artifact Table 2c-2: Pollen Recovered from Soil Samples

	<i>Cut</i> <i>Layer</i> <i>Sample</i>	1035 2084 6013	1035 2085 6016
Pollen Concentration ^a		4,476.5	3,2051.8
Taxa Richness ^b		23.0	13.0
Spore Richness ^c		3.0	4.0
Tracers		65	9
Pollen Sum		232	230
Degraded		9.5	1.7
<i>Pinus</i>		2.2	0.4
Cupressaceae		0.9	
Rhamnaceae		2.6	0.4
Rosaceae		0.9	
Other Rosaceae		1.3	
Cheno-Am		15.5	1.7
Hi-Spine Asteraceae		11.6	0.9
Asteraceae, <i>Lactuca</i> type		0.1	
Asteraceae spiny type		0.1	
<i>Ambrosia</i> type		1.3	
Poaceae		2.2	0.9
Large Poaceae		1.7	
Brassicaceae		44.0	87.0
Fabaceae			0.4
Nyctaginaceae		X	X
Onagraceae		X	X
Caprifoliaceae, cf. <i>Lonicera</i>			X
Agave		2.6	5.2
Apiaceae		0.4	
Typha		0.4	
Cyperaceae		1.3	
Alnus			0.9
<i>Erodium</i>		X	
Unknown 6027 cf. Papaveraceae, tricolpate			X
Unknown 6027b, tricolpate (tricolporate), prolate, perforate			X
Unknown 6013 syncolpate		0.4	
Unknown 6021 cf. Asteraceae or Malvaceae with large pore (foramen?)			X
Unknowns Undifferentiated		1.3	0.4
Brassicaceae Aggregates		X(>50)	X(>500)
Spores ^f			
Small brown monoporate Spore		2	
Trilete Spore, psilate, in perine		2	
Trilete Spore, psilate		3	
Trilete Spore, sculptured		3	3
Bottle Spores			3
Diporate Cylindrical Spore			3

a - Concentration is an estimate of the number of pollen grains contained in a cubic centimeter of sample sediment (gr/cc), based on an initial tracer concentration of 25,084 *Lycopodium* spores and a sample size of 20 cc.

b - Taxa richness is the number of pollen types identified in a sample out of a total of 51 known pollen types.

c - Spore richness is the number of different spore types identified in a sample out of a total of 8 spores plus the root hyphae category.

d - X notes taxa identified during 100x scans or taxa presence in sterile samples.

e - Pollen aggregate notation shows the number of aggregates and the size of the largest aggregate in parentheses.

f - Spore values assigned per the following subjective rating of abundance: 1 = common, 2 = present, 3 = rare.

Table 5-70
Privy 1035 Artifact Table 3a: Selected Artifact Categories by Group

	Count	MNI	Percent of MNI
Activities	86	66	1.7
Domestic	1,549	225	5.7
Industrial	25	16	0.4
Leisure and Recreation	3,136	2,864	72.8
Personal	759	652	16.6
Structural (selective)	17	15	0.4
Undetermined Use (selective)	5,378	95	2.4
Privy 1035 Total^a	10,949	3,933	100.0

Table 5-71
Privy 1035 Artifact Table 3b: Summary of Selected Artifacts by Category

Category	MNI	Percent
Accouterments	5	0.1
Building Material (omitted)	—	—
Clothing Maintenance	2	<0.1
Clothing/Footwear	590	15.0
Collecting	2	<0.1
Commerce	2	<0.1
Communication	59	1.5
Farming/Gardening	2	<0.1
Firearms	3	<0.1
Food Packing/Storage	87	2.2
Food Preparation/Consumption	112	2.9
Games	2,774	70.6
Grooming	3	<0.1
Health/Medicine	54	1.4
Household/Furnishing	14	0.4
Household/Maintenance	6	0.2
Industrial	14	0.4
Machinery	2	<0.1
Miscellaneous Bottle, Jar, Can	58	1.5
Miscellaneous Closure	12	0.3
Miscellaneous Metal Item	25	0.6
Nails (omitted)	—	—
Social Drugs	87	2.2
Tools/Hardware	15	0.4
Undifferentiated (omitted)	—	—
Privy 1035 Total^a	3,928	99.7

a - Total percentage less than 100 is due to rounding.

Table 5-72

Privy 1035 Artifact Table 4a: Food Preparation and Consumption Vessels by Function

Type	MNI	Percent
Container	22	19.6
Cups and Mugs	6	5.4
Drinking Vessel (tumblers, stemware, etc.)	11	9.8
Kitchen (pot, baking pan, mixing bowl, etc.)	14	12.5
Serving (platter, covered dishes, etc.)	11	9.8
Tableware (plates, bowls, saucers, etc.)	35	31.3
Flatware (fork, knife, spoon, etc.)	9	8.0
Tableware/Serving	4	3.6
Privy 1035 Total	112	100.0

Table 5-73

Privy 1035 Artifact Table 4b:**Food Preparation and Consumption Vessels by Material**

Material	MNI	Percent
Ceramic		
Chinese Porcelain	47	42.0
Japanese Porcelain	1	0.9
Semi-porcelain	3	2.7
White Improved Earthenware	13	11.6
Glass	33	29.5
Metal	15	13.4
Privy 1035 Total^a	112	100.1

a - Total percentage greater than 100 is due to rounding.

Table 5-74

Privy 1035 Artifact Table 4c: Decoration on Food Preparation and Consumption Vessels

Material	Object	Type of Decoration	MNI
Ceramic			
Chinese Porcelain	Bowl	Bamboo	2
Chinese Porcelain	Bowl	Celadon	8
Chinese Porcelain	Cup	Celadon	3
Chinese Porcelain	Hollow	Celadon	1
Chinese Porcelain	Spoon	Celadon	2
Chinese Porcelain	Tiny Cup	Celadon	1
Chinese Porcelain	Bowl	Four Flowers	10
Chinese Porcelain	Cup	Four Flowers	1
Chinese Porcelain	Dish	Four Flowers	2
Chinese Porcelain	Hollow	Four Flowers	1
Chinese Porcelain	Serving Bowl	Four Flowers	1
Chinese Porcelain	Serving Dish	Four Flowers	1
Chinese Porcelain	Small Dish	Four Flowers	1
Chinese Porcelain	Small Plate	Four Flowers	1
Chinese Porcelain	Spoon	Four Flowers	4
Chinese Porcelain	Bowl	Hand painted	2
Chinese Porcelain	Teapot	Hand painted	1
Chinese Porcelain	Spoon	Undecorated	1
Chinese Porcelain	Teapot	Undecorated	1

Table 5-74 (continued)

Privy 1035 Artifact Table 4c: Decoration on Food Preparation and Consumption Vessels

Material	Object	Type of Decoration	MNI
Chinese Porcelain	Teapot Lid	Undecorated	1
Chinese Porcelain	Teapot Lug	Undecorated	1
Chinese Porcelain	Tiny Bowl	Undecorated	1
Japanese Porcelain	Cup	Celadon, hand painted	1
Semi-porcelain	Bowl	Undecorated	1
Semi-porcelain	Hollow	Undecorated	1
Semi-porcelain	Teapot	Undecorated	1
White Improved Earthenware	Bowl	Molded	1
White Improved Earthenware	Bowl	Undecorated	1
White Improved Earthenware	Dish	Undecorated	4
White Improved Earthenware	Hollow	Undecorated	2
White Improved Earthenware	Lid	Undecorated	1
White Improved Earthenware	Plate	Molded	1
White Improved Earthenware	Plate	Undecorated	3
Glass			
Amethyst Glass	Creamer Bottle	Undecorated	1
Amethyst Glass	Milk Bottle	Undecorated	2
Aqua Glass	Bottle	Undecorated	1
Clear Glass	Bottle	Undecorated	3
Clear Glass	Canning Jar and Lid	Undecorated	1
Clear Glass	Condiment Jar	Undecorated	1
Clear Glass	Cordial	Undecorated	1
Clear Glass	Creamer Bottle	Undecorated	1
Clear Glass	Goblet	Undecorated	1
Clear Glass	Milk bottle	Undecorated	10
Clear Glass	Tumbler	Undecorated	4
Clear Glass	Tumbler	Etched Flowers	1
Clear Glass	Tumbler	Optic Mold	2
Clear Glass	Tumbler	Paneled	1
Clear Glass	Tumbler	Press Mold	1
Light Aqua Glass	Mineral Water Bottle	Undecorated	1
Light Green Glass	Jar	Undecorated	1
Metal			
Enamelware	Kettle	Undecorated	1
Enamelware	Large Sauce Pan	Undecorated	1
Enamelware	Pot	Undecorated	1
Enamelware	Sauce Pan	Undecorated	1
Ferrous	Burner	Undecorated	1
Ferrous	Can Opener	Undecorated	2
Ferrous	Element	Undecorated	1
Ferrous	Fry Pan	Undecorated	1
Ferrous	Kitchen Fork	Undecorated	1
Ferrous	Knife	Undecorated	1
Ferrous	Meat Hook	Undecorated	1
Ferrous	Sauce Pot	Undecorated	1
Ferrous	Tube Pan	Undecorated	1
Metal	Ladle	Undecorated	1
Privy 1035 Total			112

Table 5-75
Privy 1035 Artifact Table 5: Social Drugs

Social Drug	MNI	Percent
Alcohol Container		
Alcohol Bottle	27	47.4
Ale Bottle	1	1.8
Liquor Bottle	7	12.3
<i>Alcohol Container Total</i>	<i>35</i>	<i>61.5</i>
Smoking Accessories		
Opium Lamp Chimney	4	7.0
Opium Pipe Bowl	13	22.8
Opium Tin	2	3.5
Opium Tin Strip	3	5.3
<i>Smoking Accessories Total</i>	<i>22</i>	<i>38.6</i>
Privy 1035 Total^a	57	100.1

a - Total percentage greater than 100 is due to rounding.

Table 5-76
Privy 1035 Artifact Table 6a: Date and Origin of Marked/Datable Ceramic Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI^a
1311	1881–	IRONSTONE CHINA / (standing Royal Coat of Arms) / WARRANTED	Steubenville Pottery Co.	Steubenville, OH	DeBolt 1994:262	1
1343		Character marks	? Yichen		Costello 1988:48, 49	—
1532	ca. 1890+	IRONSTONE CHINA / (Royal Coat of Arms) / J. & G. MEAKIN / HANLEY / ENGLAND	J. & G. Meakin	Staffordshire, England	Godden 1964:427	1
1876	>1891–1904	ROYAL IRONSTONE CHINA / (standing Royal Coat of Arms) / W. & E. CORN. / ENGLAND	W. & E. Corn	Staffordshire, England	Godden 1964:175; Kovel and Kovel 1986:229	1
		ROYAL IRONSTONE CHINA / (standing Royal Coat of Arms) / CHARLES MEAKIN / ENGLAND	Charles Meakin	Staffordshire, England	Kovel and Kovel 1986:229	

a - MNI = minimum number of items.

Table 5-77
Privy 1035 Artifact Table 6b: Date and Origin of Marked/Datable Glass Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI^a
1050		D8 (probably mold mark)			Not found	1
1074	ca. 1900	THOMAS / 18 / INKS			Lynch 2002	1
1282	1902–1930	IPGCO	Illinois Pacific Glass Co.	San Francisco, CA	Toulouse 1971:268	1
1283	1902–1930	Citrate of Magnesia (in shield) // IPGCO	Illinois Pacific Glass Co.	San Francisco, CA	Toulouse 1971:268	1
1285	1919–1933	DETROIT / BEV (GE small, double underline) CO. // Registered	Detroit Beverage Co.	Detroit, MI	McShane 2003	—
1286	1902–1930	IPG (in triangle) // NET CONTENTS 11oz	Illinois Pacific Glass Co.	San Francisco, CA	Toulouse 1971:268	1
1287	1915–P	N (in square)	Obear-Nester Glass Co.	St. Louis, IL	Toulouse 1971:374	1
1288	ca. 1880	L. G C O	Louisville Glass Works (Co.)	Louisville, KY	Toulouse 1971:323	1
1289	1902–1930	IPG (in triangle)	Illinois Pacific Glass Co.	San Francisco, CA	Toulouse 1971:268	1
1451	ca. 1921–1928	C (in square)	Crystal Glass Co.	Los Angeles, CA	Toulouse 1971:108	—
1454	1925–1930	P C (each in box)	Pacific Coast Glass Co.	San Francisco, CA	Toulouse 1971:414	1
1456		SAN... / ...AN...			Not found	1
1457		(2?druggist symbols in oval) / NEW YORK (in ribbon)			Not found	1
1459		FULL ½ PINT			Not found	1
1460	1916–1917	[P]INT / SANITARY DAIRY / W. WOLF / SAN BERNARDINO	W. Wolf	San Bernardino, CA	SBDC 1916	1
1461	Since 1894	ONE PINT / SAN BERNARDINO / CREAMERY / REG.	San Bernardino Creamery	San Bernardino, CA	Swope et al. 1997:77	1
1462	Pat. 1880	ONE PINT / OSBUN'S / MODEL DAIRY / REDLANDS, CAL.	Osburn's Model Dairy	Redlands, CA	Ketchum 1975:154	1
1463	Since 1894	[O]NE P[INT] / SAN BERNARDINO, CAL. / CREAMERY / REGISTERD / SAN BERNARDINO	San Bernardino Creamery	San Bernardino, CA	Swope et al. 1997:77	1
1464	Pat. 1880	ONE QUART / DALE GURSEY FARM...IVER (circle) / LOS ANGELES	Dale Gurseay Farm	San Bernardino, CA	Ketchum 1975:154	1

Table 5-77
Privy 1035 Artifact Table 6b: Date and Origin of Marked/Datable Glass Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI^a
1465	1906–1930	SC DA / ONE QUART (within large embossed “M”) / WCGCO	West Coast Glass Co.	Los Angeles, CA	Toulouse 1971:536	1
1466	1917–1931	ONE QUART / SUNSHINE DAI[RY] / S (in star)	Southern Glass Co.	Vernon, CA	Toulouse 1971:457	1
1467	Since 1894	ONE QUART / SAN BERNARDINO / CREAMERY / REG. // SBC	San Bernardino Creamery	San Bernardino, CA	Swope et al. 1997:77	1
1470	1857–present	SANFORD’S INKS / HALF PINT / AND LIBRARY PASTE	Sanford Ink Co.	Chicago, IL	Sanford Corporation 2002	1
1471	Since 1894	SAN BERNARDINO / CREAMERY	San Bernardino Creamery	San Bernardino, CA	Swope et al. 1997:77	1
1472	Since 1894	ONE / HALF PINT / SAN BERNARDINO / CREAMERY / REG. / WCGCO	San Bernardino Creamery	San Bernardino, CA	Swope et al. 1997:77	1
1475	1920–1933	LB	Long Beach Glass Co.	Long Beach, CA	Toulouse 1971:318	1
1477		ASEPTIC			Not found	1
1479	1911–1929	O (in square)	Owens Bottle Co.	Toledo, OH	Toulouse 1971:393	1
1480	1858–present	STAFFORD’S / INK / MADE IN U.S.A.	S. S. Stafford, Inc.	New York	Davis n.d.	1
1481	ca. 1910–1920	Double Seal (script w/ribbon at end of “L”)	Pacific Coast Glass Works	San Francisco, CA	Toulouse 1969:97	1
1483		HALF PINT			Not found	1
1484	1890s–1983	HAMLIN’S / WIZARD OIL // I (in diamond)	John A. Hamlin	Chicago, IL	Fike 1987:193; Wilson and Wilson 1971:41	1
1485	1911–1929	o (in square)	Owens Bottle Co.	Toledo, OH	Toulouse 1971:393	1
1486	Since 1894	ONE PINT / SAN BERNARDINO / CREAMERY / REG. / I.P.G.CO.	San Bernardino Creamery	San Bernardino, CA	Swope et al. 1997:77	1
1487	1902–1930	ONE PINT / I.P.G.CO.	Illinois Pacific Glass Co.	San Francisco, CA	Toulouse 1971:268	1
1488	1902–1930	IPG (in triangle) / NET CONTENTS 11 OZ.	Illinois Pacific Glass Co.	San Francisco, CA	Toulouse 1971:268	1

Table 5-77
Privy 1035 Artifact Table 6b: Date and Origin of Marked/Datable Glass Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI^a
1489	1922–1926	ONE QUART / GATE CITY / CREAMERY / SAN BERNARDINO / SGCO	Gate City Creamery	San Bernardino, CA	LADC 1926	1
1490	1920–1936	M. A. NEWMARK & CO. // McL (C is underlined)	McLaughlin Glass Co.	Vernon, CA	Toulouse 1971:354	1
1491	1853–present	(standing devil) / PLUTO	French Lick Springs Hotel Co.	French Lick, OK	Silverman 1997	1
1492		ONE QUART			Not found	1
1704	ca. 1920–1930	QUALITY / PURITY / BLUE RIBBON	Standard Glass Co.	Marion, IN	Toulouse 1971: 87, 484–485	1
1707	1915 – P	N (in square) A 18	Obear-Nester Glass Co.	St. Louis, IL	Toulouse 1971:374	1
1780	1921–1923	I X L	I X L Glass Bottle Co.	Inglewood, CA	Toulouse 1971:271	1
1782	1921–1923	I X L	I X L Glass Bottle Co.	Inglewood, CA	Toulouse 1971:271	1
1784	1921–1923	I X L	I X L Glass Bottle Co.	Inglewood, CA	Toulouse 1971:271	1
1869	1921–1923	I X L	I X L Glass Bottle Co.	Inglewood, CA	Toulouse 1971:271	1
3305	1916–1920	SANFORD'S INKS / ONE QUART / AND LIBRARY PASTE // I (in diamond)	Illinois Glass Co.; Sanford Ink Co.	Alton, IL; Chicago IL	Ferraro and Ferraro 1964:55; Toulouse 1971:264	—
3307	1920–1933	LB	Long Beach Glass Co.	Long Beach, CA	Toulouse 1971:318	1

a - MNI = minimum number of items.

Table 5-78
Privy 1035 Artifact Table 6c: Date and Origin of Marked/Datable Miscellaneous Items

Cat. No.	Date Range	Description	Maker	Origin	Reference	MNI^a
1851	ca. 1916–mid 1920's	WATERMAN'S / REG. U.S. IDEAL (in globe) PAT. OFF. / FOUNTAIN PEN // WATERMAN'S / REG. U.S. PAT. OFF. / MADE IN U.S.A. // WATERMAN'S / REG. U.S. / PAT. OFF. / 2 // 52	Waterman's	New York, NY	Fingerman 2001	1

a - MNI = minimum number of items.

