AN ABSTRACT OF THE DISSERTATION OF

Cayla L. Hill for the degree of Doctor of Philosophy in Applied Anthropology presented on June 11, 2019.

Title: Caution! High Water: A Historical Archaeological Investigation of the Champoeg Townsite (ORMA26) after the 1861 Flood.

Abstract approved:

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David R. Brauner

The Champoeg townsite first developed due to its ideal settlement and trade location within the Willamette Valley, becoming the 'legal birthplace of Oregon' in 1843. However, by 1860 Champoeg's significance had begun to decline, and in December of 1861 a devastating flood wiped out the townsite. Archaeological excavations took place at the Champoeg townsite in 1990 and 1991 in search of information regarding the significant, pre-flood townsite. Yet, excavations at Block 4, Lots 1 and 2, held information pertaining to a potential post-1861 flood general mercantile store. Thus, a historical archaeological approach was used to investigate the composition of the archaeological assemblage, from one of the only late nineteenth-century general mercantile stores to be excavated in Oregon, as well as provide information about the history of the entire duration of the Champoeg townsite, including the impacts of the technological, transportation, and consumption transformations occurring during the late nineteenth century. In order to discuss these transformations and the experiences of those still utilizing the Champoeg townsite during the post-1861 flood time period, central place, agency, as well as risk and resilience theories were applied.

Caution! High Water: A Historical Archaeological Investigation of the Champoeg Townsite (ORMA26) after the 1861 Flood

by
Cayla L. Hill

A DISSERTATION

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APPROVED:

Major Professor, representing Applied Anthropology

Director of the School of Language, Culture, and Society

Dean of the Graduate School

I understand that my dissertation will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my dissertation to any reader upon request.

Cayla L. Hill, Author

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF FIGURES (Continued)

LIST OF FIGURES (Continued)

LIST OF TABLES

LIST OF APPENDIX TABLES

Chapter 1: Introduction

In 1793, members of the Northwest Company of Montreal, one of the leading fur trade companies of the time, set out to explore the western expanses of North America, known as the Pacific Northwest (Lyons 1940:xiv; O'Hara 1916:3). The Northwest Company sought to expand their trapping territory towards the end of the eighteenth century due to a decline in beaver populations along the Eastern seaboard regions of North America, and ultimately found that the Oregon Country, a region of the Pacific Northwest including the current states of Oregon, Washington and Idaho as well as portions of western Montana and British Columbia, to be full of fur trade potential and exponential profits (Carlos & Lewis 2008; Dicken and Dicken 1979:78; O'Hara 1916:1;3; Oregon Historical Society (OHS) 2019). Soon after, the Northwest Company confirmed their foothold within the Oregon Country by placing a trading post within the heart of the region, the Willamette Valley, located within present-day Oregon, and appropriately named the Willamette Post (Brauner 1989:11; Hussey 1967:28-29; O'Hara 1916:4; Speulda 1988:7). By 1831, three retired, French-Canadian fur trappers, Jean Baptiste Desportes McKay, Joseph Gervais, and Etienne Lucier, settled near the Willamette Post, in an area of the Valley that had easy accessibility to the Willamette River as well as to an overland route, which connected the Hudson's Bay Company's Fort Vancouver with Salem (Hussey 1967:55;58; Lenzen 2014:1; Speulda 1988:9). A townsite, known as Champoeg, developed as a result of the ideal settlement location, becoming a central trade location, predominantly a collecting point of wheat for the mobile fur trappers turned sedentary agriculturalists living in the region, and fittingly named French Prairie in association with these primary residents (Atherton 1973:2;

Speulda 1988:12;17). By 1841, Champoeg was ‘the principal settlement’ within the Willamette Valley, and in May of 1843 it became the legal birthplace of Oregon, with the decision for the establishment of a Provisional Government taking place at Champoeg (Atherton 1973:1; Hussey 1967:xi;115;150; Speulda 1988:14). Champoeg continued to grow as a commercial center during the remainder of the 1840s and 1850s, but by the 1860s had become greatly overshadowed by the developing townsites of Oregon City and Portland (Atherton 1973:2; Dicken and Dicken 1979:15; Speulda 1988:19-22).

Although the townsite of Champoeg eventually fell out of favor, it remains one of the most historically significant sites within the Willamette Valley, Oregon Country and subsequently, the overall Pacific Northwest (Nesbitt 1972:ii; 25). However, little is actually known about the historic site of Champoeg due to a lack of historical documentation including maps, photographs and descriptions of the townsite, as a result of destructive and frequent flooding (Atherton 1973:4; Snyder 2008a:1; Speulda 1988:22). The most damaging flood affected Champoeg and its occupants in the winter of 1861, resulting in the displacement of all of the wooden structures and the disappearance of the dirt roads within the townsite, leaving little surface evidence of the once booming townsite of Champoeg (Bell 1990:1; Brauner 1993:72; Hussey 1967:238; Oregon State Parks 1989:16; Snyder 2008a:1; Speulda 1988:22-23). Due to the scant amount of historical records and limited surface features, archaeological work including surface surveys of the entire platted town as well as preliminary excavations were completed at the townsite during the early 1970s in order to find out more about the townsite of Champoeg prior to the destruction caused by the 1861 flood (Atherton 1973:5, 1974:1; Hussey 1967; Nesbitt 1972:5; Speulda 1988:24-29). Thus, the analysis and interpretation

of the archaeological record remained focused on the early development of Champoeg or the pre-1861 flood years due to the general assumption, perpetuated by secondary historical sources, that the Champoeg townsite was not revitalized or rebuilt after the 1861 flood, with residents moving to higher ground and establishing the Newellsville townsite instead (Bell 1990:1; Brauner 1993:77; Chappel 1992:3; Hussey 1967:237-238; McArthur 1992:166; Oregon State Parks 1989:1; Speulda 1988:23).

Archaeological excavations completed at portions (Block 4, Lots 1 and 2) of the Champoeg townsite (ORMA26) during the summer field seasons of 1990 and 1991 by Dr. David Brauner of Oregon State University, with the aid of summer field crews, suggested that people still utilized the old townsite after the 1861 flood (Brauner 1991a; Brauner 1993:92-93). Initially, Lots 1 and 2 on Block 4 were excavated in order to investigate the pre-flood time period, primarily the perceived occupant and owner, Dr. William Bailey, who, according to newspaper accounts had lost two houses to fire in 1853 (Brauner 1993:92). Yet, even though fire was evident at after the 1990 archaeological excavations, further artifact analysis in addition to the collection of oral histories from descendant families and local residents, suggested that Block 4 had housed a general mercantile store, with some artifact types such as ceramics and glass, dating to the post-1861 flood period of recognized abandonment (Brauner 1993: 92-93; Nesbitt 1972:35).

However, analyses and interpretations regarding the archaeological record recovered during these excavations were never completed, leaving the tale of the lives of the residents of post-flood Champoeg a mystery. Therefore, additional historical research and artifact analysis, regarding the archaeological assemblage uncovered at Block 4, is

required in order to finally obtain information concerning the human behavior and town atmosphere during the post-1861 flood years. Another disastrous flood hit the once prominent town in 1890 causing an even further decline (Brauner 1993:77; Snyder 2008a:1).

Research Purpose and Significance

This research study is focused on analyzing and interpreting the artifacts collected from the Champoeg townsite (ORMA26), specifically the assemblage from the extensive excavations within Block 4, Lots 1 and 2. Based on oral histories from descendant families and local residents, Block 4 was believed to have once been the location of a general mercantile store, and would have been in operation during the post-1861 flood years, as demonstrated by the archaeological record. Thus, both the historical and archaeological record of Block 4 was examined in order to investigate the oral historical accounts of descendant families and local residents. Additionally, more extensive historical research, focused on the regional context and the potential occupants and businesses located within the townsite during the post-1861 flood years, was completed. Overall, this research study provides distinctive information about archaeological sites of this nature, a potential general mercantile store, and from this time period, the latter-half of the nineteenth century.

In addition, after the completion of the research study, which included both the historical and archaeological record, the entire duration of occupation at the Champoeg townsite, “one of the most important historic sites in the entire Pacific Northwest,” was finally able to be better understood and recounted, due to the analysis and interpretation

of a more chronologically extensive archaeological record in association with the remaining pieces and phases of the historical record (Hussey 1967:xi; Nesbitt 1972:28). As a result, the post-flood time period has been given better recognition, and no longer remains hidden from history. Both records were also examined through the lens of the theoretical approaches of central place, agency, and risk and resiliency theories in order to better understand the experiences, and human behavior or motivation that would have led occupants to return or newly establish businesses in Champoeg, after such a disastrous natural event.

In general, the completion of this historical archaeology research study, based on the prior excavations conducted by Dr. David Brauner in 1990 and 1991, helps provide information to those researching nineteenth-century rural, general mercantile stores, if the oral history accounts are reflected in the archaeological record, as well as those investigating the economic transition occurring within the United States as a result of the Industrial Revolution and the Age of Modernization, which included drastic consumption and retailing changes (Atherton 1971:164; English 2013:49; McCracken 1988:3; Orser, Jr. 2004:111; Schlereth 1991:xi-xii; Strasser 1989:5). Finally, the research study has led to a clearer depiction of the Pacific Northwest during the nineteenth century by adding to the archaeological research and knowledge base associated with the establishment and history of the Willamette Valley, and even more specifically French Prairie. Thus, the research study has built upon the archaeological work completed at the Champoeg townsite during the early 1970s by Paul Nesbitt (1972) and John Atherton (1973,1974; Speulda 1988) as well as in 1990 and 1991 by Dr. David Brauner (1991b, 1993).

Overall, the townsite of Champoeg, a rural, Oregon ghost town of seemingly little consequence, actually holds incredible historical significance for the entire region (Brauner 1991a, 1991b, 1993; Hussey 1967; Nesbitt 1972:28; Snyder 2008a:1). Yet, prior to this research study, only the earliest part of the townsite's history had ever been fully investigated (Atherton 1973,1974; Brauner 1991a, 1991b, 1993; Chapman 1993; Chappel 1992; Corning 1947; Kaiser 1956; Manion 2014; Middleton 1975; Munnick 1958; Nesbitt 1972; Hussey 1967; Snyder 2008a-c; Speulda 1988). Therefore, this research study has provided historical information, specifically focused on the post-1861 flood period at the Champoeg townsite, and includes insight into the occupants' behavior and lives, via the archaeological record, during this tumultuous time of recovery and rebuilding at the townsite in contrast to the period of growth and development within the overall region, as a result of the technological and communication innovations and transportation improvements during the latter half of the nineteenth century. Information gleaned from this research study regarding the occupants' behaviors and motivations to return or relocate to a once economically successful central place, but which is subsequently recovering, and at risk for decline as a result of the growth of other nearby towns as well as another disastrous flood was also discussed.

Research Questions

In order to better understand the post-1861 time period within Champoeg's history, several questions were addressed and explored in regards to the history of the site and its occupants as well as the archaeological assemblage recovered.

- What is the composition of the artifact assemblage? Can potential activity centers within the Block 4 assemblage be understood after analysis? As a

result, can the artifact assemblage be identified as a general mercantile store, as hypothesized by the local oral histories?

- If the overall site function is identified as a general mercantile store, is the composition of this specific general mercantile store in rural Oregon comparable to other rural general stores throughout the country during the same time period?
- Is there evidence within the archaeological record at the Champoeg townsite to suggest that nineteenth-century rural Oregon was transformed by the "Age of Modernization" and the shifts in American consumption culture and retailing by the turn of the century? (Are broader consumption transitions evident in the archaeological assemblage?)
- Does the archaeological record (in Block 4) hold evidence that technological, transportation, and communication innovations and improvements such as the expansion of the road and rail systems as well as the creation and dispersal of mail-order catalogues, were impacting the potential general mercantile store or the overall town? (Did these shifts in technology, transportation, consumption impact the store or town? If so, what were these impacts?)
- Based on the composition of the archaeological record, what material goods are being imported and supplied? How might this reflect the commercial demands and everyday lives of the Champoeg residents?

- Does the historical and archaeological record at the Champoeg townsite demonstrate the occupants' behavior, resiliency, or risk minimization strategies as a result of the previous 1861 flood and the possibility of future natural disasters?

Conclusion

The story of Champoeg during the post-1861 period, is one of great risk, persistence, and attempted economic revitalization. A tale where citizens took a chance, an economic gamble, and invested their livelihoods on a place, on a town, that had once prospered, in the hopes that it would once again. Thus, research combining the historical and archaeological record provides much needed additional information regarding the overall development of the Pacific Northwest along with the formation of the Oregon Territory, and more specifically the establishment and significance of French Prairie, located within the Willamette Valley. Finally, historical archaeological research regarding the historically significant Champoeg townsite, with a focus on the post-1861 flood years, has helped depict the life and times of these residents, and should aid those trying to better understand the historical context of rural America during the nineteenth century as well as human behavior in the face of past disaster and potentially future destruction and devastation.

Chapter 2: Research Methods

Historical archaeology, which combines the use of historical sources and the archaeological record, works well as a methodological approach for the investigation of the townsite of Champoeg, due to limited historical documentation regarding the townsite as a result of the 1861 flood (Brauner 1993; Orser, Jr. 2004:9; Snyder 2008a). Historic documents and records, maps, ethnographies, oral histories, paintings and photographs can be invaluable sources, but should be recognized as accounts of the past, which can include intentional or accidental omissions as well as chronicler and historian biases, potentially leaving gaps in the history of the past, especially when only a few primary sources are still available (Brauner 1993:5; Orser, Jr. 2004:154;176;312; Russell 2016:58; Trouillet 1995:22-23). Thus, the inclusion of extant materials or the archaeological record can play a supplementary and integral role when trying to understand the past, with information regarding each artifact's descriptive identity and functional classification, adding depth to the understanding and interpretation of the past (Orser, Jr. 2004:94; Russell 2016:58). The various artifact types and frequencies left behind in the archaeological record, as well as depositional contexts and evidence, can also help when trying to understand the conclusion of human occupation at the site, in this case the history of the Champoeg townsite and its occupants during the post-1861 flood years (Renfrew and Bahn 2010:41; Schiffer 1983).

However, it should be recognized that more fragile and perishable items such as clothing, foodstuffs, spices, and medicines may not have survived as extant examples due to both cultural and natural processes including material decomposition, potential environmental degradation, and soil disturbance (Beck 1980:2; Johnson 1961:118; Orser,

Jr. 2004:104; Renfrew and Bahn 2008:56-61). It is typically the more durable materials such as hardware, glass, and ceramics that are more likely to be found within archaeological assemblages (Johnson 1961:107-108; Orser, Jr. 2004:103; Renfrew and Bahn 2010:41). Thus, it should be kept in mind that the artifacts that were discovered within the archaeological record may not fully represent the daily lives and activities of the site occupants on their own, but may fill in details about past human behavior that would not be evident within the written record alone. As a result, historical archaeology gains its value from this combination of historical resources and archaeological evidence, in order to pursue a more holistic image of the past (Orser, Jr. 2004:4; Russell 2016:59).

Historical Method

The historical method was implemented prior to and during the artifact analysis of the ORMA26 collection in order to gain a much broader understanding of the overall Champoeg townsite. Four main sources can be utilized through the historical method; these are written, extant, oral and illustrative sources. A combination of these varying and evaluated sources helps to ensure that a more valid or relevant and reliable or trustworthy representation of the past is interpreted and understood (Gottschalk 1969:52-53). Thus, if corroborative information was discovered within several of the sources in this research study, each source was cited in order to demonstrate the strength of the research as a representative interpretation of the past (Howell & Prevenier 2001:70).

The research strategy for this study included historical research with the utilization of both primary and secondary sources including the discovery and use of any historical documents regarding the historical context of the Champoeg townsite, and

included previous archaeological studies completed at the townsite (Atherton 1973, 1974; Brauner 1989, 1993; Hussey 1967; Nesbitt 1972; Speulda 1988). Primary sources are often viewed as more reliable due to their close proximity to the time and place under investigation and were used when possible including both written sources such as census, deed, mortgage, and tax records, birth and marriage certificates, newspaper articles, store ledgers, letters, books, and mail-order catalogs as well as illustrative sources such as historical maps, drawings, and photographs (Gottschalk 1969:53). However, due to the known limitation in the availability of primary sources, secondary sources were vital, especially when investigating the historical context of the overall time period including the role of the general mercantile store within small, rural American communities of the time. Secondary sources also helped describe the overall transformation of the cultural values and perceptions within rural America, in this case Oregon, as a result of the technological, transportation and communication improvements and expansion, during the late nineteenth century, which led to shifts in politics, demographics and economics including consumption and retailing changes like the introduction of the mail-order catalogs.

Previous Archaeological Research

Thus, although historical documents and secondary accounts relate the story of the establishment and growth of the Pacific Northwest and the Oregon Country, the lives of these first French-Canadian settlers remains relatively unknown as does the development of the Champoeg townsite. As noted previously, very few primary historical records, documenting the Champoeg townsite exist due to the devastation from the 1861 flood, which essentially sent the entire townsite downstream (Brauner 1993; Snyder

2008a:1). Therefore, in order to glean more information about one of the most historically significant sites regarding the development of the Oregon Territory, previously published works and archival materials were compiled and published by John Hussey in 1967, with archaeological surveys and excavations completed at the townsite in 1971 by Paul Nesbitt, and in 1973 through 1975 by John Atherton, and then later by Dr. David Brauner in 1990 and 1991 (Atherton 1973, 1974; Brauner 1993; Hussey 1967; Nesbitt 1972; Speulda 1988).

Paul Nesbitt's 1971 archaeological research was sponsored by the Oregon Department of Transportation (ODOT), and primarily included pedestrian survey and collection of artifacts located on the surface within the boundaries of the Champoeg townsite, with a test pit excavation in a feature identified as 'Structure A' (Atherton 1973:7; Brauner 1993:5-6, 2018:1). Nesbitt's (1972:2) archaeological research interests were concentrated on 'historic Champoeg,' specifically the time period from the 1840s and 1850s, for the townsite located on the south bank of the Willamette River, within Section 2, Township 4 South, Range 2 West, Willamette Meridian, Marion County, Oregon (Speulda 1988:xi) (Figure 2.1). The research objectives were focused on locating all of the structures from the Champoeg townsite as well as evaluating the effect of the 1861 flood in association with the archaeological integrity of the townsite (Brauner 1993:5; Nesbitt 1972:5; Speulda 1988:23). However, zero records of Nesbitt's test pits have survived in order to know the exact location of these excavations (Brauner 1993:134; Speulda 1988:24).

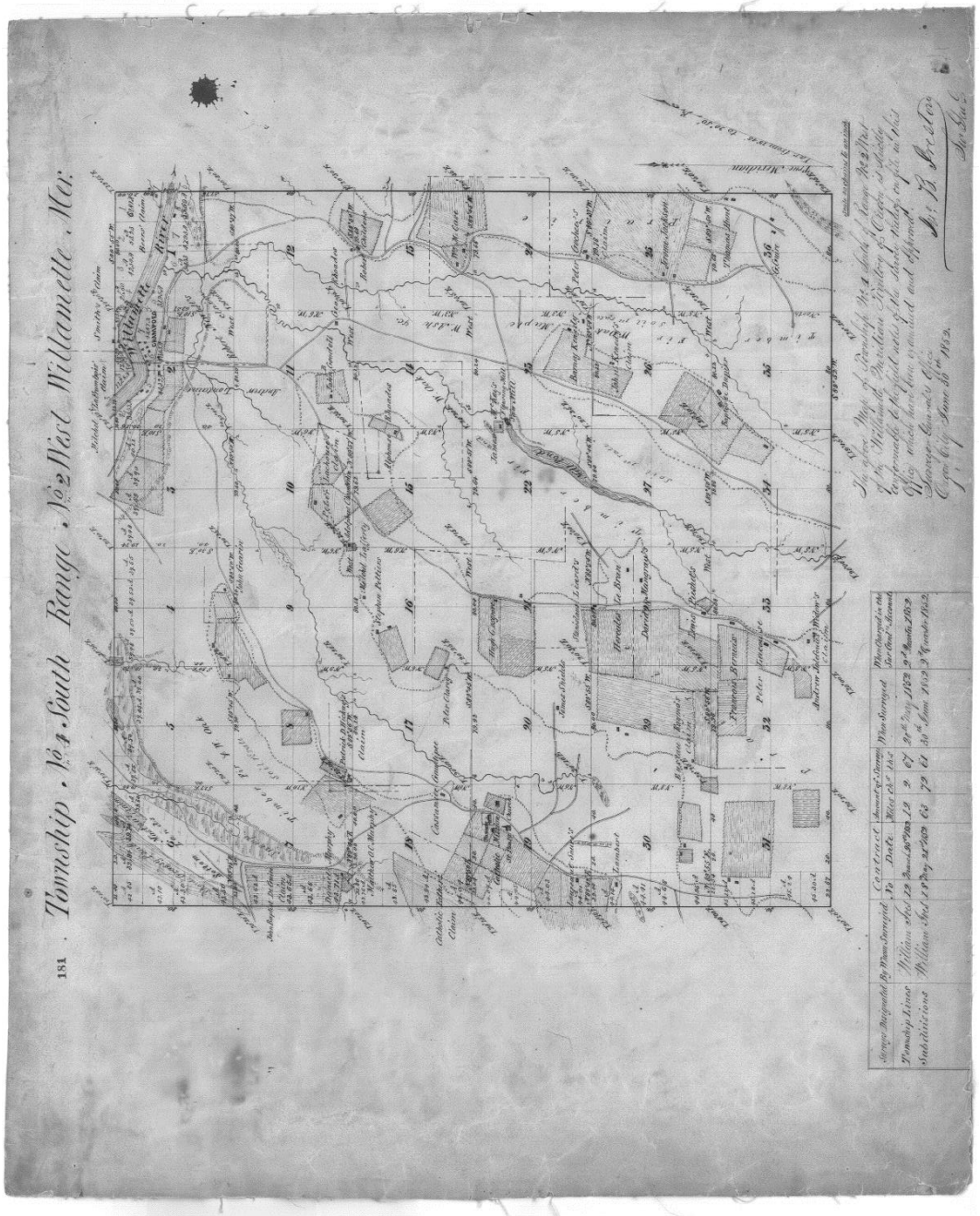

Figure 2.1: 1852 General Land Office Map: Township 4 South, Range 2 West, Willamette Meridian (University of Oregon Libraries 2012).

In 1973, Dr. John Atherton of Portland State University was contracted by the Oregon State Historic Preservation Office (OSHPO) to further Nesbitt's test pit excavations at Structure A, which Atherton states is within Block 1, and to investigate other structures within the townsite, with the townsite resurveyed and block corners placed by the Department of Transportation (Atherton 1973:5;7; Brauner 1993:6, 2018:1; Speulda 1988:25). Atherton, like Nesbitt, relied on pedestrian survey to identify which blocks and lots had once been occupied based on surface frequency and recovery, with some excavations occurring at Block 1, lots 2 and 3, in order to confirm the presence of structures, methods of construction, and their potential functionality (Atherton 1973:5;9; Brauner 1993:6). During the 1974 and 1975 seasons, excavations focused on Block 53, lot 4, and Block 12, lot 5 were excavated, respectively (Atherton 1974:5; Brauner 1993:6; Speulda 1988:26). Extensive archival work was completed over the course of the three field seasons, but due to the sheer magnitude of artifacts uncovered over the course of the three field seasons and limited post-excavation funding and resources for artifact analysis, only preliminary reports discussing the 1973 and 1974 excavations were completed by Atherton (Brauner 1993:6). In 1988, Lou Ann Speulda of Oregon State University, completed a re-analysis of the artifact assemblage and also was able to generally locate the test pit locations within the townsite based on Atherton's field maps and documents (Brauner 1993:132; 134).

Field Work Methods

On June 26, 1990, Dr. David Brauner and a five person crew from Oregon State University, continued archaeological field work at the Champoeg townsite, as part of the French-Canadian Archaeological and Historical Project which had begun in the region

during the early 1980s (Brauner 1993:7-9; 84, 2018:1). Excavations at the Champoeg townsite were completed as an undergraduate field school, and included a remote sensing program, the first of its kind within the Willamette Valley, in order to locate any possibly remaining structural and cultural features within the old town plat, which may have been buried or altered due to the effects of soil scouring and alluvial sediment deposition at the townsite (Brauner 1993:7-9; 84). The remote sensing program included aerial panchromatic and color infrared photography, seismic survey, ground-penetrating radar, soil auguring and moisture studies, and an intensive metal detector scan of the townsite and was led by James Bell (Bell 1990:1; Brauner 1993:8;81).

The core twelve townsite blocks (of the overall 72 platted blocks) and associated lots were resurveyed first, and a more refined master grid was then established for horizontal control purposes (Brauner 1993:7; 79). A primary datum of an arbitrary elevation of 100 meters was placed at the southeast corner of Block 2, Lot 2 in order to aid in the vertical control of the excavations (Brauner 1993:7; 79). Secondary datum pins, associated with the primary datum, were placed as needed (Brauner 2018:30).

It should also be noted that an Oregon archaeological site inventory form was submitted to the OSHPO after the townsite was resurveyed, and the Champoeg townsite was designated as the following Smithsonian trinomial: ORMA26 (Brauner 1993:81). This site number designation will be used throughout this research study due to its application to all field notebooks, catalogs, maps, artifacts, as well as reports and manuscripts from the 1990 and 1991 excavations. However, presently, the OSHPO officially recognizes this site by the Smithsonian trinomial 35MA00186 within its

database as a result of the re-inventorying process which affected all historic sites within the state (Oregon Parks and Recreation (OPRD) 2018).

The remote sensing data did warrant some potentially viable results with the ground-penetrating radar and seismic survey providing evidence of several potential subsurface anomalies within Blocks 1, 2, 4, and 14 (Bell 1990:8; Brauner 1993:134). As a result, seventeen test pits, within Blocks 1, 2, 4, 14, 17, and Jefferson Street, were excavated during the 1990 field season, which ended on August 10, 1990, and were placed in locations meant to test the accuracy of the remote sensing data as well as the limited pre-1861 historical records and accounts (Bell 1990:5; Brauner 1993:7-8;88-90). An evaluation of the significance and integrity of the archaeological data base within the townsite was also intended after the completion of the excavations, and led to the conclusion that the floods affecting the Champoeg townsite were not major erosional events and actually left behind archaeological evidence (Brauner 1993:8;93, 2018:44). Thus, the flood waters that inundated the townsite approximately every ten years, were observed to be low velocity, high volume events, which may have caused the buildings to float downstream due to their buoyant, wooden sill foundations, but did leave fragmentary artifact sheet scatters still present within the various townsite lots, both on the surface and below (Brauner 2018:44).

Excavations were completed as 1 x 1 meter units (ending as 1 x 2 meter or 2 x 2 meter test pits) at 10 centimeter arbitrary levels, with artifact provenience recorded typically by quadrants, but *in situ* whenever possible (Brauner 1991a, 1993:7;88). Due to disturbance caused by long-term agricultural practices in the area, a plow zone was included within Level 1, increasing its depth to 20 centimeters, rather than the previously

noted 10 centimeters for the other levels (Brauner 1993:84). All excavated soils were also screened through ¼ inch mesh (Brauner 1991a, 1993:88). Six thousand artifacts were uncovered in total during the eight week field season and were cleaned, cataloged and curated by April 1991 at the Historic Archaeology Laboratory operated by the Department of Anthropology at Oregon State University (Brauner 1993:8). Each artifact was identified and labeled with a catalog number which included the site number, block number, lot number, test pit or unit letter, and sequential inventory number taken from the field catalog (Brauner 1993:90).

At Block 4, specifically, two test pits (A and B) were excavated within each lot, with the Test Pit A's located in the front (north) of the lots and the Test Pit B's positioned in the back (south) portion of the lots. According to the field catalogs, excavations at Block 4, Lot 1, Test Pit A were terminated at Level 6, and Block 4, Lot 2, Test Pit B were completed at Level 8. Block 4, Lot 2, Test Pit A ended at Level 8, and Block 4, Lot 2, Test Pit B finishing at Level 6. Although, it should be noted that most cultural materials within the Champoeg townsite are located within the upper 40 centimeter sediment profiles (Brauner 1993:99). Rodent burrows, as a result of the high frequency of the California Ground Squirrel within the present-day park, has led to some ground disturbance and may be the cause of cultural materials located below these levels (Brauner 2018:46) (Figure 2.2).

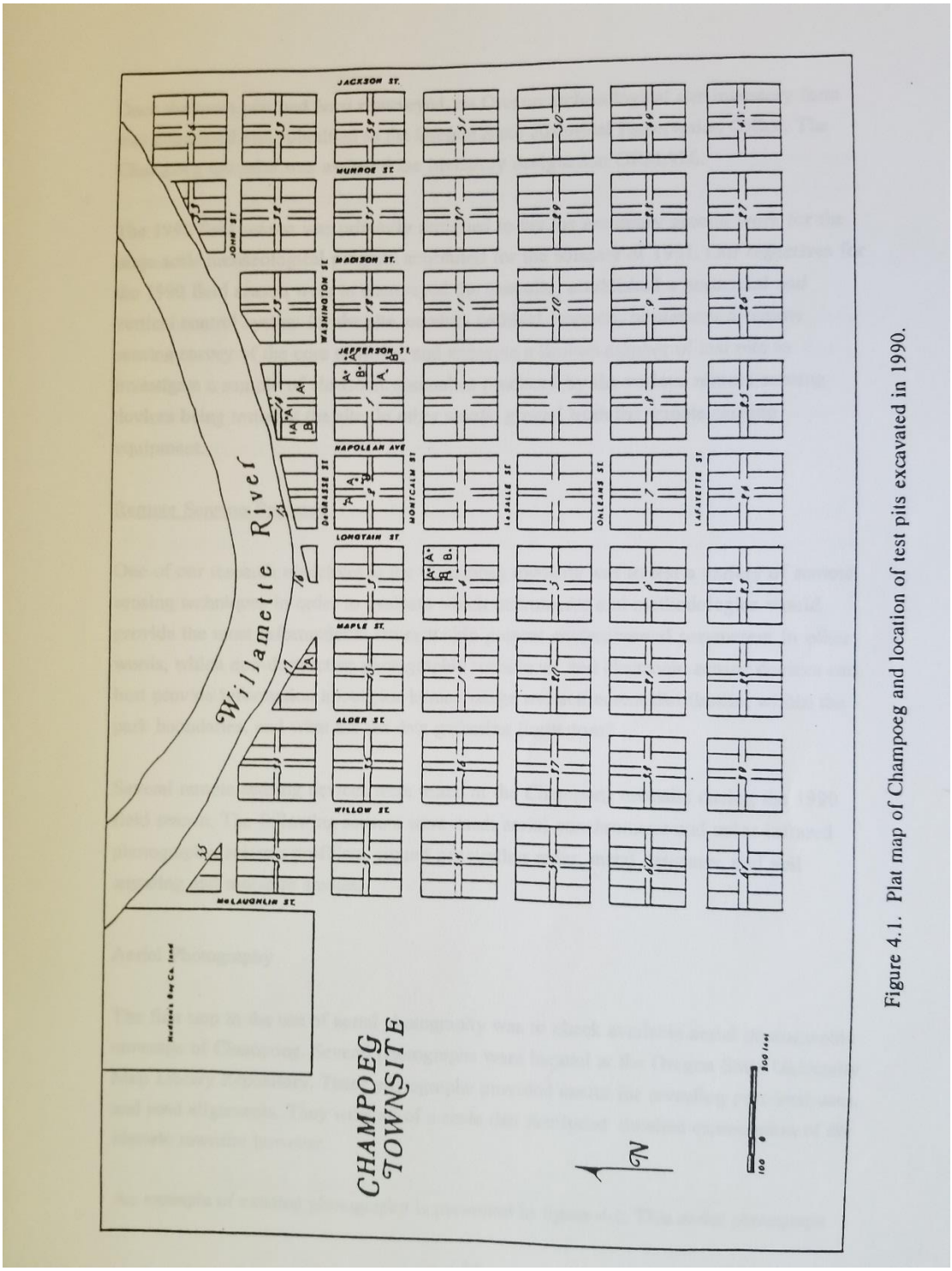

Figure 4.1. Plat map of Champoeg and location of test pits excavated in 1990.

Figure 2.2: 1990 Field Season Excavation Locations (Brauner 1993:80).

After the 1990 field season, the artifact assemblage at Block 2, Lot 2, indicated an occupation surface dating between the late 1830s and 1840s, potentially representing early resident, George Ebbert's cabin site, and led to the block excavations at Block 2 during the 1991 field season. Meanwhile, both Lots 1 and 2 within Block 4 were initially tested in 1990 in order to potentially locate the assumed site where two of Dr. William Bailey's structures, who owned Block 4, burned in 1853 (Brauner 1993:92). However, although both lots of Block 4 contained plenty of burned material culture within the four test pits, subsequent analysis demonstrated that some of these artifacts actually post-dated the 1861 flood, suggesting a potential 1880s-1890s occupation. Thus, warranting further excavations within Lots 1 and 2 of Block 4 during the 1991 field season (Brauner 1993:93).

Excavations in 1991, began on June 26, with Dr. David Brauner once again leading excavations, which included an expanded 28 member field crew and six staff members. The first two weeks were focused on creating a 50-centimeter contour interval map of the townsite, focused between Napoleon and Maple Street and from the Willamette River to LaSalle Street (Brauner 1993:9; 92). The research objectives were similar to those during the 1990 field season, but overall, excavations were meant to test the information provided by the available historical records and local oral histories, as well as the effectiveness of the remote sensing survey data in the context of the Champoeg townsite (Brauner 1993:9; 81). Detailed seismic, resistivity and metal detector surveys were noted as completed in 1990, prior to the large block excavations at Block 2, Lot 2 and Block 4, Lots 1 (Unit C & D) and 2 (Unit C) that occurred during the 1991 field season (Bell 1990; Brauner 1993:8;81). In addition, a 2 x 2 meter test pit was also

excavated on Block 53, Lot 5 in order to confirm the location of the Weston Blacksmith shop, and a 2 x 2 meter test unit was excavated in the intersection of Montcalm and Maple streets in order to potentially find the location of Andre Longtain's residence (Brauner 1993:92). Ten centimeter arbitrary levels were once again completed, aside from Level 1, and artifacts were recorded in their *in situ* positions (Brauner 1993:92). Overall, 46, 320 artifacts were collected during the 1991 field season, and were cleaned, cataloged and curated at Oregon State University by January 1993 (Brauner 1993:9).

Two 6 x 6 meter blocks were excavated on Block 4, Lot 1. One of the excavation blocks (Unit C) was located on the front (north), directly over the burned structural remains recovered within Test Pit A during the 1990 field season (Brauner 1993:93). The other block (Unit D) was placed at the back of the lot (south), away from the evidence of burned material in order to sample the cultural material composition elsewhere in the lot (Brauner 1993:93). A third 6 x 6 meter excavation block (Unit C) was positioned near the front (north) of Block 4, Lot 2 (Figure 2.3). According to Brauner, "this sampling unit was designed to allow us to assess whether a building had stood, and subsequently burned, on this lot or whether the cultural material occurring here was a scatter from Lot 1" (Brauner 1993:93). The field catalogs demonstrate that excavations were completed at Level 6 for Block 4, Lot 1, Unit C, and Level 5 for both Block 4, Lot 1, Unit D, and Block 4, Lot 2, Unit C. All three units included high densities of functionally diverse artifacts, with most artifacts found in the upper 40 centimeters of excavations, and illustrating various degrees of fragmentation as well as having been burnt, and subsequently melted (Brauner 1993:99; 2018:46).

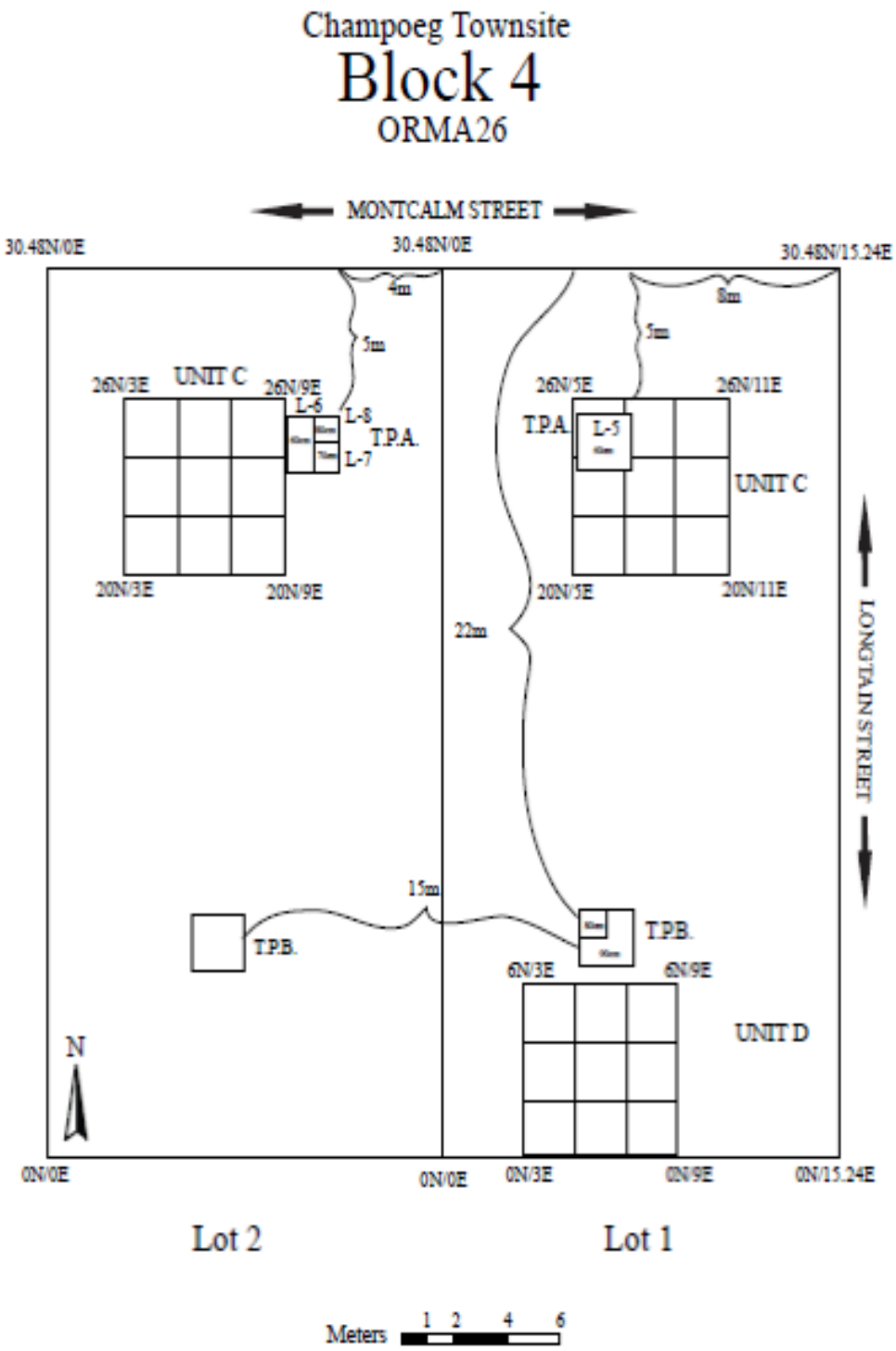

Figure 2.3: Block 4 Excavations: 1990 and 1991 Field Seasons. Courtesy of Kimberly Johnson.

However, the artifact assemblages collected from Block 4 during the 1990 and 1991 field seasons were never fully analyzed and reported, even though initial artifact analysis had suggested a unique set of dates, potentially representing a post -1861 flood occupation (Brauner 2018:46). This would be a much later occupation than artifact assemblages at other parts of the townsite (i.e. Blocks 1, 2, 14, 53) excavated by Brauner or found during previous archaeological work by Nesbitt or Atherton, and also in contrast the historical records which emphasize the abandonment of the townsite seemingly overnight after the 1861 flood (Brauner 2018:4; Hussey 1967:231; Throckmorton 1961:227). Yet, the archaeological record tells a much different story, one in which people returned or relocated to Champoeg after the 1861 flood. Thus, more research on this time period seems to be incredibly warranted and valuable, potentially providing a better understanding of the entire duration of occupation at the Champoeg townsite, rather than simply the pre-1861 flood time period. As a result, the artifact assemblages from Block 4, Lots 1 and 2, from both the 1990 and 1991 field seasons will be the focus of this research study aiming to provide an historical archaeological account and understanding of the post-1861 flood Champoeg townsite.

Chapter 3: Historical Background

The Development of the Oregon Country

The prospect of a profitable fur trade first brought Euro-Americans from Spain, Russia, Great Britain and the United States to the Pacific Northwest during the late eighteenth century (Lyons 1940:xi; O'Hara 1916:1;3; Speulda 1988:6). On May 11, 1792, Captain Robert Gray, sailing the American ship the *Columbia,* was the first to sail into what is now the Columbia River, named as a result of this first exploration (Carey 1922:140; Corning 1956:103; Gilbert 1967:11; Lyons 1940:xiii; Speulda 1988:6). Sailing expeditions from all four nations continued to explore the Pacific Northwest coast, an area known as the Oregon Country, which stretched from Alaska south to San Francisco Bay and east to the Rocky Mountains (Carey 1922:39; Hussey 1967:119 Lyons 1940:xi;xiv). Then, in 1793, the French-Canadian fur trappers of the Northwest Company of Montreal, led by Alexander Mackenzie, established the first trading ties to the region via overland trading routes (Carey 1922:150;153; Lyons 1940:xiv). From 1807 to 1810, David Thompson continued the Northwest Company's trade efforts, exploring as far south as the mouth of the Columbia River (Carey 1922:202;258; Lyons 1940:xiv). However, after the Lewis and Clark expedition had spread word of the region's vitality upon their overland return to the Eastern United States in 1806, the Pacific Fur Company, owned by the American elite, John Jacob Astor, also rushed to the scene, and arrived to the Pacific Northwest's Oregon Country in 1811, with the British-operated Hudson's Bay Company following close on their heels (Brandt and Pereyra 2002:1; Hussey 1967:22-23; 27; O'Hara 1916:2-3; Lyons 1940:xiv; Speulda 1988:6). Astor sent his ship, the *Tonquin*, to the mouth of the Columbia River near the location where Lewis and Clark had spent

the winter of 1805-1806, and there his crew founded the first American settlement in Oregon, Fort Astoria, in honor of their employer (Gilbert 1967:13; Hussey 1967:23; Lyons 1940:xiv; O'Hara 1916:3; Speulda 1988:6). The Pacific Fur Company and its associated trading post was officially established later in the year, after the addition of the overland party, led by Wilson Price Hunt, which consisted of several French-Canadian fur trappers that had been hired by Astor (Hussey 1967:23; Lenzen 2014:1; O'Hara 1916:3; Speulda 1988:6-7). During the winter of 1811-1812, a small party ventured south and a trading post, known as the Wallace House, was established by William Wallace and J.C. Halsey near present-day Salem in the Willamette Valley (Hussey 1967:25-26; Perrine 1924:305;309; Speulda 1988:6). Thus, success was seemingly just beginning for the Pacific Fur Company, but instead the American fur trade was shut down by the year 1813 due to the outbreak of the War of 1812 and the confiscation of Fort Astoria by the British (Brauner 1991b; Hussey 1967:27; O'Hara 1967:3; Speulda 1988:7). Thus, the Northwest Company once again took control of the fur trade within the Oregon Country, employing many of Astor's former fur trappers, and further confirmed their dominance by placing a trading post within the Willamette Valley in 1812, near what would later be the Champoeg townsite, and affectionately calling it the Willamette Post (Brauner 1989:11; Hussey 1967:28-29; Lenzen 2014:1; O'Hara 1916:4; Perrine 1924:309; Speulda 1988:7). It should be noted that prior to this early nineteenth-century Euro-American exploration, the Ahantchuyuk Kalapuyans had long occupied the fertile Willamette Valley, and it is believed that the location along the river, near the placement of the Willamette Post, would have served as an important seasonal staging area and campsite for the Native Americans, and as a result would have been an ideal spot for the Northwest

Company to establish a trade relationship with the Kalapuyans (Brauner 1993:4; Corning 1947:81; Jette' 2010:146).

Although the dominant trading company in the area during the first half of the nineteenth century was the Northwest Company, it too eventually succumbed to a merger, in 1821 with the British-operated, Hudson's Bay Company, a company that had previously been concerned with the fur trade in Canada but now had a clear-cut monopoly over the entire region (Brandt and Pereyra 2002:1; Gilbert 1967:22; Hussey 1967:27;32; Lyons 1940:xv; O'Hara 1916:3-4). The Hudson's Bay Company's Columbia Department was completely reorganized under the new leadership of Chief Factor, John McLoughlin, due to the merger in 1821 and the subsequent enlargement of operations in the Oregon Country, which became more specifically defined as the area from the 42nd parallel north (the Oregon-California border today) to 54 degrees, 40 minutes north (the Alaska-British Columbia border today) in 1825 (Corning 1956:183; Hill 2015:4; Hussey 1967:119; Speulda 1988:7). As a result, in 1824, the Hudson's Bay Company established Fort Vancouver as the new administrative headquarters on the north side of the Columbia River, and operations at the Northwest Company trading station, Willamette Post, were closed (Brauner 1991b:12; Kaiser 1956:27; O'Hara 1916:6; Speulda 1988:7). Fort Vancouver became the main shipping point and was the dominant trading depot and emporium in the Oregon Country, which essentially allowed the British to have full control over the region; at least, until the later arrival of the American wagon trains during the early 1840s, and even though a Joint Occupancy Treaty had been signed in 1818, and renewed in 1827, by the United States and Great Britain regarding ownership of the region (Brandt and Pereyra 2002:1; Carey 1922:261; Gilbert 1967:21-22;36;

Hussey 1967:120; Kaiser 1956:28; Kuhlken 2003:17; Lyons 1940:xvi-xvii; Speulda 1988:7) (Figure 3.1).

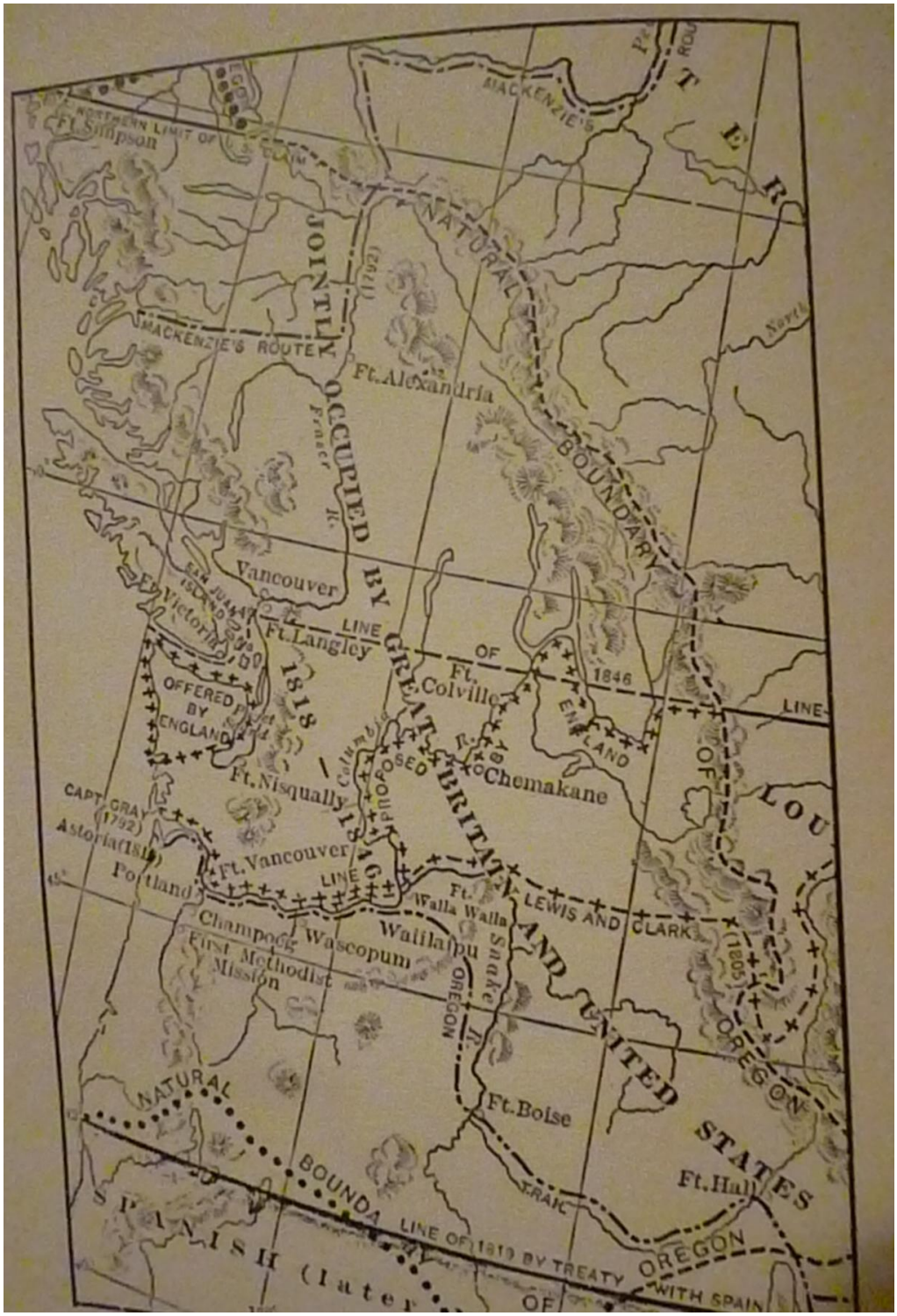

Figure 3.1: Map of the Oregon Country (O'Hara 1916:1).

By 1829, retiring French-Canadian fur trappers, many of whom had begun with the Pacific Fur Company and had become freemen or free trappers under the Hudson's Bay Company in 1821, began settling in the Oregon Country's fertile Willamette Valley, establishing homesteads and farms with the support and assistance of their former employer, Chief Factor, John McLoughlin (Blanchet 1878:71; Brauner 1989:14;16, 1991b:1; Corning 1947:11, 1956:94; Gilbert 1967:36; Hussey 1967:44-47; Jette' 2010:150; Lenzen 2014: 2-3; Lyons 1940:1; O'Hara 1916:16-17). Prior to 1829, the Hudson's Bay Company required their former fur trapping employees to return to their place of enlistment in eastern Canada, the British Isles or Continental Europe after their term of service was completed, rather than allowing any form of settlement in the Oregon Country (Brauner 1989:16; 81-82; Corning 1947:Hussey 1967:45; Lenzen 2014:2). The request to stay in the Oregon Country had come initially from Etienne Lucier in 1828, and by the next year more requests came from other French-Canadian free trappers who had also established families within the region through their marriages to Native American women and consequently no longer wanted to return to eastern Canada after their term of service expired (Brauner 1991b:1; Corning 1947:82; Hussey 1967:49; Lenzen 2014:2. McLoughlin granted their request to stay in the Oregon Country, with certain rules of conduct attached, continuing to list them as Hudson's Bay Company employees in order to avoid any fines or conflict, and even helped supply these first settlers with a start-up allowance of reportedly, two cows, two steers, seed grain, a two-wheeled cart, and a plow (Corning 1947:82; Hussey 1967:51-52; Kaiser 1956:27; Lenzen 2014:2-3). By 1836, it became clear that McLoughlin's decision to allow settlement and agriculture in the region was beneficial to the Company's trading operations, due to the

fact that the supply of furs was depleted, if not decimated in most of the Oregon Country, and the Russian settlements to the north, the Spanish missions to the south, as well the Sandwich or Hawaiian Islands all required additional imported food in order to sustain their own operations (Atherton 1973:1; Brauner 1991b:12; Carey 1922:277; Corning 1947:13;82; Gilbert 1967:31;40-42; Hill 2015:7; Hussey 1967:108-109; Lyons 1940:xvi; Speulda 1988:9; Throckmorton 1961:11-12).

The first of these French-Canadian fur trappers, those that settled in the Willamette Valley from 1829 into the early 1830s, established their working farms on the broad, natural alluvial levee from the mouth of the Champoeg Creek, west to the big bend of the Willamette River, near the former trading station, the Willamette Post (Brauner 1991b:1;3, 1993:2; Brown 1993:xiv; Hussey 1967:48;54-55; Kaiser 1956:27; Lenzen 2014:2; Speulda 1988:9). In fact, the site of Etienne Lucier's original land claim as well as Joseph Despard, Jean Baptiste Desportes McKay, and Andre Longtain's early homesteads are all believed to have been located on the same high natural levee, parallel to the Willamette River, as the Willamette Post (Brauner 1991a:3). Former Northwesterner and Hudson's Bay Company fur trapper, Pierre Bellique is then believed to have settled in the extant trading post structure in 1833, which was located to the east of Etienne Lucier's land claim (Brauner 1991b:3; Williams, and Co. 1976:28 [1878]; Hussey 1967:62) (Figure 3.2).

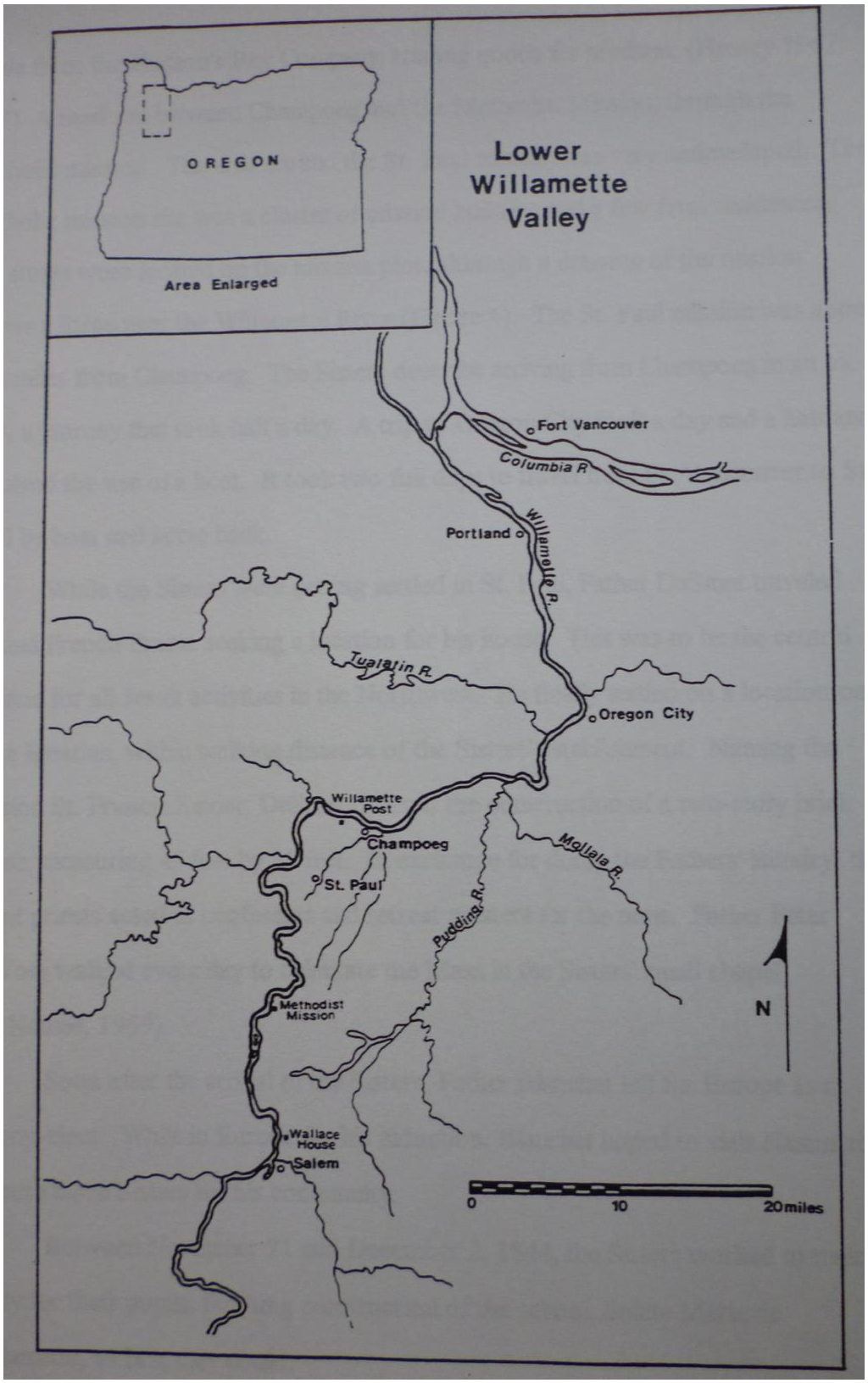

Figure 3.2: Map of French Prairie Settlements (Poet 1996:26).

