

Archaeological Investigations of the Joseph Lewis Site (36Ch859)

S.R. 0029 Slip Ramps Project
Charlestown, East Whiteland, and Tredyffrin Townships
Chester County, Pennsylvania



The Pennsylvania Turnpike Commission

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Cultural Heritage Research Services, Inc.
North Wales, Pennsylvania

For the Pennsylvania Turnpike Commission
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Eastward view of archaeologists excavating springhouse remnants in the east yard of the Joseph Lewis Farmstead in September, 2007.

CONTENTS

Introduction	<i>1</i>
Why Archaeology, and Why <i>Here</i> ?	<i>3</i>
The Section 106 Process	<i>3</i>
A History of the Joseph Lewis Farmstead	<i>5</i>
Architectural Analysis	<i>18</i>
Archaeological Excavation	<i>24</i>
Archaeological Features	<i>25</i>
Artifact Analysis	<i>29</i>
Changing Landscapes	<i>34</i>
Evolution of the Joseph Lewis Farmstead	<i>34</i>
The Farmstead in the Early to Mid-Nineteenth Century	<i>34</i>
The Farmstead in the Late Nineteenth Century	<i>37</i>
The Farmstead in the Early Twentieth Century	<i>40</i>
The Farmstead in the Mid-Twentieth Century	<i>42</i>
The Farmstead in Recent Decades	<i>43</i>
Conclusions	<i>45</i>
For Further Reading and Research	<i>46</i>



*Whiteware saucer
with decal and gilding*

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Introduction

Archaeological investigations were performed as part of the Pennsylvania Turnpike Commission's S.R. 0029 Slip Ramps Project in Chester County, Pennsylvania. The Project entails construction of slip ramps and associated interchanges midway between the Turnpike's Downingtown Interchange (312) and the Valley Forge Interchange (326), along the S.R. 0029 corridor, in a section of the Great Valley experiencing rapid corporate and residential development (*Figure 1*). Designed for use by E-ZPass holders, the slip ramps will shorten travel times for thousands of commuters, and ease traffic congestion at neighboring interchanges and on local roads.

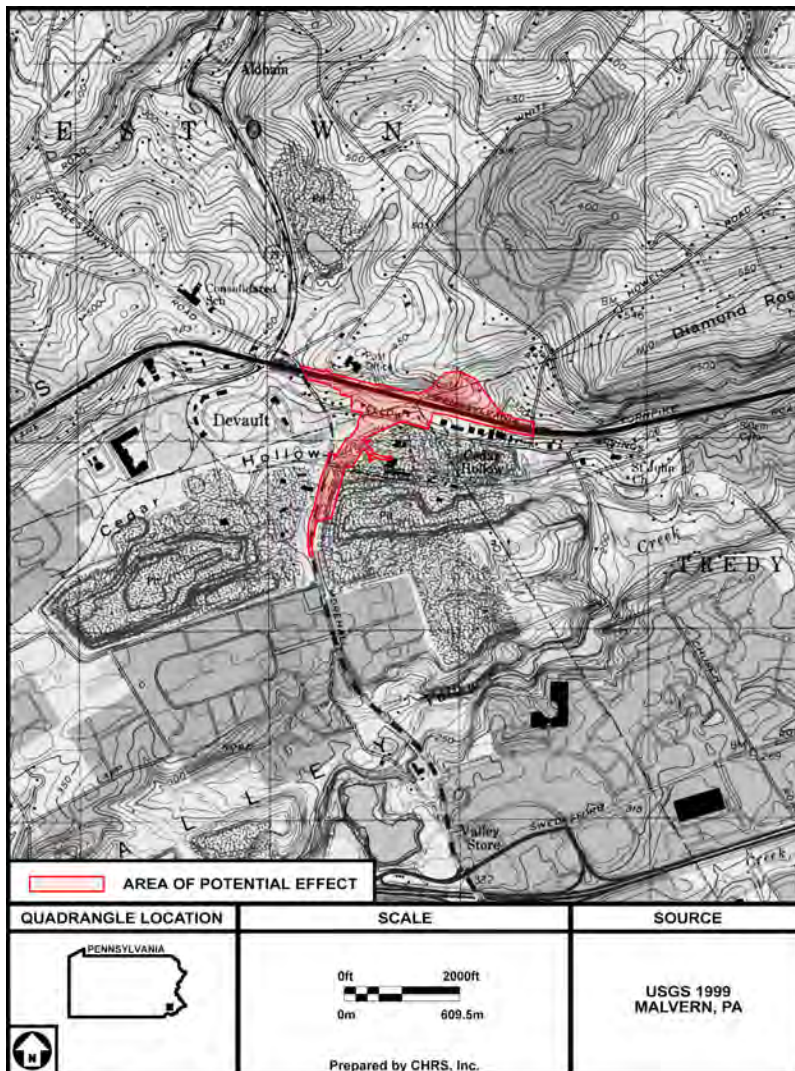


Figure 1: Area of Potential Effect, S.R. 0029 Slip Ramps Project, Charlestown, East Whiteland, and Tredyffrin Townships, Chester County, Pennsylvania.