Table 5-79
Privy 1035 Layer 2085 (Phase B1) Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Domestic				
Food Packing/Storage	Closure	Chinese brown glazed stoneware medium storage jar lid	2	1
	Closure	Chinese brown glazed stoneware straight sided jar lid	1	1
	Container	Chinese brown glazed stoneware hollow	1	1
	Container	Chinese brown glazed stoneware medium storage jar	28	1
	Container	Chinese brown glazed stoneware small storage jar	5	2
<i>Food Packing/Storage Total</i>			37	6
Food Preparation/Consumption	Tableware/Flatware	Chinese porcelain bowl	3	1
	Tableware/Flatware	Chinese porcelain spoon	1	1
<i>Food Preparation/Consumption Total</i>			4	2
Household/Furnishing	Lamp	Clear glass lamp chimney	2	1
Undifferentiated		Chinese porcelain hollow	1	1
Leisure and Recreation				
Games	Gaming Piece	Asian coin	1	1
	Gaming Piece	Multicolor glass <i>zhu</i>	3	3
	Gaming Piece	White glass <i>zhu</i>	2	2
<i>Games Total</i>			6	6
Social Drugs	Alcohol Container	Brown glass alcohol bottle	1	1
	Alcohol Container	Chinese brown glazed stoneware liquor bottle	1	1
	Alcohol Container	Light olive glass alcohol bottle	5	1
	Alcohol Container	Olive glass alcohol bottle	3	1
	Smoking Accessories	Brass alloy opium tin	5	1
<i>Social Drugs Total</i>			15	5
Personal				
Accouterments		Black glass bead	1	1
Clothing/Footwear	Fastener	Bone button	2	2
	Fastener	Metal button	2	1
	Fastener	Porcelain button	1	1
<i>Clothing/Footwear Total</i>			5	4
Health/Medicine	Container	Clear glass medicinal bottle	57	21

Table 5-79 (continued)
Privy 1035 Layer 2085 (Phase B1) Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Structural				
Building Material		Clay brick	6	1
		Light aqua glass flat	4	—
Building Material Total			10	1
Nails		Ferrous large nail	2	2
		Ferrous medium nail	209	110
		Ferrous small nail	2	2
		Ferrous tack	10	10
Nails Total			223	124
Tools/Hardware		Ferrous staple	1	1
Undetermined Use				
Miscellaneous Bottle, Jar, Can		Clear glass bottle	1	1
		Dark evergreen glass bottle	2	1
		Ferrous can	1	—
Miscellaneous Bottle, Jar, Can Total			4	2
Undifferentiated		Blue green glass hollow	1	—
Privy 1035 (Layer 2085) Total			367	175

Table 5-80
Privy 1035 Layer 2085 (Phase B1) Artifact Table 3b:
Summary of Selected Artifacts by Category

Category	MNI	Percent
Accouterments	1	2.0
Building Material (omitted)	—	—
Clothing/Footwear	4	8.2
Food Packing/Storage	6	12.2
Food Preparation/Consumption	2	4.1
Games	6	12.2
Health/Medicine	21	42.9
Household/Furnishing	1	2.0
Miscellaneous Bottle, Jar, Can	2	4.1
Nails (omitted)	—	—
Social Drugs	5	10.2
Tools/Hardware	1	2.0
Undifferentiated (omitted)	—	—
Privy 1035 (Layer 2085) Total^a	49	99.9

a - Total percentage less than 100 is due to rounding.

BONE PITS 1047, 1048, 1049, AND 1050

Four small pits containing cattle skulls and other bones were discovered in the northwest corner of the project area between the Wong Nim store and temple (Foundation 1003) and Third Street (see Figure 5-17). They were imbedded in silty sediment deposited from the overflows of adjacent Warm Creek. These pits were all approximately 18 inches in diameter and 9 inches deep. Three cattle skulls were recovered along with a few associated longbones. The animals were approximately 5 years old and no butchering marks were visible. They were small and long-horned, typical of Spanish and Mexican cattle. The skulls show special adaptations for the support of the long horns, the posterior portions exhibit a large boss (bony projection in the center) that develops as the cattle mature. These remains are thought to be associated with the butchering at Lúgo Ranch in the 1840s–1850s (see “Spanish Cattle” in Chapter 6).

PRIVY 1056

Privy 1056 is the first in a series of three backyard outhouses. It was replaced by Privy 1058 in about 1900, which in turn was replaced by Privy 1035 in about 1910 (see Figure 5-18). Located 3 feet south of the Wong Nim property line, this roughly square privy measured 3.5 by 2.5 feet and was 3.0 feet deep. The unlined privy was filled by three distinct depositional events. Lower Layer 2132 consisted of dense organic material with a low frequency of artifacts (MNI = 33) and is thought to have accumulated during the period of use. Layer 2130, a domestic refuse deposit, yielded a greater quantity of artifacts (MNI = 264). The uppermost deposit, Layer 2124,



Figure 5-25 Privy 1056 artifact collection grouped by functional category.

contained brick rubble associated with the demolition of adjacent Cooking Feature 1033 and is not included in this analysis.

The Privy 1056 assemblage consists of predominantly Chinese domestic artifacts and leisure and recreation items. Phase B1 (primary deposits) included fragments representing five Chinese brown glazed stoneware storage jars, while Phase B2 (refuse) contained fragments representing a total of 15 jars, including several fragments of a large globular jar with a shallow stoneware bowl plastered on as a lid. Chinese porcelains among the food preparation and consumption vessels include Celadon, Bamboo, and Four Flowers patterns. Phase B2 items include fragments of eight bowls and three spoons, while Phase B1 items include fragments of five bowls and one spoon. Artifacts in the social drug category consisted of fragments representing 8 opium pipe bowls, 2 opium lamp chimneys, strips representing 2 opium tins, and 13 fragments of alcohol bottles. Of the 25 items in this category, 14 were recovered from the primary deposit (Phase B1), suggesting concealment during the period of use. Gaming pieces and zinc coins also were collected. The dominant theme is one of subsistence, and almost all ceramics are Chinese. Few personal items were recovered. The TPQ for the deposit is the 1870s.

A fragment of a loosely woven plant fiber, similar to what would have been used in a hat or flat-bottomed basket, also was recovered. It is preserved in reverse, impressed into a block of soil, which provided a natural support. Conservationist Hickey Friedman identified the weave structure as a 2/2 twill (see Appendix D). Small, flat, thin, copper-alloy fragments were found within the associated soil; their function is not known.

Relatively few bones were recovered from this privy. No bird or fish remains were present, probably due to the small sample size. Elements of the native pond turtle and imported softshell turtle were identified. Pork composed 38 percent of the meat weight represented. Nearly 50 percent of the cuts of meat represented were from moderately priced retail meats.

Two soil samples from Privy 1056 were sent for macrofloral and pollen analysis, one from Layer 2130, a secondary trash deposit over Layer 2132, a primary privy deposit. The macrofloral results identified a pattern with a mix of food remains and refuse from other activities that is similar to Privies 1035 and 1058. Privy 1056 is the earliest of the sampled Chinese privies. Layer 2132 is clearly a primary privy deposit mixed with other refuse, both larger foods (peanut, wheat, and cereal fragments) and wild/weedy species, and a high density of charcoal. Blackberry constitutes about 30 percent of the seeds, but the seeds are dominated by mostly carbonized knotweed. The identified charcoal is predominantly the diffuse type and rose family, with no evidence of plant collecting at Warm Creek. The sample from Layer 2130 contained almost no plant matter. Although the soil sample from this layer was very small, the low density of remains also reflects that plant refuse was not deposited along with the other trash in this secondary refuse. Pollen analysis noted that the sample from the lower, older primary deposit (Layer 2132) contained a high pollen concentration, a high percentage of mustard, and a high percentage of agave pollen. The sample from the more recent refuse layer (Layer 2130) yielded a moderate pollen concentration and a low mustard value; agave pollen was present, and values of Chenopodiaceae, Asteraceae, and grass were higher than in the lower deposit (Layer 2132).

Samples of primary deposits were analyzed for parasites. Privy 1056 contained 3,374 ascarid eggs and 3,552 whipworm eggs per milliliter of sediment. These fecal-borne roundworm eggs are nearly ubiquitous in urban historic sites, and these numbers are not high for latrine sediments. Also discovered were eggs of *Clonorchis sinensis*, the Chinese liver fluke.

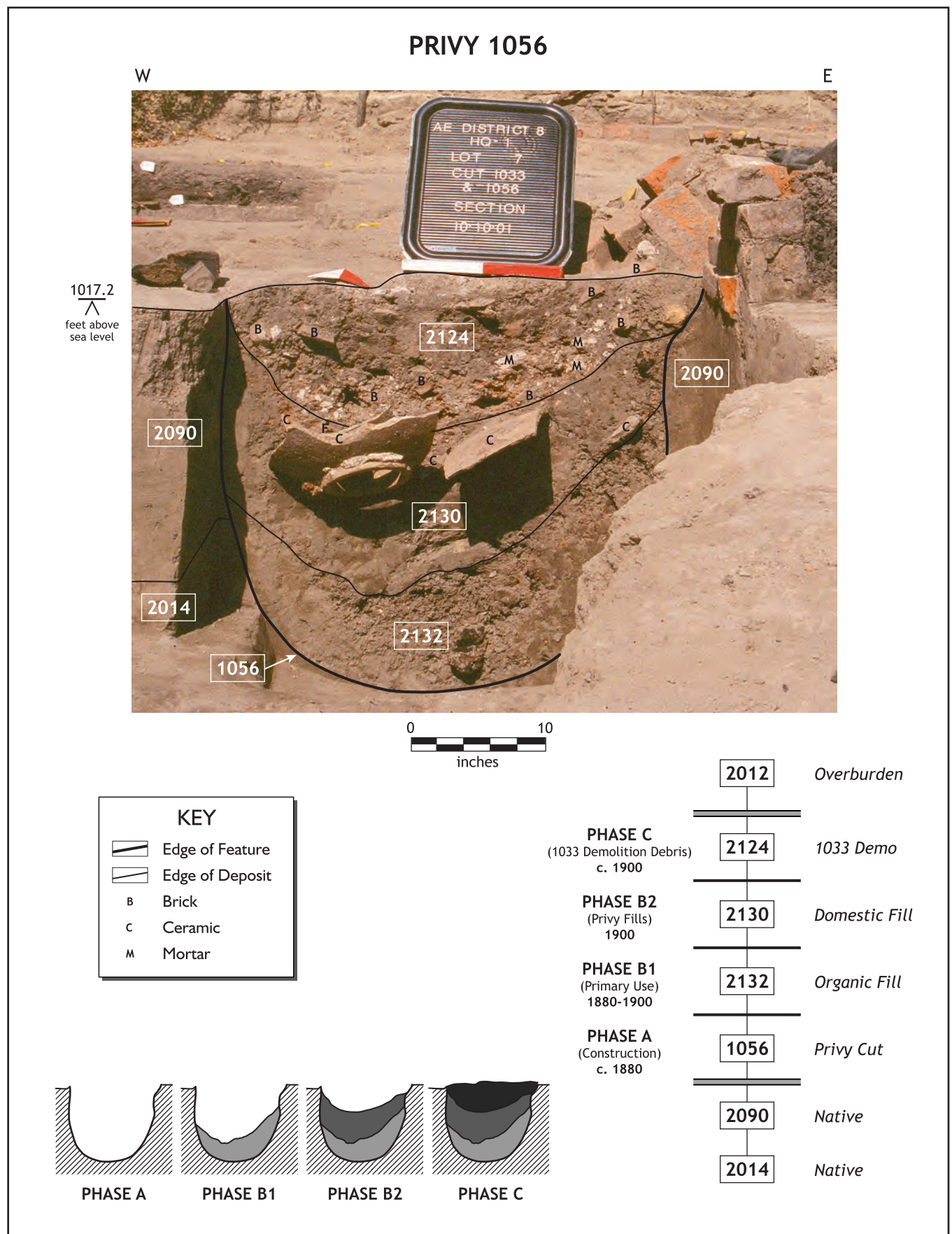


Figure 5-26 Privy 1056 section drawing and Harris matrix.

Privy 1056 is south of the Wong Nim property line and as such is likely to have been in use before Wong Nim's purchase of the lot in 1900. Privy 1056 is also the earliest of three privies in the Chinatown backyard. It was probably in use during the 1880s and 1890s, and abandoned and filled soon after 1900 when the property boundaries were established and a fence was constructed (see Figure 2-13).

Table 5-81
Privy 1056 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Activities				
Firearms	Ammunition	Metal cartridge	1	1
	Ammunition	Metal case	1	1
<i>Firearms Total</i>			2	2
Domestic				
Food Packing/Storage	Closure	Chinese brown glazed stoneware large storage jar lid	4	2
	Closure	Chinese brown glazed stoneware small storage jar lid	1	1
	Closure	Stoneware lid	1	1
	Container	Chinese brown glazed stoneware large storage jar	47	6
	Container	Chinese brown glazed stoneware medium storage jar	52	9
	Container	Chinese brown glazed stoneware small storage jar	7	3
	Container	Chinese brown glazed stoneware soy sauce jar	6	2
	Container	Chinese stoneware straight sided jar	1	1
<i>Food Packing/Storage Total</i>			119	25
Food Preparation/Consumption	Drinking Vessel	Clear glass tumbler	1	1
	Kitchen	Chinese brown glazed stoneware shallow pan	1	1
	Tableware/Flatware	Chinese porcelain bowl	50	13
	Tableware/Flatware	Chinese porcelain dish	1	1
	Tableware/Flatware	Chinese porcelain plate	1	1
	Tableware/Flatware	Chinese porcelain spoon	4	4
	Tableware/Flatware	Chinese porcelain undefined	1	1
	Tableware/Flatware	Porcelain plate	1	1
<i>Food Preparation/Consumption Total</i>			61	24
Household/Furnishing		Light aqua glass mirror	1	1
		Metal plate	1	1
	Lamp	Clear glass lamp chimney	3	1
<i>Household/Furnishing Total</i>			5	3
Undifferentiated		Earthenware undefined	1	1
Leisure and Recreation				
Games	Gaming Piece	Asian coin	7	6
	Gaming Piece	Black glass <i>zhu</i>	11	11
	Gaming Piece	Clay marble	1	1
	Gaming Piece	White glass <i>zhu</i>	10	10
<i>Games Total</i>			29	28

Table 5-81 (continued)
Privy 1056 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Social Drugs	Alcohol Container	Dark olive glass alcohol bottle	4	2
	Alcohol Container	Light olive glass alcohol bottle	4	2
	Alcohol Container	Olive glass alcohol bottle	31	9
	Smoking Accessories	Brass alloy opium tin	6	1
	Smoking Accessories	Brass alloy opium tin strip	6	1
	Smoking Accessories	Ceramic opium pipe bowl	14	8
	Smoking Accessories	Clear glass opium lamp chimney	4	2
<i>Social Drugs Total</i>			<i>69</i>	<i>25</i>
Personal				
Accouterments		Metal clasp	1	1
		Metal knife	4	1
<i>Accouterments Total</i>			<i>5</i>	<i>2</i>
Clothing/Footwear	Fastener	Ferrous button	1	1
	Fastener	Metal button	1	1
	Fastener	Porcelain button	3	3
	Fastener	Shell button	1	1
<i>Clothing/Footwear Total</i>			<i>6</i>	<i>6</i>
Health/Medicine	Container	Light aqua glass Chinese medicine vial	2	2
Structural				
Building Material		Light aqua glass flat	3	—
		Slate spall	1	1
<i>Building Material Total</i>			<i>4</i>	<i>1</i>
Nails		Ferrous large nail	2	2
		Ferrous medium nail	620	148
		Ferrous small nail	45	25
		Ferrous tack	4	4
<i>Nails Total</i>			<i>671</i>	<i>179</i>
Undetermined Use				
Miscellaneous Bottle, Jar, Can		Aqua glass bottle/jar	2	1
		Clear glass bottle	3	2
		Clear glass bottle/jar	1	1
		Cobalt glass bottle	3	1
		Ferrous can	165	—
		Green glass bottle	2	2
		Light aqua glass bottle/jar	1	1
		Light green glass bottle	1	1
		Olive glass bottle	2	1
<i>Miscellaneous Bottle, Jar, Can Total</i>			<i>180</i>	<i>10</i>
Miscellaneous Metal Item		Copper alloy wire	5	—
		Ferrous rod	5	—
		Ferrous undefined	1	1
		Lead undefined	1	—
		Metal tube	1	1
		Metal wire	2	—
<i>Miscellaneous Metal Item Total</i>			<i>15</i>	<i>2</i>
Undifferentiated		Amethyst glass hollow	1	1
		Lead undefined	1	1
<i>Undifferentiated Total</i>			<i>2</i>	<i>2</i>
Privy 1056 Total			<i>1,171</i>	<i>312</i>

Table 5-82		
Privy 1056 Artifact Table 2a-1: Animals Represented by NISP		
Common Name	Scientific Name	Count
Mammals		
Major Meat Mammals		
Cow	<i>Bos taurus</i>	17
Pig	<i>Sus scrofa</i>	88
Incidental Mammals		
Cat	<i>Felis catus</i>	2
Rat	<i>Rattus rattus</i>	8
Ground squirrel	<i>Spermophilus beecheyi</i>	1
Pocket gopher	<i>Thomomys</i> sp.	1
<i>Mammals Total</i>		<u>117</u>
Amphibians/Reptiles		
Amphibians		
Red-spotted toad	<i>Bufo punctatus</i>	9
Reptiles		
Western pond turtle	<i>Clemmys marmorata</i>	1
Softshell turtle	<i>Trionyx</i> sp.	1
<i>Amphibians/Reptiles Total</i>		<u>11</u>
Privy 1056 Total		128

Table 5-83					
Privy 1056 Artifact Table 2a-2: Meat Weight by Economics					
Meat Type	Price Group/Cut	Meat Weight (lb)	Percent within Type	Percent within Price Group	Percent of Total
Beef	High			28	
	Porterhouse	1.8	4.9		
	Prime rib	8.6	23.4		
	Moderate			48	
	Round	2.6	7.0		
	Chuck	6.6	17.9		
	Rib	8.6	23.4		
	Low			23	
	Hindshank	4.8	13.0		
	Foreshank	3.8	10.4		
	<i>Beef Total</i>	<u>36.9</u>	<u>100.0</u>	100	62
Pork	High			35	
	Loin	6.7	29.2		
	Ham	1.4	6.1		
	Moderate			49	
	Shoulder butt	11.2	49.2		
	Low			15	
	Neck	0.8	3.5		
	Hindshank	1.2	5.1		
	Foreshank	0.3	1.1		
	Feet	1.3	5.8		
	<i>Pork Total</i>	<u>22.8</u>	<u>100.0</u>	100	38
All Meat Types Total		59.7			
High Price Group Total		31%			
Moderate Price Group Total		49%			
Low Price Group Total		20%			