The Willamette Post had been established in this location, known as Campment du Sable or Sand Encampment by the French-Canadian fur trappers because of its easy access to the river, boats to and from Fort Vancouver, carrying goods and personnel, could easily land due to an opening in the forest (Brauner 1991b:12, 1993:2; Brown 1993:xiv; Corning 1947:80; Hussey 1967:18;37;109-110; Kaiser 1956:28; Lyman 1900:88; McArthur 1992:165; Smith 2011:38; Speulda 1988:15). As noted previously, the Kalapuyans had occupied this location prior to Euro-American exploration due to its usefulness as a seasonal camp (Brauner 1993:4; Corning 1947:81; Hussey 1967:17; Kaiser 1956:27). In addition, an overland route across the Tualatin Plains, once a Native American trail, connected Fort Vancouver with this natural debarkation point via boat to Champoeg landing on the south bank (Brauner 1993:2; Corning 1947:199; Hussey 1967:37). Boat travel upstream from this point on the Willamette River, those traveling south, was not very feasible due to the winding nature of the river channel (Brauner 1993:2; Brown 1993:xiv; Speulda 1988:15). Thus, an overland route, from the south bank location of what would become the Champoeg townsite and across the southern reaching open prairies, was established later for those traveling south towards Salem (Brauner 1993:2; Brown 1993:xiv; Corning 1947:80; Smith 2011:39).

About four miles south on this overland route, the first Catholic Church in Oregon was constructed by the settling French-Canadians in 1836, and was initially placed along the Willamette River (Brandt and Pereyra 2002:3; Lyons 1940:26). However, due to seasonal flooding, the church was relocated and placed in a more sustainable location, which was also on the road to Champoeg and its French-Canadian settlers (Hill 2015:11; Williams, and Co. 1976:28 [1878]). After the arrival of Fathers Francois Blanchet and

Modeste Demers at Fort Vancouver in November of 1838, the St. Paul Mission and what is now the earliest identified Catholic community in the Pacific Northwest could finally be established in January of 1839, surrounding the location of the relocated log church (Brandt and Pereyra 2002:3; Lyons 1940:28; O'Hara 1916:6-7; 21).

However, not all initial French-Canadian trappers turned farmers chose to settle near Champoeg or St. Paul, but instead chose to settle even further south, with Joseph Gervais and Louis Labonte still along the Willamette River, and Joseph Delard more inland along Lake Labish, near the present-day northern boundary of Salem (Black 1942:40; Brauner 1991b:1;4; Clark, Jr. 1981:93; Corning 1947:82; Hussey 1967:55; Speulda 1988:9). Additionally, the American Methodist Mission, led by Reverend Jason Lee, was established in 1834 at Mission Bottom, closer to these southern settlements, located twelve miles south of the Catholic Mission at St. Paul (Corning 1947:11; Hussey 1967:72; Lyons 1940:21). Officially referred to as the Willamette Station of the Methodist Mission, it was closed in 1841, with missionary efforts relocated to their Mill Creek site in present-day Salem (Chapman and Weber 1984:32). In addition, a small party of fourteen Americans, led by fur trapper Ewing Young, arrived to Fort Vancouver from California in 1834, and began to spread settlement to the west of the Willamette River (Hussey 1967:73-74). Thus, the region was not just settled by French-Canadians during the early 1830s, but did include a contingent of American Methodist missionaries, with reinforcements arriving in 1837, as well as Young's small party of male settlers (Hussey 1967:72; Lyons 1940:21).

Yet, the locale along the Willamette River, where the Champoeg townsite developed, just east of the former Willamette Post and near the location of Campment du

Sable, became the trading center and meeting place of the region known as French Prairie (Atherton 1973:1, 1974:2; Corning 1947:13; Dicken and Dicken 1979:16). This region, named in reference to the initial French-Canadian occupants, is bound on the north and west by the Willamette River, on the east by the Pudding River, and on the south by the old northern shoreline of Lake Labish (now the northern boundary of Salem) (Brandt and Pereyra 2002:2; Brauner 1989:6; Brown 1993:xiv; Corning 1956:94; Hussey 1967:7). Thus, the area known as French Prairie would be better recognized as Marion county today, and spans a distance of eighteen miles from north to south and fifteen miles from east to west, approximately 150 square miles in size (Brauner 1989:6; Kaiser 1956:28) (Figure 3.3).

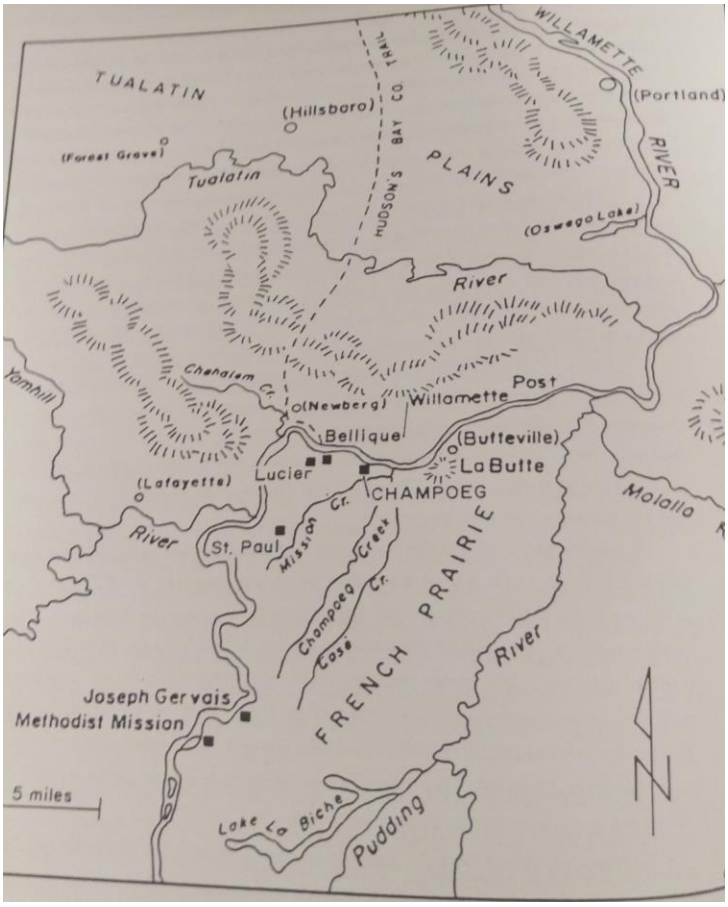

Figure 3.3: Map of French Prairie Boundaries, circa 1840 (Speulda 1988:8).

Environmental Setting of French Prairie

One summer day, upon Chehalem's crest
I stood in ecstacy; within my breast
My thankful heart to its Creator spoke,
And all my soul enthusiastic woke.
Below my feet the blue Wallamet rolled,
While scarlet cloudlets, each enfringed with gold,
The western sky adorned; around me spread
The golden fields of harvest; o'er my head
A faultless sky. Anon the ocean breeze
My brow caressed and sighed among the trees.
Up from farm houses curled the wreaths of smoke,
The evening meal in voiceless verbiage spoke,
Yet rose as incense to the Father's throne
From thankful hearts, for endless favors shown;
Yet hesitating long such scenes as these
To leave, they drifted 'mong the verdant trees,
There as a veil of thinnest misty blue,
Enrobed the forests, lending to the view
A sweet enchantment. On that evening air
Arose for light this simple, earnest prayer:

O Oregon, thou priceless diadem!
In fair Tusoa's crown the brightest gem,
Of thee, my home, here in the golden west,
In vivid green and floral beauty dressed;
Thy matchless vales, where leagues of waving grain,
With mead, and garden, variegate the plain,
And hills with orchards, and with vineyards teem,
While vernal woodlands skirt each crystal stream,
And giant forests, through whose somber shade
The golden beams, if ever, seldom strayed,
Thy mountains clothe; while off the Indian seas
The spicy breezes loiter 'mong the trees;
While high above, enrobed in spotless shrouds,
Rise mountain monarchs dwelling in the clouds.
O Sprite of numbers, tune my stammering tongue,
To sing thy praises, now too long unsung.

Say, Prince of Empire, whose the favored lot
To gaze upon, and name this sacred spot?
Who first beheld those vernal mantled hills,
This Eden of the west, whose thousand rills
Rush headlong down the rugged mountain side.

To blend their music with the sobbing tide?
Who first beheld these mountain monarchs white?
These mountains blue, say, blessed they first whose
sight?
This name of names the sweetest, who bestowed?
These rivers named as they in grandeur flowed
Through matchless valleys, where the fragrant gales
From thermal seas the winter sprite assails,
Nor strives in vain, though he on mountain crest
Eternal reigns, in tintless garments dressed.

-from *Champoeg and Other Poems* (pp.10-11) by E. E. Eberhard (1901).

The romantic portrayal of the Oregon Country, as described above, was a popular depiction of the region during the nineteenth century, especially by Americans looking to move to viable and prosperous land out West (Hussey:1967:2). Early in the nineteenth century, Americans were moving westward from the East Coast, but continued to settle in adjacent areas such as the Trans-Appalachia region and Mississippi Valley (Jette' 2015:135; Throckmorton 1961:31). Thus, it was not until a depression hit Missouri in 1837, that Americans began to look past the land immediately to the west, but to the attractive and idyllic Oregon Country (Throckmorton 1961:31).

Due to the mild, humid climate of the Pacific Northwest, which is the result of a unique combination of its geographic position, atmospheric processes, and landform characteristics, as well its immediate access to the sea and abundance of timber, the region was seemingly ideal for settlement (Jackson 2003:60; Throckmorton 1961:31). Yet, within the overall Oregon Country, it was the fertile north-central portion of the Willamette Valley, commonly known as French Prairie due to the early French-Canadian homesteads that had already laid claim to land in the region prior to the American wagon trains of the 1840s, that was the epitome of this "Eden of the West" depiction (Brandt and

Pereya 2002; Brauner 1989:26, 1991b:3, 1993:2; Clark, Jr. 1981:92; Dicken and Dicken 1979:16; Eberhard 1904:10-11). French Prairie seemed to be the most prosperous and viable area for those seeking to settle in the Oregon Country and establish agricultural enterprises due to its location on an ancient flood plain with deep, organically rich, alluvial soils deposited as a result of occasional flooding from the Willamette River, in combination with the favorable climactic conditions including warm, dry summers, and cool, wet winters with plentiful rainfall (Brauner 1989:6;8; Chamber 1929:2; Gilbert 1967:36; Manion 2014:6-7; Hussey 1967:1-2;5; Jackson 2003:60; Speulda 1988:1; White 1991:191).

The vegetation within the region of French Prairie during the nineteenth century, consisted of white oak (*Quercus garryana*) stands encompassing open prairie grasslands, which had been maintained by the Kalapuyans via seasonal fires for the growth of important edible crops like camas (*Camassia quamash*), yampah (*Perideridia oregana*), and wapato (*Sagittaria latifolia*) as well as to serve as grazing lands for the various types of big game in the region which included Roosevelt elk (*Cervus canadensis roosevelti*), black-tailed deer (*Odocoileus columbianus columbianus*), white-tailed deer (*Odocoileus virginianus leucurus*), and black bear (*Surus americanus altifrontali*) (Brauner 1989:10-11; Cultivariable 2019; Hill 2015:10; Hussey 1967:2; Kaiser 1956:28; Kuhlken 2003:18; Lyman 1900:88; McArthur 1992:165; Manion 2014:7-8; Prescott 2007:7; Speulda 1988:1; Towle 1982:71-73). Besides the white oak tracts, the lowlands of the Willamette Valley included forested hillsides and riparian zones with Douglas fir (*Pseudotsuga menziesii*), big-leaf maple (*Acer macrophyllum*), alder (*Alnus rubra*), Oregon ash (*Fraxinus oregana*), willow (*Salix*), cottonwood (*Populus*) and shrubs such as Oregon

grape (*Berberis aquiforium*), salmon berry (*Rubus spectabilis*), and elderberry (*Sambucus glauca*) as well, with ferns (*Pteridophyta*) often the primary undergrowth (Bowen 1978:59; Dicken and Dicken 1979:52; Hill 2015:9; Hussey 1967:2; Manion 2014:7; Prescott 2007:6; Speulda 1988:1; Towle 1982:67). The western and eastern slopes of the Willamette Valley were dominated by forests and woodlands comprised of variations of fir (*Abies*), pine (*Pinus*), spruce (*Picea*), hemlock (*Conium)*, cedar (*Cedrus*), larch (*Larix*) and madrone (*Arbutus menziesii*) (Chamber 1929:2; Dicken and Dicken 1979:52; Hussey 1967:3; Speulda 1988:1).

Of course it should be reiterated that, initially, the appeal of the region included the abundant number of animals that could be hunted, by both the Native American inhabitants and French-Canadian fur trappers and later settlers, for their fur bearing qualities including fox (*Vulpini*), muskrat (*Ondatra zibethicus*), wolf (*Canis lupis*), otter (*Lutrinae*), ermine (*Mustela ermine*), mountain lion (*Felis concolor oregonensis*), bobcat (*Linx rufus fasciatus*) and most importantly the Pacific Coast beaver (*Castor Canadensis pacificus*) (Brauner 1989:11; Hussey 1967:2; Manion 2014:8). Rabbit (*Sylvilagus bachmani ubericolor*) as well as a myriad of migratory waterfowl including swans (*Cygnini*) and geese (*Anserini*) were also commonly found and hunted within the Willamette Valley for their down and meat (Brauner 1989:11; Manion 2014:8). In fact, it is believed that Etienne Lucier did not only select his land claim because of its ideal transportation and trade location, along the river and near the former Willamette Post, but potentially because it was where he had previously established a base camp years earlier due to its proximity to Skookum Lake, which would be an advantageous inclusion for someone hunting and setting traps (Brauner 1989:29, 1991b:4; Hussey 1967:53). It was

then, this seemingly ideal location, just east of Etienne Lucier's homestead, which became the commercial and community center of French Prairie, better known as the Champoeg townsite.

History of the Champoeg Townsite

As a result, due to the overall decline in fur bearing animals and the fertile soils of the Willamette Valley, trade within French Prairie became focused on agriculture, and Champoeg, located on a terraced alluvial flood plain including natural levees and seasonally flooded, rich and well-drained, sandy soils on the bottomlands (as seen by the French fur trapping name, Campment du Sable or Camp of Sand) was an ideal settlement location for the French-Canadian trappers turned farmers (Atherton 1973:8; Bell 1990:2; Brauner 1991b:3; Conzen 2006:198; Corning 1947:13; Hussey 1967:1; McArthur 1992:165; Marsh 2005:421; Middleton 1975:2; Speulda 1988:xi). In fact, the origin of the name Champoeg, sometimes spelled Champooick or Champooing in some of the earliest historic records, is somewhat debated, but is believed to originally have been in reference to the Kalapuyan word for an edible root, either the yampah or wild camas, depending on the source, but both are previously mentioned as notable food sources for the Kalapuya due to their prevalence within the Willamette Valley, and further suggests the fertility and viability of the soil in and around the townsite (Cultivariable 2019; Hussey 1967:18; McArthur 1992:165). Thus, Champoeg became especially important in regards to the cultivation of wheat, and became the primary trade center and collecting point for wheat grown in the surrounding area because it could easily be shipped via the Willamette River up to Oregon City, and eventually to Fort Vancouver (Atherton 1973:2; Brauner 1991b:12; Chappel 1992: 6; Hussey 1967:109). As a result, American, Webley

Hauxhurst established a grist or flour mill along the Champoeg Creek from 1834 to 1835, and the Hudson′s Bay Company, recognizing the collection point and commerce center, instituted a warehouse or supply depot in Champoeg in 1841 (Atherton 1973:2; Bowen 1978:9; Brauner 1993:3; Corning 1947:13; Dobbs 1975:19; Hussey 1967:61;74; Kaiser 1956:28; McArthur 1992:165; Middleton 1975:2; Speulda 1988:10;15) (Figure 3.4). Fur trade operations continued at this location in Champoeg until 1851, with the Hudson′s Bay Company said to have later added a granary, small store, and Clerk′s house, but the main medium of exchange was wheat, with farmers bringing in bushels and in return gaining supplies from the Hudson′s Bay Company warehouse, based on a barter and credit system (Brauner 1991b:3; Chappel 1992:6; Chapman 2014:72; Dicken and Dicken 1979:76; Gilbert 1967:46; Hussey 1967:110; Jette’ 2010:150, 2015:144; Speulda 1988:15;17; Throckmorton 1961:14). Thus, demonstrating that the primary purpose of these settlers, at least in the eyes of the Hudson′s Bay Company, was the cultivation of the land, not necessarily the founding of towns (Corning 1947:13).

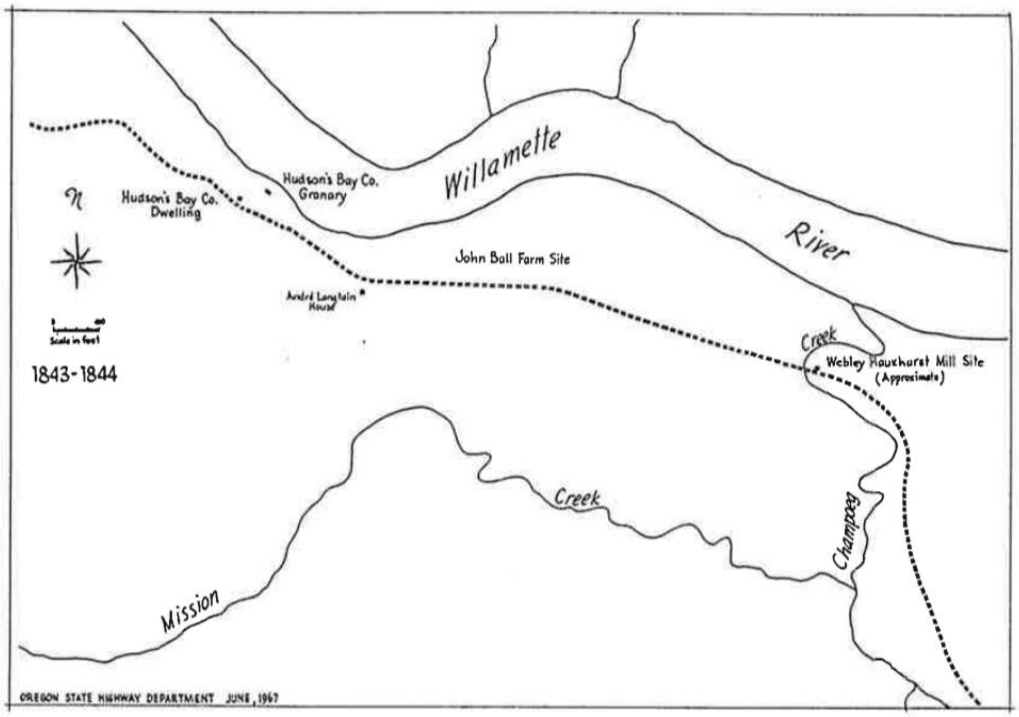

Figure 3.4: 1844 Map of Champoeg (Hussey 1967:222).

By 1841, Champoeg is recorded as the "principal settlement" in the region, and as a result of its growth and importance, in 1844, American, Robert Newell, along with French-Canadian, Andre Longtain had the town platted by Jesse Applegate (Atherton 1973:1; Chapman 1993:26; Conzen 2006:191;203; Dicken and Dicken 1979:15; Hussey 1967;115; Smith 2011:39). Each square block included 8 lots, and each lot was 50 by 100 feet in length. Each block featured a cross alley, with alleys 10 feet in width, and streets 60 feet wide (Conzen 2006:195;203; Corning 1947:88; Kaiser 1956:32; Speulda 1988:19). Cross alleys were relatively common in Missouri, Ohio, and Indiana, and spread West along with the settlers, representing the earliest type of alley featured in Oregon town plats, which allowed for every lot to have public access on two sides of the property, accounting for the needs of the occupant and demonstrating design sophistication (Conzen 2006:195;200;204; Hussey 1967:192). Among the river towns,

which were some of the first to be platted, a strip, 60 to 80 feet deep was reserved along the waterfront for wharves (Conzen 2006:195-196; Corning 1947:88; Kaiser 1956:32; Speulda 1988:19). Four blocks, or a central Shelbyville square, from Longtain to Jefferson street (west to east), and Montcalm to Orleans street (north to south), were believed to have been left in reserve for county buildings due to Champoeg's anticipated growth and significance (Brauner 1993; Conzen 2006:185;194; Kaiser 1956:30-32).

Overall, the townsite was divided north-south along Napoleon Avenue, which in 1850 would become the Champoeg-Salem road (Chappel 1992:7). Robert Newell claimed land on the east side of Napoleon Avenue, with these street names reflecting his American nationality, and Andre Longtain's claim on the west side, featuring French names (Kaiser 1956:32) (Figure 3.5). Thus, the Champoeg town plat, illustrates transitions occurring within the region of French Prairie as well as the overall Oregon Country during this time period, with the initial French-Canadian free trapper settlers, now neighbors with a growing number of American migrants (Chapman 2014:71; Jette' 2015:139-140;144; Middleton 1975:2-3; Speulda 1988:12).

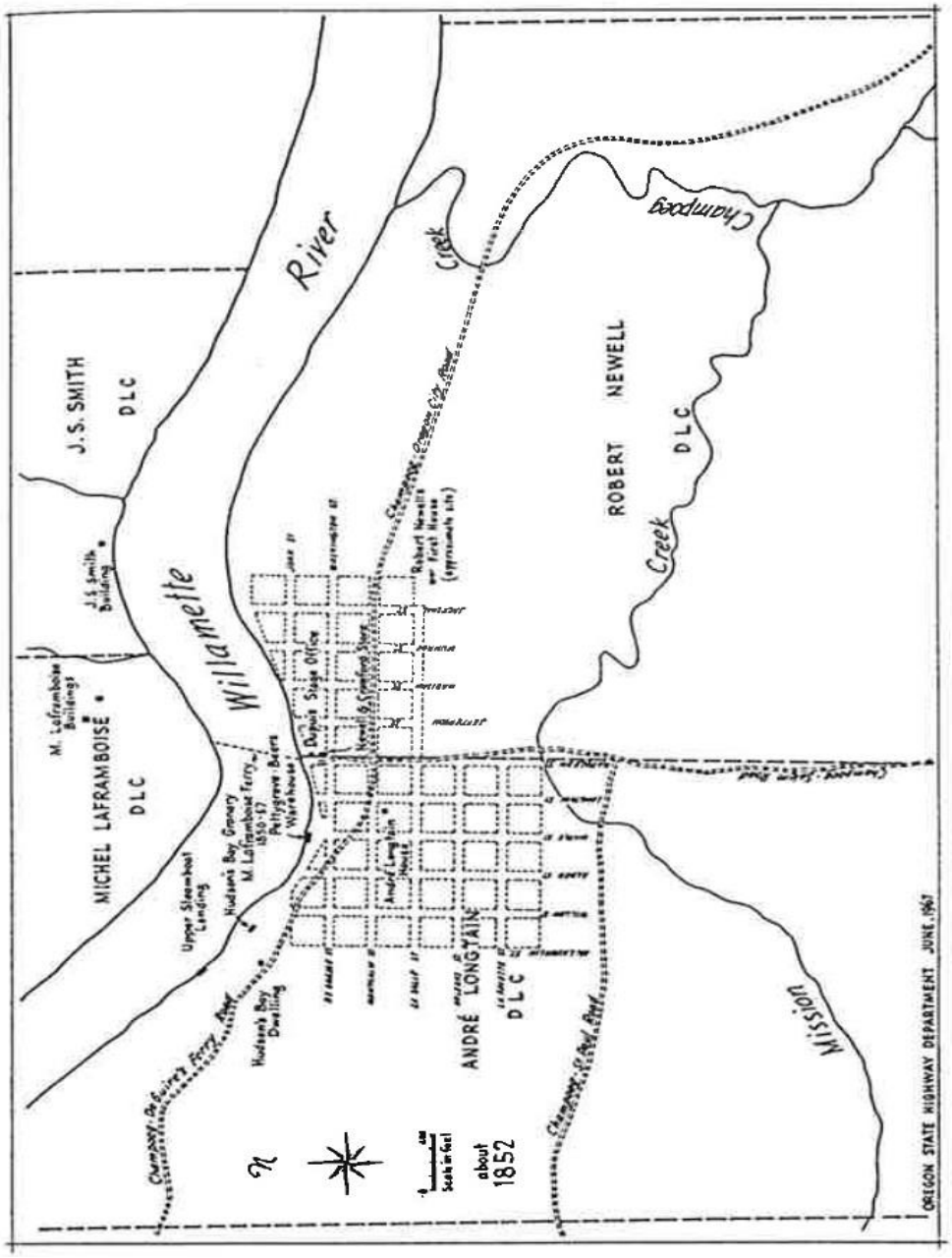

Figure 3.5: 1852 Champoeg Townsite Plat (Hussey 1967:222).

The influx of over one thousand American settlers to the Oregon Country via the opening of the Oregon Trail from 1840 to 1843, left uncertainty about the region's future due to the ongoing Joint Occupancy treaty between Great Britain and the United States

(Jette' 2015:140; Kaiser 1956:28; Speulda 1988:12; Throckmorton 1961:33). In addition, a series of meetings had been held at Champoeg after the death of American, Ewing Young in 1841 due to the legal ambiguity regarding his estate under the Joint Occupancy treaty (Hussey 1967:138; Kaiser 1956:28; Middleton 1975:3; Speulda 1988:13; Throckmortion 1961:33). Finally, on May 2, 1843, a provisional government was formed at Champoeg via a formal vote among the male settlers, and created the constitution known as the Organic Act of 1843 (Chappel 1992:6; Middleton 1975:3; Speulda 1988:14). The vote, which is believed to have been decided by the difference of two votes, also determined that the United States of America, not Great Britain, would have control over the region (Chamber 1929:47; Hussey 1967:154; Speulda 1988:13). Therefore, Champoeg became recognized as the legal birthplace of Oregon and was the first government by American settlers on the Pacific Coast (Atherton 1973:1; Chamber 1929:47; Hussey 1967:158; Kaiser 1956:29; McArthur 1992:166; Speulda 1988:14).

Reports about Champoeg at this time suggest ongoing development, with Father Modeste Demers recording that the townsite, now platted, was being built in 1844 (Brauner 1993:51). In addition, a ferry service reportedly became available the same year, from Champoeg landing across to the north side of the river, which is later recognized as LaFramboise's ferry in 1850 (Corning 1947:199; Chappel 1992:7; Kaiser 1956:33; Hussey 1967:222). Artist, Paul Kane, who traveled through the Willamette Valley from 1846 to 1848, illustrated the Champoeg townsite during this time period, depicting the Hudson's Bay Company warehouse and store as well as the Robert Newell and Andre Longtain land claims (Harper 1971:243; 300) (Figure 3.6).

Figure 3.6: Paul Kane's "Willamette Valley at Champoeg", circa 1846-48 (Harper 1971:243).

In 1848, in part due to the establishment of the provisional government at Champoeg, the disputed Oregon Country was divided, and Oregon, Washington, Idaho and Montana officially became a territory of the United States of America (Dicken and Dicken 1979:84; Kaiser 1956:28; OHS n.d; Speulda 1988:17). Unfortunately, Champoeg's importance within French Prairie was not transferred in name to the new Oregon Territory, with Oregon City, rather than Champoeg recognized as the territorial capital, and the county name changed from Champoeg to Marion in 1849 (Corning 1947:88; Dicken and Dicken 1979:15; 78; Hussey 1967:204). However, even without the capital title, and a temporary stall in growth due to the exodus to the California gold fields, Champoeg continued to expand as a commercial center during the 1850s, especially after the establishment of both the Champoeg to Salem stage road via Napolean avenue, as well as the advent of steam navigation past Champoeg to Salem and

the Upper Willamette River by 1851, with Champoeg a useful deep water port of call (Chappel 1992:7; Hussey 1967:204-205; Middleton 1975:4; Smith 2011:13; Speulda 1988:17). Additionally, economic growth occurred after 1850, with grain grown for export, rather than just for the local or Alaskan markets like previously (Bowen 1978:14). Local resident and scholar, George Gibbs drew a depiction of the growing Champoeg townsite in 1851, with the ferry landing seen on the south bank of the Willamette River (Hussey 1967:208;228; Speulda 1988:18-19 (Figure 3.7).

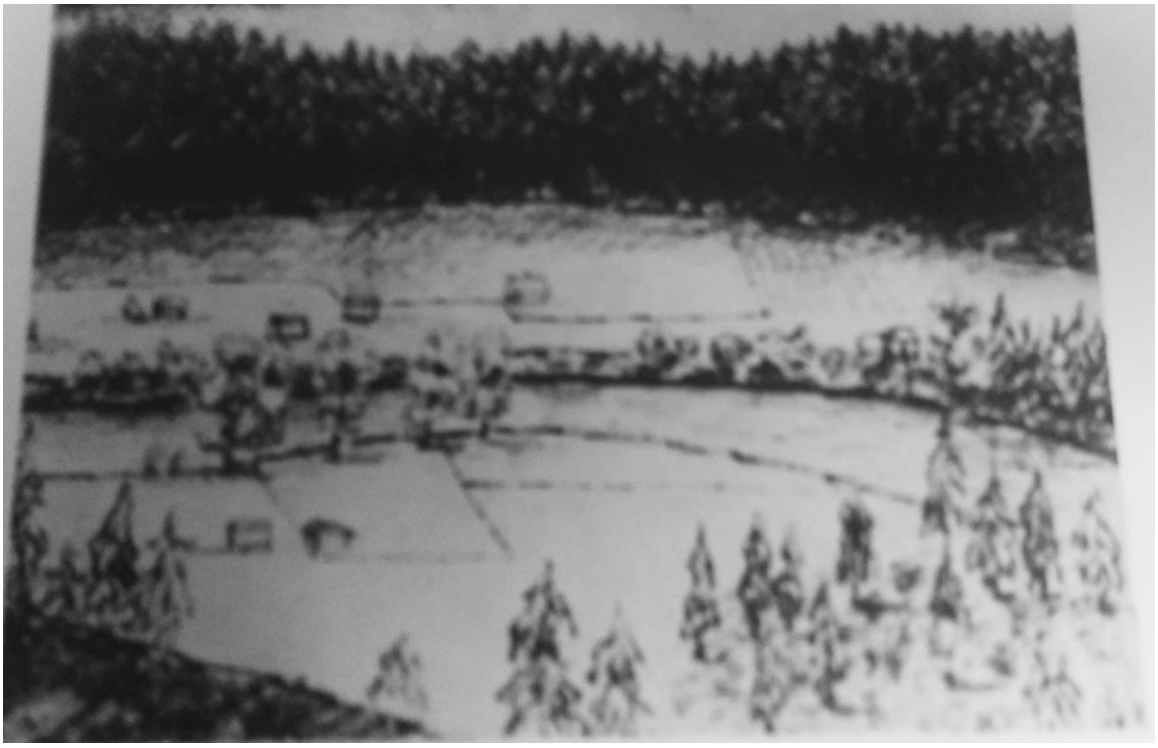

Figure 3.7: George Gibbs' Champoeg Townsite, circa 1851 (Speulda 1988:18).

Francois Xavier Matthieu, was the first post master of the Champoeg post office, which was instated on April 9, 1850, but this became the Butteville post office in September of that year, after Matthieu founded the town of the same name, and where he also ran a general mercantile business (Chapman 1993:37; Dobbs 1975:172; Hussey 1967:210; Lyman 1900:99; McArthur 1992:166). However, July 10, 1851, the Champoeg

post office name was re-established in the townsite, with Robert Newell as the new post master (McArthur 1992:166; Speulda 1988:17). Newell, in partnership with J.D. Crawford, opened a store in Champoeg which dealt primarily in staple goods, and operated alongside the post office (Hussey 1967:206;210; Speulda 1988:17).

In November 1852, the town plat was extended by surveyor, S.D. Snowden from Jesse Applegate's 1844 town plat of fifty-seven blocks (Brauner 1993:3; Conzen 2006:203;205; Hussey 1967:213; Kaiser 1956:32; Speulda 1988:19). In total, seventy-two square blocks were platted, but only one-third were ever believed to have been occupied (Atherton 1973:2; Conzen 2006:195; 201) (See Figure 3.5). From 1855 to 1860, Robert Newell is recorded as having sold 22 townsite lots, while Andre Longtain sold eight, with the townsite had attracting several prominent businessmen (Brauner 1993:3; Kaiser 1956:33). Within the 1860 census, 60% of the 131 listed Champoeg residents were farmers, demonstrating the ongoing importance of agriculture within the region (Speulda 1988:19-20). However, other professions included day laborers, carpenters, blacksmiths, millers, store keepers, lawyers, wagon makers, a gardener, a ship carpenter, a Roman Catholic Clergyman, United Presbyterian Clergyman, a baker, an apprentice, a school teacher, an engineer, a harness maker, a cabinet maker, a butcher, a molder, a surveyor, a bookkeeper, a clerk, and a gunsmith (Hussey 1967:217; Speulda 1988:20). These professional residents had recorded a variety of origins, both internationally including Prussia, England, Switzerland as well as American, moving from Washington D.C., Arkansas, Vermont, New York, and Ohio (Hussey 1967:217; Kaiser 1956:33; Speulda 1988:19).

In 1896, the *Oregon Scout* newspaper reminisced about the townsite during the 1850s, as being "quite a pretentious village and assumed the airs of a city" (Atherton 1974:2). Sources differ in the bustiness types and quantities, but by the end of the decade, Champoeg is reported to have had approximately 200 people, and thirty to sixty houses including twenty-four prominent structures (Atherton 1974:2; Brauner 1993:56; Chapman 1993:37; Chappel 1992:7; Corning 1947:89; Hussey 1967:209;215; Speulda 1988:17;19). There were at least three general mercantile stores and warehouses including Francis Pettygrove's former granary/store and warehouse, which had opened in 1844 and was operated by Pettygrove until 1848 (Brauner 1993:51; Chapman 1993:2; 26). By 1852, Edward Dupuis had rebuilt his stage station and store after a fire in 1851, and had daily stage lines headed south to Salem, as well as Butteville and Oregon City, via one of the three stage lines available, with operations later run by Ray and Danforth (Brauner 1993:54;59; Corning 1947:89; Winthur 1950:139). At least one hotel was present, including the Champoeg Hotel operated by Arnold and Stevens (Hussey 1967:209). As well as David Weston's blacksmith shop, livery stables, barber shops, a school, Masonic Hall, and church in addition to a public house and saloon, and a bowling alley (Hussey 1967:215). Robert Newell built a flour mill at Case and Champoeg creek in 1855, following in the footsteps of Webley Hauxhurst who had built a small grist-mill operation in 1835, which Thomas McKay bought in 1839, and operated until 1844. By 1859, Allan, McKinlay, and Lowe had purchased the flour mill in its entirety from Robert Newell, and had also purchased a mercantile store within the townsite (Brauner 1993:50-51;56; Hussey 1967:219-220). Finally, a brickyard was available, as well as a steam landing, west of the Hudson's Bay Company warehouse, in addition to a ferry landing or

Champoeg landing, on the northern end of Napoleon Avenue (Brauner 1993:53;56; Hussey 1967:209;215; Speulda 1988:17;19). Thus, the townsite would have been a bustling community, full of activity, especially in terms of transportation and trade, but what is most obvious is that the residents of Champoeg were planning for its long term success and occupation.

However, by the 1860s, Champoeg had begun to be overshadowed by other rapidly growing towns including Salem, Oregon City, and Portland, in particular. Salem, had become the state capital in 1859, with Oregon City, formerly known as Willamette Falls prior to 1844, had grown increasingly as a commercial center within the Valley, and Portland, which was established in 1845, grew in both population and commerce, after its establishment as a seaport in 1849 (Black 1942:46; Brauner 1993:3; Chapman 2014:73; Corning 1947:17;19; Dicken and Dicken 1979:18; Hussey 1967:204). Then, to add insult to Champoeg's economic decline, on December 6, 1861, flood waters rose over the banks of the Willamette River at Champoeg, reaching a depth of seven feet in the townsite, approximately thirty feet throughout the bottomlands, and potentially fifty-five feet at its lowest levels, and slowly washed the town away (Chappel 1992:7; Hussey 1967:230; Marsh 2005:187).

The Great Flood of 1861-1862

The citizens of Champoeg had experienced floods prior to 1861, one in 1843 and another as recently as 1853, but none of these floods compared to the flood of December, 1861 and the damage that it inflicted (Brauner 1993:71; Corning 1947:45, 1956:86; O'Mera 1943:144; United 1971:2). As a result, it is often referred to as the Great Flood of 1861-1862 due to its severity, which resulted in the worst flooding in Oregon's history

(Jones 2018:60). It was especially brutal because of a combination of factors including a cold, wet November, with plenty of snow fall in the mountains, and then a warmer December, with eighteen consecutive days of warm rain melting the snow pack in the mountains, leading to a rapid increase in runoff directed towards the Valley floor (Corning 1947:49; Hussey 1967:230; United 1971:3;14).

At Champoeg, most of the structures were constructed of wood, with wooden sill foundations, so almost all traces of the town were seemingly gone after the flood waters dissipated (Dicken and Dicken 1979:95; O′Mera 1943:145; Smith 2011:15; Speulda 1988:20). Mrs S.A. Clarke who visited the town before and after the 1861 Flood, summarized the extent of the flood′s damage:

> one saw only drifting sand, and land denuded of its soil marked the abandoned townsite … everything that made Champoeg habitable and lent it hope and peace and civilization were swept away (Atherton 1973:3; Speulda 1988:20).

Additionally, the *Oregon Argus'* reported on December 21, 1861:

> There appeared nothing left, but a layer of silt and sand had been deposited on the foundations of the buildings; the weight of this accumulation held floors of structures and scatter of broken and fallen belongings when the later heavier flooding tore away upper parts of structures (Atherton 1973:3).

Only the sturdier Hudson′s Bay Company warehouse, also located on a natural rise, is said to have survived, and it was still found fifty feet away from its foundation (Brauner 1993:50; Hussey 1967:231). Although, in 1956, Barbara Austin, at the age of 88, recounted her father, George Eberhard′s account of the Great Flood of 1861, to local French Prairie historian, Harriet Munnick:

> The water washed away all the Lucier buildings. It came up to the second story of the old Belleque [Bellique] house (Post), and twisted it about on its foundation. The folks were screaming from the upstairs windows. The men went in a rowboat to get them. While the water was still up, they went out to the old house, got poles

> under it, and floated and dragged it to higher ground...I don't know how they ever did it (St. Paul Historical Society, Oregon [SPHS] 1985-1986, Judy Sanders Chapman research notes:15-16).

On December 19th, 1861, *The Daily Oregonian*, published a similar account of the flood, describing the following:

> The high water completely wiped out our town, taking every house away. Most of the houses lodged in the timber just below, but the dwelling houses of Mr. Randall, Dr. Bailey, D. Weston and John Haefer, together with some barns and office houses are not found – they went down the river. On Tuesday the 3d instant, the water raised rapidly, and at 3 o'clock, p.m., entered the lowest places back of town. At 12 o'clock that night, the water was six feet deep over the highest parts of town, and the people were taken into boats from the second-story windows and conveyed to the hill, back of town. No lives were lost. In the morning every house was gone, and the river was still raising. It is estimated by those who pretend to know that the water was fifteen feet higher than ever known before. Nothing was saved from the houses. We all thought that it was utterly impossible for the river to raise higher than in 1852-3, and made preparations accordingly. The Champoeg Mills still stand, but are very much damaged – the water raising into it about eight feet. The Mission Mill not damaged – about 5,000 bushels wheat lost, and a large quantity of flour floated off. I consider $150,000 a small estimate of the loss of property in and about this town, after deducting all that can possibly be saved from the wreck (Brauner 1993:73).

Mary Higley Hopkins who was eight years of age when the 1861 flood hit Champoeg, later recounted the experience of being rescued by canoe and spending the night at the Newell family's house up on the hill to her daughter. In her account, she explains that the water rose more swiftly than anyone anticipated, with the second-story of her father's store within the townsite, not high or strong enough, and later found one mile away, caught in hazelnut bushes. Mary also describes the aftermath of the flood, reminiscing about how Christmas that year had been a sad one due to the economic toll that the flood had had on her family, as well as other residents and families from the town, and in her case, had forced her mother to find work in Salem, while her father and

eldest brother headed east to the Idaho gold mines, to return eight long years later (Brauner 1993:73-77; Friends 2008).

Additionally, the family of John Dimick must have experienced the flood at their home in Hubbard, Oregon, with John P. Eberhard, who was stationed with Sheridan's regiment on the East Coast, writing back to his friend in February of 1862:

> Your kind but short letter of December last came to hand a few days ago I was of course very glad to hear of you again and learn that you are all right but sorry to learn that you had been visited with an inundation which destroyed...so much property and probably many lives. You will all have my wish that such another may never again visit our happy State but that all may recover from their misfortune and live long and happy enjoying the happy priveleges of American Citizen unmolested in vocation. Nothing does a Patriate more good than to know of the peace and prosperity of his country and State (Fout and Kittell 1983:A-1-A-2).

Yet, among the townsites located on the flood plain of the Willamette River, Champoeg was not the worst town affected by the flood waters (Brauner 1993:72). Linn City, located on low-lying land on the west side of the river, across from Oregon City, completely vanished, never to be rebuilt (Corning 1947:36; 38-39, 1956:148-149; Dicken and Dicken 1979:95). While across the river, Oregon City, which was obviously not destroyed, did suffer the destruction of approximately a half dozen buildings within the lower town including George Abernethy's mill and brick store (Corning 1947:36; O'Mera 1943:144; Throckmorton 1956:240). Additionally, Orleans, established in 1851 on the east bank of the Willamette River across from Corvallis, was completely inundated, with the financial losses too great to overcome, and especially since rival, Corvallis, suffered few losses (Brauner 1993:73; Corning 1947:153). Thus, Orleans was never rebuilt (Corning 1947:153).

However, the flooding destruction was not limited to Champoeg, the Willamette Valley, or even Oregon (Jones 2018:64). In California, the Great Flood of 1861-1862 is recognized as the state's worst natural disaster, worse than the Great Fire of 1906 in San Francisco, the Loma Prieta earthquake of 1989 or the Northridge earthquake that struck near Los Angeles in 1994 (Jones 2018:59-60). As a result of forty-five days of consecutive rain in combination with snow melt from the Sierra Nevadas during January of 1862, the Central Valley, approximately 250 to 300 miles in length and the primary agricultural center in California, experienced massive flooding, sitting under thirty feet of water for much of the year before it drained (Jones 2018:60; 64-65;68). The flood caused irreparable damage, and bankrupted the state (Jones 2018:60).

Sacramento, the second-largest city in California, and the elected state capital as a result of its proximity to the gold rush activity and nearly 80% of the state's population, suffered some of the worst flooding. Built on the confluence of the American and Sacramento rivers, the levee for the American river failed, while the levee for the Sacramento river held, but trapped the flood waters from the American river within the city, washing away houses, businesses, and animals (Jones 2018:65). After three months, the city was still flooded, and the possibility of recovery looked bleak, but instead the residents chose to organize a self-tax in order to raise funds to reconstruct and raise a two- and-a-half-mile stretch of city above the 1861-1862 flood level, approximately nine to fourteen feet (Jones 2018:66-67). It took fifteen years and a considerable amount of money to completely reconstruct the city (Jones 2018:67). However, many townsites, especially those smaller in size and in rural locations like Champoeg, were not

completely rebuilt, and are seemingly lost to history as a result of the Great Flood of 1861-1862.

History of Champoeg after the 1861 Flood

Thus, all of Champoeg's significant milestones seemingly come to an end with the 1861 flood due to the fact that the townsite is believed to have been completely abandoned, essentially overnight, with residents moving to higher ground and establishing Newellsville, a half mile to the south (Chappel 1992:8; Hussey 1967:232; Smith 2011:46). Robert Newell is known to have relocated his house here in 1852, hence the name of the settlement, which opened an official Newellsville post office in 1864 (Chappel 1992:15;22; McArthur 1992:166; Speulda 1988:17). Newellsville is said to have included two general merchandise stores, a blacksmith, wagon shop, and a saloon or lodge hall (Chappel 1992:11). In 1866, Newell essentially gave up on the townsite that he had devoted so much time to develop, no longer seeking a profit from his land claim, and sold his remaining townsite lots in addition to 200 adjoining acres for $3000 total to James R. Spencer, before moving to Idaho (Chappel 1992:22; Kaiser 1956:33; Speulda 1988:21). By the turn of the century, the Champoeg townsite is often referred to as an idealized and romanticized spot, popular with tourists reminiscing about Oregon's early frontier days (Eberhard 1904; Hussey 1967: 238). In 1901, the Oregon Historical Society dedicated a monument to the formation of the provisional government and those that had voted on May 2, 1843. F. X. Matthieu, the only remaining voter still alive, designated the location of the monument, which can still be seen within Champoeg State Park today (Dobbs 1975: 171; Hussey 1967:246; Kaiser 1956:33; Speulda 1988:14).

Therefore, historians have remained focused on uncovering answers and artifacts from the Champoeg townsite's most significant time period, and have left the post-1861 flood period essentially uninvestigated. Yet, the disregard for the Champoeg townsite during this time period seems premature due to reports that warehouses were rebuilt along the river, and it is known to have continued to operate as a commercial shipping port and point of call for steamboats after the 1861 flood (Brauner 1993:77; Chappel 1992:8; Hussey 1967:233-234; Middleton 1975:4). In fact, it was reported that there was little change in terms of the quantity of goods being shipped at Champoeg only a few years after the flood had devastated the town (Hussey 1967:233).

Additionally, attempts to revitalize the townsite, in addition to the Champoeg name, do seem to occur, with the Newellsville post office taking back the Champoeg name in 1880, and remaining in place until the summer of 1905 (Chappel 1992:8; McArthur 1992:166; Speulda 1988:17). A 1884-1885 business directory lists Champoeg as containing a grist-mill and two steam saw-mills as well as a shipping point for wheat and oats (Polk 1884-1885:112). In 1886, it seems another attempt to revitalize the town was taken up by the heirs of Donald Manson, who had bought a portion of Robert Newell's land claim in 1857, including his homestead on the bottomlands just east of the townsite, by having the townsite replatted, but only one change, the shift in the street name from Washington to De Grasse, was evident (Hussey 1967:235;238; Kaiser 1956:31;33; Speulda 1988:21).

However, the introduction and rise of the railroads within the Willamette Valley during the 1870s and 1880s, which did bypass Champoeg, did impact the amount of shipping activity occurring at the townsite, reducing its usefulness as an efficient

shipping point and meeting place (Chappel 1992:8; Hussey 1967:238; Oregon Secretary of State (SOS) 2019; Smith 2011:15). Unfortunately, another destructive flood hit the townsite in 1890, and potentially 1892 as well, stopping any attempt at renewal in its tracks (Brauner 1993:77; Corning 1956:86; Hussey 1967:234; Jette' 2010:158; Kaiser 1956:33; Speulda 1988:21; United 1971:2;14). Therefore, the complete history of the townsite actually comes to a close approximately thirty years later than typically discussed, with the 1861 to 1890 time period remaining virtually unknown. Thus, further investigation of this time period via the historical and archaeological records is warranted in order to better understand the history of the entire duration of the Champoeg townsite, which may demonstrate a more complex story of decline than is typically acknowledged due to the destruction caused by the 1861 flood.

Chapter 4: Theoretical Applications

With the history of the Champoeg townsite established, the theoretical approaches which will be utilized within this research study can now be applied. Through the theoretical approaches of central place, agency, and risk and resilience theories in combination with the scant amount of available historical documents and the Block 4 archaeological record, the daily lives and experiences of the Champoeg residents after the devastating 1861 flood Champoeg, will be investigated in the hopes of better understanding the overall climate and human experiences within the rural Oregon town during this time period. Thus, these theoretical applications are not necessarily exploratory in nature, but instead were selected as a result of the known history of the Champoeg townsite and the presence of the Block 4 archaeological assemblage.

Central Place Theory

It is most notably Champoeg's location on the landscape that allowed the townsite to rapidly become a successful rural settlement of important political and economic importance (Corning 1947:80; Hussey 1967:55;58). As discussed in the previous chapter, its relatively easy access to the Willamette River, which was the main transportation route throughout the fertile Willamette Valley, as well as its connection to overland routes leading to larger trade and economic centers like Fort Vancouver and Salem, led to its significance as a commercial shipping point within French Prairie, and its establishment as a platted townsite by 1852 (Brauner 1993:2-3; Corning 1947:80; 199; Hussey 1967:37; 213; Kaiser 1956:32; Speulda 1988:19). Eberhard (1904:10-11) also makes note of the site's extreme natural beauty, declaring it a "sacred spot". Thus, the Champoeg townsite included a number of features which made it a trade and economic

center as well as an ideal settlement location or ‘central place’, as demonstrated by its comparative growth in population and development of services within the Oregon Country, which occurred over a relatively short amount of time (Atherton 1973:2; King 1984:13;20; Speulda 1988:12;17; Grant 1986:9).

Central places like Champoeg were centers or meeting places where tasks and services could be completed for or by those living in the countryside (Helbock 1973:15-16; King 1984:20). Towns and cities often developed at these locations due to the necessity of their services and as a result, the growth and expansion of these central places (King 1984:13). Central place theory is then a theoretical perspective or framework, originally utilized within the discipline of geography, in order to interpret the settlement patterns of these central places as well as explain the decline of small villages that were once central places, in addition to planning the location of new settlements and analyzing the social structures of rural communities (King 1984:7; Peterson 1967:4;23; Grant 1986:9;119).

In this research study, central place theory will be applied in order to further discuss the Champoeg townsite’s importance within the development of the Oregon Country, as a result of its seemingly ideal settlement location within the Willamette Valley. Its unforeseen and eventual decline, as a result of several factors including destructive natural disasters and shifts in technology and modes of transportation during the latter-half of the nineteenth century, which led to changes in settlement patterns and the development of new central places, will also be discussed. Thus, the research questions that are best addressed with the application of central place theory include:

- Is there evidence within the archaeological record at the Champoeg townsite to suggest that nineteenth-century rural Oregon was transformed by the "Age of Modernization" and the shifts in American consumption culture and retailing by the turn of the century? (Are broader consumption transitions evident in the archaeological assemblage?)
- Does the archaeological record (in Block 4) hold evidence that technological, transportation and communication innovations and improvements such as the expansion of the road and rail systems as well as the creation and dispersal of mail-order catalogues, were impacting the potential general mercantile store or the overall town? (Did these shifts in technology, transportation, consumption impact the store or town? If so, what were these impacts?)

The archaeological assemblage and history of Champoeg, recognized as the central place of French Prairie, can help in the understanding and interpretation of other towns in the broader region, experiencing similar transitions, during this time period (Grant 1986:7). The central place theoretical approach should also help illustrate some of the potential reasons and motivations of the residents that continued to utilize the Champoeg townsite, and even those that took up land in the townsite, after the 1861 flood. In order to further investigate the post-1861 flood residents, central place theory was combined with the secondary theories of agency as well as risk and resilience theories.

Agency

The theory of agency was applied as a secondary theoretical perspective or explanatory framework in order to complement the initial and overarching application of central place theory to the research study. While central place theory is concerned with understanding the role of the overall townsite and the impacts that consumption and transportation transitions had on the townsite during the latter-half of the nineteenth century, agency theory was utilized in order to incorporate a better understanding of the individuals within the townsite including their actions and choices (Greene 2008:8; Hegmon 2003:219; Johnson 2010:224; Shanks 2009:139). Based on the assumption that agents can express experience, negotiation, resistance or coping strategies through material consumption and production, the application of agency theory to the archaeological record at the Champoeg townsite then leads to interpretations regarding the social identity of the active agents; and potentially, the transition in consumption patterns occurring during the latter-half of the nineteenth century (Cook et al. 1996:50;59; Dobres and Robb 2005:161; Greene 2008:8; Hegmon 2003:220-221; Shackel 2000:232,234; Shanks 2009:139). Thus, through this theoretical lens, the archaeological record should then reflect either the acceptance or the rejection of newly introduced cultural trends and ideologies, as a result of the technological, transportation and communication innovations and improvements made during the latter-half of the nineteenth century within the United States (Cook et al. 1996:52-53; Dornan 2002:309; Hegmon 2003:221; Kline 2000:8; Shackel, 2000: 232; 234). Thus, agency theory was applied in order to involve the residents or consumers of the townsite in the interpretation of the past, by investigating their social interaction with material culture as a means of

reflecting their relationships with the broader cultural and structural consumption and transportation shifts and trends occurring during the time period (Cook et al. 1996:58; Dornan 2002:303;316; Hegmon 2003:219). Therefore, agency theory primarily addressed the following research questions, which were concerned with the consumer goods at Block 4 and the potential factors influencing consumption patterns and practices of the residents of the townsite.

- Based on the composition of the archaeological record, what material goods are being imported and supplied? How might this reflect the commercial demands and everyday lives of the Champoeg residents?
- Is there evidence within the archaeological record at the Champoeg townsite to suggest that nineteenth-century rural Oregon was transformed by the "Age of Modernization" and the shifts in American consumption culture and retailing by the turn of the century? (Are broader consumption transitions evident in the archaeological assemblage?)
- Does the archaeological record (in Block 4) hold evidence that technological, transportation and communication innovations and improvements such as the expansion of the road and rail systems as well as the creation and dispersal of mail-order catalogues, were impacting the potential general mercantile store or the overall town? (Did these shifts in technology, transportation, consumption impact the store or town? If so, what were these impacts?)