An initial archaeological survey was conducted in 1998, assessing the archaeological potential of several alternative slip ramp alignments. In the course of archaeological excavations performed within the limits of the preferred alternative seven years later (in 2005), two archaeological sites were identified. One of the sites—entered into Pennsylvania Archaeological Site Survey records as “the Joseph Lewis Site (36Ch859)” (*Figures 2 and 3*)—was determined eligible for listing in the National Register of Historic Places, the nation’s official list of historic properties worthy of preservation. Additional phases of archaeological excavations were performed on the Joseph Lewis Site in 2007 and 2008. In the final and most intensive phase of investigation—technically termed “Phase III Archaeological Survey,” but sometimes referred to as “Data Recovery”—more than 25,000 artifacts were recovered and many buried features were exposed and recorded. The investigators described and analyzed the artifacts and features in a highly technical, 365-page *Phase I/II/III Survey, Joseph Lewis Site (36Ch859)* report submitted in 2009. A *non-technical* summary of that report is presented on the following pages.

Figure 2: Location of the Joseph Lewis Site (36Ch859), plotted on a USGS topographical quadrangle detail.



Figure 3: The Joseph Lewis Site (36Ch859), delineated on a circa-2008 aerial photograph.

Why Archaeology, and Why *Here*?

Most Americans have a good sense of what archaeologists do, and why they do it. Polling reveals that “Americans correctly view archaeologists’ work as digging, excavating, finding, analyzing, researching, studying, documenting, and, more specifically, analyzing and researching the past to discover and learn what life and past civilizations were like.”* This doesn’t mean there are *no* misconceptions. Some people might be surprised to learn, for instance, that archaeologists do not study rocks and stones (that’s the domain of geologists), nor are they experts on fossils and dinosaurs (that’s paleontology’s realm). Archaeologists will also point out that the glamorous picture of archaeological adventure and romance painted by Hollywood bears little resemblance to the painstaking and quiet endeavors that fill their days—meticulously moving dirt, cleaning and labeling artifacts, recording data, and poring over inventories and maps.

Poll results also indicate that most Americans believe archaeology is worth the expense and effort. There is a general perception that archaeology can help us improve the future by more fully understanding both the past and the present. People recognize that archaeological artifacts and sites can have aesthetic value, spiritual worth, and historical significance for populations and individuals. For these reasons, the majority of Americans support legislation designed to protect and preserve archaeological resources.

Even *with* this awareness and appreciation, people can be startled to find an archaeological investigation underway in their own “backyard.” Most Americans assume archaeology is only performed in exotic locales. In fact, hundreds of archaeological investigations are conducted across the United States every year. A few of these “digs” are high-profile operations, overseen by historical organizations and covered by the media. The vast majority, however, are relatively brief investigations required by federal, state, and/or local laws designed to preserve the nation’s archaeological resources. Surveys of the latter variety are part of an environmental clearance protocol sometimes referred to as “the Section 106 process.”

**Exploring Public Perceptions and Attitudes about Archaeology*, Harris Interactive Poll, February 2000.

The Section 106 Process

The National Historic Preservation Act of 1966 is the cornerstone of the nation’s cultural resource preservation policy. Amended and strengthened several times since 1966, this law established the National Register of Historic Places, the office and duties of state historic preservation officers (SHPOs), a program of grants-in-aid to enable SHPOs to conduct their work, the Certified Local Government program to identify communities that meet certain preservation standards, federal agency responsibilities concerning historic preservation activities, and the Advisory Council on Historic Preservation. This legislation was followed in 1969 by passage of the National Environmental Policy Act, which requires federal agencies to prepare impact statements for undertakings that might have an effect on environmental quality (cultural resources being a principal contributor to environmental quality). Yet another law with far-reaching implications—the Archaeological and Historical Preservation Act—was passed in 1974. This legislation extended the

protections established by the Reservoir Salvage Act of 1960 to all federally funded, licensed, or aided undertakings where scientific, historical, or archaeological data might be impacted.