Table 5-84
Privy 1056 Artifact Table 2c-1a: Plant Material from Soil Samples

Material Type	Common Name	EB Number Layer	Absolute Counts and Weights		Material Density (count/liter)	
			3190	3191	3190	3191
			2132	2130	2132	2130
<i>Amaranthus</i> sp.	Pigweed, amaranth		45	—	12.86	—
<i>Arachis hypogaea</i>	Peanut		1	—	0.29	—
<i>Capsicum</i> sp.	Chile pepper		20	—	5.71	—
Cereal frag.			4	—	1.14	—
Cheno-Ams	?		9	—	2.57	—
<i>Chenopodium</i> sp.	Goosefoot		—	3	—	30
<i>Descurania</i> sp. cf.	Tansy mustard		4	—	1.14	—
<i>Ficus carica</i>	Fig		40	—	11.43	—
<i>Malva parviflora</i>	Cheeseweed		4	—	1.14	—
Poaceae fragments	Grass family		4	—	1.14	—
Poaceae small	Grass family		4	—	1.14	—
<i>Polygonum</i> sp.	Knotweed		495	—	141.43	—
<i>Rubus</i> sp.	Blackberry		387	—	110.57	—
<i>Solanum</i> sp.	Nightshade		72	—	20.57	—
<i>Triticum</i> sp.	Wheat		6	—	1.71	—
<i>Vitis vinifera</i>	Grape		2	—	0.57	—
<i>Xanthium</i> sp. cf.	Cocklebur		1	—	0.29	—
Unknown Type 1			4	—	1.14	—
Unknown fruit 2			21	—	6.00	—
Unidentifiable seeds			21	—	6.00	—
<i>Seed Total^a</i>			<i>1,144</i>	<i>3</i>	<i>326.86</i>	<i>30</i>
Plant parts						
Wood ^b			6.76	P	1.931	P
Amorphous ^b			0.60	—	0.171	—
Monocotyledon stem			1	—	0.286	—
Rind cf.			5	—	1.429	—
Unidentified seed coat/nutshell			—	—	—	—
Unidentifiable plant parts			1	—	0.286	—

a - Seed total includes unknown types and unidentifiable seeds and fragments.

b - Weight (grams/liter)

Table 5-85
Privy 1056 Artifact Table 2c-1b: Charcoal from Soil Samples

Material Type	EB Number Layer	3186	
		2084	
		Ct.	Wt. (g)
Diffuse		5	0.53
Non-pine conifer		1	0.07
<i>Pinus</i> sp.		1	0.04
Rhamnaceae		2	0.16
Rosaceae cf.		7	0.32
Indeterminate		3	0.52
Monocotyledon stem		1	<.01
Total Identified		20	1.64
Total Wood Charcoal		—	6.76

Table 5-86
Privy 1056 Artifact Table 2c-2: Pollen Recovered from Soil Samples

	<i>Cut Layer Sample</i>	1056 2130 6024	1056 2132 6021
Pollen Concentration ^a		4,232.9	1,3147.5
Taxa Richness ^b		28.0	21.0
Spore Richness ^c		2.0	5.0
Tracers		72	29
Pollen Sum		243	304
Degraded		17.3	7.9
<i>Pinus</i>		1.2	3.0
Cupressaceae		0.8	0.7
<i>Quercus</i>		0.4	—
Rhamnaceae		3.3	—
Rosaceae		—	0.7
Rosaceae, cf. <i>Rubus</i> or <i>Prunus</i>		0.8	0.3
Artemisia		0.4	—
Cheno-Am		14.8	9.9
Hi-Spine Asteraceae		16.5	4.3
Asteraceae, <i>Lactuca</i> type		0.1	0.1
<i>Ambrosia</i> type		9.9	1.3
Poaceae		4.1	1.6
Large Poaceae		6.6	1.6
Brassicaceae		8.2	53.6
Lamiaceae		2.5	—
Fabaceae		1.6	—
Solanaceae		0.4	0.3
Nyctaginaceae		X	0.3
Onagraceae		0.8	0.3
<i>Eriogonum</i>		—	X
Caprifoliaceae, cf. <i>Lonicera</i>		X	1.0
<i>Agave</i>		X	6.3
Liliaceae		1.2	—
Apiaceae		—	1.0
Cyperaceae		4.9	
<i>Alnus</i>		—	0.3
<i>Erodium</i>		X	
Unknown 6027 cf. Papaveraceae, tricolpate		—	X
Unknown 6001 non-umbel		0.8	2.0
Unknown 6013 syncolpate		2.1	0.0
Unknown 6021 cf. Asteraceae or Malvaceae with large pore (foramen?)		—	0.3
Unknown 6021 cf. Fabaceae		—	0.3
Unknown 6021 P3		—	0.3
Unknowns Undifferentiated		1.2	1.3
Total Aggregates^e		—	1.3
Brassicaceae Aggregates		—	4 (>50)
Spores ^f			
Root Hyphae		—	—
Small Brown Monoporate Spore		3	—

Table 5-86 (continued)
Privy 1056 Artifact Table 2c-2: Pollen Recovered from Soil Samples

	<i>Cut Layer Sample</i>	1056 2130 6024	1056 2132 6021
Trilete Spore, psilate, in perine		3	3
Trilete Spore, sculptured		3	—
Monolete Spore		3	3
Monolete Spore, sculptured		3	—

- a - Concentration is an estimate of the number of pollen grains contained in a cubic centimeter of sample sediment (gr/cc), based on an initial tracer concentration of 25,084 *Lycopodium* spores and a sample size of 20 cc.
- b - Taxa richness is the number of pollen types identified in a sample out of a total of 51 known pollen types.
- c - Spore richness is the number of different spore types identified in a sample out of a total of 8 spores plus the root hyphae category.
- d - X notes taxa identified during 100x scans or taxa presence in sterile samples.
- e - Pollen aggregate notation shows the number of aggregates and the size of the largest aggregate in parentheses.
- f - Spore values assigned per the following subjective rating of abundance: 1 = common, 2 = present, 3 = rare.

Table 5-87
Privy 1056 Artifact Table 3a: Selected Artifact Categories by Group

	Count	MNI	Percent of MNI
Activities	2	2	1.6
Domestic	193	53	41.1
Leisure and Recreation	98	52	40.3
Personal	13	10	7.8
Structural (omitted)	—	—	—
Undetermined Use (selective)	195	12	9.3
Privy 1056 Total^a	501	129	100.1

a - Total percentage greater than 100 is due to rounding.

Table 5-88
Privy 1056 Artifact Table 3b: Summary of Selected Artifacts by Category

Category	MNI	Percent
Accouterments	2	1.5
Building Material (omitted)		
Clothing/Footwear	6	4.6
Firearms	2	1.5
Food Packing/Storage	25	19.2
Food Preparation/Consumption	24	18.5
Games	28	21.5
Health/Medicine	2	1.5
Household/Furnishing	3	2.3
Miscellaneous Bottle, Jar, Can	10	7.7
Miscellaneous Metal Item	2	1.5
Nails (omitted)		
Social Drugs	25	19.2
Undifferentiated (selective)	1	0.8
Privy 1056 Total^a	130	99.8

a - Total percentage less than 100 is due to rounding.

Table 5-89

Privy 1056 Artifact Table 4a: Food Preparation and Consumption Vessels by Function

Type	MNI	Percent
Drinking Vessel (tumblers, stemware, etc.)	1	4.2
Kitchen (pot, baking pan, mixing bowl, etc.)	1	4.2
Tableware (plates, bowls, saucers, etc.)	18	75.0
Flatware (fork, knife, spoon, etc.)	4	16.7
Privy 1056 Total^a	24	100.1

a - Total percentage greater than 100 is due to rounding.

Table 5-90

Privy 1056 Artifact Table 4b: Food Preparation and Consumption Vessels by Material

Material	MNI	Percent
Ceramic		
Chinese Brown Glazed Stoneware	1	4.2
Chinese Porcelain	20	83.3
Porcelain	1	4.2
Semi-porcelain	1	4.2
Glass	1	4.2
Privy 1056 Total^a	24	100.1

a - Total percentage greater than 100 is due to rounding.

Table 5-91

Privy 1056 Artifact Table 4c: Decoration on Food Preparation and Consumption Vessels

Material	Object	Type of Decoration	MNI
Ceramic			
Chinese Brown Glazed Stoneware	Shallow Pan	Undecorated	1
Chinese Porcelain	Bowl	Bamboo	3
Chinese Porcelain	Bowl	Bamboo	1
Chinese Porcelain	Bowl	Celadon	5
Chinese Porcelain	Spoon	Celadon	2
Chinese Porcelain	Bowl	Four Flowers	4
Chinese Porcelain	Plate	Four Flowers	1
Chinese Porcelain	Bowl	Undecorated	1
Chinese Porcelain	Spoon	Four Flowers	2
Chinese Porcelain	Undefined	Four Flowers	1
Porcelain	Plate	Undecorated	1
Semi-porcelain	Plate	Undecorated	1
Glass	Tumbler	Undecorated	1
Privy 1056 Total			24

Table 5-92

Privy 1056 Artifact Table 5: Social Drugs

Social Drug	MNI	Percent
Alcohol Container		
Alcohol Bottle	13	52.0
Smoking Accessories		
Opium Lamp Chimney	2	8.0
Opium Pipe Bowl	8	32.0
Opium Tin	1	4.0
Opium Tin Strip	1	4.0
<i>Smoking Accessories Total</i>	<i>12</i>	<i>48.0</i>
Privy 1056 Total	25	100.0

PRIVY 1058

Privy 1058 is the second in a series of three backyard outhouses. The earliest privy discovered, Privy 1056 (constructed circa 1880), was replaced by Privy 1058 in 1900. Privy 1058 was in turn replaced by larger and improved (wood-lined) Privy 1035 around 1910 (see Figure 5-18).

At the end of the excavation of Privy 1035, Privy 1058 was identified behind the decomposing redwood lining of Privy 1035. Privy 1058 had been cut into by Privy 1035, and the surviving portion measured 3.6 by 2.6 feet and was 3.0 feet deep. This earlier privy was unlined and appears to have been constructed around 1900. Two layers (Layers 2155 and 2154) represent the period of primary use, thought to be from 1900 to 1910. A third layer (Layer 2152) was deposited when the privy was abandoned close to 1910.

Domestic items account for more than half of the assemblage, and the majority of the food preparation and consumption items are made of Chinese porcelain. Included in Phase B1 are fragments of seven bowls, three spoons, and two tiny cups. Phase B2 contains a similar quantity of porcelains and includes fragments representing eight bowls, three spoons, and one tiny cup. Within the social drug category, 63 percent of the items were recovered from Phase B2. Also recovered from Phase B2 were 13 gaming pieces, a variety of Chinese brown glazed stoneware jar fragments (MNI = 15), and abundant nails. Phase B1 included three gaming pieces, fragments of eight storage jars, and one pocket knife. Few datable items were recovered from these deposits. A TPQ of 1880 is derived from a bottle base in Layer 2152 (Phase B2).

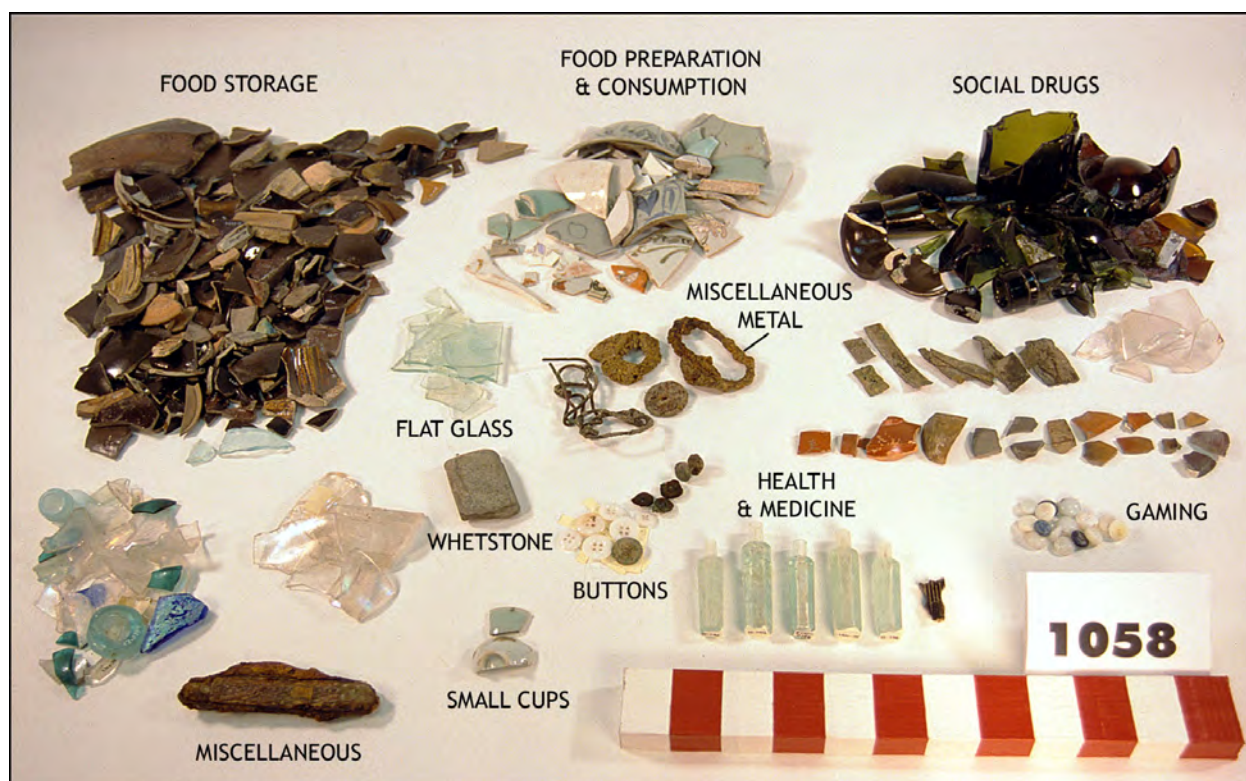


Figure 5-27 Privy 1058 artifact collection grouped by functional category (scale = 12 inches).

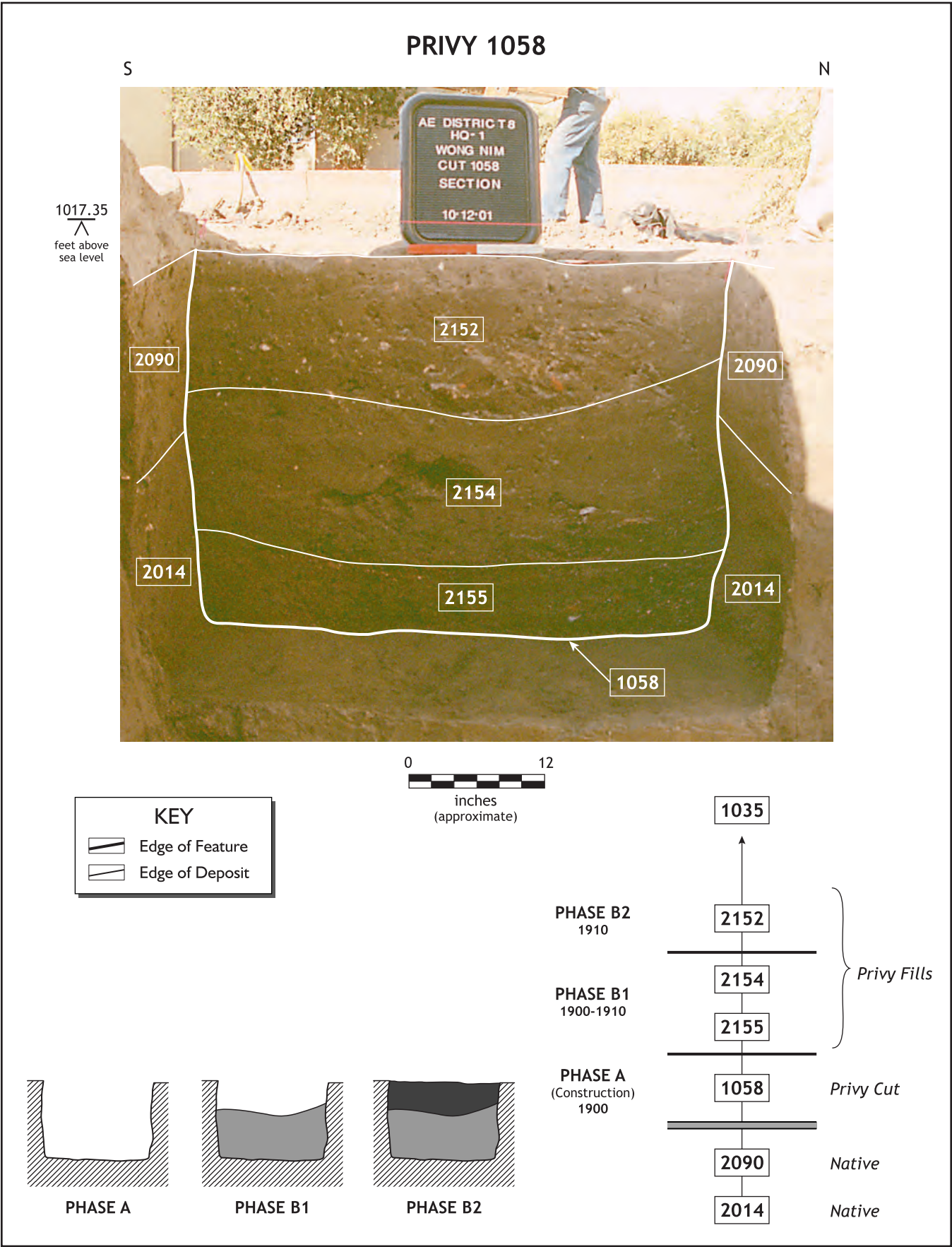


Figure 5-28 Privy 1058 section drawing and Harris matrix.

Generally, the collection consists of fragmentary evidence of day-to-day life in turn-of-the-century Chinatown.

Less than 200 bones were recovered from this privy. No birds are represented, but a few bones of both Chinese and California fishes were recovered. In addition to the local pond turtle, a single bone of an eastern box turtle was recovered. This may have been a pet that escaped and burrowed under the privy wall, becoming entrapped. Pork made up 36 percent of the meat weight represented. More than 60 percent of the meat cuts were moderately priced retail cuts.

One soil sample from Layer 2155, the primary privy deposit, was sent to specialists for macrofloral and pollen analysis. Privy 1058 follows a pattern of macrofloral remains similar to Privies 1035 and 1056. Figs dominate the samples at about 52 percent. Blackberry seeds are negligible, and there are a few of the larger cultigens (possible mung bean and wheat) and many wild and weedy types. The charcoal is diverse, with a high proportion of sycamore, buckthorn, rose family, and diffuse-type wood. The pollen studies revealed that a high concentration and a moderate diversity of 24 pollen types characterized the assemblage. Although the variety was moderate, the spectrum was dominated by mustard at 75 percent of the count. The project maximum percentage for agave (7%) was from this sample.