However, the theoretical approach of agency was also utilized in order to discuss the potential risk minimization and coping strategies employed by the occupants of Block 4 during the post-1861 flood occupation at the townsite (Halstead and O'Shea 1989; Johnson 2010:224). Thus, agency theory was also linked to the other secondary theoretical approaches or explanatory frameworks utilized within this research project, risk and resilience theories, and helped address the following research question:

- Does the historical and archaeological record at the Champoeg townsite demonstrate the occupants' behavior, resiliency, or risk minimization strategies as a result of the previous 1861 flood and the possibility of future natural disasters?

Risk and Resilience Theories

Risk and resilience theories are typically associated with prehistoric hunter-gatherers and theoretical perspectives of human behavioral ecology and optimal foraging hypotheses, with risk focusing on environmental factors such as seasonality or natural disasters, when applied to archaeological research (Johnson 2010:173-174). Yet, risk theory, simply defined as the attempted explanation of human behavior when facing uncertain circumstances, does not have to be limited to this prehistoric time period, but can be applied to archaeological sites from much later time periods including the nineteenth-century Champoeg townsite (Fitzhugh 2001:133). The unexpected variability and inability to predict the destruction caused by the 1861 flood, left the occupants who returned to the townsite during the post-flood time period, primarily to conduct business

and trade, in high risk circumstances with uncertain futures (Halstead and O′Shea 1989:1-2; Jones 2018:71-72).

Yet, the archaeological record at Block 4 demonstrates that people did return to the Champoeg townsite, and occupied it years after the 1861 flood. Therefore, risk theory is best applied to this archaeological assemblage, in combination with resilience theory, with resilience defined as "the capacity of a system, community or a society potentially exposed to hazards to adapt, by resisting or changing in order to reach or maintain an acceptable level of functioning and structure" (Djordjevic et al. 2011:864). The risk and resilience theories were anticipated to be most useful when investigating the occupants of the site via the archaeological record including their motivation as well as their ability to develop coping strategies and assess and minimize risk in order to continue to utilize the Champoeg townsite, even with knowledge of past disasters and the potential for future destruction (Djordjevic et al. 2011:864; Gourbesville 2012; Halstead and O'Shea 1989:3; Johnson 2010: 174; Jones 2018:59;71; Redman 2005:72). As a result, risk and resilience theories addressed the following research question:

- How does the historical and archaeological record at the Champoeg townsite demonstrate the occupant's behavior, coping or risk minimization strategies as a result of the previous 1861 flood and the possibility of future natural disasters?

Overall, risk and resilience theories work in conjunction with agency, by investigating the coping strategies of the active individual, as well as central place theory, by demonstrating the importance of place and the risk minimization measures, both

environmentally and economically related, that residents took in order to remain or return to the Champoeg townsite during the latter-half of the nineteenth century. Therefore, together, central place theory, agency, and risk and resilience theories were applied when analyzing both the historical and archaeological record in order to better understand the behaviors, reactions, and coping strategies practiced and utilized by the occupants at the Champoeg townsite, even after the disastrous flood of 1861. By better understanding these theoretical approaches and subsequently applying them to the remaining historical accounts and extant artifacts, information regarding the occupants' reasoning for taking the risk to resettle in a geographical location known to be affected by natural disasters, as well as their willingness to negotiate the potential for economic hardships due to the declining importance of the overall townsite as well as the shift in consumption, culture and retail patterns, was able to be better interpreted.

Chapter 5: Block 4 Historical Research

The history of Block 4 was first investigated using Dr. David Brauner's archival research as well as secondary sources about the townsite. However, several types of primary sources such as county deed indexes and records, mortgage indexes and records, marriage and Federal census records, business directories, as well as newspapers and maps, have been digitized since excavations in 1990 and 1991, and are now available via online databases. These databases were utilized in order to research both the legal history of Block 4 and the social history of Block 4.

In terms of the methods used in order to research the social history of Block 4, including the genealogical history of the known owners of the Block 4 property, databases with digitized primary records such as Federal census records were utilized, in addition to websites with cemetery interment information, which were referenced and then ground-truthed by the researcher, when possible, due to the close proximity of many of the cemeteries to Oregon State University (United States Federal Census Records (USFCR) 2018; Find a Grave Index 2018a-d, 2019a-e; Interment.net). Additionally, these websites sometimes included genealogical research from descendants, which were primarily used as a means of obtaining the original primary source such as newspaper obituary clippings, but in a four cases were cited because the original record or source could not be obtained (Ancestry.com 2003; Find a Grave Index 2018b-c, 2019a). Thus, these online databases and websites typically led to the primary sources themselves, now on a variety of digitized records, newspaper, and map databases. Overall, this led to further information about the owners of Block 4 and their families, and will be discussed after the legal history of Block 4 has been established.

Block 4 Legal History

The most valuable primary sources in regards to the legal history of Block 4 within the Champoeg townsite during the nineteenth century included the Marion County deed and mortgage indexes, which chronicled the transfer of ownership through the post-flood occupation at the Champoeg townsite (Brauner 1993:67; Oregon, Marion County Records (OMCR) 2014[1849-1976]a-k). However, regional business directories as well as marriage records were also referenced (McKenney 2009, 2010; Murphy 2008; OMCR 2014[1849-1976]i). The Block 4 deed transactions are illustrated within the following table (Table 5.1), with the transactions and occupants also described.

Table 5.1: Block 4 Deed Transactions

Date	**Grantor/ Mortgagor**	**Grantee/ Mortgagee**	**Notes**	**Source**
	George "Squire" Ebbert	Andre Lonctain (Longtain)		Hussey 1967:79
Nov. 2, 1857	Andre Lonctain (Longtain)	William J. Bailey	Lots 1, 2, 7, & 8 on Blocks 4 & 5, Champoeg	Oregon, Marion County Records (OMCR): Deed Index-Direct 1855-1873, v.1, A-V: 250-251 (a)
Dec.14, 1880	Julia M. Bailey (est.)	Bernard G. Eberhard	Lots 1, 2, 7, & 8 on Blocks 4 & 5, Champoeg	OMCR: Deed Index-Direct 1873-1883, v.2, A-L:21-22 (c)
July 28, 1881	B.G. & E. Eberhard	E. & S.J. Eberhard	Lots 1, 2, 7, & 8 on Blocks 4 & 5, Champoeg	OMCR: Deed Index-Direct 1873-1883, v.2, A-L:133-134 (c)

Block 4 first appears within the historical records as part of a larger land transaction between American fur trapper, George "Squire" Ebbert, and French-Canadian, Andre Longtain. In 1841, Ebbert transfered his claim, which would later comprise a portion of the platted townsite blocks, to Andre Longtain for a recorded 100 bushels of wheat, to be fulfilled over a three year period (Dobbs 1975:147; Hussey

1967:79). Ebbert settled on a nearby land claim on the Tualatin Plains in 1840, where he spent the rest of his life (Corning 1956:78; Dobbs 1975:147). It should be noted, that the Block 2 excavations within the Champoeg townsite are believed to be the archaeological assemblage representative of George Ebbert's cabin, during his short stint on this land claim (Brauner 1993:92).

Next, the Oregon, Marion County deed records (OMCR 2014 [1849-1976]a:250-251, 2014[1849-1976]e:180) indicate that Andre Lonctain (Longtain) sold Lots 1, 2, 7 and 8 on both Blocks 4 and 5 in Champoeg on November 2, 1857 to Dr. William J. Bailey for one dollar. This deed ownership of Block 4 in 1857 then confirms that the two houses owned by Dr. Bailey that reportedly burned to the ground in 1853, were not located at Block 4 (Brauner 1993:66). In addition, a few months previously, on August 11, 1857, William Bailey had also acquired Block 12, Lot 5 in Champoeg from John Hug for $500, as well as lots 1, 2, 7, and 8 on Block 11 in Butteville from A. and M. Aubichon on October 16, 1857 (Brauner 1993:67; OMCR 2014[1849-1976]a:14-15, 2014[1849-1976]b:13-14).

Dr. Bailey was an active member in the community, serving for many years within the provisional government (Corning 1956:16-17; Dobbs 1975:10-11; Hussey 1967:92). Yet, he was known in historical records for his alcohol-induced temper, which is noted most famously by his ex-wife, Margaret Jewett Bailey in her novel, *The Grains,* originally published in 1854 (Brauner 1993:64-65; Hussey 1967:88;91-92; 217). However, in 1855, William got married again, this time Julia M. Sheil (Nagle), widow of Dr. James Sheil (Brauner 1993:66; OMCR 2014[1849-1976]i:177). Prior to the 1861 flood, the couple, plus a twelve year-old girl named Julia Bordinean, are listed in the

1860 Marion County Census records, as residing in Champoeg with J. Hug as their neighbor (United States Federal Census Records (USFCR) 2018[1860]a). Dr. Bailey died in 1876, leaving his second wife of twenty-one years, a widow once again, until her own death on May 5, 1880 at the 60 years of age (Find a Grave Index 2018a; St. Paul Cemetery, personal visit, September 2018).

On December 14, 1880, the estate of Julia M. (Nagle) Bailey was split and sold to two different individuals. David M. Cann acquired the sixty-two acre farm, located in Township 4S, Range 2W, Sections 2 and 11, while Bernard G. Eberhard bid and won Lots 1, 2, 7 and 8 within Blocks 4 and 5 in the Champoeg townsite for eighty-two dollars (Brauner 1993:67; OMCR 2014[1849-1976]c:21-22, 2014[1849-1976]f:324). Less than a year later, on July 28, 1881, Bernard G. and his wife, Elizabeth sold Blocks 4 and 5, Lots 1, 2, 7 and 8 to their son, Elias and his wife, Sarah J. Eberhard for one hundred dollars, and the inclusion of the transfer of rights to "tenements, hereditaments, and appurtenances" or "immovable real estate including, land, buildings, and rights" (OMCR 2014[1849-1976]c:133-134, 2014[1849-1976]g:68; Russell 2015). This phrase was not included on the deed transfer to Bernard and Elizabeth, and seems to indicate that structures were now present on the property. However, after this deed transfer, Blocks 4 and 5 within the Champoeg townsite are not specifically indicated within the later deed and mortgage indexes, but the last owners of Block 4, the Eberhard family can be found, and the family history helps provide valuable information regarding the Block 4 assemblage as well as the Champoeg townsite during the post-1861 flood time period. Therefore, the Eberhard family members were the primary focus when researching the

historic records due to their known ownership of the property during the post-1861 flood time period.

History of the Eberhard Family

The Eberhard family first arrived to Oregon in 1853 from Michigan via the Panama Isthmus (Fout and Kittell 1983:vii; Genealogical 1957:85; Oregonian, 16 June 1929:19). Bernard had first come West in 1849, crossing the Plains to the California gold fields (Fout and Kittell 1983:vii). He later returned to Michigan, but his brother Lazarus, had reportedly died in the California Territory in 1849 (Find a Grave Index 2019a; Fout and Kittell 1983:vii). Yet, in 1851 Bernard went back to California, before officially moving to the Willamette Valley in 1853 with his wife and children (Find a Grave Index 2018b; Fout and Kittell 1983: vii; Genealogical 1957:85; Oregonian, 16 June 1929:19).

Bernard (Barnard, Barney or B.G.) Gamaliel (Ginsel/Gilson) Eberhard was born on January 1, 1807 in Northumberland (also reported to possibly be Union) County, Pennsylvania (Find a Grave Index 2018b; Fout and Kittell:1983:vii; Genealogical 1957:85). In 1825, at the age of 18, Bernard and his siblings moved to Crawford County, Ohio with their uncle, David and his family due to their father's death in 1818 (Find a Grave Index 2018b, 2019a; Fout and Kittell 1983:vii). On January 1, 1833, in Crawford County, Ohio, Bernard Eberhard married Elizabeth Staley (Stalie/Stailey), who was born April 1, 1811 in Westmoreland (or Armstrong) County, Pennsylvania (Find a Grave Index 2018c; Fout and Kittell 1983: vii). In 1837, the entire Eberhard family which included Uncle David and his wife, Susannah, as well as Bernard and Elizabeth, and his cousin, John David and his wife, Christenia, plus all of their children, moved again, this time to Michigan (Find a Grave Index 2018b, 2019a; Fout and Kittell 1983:vii). Bernard

and Elizabeth settled in Colon, St. Joseph County, Michigan, and a year later they had their first son, John P. (Find a Grave Index 2019a; Fout and Kittell 1983:vii).

Bernard and Elizabeth had ten children from the year 1836 until after their move to Oregon, in 1854 (Fout and Kittell 1983:vi). These children included Elizabeth Catherine (born February 10, 1836 in Bucyrus, Crawford County, Ohio), John P. (born in 1838 in Michigan), St. William (born in 1842), "T.C.G.", (born in 1844 in Michigan), Almira (Alla or Myra) Frances (born in 1846 in Michigan), Franklin B., (born January 27, 1849 in Michigan), Henry L. (born in 1845 in Michigan), Elias Eugene (born on September 24, 1851 in Colon, St. Joseph County, Michigan), Ellen (Helen) Carol (born September 14, 1854), and one other child, remains that unknown, but unlikely survived childhood due to the lack of documentation within the United States Federal Census Records (Find a Grave Index 2018b, 2018c; Fout and Kittell 1983:vii-viii; Munnick & Warner 1979:35; 108). The entire Eberhard family, according to Bernard's obituary in the *Morning Oregonian*, published on June 11, 1894, is said to have first settled near Aurora on what is now known as "Beck Farm" (Find a Grave Index 2018b; Genealogical 1957:85).

However, according to the 1860 United States Federal Census Records, Bernard Eberhard was a 53 year-old farmer living closest to the post office in Butteville in the Northern precinct of Marion County. Bernard's wife, Elizabeth, his sons, John P. (22 years), Henry L. (16 years), Franklin (11 years), Elias (8 years), and daughters, Almira (14 years) and Ellen (5 years) are included within his household. His real estate was valued at $6000 and his personal estate was valued at $2675 (USFCR 2018[1860]b). Also, by 1860, Bernard's nephew, Joshua "George" or J.G. arrived to Oregon, staying

with his cousin, Elizabeth and her husband, Lemuel Rynearson, near Butteville (Ancestry.com 2003; Daily Capital Journal [DCJ], 21 February 1912).

In 1863, Almira mentions in letters to her fiance' and later husband, John Dimick, that her father and brother Henry had gone east to seek their fortune in the Idaho gold fields (Fout and Kittell 1983:A13). Additionally, on July 5, 1863, she tells John, that the Eberhard family had received a letter from Bernard in Boise, "saying that he wished to move the family up to the new claim in the spring", and Almira did not want to go (Fout and Kittell 1983:E8). A month later, John wrote Almira on August 17, 1863:

> I was very glad to hear that your father was doing well in the mines. If labor is ever rewarded it is time he reaped his just reward for his labors. He has worked hard ever since he was on this coast but fortune seems to turn against him. But I hope not it has changed in his favor. For his entire success he has my heartiest prayers and Best wishes (Fout and Kittell 1983:E15).

It seems that a change in fortune may have changed Bernard's mind about moving East to Idaho, as well as apparent objections from at least one of his children. It also seems that his time in the Idaho gold mines may have allowed him to move from Butteville, and purchase the Lucier land claim by 1870, with a land claim filed with the United States Patent Office on September 13, 1866 in Township 4 South, Range 2 West, Section 2 for 319.32 acres (Austin 1956:26; OMCR 2014[1849-1976]d:131-132; SPHS 1985-1986, Judy Sanders Chapman research notes:15; Williams, and Co. 1976:28;43 [1878]). Howard Corning (1947:199) lists an Everhart's Landing, in the location of the former Lucier land claim, on the south-side of the Willamette River, one-fourth of a mile from Frank Osborne's Landing. Additionally, his nephew, George Eberhard had acquired the Bellique claim to the east, prior to the 1861 flood, and his sons, Franklin and Henry,

are seen owning land claims near or part of the former Lucier claim (Austin 1956:26; Williams, and Co. 1976:28 [1878]).

The *Weekly Oregon Statesman* [WOS] reported that on New Year's Evening, 1877, the Eberhard family threw a ball at their home, near the former Etienne Lucier homestead (19 January 1877). The celebration was not limited to New Year Eve however, with Bernard announcing that it was also his "three score years and ten" birthday, as well as his and Elizabeth's forty-fifth wedding anniversary. Fifty couples from the surrounding area are said to have joined the Eberhard family, including three of their unmarried sons and daughters, in enjoying an early dinner, merry dancing, and overall pleasant social entertainment (WOS, 19 January 1877).

Although, by 1883, the Champoeg farms are said to have been sold, and Bernard and Elizabeth moved to Hubbard with Bernard dying in 1894 and Elizabeth in 1908 (Find a Grave Index 2018b). Upon Elizabeth's death in 1908, five of her children survived her, the same children that had survived her husband in 1894, Elizabeth, Almira, Ellen, Henry and Elias (Find a Grave Index 2018b, 2018c). Both Elizabeth and Bernard are buried at the front of the old entrance to the Hubbard Cemetery (Find a Grave Index 2018b, 2018c; Hubbard Cemetery, personal visit, September 2018).

The Eberhard Children

Elizabeth (Lizzie) Catherine Eberhard. Elizabeth married Lemuel Rynearson on March 30, 1854 in Butteville, Marion County, Oregon, where they reportedly lived as well (Ancestry.com 2003; Fout and Kittell 1983:A15; B8). Lemuel Rynearson was a blacksmith and died in 1916 (Ancestry.com 2003; Fout el al. 1983:B8). Elizabeth's younger sister, Almira, often stayed with the Rynearson's while she went to school, and

often mentions to John Dimick in 1863, that the two sisters did not get along very well, with Elizabeth "running [John] down to every thing that she can think of" (Fout and Kittell 1983:B8).

By 1870, Elizabeth seems to have divorced Lemuel, and in that year, was remarried to Charles Ridgeway. Overall, she had five children including four sons with Lemuel. She died December 6, 1931 in San Jose, Santa Clara, California at the age of 95 (Find a Grave Index 2019b).

John P. Eberhard. John was born in 1838 in Michigan and was the first son of Bernard and Elizabeth Eberhard (Fout and Kittell 1983:vii). He joined the 7th Michigan while working in the Eastern states, and became part of the Army of the Potomac under General McClellan (WOS, 19 January 1877). John died on September 17, 1862 at the Battle of Antietam (Fout and Kittell 1983:A1; WOS, 19 January 1877).

St. William Eberhard. Their second son, St. William Eberhard was born in 1842, but died in 1855 at the age of thirteen while the Eberhard family was living near Butteville, where he is buried (Butteville Cemetery, personal visit, September 2018; Find a Grave Index 2019c). Additionally, according to the research completed by Fout and Kittell (1983:vii) on the Eberhard family, a son known as "T.C.G." was born in 1844 in Michigan. However, no other information regarding this child was found, which makes it likely that the child died as an infant, leaving few records.

Almira (Alla/Myra) Frances Eberhard. She married John Buel Dimick on January 7, 1864 "at her father's house, B.G. Eberhard" by Reverend Joseph H. Farnsworth (Fout and Kittell 1983:Epilogue1). John Dimick enlisted in the First Oregon Volunteer Cavalry, "B" Company beginning in 1862, and was stationed in Eastern

Oregon and Idaho during the Civil War (Fout and Kittell 1983:i-iii). After their marriage, he was stationed at Fort Vancouver and Fort Colville for a time, before John was released from duty in 1866, and then the couple lived on a farm near Hubbard, the cemetery in which they are both buried (DCJ, 13 August 1910; Fout and Kittell 1983:ii-iii, Hubbard Cemetery, personal visit, September 2018). John died in 1903 due to pneumonia, and Almira in 1910. They had ten children together (DCJ, 13 August 1910; Fout and Kittell 1983:v).

Franklin P. Eberhard. Franklin married H. (Helen) Josephine Cone of Butteville, Oregon. The 1878 Marion County, Oregon, Champoeg Township map records a Frank Eberhart (Eberhard) as owning a plot of land near claims owned by his father and brother (B.G. and H.L.) as well as his cousin, George (J.G.), which were once the Etienne Lucier and Pierre Bellique land claims (Williams, and Co. 1976:28 [1878]). He died in 1886 at the age of 37, and is buried in the Butteville cemetery (Find a Grave Index 2018c; 2019d, Butteville Cemetery, personal visit, September 2018).

Henry L. Eberhard. Henry was often referred to by his nickname "Bot" by his sister, Almira and her beau, John Buel Dimick (Fout et al. 1983:A2). Upon the passing of his father, Bernard's death in 1894, Henry is recorded as a resident of Champoeg, and was probably still living on the land claim that he had shared with his father in 1878 (Knap 2011; Williams, and Co. 1976:28 [1878]). However, by his mother, Elizabeth's death in 1908 he had moved to Salem, where he died in 1931 and is buried (Find a Grave Index 2018c; 2019e).

Elias Eugene Eberhard. He was born on September 24, 1851 in Colon, St. Joseph County, Michigan and was only two years old when the family traveled to Oregon

(Oregonian, 16 June 1929). Elias studied at the Lafayette Academy, and in 1871 at the age of 20, he began teaching at St. Paul, Oregon at a district school (Oregonian, 16 June 1929). He was baptized on April 17, 1870 by A. J. Glorieux at St. Paul, Oregon, with his Godfather, Hugh Gearin and his Godmother, Mary Coleman (Munnick & Warner 1979:35). In 1874, he moved to Portland to be an instructor at St. Michael's College, and then later left teaching to enter business, but continued living in Portland (Oregonian, 16 June 1929). In 1878, Elias married Sarah Jane Miner (nee' Lacey), with a son and daughter from a previous marriage (Munnick & Warner 1979: 35; Oregonian, 16 June 1929; USFCR 2018[1880]). In 1880, Elias is recorded to be living in Portland, as a bookkeeper, with his wife and step-children (USFCR 2018[1880]). On August, 30, 1881, Stella Irene Eberhard, daughter of Elias and Sarah was buried at only eight months of age, in the St. Paul Cemetery by Brother DeLorme (Munnick & Warner 1979:140). Elias and Sarah had two other daughters (Oregonian, 16 June 1929).

In 1888, the *Evening Capital Journal [ECJ]*, reported Elias E. Eberhard as "carrying on a general merchandise store in the town of Champoeg", which had to be assigned due to debts (2 June 1888). Later in the month, the same newspaper reported that Elias could not be found, and stated that he had committed forgery (ECJ, 20 June 1888). However, the forging of notes was not brought up in later court documents, which was resolved by 1890 (ECJ, 21 February 1890).

Over the course of his life, Elias wrote two poetry books, *Echoes of Evening* (1874) and *Champoeg and Other Poems* (1904). His wife Sarah, died in 1892. Elias died on June 11, 1929 at the age of 77 and was buried at the Mt. Cavalry Cemetery in Portland, Oregon (Oregonian, 16 June 1929).

Ellen (Helen/Ella/Ellie) Carol Eberhard. She was born on September 14, 1854, the only known Eberhard child to be born in Oregon. Ellen was baptized on July 17, 1877, and subsequently married to Alexander Coyle at the parish of St. Paul by the pastor, Brother DeLorme (Munnick & Warner 1979:108). Her mother, Elizabeth, died at her residence in Hubbard on June 9, 1908 (Find a Grave Index 2018c). Alexander Coyle died in 1913, and Ellen remarried at some point, gaining the surname, Murk, before her death in 1926 (Find a Grave Index 2018d; Hubbard Cemetery, personal visit, September 2018).

George (J.G.) Eberhard

Joshua George Washington Eberhard, typically seen as J.G. or George Eberhard within the historical documents, moved from Michigan via the Panama Isthmus in 1855, and spent approximately five years in California, before moving to the Willamette Valley, near his Uncle Bernard's family (Austin 1956:26; DCJ, 21 February 1912). In the Fall of 1860, he bought the Bellique land claim, paying Jean B. Bourjeau $400 for the deed to 320 acres, as well as paying Allan, McKinley and Company $300 to buy their mortgage, and $800 to Archibald McKinley, and his wife, Sarah Jane, for the mortgage to the same 320 acres. In 1888, George finally had the title to the land he had purchased in 1860 (Austin 1956:26).

Therefore, during the time of the 1861 flood, George lived on this eastern knoll above the river, and was able to save the former Willamette Post building by moving it to higher ground, where it was inhabited until 1869 (Austin 1956:26; SPHS 1985-1986, Judy Sanders Chapman research notes:15-16). In 1866, George married his neighbor, Stokley's eldest daughter, Louisa L. Jones (Austin 1956:26; DCJ, 21 February 1912). His

daughter, Barbara, was born in the relocated Bellique house or former Willamette Post in 1868, but in 1869, George built a new house. The former Willamette Post and Bellique House remained standing until approximately 1900, when it was dismantled, with the fireplace mantle and doors saved and believed to still be seen in the Austin house (Austin 1956:26; SPHS 1985-1986, Judy Sanders Chapman research notes:16). George died in 1912, and is buried at the Champoeg Cemetery next to his wife and many of his children (Champoeg Cemetery, personal visit, September 2018; DCJ, 21 February 1912; Interment.net 2001).

His grandson, George "Kenneth" Austin, married Helen E. (Van Winkle) Austin, who became one of the leading historians on French Prairie. As of 1956, the Austin family, which included their son, George K. Austin, still lived on the old Bellique farm and worked the land, managing a dairy (Austin 1956:26). Both George and his wife, Helen are buried in the Champoeg Cemetery (Champoeg Cemetery, personal visit, September 2018).

Thus, the Eberhard family, left a lasting impression on French Prairie, occupying prominent land and becoming highly regarded, integral members of the community within the post-1861 flood time period. Each of them left complicated and interesting histories, demonstrating the importance of researching these post-flood residents, many of whom were relatively new to the area prior to or right after the flood, and as a result, have generally been left out of the history books due to their association with Champoeg during this often ignored time period. Therefore, there are many more families like the Eberhards that are still left to be investigated within the historical and archaeological

records, with their role in the French Prairie community and Champoeg townsite left to be understood.

Chapter 6: Descriptive Archaeology

Dr. David Brauner led excavations at the Champoeg townsite (ORMA26), Block 4, Lots 1 and 2, during the 1990 and 1991 field school seasons. Graduate and undergraduate students of Oregon State University excavated Test Pits A and B in both Lots 1 and 2 in 1990, and Unit C and D in Lot 1, and Unit C in Lot 2 during the 1991 field season. Some artifacts were also recovered from the surface of these lots.

In total, 17, 084 artifacts were recovered from Block 4, Lots 1 and 2 within the Champoeg townsite. Each test pit and unit contained a differing assemblage, in both quantity and content. Twelve thousand, nine hundred and forty-four artifacts were excavated from Lot 1, and 4,140 artifacts were recovered from Lot 2 (Tables 6.1 and 6.2).

Table 6.1: Block 4 – Lot 1 Artifact Quantities and Percentages

Block 4: Lot 1 Excavation Location	**Quantity**	**Percentage of Lot 1 Assemblage (%)**	**Percentage of Overall Assemblage (%)**
Test Pit A	1112	8.59%	6.51%
Test Pit B	925	7.15%	5.41%
Unit C	8533	65.92%	49.95%
Unit D	2374	18.34%	13.90%
Total	12,944	100.00%	75.77%

Table 6.2: Block 4 – Lot 2 Artifact Quantities and Percentages

Block 4: Lot 2 Excavation Location	**Quantity**	**Percentage of Lot 2 Assemblage (%)**	**Percentage of Overall Assemblage (%)**
Test Pit A	936	22.61%	5.48%
Test Pit B	387	9.35%	2.26%
Unit C	2817	68.04%	16.49%
Total	4,140	100.00%	24.23%

Artifact Analysis

The artifact assemblage excavated during the field seasons of 1990 and 1991 from Block 4, Lots 1 and 2 within the Champoeg townsite was analyzed in terms of each artifact's descriptive type and functionality, based on a modified version of Roderick Sprague's (1980) functional classification system. Sprague categorized artifacts based upon possible function or use, in combination with the relationship of one artifact to another, rather than simple material or morphological descriptions of the artifact (Sprague 1980:1-2). The use of Sprague's functional classification system is a beneficial method for research similar to this, where the research questions are focused on the composition, interpretation, and location of potential social behavior and activities occurring at the site as well as the overall site function (Speulda 1988:xii). However, it does have limitations, primarily in circumstances where an artifact had a secondary function, which may not be readily apparent in the archaeological record (Sprague 1980:2). In addition, artifacts which cannot be definitively identified or described do remain classified based upon their material composition (Sprague 1980:10).

In this research study, ArcGIS maps were utilized, and will be discussed in the following chapter, in order to analyze and illustrate the spatial distributions and densities of the functional classification of each artifact in order to better determine activity centers and the overall function of the site. Descriptive statistics such as assemblage percentages were also used in order to summarize and compare data characteristics for each functional artifact category (Barber 1994:233). Additionally, each temporally diagnostic artifact type was analyzed in terms of the dates of manufacture, as well as information regarding the time period or date that the artifact type may have been present within

Oregon or French Prairie in order to better determine the potential occupational time period in association with the overall site function. Therefore, based on the research questions associated with the composition of the artifact assemblage including occupational dates as well as the location and identification of potential activity areas, each of the excavated test pits and units were examined separately in order to evaluate the spatial distribution and quantity of each functional artifact category as well as temporally diagnostic artifact types. The functional artifact category tables for each of the test pits and units excavated (Lot 1: A, B, C, and D, as well as Lot 2: A, B, and C) can be found within the appendix.

It should be noted, that the artifact types of nails, bricks, faunal and organic remains were not all individually analyzed due to the identification and analysis of all other artifact types within the field catalogs. Additionally, these artifact types did not need to be further analyzed in order to potentially answer the research questions posed within this research study. Thus, approximately 6,034 artifacts (35.32%) were not analyzed, instead the field catalog descriptions for these artifact types were assumed to be correct and trusted for the descriptive archaeology portion of this research study (Table 6.3). This means that some of the above artifact types may include some small errors in regards to assemblage size or functional category, and if necessary, should be further analyzed in the future.

Table 6.3: Analyzed Artifact Quantities and Percentages

Location	**Quantity Analyzed**	**Percentage of Test Pit/Unit Assemblage (%)**
Lot 1: A/B	678/1112 & 619/925	60.97% /66.92%
Lot 1: C	5566/8533	65.23%
Lot 1: D	1208/2374	50.88%
Lot 2: A/B	885/936 & 315/387	94.55% /81.40%
Lot 2: C	1779/2817	63.15%
Total	**11, 050**	**64.68%**

However, indications of bulk-bagging within the field catalogs led to artifacts being separated into individual artifact counts. Artifacts that were found to be bulk-bagged the majority of the time within the field catalog were machine-cut nails, various colors of glass as well as ferrous metal and brick fragments, and sometimes ceramics. Due to the often small size of the brick fragments in relation to the size of a whole brick found during analysis, brick fragments were not separated as individual artifacts in the updated field catalogs in order to avoid inflation.

Additionally, minimum number of vessel (MNV) counts were recorded when possible or known. In this case, MNV counts were primarily focused on the glass and ceramic vessels, which had been cross-mended, when possible, after the 1990 and 1991 field seasons. Analysis determining whether or not fragments were representative of similar vessels was based on differences in vessel fabric and form, the potential position of the fragment on the overall vessel, the curvature and thickness of sherd bodies, and the decorative style, glaze, pattern, and color (Voss and Allen 2010:1).

Although completing minimum number of vessel counts better describes the actual material goods found and used in the past, it can also be problematic for comparative analysis (Voss and Allen 2010:1-2). Low vessel counts are common when uncertainty regarding the fragments exists, especially when the entire vessel or the bodies of vessels are undecorated or not standardized (Voss and Allen 2010:1). Thus, assemblage percentages were completed in association with the artifact counts for each descriptive type and functional artifact category due to the ambiguity of the majority of the artifact fragments, which was significantly increased due to the amount of burnt or melted artifacts, and resulted in the high frequency of low vessel counts within the analysis. Spatial distribution maps also remained based on artifact counts due to the limited number of identifiable vessels within the excavated locations as well as some occurrences of cross-mending across artifact assemblage locations including Lot assemblages.

Material Culture Descriptions

As mentioned previously, each artifact within the Block 4 assemblage was analyzed in terms of its functional classification (Sprague 1980). Each artifact was functionally classified to the tertiary level which included a category, group and class division. If the function of the artifact remained unknown during analysis, then the artifact was categorized by its material. Modern artifacts were also included within the assemblage in order to better understand the spatial distribution of the modern artifacts and the level of disturbance the site may have experienced since its period of occupation. Table 6.4 lists the functional classifications and the associated quantities for the 17,084 overall artifacts identified within the Block 4, Lot 1 and 2 assemblages.

Table 6.4: Artifact Functional Classifications

Functional Classification	**Quantity**	**Percentage of Overall Assemblage (%)**
Personal Items	1061	6.21%
Domestic	744	4.35%
Architecture	7876	46.10%
Commerce & Industry	162	0.95%
Group Services	580	3.40%
Unknowns	6593	38.59%
Modern	68	0.40%
TOTAL	17,084	100.00%

It should also be noted, that my previously completed Master's thesis, *The Expansion of Catholicism: An Exploration of St. Joseph's College, the First Catholic Boarding School for Boys within the Oregon Territory*, utilized similar artifact analysis methods, and included some of the same artifact types within the archaeological record as the Block 4, Lots 1 and 2 Champoeg townsite assemblage. This is due to the two archaeological sites sharing the geographical location as well as the overall time period. Thus, some of the artifact type categories and descriptions included within the descriptive archaeology chapter of this research study, does include cited research and analysis that can initially be found in my Master's thesis (Hill 2015).

Personal Items

Table 6.5: Personal Artifact Assemblage

Personal Function	**Lot 1: A/B**	**Lot 1: C**	**Lot 1: D**	**Lot 2: A/B**	**Lot 2: C**	**Total Quantity & Percentage of Personal Assemblage (%)**
Clothing	24/4	105	4	0/0	11	148 / 13.95%
Footwear	6/1	54	1	6/0	14	82 / 7.73%
Adornment	0/0	4	0	0/0	2	6 / 0.56%
Body Ritual & Grooming	8/2	67	4	1/0	14	96 / 9.05%
Indulgences	49/52	380	119	20/35	65	720 / 67.86%
Pastimes & Recreation	0/0	6	0	1/0	0	7 / 0.66%
Pocket Tools & Accessories	0/0	2	0	0/0	0	2 / 0.19%
Total	87/59	618	128	28/35	106	1061 / 100.00%

Clothing

Buttons. During excavations, 148 clothing artifacts were collected, 146 of which were buttons of varying types and materials. Prosser buttons were one of the most popular, and ubiquitous, button types found within archaeological sites dating to the nineteenth century. Prosser buttons were manufactured after 1840 and can be identified by their often white coloration, orange-peel texture and a translucent, glass-like appearance (Sprague 2002:111). Although, in fact the material used to create the molded buttons is a high-fired ceramic, made by the Prosser or “dust” process that was first patented in 1840 by Richard Prosser of London, followed by his brother, Thomas Prosser, a year later in New Jersey (Sprague 2002:111;113). A variety of buttons were manufactured and varied in decoration, including calico and pie-crust buttons, as well as form, with four-hole, sew-through, as well as two-hole panty-waist, and shank buttons all produced (Sprague

2002:112). Calico buttons featuring ‘tiny repetitive details’ applied via the transferprint process, were available in a variety of colors such as pink, green, and black (as seen in this assemblage) (Sprague 2002:116).

The prosser buttons within the Block 4 assemblage were all four-hole, sew-through buttons, aside from one shank button within Lot 2: C, and included flat as well as convex faces. Sizes ranged from .5 centimeters in diameter to 1.8 centimeters, and both calico and pie-crust decorations were applied to the buttons within the assemblage. Lot 1: A included eight prosser buttons including a one centimeter diameter flat button, and another of the same diameter, but a convex face. Two buttons, nearly translucent, measured .5 centimeters in diameter, with two others including the pressed, pie-crust decoration. Finally, one pink calico button, and one fragment of a larger, thicker prosser button were found within Lot 1: A. Lot 1: B included two prosser buttons with one centimeter diameters, one of which had a convex face, and the other featured a calico decoration, but the color could not be identified due to burning.

Lot 1: C included thirty-three prosser buttons, and the 1.2 to 1.4 centimeter diameters were the most common sizes within the unit. Eleven pie-crust prosser buttons were also present within Lot 1: C as well as three calico buttons, with black and pink transferprint designs applied to the face of the button. In addition, four buttons were burnt and fused with clear glass within Unit C suggesting that the buttons were held in a drawer or container when they were burned.

Meanwhile, two prosser buttons were located within Lot 1: D. One button featured a convex face (1.7 centimeter diameter) and the other had a flat face (1.2 centimeter diameter). Six prosser buttons were located within Lot 2: C. Two featured flat

faces (1 centimeter diameter and 1.2 centimeter diameter), and two others were calico buttons, one of which featured a green transferprint on a convex face, with a one centimeter diameter, while the last four-hole, sew-through prosser button remained unknown in form, size, and decoration. Finally, one flat, prosser button featured evidence of once having a loop shank on the back (Figure 6.1).

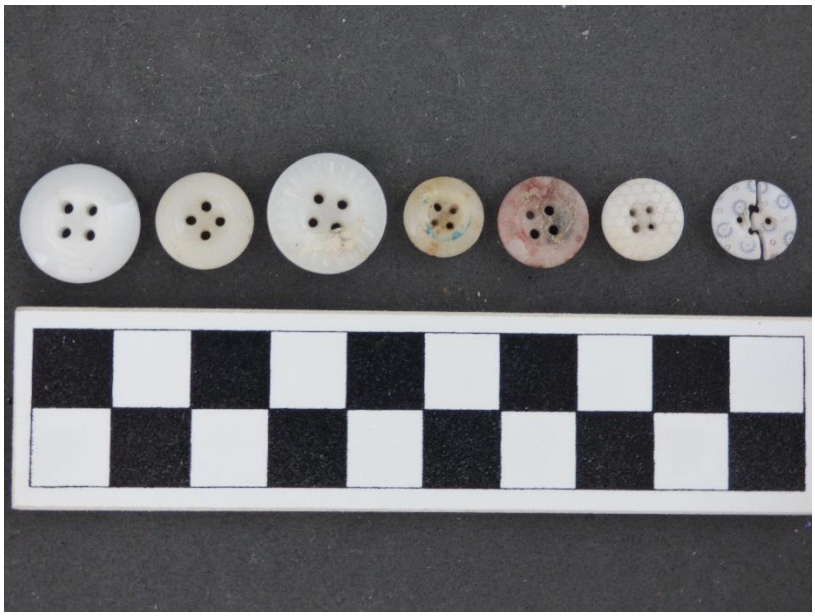

Figure 6.1: Prosser Button Assemblage

Seven brass buttons were also found within Lot 1: C. One decorative, dress button (2.5 centimeter diameter) included a two-piece stamped brass front with an intricate design and ferrous metal back and shank (Schroeder 1977:79) (Figure 6.2). Another two-piece, pressed brass button included a back with a soldered eye. While two others, were four-hole, sew-through buttons, made of stamped brass, featuring a sunken panel. Additionally, two brass ball or round buttons of varying sizes (1 centimeter diameter and 1.3 centimeter diameter), both comprised of two-piece pressed brass, as well as a 2.5 centimeter diameter, two-piece brass button with an eye loop and lead back, were found within Lot 1: C (Olsen 1963:553).

Figure 6.2: Metal Button Assorted Assemblage

One round, white milk glass stud button with a crimped metal backing was located in Lot 1: C. Due to the frilled decoration and design of the button, this is a possible cuff link to a women's blouse or shirtwaist. One ferrous metal, loop shank button, missing the glass front face of the button was found within Lot 2: C. In addition, one cobalt blue, pressed glass button, featuring a geometric, prism design with a ferrous metal loop shank on the back was collected from Lot 2: C.

Sixty-four metal button fragments of various sizes and forms were found within Lot 1: C. Eight ferrous metal button fragments remained unidentified. Seven were one-piece cast whitemetal, four-hole, sew-through buttons (n=8), dating from 1800-1860 (Olsen 1963:553). Three two-piece, ferrous metal button front fragments, and two, two-piece ferrous metal button fronts with shanks, were found within Lot 1: C. Twenty-seven two-piece, pressed steel, four-hole, sew-through buttons (n=34), with 1.5 centimeter diameters were within Lot 1: C, and dating to post-1870 (Olsen 1963:553). Three of these had pressed designs on the button fronts. Additionally, nine two-piece, flat brass buttons

with a hollow center, measured 1.5 to 1.7 centimeters in diameter, were within Lot 1: C. Due to their shape, these buttons are often known as donut buttons, and are typically worn on pants (Bryant 2014).

A two-piece ferrous metal button, with a brass loop shank was collected from Lot 1: A. Lot 1: A included eight fragments of the two-piece, pressed steel, four-hole, sew-through buttons, and two were within Lot 2: C. Five one-piece, cast whitemetal, four-hole, sew-through buttons were within Lot 1: A, and one was also found within Lot 2: C. Lot 1: D included two ferrous metal buttons, one of which was a four-hole, sew-through button.

Two non-button, clothing artifacts were found within the entire assemblage and both were excavated from Lot 1: B. This included one brass, clothes hook, probably part of a hook-and-eye, and the other clothing artifact was a pressed or stamped steel suspender buckle. Finally, it should be noted that no clothing artifacts were identified within Lot 2: A and B.

Footwear

Eighty-two footwear artifacts were identified within the entire assemblage. Fifty-two shoe buttons of various glass colors were located within Lot 1: C. Shoe button glass colors included aqua (n=13), amber (n=5), clear (n=17), milk (n=5), olive (n=4), and puce (n=8). It should be noted, that the milk glass shoe buttons, could also be ceramic shoe buttons, manufactured via the prosser process (Sprague 2002:112). The Montgomery Ward and Company, Fall and Winter 1894-1895 Catalog illustrates a variety of women’s shoes, complete with approximately ten to twelve buttons on each shoe (Schroeder 1977:490-491).

Lot 1: A included one aqua, one amber, two clear, and two olive glass shoe buttons, with Lot 1: B including one olive glass shoe button. One milk glass shoe button, with evidence of a metal shank, was located in Lot 1:D. Twelve shoe buttons were identified within the Lot 2: C assemblage, with nine made of aqua glass, two of olive glass, and one in puce glass. Finally, Lot 2: A included three aqua glass, and two olive glass shoe buttons. Most shoe buttons showed signs of having been burned or disfigured.

One brass, shoe eyelet, and one ferrous metal, shoe rivet were also located within Lot 1: C. Within Lot 2: A, one brass, shoelace hook was identified. These footwear artifacts most likely belonged to men's shoes or boots, as seen by the types of shoes being sold in the 1894-1895 Montgomery Ward and Company Catalog (Schroeder 1977:500).

One footwear artifact from Lot 2: C includes a shoe heel measuring 5 centimeters in width, but due to the shrinking of the leather since the 1991 excavation, this may not represent the original size. The shoe heel includes evidence of both stitching and tacks. Meanwhile, another footwear artifact from Lot 2- C includes a leather sole, now in two fragments, with evidence of only stitching around the edge.

Adornment

Beads. Six beads were found overall at the site. Four beads were located within Lot 1: C. One bead from Lot 1: C is .5 centimeters long, tubular-drawn and made of clear glass. Two additional clear glass, tubular drawn beads were found within Lot 2: C (Sprague 2000:202). Based on size, these could be identified as pony beads (Sprague 2000: 204; 206). Meanwhile, the other three beads within Lot 1: C are formed from olive glass and appear to be small, round seed beads (Sprague 2000: 206).

Body Ritual and Grooming

Milk glass. Overall, ninety-six body ritual and grooming artifacts were found within the Block 4 assemblage, and ninety-one of these artifacts were milk glass fragments. Milk glass was commonly used for cosmetic and toiletry vessels from the 1870s into the 1920s, and included ointment and cold cream jars, beginning in the 1890s (Horn 2005:1; Lindsey 2019). Due to the historically known manufacturing association between milk glass and cosmetic products and vessels, and the fact that they were rarely used for any other vessel type, all milk glass fragments were associated with the body ritual and grooming functional classification within this research study (Lindsey 2019).

Eight milk glass fragments were found within Lot 1: A, and one was within Lot 1: B. Sixty-seven fragments of milk glass including two jar lid fragments were collected from Lot 1: C. No milk glass was found within Lot 1: D. Fourteen fragments of milk glass were found in Lot 2: C, and one milk glass fragment was located within Lot 2: A.

Combs. One comb fragment was uncovered within Lot 1: B. The comb includes both the shaft and tooth fragments, but the material type is difficult to determine. It is possible that it is an earlier baleen comb or a later hard rubber, celluloid or volcanite comb, which became popular during the latter-half of the nineteenth century because they could be mass-produced quickly (Johnson 1961:30-31). These rubber and celluloid combs can be found in the Montgomery Ward and Company, Fall and Winter 1894-1895 Catalog (Schroeder 1977:100).

Mirror Glass. Four fragments of mirror glass were found within the Lot 1: D collection, identified by the black, shiny surface on the back of typically clear flat glass. This was

the only location that mirror glass was found, and was the only body ritual and grooming artifact type found within Lot 1: D.

Indulgences

Tobacco. Sixty-three pipe bowl fragments and seventy-four pipe stem fragments were found throughout the site for a total of 137 pipe fragments. The majority of the pipe fragments were made of white clay or white ball clay, with three pipe bowls identified as being made from red clay or terra cotta. Seven stem or bit end fragments were included within the stem fragment assemblage. It should be noted that the following descriptions include the diagnostic pipe fragments, with all pipe analysis and source research is credited to Diane Zentgraf. All other pipe bowl and stem fragments lacked distinguishable features and remain unknown in manufacturing date and origin.

Table 6.6: Tobacco Pipe: Quantities and Locations

Location	**Pipe Bowl Fragments**	**Pipe Stem Fragments**	**Total Pipe Fragments**	**Percentage of Indulgences Assemblage (%)**
Lot 1: A/B	2 / 5	3 / 6	5 / 11	2.22%
Lot 1: C	19	32	51	7.08%
Lot 1: D	25	23	48	6.67%
Lot 2: A/B	9 / 0	2 / 2	11 / 2	1.81%
Lot 2: C	3	6	9	1.25%
Total	63	74	137	19.03%

Block 4: Lot 1: B included one pipe bowl fragment with narrow cockles or flutes (Pfeiffer 2006: 24). Lot 1: D also included one pipe bowl fragment with narrow flutes. Two pipe bowl fragments, one within Lot 1: D and the other within Lot 1: C included wide flutes (Sudbury 2009:179;184). Thus, a variety of fluted pipe bowl decorations was

possible during the nineteenth century, and were most likely manufactured in England (Sudbury 2009:181).

Meanwhile, Lot 2: C included a white ball clay pipe bowl fragment with the fluted “Half Rib” decoration, featuring alternating thick and thin raised lines beginning at the stem and just behind the bowl and extending halfway up the bowl (Pfeiffer 2006:121-122). This decoration type is probably English in origin, but Dutch pipe manufacturers also made a fluted bowl (Duco 2004:33; Pfeiffer 2006:121-122; Sudbury 2009:14). Lot 2: A included two other, potentially wide fluted and English manufactured pipe bowl fragments (Sudbury 2009:14).

One pipe bowl rim, potentially an effigy pipe with a melted or burnt glaze on the exterior, was collected from Lot 1: D. French pipe manufacturers were known to glaze their pipes, while the English did not, so this pipe may be of French origin. Lot 1: D included another effigy pipe bowl fragment, the left eye of a male figure, and of probable English manufacturing origins in this case (Diane Zentgraf, personal communication, September 2018).

Block 4, Lot 1: D also included a pipe bowl fragment with evidence of a burnished exterior, and possible rouletting around the rim. This decoration style was produced in Holland, although the two pipe bowl fragments, comprising one 1 pipe bowl from Lot 1: C, had an exterior that appears to have been burnished, with rouletting circling the rounded rim, both indicating Dutch manufacture (Diane Zentgraf, personal communication, September 2018). The exterior also has evidence of having been burned with faint fluting or cockle lines also evident. A pipe bowl fragment with evidence of a

burnished exterior and potential rouletting around the rim, was also found within Lot 1: D, and was probably produced in the Netherlands due to both the burnishing and rouletting decorative additions (Diane Zentgraf, personal communication, September 2018). Although it should be noted that the rouletting decoration, typically associated with Dutch pipe manufacturer, Peter Dorni, was also being imitated in other countries such as France and Germany (Sudbury 2009: 10).

At least one pipe stem fragment from Lot 1: D included the embossed "Peter Dorni" company name, as well as the horizontal bands or rouletting decoration in combination with the interior dashes or vertical column decoration. Thus, if this pipe was actually manufactured by Peter Dorni, and not an imitation made by French or German manufacturers using his name and decorative style, the pipe would have been produced in the Netherlands (Bradley 2000:118; Pfeiffer 2006:42; Sudbury 2009:10-11). There is also evidence of a tool being used in order to trim the mold seam along the pipe stem, as seen by the addition of diagonal hatches on the top and bottom (Diane Zentgraf, personal communication, September 2018).

White ball clay or kaolin clay pipe bowls with the letters "TD", within a circle of stars or asterisks, in a variety of five differing styles, are common within sites in the Western United States that post-date 1830 in their occupational time periods (Pfeiffer 2006:25;41). As a result, "TD" pipes have been found at the Champoeg townsite, Block 4 assemblage. Two tobacco pipe fragments, making up one pipe bowl from Lot 1: D, was identified as a "TD" pipe type, with the letters originally believed to have been the initials of the first pipemaker (Bradley 2000:112; Zentgraf 2019:122). This pipe bowl was decorated with the crosshatched or fishnet background decoration as well as the

diagnostic letters, “TD” included within a circle of six-point stars and with stars surrounding the rim (Pfeiffer 2006:41; Sudbury 2009: 22). Two additional pipe bowl fragments from Lot 1: C, one including the rim and a portion of the stem, featured the “TD” letters inside the circle of six-point stars, along with the stars along the rim. Two other pipe bowl fragments from Lot 1: C included portions of the circle of six-point stars. Five pipe bowl fragments and one pipe stem with a spur fragment, located within Lot 1: C, featured pinnate frond motifs along the seams, suggesting that they are also possibly “TD” pipes of English manufacture (Pfeiffer 2006:25). It should be noted that the “TD” tobacco pipe style is typically associated with English or American makers, but was also being produced in Germany during the nineteenth century (Sudbury 2009:168; Zentgraf 2019:122) (Figure 6.3).

Figure 6.3: “TD” Pipe bowl

One “FORD STEPNEY” pipe bowl, complete with the stylized bee in the center of the cartouche, was located within Lot 1: D. The English manufacturers, John, Jesse, and Thomas Ford had factories in Stepney and Ratcliff, districts of London (Pfeiffer 2006:12). Thus, these pipes are commonly referred to as Ford Stepney pipes due to their associated manufacturing location, and are known to have been imported by the Hudson’s Bay Company from 1820 to 1875, comprising the most common pipe bowl type in the Kanaka Village of Fort Vancouver (Middleton 1975:5; Pfeiffer 2006:13-15).

Lot 1: D included four pipe bowl fragments decorated with wide flutes in combination with grass heads or flowers along the seam, and no decoration above these features. This type of pipe decoration was manufactured in Bristol, England (Sudbury 2009:179). However, German manufacturers also made these decorative types of pipes (Sudbury 2009:168). In addition, four pipe bowl fragments from Lot 1: D included wide fluting, alternating with thin fluting, as well as a mold seam decorated with an oak leaf motif (Davey 1979: 220-221). This decorative style is English in design, but without maker’s marks, it is possible that these pipe bowl fragments are different variations of this decorative motif, which may also be identified as the Scalloped X-banded variety (Sudbury 2009:59-61; 180-184).

Lot 1: D included one unglazed, white ball clay pipe bowl (n=2), with an embossed “5” on the left side of the bowl spur, probably marking the mold or style number, and potentially missing another number elsewhere. Due to the clay type and decorative style, the pipe is most likely of English origin (Diane Zentgraf, personal communication, September 2018). Lot 1: D also included one pipe bowl fragment with a burnt exterior, as well as a pipe bowl with a thin, rounded rim, with the inside of the rim

showing evidence of a botor mark. Due to the rounded rim, the pipe is most likely of French or Dutch manufacturing origins, with English pipe makers typically creating pipes with flat rims (Diane Zentgraf, personal communication, September 2018).

Four pipe stems, from Lot 1: C (n=2), D (n=1), and Lot 2: C (n=1), included the boxed and impressed maker's mark of "(Mc)DOUGALL/GLASGOW" (Pfeiffer 2006:56-57). These marked pipe stems were manufactured in Scotland, by the Duncan McDougall and Company (1847-1967), which was also a common pipe company distributer to the Hudson's Bay Company, and is commonly found in Hudson's Bay Company sites with post-1847 occupations (Bradley 2000:117; Pfeiffer 2006:12). One boxed and impressed marked pipe stem included portions of the pipe bowl along with the spur and model number "48". This model number is known to be in use by 1875 as a result of a McDougall card, Irish Price List dating from that year (Sudbury 1980:46). The enactment of the McKinley Tariff Act of 1891 stipulated that all goods imported into the United States had to be marked with the country of origin, in addition or instead of the place of manufacture (Bradley 2000:118-119). Thus, these McDougall/Glasgow pipe stems must pre-date the 1891 Act.

Four pipe stems (n=6) included bit ends, with all examples found within Lot 1: D. Three types of bit ends were produced during the nineteenth century including beveled, flat, or rounded varieties (Pfeiffer 2006: 32-33). However, the bit ends found within Lot 1: D were identified as atypical in form (Sudbury 2009:13). In addition, one bit end had a glazed pale yellow (5 YR 7/4) exterior**.** Glazed bit ends were often manufactured in order to reduce the lips from sticking to the clay pipe, but the country of origin for this pipe is unknown (Diane Zentgraf, personal communication, September 2018).

Lot 1: D also included two redware or terra cotta clay pipe bowls. One was plain and unglazed, while the other had a glazed interior and exterior as well as a raised rim and evident mold seam. Redware or terra cotta clay pipes, ranging in color from red to orange, were typically of American manufacture or made specifically for the American market (Bradley 2000:118; Pfeiffer 2006:12). John Taber, and later his son, John Taber, Jr. manufactured redware tobacco pipes including the distinctive knobby pipes, recognized by the protruding dot decoration, in a range of glazes and fabric colors, from their factories in Maine and New Hampshire from the 1830s into the twentieth century. By the early 1850s, these "knobby" pipes were widespread in America via wholesale distribution channels; and as a result, are found throughout western sites during the latter half of the nineteenth century (Sudbury 2009:93; 200-201). Thus, the glazed, redware pipe bowl may be the rim to one of these American manufactured, knobby pipes.