The unofficial but commonly employed term “Section 106 process” derives from the section of the National Historic Preservation Act requiring federal agencies to take into account the effects of their undertakings or licensing activities on historic properties, while giving the Advisory Council on Historic Preservation an opportunity to review and comment on the potential effects of these activities. The Advisory Council has defined the procedure for satisfying Section 106 requirements in a set of regulations titled “Protection of Historic Properties.”

Pennsylvania’s Legislature has enacted laws aimed at further protecting the Commonwealth’s cultural resources, whether or not they are imperiled by federally funded, licensed, or aided undertakings. The linchpin of this regulatory effort is Act No. 1978-273, amended as Act No. 1988-72, which requires that Commonwealth-funded undertakings be subjected to the same Section 106 process as federally-funded projects. Pennsylvania’s SHPO—the Pennsylvania Historical and Museum Commission, Bureau of Historic Preservation—has also published guidelines designed to promote consistency and efficiency in the treatment of cultural resources across the Commonwealth. These directives include 1991’s “Cultural Resource Management in Pennsylvania: Guidelines for Archaeological Survey and Mitigation.”

The Phase I, II, and III Archaeological Surveys of the Joseph Lewis Site were conducted in accordance with national and state cultural resource management guidelines. As with all archaeological surveys, documentary research was performed in order to ascertain the Site’s history and to provide historical context for analyzing recovered artifacts and exposed features. The results of the research were presented in the *Phase I/II/III Archaeological Survey* report under the heading “History of the Joseph Lewis Farmstead.” The following property history is adapted from that discussion.



Figure 4: An artist’s rendering of the front (southwestern) façade of the farmhouse on the Joseph Lewis Farmstead, as it appeared in 2005. In photographs of the dwelling taken during the archaeological investigations, the structure was largely hidden by trees and shrubbery.

A History of the Joseph Lewis Farmstead

A recent owner of the stone farmhouse on the Joseph Lewis Farmstead reported that a datestone embedded in the western gable of the central portion of the dwelling bore the dates 1800 and 1813. Presumably, each inscription recorded the construction date of a dwelling or major residential addition on the Farmstead. According to the property owner, the attachment of an addition to the farmhouse in the 1970s hid this datestone from view. While researchers were unable to verify the presence of this datestone and its purported inscriptions, they determined that a construction date of 1800 was consistent with historical records strongly suggesting that a log dwelling had been erected in this location around that time. The building was constructed as a tenant house by farmer Joseph Lewis Sr., who lived on a neighboring farm and owned the tenant house site.

Joseph Lewis had been born on March 20, 1732 in Goshen Township, Chester County, the eldest son of Quakers Nathan and Margaret Lewis. Joseph and his family moved to Newtown Township (now Delaware County) sometime prior to April 1745, in which month his father and a business partner (David Davis) received by an indenture of lease and release the rights to a 234.57-acre tract of land lying partly in Tredyffrin Township and partly in “Whiteland Township” (now East Whiteland Township). A decade later, by a deed dated August 20, 1755, Nathan and Margaret Lewis conveyed their “undivided moiety” (half-interest) in the Tredyffrin-Whiteland tract to their son Joseph, who was then 23 years old and still living in Newtown Township. Two months after securing this half-interest, Joseph Lewis purchased from farmer Rees Pritchard and his wife Eleanor a 100-acre plantation in Whiteland Township, adjoining the southern border of the 234.57-acre tract, along the Township’s eastern border. Lewis must have moved to this plantation between October 24, 1755 and April 17, 1760, as he was identified as a Whiteland Township “yeoman” (land-owning farmer) on the latter date when he acquired from the heirs of David Davis the outstanding half-interest in the 234.57-acre Tredyffrin-Whiteland tract.

East Whiteland Township tax records indicate that by 1767 Lewis owned at least 115 acres in the Township, along with a dwelling, 2 horses, 5 cows, and 1 sheep. Deed, tax, and Orphans’ Court records indicate that he occupied the plantation south of the future Joseph Lewis Farmstead, and made his home there for the remaining 40 years of his life. Lewis paid taxes on 115 acres and a single dwelling in East Whiteland Township in 1783, 1785, 1796, and 1798. There is no evidence in East Whiteland Township tax records that he made any improvements during the eighteenth century to his 234.57-acre tract to the north (future site of the Joseph Lewis Farmstead).