Privy 1058 also was examined for parasites and none were identified.

Privy 1058 must have been abandoned and filled before Privy 1035 was cut into it. The lower layers accumulated during the period of use, and the upper layer was the result of a deliberate refuse filling by Chinatown residents. The nature of the upper deposit (2,152 fragmented artifacts) suggests a thoughtful approach to the task; many of the small fragments may have been strewn around the backyard and shoveled or brushed into the open privy during its closure. The lack of a wholesale refuse deposit, as in Privy 1035, also may be indicative of a restrained approach to mass consumerism (i.e., reuse of containers, etc).

Table 5-93
Privy 1058 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Domestic				
Food Packing/Storage	Closure	Chinese brown glazed stoneware medium storage jar lid	19	5
	Closure	Chinese brown glazed stoneware small storage jar lid	2	2
	Closure	Chinese brown glazed stoneware straight sided jar	2	1
	Container	Chinese brown glazed stoneware large storage jar	38	3
	Container	Chinese brown glazed stoneware medium storage jar	192	8
	Container	Chinese brown glazed stoneware small storage jar	28	3
	Container	Chinese brown glazed stoneware straight sided jar	3	1
	Container	Chinese stoneware medium storage jar	2	1
<i>Food Packing/Storage Total</i>			<i>286</i>	<i>24</i>

Table 5-93 (continued)
Privy 1058 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Food Preparation/Consumption	Drinking Vessel	Clear glass tumbler	7	2
	Tableware/Flatware	Chinese porcelain bowl	45	15
	Tableware/Flatware	Chinese porcelain shallow dish	1	1
	Tableware/Flatware	Chinese porcelain spoon	23	6
	Tableware/Flatware	Chinese porcelain tiny cup	3	3
	Tableware/Flatware	Semi-porcelain dish	2	1
	Tableware/Serving	Chinese porcelain hollow	6	1
	Tableware/Serving	Semi-porcelain hollow	1	1
	Tableware/Serving	White improved earthenware hollow	7	4
Food Preparation/Consumption Total			95	34
Household/Furnishing		Clear glass hollow	5	3
		Green glass hollow	3	1
		Light yellow glass hollow	2	1
	Lamp	Clear glass lamp chimney	5	2
Household/Furnishing Total			15	7
Leisure and Recreation				
Games	Gaming Piece	Asian coin	2	2
	Gaming Piece	Black glass <i>zhu</i>	3	3
	Gaming Piece	White glass <i>zhu</i>	13	13
Games Total			18	18
Social Drugs	Alcohol Container	Brown glass alcohol bottle	6	1
	Alcohol Container	Chinese brown glazed stoneware liquor bottle	3	2
	Alcohol Container	Dark olive glass alcohol bottle	9	3
	Alcohol Container	Light olive glass alcohol bottle	2	1
	Alcohol Container	Olive glass alcohol bottle	37	10
	Alcohol Container	Very dark olive glass alcohol bottle	2	1
	Closure	Ferrous crown cap	1	1
	Smoking Accessories	Brass alloy opium tin	33	2
	Smoking Accessories	Brass alloy opium tin strip	3	1
	Smoking Accessories	Ceramic opium pipe bowl	18	9
	Smoking Accessories	Clear glass opium lamp chimney	6	2
	Social Drugs Total			120
Personal				
Accouterments		Metal and Antler Pocketknife	1	1
Clothing/Footwear	Fastener	Brass/copper alloy rivet	1	1
	Fastener	Metal and Leather Tack and Rivet	3	2
	Fastener	Metal button	1	1
	Fastener	Porcelain button	6	6
Clothing/Footwear Total			11	10
Grooming		Bone Chinese toothbrush	1	1
Health/Medicine	Container	Light aqua glass Chinese medicine vial	6	5

Table 5-93 (continued)
Privy 1058 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Structural				
Building Material		Clay brick	6	3
		Concrete	1	—
		Light aqua glass flat	24	—
		Mortar	5	—
Building Material Total			36	3
Nails		Ferrous large nail	28	28
		Ferrous medium nail	1,514	1,497
		Ferrous nail	2	1
		Ferrous small nail	50	50
Nails Total			1,594	1,576
Tools/Hardware		Flint whetstone	1	1
		Ferrous disk	1	1
		Ferrous staple	1	1
Tools/Hardware Total			3	3
Undetermined Use				
Miscellaneous Bottle, Jar, Can		Aqua glass bottle	3	2
		Brown glass bottle	13	3
		Clear glass bottle	18	6
		Cobalt glass bottle	2	2
		Evergreen glass bottle	7	3
		Ferrous can	27	—
		Green glass bottle	1	1
		Light aqua glass bottle	6	1
		Light aqua glass bottle/jar	4	1
		Light olive glass bottle	3	2
		Olive glass bottle	1	1
Miscellaneous Bottle, Jar, Can Total			85	22
Miscellaneous Metal Item		Copper alloy wire	2	—
		Ferrous band	2	—
		Ferrous can	37	—
		Ferrous handle	1	1
		Ferrous ring	1	1
		Lead undefined	5	—
		Metal ball	1	1
		Metal wire	3	1
Miscellaneous Metal Item Total			52	4
Undifferentiated		Blue green glass hollow	5	1
		Clear glass hollow	3	1
		Clear glass undefined	8	—
		Semi-porcelain hollow	4	1
		Stone	1	1
Undifferentiated Total			21	4
Privy 1058 Total			2,344	1,745

Table 5-94		
Privy 1058 Artifact Table 2a-1: Animals Represented by NISP		
Common Name	Scientific Name	Count
Mammals		
Major Meat Mammals		
Cow	<i>Bos taurus</i>	29
Sheep	<i>Ovis aries</i>	1
Pig	<i>Sus scrofa</i>	117
Minor Meat Mammals		
Deer	<i>Odocoileus hemionus</i>	2
Incidental Mammals		
Cat	<i>Felis catus</i>	4
Rat	<i>Rattus rattus</i>	2
<i>Mammals Total</i>		<u>155</u>
Reptiles		
Western pond turtle	<i>Clemmys marmorata</i>	2
Eastern box turtle	<i>Emydoidea</i> sp.	1
<i>Total Reptiles</i>		<u>3</u>
Fish		
Chinese Fishes (imported)		
Threadfin bream	<i>Nemipterus</i> sp.	1
Yellow croaker	<i>Larimichthys crocea</i>	1
Indeterminate Fishes		
Bony fishes	Teleostei	6
Croaker, type unknown	Sciaenidae	3
<i>Fish Total</i>		<u>11</u>
<i>Privy 1058 Total</i>		<u>169</u>

Table 5-95					
Privy 1058 Artifact Table 2a-2: Meat Weight by Economics					
Meat Type	Price Group/Cut	Meat Weight (lb)	Percent within Type	Percent within Price Group	Percent of Total
Beef	High			26	
	Porterhouse	5.5	11.2		
	Sirloin	2.7	5.5		
	Prime rib	4.3	8.8		
	Moderate			74	
	Round	16.9	34.4		
	Rump	2.4	4.9		
	Chuck	8.3	16.8		
	Rib	9.0	18.3		
	Low			0	
	<i>Beef Total</i>	<u>49.1</u>	<u>100.0</u>	100	64
Pork	High			32	
	Sirloin	1.4	5.1		
	Loin	6.3	22.8		
	Ham	1.0	3.6		
	Moderate			41	
	Rump	2.0	7.2		
	Shoulder butt	4.6	16.5		
	Picnic	4.8	17.2		

Table 5-95
Privy 1058 Artifact Table 2a-2: Meat Weight by Economics

Meat Type	Price Group/Cut	Meat Weight (lb)	Percent within Type	Percent within Price Group	Percent of Total
Pork	Low			28	
(continued)	Neck	0.4	1.3		
	Hindshank	4.1	15.0		
	Foreshank	1.1	4.1		
	Feet	2.0	7.2		
	<i>Total</i>	<i>27.6</i>	<i>100.0</i>	100	36
All Meat Types Total		76.7			
High Price Group Total		28%			
Moderate Price Group Total		62%			
Low Price Group Total		10%			

Table 5-96
Privy 1058 Artifact Table 2c-1a: Plant Material from Soil Samples

Material Type	Common Name	EB Number	Absolute Counts and Weights	Material Density (count/liter)
		Layer	3192	3192
			2155	2155
<i>Amaranthus</i> sp.	Pigweed, amaranth		18	8.57
Cheno-Ams	?		2	0.95
<i>Ficus carica</i>	Fig		85	40.48
<i>Lycopersicon lycopersicum</i>	Tomato		1	0.48
<i>Malva parviflora</i>	Cheeseweed		2	0.95
Poaceae	Grass family		1	0.48
Polygonaceae	Buckwheat family		3	1.43
<i>Polygonum</i> sp.	Knotweed		1	0.48
<i>Portulaca oleracea</i>	Common purslane		1	0.48
<i>Rubus</i> sp.	Blackberry		6	2.86
Solanaceae	Nightshade family		2	0.95
<i>Vigna</i> sp. cf.	Mung bean		3	1.43
<i>Xanthium</i> sp. Cf.	Cocklebur		3	1.43
Unknown fruit 2			21	10.00
Unknown Type 3			1	0.48
Unidentifiable seeds			13	6.19
<i>Seed Total^a</i>			<i>163</i>	<i>77.62</i>
Plant parts				
Wood ^b			1.47	0.701
Amorphous ^b			0.07	0.701
Unidentified seed coat/nutshell			1	0.031
Unidentifiable plant parts			3	0.476

a - Seed total includes unknown types and unidentifiable seeds and fragments.

b - Weight (grams/liter).

Table 5-97
Privy 1058 Artifact Table 2c-1b: Charcoal from Soil Samples

Material Type	EB Number	3192
	Layer	2155
	Ct.	Wt. (g)
Diffuse	2	0.14
Non-pine conifer	2	0.1
<i>Pinus</i> sp.	1	<.01
<i>Platanus</i> sp.	3	0.21
Rhamnaceae	2	0.03
Rosaceae cf.	2	0.06
<i>Salix</i> / <i>Populus</i>	2	0.03
Indeterminate	5	0.11
Monocotyledon Stem	1	<.01
Total Identified	20	0.68
Total Wood Charcoal		1.47

Table 5-98
Privy 1058 Artifact Table 2c-2: Pollen Recovered from Soil Samples

	Cut	1056
	Layer	2130
	Sample	6024
Pollen Concentration ^a		12,900.3
Taxa Richness ^b		24.0
Spore Richness ^c		3.0
Tracers		21
Pollen Sum		216
Degraded		4.6
<i>Abies</i>		X
<i>Pinus</i>		0.9
Cupressaceae		X
<i>Juglans</i>		X
Rhamnaceae		1.4
Cheno-Am		1.9
Hi-Spine Asteraceae		2.8
Asteraceae spiny type		0.1
<i>Ambrosia</i> type		0.9
Poaceae		1.9
Large Poaceae		X
Brassicaceae		75.0
Lamiaceae		0.5
Fabaceae		0.5
Nyctaginaceae		0.5

Table 5-98 (continued)
Privy 1058 Artifact Table 2c-2: Pollen Recovered from Soil Samples

	<i>Cut</i>	1056
	<i>Layer</i>	2130
	<i>Sample</i>	6024
Caryophyllaceae		X
Caprifoliaceae, cf. <i>Lonicera</i>		X
<i>Agave</i>		6.9
Liliaceae		0.5
Apiaceae		0.5
<i>Typha</i>		X
Cyperaceae		0.5
Unknown 6027 cf. Papaveraceae, tricolpate		X
Unknown 6027b, tricolpate (tricolporate), prolate, perforate		X
Unknowns Undifferentiated		0.9
Spores ^f		
Trilete Spore, psilate		3
Trilete Spore, sculptured		3
Diporate Cylindrical Spore		3

a - Concentration is an estimate of the number of pollen grains contained in a cubic centimeter of sample sediment (gr/cc), based on an initial tracer concentration of 25,084 *Lycopodium* spores and a sample size of 20 cc.

b - Taxa richness is the number of pollen types identified in a sample out of a total of 51 known pollen types.

c - Spore richness is the number of different spore types identified in a sample out of a total of 8 spores plus the root hyphae category.

d - X notes taxa identified during 100x scans or taxa presence in sterile samples.

e - Pollen aggregate notation shows the number of aggregates and the size of the largest aggregate in parentheses.

f - Spore values assigned per the following subjective rating of abundance: 1 = common, 2 = present, 3 = rare.

Table 5-99
Privy 1058 Artifact Table 3a: Selected Artifact Categories by Group

	Count	MNI	Percent of MNI
Activities	1	1	0.6
Domestic	396	65	40.1
Leisure and Recreation	138	51	31.5
Personal	19	17	10.5
Structural (selective)	2	2	1.2
Undetermined Use (selective)	137	26	16.0
Privy 1058 Total^a	693	162	99.9

a - Total percentage less than 100 is due to rounding.

Table 5-100
Privy 1058 Artifact Table 3b: Summary of Selected Artifacts by Category

Category	MNI	Percent
Accouterments	1	0.6
Building Material (omitted)	—	—
Clothing/Footwear	10	6.2
Food Packing/Storage	24	14.8
Food Preparation/Consumption	34	21.0
Games	18	11.1
Grooming	1	0.6
Health/Medicine	5	3.1
Household/Furnishing	7	4.3
Miscellaneous Bottle, Jar, Can	22	13.6
Miscellaneous Metal Item	4	2.5
Nails (omitted)	—	—
Social Drugs	33	20.4
Tools/Hardware	3	1.8
Undifferentiated (omitted)	—	—
<i>Privy 1058 Total</i>	<i>162</i>	<i>100.0</i>

Table 5-101
Privy 1058 Artifact Table 4a: Food Preparation and Consumption Vessels by Function

Type	MNI	Percent
Cups and Mugs	3	8.8
Drinking Vessel (tumblers, stemware, etc.)	2	5.9
Tableware (plates, bowls, saucers, etc.)	17	50.0
Flatware (fork, knife, spoon, etc.)	6	17.6
Tableware/Serving	6	17.6
<i>Privy 1058 Total^a</i>	<i>34</i>	<i>99.9</i>

a - Total percentage less than 100 is due to rounding.

Table 5-102
Privy 1058 Artifact Table 4b: Food Preparation and Consumption Vessels by Material

Material	MNI	Percent
Ceramic		
Chinese Porcelain	26	76.5
Semi-porcelain	2	5.9
White Improved Earthenware	4	11.8
Glass	2	5.9
<i>Privy 1058 Total^a</i>	<i>34</i>	<i>100.1</i>

a - Total percentage greater than 100 is due to rounding.

Table 5-103

Privy 1058 Artifact Table 4c: Decoration on Food Preparation and Consumption Vessels

Material	Object	Type of Decoration	MNI
Ceramic			
Chinese Porcelain	Bowl	Bamboo	6
Chinese Porcelain	Bowl	Celadon	2
Chinese Porcelain	Hollow	Celadon	1
Chinese Porcelain	Spoon	Celadon	3
Chinese Porcelain	Tiny Cup	Celadon	2
Chinese Porcelain	Bowl	Four flowers	3
Chinese Porcelain	Bowl	Hand painted, overglazed	1
Chinese Porcelain	Bowl	Hand painted	2
Chinese Porcelain	Bowl	Hand painted orange floral	1
Chinese Porcelain	Spoon	Hand painted	1
Chinese Porcelain	Spoon	Hand painted interior	1
Chinese Porcelain	Spoon	Hand painted, gilded	1
Chinese Porcelain	Tiny Cup	Hand painted	1
Chinese Porcelain	Shallow Dish	Undecorated	1
Semi-porcelain	Dish	Undecorated	1
Semi-porcelain	Hollow	Undecorated	1
White Improved Earthenware	Hollow	Undecorated	4
Glass			
Clear Glass	Tumbler	Undecorated	2
Privy 1058 Total			34

Table 5-104

Privy 1058 Artifact Table 5: Social Drugs

Social Drug	MNI	Percent
Alcohol Container		
Alcohol Bottle	16	50.0
Liquor Bottle	2	6.3
<i>Subtotal Alcohol</i>	<i>18</i>	<i>56.3</i>
Smoking Accessories		
Opium Lamp Chimney	2	6.3
Opium Pipe Bowl	9	28.1
Opium Tin	2	6.3
Opium Tin Strip	1	3.1
<i>Subtotal Smoking Accessories</i>	<i>14</i>	<i>43.8</i>
Privy 1058 Total^a	32	100.1

a - Total percentage greater than 100 is due to rounding.

Table 5-105

Privy 1058 Artifact Table 6b: Date and Origin of Marked/Datable Glass Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI ^a
794	1880–1918	Amethyst color			Munsey 1970:55	1
956		...N...			Not found	1

a – MNI = minimum number of items.

DRAINS AND SHEET REFUSE

The Chinatown backyard contained two drains filled with Chinatown debris (Drains 1002 and 1031) and an earlier drain filled with virtually sterile sands (Drain 1060). A sheet refuse area (Sheet Refuse 1057) also is associated with activities in this portion of the lot (see Figure 5-15).

Drain 1060 was discovered below Drain 1002 and represents an earlier period of Chinatown irrigation. The unlined drain, measuring 27.0 by 0.7 feet and 0.6 foot deep (within the project area), contained only small fragments representing one storage jar and three Chinese porcelain items (MNI = 9). The drain served businesses or residences on Third Street and was constructed during the early days of Chinatown (1878–1880s). The sand within the drain is thought to be the result of siltation during the period of use. Drain 1060 subsequently was sealed by Sheet Refuse 1057. This feature consists of ash and charcoal cleaned from the hearth of a roasting oven (Cooking Feature 1001) and spread across the immediate area as well as general domestic debris, consisting of fragments representing 25 storage jars, 17 porcelain bowls, 5 glass *zhu*, 9 alcohol containers, and opium paraphernalia.

A second drain (Drain 1002) of similar size but with a redwood lining was constructed in the same location as Drain 1060. Decomposition of the wood rendered an exact understanding of the construction difficult. It is not known if the drain was of “open top” or “box” type. Drain 1002 became filled with refuse identical to that defined as Sheet Refuse 1057, suggesting that Drain 1002 and Cooking Feature 1001 were in use concurrently and that Sheet Refuse 1057 and the fill within Drain 1002 represent the same depositional phase. In Tables 5-106 and 5-109, the artifacts from these two contexts are analyzed as one collection, Drain 1002/Sheet Refuse 1057.



Figure 5-29 Drain 1002 and Sheet Refuse 1057 artifact collection grouped by functional category (scale = 12 inches).