Alcohol. Olive glass was more commonly manufactured during the nineteenth century, with this color of glass potentially used when producing wine, champagne, liquor, beer and ale bottles, figured flasks as well as mineral water, ink and snuff bottles and some food vessels (Lindsey 2019). However, due to the historically known manufacturing association between olive glass and alcohol consumption, as well as the actual identification of a variety of types of alcoholic vessels within the assemblage, the majority of the olive glass fragments, diagnostic or not, were classified as personal indulgences within this study. Yet, a small assemblage of olive glass fragments were too burnt or melted to be identified as strictly bottle fragments, and are discussed in the functionally unknown category.

Three hundred and twenty-nine fragments of olive glass, in varying shades and thickness, were collected from Lot 1: C. The minimum number of vessels was determined based on the number of base fragments as well as the shape of the vessels. A minimum of seven vessels were accounted for within the Lot 1: C olive glass assemblage. Six round bottle bases were located within Lot 1: C. And four paneled, body fragments, probably belonging to a case bottle, once filled with gin or schnapps, was also found within Lot 1-C (Lindsey 2019). One finish and two lips were also analyzed within the Lot 1: C collection, but could possibly be associated with the six bottle bases, so they were not listed as additional vessel counts. The finish and the broken lip were identified as double oil or mineral finishes (Fike 1987; Horn 2005:13; Lindsey 2019). According to the Society of Historical Archaeology's Bottle Guide these bottle finishes were typically associated with liquor or ale bottles (Lindsey 2019). The other lip was hand-tooled and determined to be from a wine or brandy bottle (Fike 1987; Horn 2005:13; Lindsey 2019).

Overall, Lot 1: B included forty-four olive glass fragments, with a minimum of two vessels based on bottle base and finish types. The assemblage included one olive glass, square or case bottle base as well as seven olive glass, paneled body fragments. One of these fragments was also embossed with the letters, "SCHIED". This fragment would have likely belonged to a schnapps or gin bottle, manufactured in the city of Schiedam within the province of South Holland in the Netherlands. During the nineteenth century, the production of schnapps or gin was the town's main industry, and the city's name is affiliated with many different brands (Meyer 2013) (Figure 6.4). Thus, without further embossed fragments the company remains unknown, although "Udolpho Wolfe's Schiedam Schnapps" has been found at Fort Yamhill, a Civil War era fort, located within

the Coast Range, forty-four miles to the southwest of Champoeg (Wesseler 2017:137-138). Advertisements from Udolpho Wolfe's company market his gin for medicinal purposes, primarily as a diuretic beverage to aid those suffering from maladies as a result of drinking unclean water (Lindsey 2019; Meyer 2013; Wesseler 2017:137-138). However, within this study, case bottle fragments typically belonging to gin or schnapps, and sometimes bitters, will be regarded as strictly alcohol vessels, with a primary indulgent function, rather than hypothesizing about a potential secondary medical function (Lindsey 2019). Lot 1: B also included one champagne bottle lip as well as a ring or oil finish, potentially associated with the Schiedam schnapps or gin bottle (Fike 1987; Horn 2005;13; Lindsey 2019). Lot 1: A included forty-one olive glass fragments, with only one distinguishable paneled and embossed fragment, probably associated with a case gin or schnapps bottle.

Figure 6.4: "Schiedam" Gin or Schnapps Olive Glass Vessel

Seventy-one fragments of olive glass were found within Lot 1: D. Of these, two shoulder and neck fragments had evidence of a mold seam and another looked to be

hand-blown. No base fragments were identified, but three fragments were paneled, with one of these also embossed with the letters “OB”. As mentioned previously, these fragments probably belonged to a gin or schnapps bottle. There were a minimum of three vessels from Lot 1: D as a result of manufacturing evidence and vessel shape.

The Lot 2: A assemblage only had nine olive glass fragments, one of which was a lip fragment and another was a round bottle base, and Lot 2: B had thirty-three olive glass fragments in total, including two bases, one of which was rounded and featured mold seams. Fifty-six fragments of olive glass were uncovered in Lot 2: C. One base was identified, as well as one lip and two neck fragments, with zero paneled or embossed fragments found.

Pastimes and Recreation

Marbles. Four porcelain marbles of varying sizes (1.5- 2 centimeter diameters) were found within Lot 1: C. One clear glass marble, with a decorative yellow swirl interior was located within Lot 2: A, and showed evidence of having been burnt. Glass marbles were first produced in the Thuringen region of Germany, beginning in the 1840s. German swirls were the most common of the handmade glass marbles from the region, and the latticino core marbles, with white or yellow cores, were the most typical marble type, remaining in production until the mid-1920s (Collectors Weekly 2019) (Figure 6.5).

Dolls. Two porcelain doll fragments, including an arm were included within the Lot 1: C assemblage (Figure 6.5).

Figure 6.5: Pastimes and Recreation Artifact Assemblage

Pocket Tools and Accessories

Block 4, Lot 1: C included a pen knife including a handle, measuring seven centimeters, with a brass exterior and ferrous metal interior, but missing the wood or bone component that would have been separating the two metal types. The ferrous metal blade measured 4.5 centimeters in length. One pocket knife handle, larger in size than the pen knife and made of bone, was also located within the Lot 1: C assemblage.

Domestic

The domestic assemblage was functionally classified into seven categories and classes (Table 6.7). In terms of the classification of the culinary and gustatory classes, the artifacts were separated based on material type including ceramics and glass in order to better illustrate the contents of the overall assemblage.

Table 6.7: Domestic Artifact Assemblage

Domestic Function	**Lot 1: A/B**	**Lot 1: C**	**Lot 1: D**	**Lot 2: A/B**	**Lot 2: C**	**Total Quantity & Percentage of Domestic Assemblage (%)**
Furnishings	1/0	5	0	0/0	0	6 / 0.81%
Housewares & Appliances; Culinary	2/7	51	8	9/2	13	92/ 12.37%
Housewares & Appliances; Gustatory	64/43	289	90	9/56	60	611 / 82.12%
Housewares & Appliances; Household Pastimes	4/0	11	0	0/0	0	15 / 2.02%
Illumination	0/0	0	1	0/0	16	17 / 2.28%
Cleaning & Maintenance; Sewing	0/0	0	1	0/0	0	1 / 0.13%
Maintenance & Tools	0/1	1	0	0/0	0	2 / 0.27%
Total	71/51	357	100	18/58	89	744/ 100.00%

Furnishings

Six artifacts functionally classified as brass, interior clock fragments were located within Lot 1: A (n=1) and Lot 1: C (n=5) (David Brauner, personal communication, September 2018).

Housewares and Appliances- Culinary and Gustatory

Ceramics. The following table (6.8) depicts the overall ceramic assemblage including the ceramic sherds that were classified as domestic as well as those with unknown functions, meaning that although the ceramic sherd, typically small body vessel fragments, was most likely domestic in overall function, it could not be functionally identified further, as culinary versus gustatory. As a result, these unknown ceramics are discussed within the

later functionally unknown section.

Table 6.8: Culinary and Gustatory Ceramic Types, Quantities, and Percentages

Fabric; Design	**Lot 1: A/B**	**Lot 1: C**	**Lot 1: D**	**Lot 2: A/B**	**Lot 2: C**	**Total Quantity & Percentage of Overall Ceramic Assemblage (%)**
Stoneware	4/3	28	7	11/1	16	70 / 4.06%
Redware	5/0	16	2	2/1	1	27 / 1.57%
Creamware	0/0	0	0	0/0	0	0 / 0.00%
Yellow ware; undecorated	0/0	5	2	0/2	3	12 / 0.70%
White earthenware; undecorated	134/39	686	149	30/18	120	1176 / 68.21%
White earthenware; molded	0/2	2	3	1/1	1	10 / 0.58%
Ironstone; undecorated	34/11	181	9	2/0	11	248 / 14.39%
Ironstone; molded	0/0	4	4	0/0	1	9 / 0.52%
Slipware; blue	0/0	1	0	1/0	2	4 / 0.23%
Slip-banded wares	0/2	0	4	1/1	3	11 / 0.64%
Earthenware; hand-decorated	0/1	8	2	1/2	10	24 / 1.39%
Edge-decorated wares	0/1	1	2	0/2	1	7 / 0.41%
Transferprints	0/8	16	15	2/4	9	54 / 3.13%
Flowing Colors	0/0	0	0	1/0	2	3 / 0.17%
Porcelain; white; undecorated	4/3	17	2	5/0	2	33 / 1.92%
Porcelain; hand-decorated	6/0	3	0	1/0	3	13 / 0.75%
Porcelain; banded	1/0	3	0	0/0	1	5 / 0.29%
Porcelain; molded	2/0	1	0	1/0	0	4 / 0.23%
Porcelain; blue-green glaze	0/0	1	7	0/0	6	14 / 0.81%
Total Ceramics	190/70	973	208	59/32	192	1724 / 100.00%

Two additional tables (6.9 and 6.10) depict the ceramics that were functionally classified as domestic; housewares and appliances; culinary or gustatory, and includes information regarding their ceramic type, associated sherd and vessel counts, vessel forms, and location within Block 4. Please note that ceramic sherds and vessels were functionally classified due to analysis of vessel form and thickness, the presence of potentially diagnostic sherds such as handles, in addition to rim or base diameters, when possible. Additionally, the minimum number of vessel counts are based on differences in fabric type, decoration, and vessel forms.

Table 6.9: Culinary Ceramic Types and Quantities (Sherds/MNV)

Culinary Fabric Type/Design	**Quantity**	**Sherd Type: Rim/Footring/ Body/Unknown/ Other**	**Vessel Form: Hollowware/ Flat/Unknown**	**Total Minimum Number of Vessels (MNV)**
Stoneware	31	3/3/17/7/1	30/0/1	10
Redware	18	1/5/3/9/0	16/0/2	5
White earthenware	18	6/8/0/0/4	18/0/0	5
Ironstone	1	0/0/0/0/1	1/0/0	1
Slipware; blue	1	0/0/1/0/0	1/0/0	1
Totals	69	10/16/21/16/6	66/0/3	22

Table 6.10: Gustatory Ceramic Types and Quantities (Sherds/MNV)

Gustatory Fabric Type/Design	**Quantity**	**Sherd Type: Rim/Footring/ Body/Unknown/ Other**	**Vessel Form: Hollowware/ Flatware/ Unknown**	**Total Minimum Number of Vessels (MNV) Hollow/Flat**
Yellow ware	3	0/1/2/0/0	3/0/0	1/0
White earthenware	168	52/68/5/31/12	58/79/31	11/11 (2 hollow/mold & 1 flat/mold)
Ironstone	210	109/56/42/0/3	103/107/0	10/15 (2 hol/mold & 1 flat/mold)
Slip-banded	7	2/1/4/0/0	5/2/0	3/1
Hand-painted earthenware	15	8/1/6/0/0	3/10/2	2/3
Edge-decorated	6	6/0/0/0/0	0/6/0	0/2
Blue Transferprints	42	8/1/22/9/2	8/19/15	2/4
Green Transferprints	2	1/0/0/1/0	0/1/1	0/1
Purple Transferprints	3	1/0/2/0/0	1/0/2	0/1
Sepia Transferprints	2	0/0/2/0/0	1/1/0	1/1
Flowing Colors	3	1/0/2/0/0	0/3/0	0/1
Porcelain; white; undecorated	24	6/2/1/13/2	16/7/1	4/1
Porcelain; hand-decorated	13	6/1/6/0/0	6/7/0	2/2
Porcelain; banded	5	3/2/0/0/0	1/4/0	1/1
Porcelain; molded	3	0/1/2/0/0	3/0/0	1/0
Porcelain; blue-green glaze	13	1/1/11/0/0	13/0/0	6/0
Totals	519	204/135/107/54/ 19	221/246/52	44/35

Stoneware. Stonewares are generally non-porous vessels made from fine, dense clays with the addition of impurities such as feldspar and quartz within the clay mixture (Chapman 1993:87; Gaston 1983:12). Thus, they can be high-fired to the point of vitrification, but not to the point of translucency like porcelain (Gaston 1983:12). Stonewares can come in a range of colors from dark brown or gray to light white, red or pink and were typically decorated on the exterior by slips or salt glazes, with the interior decorated much less often (Chapman 1993:87; Greer 1999:14). Both American and British potteries manufactured stoneware vessels during the early nineteenth century, and they continued to grow in popularity during the mid-nineteenth century due to the health hazards associated with the lead-glazed redware vessels (Chapman 1993:88; Poet 1996:78; Slesin et al. 1997:55). According to Judith Chapman (1993:88), "vessels with a salt exterior and no interior glaze may be [identified as] early English wares, while vessels with both interior and exterior salt glazes are probably American". Due to the durability and lack of porosity of the ceramic fabric, stoneware vessels were generally manufactured for utilitarian purposes such as food or beverage storage and preparation (Chapman 1993:87; Greer 1999:16; Raycraft and Raycraft 1990:7). As a result, the most common vessel forms included jugs, bottles, preserve jars or crocks, bowls, churns, pitchers, and also ink bottles (Chapman 1993:88; Tereba ca.2014:335) (Figure 6.6).

Figure 6.6: Stoneware Ceramic Assemblage (Exterior)

Within Lot 1: A one base sherd was functionally classified as culinary, possibly a storage vessel for liquids due to the undecorated exterior and salt glazed interior of the 8 inch base diameter. Test Pit B within Lot 1 also had one functionally culinary sherd, a handle to a pitcher or jug, decorated with a salt glaze on the handle and a clear glaze on the interior of the vessel wall.

Eight stoneware sherds were located within Lot 2: A and B. A minimum of four different vessels were identified based on the variety of salt glaze applications (Raycraft and Raycraft 1990:7-8). One sherd located within Lot 2: B included a brown orange peel glaze on the exterior and no glaze on the interior of the vessel. Meanwhile, other stoneware sherds within Lot 2: A included salt glaze, as seen by a metallic glaze, on both the exterior and the interior the vessels, while others only had a metallic glaze on the interior with an orange peel glazed exterior or a clear glaze or brown glaze on the exterior. All of these salt glaze decoration applications were also found in Lot 2: C (n=5, n=1, and n=1), respectively.

Lot 1: C included thirteen functionally identifiable, culinary, stoneware sherds. All of the sherds belonged to hollowware vessels, but featured a variety of decoration. One rim sherd had a six inch rim diameter, but remained unglazed. An unglazed stoneware base as well as a salt glazed base with a 2.5 inch base diameter, both probably storage jar vessels, were also collected. Four sherds had a salt glaze applied to both the exterior and interior of the vessel, but the vessel wall thickness of two of these sherds was much thinner than the other two sherds with this decoration. Meanwhile, three sherds had a salt glaze applied to the exterior, and a clear glaze applied to the interior. Another had a salt glaze applied to the interior, but the exterior remained unglazed with the tan-white fabric remaining exposed. Finally, one sherd had a clear glaze applied to the exterior tan fabric. An additional three vessels were identified based on the differing glaze applications seen within the Lot 1: C assemblage. Lot 1: D included one functionally identifiable hollowware salt-glazed stoneware sherd, believed to be a culinary storage jar based on the rim/lip style and size (3 inch outer rim diameter).

Redware. Redware vessels are formed from red earthenware clays, on either a potter's wheel or simply by hand (Slesin et al 1997:55). Redwares were produced by American manufacturers and were very popular within Colonial America but fell out of popularity by the middle of the nineteenth century due to an associated increase in stoneware production and the introduction of glass and tin as storage containers (Chapman 1993:86; Slesin et al. 1997:55). Typically utilitarian, redwares can represent a number of different vessels including pitchers, pots, pans, plates, bowls, crocks, mugs, cups, jugs, sugar bowls, salts, tumblers, teapots, as well as flower pots and bricks. A multitude of different decorative designs can be applied to the generally porous

earthenware bodies, such as simple, clear lead glazes, colored slips and salt glazes (Chapman 1993:86; McAllister & Michel 2003:9; Slesin et al. 1997:55; Tereba ca.2014:336).

One redware unglazed body sherd with a simple decorative line on the exterior was identified as a hollowware culinary vessel was located within Lot 1:A, while zero redware sherds were found within Lot 1: B. Fourteen redware sherds were functionally identified after analysis of Lot 1:C. Four unglazed sherds formed one hollowware base, measuring 4.5 inches in diameter. Another hollowware base featured the application of slat glaze to both the interior and exterior walls. All other sherds remained unglazed.

Three redware sherds were located within Lot 2: A, with zero found in Lot 2: B. A minimum of two vessels were identified within Lot 2: A, with one unglazed rim sherd measuring 4 inches in diameter, and probably belonging to a crock or jar, while one of the other sherds included a brown slip interior. All of the redware sherds were identified as hollowware in vessel form and culinary in function.

Yellow ware. Yellow ware is a ceramic type which results from the firing of a yellow earthenware clay, and most common, the application of a clear glaze (Chapman 1993:83). Yellow wares are ideal as utilitarian vessels because they are sturdier than redwares and less dense than stonewares (McAllister & Michel 2003:9). Both American and English potters manufactured yellow ware, but English yellow wares were available within the late eighteenth and early nineteenth century, while American yellow ware production became prevalent during the 1820s until the 1900s, and were generally crafted as thicker, more utilitarian vessels (Chapman 1993:84; Tereba ca.2014:336). In addition,

prior to 1830 the ceramics were typically thrown on a potter's wheel, rather than being mold-made (Chapman 1993:83). A variety of design styles can be seen on yellow ware vessels including a plain, clear glaze, molded design, mocha decorations and slip bands (Golder Associates 2012:3; McAllister & Michel 2003:11; Tereba ca.2014:336). Various versions of these design styles can be seen throughout French Prairie (Chapman 1993:259-265).

Zero yellow ware sherds could be functionally identified within Lot 2: A and B, and zero yellow ware sherds were found within Lot 1: A and B. One yellow ware sherd was functionally identified as a hollowware gustatory vessel within Lot 1: C. The walls were relatively thin, and may represent a portion of a slip-banded vessel that is not apparent due to the lack of decoration on this sherd. Lot 2: C also included one yellow ware shoulder sherd and one yellow ware base sherd once belonging to a hollowware gustatory vessel, and due to the vessel thickness, may once again represent a portion of a slip-banded vessel.

White Earthenware. White earthenware vessels can be high-fired but are naturally opaque, non-vitreous and porous. Usually a clear glaze is simply applied to the vessels in order to decrease porosity and increase functionality (Gaston 1983:12). In 1779, cobalt began to be added as a clearing agent, producing a whiter end product than the earlier creamwares (Sussman 1977:105). Tin was later added as a clearing agent to white earthenwares (David Brauner, personal communication, 2014). In addition, during the nineteenth century, underglaze transfer-printing was the most popular method of ceramic decoration and was most often applied to white earthenware fabrics (Sussman 1977:108).

However, several other forms of decoration are commonly applied to white earthenwares including molded wares and hand-decorated wares.

Determining the functional classification and minimum number of vessel counts for the undecorated white earthenware category was difficult due to the relatively small sherd size as well as the burnt nature of many of the fragments. In addition, limitations occurred due to the fact that several decorated types of earthenwares also have portions left undecorated such as transferprinted, edge-decorated and hand-painted, flat and hollow wares. As a result, only rim and footring/base sherds, based on the shape and thickness of the fragments, decoration, interior and exterior glaze treatments, as well as any wear-mark evidence were analyzed for functional classification, and vessel quantities and form identification.

Twenty-nine white earthenware sherds were functionally classified as once forming gustatory vessels, a minimum of six vessels, within Lot 1: Test Pits A and B. Two molded rim sherds, one from a flat vessel and the other from a hollowware cup, were identified within Lot 1: B. Two hollowware footrings were collected (n=1/n=1), with one having a base diameter of 1.75 inches, with both sherds believed to have belonged to cups. Six flat vessel rims were located in Lot 1: A (n=4) and B (n=2), with one hollowware rim located in Lot 1: A. Four trademarks from flat white earthenware vessels were found within the Lot 1: A and B assemblage.

Seventy-five white earthenware gustatory sherds were collected from Lot 1: C. Two hollowware molded vessel sherds, potentially a teapot and a cup based on wall thickness, design, and diameter. One flat, scalloped rim sherd was also found, in addition to one six inch saucer rim sherd, two seven inch plate rim sherds, five nine inch plate rim

sherds, one angular platter rim sherd, and six other unidentified flat vessel rim sherds. Three hollowware rim sherds were collected including a flared, four inch rim diameter (n=1), and a flared, three inch rim diameter (n=2). Possibly in association, two sherds making up a mug handle were uncovered, in addition to another white earthenware handle sherd from another hollowware vessel. Eleven hollowware footrings were collected including one with a two inch base diameter, and twenty-seven flat vessel footrings were found. Seven cross-mended sherds with drill holes throughout the entirety of the hollowware vessel were found, and are believed to have functioned as a draining vessel for a platter with a dish containing excess grease or juices. Five functionally identified sherds were body sherds from unidentifiable vessel types. Finally, five white earthenware trademarks were collected and will be discussed in the trademarks sub-section, but four of these could not be functionally identified due to the size of the sherd.

Lot 1: D included thirty-eight white earthenware sherds, functionally categorized as gustatory vessels. Three of these sherds were molded, making up a flat serving vessel with a scalloped rim (n=2), and a hollowware vessel (n=1). Three trademarks were located within Lot 1: D, and will be discussed further within the trademarks sub-section, but one could not be functionally identified due to the small sherd size. Three other flat footring sherds were collected, as well as seven flat rim sherds. Seven hollowware footrings were also located, two with rather small diameters indicating a mug or cup, and three hollowware rims were also found. Twelve other sherds were functionally identified as gustatory within Lot 1: D, but could not be identified as more than body sherds.

Eight white earthenware sherds were functionally classified as representing a minimum of four gustatory vessels from Lot 2: A and B. One of these vessels includes a

hollowware pitcher due to the collection of a handle as well as a possibly associated with the 9 inch diameter base, molded body sherd fragment and the extended/flared lip featuring an unrestricted orifice. Two other hollowware rims were identified as differing hollowware vessels including a decorative, extended/flared lip possibly belonging to a teacup as well as another flared rim, either a small bowl or cup. Finally, one rim was associated with a flat serving vessel like a plate.

Lot 2: C included eighteen white earthenware sherds functionally classified as gustatory vessels. Five white earthenware flat vessel footring sherds were included as well as two hollowware footring sherds, possibly associated with a mug and a shallow bowl based on base diameters and wall thickness. Two hollowware body sherds were associated with a small vessel such as a cup or mug based on the wall curvature and thickness. Three hollowware rim sherds, with a four inch rim diameter, were also collected from Lot 2: C. One molded, hollowware rim sherd, belonging to a paneled cup with a scalloped rim was within the Lot 2: C assemblage, with one other molded rim sherd possibly associated with this hollowware vessel as well. One thick body and handle sherd from a hollowware vessel such as a pitcher or jug was collected during excavations. Finally, three other white earthenware sherds were classified as gustatory, but were unknown in vessel type.

Lot 1: C included seventeen white earthenware sherds functionally classified as hollowware culinary vessel sherds, and comprising a minimum of four vessels. One molded, thick handle complete with a thumb holder and measuring 3 centimeters in width, was identified as culinary in function. Seven base fragments, belonging to a minimum of two hollowware vessels were also collected, as were three lid fragments and

a rim fragment on which a lid would settle. A thick white earthenware rim, with a rolled lip and a 12 inch rim diameter, was probably once a crock or large bowl. Three thin rim sherds all made up the same four inch diameter, hollowware vessel, possibly a jar.

Lot 2: C included one hollowware culinary base sherd and vessel, with a glazed interior and exterior.

Ironstone. Ironstone wares include a highly vitrified, non-porous, hard white paste and clear glaze, which makes a stronger fabric than white earthenwares and the even earlier creamwares, and is more refined than the also durable stonewares (Chapman 1993:67; Tereba ca.2014:335). Ironstone can sometimes be identified by a slightly blue or gray tinted glaze in addition to the lack of crackling or crazing of the glaze, which is unlike white earthenware glazes (Chapman 1993:67; Slesin et al. 1997:21; Tereba ca.2014:335). Manufacturer trademarks are often applied as well (Tereba ca.2014:335). However, ironstone can be difficult to distinguish from white earthenwares, especially the earlier ironstones produced, typically those prior to 1870 (Tereba ca.2014:335). Thus, although ironstones and white earthenwares were differentiated within this study, it should be noted, that due to the general similarities in the ware types this analysis is not definitive, and could include some errors as a result of subjective analysis.

Ironstone vessels typically included plates of various sizes, cups, with or without handles, pitchers, coffee pots, tea pots, creamers, sugar bowls, soup and sauce tureens, a variety of serving dishes, mugs, butter and relish dishes, platters, compotes, and toddy bowls as well as toilet sets (Chapman 1993:67). Additionally, molding was a popular decoration application on both white earthenwares and ironstones after 1840, and within the Block 4 assemblage, was represented by Gothic hexagonal, or octagonal designs

(Munnick 1958:39; Slesin et al. 1997:21; Tereba ca.2014:339). The popularity of the molded ironstones by the 1850s led to the decline of the less durable, white earthenwares including the transferprinted vessels (Chapman 1993:67).

Thirty functionally classified gustatory ironstone sherds were located within Lot 1: A with a minimum number of five vessels. Thirteen sherds belonged to flat vessels, while the other seventeen were once part of hollowware vessels. Specifically, one rim sherd was measured to have a 3.75 inch rim diameter, possibly once a mug or jar. One rim sherd had a six inch rim diameter, and two rim sherds had seven inch rim diameters, potentially belonging to shallow bowls of these varying sizes (Figure 6.7). Meanwhile, six rim sherds were associated with nine inch diameter flat vessels such as dining plates. Four footring sherds belonged to hollowware vessels, with one indicating that it was once a pitcher or jug. Ten ironstone sherds, comprising two hollowware vessels (n=5) and two flat vessels (n=5), were analyzed within the Lot 1: B assemblage. Three hollowware rim sherds from Lot 1: B crossmended together, forming a shallow bowl, while one hollowware body sherd indicated its vessel form as a vase or pitcher. Two flat vessels footrings with trademarks were found as well, indicating two different, additional vessels.

Figure 6.7: Ironstone Shallow Bowls (6 and 7 inch rim diameters)

One ironstone sherd was functionally identified as a hollowware culinary or utilitarian vessel based on the handle fragment recovered from Lot 1: C.

Meanwhile, 154 ironstone sherds were functionally identified as gustatory vessels within Lot 1: C. Twenty-seven trademark sherds, many of which cross-mend, were located within Lot 1: C, forming a minimum of nine vessels. These trademarks will be discussed further in the trademark sub-section, but two of the twenty-seven could not be functionally identified as culinary or gustatory due to the size of the sherd. One molded, handle sherd, and one lid sherd, belonging to hollowware vessels were uncovered, in addition to one hollowware, scalloped rim sherd with a molded decoration on the exterior, potentially a decorative bowl or crock at one time. Three molded rim sherds made up a hollowware vessel with a six inch rim diameter. Five flat vessel footrings, and fifty-two flat vessel rim sherds, with a variety of rim diameters including 12 inch (n=1), 9 inch (n=32), 7 inch (n=1), 6 inch (n=2), and unknown (n=16), were collected from Lot 1:

C. While, twenty-eight rim sherds with a variety of diameters including 7 inch (n=6), 6 inch (n=11), 4 inch (n=3), 3.75 (n=1), 3 inch (n=1), unknown (n=5), and a flared, unrestricted rim (n=1). Ten hollowware footrings, eight of which included unknown dimensions, while one had a 3.5 inch base diameter, and the other had a 6 inch base diameter. Finally, twenty-eight hollowware body sherds were also located within Lot 1: C.

Seven ironstone sherds (n= 3 vessels) were identified as gustatory in function within Lot 1: D, including three hollowware sherds, one of which was molded, and four flat vessel sherds, two of which had molded rims, and another had a rim diameter of 10 inches. Two hollowware, ironstone sherds were found within Lot 2: A. One sherd formed part of a serving vessel lid. Lot 2: C included two, 9 inch diameter flat vessels (n=4), as well as a flat gustatory footring sherd, and a rim sherd to a cup or mug. Lot 2: C also included a molded, hollowware ironstone sherd, possibly from a tureen.

Slipware. Similar to slip-banded wares, slipwares are decorated with a slip, or a clay slurry mixed with water as well as a coloring agent (Rickard 2006:1). It should be noted that in this study, all slipwares were identified as slips applied to white earthenware vessels. One slipware sherd from Lot 1: C was functionally classified as a hollowware culinary vessel and identified based on the dark blue slip that was applied to the exterior of a white earthenware fabric.

Slip-Banded wares. A slip is a decorative substance that is formed by mixing clay, water and coloring agents together (McAllister & Michel 2003:11; Rickard 2006:1). Brown, blue and green were some of the most common slip colors applied to white

earthenwares, while white, brown, blue, gray, red, black, and green bands were some of the most common slip colors applied to yellow wares (Chapman 1993:76; 84; Leibowitz 1985:10; McAllister & Michel 2003:11). In order to create decorative banding, the slip would be applied to the exterior as the vessel spun on a lathe or potter's wheel (Leibowitz 1985:9; McAllister & Michel 2003:11; Sussman 1977:6). The term mochaware is often used interchangeably with slip-banded earthenwares, but originally it was only used when specifically referring to the dendritically decorated, slip-banded wares, first manufactured during the late eighteenth century, and so the term slip-banded wares will be applied to the ceramics identified within this assemblage due to the lack of dendritic designs (Chapman 1993:76; Leibowitz 1985:10;13; Rickard 2006:ix-x; 12; Slesin et al. 1997:115; Tereba ca.2014:340).

Slip-banded wares were manufactured in both America and England from 1830 up until the twentieth century but were the most popular prior to 1850 (Chapman 1993:76; Golder Associates 2012:2). Slip-banded ware decoration can vary dramatically, including an assortment of band colors including blue, brown or black and white, with the decorative bands applied to either a yellow or a white earthenware fabric. After 1850, slip-banded wares were only applied to the blue slip-banded varieties (Golder Associates 2012:2).

One slip-banded yellow ware rim sherd, featuring a blue band around the rim, was collected form Lot 2: B. Lot 1: B included two slip-banded sherds. One sherd belonged to a flat, gustatory vessel with the characteristically "mocha" blue on the interior and a white exterior. Meanwhile, the other sherd was once a hollowware vessel with black or brown bands, but the color was difficult to determine due to burning. Zero slip-banded

wares were recovered from Lot 1: C. One functionally identified blue slip-banded sherd (flat, gustatory vessel) was located within Lot 1: D, and appears similar to the Lot 1: B sherd in decoration. Lot 2: C included one hollowware gustatory base sherd with the "mocha" blue coloration, as well as one "mocha" blue and white rim fragment, once part of a cup or bowl. Lot 2: C also included a hollowware yellow ware sherd with blue raised bands, potentially a mug (Figure 6.8).

Figure 6.8: Assorted Slip-Banded Ceramics

Hand-decorated wares. The hand-decorated wares from Block 4 included a variety of hand-painted and stamped or stenciled floral designs. Hand-painted polychrome floral motifs, applied to white earthenwares, are found throughout French Prairie, and the term 'cottageware' is sometimes applied to these wares, which has several distinct colors including lime green, red, blue and black (Chapman 1993:75; Wilson & Langford 2011:48). English hand-decorated wares were more expensive than edge-decorated, slip-banded and mochawares, but were cheaper than transfer-print ceramics, making them popular within the American market, especially between 1820 and 1850 (Chapman 1993:74). Due to inconsistencies in the hand-decorated designs, the minimum number of vessels was difficult to determine. However, efforts were made

based on fragment thickness, form as well as the coloration and style of the decorative motif.

One hand-decorated earthenware sherd featuring a faded pink flower was functionally identified as part of a hollowware, gustatory vessel with the Lot 1: B assemblage. Eight hand-decorated earthenware sherds were uncovered within Lot 1: C, comprising a minimum of three flat gustatory vessels based on differences in hand-painted patterns and colors. One rim sherd had a diameter of 9 inches, featured a scalloped rim, with hand-painted black and green flowers and a black band around the center of the vessel. Another rim sherd (10 inch rim diameter) included hand-painted red and blue flowers around the rim, green flowers in the center, with black bands around the rim and center of the vessel. Four other rim sherds featured a different hand-painted design, potentially similar to that seen in Lot 1: B, with pink and/or purple flowers, and a black band along the rim. Two other sherds included both of these patterns including pink flowers and red flowers. Lot 1: D also included a rim sherd with green flowers, and Lot 2: C included a flat vessel sherd with green flowers and a black band. Lot 2: C included a flat rim sherd with a 9 inch diameter, featuring purple flowers and black bands, as well as a footring with a six inch base diameter, potentially from the same vessel. All of the sherds discussed above included hand-decorated, stamped or stenciled floral designs, but similar in coloration to the typical “cottageware” ceramics found on French Prairie; and as a result, were not placed in a separate decorative category (Figure 6.9). Several of these sherds were also extremely burned, and as a result, minor differences in decoration could not be fully identified.

Figure 6.9: Hand-Decorated Earthenware: Stamped or Stenciled Floral Design

A hollowware sherd with an unidentified hand-painted blue decoration was found in Lot 1: D. One hand-painted, hollowware sherd decorated with red flowers, green leaves, black stems, and a blue base was excavated from Lot 2: C (Figure 6.10).

Figure 6.10: Hand-Painted Red Flower Design

Edge-decorated wares. Shell-edge wares are hand-painted, edge-decorated wares, also known as feather edge wares. They were first introduced in 1779 by Josiah Wedgwood and quickly became manufactured by other potters, with the style remaining very popular until about 1830, and subsequently replaced by the growing popularity of transfer-printed ceramics by 1850 (Chapman 1993:71; McAllister 2001:13-14; Sussman 1977:105). Shell-edge vessels, made of white earthenware, typically had a molded edge in a variety of styles including a scalloped-rim, creating a "ruffled" design, a scalloped-rim with embossed designs, or a plain rim with a repetitive series of slanted vertical lines (Chapman 1993:206-211; McAllister 2001:11; Sussman 1977:106-107; Tereba ca.2014:339). Typically, blue or green, but even brown, purple or pink underglaze slips could then be applied to the molded-edge surfaces (Majewski & O'Brien 1987:149; Sussman 1977:105). Shell-edge wares were first produced in a variety of flat vessel types, but by the end of its period of popularity, platters with the blue coloration, rather than the green, were the dominant vessel type recorded (Sussman 1977:106;109).

A small number of functionally identified, shell-edge sherds were found within Block 4 (n=6), probably due to the early dates associated with the ceramics. The flat vessel sherds found within Block 4 most commonly had a scalloped-rim, embossed design, and the addition of colored paint, typically blue. However, this assemblage only had one sherd featuring the addition of the colored paint around the edge (blue), with the rest either left unpainted or the paint no longer visible due to burning (Figure 6.11).

Figure 6.11: Shell-edge Wares

Transfer-print Ceramics. Transfer-printed ceramics, typically white earthenwares and primarily illustrating blue underglaze designs, dominated the market during the nineteenth century (Sussman 1977:108, 1979:9). English Staffordshire transfer-prints were especially popular in America and were primarily manufactured for the North American market during the years 1812 until the beginning of the Civil War in 1860 (Neale 2005:174). This process of underglaze transfer-printing was first invented in Battersea, London in 1756 and was perfected during the early nineteenth century (Neale 2005:14; Tereba ca.2014:337). During the transfer-printing process, ink, typically cobalt oxide is applied to a design which would have been engraved into a copper plate (Neale 2005:11; Tereba ca.2014:337). Tissue paper is then placed on the copper plate and pressed by a felt-covered roller in order to soak up the inked design (Neale 2005:12). The sized tissue paper is then laid on a biscuit fired, white earthenware and transferred onto the ceramic. Once the tissue paper is removed and the ceramic is dry, the vessel is then covered in a clear glaze and fired (Neale 2005:13). Transfer-prints can be distinguished from other types of decoration by the detail of the designs, made possible by the stipple engraved copper plate (Neale 2005:11). Transfer-prints are also characteristically

monochrome in coloration, although it is possible to have the center and rim decorations differ in color due to the fact that these pieces of tissue would have been cut and applied separately (Neale 2005:13). These additional transfer-print colors were first introduced in 1829 but quickly became popular within the American market and included the following colors: brown/sepia, green, pink, red and purple or puce (Neale 2005:17;174; Tereba ca.2014:337). Transferprint patterns were commonly applied to dinner and dessert services, tea sets, and toiletwares (Chapman 1993:43).

In 1836, the Hudson's Bay Company began purchasing transfer-printed earthenwares from the Spode/Copeland pottery, located in Staffordshire, England (Sussman 1979:8). Consequently, Spode/Copeland transfer-prints, recognized by the company name Copeland and Garrett until 1847, W.T Copeland from 1847 until 1867 and finally W.T. Copland and Sons, from 1867 onward, are now the most common type of tablewares and toiletwares to be found within early nineteenth-century French Prairie archaeological sites due to the dominance of the Hudson's Bay Company within the trading industry of the Pacific Northwest from 1821 until its decline in the 1840s, which included closing its merchant operations at Fort Vancouver in 1849 (Chapman 1993:16;39 Sussman 1979:9). In addition, by 1853, the Hudson's Bay Company, with new headquarters at Fort Victoria, no longer placed orders with the Spode ceramic company due to high United States tariff duties (Chapman 1993:39).

Although Spode/Copeland is the predominant manufacturer of the transfer-printed wares found within French Prairie excavations, several transfer-print patterns manufactured by other ceramic companies including Davenport, William Adams and Sons, The Mayers, Enoch Woods and Sons, Minton, J. and M. P. Bell, and William

Ridgway were also identified (Chapman 1993:51; Hale 2008:45; Hill 2015:97). Some of these ceramic companies and their associated transferprint patterns will be discussed below (Table 6.11). However, several transferprint patterns remained unknown, in addition some sherds could not be functionally identified due to the unidentifiable vessel type, and will be discussed in the functionally unknown section as well.

Six unidentified, blue transferprint sherds were located within Lot 1: B, with zero within Lot 1: A. Six blue transferprint sherds with unidentified patterns, including one gastrolith and rim, were uncovered within Lot 1: C. Six hollowware gustatory blue transferprint sherds with unknown patterns, were collected from Lot 1: D. These six hollowware sherds represented a minimum of two vessels including a handle/body sherd from a pearlware cup or creamer, with gothic panels and blue transferprint decorative additions on the exterior and interior, as well as a hollowware sherd with an unidentified center transferprint image. Two blue transferprint sherds seem to be the supporting rim/lip and lid to a tureen. One blue transferprint sherd included a fragment of a flat gustatory vessel's footring. Six additional blue transferprint sherds could not be identified by vessel type.

Five blue transferprint sherds of unidentified patterns were located within Lot 2: A (n=1) and B (n=4). Lot 2: C included eight blue transferprint fragments, but four of these could not be functionally identified, and will be discussed further in the functionally unknown category. Two of the other four blue transferprints within Lot 2: C also did not have identifiable transferprint patterns and represented flat gustatory vessels. One pink transferprint, with an unknown pattern, also could not be functionally identified and is also discussed in the functionally unknown category.

One unidentified green transferprint was located within Lot 1: D. Three purple transferprints in an unidentified pattern, featuring leaves, were excavated from Lot 1: C. The rim sherd suggested a hollowware gustatory vessel. One hollowware gustatory sepia transferprint, of an unidentified pattern, was uncovered from Lot 1: C. The sherd also included red and yellow hand-painted highlighting on top of the glazed transferprint design. One flat gustatory sepia transferprint, potentially the *Non-Pariel* pattern manufactured by T. Mayer, was located within Lot 1: D (Figure 6.12).

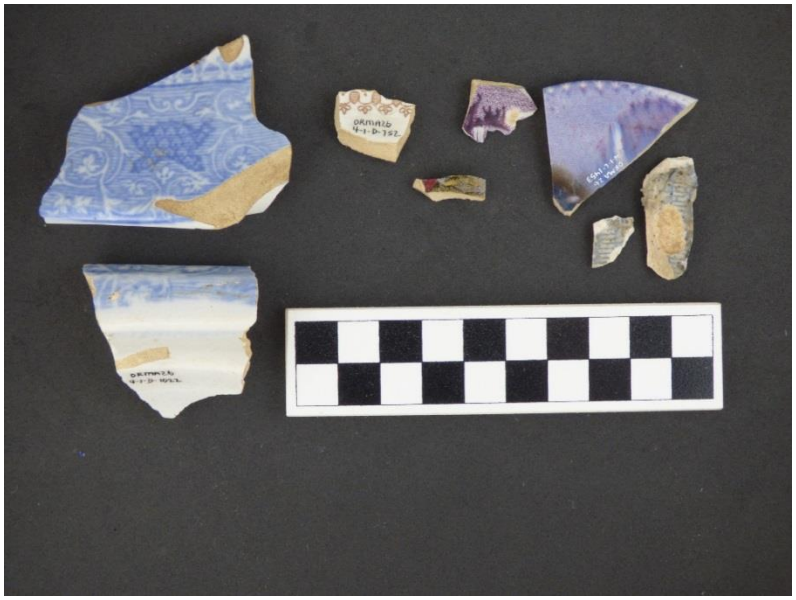

Figure 6.12: Assorted Unidentified Transferprint Patterns

Table 6.11: Identified Transferprint Patterns: Quantities and Locations

Ceramic Manufacturer	**Transferprint Pattern; color**	**Dates**	**Quantity**	**Vessel Type**	**Location**
William Adams and Sons	Columbia; blue	c.1840-	2	Hollow	Lot 1: B
Copeland & Garrett/Spode	Willow; blue	1780 - Present	2	Flat	Lot 2: A; Lot 2: C
Copeland and Garrett	Field Sports; blue	Reg. 1846-	5	Flat	Lot 1: C
William Davenport and Company	Cyprus; mulberry	c.1850-1887	3	Flat	Lot 2: A; Lot 2: C
T.J. and J. Mayer	Non-Pariel; green	1836-1838	1	Flat	Lot 1: C
George Phillips	Marino; blue	1834-1848	1	Flat; rim	Lot 2: C

Columbia

The *Columbia* pattern was one of the most popular William Adams and Sons transferprint patterns to be found on French Prairie (Chapman 1993:136). The pattern was introduced around 1840, and depicted various romantic scenes in Gothic shapes (Furniss et al. 1999:56; Chapman 1993:136). Two blue transferprint sherds, probably from the same hollowware, gustatory vessel, were located within Lot 1: B.

Field Sports

The *Field Sports* pattern was registered on September 14, 1846 (Sussman 1979:110). The pattern has a variety of different center images, and is seen in blue within the Block 4 assemblage, but can also be found in green and brown, as seen at the Robert Newell homestead, just to the west of the Champoeg townsite (Manion 2014: 212; Neale 2005:32; Sussman 1979:111-112). Five flat gustatory sherds, identified as featuring the *Field Sports* blue transferprint pattern, manufactured by W.T. Copeland, and then Copeland and Garrett, were excavated from Lot 1: C (Chapman 1993:138). Two rim sherds were included within this assemblage.

Marino

Marino was a transferprint pattern produced on flat and hollowware vessels, in Gothic shapes, by manufacturer, George Phillips of Longport from 1834 until 1848 (Chapman 1978: 146; Tereba ca.2014:355). One blue transferprint rim sherd, belonging to a flat gustatory vessel, featured the *Marino* transferprint pattern.

Non-Pariel

One green transferprint sherd, identified as the *Non-Pariel* pattern was located within Lot 1: C. *Non-Pariel* was manufactured by T.J. and J. Mayer circa 1836 to 1838 (Chapman 1993:146; Snyder 1997:120-121). The pattern was presented in a variety of colors including green, as seen in Block 4, as well as brown, sepia and cobalt blue (Snyder 1997:120). The *Non-Pariel* pattern was also located at the Bellique site as well as St. Joseph's College on French Prairie (Chapman 1993:146; Hill 2015:104).

Willow

Willow dates from the 1780s until the present day and has been produced by a variety of different manufacturers including Copeland and Garrett as well as Spode (Chapman 1993:162; Coysh and Henrywood 1982:402; Sussman 1979:235). *Willow* was the most popular of the transferprint patterns, and is found throughout French Prairie (Chapman 1993:162). One sherd of the popular pattern was identified in Lot 2: A representing a flat vessel. One rim sherd was also found within Lot 2: C, also belonging to a flat gustatory vessel.

Flowing Colors. Transfer-print ceramics were also produced in 'flowing colors', meaning that the ink applied to the bisque earthenware ran outside of the engraved and transferred pattern due to the introduction of powdered chemicals within the kiln prior to

firing, creating a smudged appearance (Neale 2005:135; Tereba ca.2014:337). Hand-painted flown wares, primarily flow blues, were first produced during the 1820s, but transfer-print designs soon followed in the 1830s (Chapman 1993:63; Neale 2005:174). Similarly to the colored transfer-prints, introduced around the same time period, the flow blues became especially well-liked in America (Neale 2005:174). Flown wares could also be produced in puce, mulberry and sepia (Chapman 1993:63).

One mulberry flowing transferprint rim, identified as the *Cyprus* pattern, produced by William Davenport and Company, was found within Lot 2: A (Chapman 1993:178). Two additional *Cyprus* mulberry flowing transferprint sherds were collected from Lot 2: C. All sherds once belonged to flat gustatory vessels. The *Cyprus* pattern is believed to have been produced around 1850, but would have been out of production by 1887 due to the Davenport factory closing as a result of bankruptcy (Chapman 1993:178; Hale 2008:51) (Figure 6.13).

Figure 6.13: Identified Transferprint Patterns

Porcelain. Porcelain is a translucent, dense ceramic ware, which is fired to the point of vitrification (Gaston 1983:12; Majewski & O'Brien 1987:124). It can most often be identified based on the sugar-like texture of the fabric caused by the vitrification process (Majewski and O'Brien 1987:128). Pale gray porcelain fabrics are typically associated with Chinese export porcelains, while the white surface porcelains are linked to English manufacture during the late 1800s (Majewski and O'Brien 1987:128).

A minimum of seven porcelain vessels were located within Lot 1: A and B, with sherds of similar design found in other excavation units as well. Two gray, decorative and molded hollowware porcelain sherds, possibly once a painted egg cup, were located within Lot 1: A, and one footring sherd with a 1 centimeter diameter was also in Lot 1: C (Figure 6.14).

Figure 6.14: Molded, Gray Porcelain Footring

Eleven white porcelain sherds, both flat and hollow in form, were within Lot 1: A, while Lot 1: B included three, hollowware white porcelain sherds. Four hand-painted flower sherds were featured on a thick, hollowware vessel, possibly a vase, with one other sherd located in Lot 1: C (Figure 6.15).

Figure 6.15: Hand-Painted White Porcelain Hollowware Vessel

One hand-painted flower and molded flat vessel, with a 2 inch rim diameter, was located in Lot 1: A, with associated sherds in Lot 1: C (n=2) as well. Another white porcelain, flat vessel in Lot 1: A included a 2.5 inch rim diameter (Figure 6.16).

Figure 6.16: White Porcelain Flat Vessels (2 inch and 2.5 inch rim diameters)

Additionally, one hand-painted flat vessel with a banded edge and floral design was found in Lot 1: A, and is also found in Lot 1: C (n=2), and Lot 2: C (n=3), and including a 5 inch rim diameter (Figure 6.17).

Figure 6.17: White Porcelain Banded Edge and Floral Design

One scalloped and green-banded, white porcelain, flat vessel rim sherd was located in Lot 1: A as well as Lot 1-C (n=1) (Figure 6.18).

Figure 6.18: White Porcelain Green-Banded Design

Finally, two white porcelain, hollowware sherds, possibly a lip or spout with a 2.7 centimeter diameter were found within Lot 1: B (Figure 6.19).

Figure 6.19: White Porcelain Lip or Spout

Another white porcelain rim, possibly a spout was located in Lot 1: C, and a white porcelain neck sherd was located in Lot 1: D. Additionally, Lot 1: C also included a white porcelain sherd, an oval rim with a two inch rim diameter, potentially a creamer vessel. Lot 1: C also included a white porcelain lid, with ~4 inch diameter, and also a hole or slot for a serving utensil. One thick white porcelain hollowware rim sherd, possibly a bowl, and one thin white porcelain flat rim sherd, possibly a saucer, were found within Lot 1: C. Lot 1: C included an additional twelve white porcelain gustatory sherds, comprising seven hollowware vessels and five flat vessels. Lot 2: C included one additional white porcelain, undecorated, hollowware gustatory sherd as well as hollowware gustatory white porcelain sherd (.3-.5 cm wall thickness) with a clear glaze and band on the exterior, but an unglazed interior.

Zero blue-green glazed porcelain sherds were located within the Lot 1: A and B assemblage. One blue-green glazed porcelain sherd, with blue hand-painted dashes applied to the exterior, was located within Lot 1: C, and determined to be a hollowware

gustatory sherd. Six blue-green glazed hollowware porcelain sherds were collected from Lot 1: D, representing a minimum of three vessels based on the hand-painted designs applied to the exterior surfaces including a large blue band (n=3), four horizontal bands (n=1), and an intricate blue design that could not be defined (n=1) in addition to a blue-green glazed hollowware footring. Six blue-green glazed porcelain sherds were located within Lot 2: C, all of which were hollowware gustatory vessels. Four sherds included an unidentifiable hand-painted blue design, while one sherd included green paint, and the other depicted three blue bands (Figure 6.20).

Figure 6.20: Blue-Green Glazed Porcelain Designs

One white hollowware porcelain sherd, depicting green, yellow and red hand-painted flowers, was located within Lot 2: A.

Other Ceramic Information

Trademarks. Lot 1: D included three white earthenware trademarks, two of which had identifiable trademarks. One trademark was an impressed mark with the company name, “DAVENPORT” in an arc above an anchor with the numbers “4” and “6” on either side. The other trademark is almost identical, aside from the numbers, which are “4” and “8” instead. These numbers represent the manufacturing year of the white earthenware ceramic vessels, 1846 and 1848, respectively (Godden 1970:189).

Lot 1: C included five white earthenware trademarks, but only one mark could be identified. It was an impressed trademark with the following, “HARLES M”, and “BURSLEM” impressed underneath. The ceramic manufacturer, Charles Meakin was responsible for the majority of ironstone trademarks found within Lot 1: C (n=). However, all of the ironstone trademarks are printed in black ink, not impressed, and obviously using an ironstone fabric rather than a white earthenware. Thus, it is possible that this vessel was manufactured earlier than the Charles Meakin ironstone vessels, although production was moved from Burslem to Hanley in 1883, so this trademark at least dates to the 1870-1882 time period (Godden 1970:426). In addition, three of these Charles Meakin base sherds were also located within Lot 1: A, but two of these cross-mend with a previously mentioned Lot 1: C vessel.

Overall, twenty-seven ironstone trademarks were located within Lot 1: C. As mentioned previously, Charles Meakin was the most common trademark found, identified on twelve sherds, and a minimum of six vessels based on the trademark word combinations present. The Charles Meakin trademark identified on these ironstone sherds included printed marks with variations of the royal arms, above “CHARLES MEAKIN”, with “ENGLAND” written underneath, rather than the specific Staffordshire

manufacturing locations of Burslem (1870-1882) or Hanley (1883-1889) (Godden 1970:426). Therefore, the dates of these ceramics remain relatively unknown since this specific trademark could not be identified, but it is probable that the country of origin was simply being used interchangeably with the manufacturing locations during the 1870 to 1889 production time period. However, it is possible that Charles Meakin began applying England to his marks in 1890, as a result of the McKinley Tariff Act of 1891, which required the country of origin to be included on all products imported to the United States (Bradley 2000:118) (Figure 6.21).

Figure 6.21: Charles Meakin Ironstone Trademarks

Three ironstone trademark sherds, which cross-mended, were identified as a Henry Burgess ceramic vessel. The mark was printed and included the Royal Arms, “H. BURGESS”, and “BURSLEM” on the base. This trademark was used throughout the company’s lifetime, from 1864 to 1892 (Godden 1970:116). Lot 1: C included one

trademark, identified as an ironstone vessel, manufactured by J. and G. Meakin. Three additional J. & G. Meakin sherds, representing two other vessels, were located within Lot 1: A, and were identified as white earthenware, rather than ironstone. The printed trademarks from J. & G. Meakin varied, but typically included parts of the Royal Arms, “J & G MEAKIN”, and “ENGLAND”. It seems that from 1851 to 18889, J. & G. Meakin did not include England within their trademarks, but began doing so in 1890 and afterward (Godden 1970:427).

Lot 1: C included one other trademark type, Edward Clarke (n=2). The printed mark included: “EDWARD CLA”, “TUNSTALL”, above the word “TRADEMARK” written in an arc above two shields, and “STONE” in an arc below. A separate, impressed and upside down mark included “...KE”. Production at Tunstall lasted from 1865 to 1877 for Edward Clarke’s company, before it was moved to Burslem (Godden 1970:147).

Finally, nine ironstone trademarks within Lot 1: C, and one within Lot 1: A remained unidentified. Three trademarks including ironstone (n=2) and white earthenware (n=1) sherds were collected from Lot 1: B, but all remained unidentified after analysis. The white earthenware trademark was a gastrolith as well. Zero trademarks were found within Lot 2 (Table 6.12).

Table 6.12: Identified Ceramic Trademarks: Quantities and Locations

Ceramic Company	**Trademark Type**	**Dates**	**Quantity**	**Material Type**	**MNV**	**Location**
Henry Burgess	Printed; Royal Arms; Burslem	1864-1892	3	Ironstone	1	Lot 1: C
Edward Clarke	Printed & Impressed; Shields; Tunstall	1865-1877	2	Ironstone	1	Lot 1: C
Davenport	Impressed; Anchors; Years	1846 & 1848	2	White earthenware	2	Lot 1: D
Charles Meakin	Impressed; Burslem	1870-1882	1	White earthenware	1	Lot 1: C
Charles Meakin	Printed; Royal Arms; England	1870-1889 or c.1890 +	3; 12	Ironstone	6	Lot 1: A; Lot 1: C
J & G Meakin	Printed; Royal Arms; England	1851-1890 or c.1890 +	3; 1	White earthenware & Ironstone	3	Lot 1: A; Lot 1: C
Unidentified	Printed	-	1; 3; 13 & 1	Ironstone & White earthenware	-	Lot 1: A; Lot 1: B; Lot 1: C & Lot 1: D
Total	**-**	**1846-1890+**	**45**	**-**	**14**	**Lot 1**

Housewares and Appliances- Culinary and Gustatory

Glass. Although the ceramics were categorized based on their fabric type or their decorative application, glass wares were functionally classified according to the vessel type identified. If a fragment was too small or otherwise unidentifiable the artifact was placed within the functionally unknown category based on glass color. If the vessel form could be identified, but the possible contents were not able to be identified, the fragments

were recorded within the functionally unknown category. Thus, the following glass vessel types were functionally identified as either culinary or gustatory.