In 1801, Lewis was assessed for the first time in East Whiteland Township for his ownership of a 25-acre tract, in addition to his 115-acre farm. The smaller tract was equipped with unspecified buildings valued at \$148, and it was occupied by farmer James Sloan along with 2 horses and 4 cattle. Subsequent tax and deed records strongly suggest that Lewis’ 25-acre tract embraced or soon came to embrace the Joseph Lewis Farmstead, located in the smaller East Whiteland Township portion of the 234.57-acre tract Lewis had wholly owned since 1760. It is not known why Lewis did not pay tax on the East Whiteland Township portion of this large tract before 1801. Perhaps Lewis’ construction of one or more farm buildings on the parcel in 1800 triggered the new assessment. In any case, the 1801 East Whiteland Township tax assessment appears to have resulted in the first official record of structures on the Joseph Lewis Farmstead.

East Whiteland Township population census schedules compiled a year earlier (1800) may include an oblique reference to the Farmstead's occupants. In those records, James Sloan was identified as the head of a 9-person household living next-door to Joseph Lewis. Genealogical records indicate that Sloan was about 38 years of age in 1800, and had been married for about seven years to Jane Thompson. Three children had been born to the Sloans before 1800, and at least seven more arrived after that year. The Sloans would occupy Joseph Lewis' tenant farm for over a decade, as reflected in East Whiteland Township tax records. In the 1802 assessment, Lewis' 25 acres were said to be worth \$500, and the parcel's taxable structures reportedly comprised a log house valued at \$60, a log barn valued at \$58, and a stone springhouse valued at \$30. The farm's taxable livestock in 1802—under the care of James Sloan—amounted to 2 horses and 4 cattle. Three years later (1805), the structures on the property were said to comprise a house valued at \$50, a barn worth \$100, and a "milkhouse" worth only \$10.

On August 12, 1805, 71-year-old Joseph Lewis Sr. conveyed all of his real estate in East Whiteland and Tredyffrin Townships to two of his adult children—Mary (married to storekeeper John Phillips) and Joseph Jr.—as well as four of his grandchildren. The senior Joseph's holdings comprised three tracts: the home farm in East Whiteland; the 234.57-acre tract lying partly in East Whiteland and partly in Tredyffrin (encompassing the Joseph Lewis Farmstead); and a 9.75-acre parcel attached to the western end of the 234.57-acre tract. Altogether, these contiguous tracts amounted to just over 344 acres.

Upon this conveyance, James Sloan became accountable to new landlords. For six years beginning in 1806, the owners of the East Whiteland Township tract embracing the Sloan-occupied Joseph Lewis Farmstead were identified in tax records as "Joseph Lewis Jr. et al." From 1806 through 1811, these owners allowed Sloan to farm an additional 30 acres in East Whiteland Township. The property was thus reported in Township tax records to embrace 55 acres. Records suggest that the additional land was annexed from the adjoining Lewis Farm to the south, which was reduced in size by an equal number of acres during that period. Tax records also suggest that one or more buildings on the Sloan-occupied Joseph Lewis Farmstead were constructed or significantly upgraded in 1807, the year of Joseph Lewis Sr.'s death.

In the spring of 1811, Joseph Lewis Jr. and the co-owners of the three tracts in East Whiteland and Tredyffrin Townships formerly held by Joseph Lewis Sr. agreed to partition the real estate into approximate thirds and take possession of the partitions as follows: Joseph Lewis Jr. would acquire the 114.13-acre farm he was then occupying in Tredyffrin Township, in consideration of \$5,706.87; Mary Lewis Phillips and her storekeeper husband John Phillips would acquire 125.83 acres lying partly in East Whiteland Township and partly in Tredyffrin Township, in consideration of \$6,920.70 (the East Whiteland Township portion of this tract embraced the Sloan-occupied Joseph Lewis Farmstead). The remaining co-owners (all grandchildren of Joseph Lewis Sr. or their representatives) acquired the original Lewis Farm in East Whiteland, in consideration of \$8,412.67. Deeds of release formalizing this three-way partition were completed on August 24, 1811.