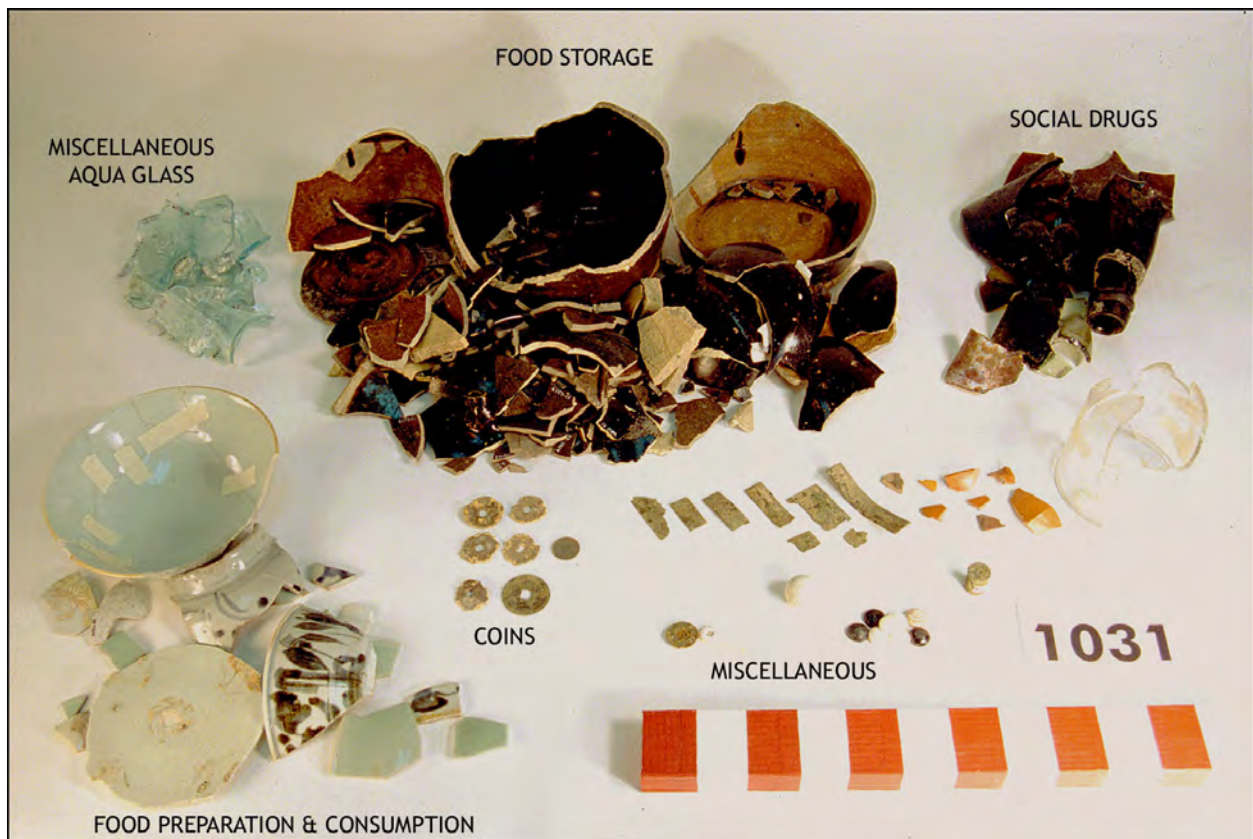


Figure 5-30 Drain 1031 artifact collection grouped by functional category (scale = 12 inches).

A third drain (Drain 1031) ran west-east across the Chinatown backyard and met with contemporary Drain 1002 on its west side. Within the project area, the unlined Drain 1031 measured 20.0 by 1.0 feet and was 0.6 foot deep. The drain contained domestic refuse from the Chinatown occupation period, which included 7 coins and 3 buttons, fragments from 11 storage jars and 6 bowls, opium paraphernalia, and several pig jaws (see below). Drains 1002, 1060, and 1031 drained into Warm Creek and most likely carried off wastewater from Third Street dwellings or businesses such as laundries.

By the time contemporary Drains 1002 and 1031 were being filled with backyard refuse, they certainly had been abandoned as water drains. As laundries were still the largest employer in Chinatown in 1900, but negligible by 1920, this abandonment likely happened sometime between those dates.

The faunal material from all the drains and the sheet refuse were analyzed as one collection. Pork, chicken, and fish were well represented in the accumulated trash in the backyards of Chinatown. Four different species of imported Chinese fish were recovered. Pork composed 48 percent of the meat by weight. Included in the refuse were portions of a minimum of seven hog heads that exhibited butchering marks indicating removal of the tongue, and knife or cleaver scores indicating removal of meat from the head and jowl. Development of the tusks indicates that these were four female and three male pigs. Almost 60 percent of the meat cuts were from moderately priced retail cuts.

DRAIN 1002/DRAIN 1060/SHEET REFUSE 1057

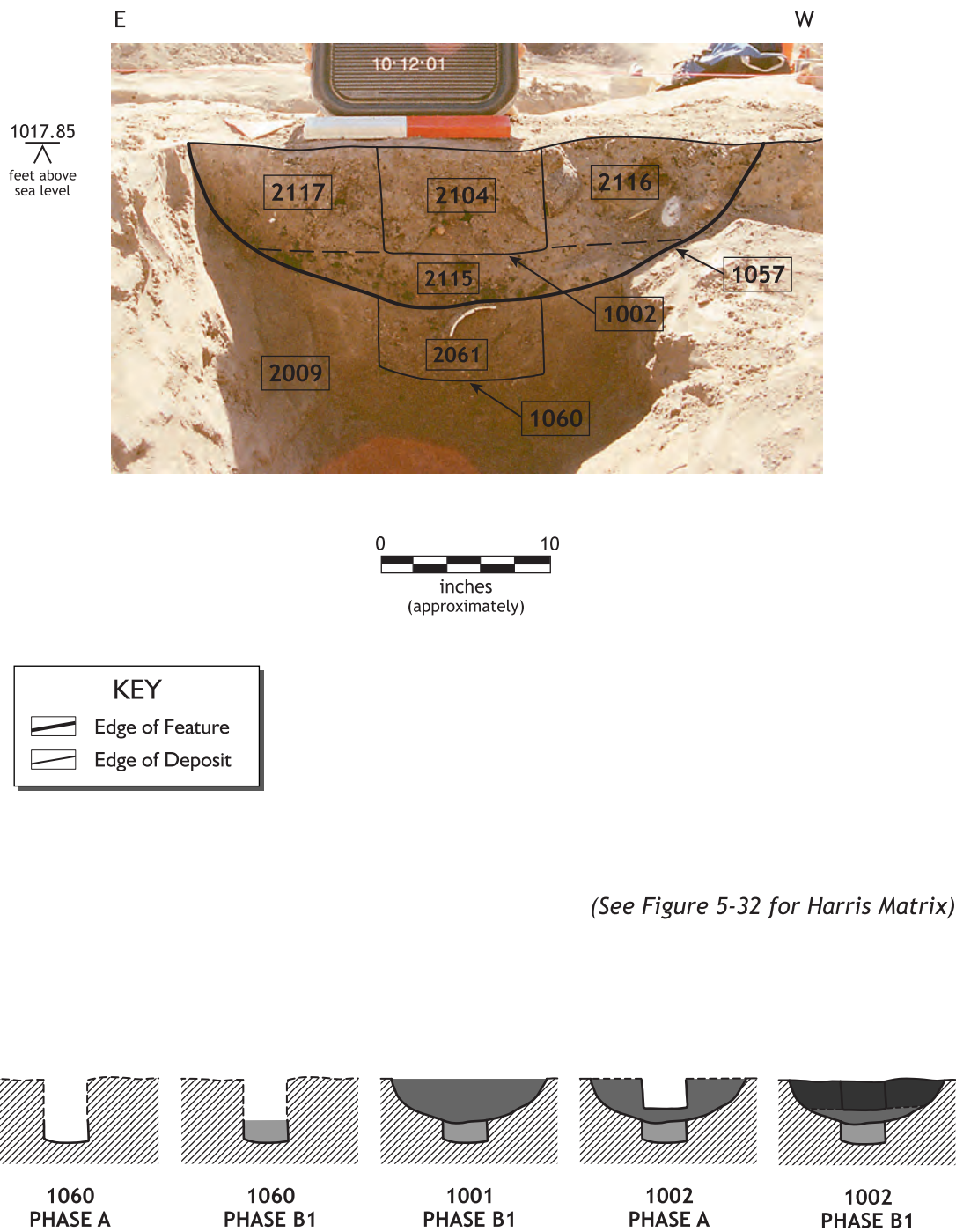


Figure 5-31 Drain 1002, Drain 1060, and Sheet Refuse 1057 section drawing.

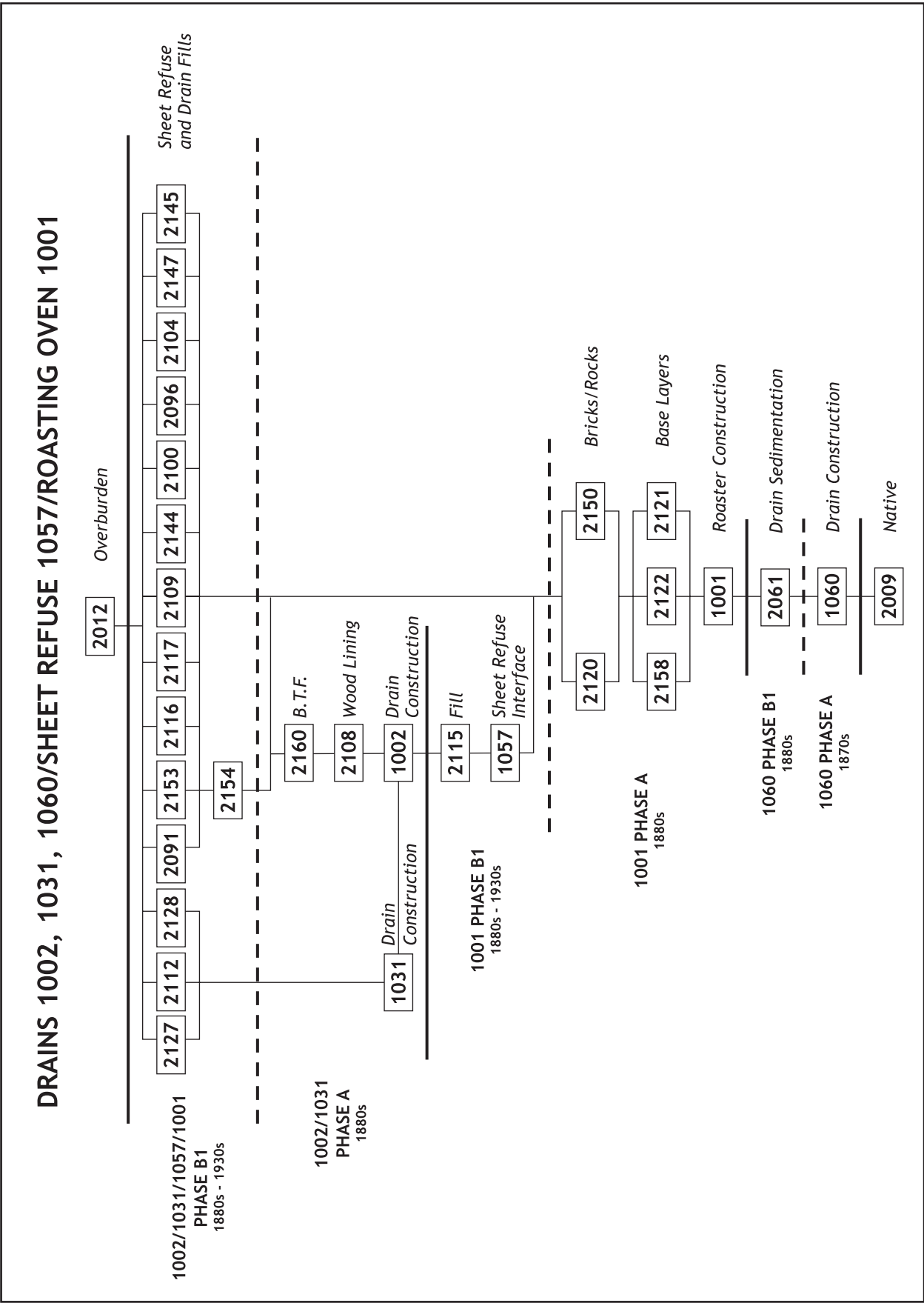


Figure 5-32 Drain 1002, Drain 1031, Drain 1060, Sheet Refuse 1057, and Roasting Oven 1001 Harris matrix.

DRAIN 1031

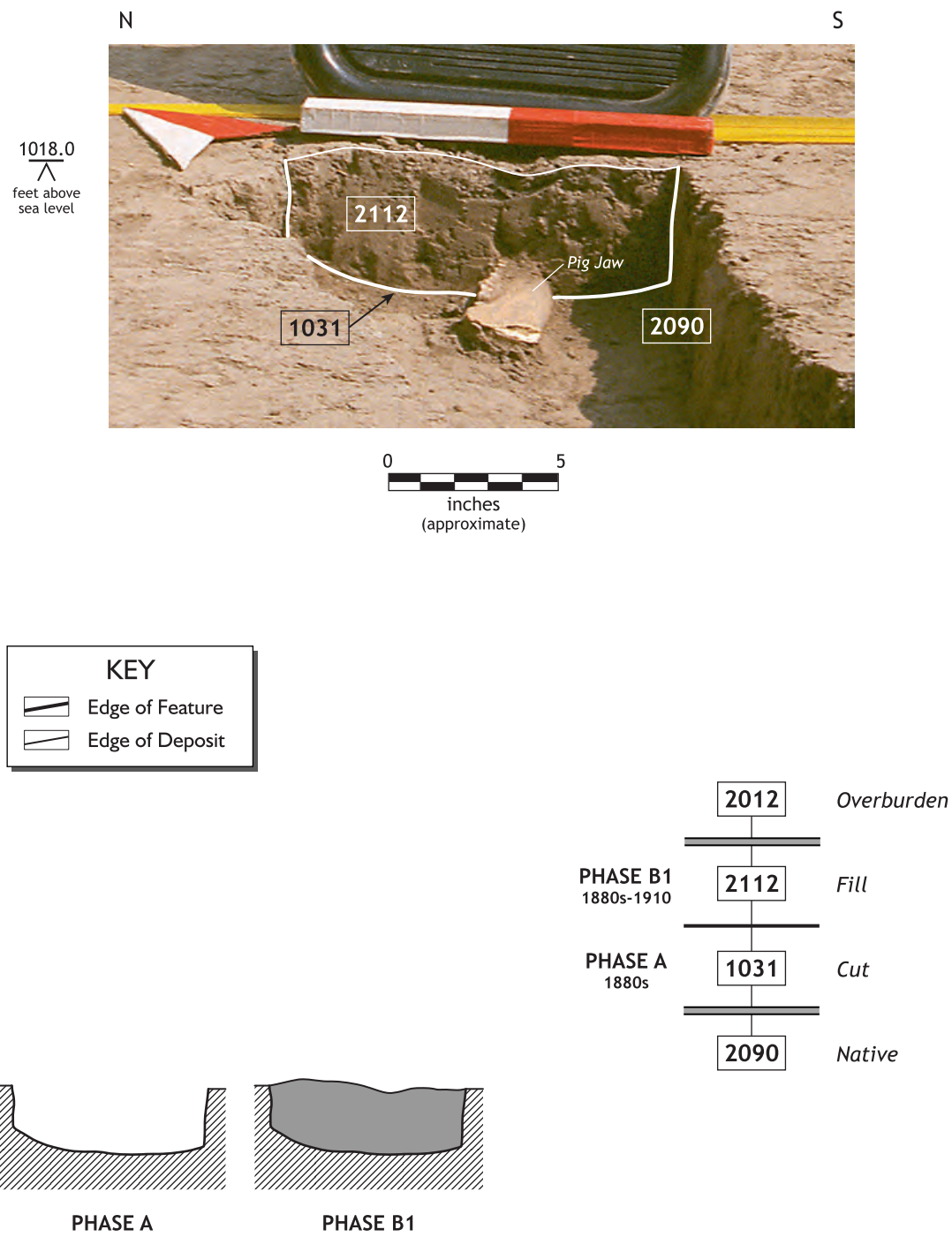


Figure 5-33 Drain 1031 section drawing and Harris Matrix.