Culinary. Two aqua glass, chamfered body fragments, belonging to two different vessels based on vessel thickness were found within Lot 1: B. Six aqua glass, paneled and chamfered body fragments were also collected from Lot 1: D. One aqua glass, chamfered base was also located within Lot 2: C. Chamfered bottles, commonly made of aqua glass, were often associated with condiment, sauce or chutney bottles during the nineteenth century (Jones and Sullivan 1989:84-85; Lindsey 2019).

Lot 1: B also included one clear curved glass, ground rim/lip with thread from either a bottle or jar. One aqua glass flat sanded lip with string thread was collected from Lot 1: D, representing a possible storage jar (Jones and Sullivan 1989:81). One dark aqua or turquoise glass base, with a pontil scar, was found within Lot 1: C. This base type and glass color are often called cathedral bottles, and were typically used as sauce or pickle bottles (Lindsey 2019). An aqua glass jar lid, embossed with the letters “TD MA” were also found within Lot 1: C and determined to be associated with canning, and as a result, culinary in function.

Gustatory. Tumblers are one of the most common forms of table glass found in archaeological sites, but on French Prairie, tumblers are rarely found within the archaeological assemblages at the French-Canadian homesteads (Chapman 2014:85; Jones 2000:224-224; Jones and Sullivan 1989:143). This may potentially be due to consumer preference, purchase location, or market availability due to the early date of the initial French-Canadian homesteads (Chapman 2014:85). Tumblers, especially the

pressed glass variety, were not produced until the late 1830s, and pressed glass patterns then evolved from a plain design in 1845, to geometric, ribbed, and naturalistic patterns by 1865 (Chapman 2014:85; Jones 2000: 225).

Three clear glass tumbler sherds were located within Lot 1: B including two with the pressed, geometric paneled pattern, and the other with the pressed, scalloped paneled pattern, circa 1840 to 1860 (Chapman 2014:85). Sixteen clear glass tumbler sherds were located within Lot 1: D. The pattern on four of these sherds could not be identified, but included 2 rims, one body sherd, and one base (5 cm diameter) with a broken glass pontil scar. The other twelve sherds included a mix between the pressed, scalloped paneled pattern (n=8 including three rims), and the pressed, geometric paneled pattern (n=4 including a 5 cm base). No tumbler fragments were recorded within Lot 1: C.

Forty-two tumbler sherds made of clear glass were located within Lot 2: B including one plain base, one pressed, scalloped paneled pattern, and thirteen pressed, geometric paneled pattern fragments including four rims. One overall fragment was found within Lot 2: A. Three clear glass tumbler sherds were collected from the Lot 2: C excavations including one rim sherd, associated with an unknown pattern as well as two body sherds of a unique grooved or ribbed, zig-zag pattern not found elsewhere within the Block 4 excavations (Figure 6.22).

Figure 6.22: Assorted Tumbler Assemblage

Two amber glass body fragments, were determined to be gustatory bottles. Amber glass was produced in a wide range of color variation, and was often used to bottle carbonated beverages like beer or ale during the nineteenth century, a function it is still used for today (Lindsey 2019). Additionally, one thick, round aqua glass fragment featuring the embossed letters “DUBL/…”LFA”, was located within Lot 1: C and is believed to have been a carbonated beverage gustatory vessel (Figure 6.23).

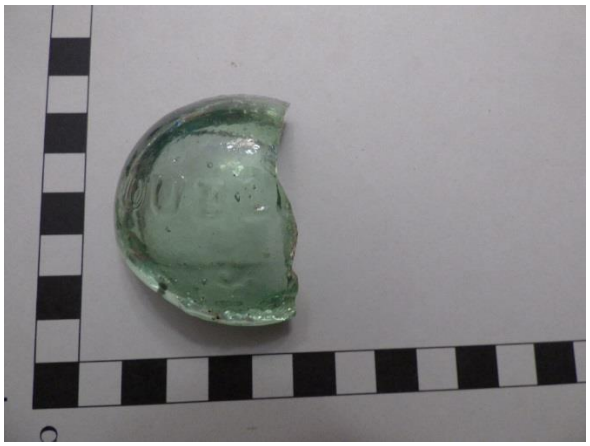

Figure 6.23: Aqua Glass Carbonated Beverage Vessel Fragment

One clear curved glass, embossed body sherd was functionally identified as a gustatory vessel within Lot 1: D. Also, within Lot 1: D, one clear curved glass hand-tooled rim fragment, potentially a decorative or ornamental fragment, potentially associated with a goblet or bowl, was collected and associated with another sherd from Lot 2: C (Jones and Sullivan 1989:40) (Figure 6.24).

Figure 6.24: Hand-Tooled, Ornamental Clear Glass Rim Fragment

Housewares and Appliances-Other Culinary

Lot 1: B featured a ferrous metal “tin can” flat base as well as a hole-in-cap can lid with a lead lined interior (Horn 2005:8) (Figure 6.25). Lot 1: B also included a cast iron rim fragment most likely belonging to a pot or pan.

Figure 6.25: Hole-In-Cap Lead-Lined “Tin Can” Lid (Left) and Ferrous Metal Base (Right)

Lot 1: C included a ferrous metal handle, belonging to a hollowware utilitarian or culinary vessel such as a kettle or pitcher. The handle had a pinched or folded rim, measuring three centimeters in width at the top and two centimeters at the base, with a measurement of ten centimeters in length. Two cast iron handle fragments were also found within Lot 1: C and determined to be culinary in function.

One ferrous metal oval can base, measuring 2.7 centimeters in width, was within Lot 2: C and determined to be culinary in function. Lot 2: C also included two cast iron stove parts including a stove top fragment, (Figure 6.26) as well as a potential cast iron trivet fragment (David Brauner, personal communication, September 2018). However, this cast iron trivet fragment could possibly be a door hardware latch or locking mechanism fragment, but will be regarded as culinary within this research study.

Figure 6.26: Cast Iron Stove Top Fragment

Housewares and Appliances-Other Gustatory

Table Ware. *Utensils.* Twenty-one total utensil fragments were found within Block 4. Lot 1: A had one ferrous metal spoon bowl in addition to a thin ferrous metal handle (n=2; 1 cm width) featuring a raised or molded oval design and an engraved center line. Lot 1: B included a pewter utensil handle (n=1) as well as a ferrous metal utensil handle (n=6). Lot 1: C also included a molded, ferrous metal utensil handle, but it was much heavier than the handle found in Lot 1: A, and probably associated with a tableware knife. Three ferrous metal tableware (n=4) knives were also found within Lot 1: C as well as a ferrous metal, three-prong fork. Lot 2: C included a threaded, ferrous metal handle, most likely associated with a fork or spoon, as well as a ferrous metal tableware knife blade, and two ferrous metal spoon bowls of differing sizes, teaspoon and serving.

One pewter or Britannia metal utensil handle, impressed and stamped with "YATES", was recovered from Lot 1: D. Britannia metal (or tutania), is an alloy containing tin, antimony, and copper, very similar to pewter, but more durable (Light 2000:15-16; Snodin and Belden 1976:12;16; Turner 1972:409). Both of these soft metals

were used for some of the earliest utensils, especially spoons, during the latter-half of the eighteenth century into the nineteenth century, but by the 1840s electroplated silverware was available at relatively cheap prices, with pewter and Britannia-metal utensils out of production in the United States within the 1870s (Light 2000:14; Snodin and Belden 1976:12;16). The fiddle-shaped handle with pointed shoulders design, seen on this artifact, is noted as being the most popular from approximately circa 1810 to 1830 (Snodin and Belden 1976:16).

Additionally, the name Yates, is associated with a few different manufacturers during the nineteenth century, but based on the trademark style as well as the utensil handle material and design it seems to be best associated with John Yates. John Yates, was a tutania or Britannia metal spoon-maker from Birmingham, England, circa 1818 (Woodhead 1991:285). In 1850, assuming this is the same person, he opened John Yates and Sons, also in Birmingham with a stamped trademark, and began to manufacture Crown metal, Britannia metal, nickel-silver, and electroplated goods until 1892 (Woodhead 1991:285) (Figure 6.27).

Figure 6.27: Assorted Utensil Assemblage

Lot 2: A held a unique utensil, a four-pronged fork. The back handle stem names the manufacturing company, “1847 Rogers Bros A1”, with A1 citing the standard silverplate grade, and electroplate manufacturing method used (Turner 1972:44). In 1847, the Rogers Brothers company was established in Hartford, Connecticut and included brothers, William, Simeon, and Asa (Turner 1972:19;44). The brothers were pioneers in the development of electroplated wares, which deposited a coating of metal via electrolysis, and initially used Britannia metal, and then German silver, a mix of copper, nickel, and zinc, as the base metal for the electro- or silverplating process (Light 2000:14; Snodin and Belden 1976:16; Turner 1972:19;44;410). However, by 1855 the original partnership had dissolved, and in 1862 the Meriden Britannia Company of Meriden, Connecticut acquired the rights to the 1847 Rogers Bros. trademark (Turner 1972:19-20;339). The 1847 Rogers Bros. trademark became one of the most well-known of all silvermarks during the latter-half of the nineteenth century (Turner 1972:21). The trademark type (#3) seen on the fork within the Block 4 assemblage was used by the Meriden Britannia Company on electroplated wares until 1898 (Turner 1972:339) (Figure 6.28).

Figure 6.28: 1847 Rogers Bros. A1 Electroplated Fork (Back)

The front handle of the four-pronged fork is decorated with an oval thread pattern (Turner 1972:85;397). The oval thread or threaded oval pattern was one of the earliest patterns produced by the 1847 Rogers Bros., and remained a standard pattern that was produced in electroplate as well as sterling (c.1878-1880) (Turner 1972:67;85). One example of an electroplated, oval thread 1847 Rogers Bros. utensil was believed to have been manufactured in 1862 (Turner 1972:397).

In addition, “NY Bakery” is engraved into the center of the oval thread design and handle (Figure 6.29). Apparently, after 1860, it became common to double-trademark silverware, especially by retail establishments because the name of the local jeweler was often better known than the names of the distant manufacturers (Turner 1972:21). Companies selling goods such as soups, cereals, teas, tonics or soaps, had often

associated an unrelated gift with their goods as a marketing technique to gain more customers, and silverplated tableware soon became one of these associated items (Turner 1972:63).

Upon discovery of the fork during field excavations in 1990, the 1847 Rogers Brothers and New York Bakery trademark seemed to lend support to the potential occupants of the site, which was believed to be Dr. William Bailey and his wife. The date of manufacture and trademark location seemed to coincide with the trip that the couple took to the East Coast, including New York, in 1850, with their return in 1852 (Brauner 1993:64-65). However, as noted above, the 1847 date is associated with the Rogers Brothers trademark, and was applied to the company's electroplated utensils throughout the latter-half of the nineteenth century, and did not represent the actual date the fork was manufactured.

Additionally, research within *McKenney's Pacific Coast Directory*, located a New York Bakery and Restaurant at 626 Kearney Street in San Francisco, California in the 1883-1884 and 1886-1887 directories (McKenney 2009:285 [1882], 2010:113 [1884]). William Pike was the proprietor of the bakery and restaurant, which was located near the Central Station, and is said to have been frequented by stage-robber and outlaw, Black Bart, as well as the police men, meant to catch him (Jackson 1977:174). It is unknown whether the New York Bakery and Restaurant was marking utensils for advertising purposes, or was potentially selling these tableware items, or if someone who had visited the bakery and restaurant in San Francisco had simply taken the fork as a souvenir or for later use.

Figure 6.29: Electroplated Fork “NY Bakery” (Front) with Ferrous Metal Table Knife

Housewares and Appliances- Household Pastimes

Organs. The artifacts within Block 4, once belonged to a reed organ, often called a pump organ or harmonium (Fudge 2015). It is a free reed instrument that came in a variety of sizes, from those that could fit on one’s lap to the more widely recognized parlor organs (Clutton and Libin 2019; Fudge 2015). The brass reeds within the reed organ could range in size from ¾ of an inch (~2 centimeters) to 5 inches in length, with the pitch determined by the length of the reed (Clutton and libin 2019; Fudge 2015). Reed organs became very popular within American homes during the latter-half of the nineteenth century because they were cheaper than their much larger counterparts, the pipe organ, and were also portable and easy to repair (Clutton and Libin 2019; Fudge 2015).

Lot 1: A included four different brass reed fragments. These organ artifacts included a two, four centimeter long reeds with tongues, as well as one bent, possibly due

to fire, six centimeter long reed and tongue piece and an unbent reed and tongue piece, measuring 7.8 centimeters. The only other location in which brass organ fragments were located were in the expanded nearby Unit C within Lot 1. Eleven brass organ fragments were collected during excavations here. The following table (6.13) depicts the different labeled brass organ fragments from Lot 1: C (Figure 6.30).

Table 6.13: Reed Organ Artifact Descriptions

Organ Type	**Key**	**Length**
Reed and Tongue	A#	4.7 cm
Reed and Tongue	B	4.0 cm
Reed and Tongue	C#	4.6 cm
Tongue	E	4.2 cm
Reed and Tongue	F	4.3 cm
Reed and Tongue	F#	4.7 cm
Reed and Tongue	G#	3.8 cm
Reed and Tongue	G#	4.8 cm
Tongue	G#	~7.5 cm (bent)
Reed and Tongue	Unknown	6.8 cm
Reed and Tongue	Unknown	7.3 cm

Figure 6.30: Brass Reed Organ Fragments

Illumination

One clear curved glass fragment, determined to be chimney glass based on glass thickness and curvature, was located within Lot 1: D. Sixteen chimney glass fragments were also found within Lot 2: C.

Cleaning and Maintenance

Sewing. One brass, straight pin (1.5 inches long) was located within Lot 1: D.

Maintenance and Tools

One cast iron awl, used for punching holes through leather or wood, was found within Lot 1: B (Figure 6.31). One cast iron expansion wedge was identified by Dr. David Brauner during analysis of Lot 1: C.

Figure 6.31: Cast Iron Awl

Architecture

Table 6.14: Architecture Artifact Assemblage

Architecture Function/Description	**Lot 1 Quantity & Percentage of Lot 1 Assemblage (%)**	**Lot 2 Quantity & Percentage of Lot 2 Assemblage (%)**	**Total Quantity**	**Percentage of Overall Assemblage (%)**
Construction-Hardware	**3860 / 29.82%**	**2072 / 50.04%**	**5932 / 17,084**	**34.72%**
Hand-wrought nails	0 / 0.00%	0 / 0.00%	0	0.00%
Machine-cut nails	3650 / 28.20%	2040 / 49.28%	5690	33.31%
Wire nails	5 / 0.04%	4 / 0.10%	9	0.05%
Finishing nails	15 / 0.12%	0 / 0.00%	15	0.09%
Door hardware	24 / 0.19%	6 / 0.14%	30	0.17%
Expansion joint	2 / 0.01%	0 / 0.00%	2	0.01%
Hinge	5 / 0.04%	1 / 0.02%	6	0.03%
Hook	2 / 0.02%	2 / 0.05%	4	0.02%
Nut	1 / 0.01%	1 / 0.02%	2	0.01%
Rivet	4 / 0.03%	6 / 0.14%	10	0.06%
Screws	78 / 0.60%	9 / 0.22%	87	0.51%
Spike	27 / 0.21%	3 / 0.07%	30	0.18%
Tack	45 / 0.35%	0 / 0.00%	45	0.26%
Wire	2 / 0.01%	0 / 0.00%	2	0.01%
Construction-Materials	**1764 / 13.63%**	**179 / 4.33%**	**1943 / 17,084**	**11.37%**
Brick	538 / 4.16%	139 / 3.36%	677	3.96%
Clear Flat Glass	1226 / 9.47%	40 / 0.97%	1266	7.41%
Fixed Illumination	**1 / 0.01%**	**0 / 0.00%**	**1**	**0.006%**
TOTAL	**5625 / 43.46%**	**2251 / 54.37%**	**7876 / 17,084**	**46.10% / 100%**

Construction-Hardware

The most common type of construction-related hardware items at Block 4, Lots 1 and 2, are nails. As noted previously, the artifact types of nails, bricks, faunal and organic remains were not all individually analyzed due to the identification and analysis of all other artifact types within the field catalogs, and instead the field catalog descriptions for

these artifact types were assumed to be correct and trusted for the descriptive archaeology portion of this research study. As a result, the number of whole nails and associated penny sizes is not known due to the ambiguous artifact descriptions and use of bulk-bagging within the field catalogs, and was not deemed necessary for this study due to the potential deterioration of many of the nails since the excavations in 1990 and 1991. Therefore, the nail counts include both whole nails, as well as both head and shank fragments, which could potentially be fragments of the same nail, meaning that these counts may be slightly inflated as a result of deterioration.

Hand-wrought Nails. Hand-wrought nails were the most common type of construction hardware used and manufactured from the eighteenth century into the early decades of the nineteenth century. Both the head and shank were formed from a small iron rod, by the hand of a blacksmith. Typically, hand-wrought nails were shaped with roseheads or rosette heads, but broad "butterfly", L-shaped or T-shaped heads were also produced (Leach 2000:37; Peter 1979:59; Rock 1990:41; Visser 1997). However, zero hand-wrought nails were identified within the artifact assemblage from Block 4, Lots 1 and 2.

Machine-Cut Nails. Machine-cut nails began to first be produced in the 1790s, with the earliest versions still receiving hand-wrought heads (Leach 2000:39; Peter 1979:59; Visser 1997). However, by the 1820s a more efficient and effective nail cutting machine was introduced, which was able to actually flip over the iron bar after every stroke, producing a rectangular, cut nail with tapers on two sides (Leach 2000:35; Pierson 2006:7; Rock 1990:41-42; Visser 1997). Machine-cut nails dominated the market throughout the majority of the nineteenth century, primarily after the year 1830 in most parts of the United States (Peter 1979:60; Rock 1990:43; Visser 1997). In the Pacific

Northwest, machine-cut common nails are believed to have been first introduced to supply depot of Fort Vancouver in 1845, and then replaced all other existing types of similar construction nails by 1852 (Pierson 2006:9). However, by the late 1880s, machine-cut nails were then replaced in popularity by soft steel, wire nails (Rock 1990:44; Visser 1997).

A total of 5,690 machine-cut nails and nail fragments of varying penny-sizes were excavated from both Lots 1 and 2, within Block 4, making up 33.31% of the overall assemblage. Within Lot 1: A and B, 660 machine-cut nails were located. Lot 1; C, included 2,351, with 639 machine-cut nails from Lot 1: D. Lot 2, Test Pits A and B had 689 machine-cut nails, and Lot 2: D included 1351 machine-cut nails.

In addition, of the analyzed machine-cut nails, fifty-one, all found within Lot 1: C, showed signs of "red lead" having been applied. Evidence of lead-coating being applied to nails, predominantly machine-cut nails manufactured from 1790 to 1840, as well as on some of the earlier hand-wrought nails and post-1840 machine-cut nails, was also found at Fort Niagara in Youngstown, New York. The lead-coating is visible due to its bright red oxidization (Leach 2000: 43). The hospital at Fort Yamhill, Oregon (1856-1866) also have "red lead" nails within each feature's assemblage (Wesseler 2017:133). Lead would have been a useful application to ferrous metal nails, especially in more humid, corrosive environments, and would have helped with corrosion resistance and prolong structural integrity, especially roofs, but this coating application is rarely documented in historic records (Leach 2000: 43).

Wire nails. Wire nails made of soft steel became popular during the 1880s due to technological advances which decreased the costs associated with soft steel production (Leach 2000:42; Peter 1979:60; Rock 1990:44; Visser 1997). By 1892, more steel-wire nails were being produced than the previously popular iron, machine-cut nails. Wire nails feature a flat, round head and rounded, wire shank, rather than a rectangular, tapered shank as seen with the machine-cut nail (Visser 1997). Nine wire nails were found, representing 0.16% of the entire nail assemblage.

Finishing nails. In addition to the nine wire nails, fifteen finishing nails were also collected from Block 4, all of which were found within Lot 1. Finishing nails are similar to wire nails in their manufacturing material and process, but come in smaller sizes with smaller heads, often with corrugated markings on the round shank, near the head of the nail (Leach 2000:39; Peter 1979:60). Finishing nails are used for the "finishing" touches of construction, and are easily hidden within the mold or trimming of the structure or cabinet under construction (DoItYourself.com 2018). It should be noted, that some of these finishing nails could potentially be identified as brad nails instead, which look similar to finishing nails, but include flatter heads and longer shanks (Peter 1979:60). The head and length of these shanks may not have been evident in the field or during analysis as a result of deterioration. As a result, all nails of this style were identified as finishing nails, especially since both brad and finishing nails tend to serve similar carpentry functions.

Door hardware. Thirty door hardware fragments were excavated from Block 4, Lots 1 and 2. Lot 1: C included nine mineral doorknob fragments. Mineral doorknobs, also known as Bennington knobs due to their initial manufacturing location in Vermont from

1847 to 1867, can be identified based on their brown to tan, mottled coloration, similar to that of Rockingham pottery (Eastwood 1976:48;55;57). Made of a marbled or mixed clay, the fired doorknob is then covered in a clear glaze, as seen in this assemblage, but the application of an Albany slip glaze was also produced (Eastwood 1976:57). Two doorknob fragments illustrated the threaded interior of the doorknob, and another fragment featured the doorknob's diameter in Lot 1: C. Five other mineral doorknob fragments were located within Lot 2: C. Three mineral doorknob backplate or mounting fragments were also found in Lot 1: C, two of which cross-mended together (Schroeder 1977:368). One white porcelain doorknob fragment was also found within Lot 1: C (Eastwood 1976:55) (Figure 6.32).

Figure 6.32: Mineral and Porcelain Door Knob Fragments with Spindle

Lot 1: C also included two ferrous metal escutcheons with key hole openings (Eastwood 1976:134). A ferrous metal rim lock latch, cast iron rim lock backplate, and a

brass spring, potentially associated with this rim lock door hardware, were also found (Eastwood 1976:201; Priess 2000:84;87). In addition to a brass skeleton key, and a ferrous metal skeleton key, featuring a stamped out, heart-shaped design in the bow. This ferrous metal key design, along with various rim locks, can be seen within the Montgomery Ward and Company, Fall and Winter 1894-1895 Catalog (Schroeder 1977:368) (Figure 6.33 and 6.34).

Figure 6.33: Assorted Door Hardware Assemblage

Figure 6.34: Ferrous Metal Key with Heart-Shaped Design

A ferrous metal skeleton key was located in Lot 1: D, along with a cast iron latch, part of a door hardware rim lock mechanism. Lot 1: B included a door knob spindle in its entirety, with both shanks (Eastwood 1976:128-129). Lot 1: C also included a cast iron shank, and Lot 2: B included a door knob spindle, knob rose, and shank (Eastwood 1976:128).

Expansion joint. Two cast iron, architectural expansion joints were identified by Dr. David Brauner at Oregon State University (September 2018). They were excavated from Lot 1: C, but more information regarding the artifact type and their function could not be found (Figure 6.35).

Figure 6.35: Cast Iron Expansion Joint

Hinge. Four hinges, of the butt hinge variety, and one including four screws, were located within Lot 1: C (Priess 2000:60). Lot 1: B included one cast iron, strap hinge (Priess 2000:51-52). Lot 2: C also included one butt hinge.

Hook. One large (10 centimeter long curvature), wrought iron hook was excavated from Lot 2, Unit C. Analysis via both the 1894-1895 Montgomery Ward and Company Catalog (Schroeder 1977:382) and the 1896 Francke and Schindler Catalogue described this wrought iron artifact as a meat hook, which would have been driven, rather than screwed into a surface. Two hinged, cast iron hooks, located within Lot 1: C, appear to be coat hooks based on references within the 1894-1895 Montgomery Ward and Company Catalog (Schroeder 1977:375), and the 1896 Francke and Schindler Catalogue. One small, ferrous metal hook was also found within Lot 2: C, and includes threads that would have allowed the hook to be screwed into a surface. In addition, two other ferrous metal hooks, much smaller in size were also within the artifact assemblage (Lot 1: C), but were not able to be functionally classified, and remain in the functionally unknown, ferrous metal assemblage.

Nut. One nut was located in each of the lots.

Rivet. Ten brass rivets were located in Block 4, Lots 1 and 2, comprising 0.17% of the construction hardware assemblage.

Screws. During the nineteenth century, the core size and external diameters of screws became standardized. In addition, once companies developed special machines and tools for producing the uniform types of thread designs, screws became a cheap, mass-produced piece of construction hardware (Wagner Tooling Systems 2018). Eighty-seven

screws with either flat or rounded heads were excavated from Block 4, Lots 1 and 2, but the majority (89.66%) were located within Lot 1.

Spike. Larger in size than machine-cut nails, thirty spikes were located on Lots 1 and 2, with 90% of the spikes located in Lot 1.

Tack. All forty-five excavated tacks were located within Lot 1. Seven ferrous metal tacks and thirty-five brass tacks were found within Lot 1: C. Two brass tacks were within Lot 1: D, and one brass tack was within Lot 1: B.

Wire. Two cast iron wire fragments (.5 centimeters in width) were found within Lot 1: A.

Construction- Materials

Brick. A total of 677 brick fragments were collected from Block 4, Lots 1 and 2, 34.84% of the materials assemblage. The coloration and hardness of the bricks varied due to apparent differences in firing temperatures and possible clay origins (Gurcke 1987:28). No whole bricks were identified within the artifact assemblage from Block 4, Lots 1 and 2, and brick fragments were not separated in the updated field catalogs in order to avoid inflation. Due to the impact of agricultural and recreational activity it is not surprising to note the fragmentation of the brick artifacts.

Bricks were not commonly used for construction within the Willamette Valley prior to the 1840s due to the high cost of the construction materials (Middleton 1975:6). However, the bricks found at Champoeg including Block 4 are most likely made from Willamette Valley clays due to the establishment of several brickyards in the region throughout the 1840s (Converse 2014:45-46). They may also be extremely local clays, located close to Champoeg, due to reports of Robert Newell operating a brickyard along

Mission Creek, after 1843, as well as a lumber mill and brick kiln recorded as being operated by William Case on his land claim during the mid-1840s (Converse 2014:46; Hussey 1967:215).

Clear Flat Glass. Window pane glass typically found within the Pacific Northwest, especially during the early nineteenth century was primarily supplied by the Hudson's Bay Company, which was known to import their window panes from England. Crown glass was the predominant type of glass manufactured in England until approximately 1850, when the cheaper, cylinder glass method, already popular in America, began to be produced (Roenke 1978:116). Clear flat glass comprised the majority of the architectural materials functional category (65.16%), with Lot 1 including 1,226 clear flat glass fragments or 96.84% of the overall clear flat glass assemblage. Clear flat glass, or window pane glass, tint and thickness was not analyzed in this research study due to other means of potentially dating the Block 4 assemblage.

Fixed Illumination

Lamp Bracket. One cast iron lamp bracket was collected from Lot 1: C.

Commerce & Industry

Table 6.15: Commerce and Industry Artifact Assemblage

Commerce & Industry Function	**Lot 1: A/B**	**Lot 1: C**	**Lot 1: D**	**Lot 2: A/B**	**Lot 2: C**	**Total Quantity & Percentage of Commerce & Industry Assemblage (%)**
Agriculture & Husbandry	0/0	14	3	0/0	9	26 / 16.05%
Hunting	0/2	1	4	0/0	2	9 / 5.55%
Manufacturing	0/1	109	4	0/0	1	115 / 70.99%
Commercial Services; Medical	0/0	6	0	0/0	4	10/ 6.17%
Commercial Services; Monetary	0/0	1	0	0/0	0	1 / 0.62%
Transportation	0/0	1	0	0/0	0	1 / 0.62%
Total	0/3	132	11	0/0	16	162 / 100.00%

Agriculture and Husbandry

Barbed Wire. One fragment of barbed wire was found within Lot 1: C, and one was found within Lot 2: C.

Bridle or Harness Ring. One cast iron bridle or harness ring was excavated from Lot 1: C (Schroeder 1977:322).

Buckles. Seven ferrous metal buckle fragments were recovered from Lot 1: C. Three were collected in their entirety and were square-shaped (2.5 cm across and 3 cm tall) (Aultman et al. 2018:10). Three only included fragments of the pin terminal portion of the buckle (Aultman et al. 2018:13). The final ferrous metal buckle was a double-framed square/rectangle buckle with no tongue (Aultman et al. 2018:10). One ferrous metal buckle frame was collected from Lot 1: D (Aultman et al. 2018:9). One whole ferrous metal buckle was D-shaped (3.7 cm across and 3 cm tall) and located within Lot 2: C

(Aultman et al. 2018:10). Three brass buckles were also found in Lot 1: C. This included one whole, square buckle (3.3 cm across and 4.1 cm tall), the pin and tongue to another buckle, and one buckle which was melted.

Fence staples. Two fence staples, made of ferrous metal, were collected from Lot 1: D.

Horseshoe Nails. Horseshoe nails can be identified based on their difference in appearance to machine-cut, hand-wrought, or wire nails. The head of a horseshoe nail features five sides, with a flattened top (Horn 2005:17). Two horseshoe nails were collected from Lot 1: C. Seven horseshoe nails were found within Lot 2: C.

Hunting

One lead BB shot was collected from Lot 1: C. Two lead shot artifacts were located within Lot 1: B. They included a No. 1 buck shot, measuring .30 inches in diameter and a No. 0 buck shot, measuring .32 inches in diameter (Olin 1952:15). Two lead, buck shot artifacts, of unrecorded size, were collected from Lot 1: D, in addition to one fired, lead shot and one .22 caliber lead shot artifact. This type of lead shot, believed to be the .22 Long Rifle cartridge, began to be manufactured around 1887 by Stevens Arms Company (Johnson 2017). In combination with its *in situ* location within Level 3, it is not believed that this is a modern artifact. Two lead, buck shot artifacts, of unrecorded size, and one of which was fired, were also located in Lot 2: C.

Manufacturing

Clinkers. The process of burning coal results in residual formations better recognized as clinkers. Clinkers are conglomerate masses of inorganic material, which appear as either partly fused with other forms of residual slag or as completely fused glassy blocks.

Clinkers can vary in size, from small fused pieces to individual pieces weighing more than one hundred pounds, due to the size of the furnace, from the method of burning or the amount of ash within the coal itself (Nicholls & Selvig 1932:27).

One clinker was identified within Lot 1: B. Lot 1: C included 109 artifacts classified as clinker fragments. Four clinkers were located within Lot 1: D and one was found within Lot 2: C.

Lot 1: A as well as Lot 2: A and B did not include any artifacts functionally classified as Commerce and Industry.

Medical

Five clear curved glass fragments and one aqua glass fragment were functionally classified as commercial, medical vessels within Lot 1: C, based on their overall bottle shape and design as well as the lip shape. Patent and prescription lips were often used for medicinal vessels, as seen by the associated names (Jones and Sullivan 1989:79; Lindsey 2019). Two patent lips were identified within the Lot 1: C assemblage, one made of aqua glass and the other clear curved glass. The four other clear curved glass fragments featured embossed letters and sanded lips. The embossed letters on each of the different sherds included the following: “PA”, “R”, “TS”, and “9th I”, with the latter believed to have been part of an address. As a result, these were believed to be associated with extract or patent and proprietary medicine bottles (Lindsey 2019).

Within Lot 2: C, one clear paneled glass fragment with the embossed numbers “111” located above the letters “POR”, seemed to indicate an address label, possibly in association with three other clear paneled glass fragments which crossmended, and included the embossed letters (“EX”, “ACT”, and “S”), suggesting that this was some

type of extract bottle, often used for medicinal purposes during the nineteenth century (Lindsey 2019).

Monetary

Coin. The one and only coin collected from the Block 4 excavations was an 1841 seated Liberty dime, located in Lot 1: C. On the obverse side, Liberty is seated with stars and drapery, and was identified as Type II (Figure 6.36). On the reverse side, the coin says "ONE DIME" in the center, with "UNITED STATES OF AMERICA" around the outside, surrounding two olive branches (Figure 6.37). These coins were designed by engraver, Christian Gobrecht, and were minted in Philadelphia (USA Coin Book 2019). Coins are a rare find on French Prairie due to the fact that trade was typically based on barter or credit systems, especially during the initial settlement period (Chapman 2014:72; Jette' 2015:144).

Figure 6.36: 1841 Seated Liberty Dime (Obverse)

Figure 6.37: 1841 Seated Liberty Dime (Reverse)

Transportation

One cast iron carriage bolt and nut were collected from Lot 1: C.

Group Services

Table 6.16: Group Services Artifact Assemblage

Location	**Quantity**	**Percentage of Group Services Assemblage (%)**
Lot 1: A/B	25/1	4.49%
Lot 1: C	540	93.10%
Lot 1: D	9	1.55%
Lot 2: A/B	0/0	0.00%
Lot 2: C	5	0.86%
Total	580	100.00%

Education

Slate and slate pencils. Slate tablets and pencils were often used for educational purposes during the nineteenth century and were recorded by the Sisters of Notre Dame de Namur on the 'Liste des Objets' of items that they brought to the St. Paul, Oregon Catholic mission in 1844 (Concordia 2014; Poet 1996:137). A daybook from 1883, provided by descendants of Champoeg and Newellsville resident, Casper Zorn, and his business partner and brother-in-law, John Hoefer, also mention the sale of slate desks ($2.20 for each desk) at their Newellsville location, where John served as the Justice of the Peace.

Evidence of both artifacts were found within Block 4, with Lot 1: A (n=25) and B (n=1) having only slate tablet fragments. Lot 1: C included 539 slate tablet fragments and the only slate pencil fragment (n=1) within the Block 4 group services assemblage, while Lot 1: D included nine slate tablet fragments. Lot 2: A and B did not include any group services, and Lot 2: C included five slate tablet fragments within its assemblage. Overall, 580 group service artifacts were functionally identified, all were slate tablets or potentially slate desk tablet fragments, with the exception of one slate pencil. Additionally, 93.10% of the group services assemblage was located within Lot 1: C.

Unknown

Table 6.17: Unknown Artifact Assemblage

Unknown Category	**Lot 1: A/B**	**Lot 1: C**	**Lot 1: D**	**Lot 2: A/B**	**Lot 2: C**	**Total Quantity & Percentage of Unknown Assemblage (%)**
Faunal Remains/Organic	5/22	145	99	45/56	121	493 / 7.48%
Ceramic	127/36	647	136	43/16	132	1137 / 17.24%
Charcoal/Ash	0/0	40	3	0/0	7	50 / 0.76%
Glass	240/88	1759	169	95/20	413	2784 / 42.23%
Metal	100/91	1066	210	114/40	395	2016 / 30.58%
Rock/Stone	11/3	22	9	6/0	11	62 / 0.94%
Seeds/Shells	0/0	32	6	0/0	0	38 / 0.57%
Wood	0/1	8	2	0/1	1	13 / 0.20%
Total	483/241	3719	634	303/133	1080	6593 / 100.00%

Faunal Remains/Organics

Twenty-seven faunal bones from various domesticated animals including sheep and cows were collected from Lot 1: A (n=5) and Lot 1: B (n=22). Lot 1: C included a variety of faunal remains (n=145) (Atherton 1973:12). Ninety-nine faunal bones were collected from Lot 1: D. Forty-five faunal bones including teeth were excavated from Lot 2: A, and 56 were located within Lot 2: B. Meanwhile, a mix of 121 faunal remains were excavated from Lot 2: C. The faunal remains make up the majority of artifacts, better recognized as ecofacts that were not analyzed within the assemblage due to time restraints as well as the focus of the research questions being asked. Therefore, this is a research area that could be completed in the future, but for this research study the initial field analysis and catalog descriptions were assumed to be correct.

Ceramics

Stoneware. Lot 1: A/B included five stoneware sherds that remained functionally unknown including two sherds from the same vessel or artifact, with a two inch diameter, and potentially belonging to either a lid or a doorknob. Lot 1: C included fifteen functionally unknown stoneware sherds. Lot 1: D included six unknown stoneware sherds with various decoration including two thin unglazed rim sherds made of a tan stoneware fabric. Lot 2: A included four sherds that were undiagnostic and remained unclassified. Lot 2: C included a variety of decorated stoneware sherds (n=9), two of which were made of an unglazed yellow ware fabric, probably a bottle or jar with unknown contents, but potentially a carbonated beverage or even ink, and was not able to be functionally classified.

Redware. Four redware sherds remained functionally unknown after analysis of Lot 1: A and B. Two rim sherds were completely unglazed, but one included a 6 inch rim diameter, and two other sherds had a clear glaze exterior, but the functional classification of the sherds could not be determined. Two redware sherds remained functionally unknown after analysis of the Lot 1: C assemblage. Two redware sherds, one with a salt glaze and the other featuring a blue and white slip, were located within Lot 1: D and could not be functionally identified. One redware sherd was unknown within Lot 2:C.

Yellow ware. Two yellow ware sherds of unknown function, including evidence of also being a gastrolith, were found within Lot 2: B. Four yellow ware sherds of unknown function were identified within Lot 1: C. Lot 1: D included two yellow ware sherds with unknown functions. One unknown yellow ware sherd, with a white slip exterior, was located within Lot 2: C. Zero yellow ware sherds were found within Lot 2: A.

White earthenware. One hundred and forty-six functionally unknown white earthenware sherds were located within Lot 1: A (n=104) and B (n=29). Lot 1: C included 596 functionally undiagnostic white earthenware sherds. One hundred and fourteen white earthenware sherds remained functionally unknown after analysis of Lot 1: D. Forty-two undiagnostic white earthenware sherds were located between Test Pit A and B in Lot 2. One hundred and two white earthenware sherds were functionally unidentified within Lot 2: C.

Ironstone. Four functionally unknown ironstone sherds were located within Lot 1: A. One unknown ironstone sherd was within the Lot 1: B assemblage. Thirty ironstone sherds from Lot 1: C could not be functionally identified. Six ironstone sherds were not functionally identified as culinary or gustatory within the Lot 1: D assemblage including a molded handle, potentially associated with a pitcher, one hollowware footrings, and three rim sherds. Lot 2: C included five functionally unknown, ironstone body sherds.

Slipware. Slipware is used here due to the application of a dark blue slip to the exterior of a white earthenware sherd located within Lot 2: A. The potential function and vessel type could not be determined based on the size of the fragmented sherd. Two additional cross-mended hollowware slipware sherds featuring a blue slip on the exterior of a white earthenware with a white-slipped interior, were found within Lot 2: C, but could not be functionally identified.

Slip-Banded Ware. One ceramic hollowware sherd was found in Lot 2: A with black and brown bands and potentially a blue band, but hard to determine based on burnt exterior. One slip-banded sherd, with white and brown bands, on a yellow fabric was located within Lot 1: D, and remained functionally unknown. Lot 1: D also included one

slip-banded sherd with the remnants of a blue slip on the exterior, and another with both blue and green slips on the exterior, but neither sherd could be functionally identified.

Handpainted earthenware. One blue handpainted earthenware sherd, turned gastrolith, was found within Lot 2: A. Two hand-decorated, stamped earthenware sherds featuring purple flowers were located within Lot 2: B, but were extremely burned and could not be further identified. Six hand-decorated, stamped earthenware sherds with green flowers were collected from Lot 2: C, but were not functionally identified based on the amount of burning and size of the sherds.

Edge-decorated. One edge-decorated rim sherd, featuring a shell-edge impression, was located within Lot 1: D. However, it appears to have been part of a hollowware vessel with a nine inch rim diameter, which is an uncommon vessel type for shell-edge wares, and as a result, remained functionally unclassified (Chapman 1993:71).

Transferprints. Four blue transferprint sherds, with unknown patterns, were collected from Lot 2: C. They could not be functionally classified as a result of the sherd type, with two indicating that they were once part of a lid to a small jar with unknown contents; and subsequently, function. One pink transferprint sherd, with an unknown pattern, also could not be functionally identified.

Porcelain. Two white porcelain sherds of unknown function due to size were located within Lot 1: A. Two unknown porcelain sherds, one white porcelain and one blue-green glazed porcelain, were found within Lot 1: D and could not be functionally identified. One white, molded porcelain sherd was located in Lot 2: A, along with five other unknown porcelain sherds. Lot 2: C also included one undecorated white porcelain sherd of unknown function.

Charcoal/Ash

Zero charcoal or ash samples were collected from the Lot 1: A and B as well as Lot 2: A and B test pits. Meanwhile, forty charcoal specimens were collected from Lot 1: C. Two charcoal and one ash sample was collected from Lot 1: D, while six charcoal and one ash sample was collected from Lot 2: C.

Glass

Clear curved, amber, amethyst, aqua, and cobalt glass fragments were also found during the Block 4 excavations. Many of the glass artifacts were more adversely affected by the presence of fire at the site in the past, which limited the number of diagnostic glass fragments for vessel function and form identification. In addition, a number of vessel types, with varying contents, were produced in each of these colors, making it difficult to functionally classify these fragments, so the artifacts remain distinguished by their coloration (Lindsey 2019).

Clear curved glass. Clear curved or colorless glass, was rather uncommon prior to the 1870s, but after the widespread use of automatic bottle machines in the mid-1910s it became a very common bottle glass color (Lindsey 2019). Two hundred and twenty-four fragments of unidentifiable clear curved glass were collected from Lot 1: A (n=174) and B (n=50). Forty-eight fragments of clear curved glass were excavated from Lot 2: A including an unidentified vessel lip, as well as a paneled piece with the letters “GRAN” embossed on the side of an unidentified bottle type. Lot 1: C included 1,467 functionally unidentifiable fragments of clear curved glass including a fluted rim fragment as well as a pressed glass fragment with a sanded lip and star design, belonging to unknown vessels. One hundred and seven clear curved glass fragments were located within Lot 1: D.

Nineteen clear curved glass fragments were located within Lot 2: B. Lot 2: C included a variety of 256 clear curved glass fragments that could not be functionally identified.

Amber glass. Four amber fragments were located within Lot 1: A (n=2) and B (n=2) as well as Lot 2: A (n=4) and Lot 2: B (n=0). Lot 1: C included eighty-seven amber glass fragments including five potentially decorative vessel elements. Five unidentified amber glass fragments, one of which featured undiscernible embossing, were within Lot 1: D. Lot 2: C included one unidentified amber glass body fragment.

Amethyst glass. The solarization of the glass to a purple tint is the result of the addition of manganese, which was a common clearing agent in glass manufacturing from the 1880s until the beginning of World War I (Jones and Sullivan 1989:13; Lindsey 2019). Three pieces of amethyst-colored glass were found in Lot 1: B. Two amethyst-colored glass fragments were collected from Lot 1: C as well as Lot 1: D. Two fragments were found within Lot 2: C including a paneled body piece and a lip fragment. Seven pieces of amethyst-colored glass were found in Lot 2: A, but zero were identified within Lot 2: B.

Aqua glass. Aqua glass was a common bottle glass color, and commonly used for all bottles types, prior to the 1920s (Lindsey 2019). Seventy-seven unknown aqua glass fragments were located in Lot 1: A (n=52) and B (n=25), including ten neck and shoulder fragments. Lot 1: C included 174 unknown aqua glass fragments, with some illustrating some evidence of mold seams and slight embossing, but were not able to be identified after analysis. Fifty-two aqua glass fragments including six finish fragments were within Lot 1: D, but were not functionally identified. Twenty-four fragments of unidentified aqua glass were located within Lot 2: A, while one fragment was within Lot 2: B. Lot 2:

C included 141 aqua glass fragments of unknown function including base, finish and embossed body fragments that could not be identified.

Cobalt glass. Cobalt blue was one of the most popular colorants used during the late nineteenth century due to its accessibility, and was commonly used when manufacturing ink bottles as well as soda and mineral water bottles from the 1840s into the 1900s, but from the 1890s until the 1960s it also held poisonous substances and cosmetics (Fike 1987:13; Jones and Sullivan 1989:14; Lindsey 2019). However, it was not possible to distinguish between the vessel types, and due to their far-reaching contents, the artifacts were not functionally classified. Zero cobalt blue glass fragments were found in Lot 1 and 2: A and B. Twelve cobalt blue glass fragments were found within Lot 1: C, one was within Lot 1: D, and seven fragments were within the Lot 2: C assemblage.

Olive glass. In addition, as mentioned previously, some fragments of olive glass within the collection were very burned, and as a result were included within the functionally unknown category rather than following the complete assumption that all olive glass fragments fell under the personal; indulgences-alcohol functional classification.

Twenty were within Lot 1: A (n=12) and B (n=8) and included two potentially decorative olive glass objects, but due to burning could not be identified. Four functionally unknown olive glass fragments were found in Lot 1: C. Two unknown olive fragments were within Lot 1: D. Six olive glass fragments were functionally unknown after analysis of Lot 2: C. Twelve artifacts were located within the Lot 2: A test pit, but zero were burnt beyond identification within Lot 2: B.

Puce glass. Puce glass, a brownish, dark-red to a reddish, dark purple, was rarely noted as in use as a bottle color prior to the 1840s, and then rarely mentioned after the early 1880s (Lindsey 2019). Thirteen puce glass fragments were located within Lot 1: C. Most of these fragments were burned or melted, and could not be identified functionally. Although, it should be noted that puce glass shoe buttons were also found in Lot 1: C.

Metal

The most common metal type within this category is ferrous metal. Of the ferrous metal fragments, strapping of various widths and a variety of unidentifiable cast iron fragments made up the majority of the assemblage.

Lot 1: A and B included a total of 180 ferrous metal fragments including six cast iron pieces and 53 ferrous metal strapping fragments. Eighty-nine ferrous metal fragments were within Lot 1: A, and 91 were within Lot 1: B. Lot 1: C included 1,030 ferrous metal fragments including 34 ferrous metal strapping fragments, 108 cast iron fragments, seven wire fragments, four ferrous metal loops, two hooks, and two can rims of unknown function. Lot 1: D included 196 ferrous metal functionally unknown artifacts including 21 ferrous metal strapping fragments, one wrought iron hook, can lid, spring, and cast iron fragment, possibly door hardware or a stove part.

All forty-four of the ferrous metal strapping fragments were located within Lot 2: A, along with two cast iron fragments and a wire fragment. Lot 2: B included one cast iron fragment as well as nine fragments of an unidentifiable can. Overall, Lot 2: A and B included 138 unknown pieces of ferrous metal. Three hundred and eighty unknown pieces of ferrous metal were collected from Lot 2: C including seventeen ferrous metal

strapping fragments, twelve cast iron fragments, twelve canister fragments, fifteen pieces of wire and three wire spring fragments.

Brass. Five brass artifacts remained functionally unknown after analysis of Lot 1: A (n=5) and B (n=0) including a brass clasp and washer. Eleven unknown brass artifacts were uncovered in Lot 1: C including four washers. Lot 1: D included one unknown brass cap artifact. Four brass artifacts of unknown function including an unidentifiable cap and three washers were within Lot 2: A, and one brass washer was located within Lot 2: B. Six brass functionally unknown artifacts were excavated from Lot 2: C including three washers.

Copper. Lot 1: A included a piece of undiagnostic copper wire.

Lead. Lot 1: A included four fragments of lead, and Lot 1: B included one fragment of lead sheeting. Lot 1: C included twenty-two unknown lead fragments. Nine lead sheeting fragments and four other unknown lead fragments were uncovered in Lot 1: D. Nine unidentifiable lead fragments were located within Lot 2: A including a fragment of lead sheeting, with two lead objects located in Lot 2: B. Lot 2: C included seven lead fragments of unknown identity and function.

Rocks/Stones

Ten rocks of unknown function, plus a quartz fragment were collected from Lot 1: A, with three unknown rocks coming from Lot 1: B. Twenty-one rocks of unknown function were uncovered in Lot 1: C including two identified as fire-cracked rocks, and one very small, broken opal fragment. One stone fragment, believed to be a tile, was also located in Lot 1: C. Nine rocks were collected from Lot 1: D including two quartzite and

one agate. Three were identified in the field catalog as manuports, one was recognized as a cryptocrystalline (CCS) flake, and two remained unknown in identity. Four rocks of unknown function were collected during excavations at Lot 2: A, along with a CCS flake as well as an agate. Lot 2: C included four CCS flakes in addition to seven unknown rocks.

Seeds/Shells

Zero seeds or shells were collected from the Lot 1: A and B as well as Lot 2: A and B, and Lot 2: C. Meanwhile, thirty-two seeds and shells were found within Lot 1: C, and six were collected from Lot 1: D.

Wood

One unidentified wood fragment was collected from both Lot 1: B and Lot 2: B, but no wood artifacts were collected from Lot 1: A, and Lot 2: A. Eight wood fragments were found within Lot 1: C. Two wood specimens were collected from Lot 1: D and one was found within Lot 2: C.

Modern

A total of sixty-eight various artifacts were determined to be of modern origins, and associated with the conversion of the Champoeg townsite to a recreational state park. Objects included bottle caps, coins, styrofoam, shoe laces, shotgun shells, plastic wrappers and utensils as well as cigarette filters. Four objects identified as modern were located within Lot 1: A (n=2) and Lot 1: B (n=2). Lot 1: C included seventeen of these objects, while Lot 1: D included 29 objects. Eight objects were located within Lot 2: A (n=4) and Lot 2: B (n=4). Lot 2: C included 10 modern objects (Table 6.18).

Table 6.18: Modern Artifact Assemblage Locations

Location	**Quantity**	**Percentage of Modern Assemblage (%)**
Lot 1: A/B	2/2	5.88%
Lot 1: C	17	25.00%
Lot 1: D	29	42.65%
Lot 2: A/B	4/4	11.76%
Lot 2: C	10	14.71%
Total	68	100%

In addition, all objects identified as modern were located within the first four levels of the site excavations (Table 6.19). Nearly half of the modern assemblage (45.59%) was located within Level 1 and an additional 16.18% within Level 2. This further suggests the modern origins of the artifacts and the overall integrity of the site, since these two levels could easily have been disturbed by the recorded past and ongoing agricultural operations, burrowing animals, as well as the presence of daily visitors, as a result of the Champoeg townsite being a part of Champoeg State Park.

Table 6.19: Modern Artifact Assemblage Depths

Depth	**Quantity**	**Percentage of Modern Assemblage (%)**
Level 1	31	45.59%
Level 2	11	16.18%
Level 3	21	30.88%
Level 4	5	7.35%
Level 5-8	0	0.00%
Total	68	100.00%

Chapter 7: Block 4 Spatial Distribution Analysis

As demonstrated in Chapter 6: Descriptive Archaeology, artifacts were analyzed in terms of their function, rather than only their material classification, in order to better interpret occupant behavior, activity areas, and overall site function (Speulda 1988:xii). Additionally, potential dates of occupation were determined based on the dates of manufacture of temporally diagnostic artifact types as well as dating information regarding their presence within Oregon or French Prairie. Thus, ArcGIS maps were created in order to spatially analyze and illustrate the quantities and densities of the functional classification categories as well as temporally diagnostic artifact types. In combination with descriptive statistics including assemblage percentages, the location and distribution of each functional artifact category could then be compared, in addition to the spatial distribution and quantity of temporally diagnostic artifact types. The spatial distribution of both temporally diagnostic artifact types and functional artifact categories within the Block 4 archaeological assemblage were then compared and discussed in order to demonstrate the potential time period of occupation, activity areas, and overall site function.

Block 4 Archaeological Integrity

First, in order to lend support to the discussion and conclusions presented in regards to the spatial distribution of the Block 4 archaeological assemblage, the integrity of the Champoeg townsite and archaeological excavations should be established. John Atherton (1973:6-7) completed a site integrity evaluation after initial excavations, and found that although the townsite has been and is prone to disturbance as a result of burrowing insects and California ground squirrels as well as agricultural and recreational

activities such as plowing in addition to frequent flooding, the site still yields cultural material, undisturbed beneath the plow zone (approximately the top thirty centimeters) (Brauner 1993:84;88). After the 1990 and 1991 excavations, Dr. David Brauner (1993:8;93) also found that although the Champoeg townsite experienced a flooding event approximately every ten years, the flood waters were typically low in velocity, and did not lead to major erosional destruction, actually leaving artifact sheet scatters behind, with minimal horizontal disturbance (Schiffer 1983:680). Even though, due to the typically high volume of flood waters, the early building technique which included wooden sill foundations pressed into a mix of local clay and sand, often led to the buoyant wooden foundations and structures above to float downstream (Brauner 1993:8;93, 2018:44; Middleton 1975:5). Yet, Atherton estimated that at least 90% of the townsite could be reconstructed, at least in terms of the position of structures (Atherton 1973:6; Middleton 1975:5; Speulda 1988:25).

As mentioned previously, all objects identified as modern were located within the first four levels of the site excavations (Table 6.19). Nearly half of the modern assemblage (45.59%) was located within Level 1 and an additional 16.18% were within Level 2. Yet, the integrity of Lot 2: C was further investigated via statistical analysis including a Pearson's chi-square analysis completed in 2016. The occurrence for material artifact types with statistically significant standard residuals within the Level 1-Backdirt seemed to demonstrate that vertical disturbances were occurring in the level, leading to statistical differences in the expected and observed artifact values. These disturbances were determined to be due to a number of factors such as the agricultural disturbances and public interaction or collection, mentioned above, as well as the frequent flooding of

the site, all of which are known to have continued to impact the site of the Champoeg townsite until today. For example, the lower frequency of observed metal within Level 1-Backdirt may be due to surface collection by visitors as well as agricultural disturbances and development (Schiffer 1983:679-680). The higher frequency of ceramics than expected, may primarily be due to agricultural disturbances such as plowing, resulting in the greater fragmentation of ceramic vessels and upward movement of the artifacts (Schiffer 1983:679). If this is the case, the Pearson's chi-square analysis then demonstrated that the disturbance was limited to Level 1-Backdirt, with Levels 2, 3 and 4-5 undisturbed or maintaining their integrity. With the integrity in place, the high frequency of artifacts within Level 2 most likely demonstrated the primary occupation of the site, and then the relatively quick occupational abandonment. This is hypothesized to also be true at Lot 1: C due to the limited number of overall modern artifacts (n=17) within the Lot 1: C assemblage (n=8533) and their location primarily within the plow zone or Levels 1 and 2, with three fragments of one modern artifact located in Level 4, but potentially misidentified as a modern object due to its unique and unknown identity (crimped, ferrous metal object with red pigment or paint applied).

On the other hand, Lot 1: D included the highest quantity of modern objects, and twenty of Lot 1: D's twenty-nine modern objects were located within Level 3 such as various coins dating to the 1960s and 1970s as well as modern recreational debris. This suggests that the location of Lot 1: D (see Figures 6.18 and 6.19) was more heavily disturbed and may have been utilized more for recreational activities during the twentieth century than other areas of Block 4. Finally, five artifacts (7.35% of modern assemblage) were located within Level 4 excavations including Lot 1: C (n=3), representing one

unknown, crimped metal object, Lot 1: D (n=1), a plastic cigar mouthpiece, and Lot 2: A (n=1), an unknown metal gear, which could be due to the potential misidentification of the artifacts as modern, or also agricultural and recreational activity disturbance slightly affecting the integrity of these lower depths in certain locations. Thus, prior to the spatial distribution analysis of the functional artifact categories and temporally diagnostic artifact types, it should be noted that the Lot 1: D excavations, located at the back (or southern end) of the lot, showed evidence within the artifact assemblage of having been more disturbed than the other excavation areas.