James Sloan's occupancy of the Joseph Lewis Farmstead ended around the time of this partition, and the East Whiteland Township portion of the associated tract reverted to 26 acres, very nearly the size it had been a decade earlier. New landlords John and Mary Phillips rented the farm

to John Clair for a couple of years, then to John Byerly beginning in 1814. During Clair's stay, the taxable buildings on this property were reported to be worth only \$220, down from a reported value of \$360 during the period 1808-1811. Then, in 1814, the value of the taxable buildings was adjudged by Phillips himself (he served as assessor that year) to be \$280, itemized as follows: "Stone House" (\$200); "Log Barn" (\$60); and "Stone Spring House" (\$20). This is the earliest record in which the dwelling on the Joseph Lewis Farmstead was characterized as "stone."

John Byerly was identified in East Whiteland Township tax records as the occupant of John Phillips' 26-acre farm from 1814 through 1816. In the latter year, Phillips sold Byerly some land in Tredyffrin Township, whereupon Byerly relocated, and James Gamble took up residence on the Joseph Lewis Farmstead. The Farmstead's taxable buildings in 1817 comprised a "stone dwelling house" valued at \$350, a "stone Spring House" worth \$30, and a "Log Barn" valued at \$40. The live-stock managed by Gamble included 5 horses and 8 cattle owned by John Phillips.

In 1818 or early 1819, Benjamin Watson replaced James Gamble as tenant farmer on the Joseph Lewis Farmstead. The arrival of Watson introduced a new era of occupant stability on the property, as his tenure would last approximately 15 years. Tax records indicate that early in this era—around 1819—John Phillips erected a stone barn to replace the earlier log barn on the Farmstead. The new barn, with a reported value of \$450, was first noted in East Whiteland's 1820 tax assessment. From that year through 1834, Phillips was taxed on 3 or 4 horses and a herd of half-a-dozen cattle under Benjamin Watson's care on the Joseph Lewis Farmstead. Watson appears to have had plenty of help with his farming. The household he headed in 1820 comprised a dozen persons.

On April 12, 1834, a frail John Phillips composed his last will and testament. After bequeathing to his wife Mary "the farm whereon I now live, and which is now in the tenancy of [my new son-in-law] David Cope," and directing the executors of his will "to sell within eighteen months after my decease the stores and dwelling houses situate at the Crossroads [village of Devault] together with the lots as they now stand enclosed with fence," Phillips ordered his executors to "sell within the time aforesaid the plantation or tract of land now in the tenure of Benjamin Watson situate partly in the Township of Whiteland and partly in the Township of Tredyffrin, and that they also sell the lot now in the Tenure of Gurge [*sic*] Davis containing about two acres (which two properties so ordered to be sold are the same as the tract of land above described of one hundred and twenty five acres, three quarters & thirteen perches." Together with tax records compiled a few weeks earlier in which Benjamin Watson had been identified as the occupant of Phillips' 26-acre parcel in East Whiteland Township (for the 15th year running), Phillips' will appears to confirm that the parcel embracing the Joseph Lewis Farmstead constituted the East Whiteland Township portion of the 125.83-acre tract that he and his wife Mary had acquired through partition in 1811.

Phillips died shortly after composing his will, which was probated on October 18, 1834. The executors of his will conveyed the 125.83-acre farm "lying partly in East Whiteland Township and partly in Tredyffrin Township" to East Whiteland Township resident Jesse Gyger by a deed dated April 3, 1835. Gyger paid \$6,027 for the property. His acquisition took place too late to be reflected in the 1835 East Whiteland Township tax assessment. In the following year's assessment, Gyger's entries picked up where John Phillips' had left off, as Gyger paid tax on 26 acres, a dwelling, 3 horses, and 7 cattle.

In East Whiteland Township census records compiled in 1840, Gyger and one other person in his eight-person household were said to be professionally engaged in agriculture. Gyger appears to have soured on this occupation sometime over the course of the next few years, as he moved his family to Radnor Township, Delaware County, in the mid-1840s, and there took up blacksmithing. His departure may have been prompted, or at least influenced by, the national economic depression of 1839-43, which is regarded by some historians as the most severe depression in American history. Whatever his motivations, Gyger conveyed his “plantation and 2 tracts of land in East Whiteland Township and Tredyffrin Township,” totaling 125.83 acres, to farmer Peter Colehower of Plymouth Township, Montgomery County, by a deed dated March 27, 1846. Colehower paid \$8,483.33 for the property, so Gyger made a 40% profit on the real estate deal.