Table 5-106
Drain 1002/Sheet Refuse 1057 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Activities				
Communication	Writing	Chinese stoneware ink grinding bowl	1	1
Firearms	Ammunition	Metal case	1	1
	Ammunition	Lead bullet	1	1
	Ammunition	Metal cartridge	1	1
	Ammunition	Metal case	1	1
<i>Firearms Total</i>			4	4
Domestic				
Food Packing/Storage	Closure	Chinese brown glazed stoneware medium storage jar lid	15	3
	Closure	Chinese brown glazed stoneware small storage jar lid	2	1
	Closure	Chinese brown glazed stoneware straight sided jar lid	5	1
	Container	Ceramic hollow	1	1
	Container	Chinese brown glazed stoneware large storage jar	56	4
	Container	Chinese brown glazed stoneware medium storage jar	247	25
	Container	Chinese brown glazed stoneware small storage jar	46	7
	Container	Chinese brown glazed stoneware soy sauce jar	42	4
	Container	Chinese brown glazed stoneware straight sided jar	3	1
	Container	Chinese porcelain ginger jar	1	1
	Container	Chinese porcelain small storage jar	5	1
	Container	Chinese stoneware ginger jar	14	2
	Container	Stoneware crock	1	1
<i>Food Packing/Storage Total</i>			438	52
Food Preparation/Consumption	Container	Light green glass bottle	6	1
	Serving	Chinese porcelain serving bowl	5	2
	Serving	Chinese porcelain serving dish	1	1
	Serving	Chinese porcelain teapot lid	2	2
	Serving	Porcelain dish	2	1
	Serving	White improved earthenware serving bowl	1	1
	Serving	White improved earthenware serving dish	3	1
	Tableware/Flatware	Chinese porcelain bowl	157	33
	Tableware/Flatware	Chinese porcelain dish	15	8
	Tableware/Flatware	Chinese porcelain hollow	1	1
	Tableware/Flatware	Chinese porcelain spoon	10	6
	Tableware/Flatware	Chinese porcelain tiny bowl	2	1
	Tableware/Flatware	Porcelain bowl	5	2

Table 5-106 (continued)
Drain 1002/Sheet Refuse 1057 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Food Preparation/Consumption (continued)	Tableware/Flatware	Porcelain saucer	2	1
	Tableware/Flatware	Silver alloy fork	4	1
	Tableware/Flatware	White improved earthenware dish	1	1
	Tableware/Flatware	White improved earthenware plate	6	3
	Tableware/Serving	Chinese porcelain hollow	14	2
	Tableware/Serving	Porcelain dish	3	2
	Tableware/Serving	Porcelain hollow	2	2
	Tableware/Serving	White improved earthenware hollow	9	2
	Tableware/Serving	White improved earthenware serving dish	5	1
<i>Food Preparation/Consumption Total</i>			<i>256</i>	<i>75</i>
Household/Furnishing	Lamp	Clear glass lamp chimney	10	2
Household Maintenance		Clear glass light bulb	4	1
		Metal/glass undefined	31	1
<i>Household Maintenance Total</i>			<i>35</i>	<i>2</i>
Leisure and Recreation				
Games	Gaming Piece	Asian coin	4	2
	Gaming Piece	Black glass <i>zhu</i>	3	3
	Gaming Piece	White glass <i>zhu</i>	8	7
<i>Games Total</i>			<i>15</i>	<i>12</i>
Social Drugs	Alcohol Container	Brown glass alcohol bottle	16	3
	Alcohol Container	Chinese brown glazed stoneware liquor bottle	15	3
	Alcohol Container	Clear glass alcohol bottle	3	1
	Alcohol Container	Dark brown glass alcohol bottle	1	1
	Alcohol Container	Dark green glass alcohol bottle	8	2
	Alcohol Container	Dark olive glass alcohol bottle	8	2
	Alcohol Container	Green glass alcohol bottle	1	1
	Alcohol Container	Light amber glass alcohol bottle	1	1
	Alcohol Container	Light olive glass alcohol bottle	11	2
	Alcohol Container	Olive glass alcohol bottle	53	3
	Alcohol Container	Stoneware ale bottle	2	1
	Alcohol Container	Very dark olive glass alcohol bottle	10	1
	Smoking Accessories	Brass alloy opium tin	131	3
	Smoking Accessories	Brass alloy opium tin strip	42	7
	Smoking Accessories	Ceramic opium pipe bowl	32	11
	Smoking Accessories	Ceramic opium pipe bowl stem	2	1
	Smoking Accessories	Ceramic pipe stem	1	1
	Smoking Accessories	Clear glass opium lamp chimney	5	4
<i>Social Drugs Total</i>			<i>342</i>	<i>48</i>
Personal				
Accouterments	Jewelry	Bone cuff link	4	2
	Jewelry	Metal loop	1	1
<i>Accouterments Total</i>			<i>5</i>	<i>3</i>

Table 5-106 (continued)
Drain 1002/Sheet Refuse 1057 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Clothing/Footwear	Fastener	Ferrous button	2	2
	Fastener	Glass/metal button	1	1
	Fastener	Porcelain button	4	4
	Fastener	White glass button	3	3
<i>Clothing/Footwear Total</i>			<i>10</i>	<i>10</i>
Grooming	Toiletry	Bone toothbrush	1	1
	Toiletry	Clear glass teeth and breath bottle	1	1
<i>Grooming Total</i>			<i>2</i>	<i>2</i>
Health/Medicine		Clear glass eye dropper tube	2	1
		Clear glass tube	1	1
	Container	Aqua glass medicinal bottle	12	2
	Container	Clear glass medicinal bottle	6	1
	Container	Light aqua glass Chinese medicine vial	3	1
	Container	Light aqua glass eye water bottle	1	1
<i>Health/Medicine Total</i>			<i>25</i>	<i>7</i>
Toys		Porcelain doll part	1	1
Undifferentiated		Brass alloy bead	2	1
Structural				
Building Material		Clay brick	9	2
		Clear glass flat	6	—
		Light aqua glass flat	20	—
<i>Building Material Total</i>			<i>35</i>	<i>2</i>
Nails		Ferrous large nail	16	16
		Ferrous medium nail	646	558
		Ferrous small nail	64	61
		Ferrous spike	1	1
		Ferrous tack	5	5
<i>Nails Total</i>			<i>732</i>	<i>641</i>
Tools/Hardware		Metal handle	1	1
Undetermined Use				
Miscellaneous Bottle, Jar, Can		Amber glass bottle	1	1
		Clear glass bottle	16	2
		Clear glass hollow	1	1
		Cobalt glass bottle	5	2
		Ferrous can	329	—
		Green glass bottle	2	2
		Light aqua glass bottle	1	1
		Light green glass bottle	2	1
<i>Miscellaneous Bottle, Jar, Can Total</i>			<i>357</i>	<i>10</i>
Miscellaneous Metal Item		Ferrous wire	1	1
		Metal clasp	1	1
<i>Miscellaneous Metal Item Total</i>			<i>2</i>	<i>2</i>

Table 5-106 (continued)
Drain 1002/Sheet Refuse 1057 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Undifferentiated		Amber glass hollow	1	1
		Aqua glass hollow	4	1
		Bone cylinder	1	1
		Bone undefined	1	1
		Clear glass hollow	18	1
		Lead amorphous	5	—
		Lead undefined	1	—
		Light aqua glass hollow	1	1
		Light green glass hollow	2	1
<i>Undifferentiated Total</i>			<i>34</i>	<i>7</i>
<i>Drain 1002/Sheet Refuse 1057 Total</i>			<i>2,307</i>	<i>883</i>

Table 5-107
Drains 1002 and 1031/Sheet Refuse 1057 Artifact Table 2a-1: Animals Represented by NISP

Common Name	Scientific Name	Drain 1002	Drain 1031	Sheet Refuse 1057	Total
Mammals					
Major Meat Mammals					
Cow	<i>Bos taurus</i>	37	11	33	81
Sheep	<i>Ovis aries</i>	5	1	0	6
Pig	<i>Sus scrofa</i>	295	127	112	534
Minor Meat Mammals					
Cottontail rabbit	<i>Sylvilagus</i> sp.	1	0	1	2
Jackrabbit	<i>Lepus californicus</i>	1	0	0	1
Incidental Mammals					
Cat	<i>Felis catus</i>	8	0	0	8
Ground squirrel	<i>Spermophilus beecheyi</i>	1	0	0	0
Mole	<i>Scapanus latimanus</i>	0	1	0	1
<i>Mammals Total</i>		<i>348</i>	<i>140</i>	<i>146</i>	<i>634</i>
Birds					
Domestic poultry					
Chicken	<i>Gallus gallus</i>	110	35	66	211
Turkey	<i>Meleagris gallopavo</i>	0	6	0	6
Pigeon	<i>Columba livia</i>	0	0	1	1
Duck	<i>Anas platyrhyncha</i>	11	2	10	23
Wild game birds					
Duck, type unknown	Anatidae	3	0	0	3
<i>Birds Total</i>		<i>124</i>	<i>43</i>	<i>77</i>	<i>244</i>
Amphibians					
Western pond turtle	<i>Clemmys marmorata</i>	3	1	2	6

Table 5-107 (continued)
Drains 1002 and 1031/Sheet Refuse 1057 Artifact Table 2a-1: Animals Represented by NISP

Common Name	Scientific Name	Drain 1002	Drain 1031	Sheet Refuse 1057	Total
Fish					
California fishes					
Rockfish	<i>Sebastes</i> sp.	1	0	0	1
Seabass	Serranidae	4	7	0	11
Sandbass	<i>Paralabrax</i> sp.	1	0	0	1
Wrasse	Labridae	16	3	10	29
Ocean whitefish	<i>Caulolatilus princeps</i>	1	0	0	1
California barracuda	<i>Sphyraena argentea</i>	2	0	1	3
Starry flounder	<i>Platichthys stellatus</i>	0	0	1	1
Flatfishes	Pleuronectiformes	4	0	0	4
Chinese fishes (imported)					
White herring	<i>Ilisha elongata</i>	1	0	1	2
Threadfin bream	<i>Nemipterus</i> sp.	2	0	1	3
Yellow croaker	<i>Larimichthys crocea</i>	1	0	0	1
Puffers	Tetraodontidae	2	5	0	7
Indeterminate fishes					
Croaker, type unknown	Sciaenidae	1	3	1	5
Bony fishes	Teleostei	56	11	22	89
Scales	Teleostei	93	0	7	100
<i>Fish Total</i>		<i>185</i>	<i>29</i>	<i>44</i>	<i>258</i>
Drains 1002 and 1031/Sheet Refuse 1057 Total		660	213	269	1,142

Table 5-108
Drains 1002 and 1031/Sheet Refuse 1057
Artifact Table 2a-2: Meat Weight by Economics

Meat Type	Price Group/Cut	Meat Weight (lb)	Percent within Type	Percent within Price Group	Percent of Total
Beef	High			20	
	Porterhouse	20.3	11.6		
	Prime rib	14.7	8.4		
	Moderate			62	
	Round	18.2	10.4		
	Rump	22.8	13.0		
	Chuck	58.3	33.3		
	Rib	9.5	5.4		
	Low			18	
	Hindshank	2.9	1.6		
	Brisket	2.9	1.6		
	Foreshank	15.8	9.0		
	Neck	9.6	5.5		
<i>Beef Total</i>		<i>174.9</i>	<i>100.0</i>	100	52

Table 5-108 (continued)
Drains 1002 and 1031/Sheet Refuse 1057
Artifact Table 2a-2: Meat Weight by Economics

Meat Type	Price Group/Cut	Meat Weight (lb)	Percent within Type	Percent within Price Group	Percent of Total
Pork	High			25	
	Sirloin	6.0	3.8		
	Loin	20.2	12.7		
	Ham	13.0	8.2		
	Moderate			55	
	Rump	21.3	13.4		
	Shoulder butt	27.8	17.5		
	Picnic	38.3	24.0		
	Low			21	
	Belly	0.6	0.4		
	Neck	4.9	3.1		
	Hindshank	13.2	8.3		
	Foreshank	4.0	2.5		
	Jowl	3.3	2.1		
	Feet	6.7	4.2		
<i>Pork Total</i>		<i>159.3</i>	<i>100.0</i>	100	48
All Meat Types Total		334.2			
High Price Group Total		22%			
Moderate Price Group Total		59%			
Low Price Group Total		19%			

Table 5-109
Drain 1002/Sheet Refuse 1057 Artifact Table 3b:
Summary of Selected Artifacts by Category

Category	MNI	Percent
Accouterments	3	1.3
Building Material (omitted)	—	—
Clothing/Footwear	10	4.3
Communication	1	0.4
Firearms	4	1.7
Food Packing/Storage	52	22.4
Food Preparation/Consumption	75	32.3
Games	12	5.2
Grooming	2	0.9
Health/Medicine	7	3.0
Household/Furnishing	2	0.9
Household/Maintenance	2	0.9
Miscellaneous Bottle, Jar, Can	10	4.3
Miscellaneous Metal Item	2	0.9
Nails (omitted)	—	—
Social Drugs	48	20.7
Tools/Hardware	1	0.4
Toys	1	0.4
Undifferentiated (omitted)	—	—
<i>Drain 1002/Sheet Refuse 1057 Total</i>	<i>232</i>	<i>100.0</i>

Table 5-110

Drain 1002 Artifact Table 4a: Food Preparation and Consumption Vessels by Function

Type	MNI	Percent
Container	1	2.6
Serving (platter, covered dishes, etc.)	2	5.1
Tableware (plates, bowls, saucers, etc.)	28	71.8
Flatware (fork, knife, spoon, etc.)	5	12.8
Tableware/Serving	3	7.7
Drain 1002 Total	39	100.0

Table 5-111

Drain 1002 Artifact Table 4b: Food Preparation and Consumption Vessels by Material

Material	MNI	Percent
Ceramic		
Chinese Porcelain	27	69.2
Porcelain	4	10.3
White Improved Earthenware	6	15.4
Glass	1	2.6
Metal	1	2.6
Drain 1002 Total^a	39	100.1

a - Total percentage greater than 100 is due to rounding.

Table 5-112

Drain 1002 Artifact Table 4c: Decoration on Food Preparation and Consumption Vessels

Material	Object	Type of Decoration	MNI
Ceramic			
Chinese Porcelain	Bowl	Bamboo	2
Chinese Porcelain	Bowl	Celadon	9
Chinese Porcelain	Hollow	Celadon	1
Chinese Porcelain	Spoon	Celadon	2
Chinese Porcelain	Bowl	Four Flowers	4
Chinese Porcelain	Dish	Four Flowers	5
Chinese Porcelain	Spoon	Four Flowers	2
Chinese Porcelain	Tiny Bowl	Four Flowers	1
Chinese Porcelain	Hollow	Undecorated	1
Porcelain	Bowl	Hand painted	1
Porcelain	Dish	Undecorated	1
Porcelain	Hollow	Molded	1
Porcelain	Saucer	Undecorated	1
White Improved Earthenware	Dish	Undecorated	1
White Improved Earthenware	Hollow	Undecorated	1
White Improved Earthenware	Plate	Undecorated	3
White Improved Earthenware	Serving Bowl	Undecorated	1
Glass			
Light Green Glass	Bottle	Undecorated	1
Metal			
Silver Alloy	Fork	Undecorated	1
Drain 1002 Total			39

Table 5-113
Drain 1002 Artifact Table 5: Social Drugs

Social Drug	MNI	Percent
Alcohol Container		
Alcohol Bottle	6	28.6
Ale Bottle	1	4.8
<i>Alcohol Total</i>	<i>7</i>	<i>33.4</i>
Smoking Accessories		
Opium Lamp Chimney	2	9.5
Opium Pipe Bowl	5	23.8
Opium Pipe Bowl Stem	1	4.8
Opium Tin	1	4.8
Opium Tin Strip	4	19.1
Pipe Stem	1	4.8
<i>Smoking Accessories Total</i>	<i>14</i>	<i>55.8</i>
<i>Drain 1002 Total^a</i>	<i>21</i>	<i>100.2</i>

a - Total percentage greater than 100 is due to rounding.

Table 5-114
Drain 1002 Artifact Table 6: Date and Origin of Marked/Datable Glass and Ceramic Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI^a
Ceramic						
2477	1885–P	(line) / KPM / G8	Krister Porcelain Manufactory	Walbrzych, Poland	Kovel and Kovel 1986:183	1
Glass						
2688	1941–1942	DR THOMPSON'S / EYE WATER / NEW LONDON / CONNT	John L. Thompson Son & Co.	Troy, NY	Fike 1987:245	1
Miscellaneous						
2621		MO...(framed in embossing)				1

MNI = minimum number of items.

Table 5-115
Sheet Refuse 1057 Artifact Table 4a:
Food Preparation and Consumption Vessels by Function

Type	MNI	Percent
Serving (platter, covered dishes, etc.)	6	16.7
Tableware (plates, bowls, saucers, etc.)	22	61.1
Flatware (fork, knife, spoon, etc.)	2	5.6
Tableware/Serving	6	16.7
<i>Sheet Refuse 1057 Total</i>	<i>36</i>	<i>100.1</i>

a - Total percentage greater than 100 is due to rounding.

Table 5-116
Sheet Refuse 1057 Artifact Table 4b:
Food Preparation and Consumption Vessels by Material

Material	MNI	Percent
Ceramic		
Chinese Porcelain	29	80.6
Porcelain	4	11.1
White Improved Earthenware	3	8.3
<i>Sheet Refuse 1057 Total^a</i>	<i>36</i>	<i>99.9</i>

a - Total percentage less than 100 is due to rounding.

Table 5-117
Sheet Refuse 1057 Artifact Table 4c: Decoration on Food Preparation and Consumption Vessels

Material	Object	Type of Decoration	MNI
Ceramic			
Chinese Porcelain	Bowl	Bamboo	5
Chinese Porcelain	Bowl	Celadon	8
Chinese Porcelain	Bowl	Four Flowers	5
Chinese Porcelain	Dish	Four Flowers	3
Chinese Porcelain	Hollow	Four Flowers	1
Chinese Porcelain	Serving Bowl	Four Flowers	2
Chinese Porcelain	Serving Dish	Four Flowers	1
Chinese Porcelain	Spoon	Four Flowers	1
Chinese Porcelain	Spoon	Hand painted	1
Chinese Porcelain	Teapot Lid	Hand painted	1
Chinese Porcelain	Teapot Lid	Undecorated	1
Porcelain	Bowl	Hand painted, gilded	1
Porcelain	Dish	Gilded	1
Porcelain	Dish	Scalloped edge	1
Porcelain	Hollow	Hand painted	1
White Improved Earthenware	Hollow	Undecorated	1
White Improved Earthenware	Serving Bowl	Undecorated	2
<i>Sheet Refuse 1057 Total</i>			<i>36</i>

Table 5-118
Sheet Refuse 1057 Artifact Table 5: Social Drugs

Social Drug	MNI	Percent
Alcohol Container		
Alcohol Bottle	10	38.5
Liquor Bottle	3	11.5
<i>Alcohol Total</i>	<i>13</i>	<i>50.0</i>
Smoking Accessories		
Opium Lamp Chimney	2	7.7
Opium Pipe Bowl	6	23.1
Opium Tin	2	7.7
Opium Tin Strip	3	11.5
<i>Smoking Accessories Total</i>	<i>13</i>	<i>50.0</i>
<i>Sheet Refuse 1057 Total</i>	<i>26</i>	<i>100.0</i>

Table 5-119
Sheet Refuse 1057 Artifact Table 6a and 6b:
Date and Origin of Marked/Datable Glass and Ceramic Items

Cat No.	Date Range	Description	Maker	Origin	Reference	MNI ^a
Ceramic						
2118	ca. 1885–1892	(shield) McN. B. & Co.	McNicol, Burton & Co.	East Liverpool, OH	Gates and Ormerod 1982:184, 185	1
2535		M?				1
Glass						
2160	1848–1930s	SOZODONT / FOR THE / TEETH / & / BREATH	Hall & Ruckel, Inc.	New York, NY	Fike 1987:182	1

a - MNI = minimum number of items.