Spatial Distribution Analysis of Burned Artifacts

Initial artifact analysis during the 1990 excavations, discussed the amount of artifacts from throughout the Block 4 test pit excavations that demonstrated one of the most obvious observations, the presence of fire (Schiffer 1983:684). It was the strong evidence of burning or melting on many of the artifacts that seemed to confirm that this was the site where two of Dr. William Bailey's houses had burned down in 1853, according to the *Oregon Statesman* (Brauner 1993:66). However, analysis regarding the date of many of these artifacts, suggested a post-flood occupation, potentially from the 1880s. As noted previously, this warranted further excavation at both Lots 1 and 2 within Block 4 during the 1991 field season (Brauner 1993:92).

Allison Mickel (2013:1;14), in her experimental study regarding nineteenth-century ceramic wares at the Market Street Chinatown in San Jose, California, determined that 2000 degrees Fahrenheit was sufficient enough to melt the glaze on ceramics such as European Improved Whiteware, and when cooled, the glaze would attach extremely securely to other objects. Meanwhile, this was not apparent in ceramics

heated to 1750 degrees Fahrenheit, and suggested that the presence of this type of melting may be evidence of a very hot fire event, in this case an arson fire (Mickel 2013:14). Evidence of Ironstone ceramics, similar if not the same to the European Improved Whiteware, with melted glazes including bubbling as well as the strong attachment to nearby artifacts, is also found within the Block 4 assemblage, suggesting that a very hot fire event affected the assemblage. Spatial distribution analysis was then used in order to demonstrate what excavated test pit and unit locations had evidence of burning, which among the ceramics also included indications of warped fabrics as well as iridescent and clouded glazes and fabrics, and suggest where a structure may have once stood, and subsequently burned.

The overall assemblage included 17,084 artifacts, and as mentioned previously, 11, 050 artifacts (64.68% of the overall assemblage) were individually analyzed, with over 50% of each test pit and unit's assemblage analyzed (Table 6.3). Of the artifacts analyzed, 3,253 artifacts or 29.44% of the analyzed assemblage showed evidence of having been burned (Table 7.1). Thus, the quantity of burned artifacts could be larger because some artifacts like nails, brick, and faunal and organic remains were not directly analyzed. However, according to Table 7.1, Lot 1: A included the highest assemblage percentage of burned artifacts (61.36% within the Lot 1: A analyzed assemblage). Meanwhile, the burned artifacts within Lot 1: C included 35.77% of the analyzed artifact assemblage from the unit, but had the highest density of burned artifacts within the overall unit assemblage (23.33% of Lot 1: C assemblage) and the overall assemblage (11.65%). (See Figure 7.1 but note in the following spatial distribution figures that errors sometimes exist, with the artifact densities for Lot 2: A and B not evident due to the field

catalogs and the use of arbitrary quadrants, rather than specific *in situ* locations). Additionally, Lot 2: C included 27.38% of burned analyzed artifacts as well as 17.29% of burned artifacts within the overall unit assemblage. The burned artifact percentages within the overall assemblage, found within both Lot 1: A (2.44%) and Lot 2: C (2.85%), although seemingly insignificant, actually represent the other excavation locations with a higher density of burned artifacts. Meanwhile, Lot 1: D included the second-lowest burned artifact percentage within the analyzed artifacts in the unit (11.75%), the lowest percentage of burned artifacts from the overall unit (5.98%), and the fourth lowest percentage of burned artifacts within the overall assemblage at 0.83%. This seems to indicate that Lot 1: A and C, and Lot 2: C to the west, may have once held a structure or structures that experienced a hot fire event, while Lot 1: B and D, and Lot 2: B to the west, did not have the same event.

Table 7.1: Burned Artifact Assemblage Locations: Quantities and Percentages

Location	**Quantity Burned (of 11, 050 artifacts analyzed)**	**Burned Percentage within Test Pit/Unit Analyzed Assemblage (%)**	**Burned Percentage of Test Pit/Unit Assemblage (%)**	**Burned Percentage within Overall Assemblage (%)**
Lot 1: A/B	416/74	61.36% /11.95%	37.41% /8.00%	2.44% /0.43%
Lot 1: C	1991	35.77%	23.33%	11.65%
Lot 1: D	142	11.75%	5.98%	0.83%
Lot 2: A/B	112/31	12.66% / 9.84%	11.97% / 8.01%	0.66% / 0.18%
Lot 2: C	487	27.38%	17.29%	2.85%
Total	**3, 253**	**29.44%**	**-**	**-**

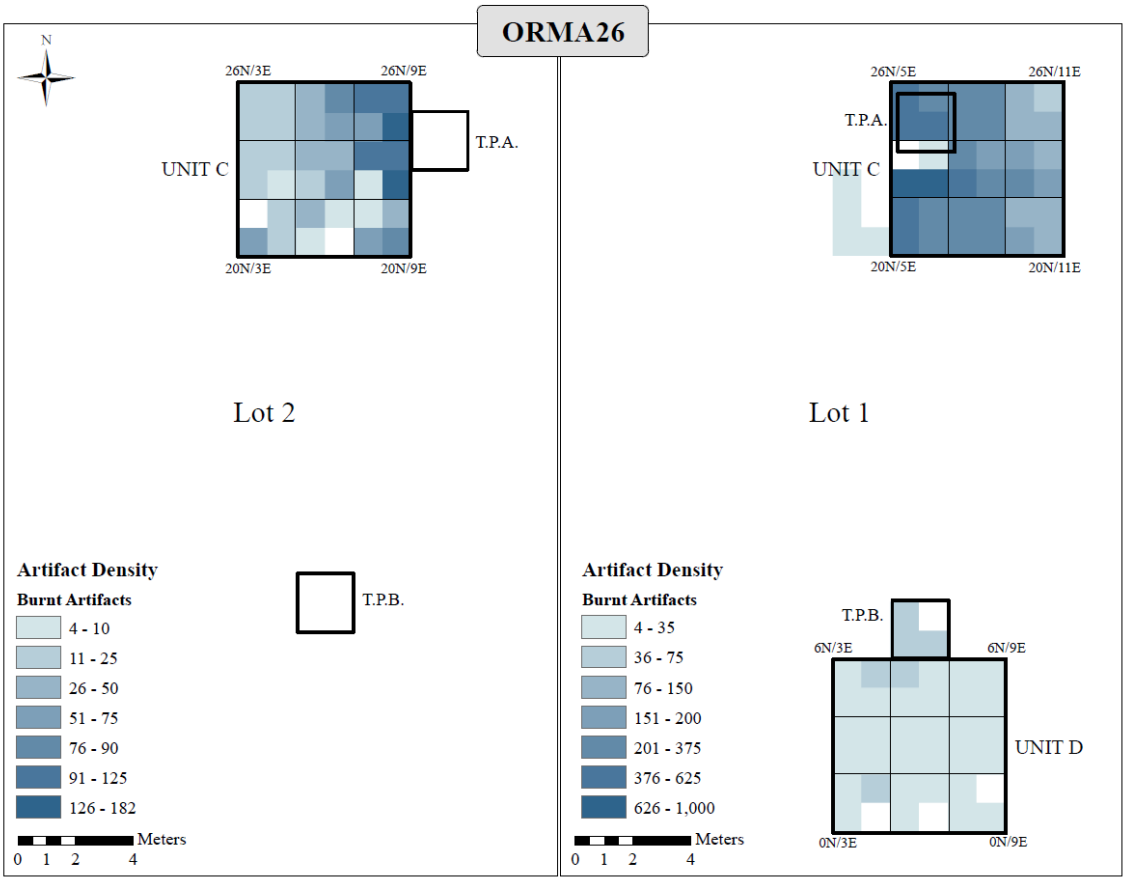

Figure 7.1: Burned (or Burnt) Artifact Spatial Density Distribution. Courtesy of Kimberly Johnson.

Spatial Distribution Analysis of Functional Classification Categories and Temporally Diagnostic Artifact Types

Lot 1 held more than 71% of all functional classification category assemblages, while the functional classification category of architecture within Lot 2 included the highest functional classification percentage at 28.58% (Table 7.2). This is due to the large quantity of artifacts within Lot 1 (n=12,944 or 75.77% of the overall assemblage). Within Lot 1, Unit C encompassed the largest quantity of artifacts (n=8533), including 65.92% of the Lot 1 assemblage, and 49.95% of the overall assemblage. As a result, Lot 1: C typically held the highest number and percentage of artifacts within each functional

classification category, and suggests that the location of Lot 1: A and C excavations were on or near a former structure. This structure was then concluded to be at the corner of Montcalm and Longtain streets due to the precision of the town plat survey and refined master grid that was completed during the 1990 and 1991 field seasons (Brauner 1993:7; 79) (Figure 7.2).

Table 7.2: Distribution and Percentage of Artifacts based on Functional Classification Category

Functional Category	**Lot 1 Quantity**	**% of category**	**Lot 2 Quantity**	**% of category**	**Category Totals**
Personal	892	84.07%	169	15.93%	1061
Domestic	579	77.82%	165	22.18%	744
Architecture	5625	71.42%	2251	28.58%	7876
Commerce & Industry	146	90.12%	16	9.88%	162
Group Services	575	99.14%	5	0.86%	580
Unknowns	5077	77.01%	1516	22.99%	6593
Modern	50	73.53%	18	26.47%	68
Totals	12, 944		4, 140		17, 084

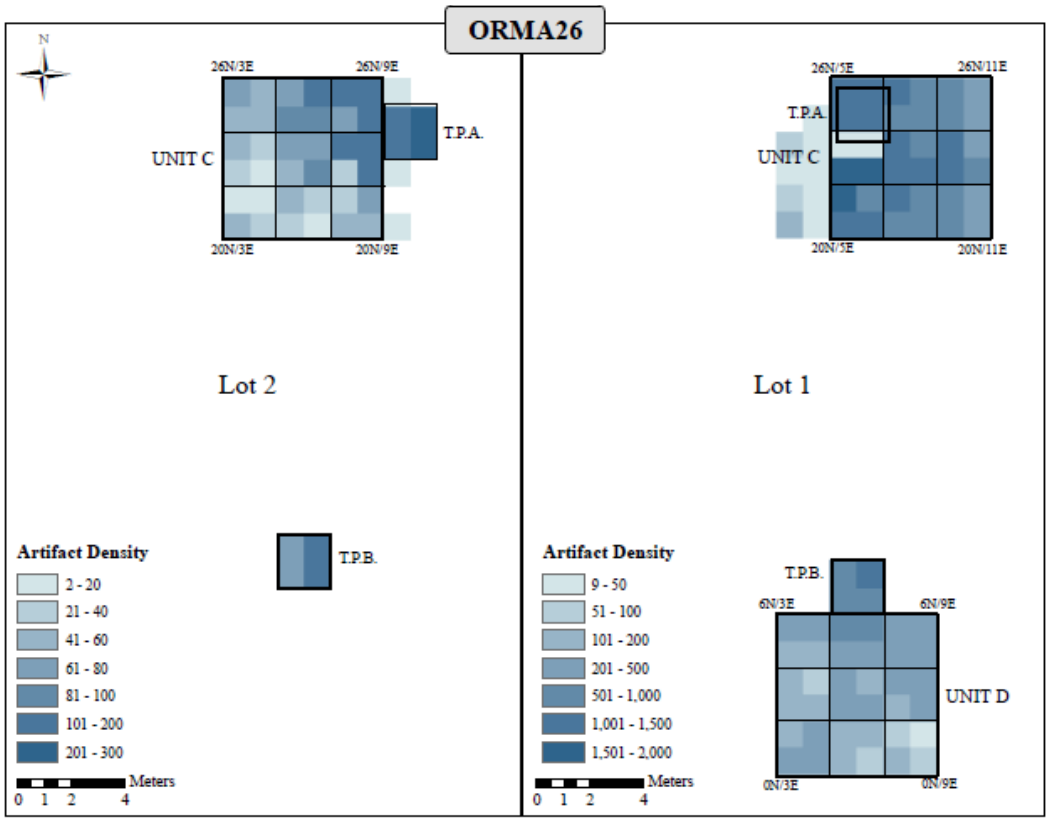

Figure 7.2: Density of Artifacts in Block 4: Lots 1 and 2. Courtesy of Kimberly Johnson.

In order to better determine the location of potential activity areas as well as potential periods of occupation; and ultimately, the overall site function, all functional classification categories were analyzed in terms of functional sub-categories as well as artifact types found throughout the test pit and unit assemblages, not just the overall lot assemblages. Therefore, the largest functional classification assemblage was architecture (n=7,876), making up 46.10% of the overall assemblage, and including sub-categories of construction; hardware (n=5,932; 34.72%), construction; materials (n=1,943; 11.37%), and fixed illumination (n=1; 0.006%) (Table 6.14). Machine-cut nails were the main artifact type within the hardware assemblage, encompassing 95.92%, and 33.31% of the overall assemblage, while zero hand-wrought nails were located during excavations at Block 4. Additionally, Lot 1 included finishing nails (n=15), expansion joints (n=2),

tacks (n=45), and wire (n=2), unlike Lot 2, and also included larger quantities of certain hardware artifacts such as machine-cut nails, door hardware, screws, and spikes. However, within Lot 1, the highest artifact densities are visible, once again, within the Lot 1: A and C assemblages (Figure 7.3). The large quantity of architecture; hardware artifacts is also evident within the door hardware assemblage, with Lot 1: C including the majority and highest variety of door hardware artifacts, with both mineral and porcelain doorknobs present, as well as rim lock fragments and escutcheons, skeleton keys of differing metals, and door shanks and spindles (Figure 7.4).

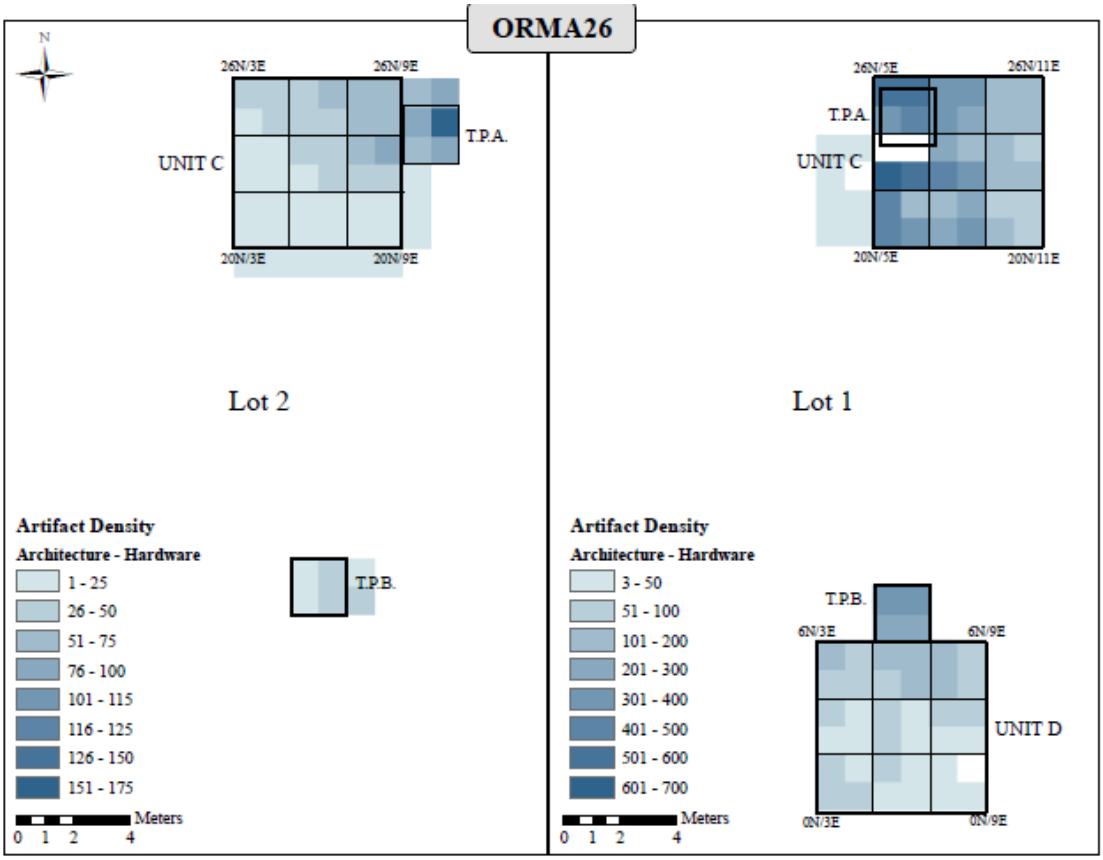

Figure 7.3: Architecture; Construction-Hardware Artifact Density. Courtesy of Kimberly Johnson.

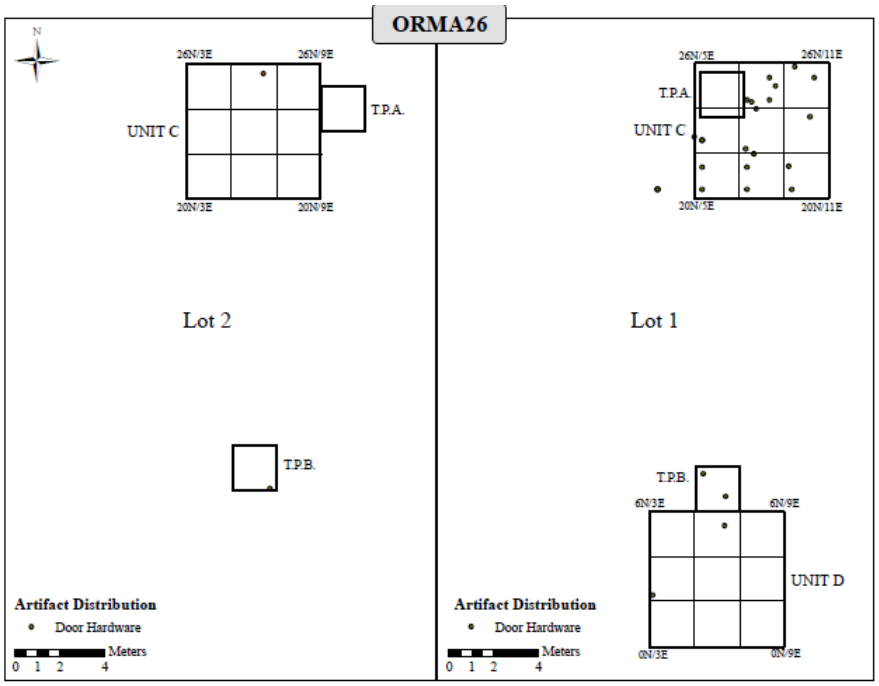

Figure 7.4: Door Hardware Artifact Distribution. Courtesy of Kimberly Johnson.

The construction; materials artifacts within the architecture assemblage, involved 11.37% of the overall assemblage, and consisted of two artifact types, brick (3.96% of the overall assemblage), and clear flat glass (7.41% of the overall assemblage). Figure 7.5 best illustrates the location of high construction; materials artifact densities, with the following Figure 7.6, representing the brick artifact densities. Thus, it is apparent that Lot 1: D includes a higher concentration of construction; materials, with the unit's brick assemblage (n=330) larger than Lot 1: C (n=162) or Lot 2: C (n=111), as well as the clear flat glass assemblage (n=482), with Lot 1: C including 461 artifacts, and Lot 2: C with a minimal 24 artifacts. Close in proximity to Lot 1: D, Lot 1: B, also includes a high density of brick (n=39) and clear flat glass (n=264) within the overall assemblage (n=925). In addition, Lot 1: C included the one fixed illumination functional artifact, a cast iron lamp bracket.

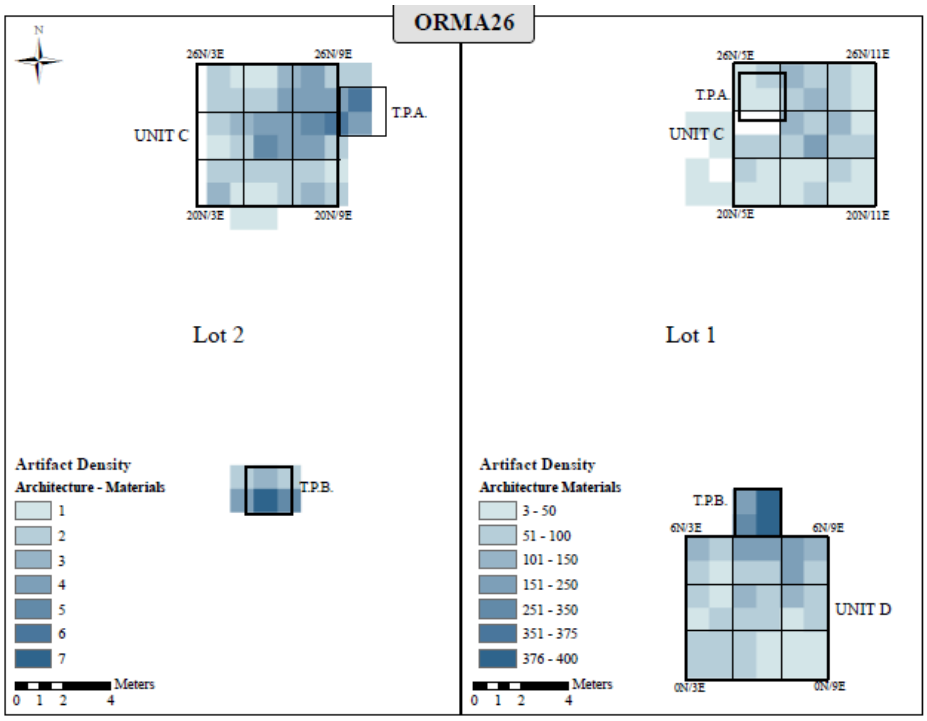

Figure 7.5: Architecture; Construction-Materials Artifact Density. Courtesy of Kimberly Johnson.

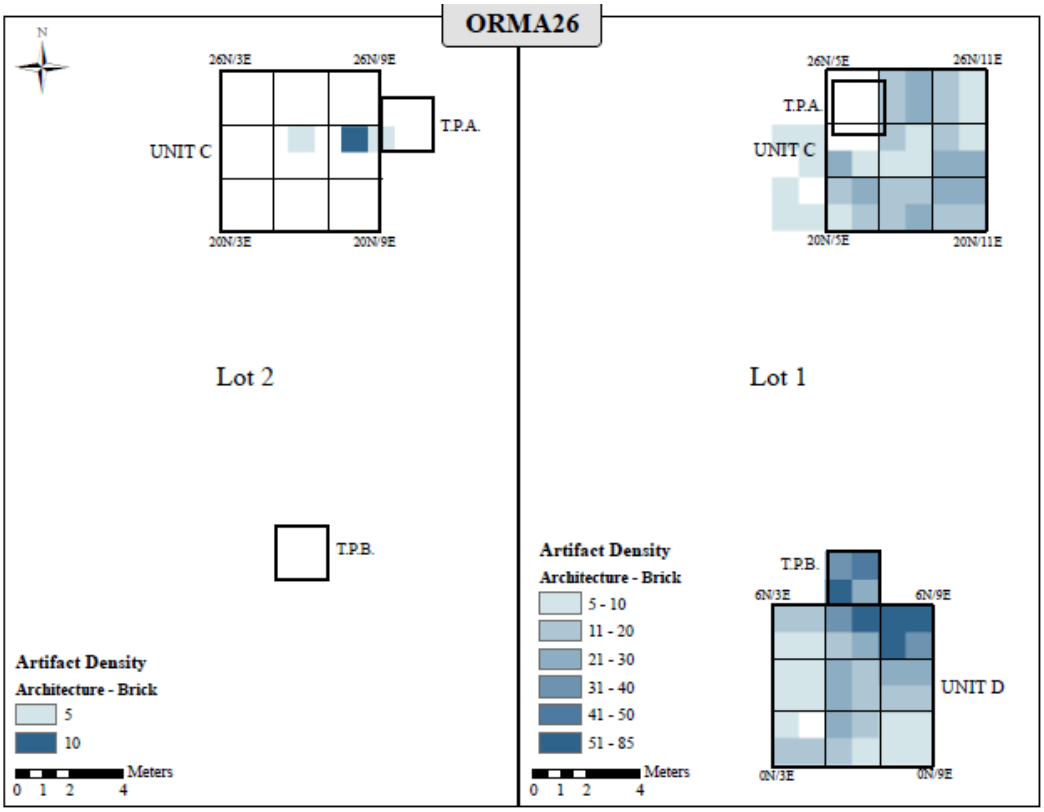

Figure 7.6: Brick Artifact Density. Courtesy of Kimberly Johnson.

The second largest functional classification assemblage (38.59%) included the remaining functionally unknown artifact categories featuring faunal remains, ceramics, charcoal/ash, glass, metal, rocks/stones, seeds/shells, and wood. Once again, Lot 1 had a larger percentage of the functional category within the overall assemblage (77.01%), and Lot 2 included the additional 22.99%. Functionally unknown artifacts made up 39.22% of the Lot 1 assemblage, and 36.22% of the Lot 2 assemblage. These artifacts were not spatially analyzed any further (See Table 6.17).

Although a dramatically lower percentage than the architecture or unknown functional categories, the third largest functional classification category was the personal assemblage, comprising 6.21% of the overall assemblage. Lot 1 included 84.07% of the entire personal assemblage, with Lot 1: C including 69.28% of the Lot 1 personal assemblage (Table 7.2 and Figure 7.7). The Lot 1 personal functional category included the sub-categories of clothing (n=137), footwear (n=62), adornment (n=4), body ritual and grooming (n=81), indulgences (n=600), pastimes and recreation (n=6), and pocket tools and accessories (n=2). Meanwhile, Lot 2 had fewer personal sub-categories due to the absence of pocket tools and accessories within the personal assemblage of the lot (See Table 6.5).

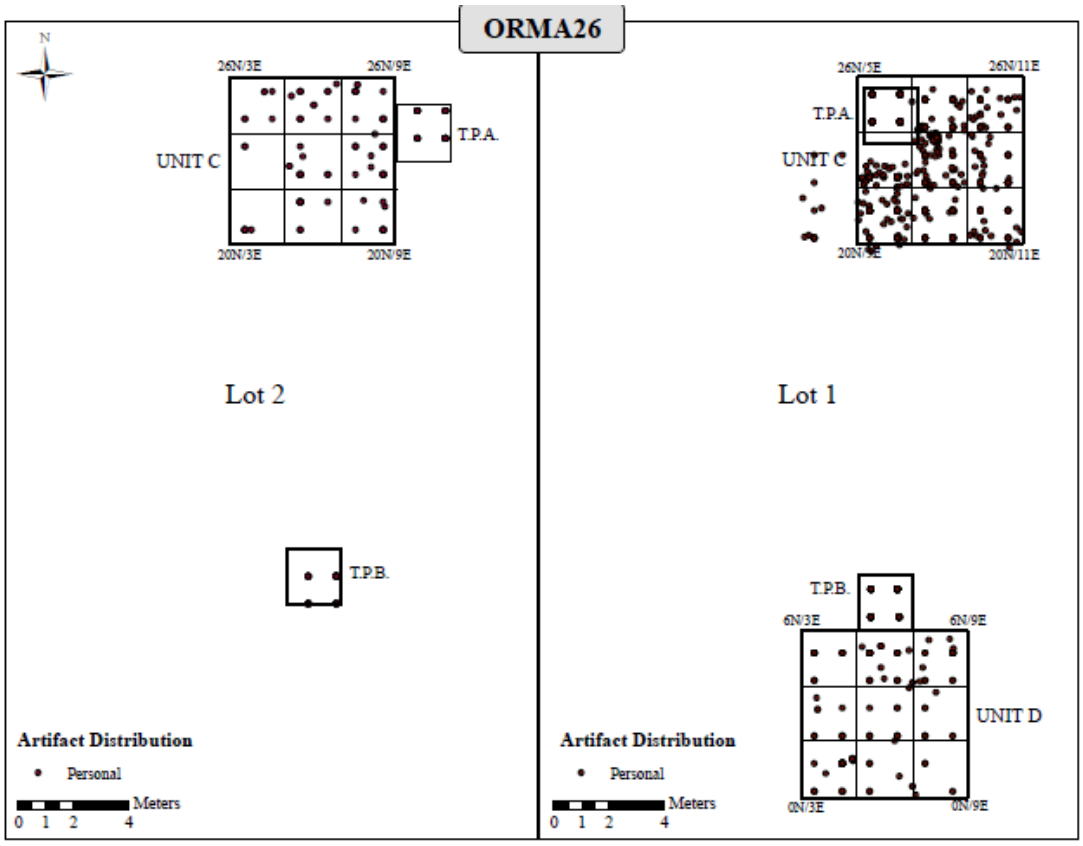

Figure 7.7: Personal Assemblage Spatial Distribution. Courtesy of Kimberly Johnson.

The personal functional sub-category of indulgences, comprised of olive glass alcohol vessels and clay tobacco pipe fragments, made up the majority (67.86%) of the personal assemblage, with 52.78% of the indulgences assemblage located within Lot 1: C, but 86.58% of the Lot 1: C indulgences assemblage was solely represented by olive glass. Lot 2: A (n=11; 55.00%) and Lot 1: D (n=40.34%) included the highest percentage of tobacco pipe fragments within their associated test pit and unit indulgences assemblages. Furthermore, the tobacco pipes (n=48) within Lot 1: D comprised 37.50% of the unit's personal assemblage (n=128), and 6.67% of the overall indulgences assemblage (n=720), only slightly less than Lot 1: C with 7.08% of the indulgences assemblage (Table 6.6). However, as noted previously, the tobacco pipe assemblage

within Lot 1: C only made up 13.42% of the lot's indulgences assemblage, unlike Lot 1: D (Figures 7.8 and 7.9).

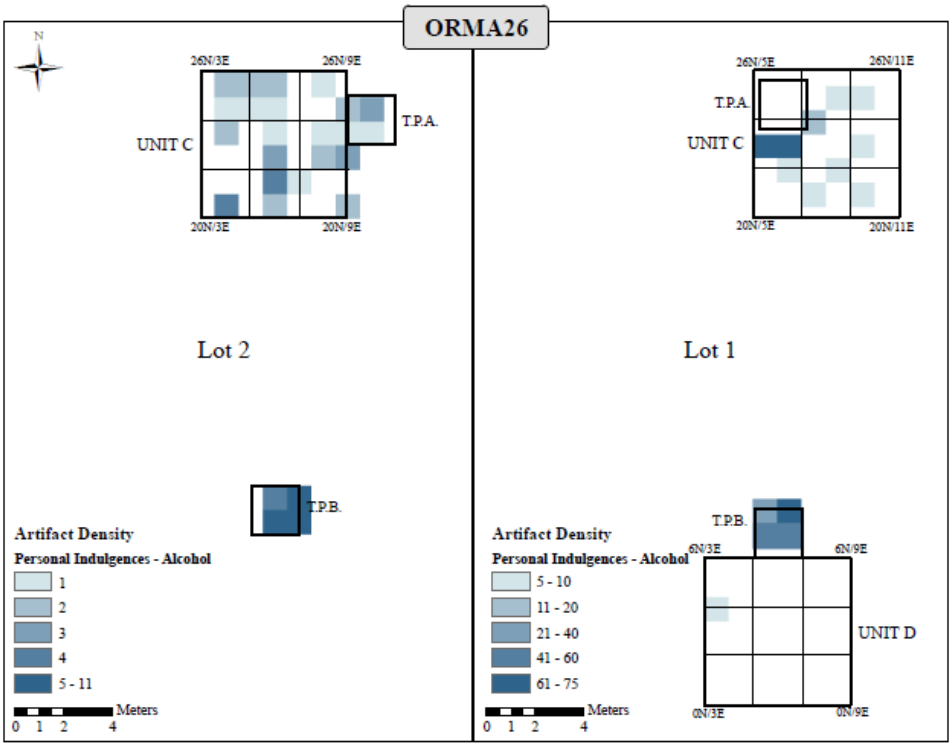

Figure 7.8: Personal Indulgences-Alcohol Artifact Density. Courtesy of Kimberly Johnson.

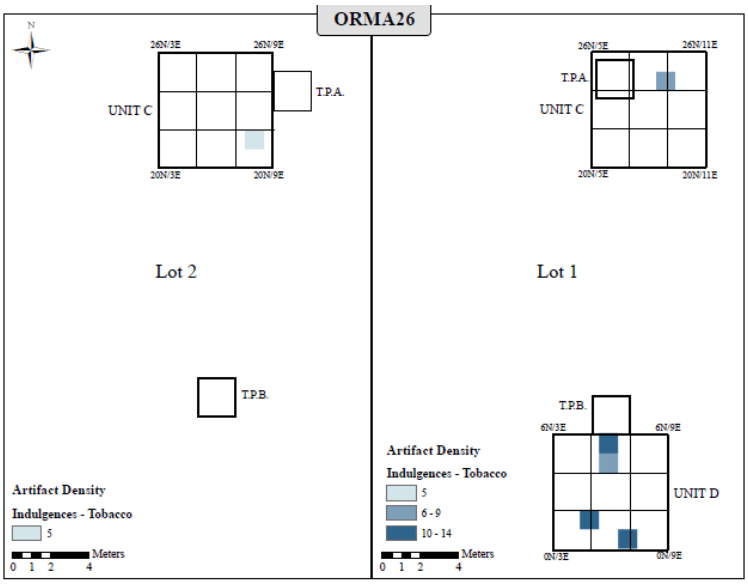

Figure 7.9: Personal Indulgences-Tobacco Artifact Density. Courtesy of Kimberly Johnson.

Clothing consisted of 13.95% of the overall personal assemblage, and primarily included buttons in various materials and styles (98.65% of the clothing assemblage). Lot 1: B included the only non-button, clothing artifacts (n=2), and Lot 1: D included only four buttons from the overall clothing assemblage (n=148) (Figure 7.10). The body ritual and grooming functional category comprised 9.05% of the personal assemblage, and included milk glass, a comb fragment, and mirror glass. Milk glass was the primary component of the body ritual and grooming category (94.79%). The only comb fragment, potentially made of baleen or the later rubber or celluloid materials, was found within Lot 1: B. Meanwhile, the only mirror glass fragments (n=4) were found within Lot 1: D, and were the only body ritual and grooming artifacts located in the unit (Figure 7.11).

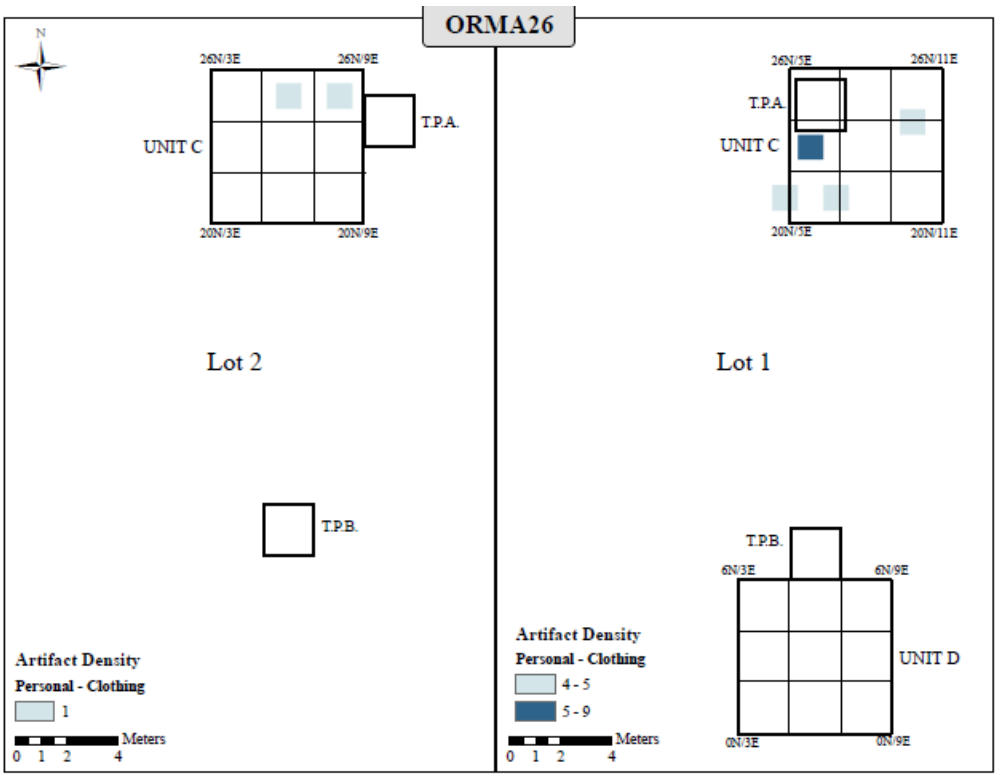

Figure 7.10: Personal Clothing Artifact Density. Courtesy of Kimberly Johnson.

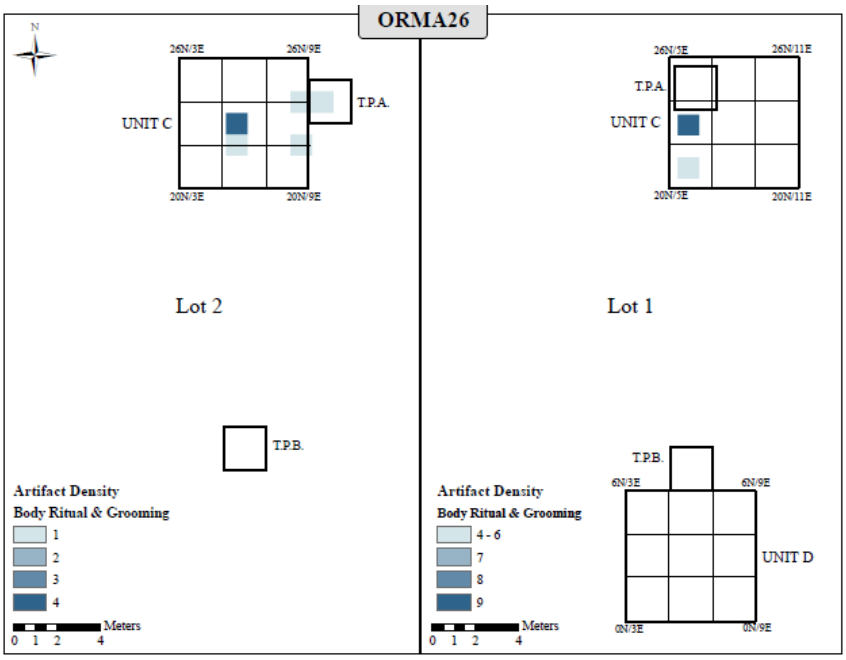

Figure 7.11: Personal Body Ritual and Grooming Artifact Density. Courtesy of Kimberly Johnson.

Footwear was also within the personal functional category, with shoe buttons in various colors making up 95.12% of the footwear assemblage (n=82). Only one shoe button was within Lot 1: D, as well as nearby Lot 1: B. Two leather shoe heels were found within the Lot 2: C footwear assemblage (n=14) (Figure 7.12). In addition, pastimes and recreation artifacts, including marbles and porcelain doll fragments, were found primarily in Lot 1: C (85.71%), but only contained 0.66% of the overall assemblage. Finally, 66.67% of the adornment assemblage or beads (n=6), were located within Lot 1: C, with 100.00% of the pocket tools and accessories assemblage (n=2) in the same lot.

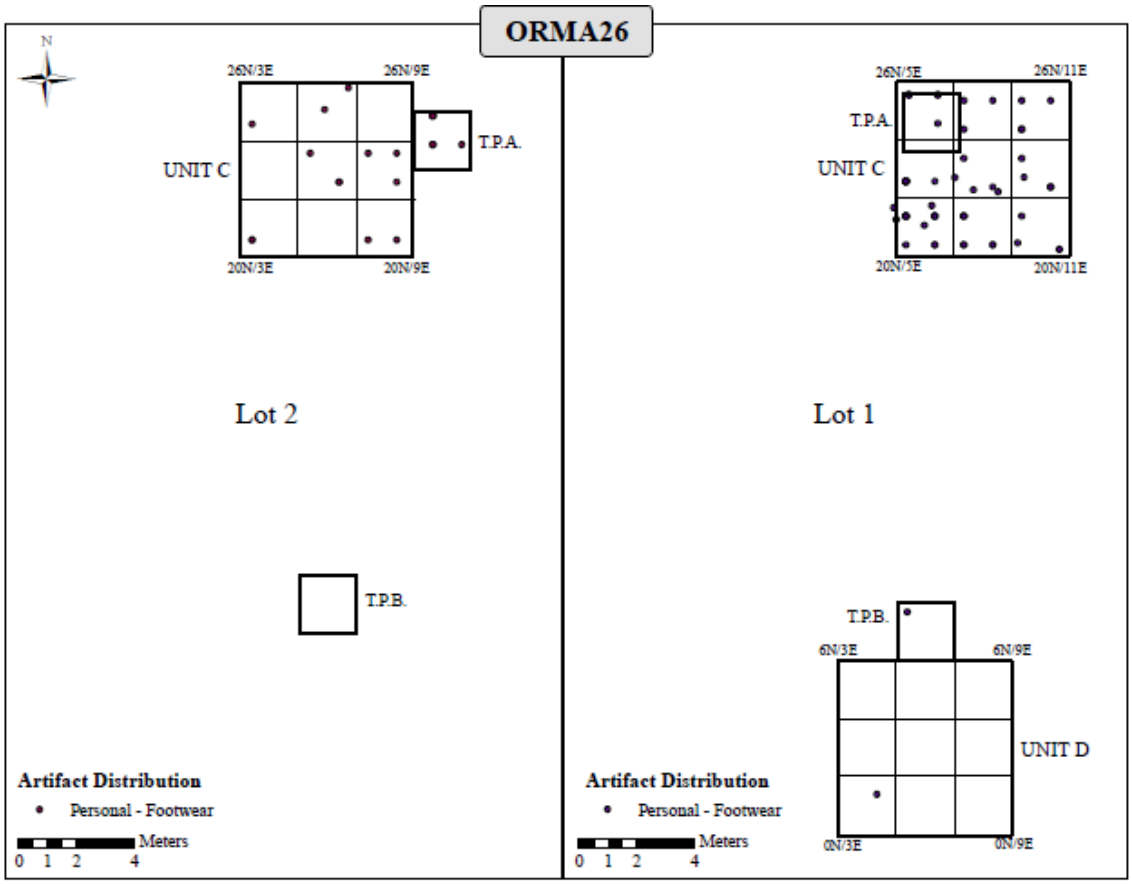

Figure 7.12: Personal Footwear Artifact Distribution. Courtesy of Kimberly Johnson.

The domestic functional classification category followed the personal assemblage with 4.35% of the overall assemblage. Lot 1 included 77.82% (n=579) of the domestic assemblage (n=744), which featured sub-categories of furnishings (n=6), housewares and appliances; culinary (n=92), housewares and appliances; gustatory (n=611), housewares and appliances; household pastimes (n=15), illumination (n=17), cleaning and maintenance; sewing (n=1), and maintenance and tools (n=2) (Table 6.7 and Figure 7.13, please note Lot 2: A and B density error). Within Lot 1, Lot 1: C included 83.33% of the furnishings assemblage, and 55.43% of the culinary assemblage including ceramic and glass vessels, while Lot 1: D included 8.70% of the culinary assemblage and Lot 2: C with 14.13% (Figure 7.14).

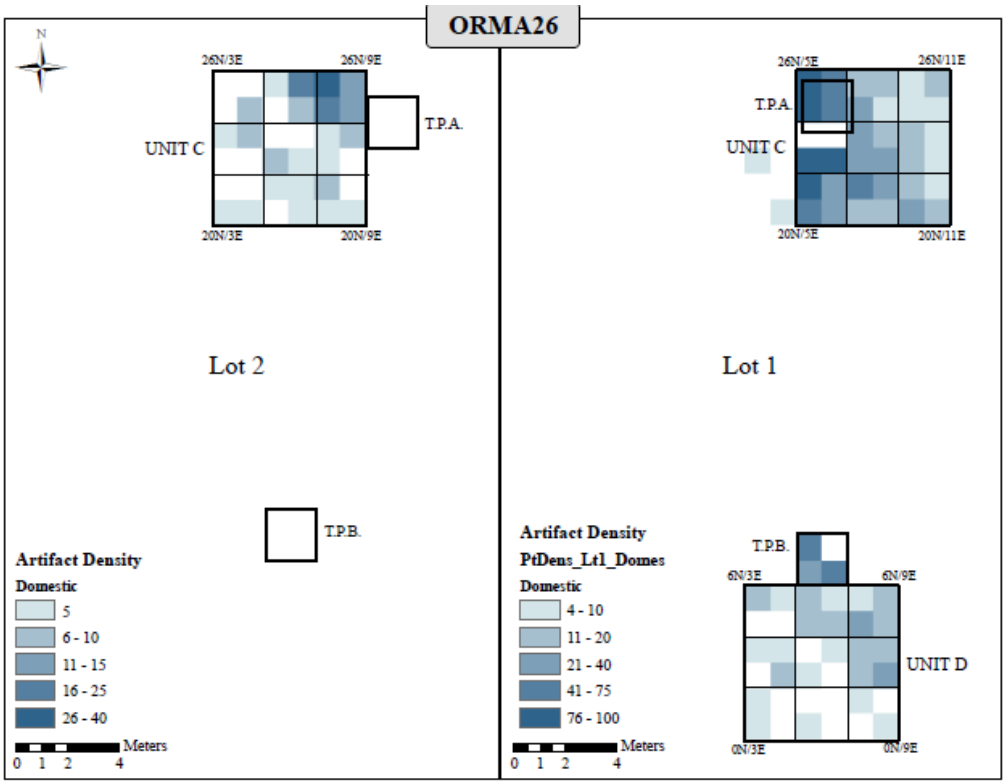

Figure 7.13: Domestic Assemblage Artifact Density. Courtesy of Kimberly Johnson

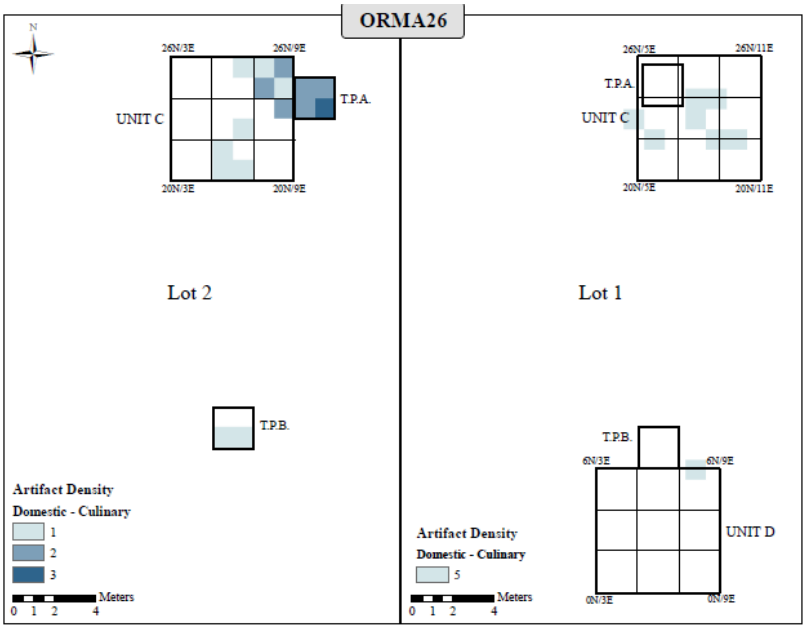

Figure 7.14: Housewares and Appliances-Culinary Artifact Density. Courtesy of Kimberly Johnson.

The domestic; housewares and appliances-gustatory assemblage containing ceramics, glass, and tableware utensils, was also dominated by Lot 1: C, making up 47.30%, and included the largest number of ceramic varieties (see Table 6.8 and Figure 7.15). The majority of the gustatory glass vessels were clear curved glass, tumbler sherds, with the majority located within Lot 2: B (n=42), all other assemblages included tumbler fragments, aside from Lot 1: C, where zero were collected and identified. Pewter utensil handles were found within Lot 1: B and Lot 1: D, with an electroplated fork within Lot 2: A, among otherwise ferrous metal utensils, the majority of which were within Lot 1: C (Figure 7.16).

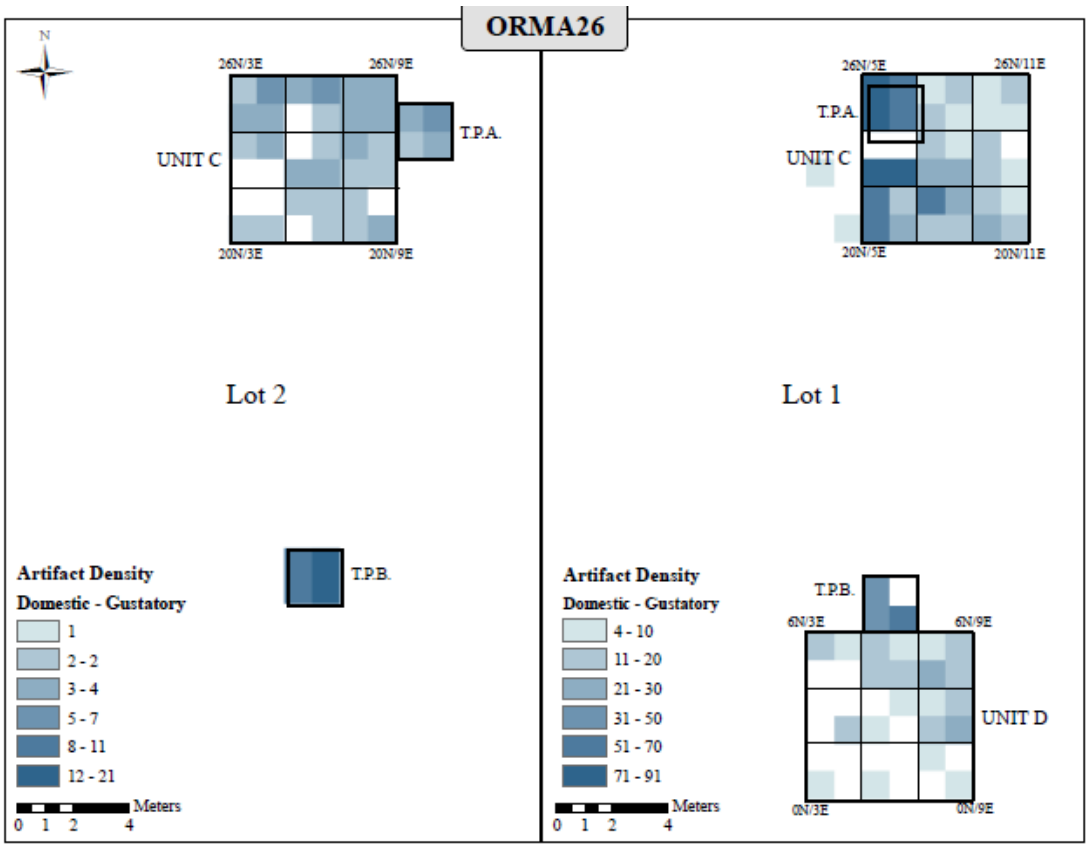

Figure 7.15: Housewares and Appliances- Gustatory Artifact Density. Courtesy of Kimberly Johnson.

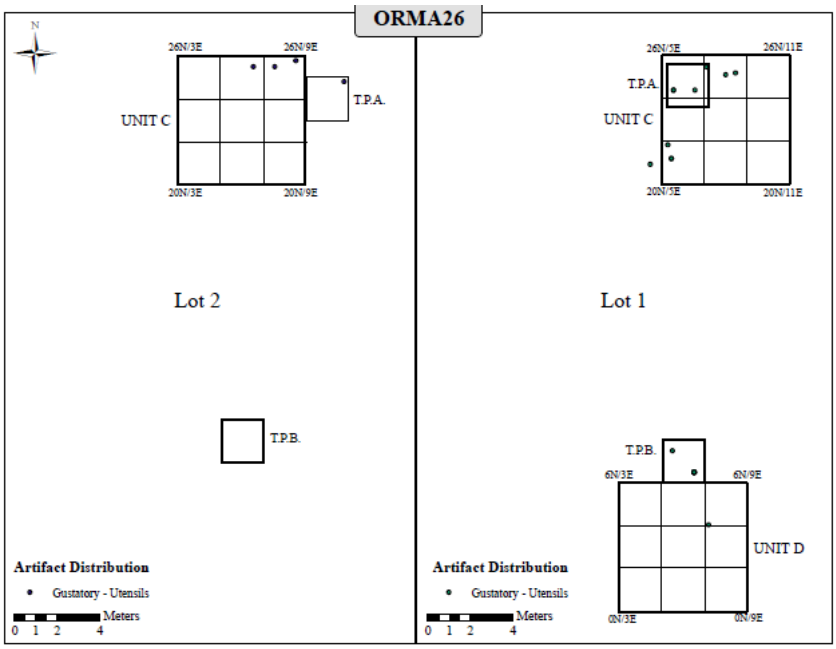

Figure 7.16: Utensil Artifact Spatial Distribution. Courtesy of Kimberly Johnson.

Additionally, Lot 1: C included 73.33% of the household pastimes assemblage (n=11), comprised of reed organ fragments (n=15), with the remaining 26.67% of the assemblage within the nearby Lot 1: A test pit (n=4) (Figure 7.17). Meanwhile, zero domestic; illumination artifacts were within Lot 1: C, but were located within Lot 2: C (n=16), and Lot 1: D (n=1). Lot 1: D also included the one cleaning and maintenance; sewing artifact, a brass straight pin, with Lot 1: C and Lot 1: B, each holding one maintenance and tool artifact, an expansion wedge and an awl.

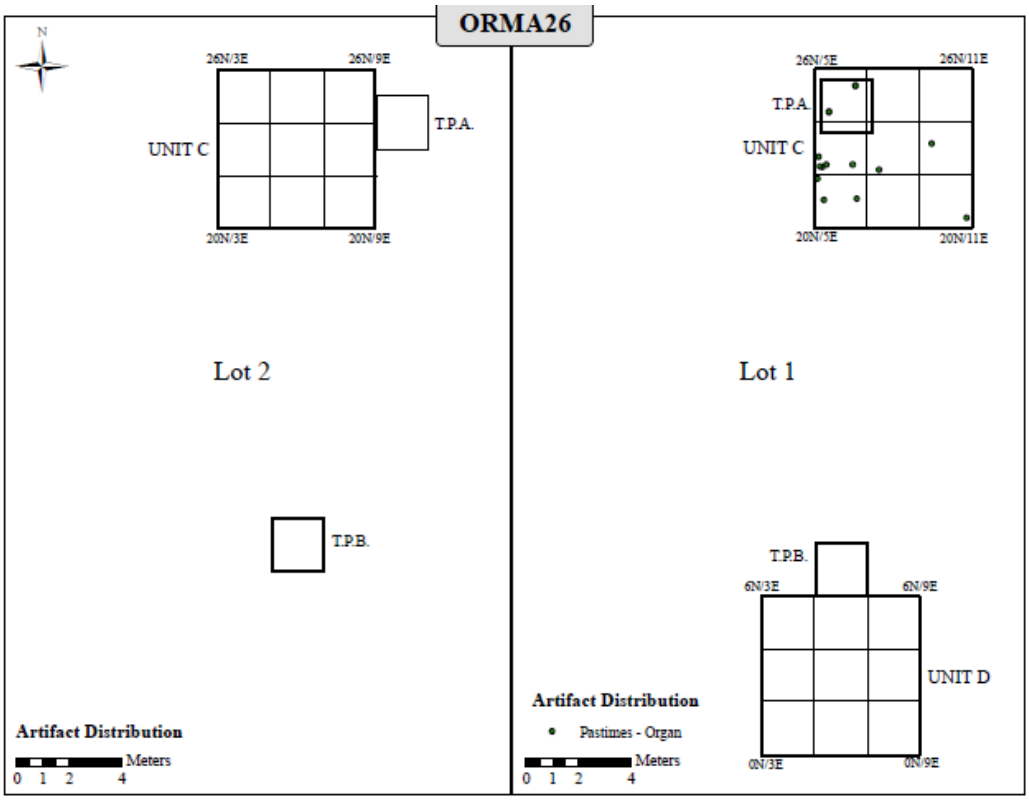

Figure 7.17: Household Pastimes Artifact Spatial Distribution. Courtesy of Kimberly Johnson.