Peter Colehower moved to East Whiteland Township (presumably to occupy the former Gyger farm) between March 1846 and early 1849, and appears to have soon thereafter acquired additional land in the Township. In East Whiteland Township tax records compiled early in 1849, Colehower was recorded as paying tax on 104 acres, 4 horses, 12 cattle, a carriage, and a dog. Crop production on the average farm in eastern East Whiteland Township in 1850 amounted to 167 bushels of wheat, 330 bushels of Indian corn, 330 bushels of oats, 56 bushels of Irish potatoes, and 25 tons of hay. Most of the corn, oats, and hay were used to feed the farm’s horses, cattle, pigs, and poultry. Some of the corn, and most of the wheat and potatoes, fed the farming household. Surplus produce was taken to market. Harvested hay was stored loose in the barn mow. Harvested wheat and oats were either taken to a mill for processing into flour or they were processed on the barn’s threshing



Figure 5: *The boundary of the 125.83-acre tract “lying partly in East Whiteland Township and partly in Tredyffrin Township,” conveyed by the executors of John Phillips’ will to Jesse Gyger on April 3, 1835, is superimposed on an aerial photograph taken in 1937. The arrow points to the Joseph Lewis Farmstead.*

floor. Corn was shocked out in the field and left there to be shelled and/or chopped over the coming months, as needed. Milk not quickly consumed by the household was turned into butter for both domestic consumption and retailing. Most farmers stored butter in a springhouse or cellar during the warmer months. When the weather turned cold, butter had to be stored in a heated area, such as in or alongside a smokehouse where beef and pork cuts were slowly cured.

In East Whiteland Township census records compiled in August 1850, Peter Colehower was identified as a 50-year-old German immigrant and farmer, living with his 40-year-old, Pennsylvania-born wife Jane, and seven Pennsylvania-born children, ranging in age from 7 to 23. The Colehower farm was thus equipped with a relatively large labor pool, and the agricultural data suggests this pool was put to extensive use. On a farm 67% larger than the average farm in this vicinity, the Colehowers serviced a herd of dairy cattle twice the size of the average herd. Using milk produced by this herd, they manufactured nearly three times the amount of butter as the average eastern East Whiteland Township farm (1,900 pounds vs. 678.7 pounds). In the latter respect, they were on the leading edge of change, as Chester County agriculture transitioned from an emphasis on beef-fattening to the new concentration on dairying. Some labor on the Colehower farm was facilitated by first-generation horse-powered implements, including a threshing machine and a fodder cutter. Innovative equipment and hard work produced well-above-average harvests of wheat, Indian corn, and hay on the Colehower farm in 1850, along with closer-to-average crops of oats and Irish potatoes. The farm was also exceptional locally as one of the few plantations in the area where sheep were raised for wool production.

The Colehowers' concentration on dairying, and their early adoption of horse-powered machinery, was also reflected in a list of "Personal Property" advertised for sale by 54-year-old Peter Colehower in January 1854 as he prepared to either retire from farming or relocate his growing family. The items he intended to offer at auction on February 9, 1854 were identified as follows in an advertisement published in the Chester County newspaper *American Republican* several weeks prior to the event:

Personal Property at Public Sale. Will be sold at public sale, on THURSDAY, the 9th of February next, at the residence of the subscriber, in East Whiteland township, Chester county, the following personal property, to wit: Two first rate family Horses, one of them is a very good leader, 14 superior Cows, springing to calve, 1 Bull 2 years old, 2 Heifers, 3 Shoats, 1 good threshing machine, 1 horse power, Vanderslice's make, 1 Ermy's fodder cutter, 1 hay fork, rope and tackles, 1 york wagon, 2 wagons, one a low wheel farm wagon, hay ladders, 1 bread wheel cart, ploughs, harrows, double and single gears, 1 large timber chain, quarry tools, hay and straw by the ton, about 500 bushels of slacked lime, also a lot of dairy fixtures, 2 butter tubs, tin cream pots with pans and other articles too numerous to mention. Sale to commence at 12 o'clock P.M., when conditions will be made known on the day of the sale by PETER COLEHOWER.

Six weeks after conducting this sale, Peter Colehower and his wife Jane conveyed the Joseph Lewis Farmstead to widow Jane Stephenson of Philadelphia, in consideration of \$11,000. Stephenson would own the Joseph Lewis Farmstead and attached farmland for the next decade. In an East Whiteland Township tax assessment conducted in 1858, she was recorded as paying tax on 101