Table 5-120
Drain 1031 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Activities				
Commerce		Metal coin	1	1
Firearms		Metal case	1	1
Domestic				
Food Packing/Storage	Closure	Chinese brown glazed stoneware medium storage jar lid	6	3
	Container	Chinese brown glazed stoneware large storage jar	10	1
	Container	Chinese brown glazed stoneware medium storage jar	139	5
	Container	Chinese brown glazed stoneware small storage jar	4	1
	Container	Chinese brown glazed stoneware soy sauce jar	7	2
	Container	Chinese stoneware ginger jar	1	1
<i>Food Packing/Storage Total</i>			<i>167</i>	<i>13</i>
Food Preparation/Consumption	Serving	Chinese porcelain serving dish	8	2
	Tableware/Flatware	Chinese porcelain bowl	21	6
	Tableware/Flatware	Chinese stoneware bowl	2	1
	Tableware/Flatware	White improved earthenware plate	1	1
	Tableware/Serving	Chinese porcelain hollow	2	1
<i>Food Preparation/Consumption Total</i>			<i>34</i>	<i>11</i>
Undifferentiated		Chinese porcelain hollow	1	1
Leisure and Recreation				
Games	Gaming Piece	Asian coin	6	6
	Gaming Piece	Black glass <i>zhu</i>	3	3
	Gaming Piece	Porcelain marble	1	1
	Gaming Piece	White glass <i>zhu</i>	5	5
<i>Games Total</i>			<i>15</i>	<i>15</i>

Table 5-120 (continued)
Drain 1031 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Social Drugs	Alcohol Container	Amber glass alcohol bottle	1	1
	Alcohol Container	Brown glass alcohol bottle	38	1
	Alcohol Container	Light olive glass alcohol bottle	3	1
	Alcohol Container	Olive glass alcohol bottle	12	1
	Smoking Accessories	Brass alloy opium tin strip	16	3
	Smoking Accessories	Ceramic opium pipe bowl	8	2
	Smoking Accessories	Clear glass opium lamp chimney	8	1
<i>Social Drugs Total</i>			<i>86</i>	<i>10</i>
Personal				
Clothing/Footwear	Fastener	Ferrous button	1	1
	Fastener	Porcelain button	3	2
<i>Clothing/Footwear Total</i>			<i>4</i>	<i>3</i>
Undifferentiated		Bone undefined	1	1
Structural				
Building Material		Clay brick	25	3
		Clear glass flat	1	—
<i>Building Material Total</i>			<i>26</i>	<i>3</i>
Nails		Ferrous large nail	7	7
		Ferrous medium nail	238	227
		Ferrous small nail	4	4
		Ferrous spike	2	2
<i>Nails Total</i>			<i>251</i>	<i>240</i>
Undetermined Use				
Miscellaneous Bottle, Jar, Can		Aqua glass bottle	40	1
		Clear glass bottle	2	1
		Cobalt glass bottle	1	1
		Ferrous can	250	—
		Green glass hollow	1	1
		Light aqua glass bottle	2	1
		Light green glass bottle	2	1
<i>Miscellaneous Bottle, Jar, Can Total</i>			<i>298</i>	<i>6</i>
Miscellaneous Metal Item		Brass alloy tube	2	1
		Ferrous band	2	1
		Ferrous knob	1	1
<i>Miscellaneous Metal Item Total</i>			<i>5</i>	<i>3</i>
Undifferentiated		Clear glass hollow	4	1
		Lead amorphous	1	—
<i>Undifferentiated Total</i>			<i>5</i>	<i>1</i>
Drain 1031 Total			895	309

Table 5-121
Drain 1031 Artifact Table 3a: Selected Artifact Categories by Group

	Count	MNI	Percent of MNI
Activities	2	2	3.1
Domestic	202	25	38.5
Leisure and Recreation	101	25	38.5
Personal	5	4	6.2
Structural (omitted)	—	—	—
Undetermined Use (selective)	303	9	13.8
Drain 1031 Total	613	65	100.1

a - Total percentage greater than 100 is due to rounding.

Table 5-122
Drain 1031 Artifact Table 3b: Summary of Selected Artifacts by Category

Category	MNI	Percent
Building Material (omitted)	—	—
Clothing/Footwear	3	4.6
Commerce	1	1.5
Firearms	1	1.5
Food Packing/Storage	13	20.0
Food Preparation/Consumption	11	16.9
Games	15	23.1
Miscellaneous Bottle, Jar, Can	6	9.2
Miscellaneous Metal Item	3	4.6
Nails (omitted)	—	—
Social Drugs	10	15.4
Undifferentiated (selective)	2	3.1
Drain 1031 Total	65	99.9

a - Total percentage less than 100 is due to rounding.

Table 5-123
Drain 1031 Artifact Table 4a: Food Preparation and Consumption Vessels by Function

Type	MNI	Percent
Serving (platters, covered dishes, etc.)	2	18.2
Tableware (plates, bowls, saucers, etc.)	8	72.7
Tableware/Serving	1	9.1
Drain 1031 Total	11	100.0

Table 5-124
Drain 1031 Artifact Table 4b:
Food Preparation and Consumption Vessels by Material

Material	MNI	Percent
Ceramic		
Chinese Porcelain	9	81.8
Chinese Stoneware	1	9.1
White Improved Earthenware	1	9.1
<i>Drain 103 Total</i>	<i>11</i>	<i>100.0</i>

Table 5-125
Drain 1031 Artifact Table 4c: Decoration on Food Preparation and Consumption Vessels

Material	Object	Type of Decoration	MNI
Ceramic			
Chinese Porcelain	Bowl	Bamboo	2
Chinese Porcelain	Bowl	Celadon	2
Chinese Porcelain	Serving Dish	Celadon	1
Chinese Porcelain	Bowl	Four Flowers	1
Chinese Porcelain	Serving Dish	Four Flowers	1
Chinese Porcelain	Bowl	Undecorated	1
Chinese Porcelain	Hollow	Undecorated	1
Chinese Stoneware	Bowl	Hand painted	1
White Improved Earthenware	Plate	Undecorated	1
<i>Drain 1031 Total</i>			<i>11</i>

Table 5-126
Drain 1031 Artifact Table 5: Social Drugs

Social Drug	MNI	Percent
Alcohol Container		
Alcohol Bottle	4	40.0
Smoking Accessories		
Opium Lamp Chimney	1	10.0
Opium Pipe Bowl	2	20.0
Opium Tin Strip	3	30.0
<i>Smoking Accessories Total</i>	<i>6</i>	<i>60.0</i>
<i>Drain 1031 Total</i>	<i>10</i>	<i>100.0</i>

Table 5-127
Drain 1060 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Domestic				
Clothing Maintenance		Powder bluing ball	<i>1</i>	<i>1</i>
Food Packing/Storage	Container	Chinese brown glazed stoneware large storage jar	1	1
	Container	Chinese brown glazed stoneware medium storage jar	1	1
<i>Food Packing/Storage Total</i>			<i>2</i>	<i>2</i>
Food Preparation/Consumption	Tableware/Flatware	Chinese porcelain bowl	3	2
	Tableware/Flatware	Chinese porcelain spoon	1	1
<i>Food Preparation/Consumption Total</i>			<i>4</i>	<i>3</i>
Leisure and Recreation				
Social Drugs	Alcohol Container	Olive glass alcohol bottle	<i>1</i>	<i>1</i>
Structural				
Nails		Ferrous medium nail	<i>1</i>	<i>1</i>
Undetermined Use				
Undifferentiated		Clear glass hollow	<i>1</i>	<i>1</i>
<i>Drain 1060 Total</i>			<i>10</i>	<i>9</i>

COOKING STRUCTURES

Three cooking structures were identified in Chinatown. Of these, Roasting Oven 1001 and Cooking Feature 1033 were located along the rear margin of the Chinatown lots (see Figure 5-16). Roasting Oven 1036 was discovered adjacent to Wong Nim's store and the Kuan Yin Temple (see Figure 5-17).

Roasting Oven 1001 was "keyhole" shaped and measured 3.5 feet in diameter. The opening to the feature was 0.8 foot wide and defined by two common red bricks and a metal plate. The interior of the feature was lined with a series of 0.5–1.0-foot-diameter rocks. The native soils on the floor and edge of the feature exhibited the effects of exposure to heat. No other artifacts were recovered from the interior of this feature. The adjacent Sheet Refuse 1057/1002 contains ash and charcoal residue from the cleaning of Roasting Oven 1001.

Roasting Oven 1036 was discovered just south of Wong Nim's store and adjacent to the Kuan Yin Temple. The circular, common red brick construction measured 3.5 feet in diameter and 2.5 feet deep and was built of reused whole and half bricks that were widely spaced and mud-mortared (Figures 5-36 and 5-37). The opening on the south side of the feature was constructed from two large segments of forge lining made of firebrick material and a metal lintel. One of the liners carried the maker's mark H43 / MO FB & Co / St Louis MO / WG, which provides a construction TPQ of 1927. This structure may have replaced Roasting Oven 1001 circa 1930. The base of the interior consisted of a thin layer of charcoal and other burned material (Layer 2095) above heat-affected native sediments (Layer 2105). Layer 2135, representing burned material scraped from the interior and out the fire mouth, is correlated with Layer 2095. Following abandonment of the feature, certainly by 1942 after Wong Nim's death, the upper walls collapsed inward and the cavity filled with demolition debris.



Figure 5-34 Roasting Oven 1001.

Soil samples were taken of the burned residue in each roasting oven and submitted for macrobotanical analysis. Roasting Oven 1036 contained no seeds, and Roasting Oven 1001 contained only tiny carbonized unidentifiable seed fragments. If any seeds or fruits were processed in the ovens, they burned completely to ash. The low diversity of charcoal taxa in the roasting ovens compared to the privy samples suggests that specific woods were preferred for roasting. These woods may have produced long-lasting hot coals for roasting meat. In addition, the two ovens contained different types of wood: Roasting Oven 1036 represents diffuse types with a significant amount of a bamboo-like monocotyledon in Layer 2095; Roasting Oven 1001 contained primarily buckthorn and rose family wood, probably local wild types. Roasting Oven 1036, constructed circa 1930 in the vicinity of the temple, apparently had a different wood source than Roasting Oven 1001, which may have been fueled with locally foraged wood used to cook meat for weekend sale to laborers.

The pollen sample from the oven did not provide any clear evidence of cultural activities. The predominant pollen taxa were Chenopodium, Asteraceae, and grass, all of which could represent primarily weeds. Prickly pear pollen was unique to this sample, and this was the only project sample lacking agave. Nightshade pollen also was found in the roasting oven sample, representing a diverse family of economic plants including tobacco, potato, datura, and eggplant.

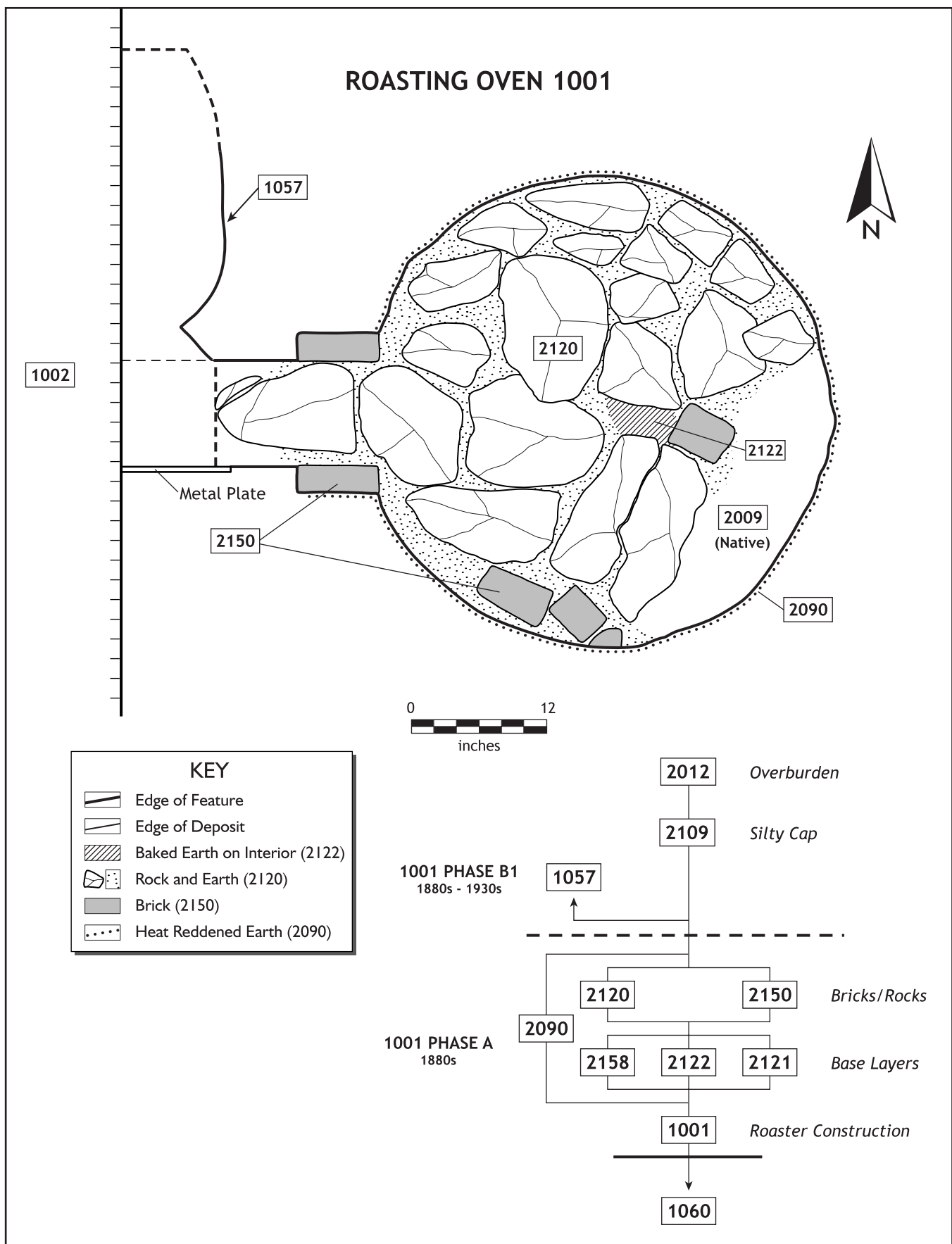
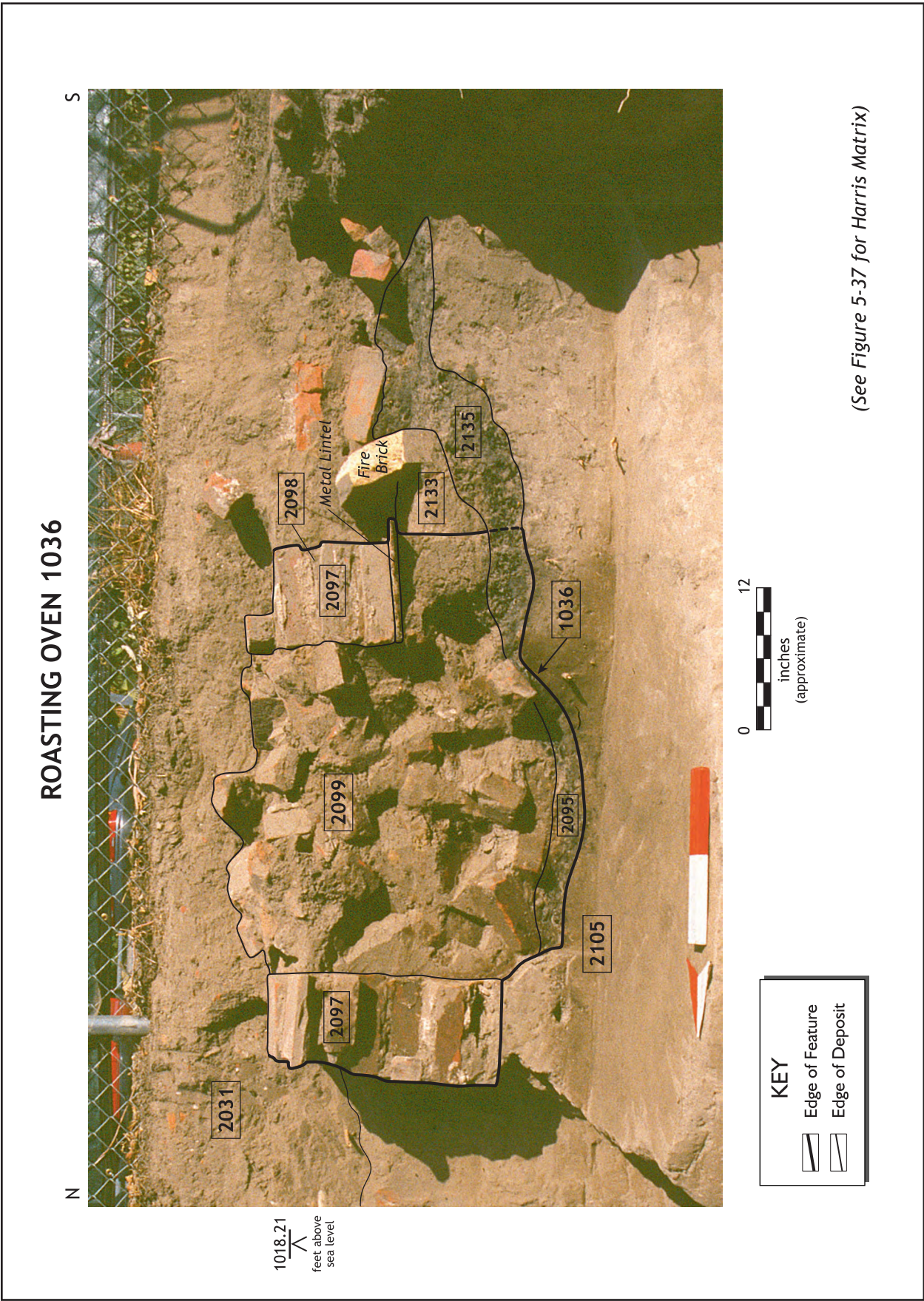


Figure 5-35 Roasting Oven 1001 plan view and Harris Matrix.