The group services functional classification category included 3.40% of the overall assemblage, with 99.14% of the artifacts located within the Lot 1 assemblage, and 93.91% located within Lot 1: C (Figure 7.18). The group services artifacts consisted of slate tablet and one pencil fragment.

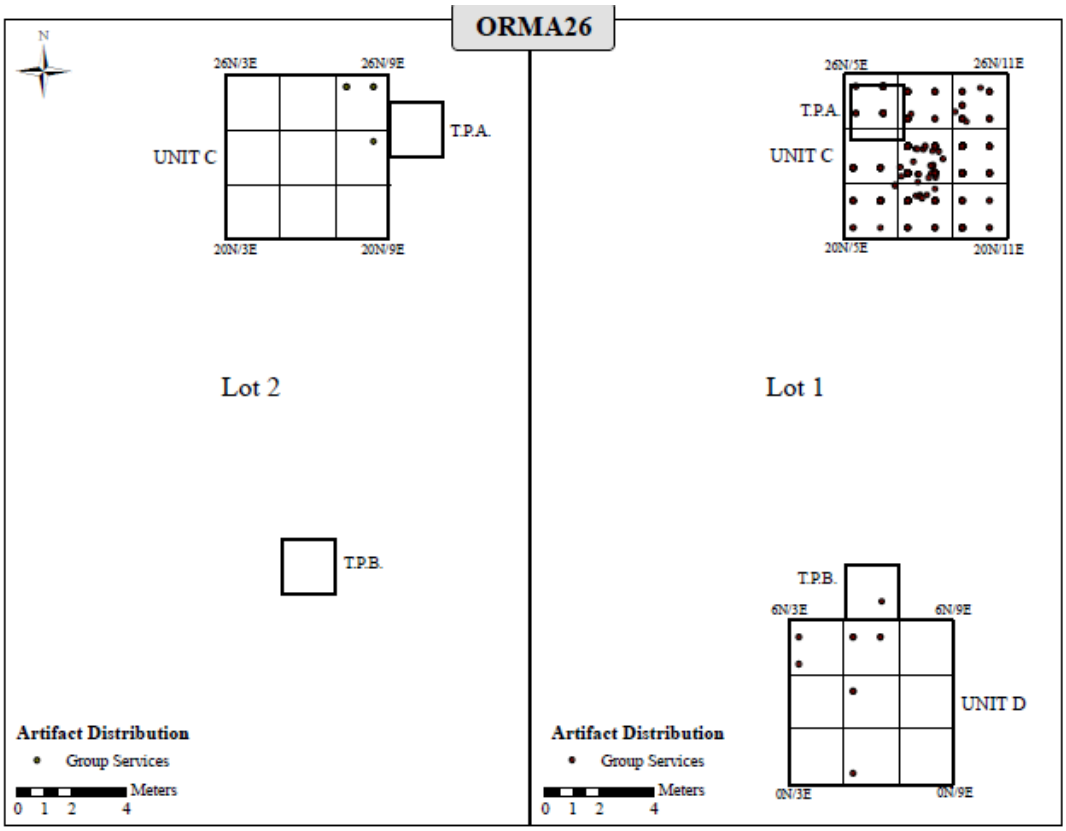

Figure 7.18: Group Services Artifact Spatial Distribution. Courtesy of Kimberly Johnson.

Additionally, the commerce and industry functional classification category dropped behind, encompassing 0.95% of the overall assemblage (n=162) including agriculture and husbandry; barbed wire (n=1), bridle or harness ring (n=1), buckles (n=12), fence staples (n=2), horseshoe nails (n=9), as well as hunting (n=9), manufacturing (n=115), medical (n=10), monetary (n=1), and transportation (n=1). Lot 1: C contained the barbed wire, bridle or harness ring, as well as ten buckles, two horsehoe nails, one lead shot, 109 manufacturing clinkers, six glass, medical vessel fragments, and the one coin and one carriage bolt on site. Meanwhile, Lot 2: C included more horseshoe nails (n=7), as well as lead shot (n=2), as did Lot 1: B (n=2), and Lot 1: D (n=4) (Figure 7.19).

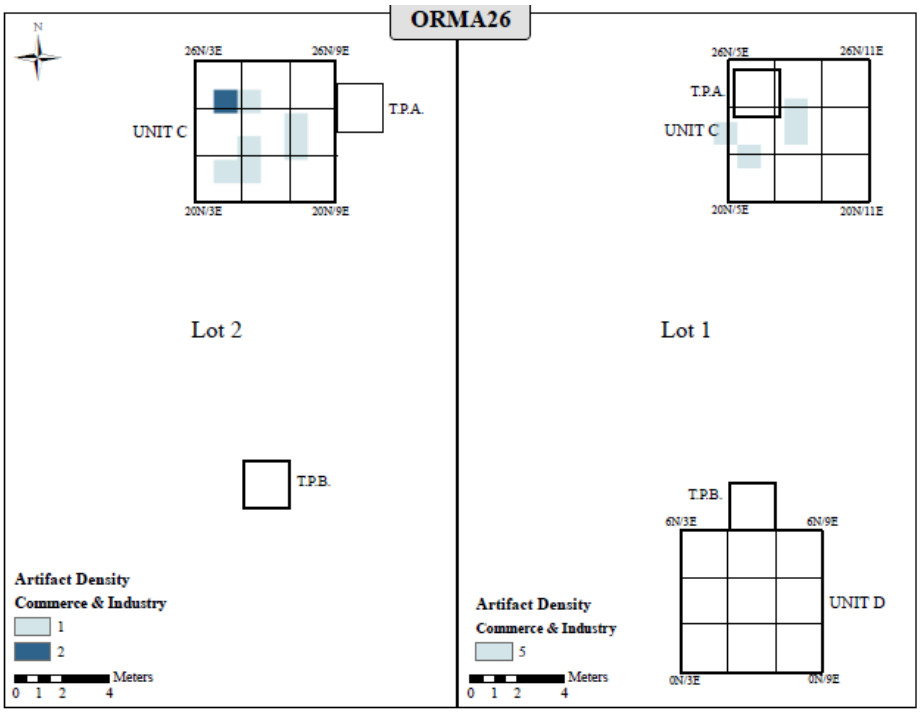

Figure 7.19: Commerce and Industry Artifact Density. Courtesy of Kimberly Johnson.

The modern functional classification category contained the last 0.40% of the overall artifact assemblage from the Block 4 excavations. Lot 1: D included 42.65% of the modern assemblage, and Lot 1: C featured 25.00%. However, the spatial distribution regarding both the horizontal and vertical locations of the identified-as-modern artifacts (n=68), has been previously discussed, and will not be examined further here (See previous tables).

Spatial Activity Area Discussion

Based on the spatial distribution of the functional classification categories along with temporally diagnostic artifact types, it is apparent that a structure was once present where Lot 1: A and C were excavated. The sheer quantity and density of artifacts within the larger unit excavation, Lot 1: C, compared to the Lot 1: B and D, as well as any of the Lot 2 excavations suggests the presence of a structure, especially when analyzed in terms

of the amount of architecture; construction-hardware artifacts such as machine-cut nails. When excavating the townsite, Dr. David Brauner (1993:88) attributed the spatial concentration of nails to be an indicator of a previous structure. The location of the Lot 1: A and C excavations, at the top or northern portion of Lot 1, and approximately five meters from the intersection of Montcalm and Longtain streets, according to the newly surveyed town plat and master grid, also indicates that this would be an ideal location to place a structure if looking to do business within the townsite.

Additionally, evidence of a hot fire event within the Lot 1: A and C assemblages, as well as Lot 2: C, but not Lot 1: D, suggests the presence of a structure, and would have led to an unintended, quick abandonment, which is also evident in the archaeological record. However, as John Atherton (1973:9) notes, plowing disturbances within the plow zone (Levels 1 and 2) led to rather large horizontal artifact scatters when compared to the size of the potential structures, and as discussed previously, Lot 2: C included the highest number of artifacts within Level 2, although the Pearson's chi-square analysis demonstrated that this level remained undisturbed. Yet, it should be considered that many of the artifacts located within Lot 2: C, as well as nearby Lot 2: A, may be the result of lateral shifts due to agricultural disturbances, and may be representative of an artifact scatter from a structure located at Lot 1: C. The temporal similarities between the Lot 1: C and Lot 2: C assemblages, which will be discussed here, also lend encouragement to this conclusion.

Occupational Time Period Analysis

In order to better understand and interpret the spatial distribution and potential activity areas throughout the Block 4 excavations, temporally diagnostic artifact types, and their frequencies, in each of the excavation areas were analyzed in terms of their known dates of manufacture as well as any known date of arrival or presence within Oregon or French Prairie, specifically. These associated dates help demonstrate the potential occupational episodes or time periods within the excavated areas and their assemblages (Schiffer 1983:685). As a result, the possible activities that took place at Block 4 over time can be better interpreted, especially when in combination with the functional classification spatial distribution data.

Within the Block 4 excavations (Figure 7.20), artifact analysis did not lead to the identification of any creamware ceramics or hand-wrought nails within any of the excavation assemblages, both had fallen out of favor by 1830, and their absence within the assemblage then suggests that the Block was not occupied during the early settlement of Champoeg (Chapman 1993:76; Visser 1997). However, the Lot 1: B and D excavations, located at the back of Lot 1, did demonstrate that this test pit and unit included primarily mid-century or pre-flood time period artifacts, dating to the 1840s and 1850s. In particular, these temporally diagnostic artifacts included a clay tobacco pipes, ceramic transferprint patterns and company trademarks, pewter and Britannia utensil handles, as well as slip-banded, and shell-edge wares.

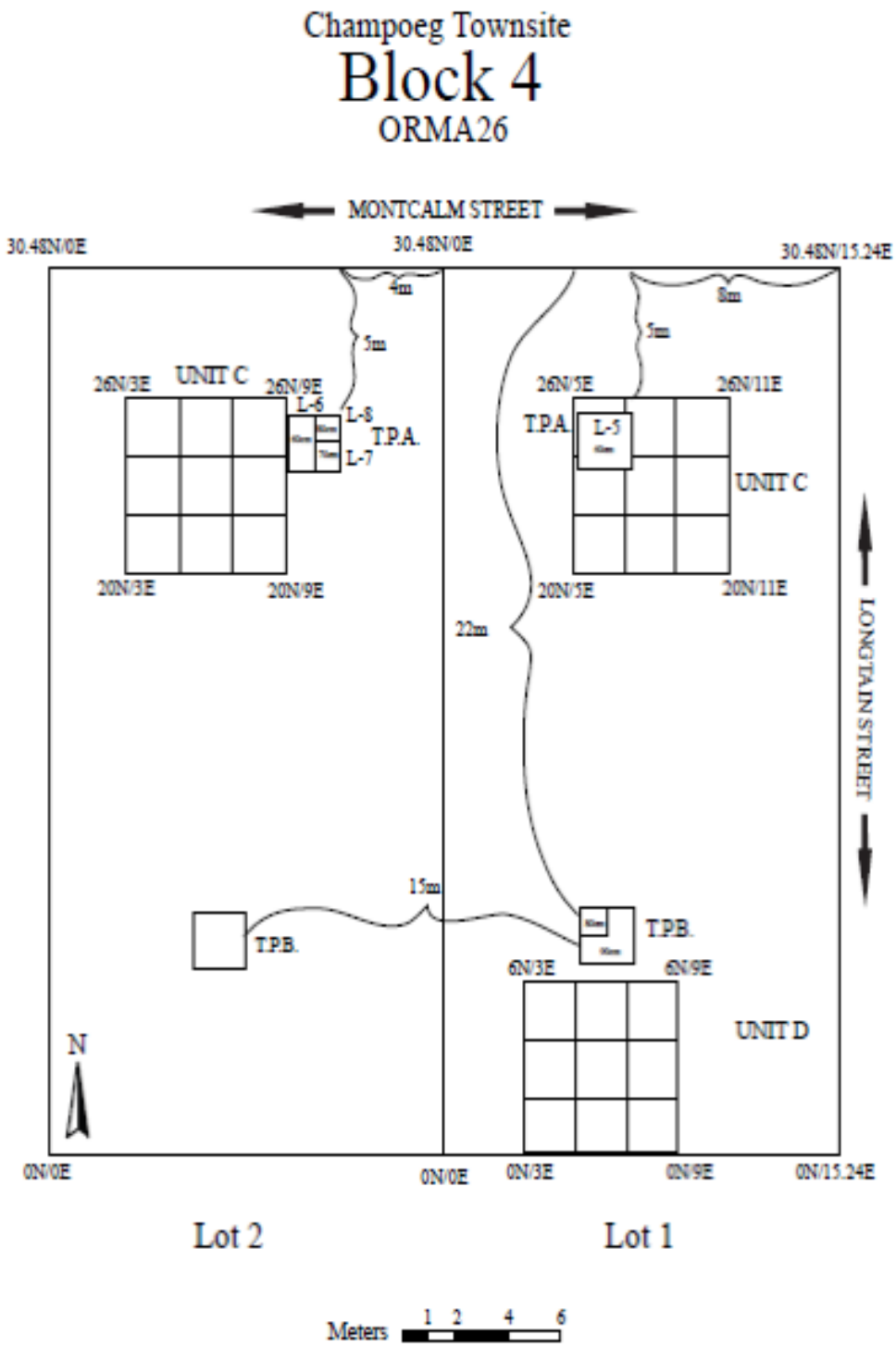

Figure 7.20: Block 4 Excavations: 1990 and 1991 Field Seasons. Courtesy of Kimberly Johnson.

Based on the clay tobacco pipe analysis previously discussed, these artifacts can be generally dated to the early to mid-nineteenth century due to their apparent rise in popularity during this time period, and their decline in popularity by the twentieth century (Adams 1976:46). A higher quantity of tobacco pipe fragments in relation to the unit assemblage were located within Lot 1: D than any other assemblage. A larger variety of pipe types were also present including Ford Stepney pipes, which were imported by the Hudson's Bay Company from 1820 to 1875, TD pipes, manufactured from 1805 to 1865, McDougal Douglas pipes, available with this design in the Pacific Northwest from 1847 to 1891, and redware, knobby pipes, post-dating 1850 in their popularity (Bradley 2000: 117-119; Pfeiffer 2006:12-15; 25;41; Sudbury 2009:93; 200-201). The presence of these tobacco pipe types and their associated dates within Lot 1: B and D, in combination with the identified transferprint pattern of *Columbia*, manufactured by William Adams and Sons, circa 1840, within Lot 1: B, as well as the Davenport trademark dates of 1846 and 1848, located on two white earthenware sherds within Lot 1: D, suggests a pre-1861 flood occupation. The Britannia and pewter utensil handles, located within Lot 1: B and D, also suggests an 1840s occupational period due to their popularity before, but not necessarily after this decade (Light 2000:14; Snodin and Belden 1976:12;16). Finally, according to Dr. David Brauner (1993:105), the presence of shell-edge, and mocha ware, identified within this research study as slip-banded wares, both of which are present within Lot 1: B and D in higher comparative percentages than the other assemblages, suggests a mid-century date of occupation.

In addition, Lot 1 held the majority of brick artifacts, 79.47% of the brick assemblage; but spatial analysis demonstrates that Lot 1: B and D held the majority of

these brick artifacts (Figure 7.6). Brick became more popular and used more frequently in the Willamette Valley during the 1840s due to the establishment of several brickyards in the region during this time period, which lowered the cost of the construction materials (Converse 2014:45-46). Thus, the high prevalence of brick in the Lot 1: B and D assemblage may indicate this initial use of brick within the Valley, and may suggest that brick was not a common construction material after the 1861 flood due to the smaller assemblage within Lot 1: A and C.

Additionally, the artifacts within Lot 1: D, as well as nearby Lot 1: B, are similar to those found during Brauner's excavations at Block 14, Lot 5, believed to be the location of Edward Dupuis store, which reportedly operated from 1851 until the flood of 1861 (Brauner 1993:98). Clay pipe fragments, olive and aqua glass fragments, undecorated white earthenware in addition to transferprints, shell-edge, and slip-banded ware as well as an assortment of architectural artifacts including bricks were located within test pits A and B (Brauner 1993:101-102). As discussed previously, these artifact types were also found within Lot 1: D, and with this comparative assemblage, seems to further demonstrate that the duration of occupation in the area of the Lot 1: B and D excavations were limited to the pre-flood time period, circa 1840s and 1850s.

In addition, the Block 14, Lot 5 excavations in 1990 encountered vertical disturbance, evident via modern artifacts such as coins dating to the 1980s, within the assemblage, due to the creation of a group campground in the area of Napoleon Avenue and the adjacent Block 2 (Brauner 1993:99). The presence of similar artifacts are found within the Lot 1: D assemblage, dating to the 1960s and 1970s, and further indicates that

the back of Lot 1 within Block 4 was more disturbed most likely as a result of previous recreational activities.

Meanwhile, Lot 1: C, as well as nearby Lot 1: A, also included temporally diagnostic artifacts dating to the pre-flood time period including clay tobacco pipes, ceramic transferprint patterns, and one shell-edge fragment. However, as noted above, Lot 1: B and D included higher frequencies of these artifacts in relation to the unit assemblages. In addition, Lot 1: C included a high number of temporally diagnostic artifacts that were not present at all within Lot 1: B or D including milk glass and reed organ fragments, or included a very small assemblage, as seen by the overall quantity of prosser and metal buttons, shoe buttons, white porcelain, and ironstone fragments. These artifacts, highly prevalent within Lot 1: A and C, but not within Lot 1: B or D, are typical of the latter-half of the nineteenth century, and will be discussed further in the next chapter. Milk glass, for example, as well as clear or colorless glass, also found in large quantities within Lot 1: C, was not produced until the 1870s (Lindsey 2019). Additionally, Lot 1: C included white earthenware and ironstone trademarks dating from 1864 to 1890, and potentially after (See Table 6.12), as well as puce glass fragments, dating from 1840 to the early 1880s, and a sepia transferprint fragment with red and yellow paint accents over the glaze, a decorative combination that was more common during the latter-half of the nineteenth century (Lindsey 2019; Munnick 1958:39).

As a result, the Lot 1: A and C assemblages were found to include temporally diagnostic artifacts dating to both the pre-flood and post-flood time periods, and due to the quantity and density of artifacts within the assemblage, did include a small quantity of pre-flood artifacts not found in other assemblages such as the 1841 liberty dime.

However, more post-flood time period diagnostic artifacts were collected from the Lot 1: A and C excavation locations, and were also the artifacts that were most often burned. Therefore, although the Lot 1: A and C location appears to have had a pre-flood occupation or presence, the primary occupation, appears to have been the post-1861 flood time period, circa 1860s to the 1890s, based on the quantity of temporally diagnostic artifacts within the assemblage, with abandonment of the structure occurring after this primary occupation, most likely the result of a hot fire event.

Furthermore, Lot 2: A and C include diagnostic artifact types that are temporally similar to Lot 1: A and C, but the Lot 2 assemblages do not include the same level of quantity, density, or variety of artifacts. Yet, the Lot 2: A and C assemblages contain some unique artifacts such as the New York Bakery, 1847 Rogers Brothers, electroplated fork, Flow Mulberry transferprints, dating from 1850 to 1887, two clothing hooks, a shoe eyelet, a glass marble, post-dating 1840, and two leather shoe heels (Chapman 1993:178; Collectors Weekly 2019; Hale 2008:51; Munnick 1958:39). Lot 2: C also was identified as featuring the majority of the chimney glass assemblage, with amethyst glass, dating from the 1880s with the highest quantity in Lot 2: A (Lindsey 2019). Some artifacts within the Lot 2: A and C assemblage did illustrate evidence of having been in a hot fire, as seen by the warping on the electroplated fork within Lot 2: A, while the two leather shoe heels remained unaffected by fire. Therefore, it seems likely, as mentioned previously, that Lot 2: A and C was an area containing some of the artifact scatter from the Lot 1: A and C assemblage.

Finally, the Lot 2: B assemblage, at the back of Lot 2, typically included the smallest assemblages regarding both functional classification categories and temporally

diagnostic artifact types. However, in terms of clear glass tumblers, Lot 2: B included the largest assemblage with forty-two sherds of the various decorative designs, typically dating to the 1840s through the 1860s (Chapman 2014: 85). Lot 1: D included sixteen tumbler sherds, while Lot 1: C did not include any tumbler sherds within the assemblage, suggesting the early date of this tableware, and the potential occupational time period of Lot 2: B.

Conclusion

Overall, Lot 1: A and C included a larger quantity and higher density of artifacts than other areas, demonstrating a potential location of a structure in addition to its potential location at the intersection of Montcalm and Longatin streets. Lot 1: A and C included a pre-flood artifact assemblage, but the primary occupation, as a result of temporally diagnostic artifact types and their frequencies, seems to date to the post-1861 flood period. As a result, and based, once again, on the dates associated with the temporally diagnostic artifact types, it is apparent that Lot 1: D is not temporally similar to Lot 1: C. Therefore, I believe that Lot 1 was cleared and leveled at some point, possibly at the end of the 1850s or as a result of soil scouring from the 1861 flood, and Lot 1: B and D then represents an artifact scatter from an earlier occupation at the Block, near the Lot 1: A and C area. Thus, this assemblage is most likely associated with William and Julia Bailey's ownership of the Block, which was acquired in 1857 (OMCR 2014[1849-1976]a: 250-251). Ultimately, this conclusion is supported by the discussion that Lot 1: C does not seem to hold the same integrity concerns as Lot 1: D.

Afterwards, a new structure was built in the Lot 1: A and C location, and would have been occupied during the post-flood time period, with temporally diagnostic artifacts suggesting dates of 1860s-1890s, before a fire destroyed the building. This led to the quick abandonment of the site, with an occupational period not likely after the 1890s, based on the archaeological record. Lot 2: A and C then represent the 1860s to 1890s artifact scatter from the destruction of the structure located near or on Lot 1: A and C, as a result of fire.

Ownership of Block 4 in relation to this post-flood time period artifact assemblage can be associated with the Bailey's, who owned the property until 1880. However, it is unclear in the historic records whether they actively utilized the property during this time period. As well as the Eberhards, who acquired the property in December of 1880, after the death of Julia Bailey (OMCR 2014[1849-1976]c:21-22). Elias Eberhard then took over the property from his parents, approximately six months later.

Ultimately, the activity areas as well as the occupational time periods associated with the Block 4 assemblage can now be better understood and interpreted, as a result of the spatial distribution analysis regarding both functional classification categories as well as temporally diagnostic artifact types. Obviously, it should be noted that these interpretations are limited due to the extent of the excavations, with further excavations in between Lots 1 and 2 as well as Lot 1: C and D, helping to either lend support or refute the conclusions regarding the activity areas and dates of occupation within the Block 4 assemblage. Nevertheless, with the activity areas and primary date of occupation established for the excavation areas, especially the Lot 1: A and C area believed to have

once housed a structure, the overall site or Block 4 function can be assessed and discussed.

Chapter 8: Block 4 Functional Analysis

The overall Block 4 site function, was based on the artifact quantity, density, and variety or diversity of the Lot 1: A and C assemblages, specifically. This was due to the conclusion, based on the spatial distribution analysis regarding activity areas and dates of occupation, that a structure once stood in that location and was occupied during the post-flood time period, from the 1860s to 1890s. In addition, the Lot 1: C comprised 49.95% of the overall assemblage, with Lot 1: A making up an additional 6.51%. Thus, demonstrating that this area of the Block was the primary functional location, and would have been utilized the most by the occupants. Both the historical and archaeological record were investigated in order to determine the potential function of the post-1861 flood, Lot 1: A and C structure.

Historical Record

Although Block 4 could not be found within the Champoeg townsite's deeds records after Elias and Sarah Eberhard purchase lots 1, 2, 7, and 8 within Blocks 4 and 5 from Bernard and Elizabeth Eberhard in 1881, the property owner, Elias, can be found within the historical record from this time period. In the 1880 census records, Elias is described as a bookkeeper in Portland (USFCR 2018[1880]). He is then listed as a general merchant at Champoeg within the 1883-1884 *McKenney's Pacific Coast Business Directory*, published potentially as early as 1882 (McKenney 2009:976 [1882]). By 1888, Elias is mentioned in the *Evening Capital Journal [ECJ]*, as operating a general merchandise store in Champoeg, but had to assign the general mercantile store to I.R. Dawson "for the benefit of his creditors" including his mother, Elizabeth Eberhard,

brother, H.L. Eberhard, cousin, J.G. Eberhard, and wife, Sarah J. (2 June 1888). His liabilities included $15,054.00, and his assets included $17,564 including real estate at Portland ($2,000), a dwelling, storehouse, warehouse, and dock ($1,750), horses, wagon, harness ($150), wood ($1,000), interest in Weston's estate ($500), and notes ($144) (ECJ, 2 June 1888).

Although it is possible that he was still operating a general merchandise store at Block 4 at this time, on March 13, 1883 he had purchased a tract of land north of Block 4 from John Hoefer, Anna Hoefer, and Casper Zorn for $300, which in the mortgage held by his mother, Elizabeth, mentions the inclusion of a store and warehouse structure (OMCR 2014[1849-1976]h:35, 2014[1849-1976]j:55, 2014[1849-1976k:71-73). Thus, it seems that operations at the Block 4: Lot 1: A and C structure were probably as a general mercantile store, with the business directory published before he purchased the other tract of land on March 13,1883, suggesting that he had already established a general mercantile store in the townsite prior to the additional tract's purchase, and due to the potential tenements listed on the deed for Block 4 and 5 his parents, in addition to the mention of a dwelling listed in the *Evening Capital Journal's* record of Elias' assignment on June 2, 1888 (OMCR 2014[1849-1976]g:68, 2014[1849-1976]h:35). Additionally, the purchase of this land has several potential implications for the Block 4: Lot 1: A and C assemblage, with Elias possibly expanding his general merchandising operations within the townsite, with the addition of another store building and warehouse closer to the river. On the other hand, he may have completely abandoned the Block 4 site at this time, potentially as a result of a devastating fire. Newspaper accounts of a fire in the townsite during the 1880s or 1890s could not be found, which could be the result of a seemingly

insignificant fire, even though the archaeological record suggests otherwise, or just a general decline in reporting about the Champoeg townsite during this time period.

In addition, after the 1990 field season had uncovered evidence of a post-flood occupation, Helen E. Austin, one of French Prairie's leading historians, local resident, as well as a member of the Eberhard-Austin family, told Dr. David Brauner that the location of the Block 4, Lot 1: A and C assemblage, at the corner of Montcalm and Longtain streets, was the location of the "Eberhard store" (Dr. David Brauner, personal communication, 2015-2019; Brauner 1993:67). Archaeologist, Paul Nesbitt's (1972:35) survey maps also suggest that the corner of Lot 1 on Block 4 at Montcalm and Longtain streets was the location of "Elias Eberhardt's store". The location is seemingly ideal for a general mercantile store, located along Montcalm street which served as the main East-West road, which headed west to the Bellique and Lucier claims and DeGuerre's ferry, and just a block west of Napoleon Avenue or the Champoeg-Salem road, which was the primary North-South route (Brauner 1991b:3, 1993:59; Hussey 1967:222, Williams, and Co. 1976:28 [1878]). Thus, it seems likely that Elias was operating a general mercantile store on Block 4: Lot 1: A and C during the 1880s.

Archaeological Record

The overall site function can often be interpreted based on the largest functional classification artifact assemblage, with artifact diversity representative of differences in settlement function and activity areas (Schiffer 1983:685-686). Within the Block 4 assemblage, the largest functional classification category is architecture (46.10%) (Table 6.4). However, since any structure will include construction, hardware and materials,

especially if the structure is destroyed and abandoned, this is not the most functionally informative category in terms of the overall site function. Unfortunately, the second-largest functional classification category is the functionally unknown category (38.59%), which is this case was heavily influenced by the amount of burned or melted artifacts that could not be identified.

This left the third-largest functional classification category as the best indicator of the overall site function. Although a relatively small percentage of the overall assemblage (6.21%), the personal functional classification category does include a variety of functional classification sub-categories including: clothing, footwear, adornment, body ritual and grooming, indulgences, pastimes and recreation, as well as pocket tools and accessories (Table 6.5). A diverse amount of artifact types are also included within each of these sub-categories, many of which are most prevalent or limited to the Lot 1: A and C assemblages such as differing button types, shoe buttons and glass vessels in various colors, as well as porcelain doll fragments and porcelain and glass marbles, with the personal assemblage from Lot 1: C (n=618), comprising 58.25% of the entire personal assemblage (n=1061), and Lot 1: A making up an additional 8.20% of the entire personal assemblage. Also, note that the personal assemblage is the third-largest assemblage within both Lots 1 (6.89%) and Lot 2 (4.08%) (Table 8.1), as well as Lot 1: A (Table A.1) and Lot 1: C (Table A.3), following the architecture and unknown functional classification categories.

Table 8.1: Distribution and Percentage of Artifacts based on Assemblage Type

Functional Category	**Block 4: Lot 1**	**% of Lot 1 Assemblage**	**Block 4: Lot 2**	**% of Lot 2 Assemblage**
Personal	892	6.89%	169	4.08%
Domestic	579	4.47%	165	3.99%
Architecture	5625	43.46%	2251	54.37%
Commerce & Industry	146	1.13%	16	0.38%
Group Services	575	4.44%	5	0.12%
Unknowns	5077	39.22%	1516	36.62%
Modern	50	0.39%	18	0.44%
Totals	12, 944	100.00%	4, 140	100.00%

The following functional classification category, the domestic assemblage, encompasses 4.35% of the overall assemblage, and also includes a variety of functional sub-categories as seen by the following: furnishings, housewares and appliances-culinary, housewares and appliances- gustatory, housewares and appliances-household pastimes, illumination, cleaning and maintenance-sewing, and maintenance and tools, with a diverse amount of artifact types within the assemblage such as clock pieces, a variety of ceramic wares and decorations, various utensils and glassware, metal tools, as well as reed organ fragments including various keys as well as multiples of the same key. Once again, the Lot 1 A and C assemblage included over half of the entire domestic assemblage (57.53%), with many of the artifact type only found in that location.

Group services, involved 3.80% of the overall assemblage, with 97.41% of the assemblage located in the Lot 1: A and C excavation areas. Therefore, rather than a variety of artifact types present within the group services assemblage within Lot 1: A and C, a high number of slate tablets was apparent instead. Meanwhile, the commerce and industry functional classification included 0.95% of the overall assemblage, but 81.48%

was within Lot 1: C, with zero artifacts located within Lot 1: A, and again included several functional sub-categories, with a variety of artifact types including clinkers, buckles, lead shot, glass medical vessels, and the rare presence of a coin, to name a few.

Thus, the spatial distribution in combination with the quantity and variety or diversity of artifact types in the Lot 1: A and C assemblages, seems to demonstrate, like the historic records and oral histories, the overall site function as that of a general mercantile store. The presence of a diverse set of artifact types or goods, in large quantities, from the personal, domestic, and commerce and industry functional classification categories seems to suggest a much broader overall function than a well-stocked, domestic structure or homestead, which would not typically have such large quantities of artifacts, especially in combination with such a wide-range and variety of artifact types (Middleton 1975:9). The addition of the spatial distribution or location of similar artifact types also lends support to this overall site function, with clusters of prosser buttons, shoe buttons, and ceramic sherds melted or burned together, demonstrating that these are not necessarily discarded items as a result of being lost or broken, but instead were in association at the time of the fire, potentially in boxes, drawers, or cartons ready to be sold. Due to the lack of comparative archaeological assemblages from the post-1861 flood time period at the Champoeg townsite, the overall site function of the Block 4 archaeological assemblage as a general mercantile store is also reinforced by the researcher's previous field excavations, experience, and knowledge of the archaeological assemblages from the pre-1861 flood Champoeg townsite as well as the nearby Robert Newell Homestead (35MA41).

It should also be noted, that with the site function interpreted as a general mercantile store, that the architecture assemblage may not simply be a result of the construction of the structure, but may also encompass architectural material and hardware that were for purchase. This may explain why there is such variety of artifact types that seemingly do not belong together within the architecture assemblage, including various door hardware with three different types of skeleton keys, and porcelain as well as mineral doorknobs, wrought iron meat hooks, with cast iron coat hooks, brass and ferrous metal tacks, as well as a relatively large amount of finishing nails, spikes, and screws. Finally, the date of occupation of these temporally diagnostic artifacts then suggests a general mercantile store that was in operation during the post-1861 flood time period, with the addition of historic deed records, more narrowly defining the period of occupation or operation to the 1880s.

Comparative Historical Resources

Comparative historical resources were utilized in order to research the contents and goods typically sold within rural general mercantile stores during the latter-half of the nineteenth century, with the purpose of either confirming or denying the Block 4 assemblage as representing a general mercantile store. Historic resources discussing general mercantile stores from other regions of the United States were investigated in addition to regional and local general mercantile store sources and documents in order to have a more comprehensive understanding of the potential items being imported and sold, and subsequently found within the archaeological record (Atherton 1971; Beck 1980; Carson 1965; Chapman 1993; English 2013; Hoefer-Zorn Store Daybook 1883; Johnson 1961; Orser, Jr., 2004:70;104; Vincent 1991). Additionally, historical resources

also included information regarding perishable nineteenth-century consumer goods that were not evident within the archaeological record, including the Block 4 assemblage (Orser, Jr. 2004:104; Hoskins 1985:123; Renfrew and Bahn 2008:56-61).

Overview of the General Mercantile Store

Overall, the general store often served a variety of other functions such as the local post office, bank, court of law, barber shop, stagecoach stop or livery stable, with the general store owner or merchant typically serving as the post master, banker, town clerk, and even as a fire insurance agent or Justice of the Peace due to its significance as well as its physical location typically at the intersection or crossroads of the community (Atherton 1971:16,29,163; Beck 1980:2,4-6; Carson 1965:ix; Clark 1944:32;34; Emmet and Jeuck 1950:16; English 2013:8; Johnson 1961:29,31,122; Vincent 1991). This seems to also be the case in Champoeg, with Robert Newell listed as the postmaster and also operating a general mercantile store in 1851 with his business partner, J.D. Crawford, in the townsite (Hussey 1967:206;210). In nearby Butteville, F.X. Matthieu was also running both the post office and a general mercantile store (Hussey 1967:210). During the post-1861 flood time period, Adolphe Jette' was listed as running a general mercantile store and the post office under the Champoeg name, but would have actually been in operation at Newellsville on the bluff above the townsite, near many of the occupants' residences (McKenney 2009:976 [1882]). Additionally, John Hoefer is also listed in deed records, and within the *McKenney's Pacific Coast Directory of 1883-1884*, as serving as the Justice of the Peace for the community, with an extant daybook from January 1, 1883 demonstrating his store operations as well (McKenney 2009:976 [1882]). Thus, due to its location on Block 4 within the Champoeg townsite, the Eberhard general

mercantile store would have had the sole purpose of marketing goods rather than serving as a post office or Justice of the Peace, with Elias Eberhard listed as a general merchant within the same business directory (McKenney 2009:976 [1882]).

General Mercantile Store Goods

Typically a hodgepodge of products including both necessities such as food, drugs and medicines, soaps, books, dry goods, shoes and leather goods, glassware and ceramics, hardware and farming equipment and tools as well as luxury items like spices, plush cloth, laces, ribbons, handkerchiefs, and combs, which were increasing in demand, were sold at the local, general mercantile stores (Atherton 1968:75-76, 1971:56; Beck 1980:1; Chapman 1993:32; Emmet and Jeuck 1950:15; Johnson 1961:30-31). Especially in regions of scattered populations or low purchasing power, storekeepers carried a very wide range of merchandise in order to stay in business as a result of the limited extent of the market, and as a result of the consumer's preference for a variety of goods rather than a wide choice of quality or prices (Atherton 1968:71;74). In the southern general stores, merchants' goods were typically purchased on credit or through a barter system, especially during the early nineteenth century, with farmers paying for goods with items such as furs, meats, wheat, flax, hemp, whiskey, ginseng, honey and beeswax (Atherton 1968:53; Beck 1980:2,9; Emmet and Jeuck 1950:16; English 2013:13; Johnson 1961:30; Strasser 1989:67).

French Prairie Regional General Mercantile Stores and their Goods

Prior to opening a granary/store and warehouse in Champoeg in 1844, Francis Pettygrove had already established general mercantile stores in Oregon City and Portland in 1843 (Chapman 1993:24;26; Throckmorton 1961:35;40). Pettygrove reportedly sold

buttons, wash bowls and pitchers, chamber pots, pint bowls, quart bowls, pudding pots, small round dishes, covered butter boxes, pepper boxes, glass mustards, stone bowls, mugs, creamers, sugar bowls, cups and saucers, plates sauce bowls, glass tumblers, tea kettles, tin pans, silverplate and iron table spoons, tea spoons, knives, forks, and other household items at his Oregon City store, which were imported from a New York merchant, Benson and Brothers (Chapman 1993:24; Chapman 2014:72). However, the prices of ceramic wares sold by Pettygrove were almost ten times higher than the prices for the same wares on the East Coast (Chapman 1993:35).

Also in Oregon City, Pettygrove's competitor, George Abernethy and Company, had become the largest mercantile house in the Oregon Territory by 1850, and was a wholesale distributor to the regional general mercantile stores, with Abernethy and Company receiving their goods directly from New York (Chapman 1993:36; Throckmorton 1956:230). Also in 1850, Allan, McKinley and Company, who later bought Robert Newell's grist mill at Champoeg, and opened a mercantile business in 1853 there as well, were importing "crockery and China goods" via the Sandwich Islands (Brauner 1993:50-51;56; Chapman 1993:36; Hussey 1967:219-220; Throckmorton 1956:220). However, by 1850, the growing seaport city of Portland had replaced Oregon City as the commercial center of the Oregon Territory (Chapman 1993:37).

Meanwhile, at Champoeg, Pettygrove's granary/store and warehouse had closed operations in 1848, but new general mercantile businesses had arisen in its place including Robert Newell and J.D. Crawford's general store, which opened in 1852, as well as Edouard (or Edward) Dupuis' general store, which was rebuilt in 1852, after a fire in 1851 (Chapman 1993:37). As seen within a daybook from the store in May of 1852,

Dupuis sold and imported diverse types of goods for the time period, including staples such as dry goods, as well as books, candles, nails, saddles, slate and pencils, pipes, brandy, paint, linseed oil, crosscut saws, kitchen articles and soap, horse and farm articles, ceramic wares such as cups and saucer sets, teapots, and plates, and platters (Chapman 1993:37-38). As mentioned previously, Allan, McKinley and Company also opened a mercantile store in 1853, believed to have been in the former Hudson's Bay Company location. Other merchants at Champoeg during the 1850s included Crosby and Smith in 1853, James Costello in 1854, and also listed as the postmaster in that year, as well as E. and M. Kahn also in 1854, and S. Jacobs and Company in 1857 (Chapman 1993:38; Hussey 1967:210). General mercantile stores were also in operation during the 1850s at the nearby French Prairie communities of St. Paul, Fairfield, and Butteville. F.X. Matthieu, the founder of Butteville, operated the post office and general store there, reportedly selling cup and saucers, butter plates, yellowware dishes, set plates, small plates, a dozen plates, dry goods, kitchen goods, provisions, stationary, home building products, books, medicines, and toiletries (Chapman 1993:38; Hussey 1967:210).

Additionally, after the 1861 flood, general merchandise stores were opened south of the Champoeg townsite, on high ground, known as Newellsville. By the 1880s, Both Adolphe Jette and John Hoefer are known to have sold goods at Newellsville with Jette' operating a general merchandise store as well as a saloon, and Hoefer serving as the Justice of the Peace for the community (Jette' 2010:155; McKenney 2009:976 [1882]). Due to the existence of an extant daybook from the general merchandise store that John Hoefer operated as the Justice of the Peace, accessed via the descendants of Casper Zorn,

who still live on the property that was once owned by Hoefer and Zorn, it is known that customers were specifically purchasing the following items:

> Picture frames, slate desks, writing desks, watch stands, toys and dolls, alphabet blocks, noisy balls, marbles, lead soldiers, musical tops, toy watches, playing cards, china dishes and mugs, books, primers, tool chests, trunks, folding chairs, chair rockers, bell chimes, dust pans and dusters, rubber balls, cork screws, wash sets, sprinkling cans, shoe blackening, flags, ladies satchets, scrap books, watch charms, combs, pocket combs, pocket knives, watch safes, soap sheets, bow-hair, candy boxes, mirrors, shaving mirrors, pencil cases, clothes brushes, work books, a lot of jewelry, Indian beads, cigarette lighters, cigar cases, fish lines and silk lines, fish hooks, hair oil and cologne, shaving brushes and razors, collar buttons, patent razors, knapsacks, lead pencils, harmonicas cymbal players, trumpets, violins and strings, fifes, banjos, piccolos, accordions, microscopes, work baskets, wagons, writing paper, envelopes, cigarette papers, bottle ink, Perfection tobacco, Leichter canaster, Germans, smoking tobacco, Vanity Fair cigarettes, clay pipes, wooden pipes, mouth pieces, cigar holders, pipe stems, bullion chewing, bottles snuff, one box of horseshoes, chewing tobacco, dominos, and suspenders, were all items that were purchased on January 1, 1883 based on the stock on hand (Hoefer-Zorn Daybook 1883:3-13).

These items were often sold in multiples, with sizes mentioned as lots, boxes or by the dozen. It should be noted, that the daybook includes all of the consumer's transactions that occurred on January 1, 1883, but this list is not completely exhaustive of all of the variety of goods sold that day, with the absence of some of the staple goods and ceramic wares, as well as multiple purchases, not included in the list above. However, many of these items listed and sold by John Hoefer in 1883, are similar to the variety of types included within the archaeological assemblage at Block 4, as seen within the Chapter 6: Descriptive Archaeology. Although, obviously Hoefer's daybook includes a much broader scope or understanding of the consumer's purchases, with many more items listed for purchase, including the overall quantities and perishable goods that could have also been purchased at the Eberhard store, but are not available within the extant archaeological record. Thus, the Hoefer-Zorn daybook of 1883 includes supportive

evidence that the Block 4 assemblage and overall site function, was one of a general mercantile store.

Comparative Archaeological Assemblages

Few sources were available in terms of comparative archaeological sites within the Pacific Northwest. Although some general mercantile assemblages were found, the time period, location, and/or the site type were often too different to be utilized for comparative purposes, with the 1880s general mercantile store assemblage from Block 4. For example, although the archaeological assemblage from Camp Grayling, Michigan is that of a general store, the site, which is in association with a lumber camp not a town or commercial center, dates to the early twentieth century, with the archaeological assemblage having few similarities in artifact types due to the context of the site and later time period of the overall occupation (Taylor 2001). Additionally, the Red and White General Store within Radway, Alberta, Canada, once again dated to the early twentieth century due to the areas later settlement, just beginning in the 1880s, with the initial settlers primarily Ukrainian in their ethnicity (Weizman 1985). Therefore, even though the assemblage is entirely intact, unfortunately its contents are not a useful comparative tool with the Block 4 assemblage and its context. In the end, this suggests that the Block 4 archaeological assemblage is one of the only sites in the region, of this type and from this time period to have been excavated.

However, the archaeological site that seemed to yield the most information, in terms of comparison, and potentially confirming the Block 4 assemblage as a late nineteenth-century general mercantile store, was the Bill Wilson store, excavated in 1972

and 1973, by William Adams, and located within the rural community of Silcott, Washington. The general mercantile store did operate in the town within the early twentieth century, rather than the latter-half of the nineteenth century, so the specific artifact types were not necessarily the same as the Block 4 assemblage, but unlike the Camp Grayling site, the overall functional classification categories were similar. It should also be noted, that the Silcott general store did serve as both a store, and a residence for the owner, Bill Wilson, as did many general stores during this time period, and it is entirely possible that the Eberhard store also included a domestic residence above the store itself, which cannot necessarily be identified outside of the overall site function (Adams et al. 1975:18). However, William H. Adams et al. (1975:18) point out the value in this archaeological assemblage: "ideally the material recovered archaeological represents different, but complementary sets of data: products sold by the store and products used by the store's most privileged consumer". Thus, it "would ideally provide an idea of the variety of cultural materials available to the community", as well as the community's needs, preferences, and purchase power (Adams 1976:29).

Bill Wilson's store operated from 1909 until 1928, due to a fire, and consisted of three buildings, a dance hall, store, and saloon (Adams et al. 1975:18; Adams 1976:20). Most of the store's business was with the orchard workers, buying a general line of merchandise, with residents utilizing the store for local convenience, with larger purchases made in distant Lewiston (Adams et al. 1975:18). Archaeological excavations in 1973 and 1974 located a large trash midden and root cellars, with an outhouse pit, trash deposit, and a fenceline (Adams et al. 1975:24). Thus, the features at the site differed from those at Block 4, but in terms of the archaeological assemblage and the artifact

types present, similarities were apparent, with medicine and alcohol bottles, tumblers, nails, ceramic plates, saucers, cups, and bowls, clock, buttons, pocket knife, oil lamp, shoes and tin cans present (Adams 1976:42;45; Adams et al. 1975:27;32; 110-162). Diagnostic artifacts that were introduced and popular within the twentieth century, rather than the nineteenth century, were obviously present at the store site due to its years of operation, and included a 1914 calendar, company branded buttons, a phonograph record, beer and pop bottles, meat, sardine, and evaporated milk cans were also available at this site though (Adams 1976:41;49; Adams et al. 1975:32). Two thousand artifacts were found within the store assemblage, and similarly to the Block 4 assemblage, the majority of the artifacts were architecture related (Adams 1976:11;32). Since these architecture related artifacts do not elaborate on the overall function of the site, Adams (1976) investigated a variety of personal items including clothing, footwear, and indulgences, as well as body ritual and grooming and medicine. Domestic artifacts such as food stuffs as well as gustatory and culinary glass and ceramic artifacts were also examined (Adams 1976:50-64). Based on the fact that Bill Wilson and his wife not only operated the general store, but also resided there, the overall conclusion regarding the function of the site was as a domestic site, but one where the occupant had greater purchase power than the other consumers in the area (Adams 1976:51). Yet, due to the fact that both of these sites are known to be general mercantile stores, and both are in rural communities within the Pacific Northwest, with similar functional artifact assemblages, even though they are temporally different, it seems reasonable to suggest that the Bill Wilson general store assemblage in Silcott, Washington provides further evidence that the Block 4 assemblage also functioned as a general mercantile store.

Conclusion

It is the spatial distribution, together with the quantity and variety or diversity of the artifact types, especially within the personal, domestic, commerce and industry, and architecture functional classification categories, that truly distinguishes the Block 4: Lot 1: A and C assemblages from a domestic structure, and suggests that it is a general mercantile store. These goods are similar to those found within the secondary sources regarding contemporaneous general mercantile stores and their supplies being sold, as well as within a contemporaneous local primary source, the extant daybook from Newellsville. Additionally, although limited, the comparative archaeological assemblage from an early twentieth century, rural general mercantile store in Idaho, also contains similar goods and quantities, once again suggesting the overall site function of Block 4 as a general mercantile store. Thus, after the exploration of and analysis of the archaeological and historical record within this research study, the oral traditions do seem to be correct, with a general mercantile store, operating during the 1880s, located in Block 4, Lot 1 at the corner of Montcalm and Longtain streets.

Chapter 9: Nineteenth-Century Consumption and Transportation Transformations

Culture, Consumption and Retailing in the United States during the late Nineteenth-Century

"Consumption is shaped, driven and constrained at every point by cultural considerations" (McCracken 1988:xi). Consumption, defined by Consumer Studies professor, Grant McCracken (1988:xi), as the "processes by which consumer goods and services are created, bought and used," is then inextricably linked, especially within today's modern world, with culture or the "ideas and activities with which we construe and construct our world". Consumer goods can then be best described as the instruments which physically reflect, carry and express the relationship between consumption and the cultural meanings, categories and principles of the culturally-constituted world, representing the "world of everyday experience in which the phenomenal world presents itself to the individual's senses fully shaped and constituted by the beliefs and assumptions of his or her culture" (English 2013:11; McCracken 1986:71-72, 1988:xi). Selected cultural meanings from the culturally-constituted world are transferred to the consumer good or object by means of representation via advertisements as well as product designs included within fashion systems, and in turn, cultural meanings are then transferred from the consumer good to the individual consumer via consumer rituals (Douglas and Isherwood 1996:43; McCracken 1986:71;81). Therefore, the significance of consumer goods goes beyond that of their utilitarian character and commercial value, but rather is a result of their role within the consumption process, which includes their

potential to demonstrate the selection, choice and behavior of the consumer as well as the ability of consumer goods to physically reflect cultural meanings and "cultivate ideals, create and sustain lifestyles and construct notions of self and create (and survive) social change" (Douglas and Isherwood 1996:36;45; McCracken 1986:71, 1988:xi; Orser, Jr., 2004:110). In fact, McCracken (1988:10) argues "It is precisely as expressions, creators, and innovators of a range of cultural meaning that goods have contributed to the rise of the modern West". As a result, a modern society left without consumer goods would no longer have the proper and adequate instruments in which to visibly represent as well as actively reproduce, structure and manipulate culture (Douglas and Isherwood 1996:44-45;49; McCracken 1988:xi).

Historical Development and Qualities associated with Consumption and Retailing

The development of modern consumption processes and practices, within the modern West, can be recognized as stemming from several centuries of dramatic and ongoing social, economic, and cultural changes (McCracken 1988:3;22). The historical development of consumption processes and practices including the ongoing social, economic and cultural shifts and transitions can then best be recognized via the varying forms, in association with the potential cultural meanings, of the consumer goods, as well as the consumption institutions or retail locations in which consumer goods were presented, sold, distributed to and selected by the consumers (Carson 1965:xi; Douglas and Isherwood 1996:37,39; English 2013;11,13; McCracken 1988:10). During the eighteenth- and nineteenth- centuries these retail institutions would have primarily been local general stores, with the individual retail stores as well as the consumer goods or objects within the stores, each carrying their own long histories of development and

cultural meanings from both their past and present forms (Carson 1965:ix-x; English 2013:13).

The Role of the General Mercantile Store in the United States during the Nineteenth Century

The first half of the nineteenth century saw the rise of the general mercantile store, a purely American enterprise which had been established during the late eighteenth century in order to "meet the raw conditions of [the] new continent," and its unique development and continuous westward frontier expansion throughout the second half of the nineteenth century (Atherton 1971:9,14; Carson 1965:ix-x; Johnson 1961:95). Therefore, due to the rural nature of the ever expanding United States, general mercantile stores became important institutions within the history of the development of the United States, surpassing their role as just a "place where things were sold", but also representing a social center or gathering place, uniting the often scattered country farms and people from vastly different backgrounds into communities or neighborhoods (Atherton 1971:15-16; Beck 1980:2; Carson 1965:ix,xi; Emmet and Jeuck 1950:16; English 2013:14; Gordon 2016:29; Gray and Levis 1989; Johnson 1961:31,95). The general store owner was then recognized as an important personality and leader within the community due to the significance of his place of business, and was typically regarded as a well-travelled, well-informed and well-read individual one could turn to for advice (Atherton 1971:13-14; Beck 1980:2,15,17; Carson 1965:ix; Emmet and Jeuck 1950: 16; English 2013:32; Johnson 1961:122; Strasser 1989:67).

Put simply, 'The old general store was a way of life' (Beck 1980:1). The store front façades were distinctive, including four posts which supported an overhang porch or storage area, and was a consistent and traditional characteristic of the rural general store

(Beck 1980:4; Clark 1944:40; English 2013:8; Vincent 1991). Within these general mercantile stores the rural consumer could view, select and purchase both staple goods such as tobacco, flour, coffee, salt, potatoes and domestic fabrics like flax and wool as well as an increasing array of specialty and luxury goods like imported spices, coffee, tea, produce and fabrics (Atherton 1971:29; Beck 1980:2,5; Carson 1965:189,201; Clark 1944:41; Emmet and Jeuck 1950:15; English 2013:13-14; Gray and Levis 1989; Johnson 1961:28,118). Furthermore, the local general store united the typically unknown or ordinary rural consumers, and provided them a location or institution to not only acquire these material items, but to also socialize, gossip and discuss the news including topics such as politics and hunting (Bronner 1989:372; Beck 1980:19; Emmet and Jeuck 1950:16; English 2013:13; Gray and Levis 1989).

Consumption and Retailing Transformations in the United States during the late Nineteenth Century

However, with the end of the Civil War during the mid-1860s, the latter-half of the nineteenth century drew witness to dramatic transformations across the United States in terms of politics, demographics and economics, especially in terms of retailing as well as consumption processes and practices, evident via historical records in addition to the physical properties of the consumer goods (Atherton 1971:164; English 2013:11; McCracken 1986;77; 1988:22; Strasser 1989:5). As a result, by the late nineteenth century and early twentieth century, or the period known as the 'Gilded Age,' the significance of the general mercantile store as a gathering place as well as the primary location of consumption and culture for consumers across the largely rural, United States began to decline due to an increase in growth, competition and specialization (Atherton 1971:41; English 2013:15,19,49; Schlereth 1991:xi). This growth, competition, and

specialization in consumption patterns was characterized by a number of factors including the arrival of the department store, which largely affected urban elite and middle-class consumers, in addition to the creation and dispersal of mail-order catalogues, which actually brought goods to the rural consumers (Atherton 1971:41; Gray and Levis 1989; Hollitz 1981:30; McCracken 1988:27; Schlereth 1980:49).