acres, 2 horses, and 4 cattle. She was living in East Whiteland Township as of June 20, 1860, when an enumerator visited her residence and identified her as a 60-year-old Irish immigrant, living with 34-year-old, American-born farmer Alexander H. Stephenson (possibly her son) and 16-year U.S. native Sarah Wolkup. The size, value, and principal products of the Stephenson farm during the year ending on June 1, 1860 were recorded on schedules completed as part of an agricultural census conducted in the summer of that year. This information reveals that Jane Stephenson and/or her farm manager did not maintain the elevated level of agricultural activity on the Joseph Lewis Farmstead property that had been attributed to Peter Colehower and his family a decade earlier. While the farm retained its superior size and real estate value in comparison to other farms in the vicinity and across Chester County, in most other measurable categories the Stephenson farm ranked no better than average, and more often it fell significantly short of the average. Only in the relatively insignificant categories of potato production and value of orchard products did the Stephenson farm outrank most of its neighbors. The farm managed a close-to-average ranking in terms of the value of its farm implements and machinery, its population of livestock, and its hay production. In its wheat and oat yields, the farm fell somewhat below the regional average, and well-below-average rankings were registered in livestock value, value of slaughtered animals, and—mostly glaringly—in Indian corn and butter production. The dip in agricultural intensity during Jane Stephenson’s ownership and occupancy may have resulted from a combination of factors, including Stephenson’s advanced age, her gender, her unmarried status, her prior residency in an urban setting, and the small size of her household. It is possible that Stephenson relied largely or wholly on hired farmhands or neighboring farmers for farm labor during her tenure on the Joseph Lewis Farmstead. If so, finding dependable and sufficient help in the neighborhood could only have grown more difficult during the years of America’s Civil War.

By a deed dated March 25, 1864, Jane Stephenson conveyed the Joseph Lewis Property as part of a 63.11-acre “messuage and tract of land in East Whiteland Township and Tredyffrin Township” to William Henry Sr. of Tredyffrin Township, in consideration of \$5,000. Henry would be identified in a business directory attached to an 1873 map of East Whiteland Township as “Colonel of the Union Troops of Chester and Delaware counties, commissioned by Governor Porter in 1838.” In 1868, Henry paid tax on 95 acres, 8 horses, 8 cattle, and a carriage in East Whiteland Township. By the following year, his herd of horses had been reduced to a pair. Henry was identified in census records compiled in August 1870 as a 69-year-old farmer, living with his 58-year-old wife Elizabeth, their 38-year-old son William Jr., and three teenage children of the junior William.

In the Henry farm’s neighborhood, farms tended to exceed the Chester County average in terms of cash value, the value of their implements and machinery, and the value of their slaughtered animals. Dairying continued to be the principal means of profit-making on the average East Whiteland Township farm in 1870, as evidenced by the relatively large population of dairy cows. A steep decline in butter production was recorded on 1870 agricultural census schedules (492.78 pounds per farm in 1870 vs. 970.33 pounds a decade earlier). The statistical decline may reflect the growing tendency of farmers to ship their milk directly to market, rather than retain it for in-house processing. A depot established by the Chester Valley Railroad Company in 1852 at Valley Store (1½ miles south of the Joseph Lewis Farmstead) provided a means for area farmers to drop off their milk or have it collected every morning for shipment to market.

East Whiteland Township farmers also profited more than ever before from raising and slaughtering their own animals. While the value of animals slaughtered on the average farm had totaled \$104.87 in 1850 and \$175.03 in 1860, that amount swelled to \$568.52 by 1870. The butchering of beef and pork was typically performed in the late autumn by “bees” of workmen and neighbors moving from farm to farm. Each farm, however, had to have facilities for the further processing of meat into various products through smoking, grinding, cooking, and drying. This work, as well as the slaughter and dressing of poultry, was performed in the butcher house on those farms prosperous enough to have an outbuilding devoted to such activities. If specialized outbuildings were not available, butchering took place around the barn or the kitchen.

Agricultural data recorded in the summer of 1870 reveal that, in most measured categories of value and productivity, the Henry farm ranked close to the local average. In wheat, rye, oats, and potato production, the Henry farm slightly exceeded the average, while in the value of its slaughtered animals and its implements and machinery, it fell well below the average. Though William Henry was past retirement age, his son William and three teenage children apparently constituted a large and capable enough workforce to keep the family farm viable, if not particularly prosperous.