ROASTING OVEN 1036

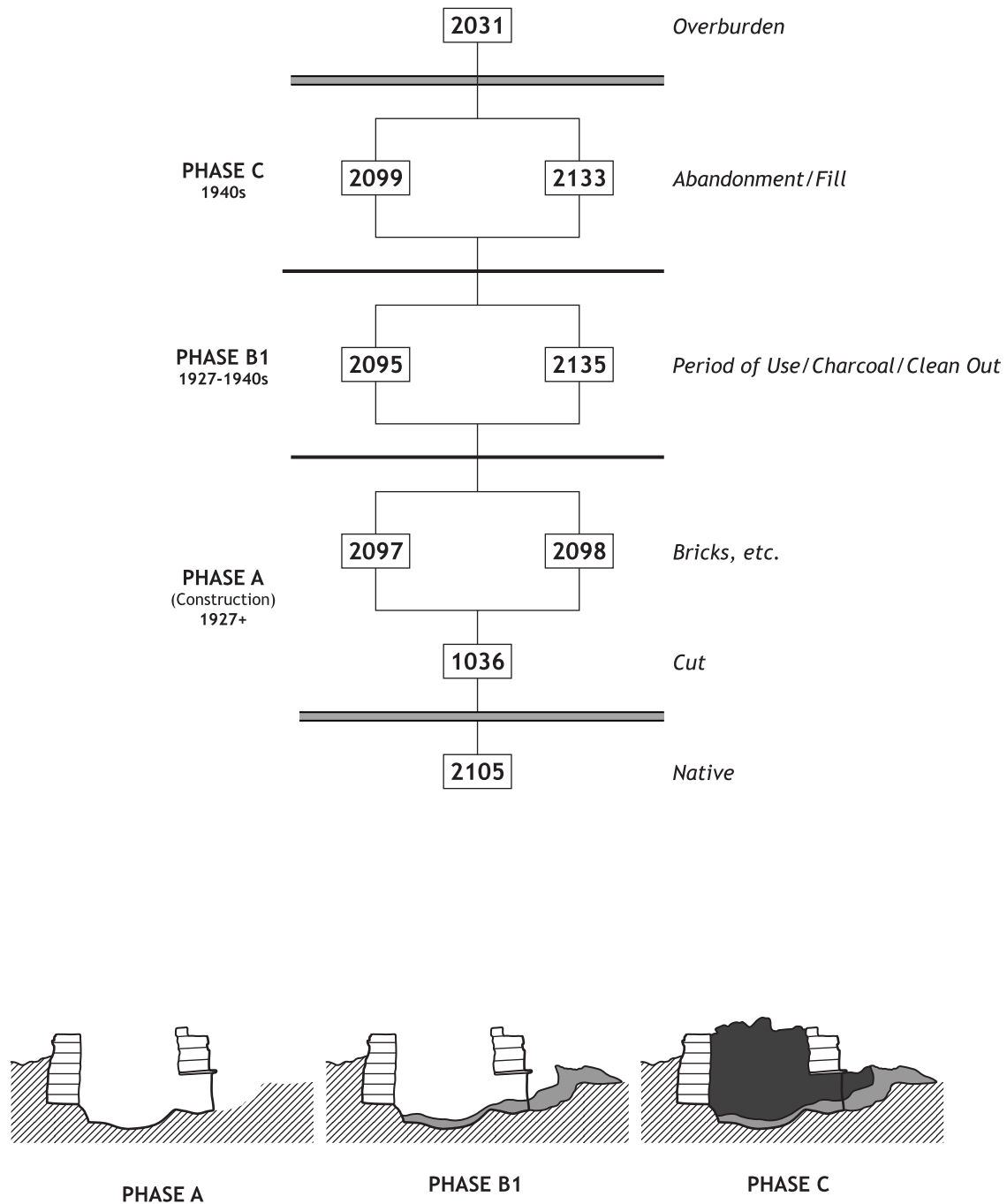


Figure 5-37 Roasting Oven 1036 Harris matrix.

COOKING FEATURE 1033

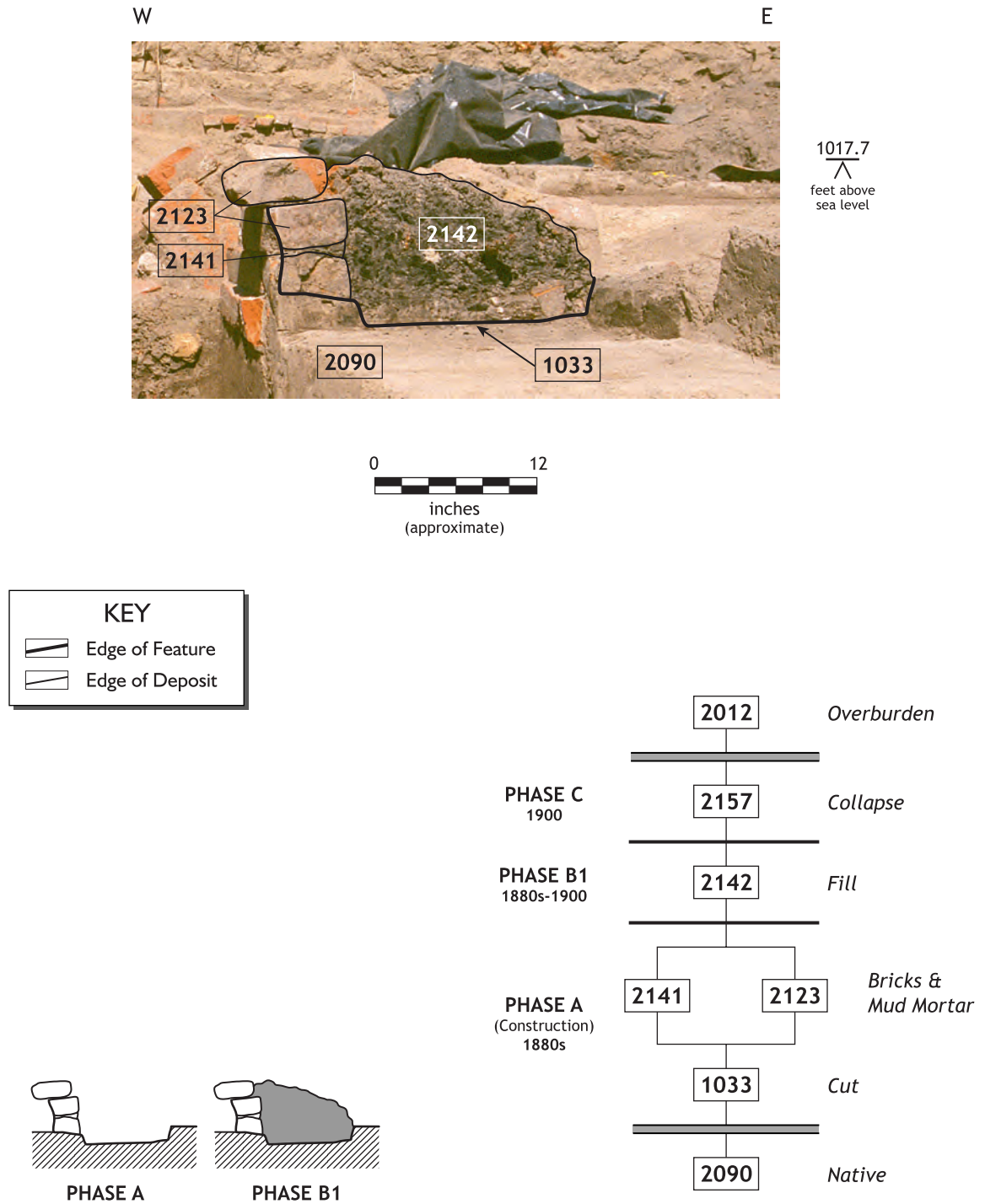


Figure 5-38 Cooking Feature 1035 section drawing and Harris matrix.

Cooking Feature 1033 was a small, mud-mortared, common red-brick structure. Located 2.5 feet south of the Chinatown back lot line and measuring 2.0 by 2.0 feet, the feature is thought to have been at least eight courses or approximately 2.0 feet high. The interior of the feature displayed no signs of in situ burning, suggesting that low heat was used in cooking. The base was at the approximate elevation of the historic Chinatown surface (1,017 feet above mean sea level). Sediments within the structure contained a large amount of charcoal and small quantities of domestic ceramics and glass. Two personal items, a fragmented bone toothbrush and an onyx bracelet, also were recovered. The exact nature of this feature has not been determined. The location south of the Wong Nim property line suggests that Cooking Feature 1033, like adjacent Privy 1056, was in use before 1900 and abandoned when the property boundaries were established in that year. At that time, the upper courses of brick collapsed or were demolished. Several of the bricks fell into Privy 1056, which likely was abandoned at the same time.

All of these features contained only small quantities of bone, most of which appear to postdate their use. Cooking Feature 1033 contained a single jackrabbit vertebra. Roasting Oven 1001 contained a single chicken bone plus partial skeletons of one adult and one juvenile cat. Roasting Oven 1036 contained one chicken bone, one rabbit bone, one cat bone, and two rat bones.

Table 5-128
Roasting Oven 1001 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Domestic				
Food Packing/Storage	Closure	Chinese brown glazed stoneware medium storage jar lid	1	1
	Container	Chinese brown glazed stoneware large storage jar	1	1
	Container	Chinese brown glazed stoneware medium storage jar	6	1
	Container	Chinese brown glazed stoneware small storage jar	1	1
<i>Food Packing/Storage Total</i>			<i>9</i>	<i>4</i>
Food Preparation/Consumption	Tableware/Flatware	Chinese porcelain bowl	3	2
	Tableware/Serving	Chinese porcelain hollow	1	1
<i>Food Preparation/Consumption Total</i>			<i>4</i>	<i>3</i>
Leisure and Recreation				
Social Drugs	Alcohol Container	Brown glass alcohol bottle	1	1
	Alcohol Container	Olive glass alcohol bottle	1	1
	Smoking Accessories	Ceramic opium pipe bowl	1	1
<i>Social Drugs Total</i>			<i>3</i>	<i>3</i>
Structural				
Building Material		Clear glass flat	3	—
Nails		Ferrous medium nail	30	30
		Ferrous small nail	4	4
<i>Nails Total</i>			<i>34</i>	<i>34</i>
Tools/Hardware		Ferrous hook	1	1

Table 5-128 (continued)
Roasting Oven 1001 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Undetermined Use				
Miscellaneous Bottle, Jar, Can		Clear glass bottle	1	1
		Ferrous can	2	1
		Light aqua glass bottle	1	1
<i>Miscellaneous Bottle, Jar, Can Total</i>			<i>4</i>	<i>3</i>
Undifferentiated		Clear glass hollow	1	1
<i>Roasting Oven 1001 Total</i>			<i>59</i>	<i>49</i>

Table 5-129
Roasting Oven 1001 Artifact Table 2c-1a: Plant Material from Soil Samples

	<i>EB Number</i>	Absolute Counts and Weights	Material Density (count/liter)
		3181	3181
Material Type	<i>Layer</i>	2120	2120
Unidentifiable seeds		2	6.667
Wood		0.55	1.833
Amorphous		0.09	0.300

Table 5-130
Roasting Oven 1001 Artifact Table 2c-1b: Charcoal from Soil Samples

	<i>EB Number</i>	3192
	<i>Layer</i>	2155
Material Type	Ct.	Wt. (g)
Diffuse	1	0.02
Rhamnaceae	44	0.06
Rosaceae cf.	6	0.09
Indeterminate	4	0.05
<i>Total Identified</i>	<i>15</i>	<i>0.22</i>
Total Wood Charcoal		0.55

Table 5-131
Roasting Oven 1001 Artifact Table 2c-2: Pollen Recovered from Soil Samples

	<i>Cut</i>	1056
	<i>Layer</i>	2130
	<i>Sample</i>	6024
Pollen Concentration ^a		2,475.0
Taxa Richness ^b		23.0
Spore Richness ^c		4.0
Tracers		75
Pollen Sum		148
Degraded		16.9
<i>Pinus</i>		2.0
Cupressaceae		1.4
Rhamnaceae		2.7
Rosaceae		1.4
Cheno-Am		11.5
Hi-Spine Asteraceae		37.2
Asteraceae, <i>Lactuca</i> type		0.1
Asteraceae spiny type		0.1
Asteraceae type C		0.1
<i>Ambrosia</i> type		4.7
Poaceae		8.1
Large Poaceae		X
Brassicaceae		1.4
Solanaceae		0.7
Nyctaginaceae		0.7
Malvaceae, cf. <i>Sphaeralcea</i>		X
<i>Eriogonum</i>		2.7
<i>Opuntia</i> sp.		X
cf. <i>Cephalanthus</i>		1.4
Cyperaceae		1.4
<i>Erodium</i>		0.7
Unknown 6029 cf. Capparaceae		2.7
Unknown 6029 C3T3, prolate, tectate, fine reticulate		0.7
Unknowns Undifferentiated		2.0
Spores ^f		
Root Hyphae		3
Small brown monoporate Spore		1
Trilete Spore, psilate, in perine		3
Trilete Spore, psilate		3

a - Concentration is an estimate of the number of pollen grains contained in a cubic centimeter of sample sediment (gr/cc), based on an initial tracer concentration of 25,084 *Lycopodium* spores and a sample size of 20 cc.

b - Taxa richness is the number of pollen types identified in a sample out of a total of 51 known pollen types.

c - Spore richness is the number of different spore types identified in a sample out of a total of 8 spores plus the root hyphae category.

d - X notes taxa identified during 100x scans or taxa presence in sterile samples.

e - Pollen aggregate notation shows the number of aggregates and the size of the largest aggregate in parentheses.

f - Spore values assigned per the following subjective rating of abundance: 1 = common, 2 = present, 3 = rare.

Table 5-132
Roasting Oven 1036 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Activities				
Farming/Gardening		Terracotta flower pot	1	1
Firearms	Ammunition	Metal case	2	2
Domestic				
Food Preparation/Consumption	Tableware/Flatware	Chinese porcelain dish	2	1
	Tableware/Flatware	White Improved earthenware plate	2	1
	Tableware/Serving	Porcelain hollow	1	1
	Tableware/Serving	White improved earrthenware hollow	2	1
Total Food Preparation/Consumption			7	4
Household/Furnishing		Clear glass bead	1	1
Leisure and Recreation				
Social Drugs	Smoking Accessories	Brass alloy opium tin	9	1
	Smoking Accessories	Ceramic opium pipe bowl	1	1
Total Social Drugs			10	2
Clothing/Footwear	Fastener	Shell button	1	1
Structural				
Building Material	Nails	Ferrous large nail	1	1
		Ferrous medium nail	20	20
		Ferrous small nail	2	2
Total Building Material			23	23
Undetermined Use				
Miscellaneous Bottle, Jar, Can		Clear glass bottle/jar	1	1
		Clear glass jar	1	1
		Ferrous can	90	1
Total Miscellaneous Bottle, Jar, Can			92	3
Miscellaneous Metal Item		Ferrous band	1	1
		Ferrous rod	2	1
		Ferrous sheet metal	3	1
Total Miscellaneous Metal Item			6	3
Undifferentiated		Clear glass hollow	1	1
		Concrete formed block	2	2
Total Undifferentiated			3	3
Roasting Oven 1036 Total			182	44

Table 5-133
Roasting Oven 1036 Artifact Table 2c-1a: Plant Material from Soil Samples

	<i>EB Number</i>	Absolute Counts and Weights		Material Density (count/liter)	
		3188	3189	3188	3189
Material Type	Layer	2095	2135	2095	2135
Wood ^a		12.8	114.85	9.143	54.690
Amorphous ^a		0.53	—	0.379	—

a - Weight (grams/liter)

Table 5-134
Roasting Oven 1036 Artifact Table 2c-1b: Charcoal from Soil Samples

<i>EB Number</i> <i>Layer</i>	3188		3189	
	2095		2135	
Material Type	Ct.	Wt. (g)	Ct.	Wt. (g)
Diffuse	13	0.63	20	2.29
<i>Salix /Populus</i>	1	0.02	—	—
Monocotyledon Stem	6	0.32	—	—
Total Identified	20	0.97	20	2.29
Total Wood Charcoal	—	12.8	—	114.85

Table 5-135
Roasting Oven 1036 Artifact Table 3a: Selected Artifact Categories by Group

	Count	MNI	Percent of MNI
Activities	3	3	17.6
Domestic	8	5	29.4
Leisure and Recreation	10	2	11.8
Personal	1	1	5.9
Structural (omitted)	—	—	—
Undetermined Use (selective)	98	6	35.3
Roasting Oven 1036 Total	120	17	100.0

Table 5-136
Roasting Oven 1036 Artifact Table 3b: Summary of Selected Artifacts by Category

Category	MNI	Percent
Building Material (omitted)	—	—
Clothing/Footwear	1	5.9
Farming/Gardening	1	5.9
Firearms	2	11.8
Food Preparation/Consumption	4	23.5
Household/Furnishing	1	5.9
Miscellaneous Bottle, Jar, Can	3	17.6
Miscellaneous Metal Item	3	17.6
Nails (omitted)	—	—
Social Drugs	2	11.8
Undifferentiated (omitted)	—	—
Roasting Oven 1036 Total	17	100.0

Table 5-137
Roasting Oven 1036 Artifact Table 4a:
Food Preparation and Consumption Vessels by Function

Type	MNI	Percent
Tableware (plates, bowls, saucers, etc.)	2	50.0
Tableware/Serving	2	50.0
Roasting Oven 1036 Total	4	100.0

Table 5-138
Roasting Oven 1036 Artifact Table 4b:
Food Preparation and Consumption Vessels by Material

Material	MNI	Percent
Ceramic		
Chinese Porcelain	1	25.0
Porcelain	1	25.0
White Improved Earthenware	2	50.0
<i>Roasting Oven 1036 Total</i>	<i>4</i>	<i>100.0</i>

Table 5-139
Roasting Oven 1036 Artifact Table 4c:
Decoration on Food Preparation and Consumption Vessels

Material	Object	Type of Decoration	MNI
Ceramic			
Chinese Porcelain	Dish	Four Flowers	1
Porcelain	Hollow	Decal	1
White Improved Earthenware	Hollow	Undecorated	1
White Improved Earthenware	Plate	Undecorated	1
<i>Roasting Oven 1036 Total</i>			<i>4</i>

Table 5-140
Roasting Oven 1036 Artifact Table 5: Social Drugs

Social Drug	MNI	Percent
Smoking Accessories		
Opium Pipe Bowl	1	50.0
Opium Tin	1	50.0
<i>Roasting Oven 1036 Total</i>	<i>2</i>	<i>100.0</i>

Table 5-141
Roasting Oven 1036 Artifact Table 6c: Date and Origin of Marked/Datable Miscellaneous Items

Cat. No.	Date Range	Description	Maker	Origin	Reference	MNI^a
2030	1925–1930	WGC CO / D 2	Whitacre Greer Fireproofing Co.	Malvern, OH	Graves 1999a:372, 1999b:197	1
2034	1925–1930	WGC CO / D2 HB	Whitacre Greer Fireproofing Co.	Malvern, OH	Graves 1999a:372, 1999b:197	1
2047	1927	H43 / MO FB & C CO /	Missouri Fire Brick	St. Louis, MO	Graves 1999a:268, 1999b:127	1

a - MNI = minimum number of items.

Table 5-142
Cooking Feature 1033 Artifact Table 1: Descriptive Artifact List

Group and Category	Type	Description	Count	MNI
Domestic				
Food Packing/Storage	Closure	Chinese brown glazed stoneware medium storage jar lid	2	1
	Container	Chinese brown glazed stoneware medium storage jar	2	1
<i>Food Packing/Storage Total</i>			<i>4</i>	<i>2</i>
Food Preparation/Consumption	Tableware/Flatware	Chinese porcelain dish	1	1
	Tableware/Serving	Chinese porcelain hollow	1	1
<i>Food Preparation/Consumption Total</i>			<i>2</i>	<i>2</i>
Leisure and Recreation				
Social Drugs	Alcohol Container	Olive glass alcohol bottle	1	1
	Smoking Accessories	Brass alloy opium tin	3	1
<i>Social Drugs Total</i>			<i>4</i>	<i>2</i>
Personal				
Clothing/Footwear	Fastener	Porcelain button	1	1
Structural				
Nails		Ferrous large nail	2	2
		Ferrous medium nail	32	32
		Ferrous small nail	2	2
<i>Nails Total</i>			<i>36</i>	<i>36</i>
Undetermined Use				
Miscellaneous Bottle, Jar, Can		Clear glass bottle	1	1
Undifferentiated		Clear glass hollow	1	1
<i>Cooking Feature 1033 Total</i>			<i>49</i>	<i>45</i>