Shifts in Consumer Goods and Preferences

In response to the Civil War and the need to supply goods to each individual soldier, new machinery was developed in order for factories to begin packaging goods in smaller quantities (Johnson 1961:95; Strasser 1989:19,32). Thus, the introduction of new machinery like the paper bag machine, developed in 1852, and the later development of carton or box packaging influenced the production, standardization, distribution as well as the size and quantities of consumer goods (Beck 1980:32; Johnson 1961:32:95). This shift from bulk storage and purchases to individual packaging led to a historical change in consumption and merchandising methods, with consumers in the latter-half of the nineteenth century gradually demonstrating a preference for goods purchased in smaller quantities or in individually packaged units (Beck 1980:32; Bronner 1989:354; Carson 1965:268-269; Johnson 1961:95). Clearly, the general store was profoundly impacted by this shift in consumer preference and gradually made the shift from barrel to carton during the latter-half of the nineteenth century into the early twentieth century, but as the number of barrels, as well as the sale transaction and interaction time with the merchant was reduced, the qualities that had made general mercantile store a unique American entity began to be lost, and in its place was the more modern department store and the more accessible mail-order catalogue (Carson 1965:269,272; Johnson 1961:30-33,95;

Strasser 1989:29). Yet, it should be kept in mind that these technological innovations and shifts in consumption and consumer behavior would not have been able to reach all areas of rural America at the same time (Carson 1965:198; Strasser 1989:18).

Influence of the Department Store

Due to the striking transitions in consumption, culture and demographic patterns involving workplaces, housing, eating, drinking and recreational preferences, Economic Historians typically regard the period from the Civil War to World War I as the "Age of Modernization" (Schlereth 1991:xii). During the nineteenth century, the department store was a primary institution that featured the combination of consumption and culture through the constant contact between consumption and social change (Hower 1946:146; McCracken 1988: 27). In particular, department stores led to shifts in preference for consumption locations, goods and behavior, especially in terms of the interaction between the consumer and the goods (McCracken 1988:22;26,29). In fact, McCracken (1986:78, 1988:26, 29) argues that department stores were responsible for helping create the cultural meaning that goods carried, and even manipulated these potential cultural meanings, obvious and hidden, through the symbolic properties of the goods. The changes in consumption and cultural preferences or lifestyles could then be seen in the changes in stock (Beck 1980:33; Chaney 1983:30).

In terms of the quality and quantity of the goods themselves, the consumer was no longer limited to simply purchasing the necessities or the luxury items selected by their local general store merchant, and items were no longer purchased in terms of a barter system, instead the organized department stores specified set prices, which required little interaction between the consumer and the merchant or seller (Chaney 1983:22; Gray and

Levis 1989; McCracken 1988:26; Strasser 1989:204). In addition, department stores were influenced by the world expositions of the time period such as the Philadelphia Centennial of 1876 which provided the ultimate “dream world of mass consumption” and purchase possibilities, with the consumer goods symbolically reflecting both personal and collective ideals (Schlereth 1991:3; McCracken 1988:xv, 26). Thus, the department store provided a new environment, one that was orderly and impersonal, but yet evoked a sense of freedom to the consumer, who could shop and purchase a multitude of material goods and objects (Chaney 1983:22,27; McCracken 1988:25-26; Schlereth 1991:3). However, the department store did not remain as a static entity, instead as a result of the shifts in consumption patterns and preferences that it actually introduced to the consumer, the department store itself continued to change and evolve (McCracken 1988:22).

Influence of New Technology

However, the transitions in consumption and cultural tastes and preferences during the latter-half of the nineteenth century would not have been possible without the incredible transformations in technology, mobility, and communication that also occurred during the “Age of Modernization” (Greene 2008:5; Schlereth 1991:xii). These inventions included kerosene lighting, the elevator, telegraph, telephone, and the typewriter (Bronner 1989:342; Carson 1965:188; Gordon 2016:4; Schlereth 1991:xii). In particular, the invention of the typewriter and steam press with stereotypes had a pronounced effect on the availability and distribution of different types of printed works, helping lead to the creation of printed almanacs, recipe books, various types of magazines as well as daily metropolitan and weekly country newspapers, along with the mail-order catalogue (Carson 1965:267; Schlereth 1991:xii).

Influence of Mail-Order Catalogues

Similarly to the general mercantile store, the mail-order catalogue industry was a uniquely American "method of merchandising that distributed goods to consumers upon receipt of orders placed not in person, but by mail after they examined a catalogue that lists the products for sale and that delivers the goods to the customers by some established shipping service such as express, freight or post" (Gray and Levis 1989; Schlereth 1980:48-49). In 1872, Aaron Montgomery Ward of Chicago was the first to mass-produce a mail-order catalogue on a grand-scale, which sought out the isolated, rural consumer (Bronner 1989:364-365; Emmet and Jeuck 1950:2; Gordon 2016:63; Hollitz 1981:25; Strasser 1989:64). Sears Roebuck and Company, also of Chicago, followed suit and began distributing mail-order catalogues in 1893 (Bronner 1989:365; Emmet and Jeuck 1950:36; Gray and Levis 1989; Hollitz 1981:25; Orser Jr. 2004:104). The Sears Roebuck catalogue in particular was noted for its attention-grabbing advertisements, which were all written and drawn by Richard Sears himself, in a manner that seemingly appealed to the literate rural consumers due to the catalogues designation as the "Farmer's Bible" in addition to the company's reputation as the "largest retail empire in the world" during the time period (Bronner 1989:364-365; Gray and Levis 1989).

The mail-order catalogue offered a diverse amount of goods including both staple goods and necessities in addition to new items such as the increasingly popular bicycle, and for the rural female consumer, paper dress patterns, patented in 1864, and relatively affordable sewing machines, introduced in 1871 (Gordon 2016:63; Gray & Levis 1989;

Johnson 1961:120). Thus, just as the changes in consumption and cultural preferences or lifestyles could be seen in reference to the changes in department store stocks, similarly the advertisements and goods being sold within the pages of the mail-order catalogues are then acknowledged as representing the cultural trends of the time period (Beck 1980:33; Schlereth 1980:55). Additionally, the mail-order catalogue was particularly appealing to the rural consumer because it cut out the middleman or general store merchant that charged at a profit, and consequently, reduced the cost of many goods (Johnson 1961:29). With the introduction of Rural Free Delivery in 1896, the rural farmer was no longer even required to visit the general store in order to pick up their mail, which had a resonating and lasting impact on the social organization of rural communities (Bronner 1989:341,369; Gordon 2016:137; Gray and Levis 1989). Thus, where the department store had significantly transformed the consumption patterns and cultural preferences within cities, the mail-order catalogue had a similar, if not greater, influence within rural communities; and as a result, had a pronounced effect on the viability of the already struggling general mercantile stores (Schlereth 1980:48; Gray and Levis 1989; Hollitz 1981:25-26).

Influence of Advertisements

Historical sources, especially magazines, newspapers and directories, included the initially urban, but completely revolutionary, phenomena of advertisements (Chaney 1983:23; Orser Jr. 2004:104; Strasser 1989:90). Advertisements came in a variety of forms, from the trademarks and brand names on individual packages to printed works in magazines and newspapers as well as the mail-order catalogue as a whole (Atherton 1971:63-67; Carson 1965:165-166; Johnson 1961:96; Orser Jr. 2004:103-104; Schlereth

1980:50; Strasser 1989:28). Each of the advertisements included inventive, attention-grabbing text and images, providing valuable information such as prices, market availability and trade information and distribution to the nineteenth-century consumer, and today's researcher (Atherton 1971:67; Orser Jr. 2004:104-107; Schlereth 1980:55).

According to McCracken (1986:72,75), advertisements served as instruments for the transfer of meaning from the culturally-constituted world to the consumer good itself. Thus, when a consumer selects and purchases an object after viewing an advertisement in a catalogue or magazine, the cultural meaning, and associated cultural categories such as class, status, gender, that are portrayed or envisioned in the advertisement whether consciously or unconsciously acknowledged by the consumer, can now be seen to be physically represented in the consumer good (Douglas and Isherwood 1996:50; McCracken 1986:75-79). For example, Sears Roebuck and Company would advertise their goods as the highest quality, but at the lowest costs, suggesting to the rural consumer that an object purchased through Sears Roebuck and Company, although relatively cheap, would still demonstrate the selected cultural categories, in this case high class and status to those around him. Therefore, making it the best option on the market in the eyes of the consumer, and perpetuating the transfer of cultural meaning and cultural categories to the goods themselves (Douglas and Isherwood 1996:38,50; McCracken 1986:72-75, 1988:x; Gray and Levis 1989).

Other types of instruments for cultural meaning transfers such as production designs within fashion systems as well as consumer rituals like exchange, possession, grooming and divestment were also depicted via advertisements included within early magazines such as *Harper's Bazar* and *Godey's Lady Book* (1830-1898) as well as daily

metropolitan newspapers (Atherton 1971; English 2013; McCracken 1986:78-80; Schlereth 1980:55; Strasser 1989:91). Therefore, advertisements can be seen as the avenues in which cultural meanings and cultural categories such as class, status, gender, age, occupation and lifestyle of the individual, as well as cultural trends on a larger-scale, were transferred from the conceptual world to the consumer via the acquisition and purchase of various types of consumer goods (McCracken 1986:75,79). As a result, advertisements were heavily responsible for the drastic alterations in American culture, especially in terms of consumption preferences and tastes due to the cultural ideals and meanings that they transferred (McCracken 1986:75-79; Orser Jr. 2004:104). For example, the next new and revolutionary innovations such as bicycles and kerosene lanterns were first seen and described in advertisements, in which the "need" and desire for the consumer to purchase such an object was visibly expressed (Carson 1965:188; English 2013:49; Johnson 1961:31,108; Orser 2004:111). Thus, the "consumer revolution" or the transition from a cultural orientation of production to one of consumption and ultimately, the 'Great Transformation of the West' was executed via instruments of meaning transfers such as advertising, fashion systems and consumer rituals which became embedded, structural features of society during this time period (Bronner 1989:2-4; McCracken 1988:22; Strasser 1989:18).

Transformations in Transportation within the United States during the late Nineteenth Century

As mentioned previously, without the accompaniment of technological innovations, which sought to dramatically enhance communication and trade across the country including into the rather isolated western frontier, the impact of these newly established retail institutions and merchandising methods would not have had as

profound an effect on the consumption processes and practices and the consumer goods, noted above, during the nineteenth century (Atherton 1971:163; Bronner 1989:344; Carson 1965:165-166; Chaney 1983:23; Gordon 2016:204; Gray and Levis 1989; Greene 2008:5; Schlereth 1991:xii). In terms of transportation transformations, canals including the well-known Erie Canal were built first, and aimed at improving river transportation in order to more quickly and easily connect the city markets to the country farms via steamship, rather than by stagecoach (Atherton 1971:68,83,163; Carson 1965:165,191; Dayton 1925:337-338; Gordon 2016:4; Greene 2008:1). On a broader scale, in 1848, the Panama route, which connected the Eastern seaboard, with departure points at New York and New Orleans, to San Francisco via the Panama Isthmus, cut short the six month journey around Cape Horn or the arduous overland journey, to approximately 33-35 days, and as short as two weeks by 1865 (Chapman 2014:73; Kemble 1972:7;33;148; Throckmorton 1961:110). This was a vital transportation route, increasing communication by carrying mail, newspapers, and express freight across the United States much faster than ever before (Kemble 1972:1). With the introduction of the Panama route, mail was delivered back and forth from each coast, Charleston, South Carolina to Astoria, Oregon, by at least every two months (Hafen 1969:38). In addition to mail, a total of 372,615 passengers, including the Eberhard family, came West via this route until its closure in 1869, with the opening of the transcontinental railroad (Fout and Kittel 1983:vi-vii; Kemble 1972:254; Throckmorton 1961:111).

Thus, with the development and rapid expansion of the railroad system from the 1850s onward, transportation was tremendously improved in terms of efficiency, reliability, speed as well as cost, with the now more risky and costly steamboats no

longer the dominant means of shipping consumer goods (Atherton 1971:95,98; Beck 1980:3; Carson 1965:165-166, 213, 267; Chaney 1983:26; Gordon 2016:4,48-49). In fact, transportation improvements increased so dramatically that by 1871 consumer goods could reach the opposite coast of the United States within forty-eight hours (Carson 1965:169). In the rural American West, two types of urban places developed generally as a result of the expansion of the railroad, and included the growth of market centers, as well as the establishment of new railroad towns or central points on the railroad tracks, located at eight-mile increments in order to ensure that farmers would be able to access the railroads and sell their goods, and often owed their prosperity to the railroad, in addition to their associated location to the roundhouses and shops within the towns (Cronon 1991:74-79; Schwantes 1989:159; White 2012:xxix;140;144; 155). It should be noted, that often traveling alongside the consumer goods on the expanded railroad lines were the increasingly popular traveling salesmen or drummers; which when coinciding with the development of the mail-order catalogue, the reduction in mail costs, and the later establishment of Rural Free Delivery as well as the westward expansion of wholesale stores into the Midwestern states and territories, negatively impacted the role and success of the general mercantile stores within the rural towns of the American West (Atherton 1971:61,65,95-98; Beck 1980:3; Bronner 1989:360; Carson 1965:165-166; Gray and Levis 1989; Johnson 1961:30,85; 122; Strasser 1989:19-21,59).

Additionally, the expansion of the railroads reshaped how Americans viewed both time and space, adopting standard time zones in 1883, in order to create tight time schedules for farmers trying to sell their goods on a larger market (Cronon 1991:74-79; Schwantes 1989:159; White 2012:xxix;140;144). Thus, the extension of the rails during

the nineteenth century rapidly transformed the American West into a national as well as a dominant world, and represented the epitome of the modern world during the time period, demonstrating the rapid change in technology, from muscle, both human and animal drive, to wind power, steam power, and eventually, to fossil fuels and the development of the railroad (Jackson 2005:1-2; Shwantes 1989:148-150; White 2012:507). Thus, the transcontinental railroad had a profound and transformative effect on the landscape of the American West, as well as American society, through its representation of progress, nationalism and modernity (Cronon 1991:66-68; Jackson 2005:1,70; Robbins 1997:110-111; Schwantes 1989:141;148; White 2012:xxi; 507). Additionally, historian, Susan Strasser (1989:5) states that within an eighty-year time span (1860-1940), the United States had completely transformed from an agricultural to an industrial society, with technological innovations and organizational systems for production and distribution of goods reaching clear across the country.

Transformations in Consumption and Transportation within Oregon during the late Nineteenth Century

Oregon's growth during the 1850s and 1860s was primarily a result of the shifts and improvements in communication and transportation during the time period, with these enhancements influenced by the discovery of gold in California during the late 1840s and then in Idaho and Eastern Oregon during the early 1860s (Scott 1917:246-248; Smith 2011:88; Throckmorton 1961:107). As mentioned previously, the introduction of the Panama route in 1848, led to a much quicker trip for mail, freight, as well as passengers, departing for San Francisco, and resulted in better communication between the two coasts of the United States afterwards (Kemble 1972:1;33; Throckmorton 1961:110). The subsequent addition of steamboats and sailing vessels between San

Francisco and the Willamette River, then connected Oregon with the Panama route, and in turn, the East coast, broadening the horizons of the available goods and markets available to the rural, Oregon store owner and consumer (Dayton 1925:ix; Throckmorton 1961:107). With the improved transportation lines in and out of the region, sources of supplies became more regular and dependable, but as a result, merchandising in the region did become more competitive, and the rural general mercantile store began its long road to decline (Atherton 1971:61,65,95-98; Beck 1980:3; Bronner 1989:360; Carson 1965:165-166,188; Gray and Levis 1989; Johnson 1961:30,85; 122; Strasser 1989:19-21,59; Throckmorton 1961:229).

Within Oregon, the Willamette River was the primary line of transportation and communication, and prior to the introduction of the steamboat during the 1850s, keelboats, canoes, rafts, scows, and bateauxs, were the primary modes of transport, with Champoeg as the head of navigation (Corning 1947:24; Dayton 1925:x;333; Smith 2011:39;78; Throckmorton 1956:ii;219, 1961:121;205). With the arrival of the steamboat, with entry to the Upper Willamette River past Champoeg to Corvallis in 1851, greater connections and commerce between the river towns was possible, as was access to the larger commerce centers of Portland to the north, as well as San Francisco, and cities on the East Coast (Kuhlken 2003:19; Smith 2011:14;81; Throckmorton 1961:121; 205). Furthermore, by 1856, steamboats on the Willamette River could reach the city of Eugene, the natural head of navigation (Throckmorton 1956:219, 1961: 205).

A firsthand account from Mrs. S.A. Clarke illustrates travel by steamboat along the Willamette River during the 1850s:

> I was making a journey from Portland to Salem and had to stop at Champoeg overnight. We took the steamer *Canemah* at Oregon City, and after voyaging on

> the lower and upper river, as well as making the portage at the falls, reached Champoeg towards evening. Boating on the river above there was prohibited, as the river was too low. From Champoeg we went by stage to Salem…(Atherton 1973:3).

The discovery of gold in Idaho and Eastern Oregon during the early 1860s led to improvements in the road systems and the expansion of stagecoach and express businesses in these areas, with the California Stage Company extending their stage line and overland mail service to the Willamette Valley in 1860 (Kuhlken 2003:20; Throckmorton 1961:295). However, the invention of the telegraph in the early 1860s quickly challenged the stage coach companies, dramatically reducing communication time, with an east to west telegraph line in San Francisco in 1861, and the Oregon Telegraph Company established in Portland in 1862 (Gordon 2016:49; Throckmorton 1961:299). Thus, by the end of the 1860s, the Willamette Valley, and Oregon as a whole, had dramatically transformed (Smith 2011:76; Throckmorton 1961:309).

The introduction of the railroad to the Willamette Valley in 1868, reaching as far as Eugene in 1870 and Roseburg in 1872, marked the beginning of a new era of trade and transportation in the region (Chappel 1992:8; Oregon SOS 2019; Throckmorton 1961:309; 314). The arrival of the railroads helped boost wheat production in the Valley in 1870 because more equipment had been shipped to the region as a result of the more efficient transportation routes, which also allowed for faster and easier shipping of the wheat itself (Corning 1947:21; Oregon SOS 2019; Prescott 2007:96). In addition, by the 1880s, the telegraph and telephone had reached the Valley, as well as the distribution of mail-order catalogues, magazines, and newspapers (Dodge 1983-1984:87; Prescott 2007:11; Smith 2011:18). Therefore, Western Oregon would have been accessible to receive the entire influx of new cultural trends sweeping the United States during the

latter-half of the nineteenth century including new consumer goods (McCracken 1988:37; Schwantes 1989:148; Strasser 1989:18). Thus, the following decade of the 1880s grew to be the most formative period within the Pacific Northwest, leading to incredible commercial and urban development (Schwantes 1989:148;163).

Yet, while some market centers like Salem and Portland prospered as a result of the introduction of the railroad, townsites located along the previous thoroughfares, the rivers, which were dependent on steamboat freight and passengers, saw economic declines (Black 1942:46; Corning 1947:21; Schlereth 1991:xii,7). Small towns such as Eola, Lafayette, Fairfield, and Lincoln, Oregon, as well as Champoeg, instead felt the economic repercussions of the reduction in river steamboat shipments, and the necessity for these shipping points along the river declined (Black 1942:46; Smith 2011:14-15; Snyder 2008c:4; Vincent 1991). Other towns within French Prairie like Newellsville and St. Paul, which were not completely dependent on the rivers, also waned, simply as a result of being bypassed by the railroad and its associated commerce (Black 1942:49; Chappel 1992:8). Meanwhile, new locomotive service stops such as Silverton and Hubbard, located along the rail lines, rose as nodal market centers, leading to greater town concentrations and connections, and forever altering the settlement patterns of the region and shifting the corridor of commerce away from the rivers (Black 1942:46;51; Corning 1947:1; 21; Kuhlken 2003:21; Murphy 2008:269 [1873]; Schwantes 1989:160). So, although not all communities or even businesses, such as the rural general mercantile store, seemingly benefited from the technological and transportation developments of the latter nineteenth century, it cannot be denied that these transformations had a pronounced

and lasting effect on the country, remarkably impacting and accelerating the mobility, movement and migration of all Americans (Schlereth 1991:xii,7).

Additionally, these transportation and communication improvements included the closure of the Panama route, as a result of the completion and absolute adoption of services by the transcontinental railroad in 1869 (Gordon 2016:30; Kemble 1972:254; Throckmorton 1961:111). Additionally, although the opening of the rail lines, with the transcontinetal connection made to California in 1887, led to easier access to Eastern markets, it also led to more competition for the wheat farmers in the fertile Willamette Valley (Corning 1947:22; Kuhlken 2003:21; Murphy 2008:191 [1873]; Oregon SOS 2019; Prescott 2007:52; Wilentz 1997:5). Therefore, in order to diversify their market, new cash crops were adopted in the region by the end of nineteenth century, including berries and hops, as well as dairy products and fruits and vegetables for those farmers located close to urban markets (Prescott 2007:52). Thus, as a result of the technological, transportation and communication improvements and expansion during the late nineteenth century, shifts in politics, demographics and economics including consumption and retailing changes occurred (Wilentz 1997:10).

In conclusion, the latter-half of the nineteenth century has been given a number of titles including the “Reconstruction Era,” “Gilded Age,” “Consumer Revolution,” “Age of Modernization,” and “Great Transformation of the West,” among others (Bronner 1989:2-4; English 2013:20,49; McCracken 1988:22; Schlereth 1991:xi-xii). Yet, among these different names lies one underlying concept, which infiltrated all aspects of American culture and the culturally-constituted world, the belief in and desire for progress (English 2013:49; McCracken 1986:72). It is then the belief in and desire for

continual progress which was responsible for the shifts in politics, demographics and economics, and included technological innovations, transportation and communication inventions as well as consumption and retailing changes, that completely infiltrated and altered American cultural values and perceptions forever (Atherton 1971:164; English 2013:49; McCracken 1988:3; Orser, Jr. 2004:111; Schlereth 1991:xii; Strasser 1989:5). Furthermore, due to the increase in the availability and affordability of a diverse array of goods, both necessities and luxury items, it is not a surprising that consumption processes and practices were to be altered so dramatically during the latter-half of the nineteenth century (Atherton 1971:56; Beck 1980:2,32; Gray and Levis 1989; Prescott 2007:11). However, as noted previously, the decline of the rural general mercantile store did not happen overnight, but was in fact the result of a the lengthy progression, development and expansion of a combination of factors including technology, transportation and communication improvements, which coincided with shifts in cultural preferences and attitudes; and ultimately consumption processes, practices and consumer choices and behavior (Atherton 1971:61,65,95-98; Beck 1980:3; Bronner 1989:360; Carson 1965:165-166,188; Gray and Levis 1989; Johnson 1961:30,85; 122; Strasser 1989:19-21,59).

Nineteenth Century Consumption and Transportation Transformations at Block 4

In order to better understand the consumption, culture and retailing processes and practices occurring at the Champoeg townsite during the latter-half of the nineteenth century, the functionally-identified general mercantile store assemblage from Block 4 including the consumer goods themselves, were analyzed. According to William Adams (1977:29), the archaeological assemblage of a general mercantile store is ideal for

providing an idea of the variety of materials goods available to a community, as well as the community's needs and preferences, since the general mercantile store would have served as the social and economic center within rural communities, uniting the scattered and diverse farms around the area (Atherton 1971:15-16; Johnson 1961:31,95).

Each rural retail or general mercantile store would have been unique in terms of supplying and serving differing local economies and communities (Carson 1965:xi; English 2013:14). Yet, at the same time, the general stores during this time period, were all essentially similar; recognized as the social center or central nervous system of a community or neighborhood and supplying the same typical consumer goods and services to the notably, geographically-diverse, rural consumers of all classes, races and genders (Atherton 1971:14; Carson 1965:ix;xi; English 2013:14). This has led American historian and folklorist, Gerald Carson (1965:xi), to conclude that there was "unity within diversity" in regards to the culture and consumption associated with the American general mercantile store of the nineteenth-century time period. Thus, when researching aspects of consumption, including the potential imported goods and commercial demands of the regional or local residents as well as shifts in consumption patterns, practices, and trends, general mercantile store assemblage's are seemingly the best data set for analysis.

However, the addition of primary sources or historical documents associated with the nineteenth-century general mercantile stores, if available, can also help inform the researcher about the consumer goods advertised, purchased and selected by the local consumers, and the potential cultural influence and meaning associated with the acquisition of these selected goods (English 2013:3,8; McCracken 1986:71, 1988:xi; Orser, Jr. 2004:106-107; Schlereth 1980:55). Sources such as store ledgers included

information regarding the consumer goods such as clothing, food, jewelry that were available, preferred, selected and purchased for use, consumption, display or simply as an expression of cultural meaning and also include information regarding the broader cultural trends, preferences and patterns of the time and place (English 2013:8,11; McCracken 1986:78, 1988:3; Orser, Jr. 2004:103). They feature a complex web of relationships between the general store owner and merchant and the diverse group of consumers in which he interacted with and sold goods to on a daily basis (English 2013:3,14). Therefore, on a small scale, the general store ledger demonstrates each consumers' preferences, in terms of the goods available at the local general store, but on a grander scale it also illustrates the local economy and shifts in consumption patterns including consumers' tastes and buying habits that occurred throughout the "Age of Modernization" (English 2013:14; McCracken 1988:3; Schlereth 1991:xii). Therefore, due to the existence of and access to the extant daybook for John Hoefer's Justice of the Peace and store operations at Newellsville on January 1, 1883, comparisons between the 1880s general mercantile store artifact assemblage at Block 4 within the Champoeg townsite and contemporaneous store operations just up the hill at John Hoefer's store can be completed in order to have a broader understanding of the consumer goods available and imported to the area, as well as the goods that were in higher demand by the local consumers, potentially illustrating the shifts in consumption and consumer preference, and transportation due to the progression of the "Age of Modernization".

Shifts in Consumer Preference

Deborah J. Hoskins (1985:123) states that the cultural and technological changes that occurred during the last decades of the nineteenth century, dictated new definitions

for “necessary” goods, with the number and variety of status-objects growing during this time period. Thus, consumption became public, with the consumer goods of the nineteenth century representing a new opportunity for defining oneself and the world due to the application of cultural meanings to consumer goods through person-object relations, with status-object goods in particular, “tell[ing] us not who we are, but who we wish we were” (Douglas and Isherwood 1996:43-45; English 2013:14; McCracken 1986:71,77, 1988:x;23-24;117;Strasser 1989:5). In the end, these shifts in consumer preferences and material cultural representations can then be viewed or substantiated through the material goods available to, selected and purchased by the consumer, which as mentioned previously, would ideally include a general mercantile store artifact assemblage as well as primary store ledgers or daybooks with descriptive inventories (Adams 1976:29; Beck 1980:33; Chaney 1983:30; McCracken 1986:78-80).

Consumer Goods at Block 4

As mentioned previously, status-objects were often purchased with public display in mind, and adorned the public space of the home, typically the parlor, which was present even within frontier homes. Pianos were one of these status-objects which could be found in the parlor, but organs, such as the reed or pump organ fragments found within the Block 4 assemblage, were actually more common because they were less expensive, but still illustrated the high culture and status of the family with its presence (English 2013:86). The presence of additional musical instruments including cymbal players, snare drums, violins and strings, harmonicas, fifes, banjos, piccolos, trumpets and accordions, all mentioned as being purchased within the Hoefer-Zorn daybook, demonstrates a shift in the importance of pastimes and recreation and leisure during this time period, which is

also seen by the diversity in the available types of toys, games, and dolls, as well as luxury items, and representative of the consumption preferences and culture of the Victorian time period (English 2013:166; Gordon 2016:38; Prescott 2007:11). Within the Hoefer-Zorn daybook, an increase in the presence and purchase of luxury items such as jewelry, silverware, clocks, and watches was also depicted (Gordon 2016:38; Hollitz 1981:24). Thus, the increasing addition of all of these object types within the Hoefer-Zorn daybook, with evidence also within the archaeological record at Block 4 within the Champoeg townsite, suggests that the cultural and consumption transformations sweeping the nation, were also impacting the goods being selected for import by the general store owner, and also reflecting the commercial demands of the residents in the area of Newellsville and Champoeg.

Based on the Hoefer-Zorn daybook and its inventory of stock sold on hand, by the end of the day on January 1, 1883, Hoefer had sold $1,308.52 worth of goods. Unfortunately, without another comparative date of sale, the amount of stock sold on January 1, 1883, does not illustrate whether this was a particularly good day in terms of sales at the store or not. Thus, it is unclear whether or not the consumers within the Champoeg area had begun to shift their point of access for certain goods away from the local general mercantile store, or if it was still the primary location for purchasing both staple and more luxury goods.

However, the sales inventory for January 1, does help depict some of objects in the highest demand, which was interpreted based on multiple purchases, by various consumers, ranging in quantity from one to a dozen as well as lots and boxes, and included China and rubber dolls, toilet sets, watch stands and safes, primer books,

alphabet blocks, water colors, lead soldiers, picture frames, china dishes, tool chests, saving banks, bead steads, trunks, tin rattles and toys, trumpets, flags, pocket knives, combs, money purses, scrap books, violin parts, mirrors, buckskin gloves, fish hooks, collar buttons, microscopes, accordions, pipe stems, mouth pieces, French pipes, wooden pipes, cigarettes and tobacco, chewing tobacco, suspenders, cigars, walking canes, and clay pipes. Many of these objects would be functionally-classified within the archaeological record as personal or domestic artifacts. These are also the functional categories, and type varieties, that best identify the overall site function of the Block 4 assemblage at the Champoeg townsite as a general mercantile store, with many of these objects found within the Block 4 assemblage, just with fewer extant examples than the store inventory. Thus, this suggests that these were objects known to be in demand and used by the consumers in the area, and were actively being imported by the general merchants. In addition, the Hoefer-Zorn daybook transactions linked to foodstuffs, medicines, and beverages seem to be missing, which may suggest that Hoefer's store was not the place to buy more perishable items, but assuming the general stores were contemporaneous, evidence of such goods are found, in combination with a smaller and differing supply of personal and domestic objects within the Champoeg townsite general mercantile store assemblage at Block 4.

In general, the Block 4 archaeological record illustrates a large shift in the sheer amount and increase in the variety of consumer goods that were available in the latter-half of the nineteenth century versus the first-half. The Hoefer-Zorn daybook also demonstrates the considerable variety of goods that were in stock and available for purchase, with many of the objects purchased, only in existence as a result of the

technological and machinery transformations that had occurred during this later time period, including the introduction of new glass colors, glass and ceramic vessel types and decorative designs, as well as cigarettes and cigars, in addition to electroplated forks, alphabet blocks, slate desks, picture frames, and microscopes, to name a few. Most notably, within the Block 4 assemblage, there was high diversity in the ceramic wares with several different types of decorative applications evident, especially on the porcelain, white earthenware, and ironstone ceramics. Therefore, the quantity and overall presence of temporally diagnostic artifact types, representing the post-1861 flood time period, with these later artifacts either not present or not common within pre-1861 flood occupations at Block 4, suggests shifts in consumption, consumer preference and demand at the Champoeg townsite as well as at John Hoefer's nearby store (Paynter 1988:425; Prescott 2007:11; Schiffer 1983:685). Shifts that were actively selected by the rural consumer as a result of broader cultural transformations during the time period, and leading to new levels of rural modernity and cultural consumption (Kline 2000:8).

Chapter 10: Theoretical Application Discussion

Overall, central place theory is the primary theoretical perspective or explanatory framework utilized in this research study because of Champoeg's overall importance as a central place within rural Western Oregon during the nineteenth century. However, the secondary theoretical applications of agency and risk and resilience theories work in conjunction with each other. By investigating the coping strategies, motivations, and choices of the active individual, with central place theory, the importance of place and the risk minimization measures, both environmentally and economically related, are demonstrated, with residents continuing to utilize the Champoeg townsite during the latter-half of the nineteenth century. Therefore, together, central place theory, agency, and risk and resilience theories were applied when analyzing both the historical and archaeological record in order to better understand the behaviors, reactions, and coping strategies practiced and utilized by the occupants at the Champoeg townsite, even after the disastrous flood of 1861. By better understanding these theoretical approaches and subsequently applying them to the remaining historical accounts and extant artifacts, information regarding the occupants' reasoning for taking the risk to resettle in a geographical location known to be affected by natural disasters, as well as their willingness to negotiate the potential for economic hardships due to the declining importance of the overall townsite as well as the shift in consumption, culture and retail patterns, should be able to be better interpreted.

Central Place Theory and the Champoeg Townsite

The Champoeg townsite's location in a fertile region as well as its ideal trade location along the Willamette River, the highway of the time period, as well as overland stage routes to the north and south made it an ideal location as a commercial trade and political center or central place (Brauner 1993:2; Corning 1947:13; 80;199; King 1984:7; Hussey 1967:37; Trigger 1968:67). As a result, the Champoeg townsite's importance and role as a central place within the development of the Oregon Country because of its seemingly superlative settlement location within the Willamette Valley is discussed within this research study. Central place theory was also applied in order to better understand the decline of Champoeg and the location of new central places as a result of consumption and transportation transformations during the latter-half of the nineteenth century.

In order to address these research objectives regarding central place theory, historic documents and secondary written sources as well as previous archaeological studies completed at Champoeg were used in order to acquire more information regarding the Champoeg townsite, French Prairie, as well as the State of Oregon, during the latter half of the nineteenth century. Historical research in terms of Champoeg as a central place is summarized next, but Chapter 2: Historical Background includes more detail regarding the importance and role of the Champoeg townsite within French Prairie. Additionally, the Champoeg townsite's eventual decline and abandonment in 1890 due to another disastrous flood is discussed below. However, the consumption and

transportation transformations that impacted Champoeg's overall economic success after the 1861 flood is researched in more detail within Chapter 9: Nineteenth-Century Consumption and Transportation Transformations.

The Champoeg Townsite as a Central Place

Due to the growth and development of the Champoeg townsite in terms of the population, commerce and trade, and services available from the initial settlement in the 1830s to the height of the townsite during the 1850s, in comparison to other towns within French Prairie, it is apparent that the Champoeg townsite was perceived and acted as a central place in the region during this time period (Brauner 1993; Chapman 1993; Grant 1986:9;119; Hussey 1967; Peterson 1976:23; Speulda 1988). For example, at its height during the 1850s, Champoeg had grown from the settlement location of a few French-Canadian free trappers and their families to that of approximately two hundred people. The townsite itself included approximately twenty-four prominent buildings, with one-third of the seventy-two platted blocks believed to have been in use (Atherton 1973:2; Hussey 1967:217; Speulda 1988:20). A grist mill and the Hudson's Bay Company granary were located at Champoeg first, which was a result of its importance as a trade center for the primary crop grown in the Willamette Valley, wheat (Atherton 1973:2; Brauner 1993:50-51;56; Hussey 1967:219-220). Other businesses soon followed and included several general mercantile stores, another granary and warehouse, at least one hotel, a stage station with stage lines to the south and the northeast, a blacksmith, livery stables as well as a steamboat and ferry landing (Atherton 1974:2; Brauner 1993:51;53-54;56;59; Chapman 1993:2;26; Corning 1947:89; Hussey 1967:209;215; Speulda 1988:17;19; Winthur 1950:139). On the other hand, a bowling alley, saloon and public

house, Masonic Hall, church, school, and barber shop were established for the growing number of people residing in or near the Champoeg townsite, and also served as forms of entertainment for those simply on an overnight stop in the town (Brauner 1993:51;53-54;56;59; Hussey 1967:209;215). As a result, the residents of Champoeg had a number of occupations and professions within the 1860 census including day laborers, carpenters, blacksmiths, millers, store keepers, lawyers, wagon makers, a gardener, a ship carpenter, Clergymen, a baker, an apprentice, a school teacher, an engineer, a harness maker, a cabinet maker, a butcher, a molder, a surveyor, a bookkeeper, a clerk, and a gunsmith, in addition to the majority farmers (Hussey 1967:217; Speulda 1988:20). Thus, a variety of services, primarily centered on commerce and trade and the transportation of goods as well as passengers, were offered at the townsite, as a result of the initial purpose of the settlement and its ongoing importance as a central trade location and transportation stop (Chapman 1993:34; Smith 2011:39; Trigger 1968:65).

The Decline of the Central Place

However, it should also be noted that it is due to Champoeg's location, and consequently its designation as a central place, that ultimately hindered further economic growth at the site, with steamships and stagecoaches losing popularity and reliability as the result of the expansion of the railroad, which did not extend to the Champoeg townsite (Atherton 1973:2; Corning 1947:20-22,34; O'Mera 1943; Speulda 1988:19-22). Additionally, as noted previously, it was the Willamette River itself which turned out to be detrimental to the townsite's growth and existence due to the frequent and destructive flooding (Atherton 1973:4; Corning 1947:80; Snyder 20008a-c; Speulda 1988:22). Due to the townsite's ongoing encounters with destructive floods, the most harmful reported

and witnessed in 1853, 1861, and 1890, the Champoeg townsite was no longer the prosperous community it once was, with the population declining dramatically after the 1861 flood, with residents moving to higher ground, and establishing the town of Newellsville, and others moving to the already established, nearby town of Butteville, which was unaffected by the flood due to its location on a high rise or butte (Brauner 1993:71; Chappel 1992:8; Corning 1947:45, 1956:86; Hussey 1967:232; O'Mera 1943:144; Smith 2011:46; United 1971:2). However, some residents seemingly kept their businesses at the townsite, while new occupants are seen in the deed records purchasing blocks and establishing commercial businesses in the townsite and along the riverbank, years after the 1861 floodwaters had passed (Chappel 1992:20-21; Jette' 2010:150;155; OMCR 2014[1849-1976]c).

However, the establishment of new nodal settlements along the railroad tracks as well as the expanding road systems, led to shifts in central place settlement patterns, with residents and businesses no longer attracted to Champoeg as a place of commerce and trade due to improvements in access and mobility to these other locations which offered efficient means of shipping goods and growing market centers (Helbock 1973:38-39; Grant 1986120). The population had already been reduced due to the disastrous 1861 flood, and continued to decline, without the ability to attract new inhabitants in order to replace those that moved or had died (Barron 1985:333; Helbock 1973:3; Peterson 1976:3; Trigger 1968:70). As a result, the population size and diversity of businesses was not large enough to cope with the additional stressors that subsequently impacted the town after the 1861 flood, including consumption and transportation transformations such as the introduction of the railroad, which bypassed Champoeg, and isolated it, as well as

other small towns on French Prairie, from the new market transit routes (Chappel 1992:8;20; Helbock 1973:2; Peterson 1976:79).

Additionally, the presence of these nearby market centers within French Prairie such as Newellsville, Butteville, and St. Paul, reduced the townsite′s viability as a commercial center after the 1861 flood due to overlaps in spacing and the range of goods, with the consumer having several options for where to purchase their supplies (Chapman 1993:38; Grant 1986:119; Helbock 1973:2; Murphy 2008:269 [1873]; Peterson 1976:79). The credit systems used in rural communities between the residents and the general store owner, also turned out to be potentially detrimental, and could easily lead to debt and economic hardship if payments continued to not be received from the consumers (Jette′ 2010:150). Consequently, it was a multitude of factors that ultimately led to Champoeg's decline, with its overall abandonment spurred by the arrival of another high volume flood in 1890, demonstrating that the residents were either not able to or not willing to cope with this extra stressor by this time (Brauner 1993:71; Helbock 1973:2; Hussey 1967:232; Peterson 1976:79).

Overall, the ideal settlement location including the natural and economic benefits that led to the establishment of the Champoeg settlement in the first place, were actually the ultimate reasons for the town′s decline, with an increase in natural disasters and shifts in technology and transportation affecting the town's commercial viability and livelihood. Yet, a further look into this time period including the historical and archaeological record depicts its ongoing history and economic viability for a time after the 1861 flood. Thus, it should be acknowledged that the overall decline of the townsite was not just a consequence of the destruction of the 1861 flood, but is actually much

more complex story which involves commercial and economic factors affecting the townsite during the post-flood time period.

Agency and Block 4

The artifacts remaining within the Block 4 artifact assemblage represent the imported goods actively selected by the general store merchant, as well as the goods available to the merchant for selection. The general store owner or merchant, was single-handedly responsible for acquiring and actively selecting the type and variety of goods that were available for purchase at the general store (Dornan 2002:310; Johnson 2010:108; Shanks 2009:138). Additionally, the merchant had to make considerations regarding what goods to purchase for the store based on the consumption patterns, needs and desires of the individual residents and consumers within the town, who then actively selected and purchased specific goods from the general store merchant, and subsequently attached meaning or purpose to the object through their acquisition (Cook et al. 1996:52-53). Thus, after goods were purchased, they became outward expressions of the social systems in which they were used (Dobres and Robb 2005:163; Dornan 2002: 303; Majewski and O'Brien 1987:182). As a result, the material, consumer goods excavated from the Block 4 general mercantile store helps depict the relationships between the merchant and the larger, available market system, as well as the interaction between the merchant and his consumers including their preferences and demands, through the investigation of the artifact types and quantities present in the archaeological assemblage and primary historical sources (Cook et al. 1996:58; Hegmon 2003:219).

As discussed in more detail within Chapter 9: Nineteenth-Century Consumption and Transportation Transformations, the general store merchant and

consumers, as seen in both the archaeological and historic record, were active agents within the Champoeg and Newellsville communities, with the material goods illustrating and expressing the acceptance of the shifts in consumption, consumer preference, as well as technology that were occurring during the latter-half of the nineteenth century (Cook et al. 1996:50;59; Dobres and Robb 2005:163; Greene 2008:8). Thus, the consumers at the Champoeg townsite and Newellsville can be seen to be actively embracing the cultural transformations sweeping the nation during the "Age of Modernization", by purchasing material goods reflecting the new cultural trends and ideologies of modernity and progress, including more leisure and recreation goods as well as status-objects (Cook et al. 1996:52-53;58; Dornan 2002:303;309;316; English 2013:86; Hegmon 2003:219; Hoskins 1985:123; Kline 2000:8; Shackel, 2000: 232; 234). Therefore, the consumer goods or material objects, then reflect this period of economic development and transition in consumption, and the associated cultural meanings or person-object relations; as evident via the physical or symbolic properties of the extant material goods in the present (Carson 1986:77; Dobres and Robb 2005:163; McCracken 1986:71,77; Strasser 1989:5). Additionally, the material goods within the archaeological and historic records from the latter-half of the nineteenth century also reflect the technological and transportation innovations and improvements in the area during the time period.

Risk and Resilience at the Champoeg Townsite

Prior to the 1861 flood, the Champoeg townsite had been affected by flood waters in 1853, afterwards the residents had reportedly adjusted the location of their dwellings and structures, according to the height and damage caused by that flood, not believing that flood waters would ever be higher or damage worse (Brauner 1993:73).. According

to Lucy Jones 92018:59;73-75), this perception of floods as seemingly predictable and controllable; and therefore, less threatening than other forms of natural disasters is typical of the human psyche, when actually extreme floods such as the Great Flood of 1861-1862 can cause much more damage with longer-term impacts than other types of natural disasters. As a result, the Champoeg townsite was once again utilized, with its influence as a once successful, central place, drawing people back, and re-establishing or newly establishing commercial businesses because of its still viable shipping location along the Willamette River, which was still the primary means of transportation in the area during this time period (Hussey 1967:232). Thus, the commercial opportunity and viability that the pre-flood, prosperous town offered, was still worth the risk to these residents.

However, the Champoeg residents did not respond to the 1861 flood by recovering and reconstructing the town as it once was (Djordjevic et al. 2011:864; Gourbesville 2012; Hussey 1967:231-232; Jones 2018:50). Instead, residents limited their return and utilization of the townsite, minimizing their risk and demonstrating resilience, by only placing commercial structures and businesses at the post-flood townsite (Djordjevic et al. 2011:864; Gourbesville 2012; Redman 2005:72). Thus, the occupants that continued to utilize the townsite were still risking their commercial success on this previously prosperous townsite, but seen through the shift in settlement patterns, were no longer willing to risk their homes and families, with pre-flood Champoeg residents responding by moving their homes up the nearby hill and establishing the community of Newellsville. Consequently, due to the coping strategies and negotiations made by the residents by moving up the hill and establishing Newellsville, the Champoeg townsite near the river remained a viable commercial location and shipping port after the 1861

flood, with the resilience demonstrated by the residents minimizing their overall risk, and allowing the community to survive even after the devastation caused by the 1861 flood, and leaving property in the townsite available to new occupants such as the Eberhards (Chappel 1992:20; Djordjevic et al. 2011:864; Gourbesville 2012; Halstead and O'Shea 1989:3; Hussey 1967:232).

The Eberhard family most likely experienced the effects of the 1861 flood due to their ownership of land near Butteville during the early 1860s (OMCR 2014[1849-1976]b; Oregonian, 16 June 1929). The Eberhard family was representative of a larger population of migrants that were used to taking economic risks, as seen by their complete migration from Michigan to Oregon in 1853 (Fout and Kittell 1983:vii; Oregonian, 16 June 1929). For example, Bernard Eberhard had traveled to the California gold fields, not once, but twice, and even after his brother reportedly died in California during the first trip (Find a Grave Index 2019a; Fout and Kittell 1983:vii; Knap 2011). Also, during the early 1860s, with the discovery of gold in Idaho, he reportedly traveled east to the mines with his son, Henry in order to strike it rich, with this trip seemingly worth the risk this time, according to his daughter, Almira (Fout and Kittell 1983:A13). Additionally, Elias, who was known to be the general merchant in Champoeg during the 1880s, would have been approximately ten years old at the time of the flood, which may have limited his emotional distress and understanding of the destruction associated with the flood, and may have lessened his perception of risk by establishing a business in the townsite during this time period (ECJ, 2 June 1888; Jones 2018:75; Oregonian, 16 June 1929; McKenney 2009:976 [1882]). Thus, the perception of risk and uncertainty during this time period

was not necessarily a deterrent for many of the residents in the Champoeg area, many of whom had already taken a huge risk by moving to Oregon in the first place.

Residents in other towns of Oregon, and California, also completed measures of risk and resilience due to the Great Flood of 1861-1862, with the residents of Sacramento taking extreme measures of risk, resilience, and recovery in order to ensure that another large flood would not have the same disastrous effects on the town, with residents implementing a self-tax in order to completely raise the town above the 1861-1862 flood level, and ensure its survival for the future (Jones 2018:67). However, residents at the Champoeg townsite did not have the same resilience and recovery options or coping abilities as the residents of Sacramento, due to limited financial investments as a result of the smaller town and population size, business diversity, and willingness of the residents to go to such extreme measures to completely rebuild the rural Oregon townsite during the latter-half of the nineteenth century (Holbeck 1973:2; Peterson 1976:6;79; Xiao and Drucker 2013:150). Thus, the resilience measures taken by the Champoeg residents were ultimately not enough to protect the Champoeg townsite from the impacts of other factors such as consumption and transportation improvements in the region, and eventually both the Champoeg townsite and newer community of Newellsville were no longer viable commercial locations, especially after the destruction caused by another flood in 1890 (Chappel 1992:20; Halstead and O′Shea 1989:3; Hussey 1967:237-238).

Therefore, due to the introduction and rise in importance of the railroad throughout the Willamette Valley, Champoeg was no longer the most efficient route or meeting place for commerce and trade. Thus, by the time of the occurrence of another severe flood in 1890, the townsite and oerall community were already expericening

economic decline (Hussey 1967:238). As a result, the community would not have had the means or the need to try and recover the townsite which was already experiencing an economic decline (Peterson 1976:3; 79).

Conclusion

Overall, the historical and archaeological record from the Champoeg townsite has helped provide a better understanding of the human behavior and the reactions, risk minimization, and coping mechanisms that occurred after the 1861 flood. In fact, due to the resilience of the families that moved to higher ground after the 1861 flood, many descendants can still be found in the area today, including the Zorn, Jette', and Eberhard families (Austin 1956; Jette' 2010:155; Jerry and Elaine Owen, personal communication, July 7, 2017). Therefore, even though, the Champoeg townsite was eventually abandoned, the history of this post-1861 flood time period is still worthy of discussion because of its ongoing importance as a central place for many years afterward, and the residents utilizing the post-1861 flood townsite, demonstrating that they have stories left to be told, via both the archaeological and historic records.

Chapter 11: Conclusion

In conclusion, the importance of the Champoeg townsite, prior to the 1861 flood was not unknown before the completion of this research study. However, the site's post-flood history has often been overlooked, assumed to be abandoned and insignificant, but the archaeological assemblage from Block 4, Lots 1 and 2 demonstrated that there is more to learn about the Champoeg townsite. Therefore, the investigation of both the historic and archaeological record at Block 4 within the Champoeg townsite, provided information regarding the entire duration of occupation of the town, which spanned approximately thirty years after the 1861 flood, with Champoeg's ultimate decline not necessarily a direct result of the 1861 flood, but a combination of factors that influenced the townsite throughout the latter-half of the nineteenth century before its abandonment in the 1890s.

Overall, The Block 4 archaeological assemblage was analyzed in terms of its composition, with artifacts classified into functional categories and analyzed in terms of their spatial distributions, based on the quantity and density of these functional categories as well as diagnostic artifact types. Artifact analysis of the Lot 1: A and C assemblages, excavated on the corner of Montcalm and Longtain streets, illustrated the presence of a structure, with a pre-flood, but more prominent post-flood occupation, and was seemingly abandoned after a hot fire event. With the addition of the local history of the Eberhard/Austin family, this assemblage location was identified as the Eberhard store, operated after the 1861 flood. However, the overall site function was analyzed in terms of the variety of artifact types, frequencies, and densities actually found with the Lot 1: A and C post-1861 flood archaeological assemblage. The archaeological assemblage was

then compared to historical records, and to a lesser extent archaeological sites, from contemporaneous general mercantile stores, found throughout the United States, the region, and even as locally as Newellsville, and was found to confirm the local oral traditions. Thus, the Block 4 archaeological record, specifically the Lot 1: A and C assemblage, was found to comprise a general mercantile store, which operated within the Champoeg townsite during the post-1861 flood time period, and represents one of the only general mercantile stores to be excavated in Oregon dating to this time period.

In addition, Elias Eberhard was known to have owned the property during the 1880s. Therefore, Block 4 was also investigated in regards to its occupant history, with information regarding the Eberhard family demonstrating that although they were not key players within the pre-flood townsite, they were integral and prominent members of the Champoeg community, living on historically significant land, during the post-flood time period, and they left lasting legacies within the region. Thus, more research regarding the residents that returned and even those that took up property within the Champoeg townsite, like the Eberhard family, should be completed in order to better understand the entire span of occupants at the townsite.

As a result of the overall site function, the general mercantile store assemblage, in combination with the 1883 Hoefer-Zorn store daybook, were investigated in order to determine if consumption trends were evident via the material goods selected by the merchant and present at the Block 4 store or purchased by the consumer at the Newellsville store. This included any evidence for the shifts in consumption, technology, and transportation, known to have been occurring during this time period. Consumer preferences and demands were also explored, based on the variety and quantity of types

available and purchased at the stores, with the Hoefer-Zorn daybook actually demonstrating the goods purchased by demand.

Thus, research regarding the shifts in consumption and consumer preference and demand, as well as the transportation, technology, and communication transformations occurring across Oregon as well as the broader United States during the latter half of the nineteenth century or the "Age of Modernization", was also completed in order to understand the broader historical context of the time period. Therefore, this research demonstrated the impacts that the introduction of such transformations like the railroad had on rural towns like the Champoeg townsite, which was dependent on river transportation for its overall commercial viability and economic success. Thus, further investigation of this time period via the historical and archaeological records is warranted in order to better understand the history of the entire duration of the Champoeg townsite, which may demonstrate a more complex story of decline than is typically acknowledged due to the destruction caused by the 1861 flood.

In the end, the story of Champoeg during the post-1861 period, is one of great risk, persistence, and resilience. A tale where citizens took an economic gamble, on a town that had once prospered, in the hopes that it would once again be economically successful. This research study is just a small sample of the information that can be gleaned from the post-1861 flood history of Champoeg, which tells a much different story than the earlier Champoeg townsite, with depictions of the life and times of later residents, who are often left out of the history books due to their association with the more insignificant Champoeg time period, in addition to elaborating on the decline of the Champoeg townsite and the factors involved in its ultimate abandonment during the

1890s. Thus, in order to truly understand the history of the Champoeg townsite, the economic and commercial factors that led to its ultimate decline need to be acknowledged, and the post-1861 flood time period needs to be investigated further, via both the archaeological and historical record.

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APPENDIX

Block 4 Artifact Assemblage Analysis

Table A.1: Lot 1: A Artifact Assemblage

Lot 1: Test Pit A Functional Classification	**Quantity**	**Percentage of Test Pit A Assemblage (%)**
Personal Items	87	7.8%
Domestic	71	6.4%
Architecture	444	39.9%
Commerce & Industry	0	0.0%
Group Services	25	2.3%
Unknowns	483	43.4%
Modern	2	0.2%
TOTAL	**1112**	100.0%

Table A.2: Lot 1: B Artifact Assemblage

Lot 1: Test Pit B Functional Classification	**Quantity**	**Percentage of Test Pit B Assemblage (%)**
Personal Items	59	6.4%
Domestic	51	5.5%
Architecture	568	61.4%
Commerce & Industry	3	0.3%
Group Services	1	0.1%
Unknowns	241	26.1%
Modern	2	0.2%
TOTAL	**925**	100.0%

Table A.3: Lot 1: C Artifact Assemblage

Lot 1: Unit C Functional Classification	**Quantity**	**Percentage of Unit C Assemblage (%)**
Personal Items	618	7.3%
Domestic	357	4.2%
Architecture	3150	36.9%
Commerce & Industry	132	1.5%
Group Services	540	6.3%
Unknowns	3719	43.6%
Modern	17	0.2%
TOTAL	**8533**	100.00%

Table A.4: Lot 1: D Artifact Assemblage

Lot 1: Unit D Functional Classification	**Quantity**	**Percentage of Unit D Assemblage (%)**
Personal Items	128	5.4%
Domestic	100	4.2%
Architecture	1463	61.6%
Commerce & Industry	11	0.5%
Group Services	9	0.4%
Unknowns	634	26.7%
Modern	29	1.2%
TOTAL	**2374**	100.0%

Table A.5: Lot 2: A Artifact Assemblage

Lot 2: Test Pit A Functional Classification	**Quantity**	**Percentage of Test Pit A Assemblage (%)**
Personal Items	28	3.0%
Domestic	18	1.9%
Architecture	583	62.3%
Commerce & Industry	0	0.0%
Group Services	0	0.0%
Unknowns	303	32.4%
Modern	4	0.4%
TOTAL	**936**	100%

Table A.6: Lot 2: B Artifact Assemblage

Lot 2: Test Pit B Functional Classification	**Quantity**	**Percentage of Test Pit B Assemblage (%)**
Personal Items	35	9.0%
Domestic	58	15.0%
Architecture	157	40.6%
Commerce & Industry	0	0.0%
Group Services	0	0.0%
Unknowns	133	34.4%
Modern	4	1.0%
TOTAL	**387**	100.0%

Table A.7: Lot 2: C Artifact Assemblage

Lot 2: Unit C Functional Classification	**Quantity**	**Percentage of Unit C Assemblage (%)**
Personal Items	106	3.8%
Domestic	89	3.1%
Architecture	1511	53.6%
Commerce & Industry	16	0.6%
Group Services	5	0.2%
Unknowns	1080	38.3%
Modern	10	0.4%
TOTAL	**2817**	100.0%