William Henry apparently suffered a financial setback in the early 1870s, perhaps as fallout from 1873’s economic Panic. Chester County’s High Sheriff seized the Henry farm in October 1874 and prepared to sell it to the highest bidder in order to satisfy Henry’s creditors. At the Sheriff’s sale held on October 22, Henry Loucks of Upper Providence Township, Montgomery County

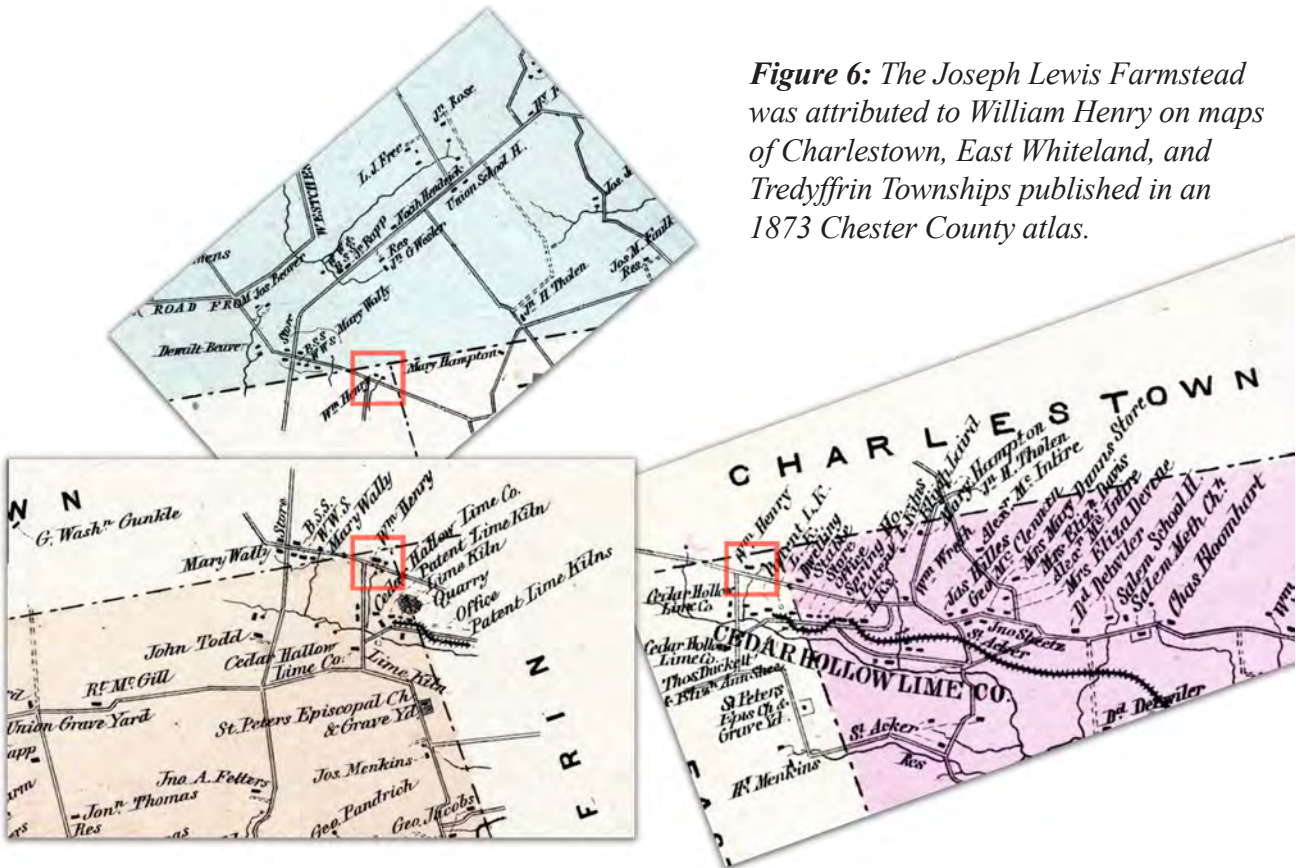


Figure 6: The Joseph Lewis Farmstead was attributed to William Henry on maps of Charlestown, East Whiteland, and Tredyffrin Townships published in an 1873 Chester County atlas.

submitted the winning bid of \$5,035. Loucks apparently only regarded the property as a quick investment. On January 9 of the following year (1875), he and his wife Ellen conveyed the former Henry farm to Sarah H. Jacobs, the wife of Joseph Jacobs of Tredyffrin Township, in consideration of \$7,000.

The following genealogical data concerning Joseph Jacobs was presented in a biographical sketch published in Samuel T. Wiley's *Biographical and Portrait Cyclopedia of Chester County, Pennsylvania* in 1893:

[He] is of German descent. His paternal grandfather came from one of the provinces of Germany, and settled in Montgomery County, where his occupation was that of lime burner until his death at an advanced age. He married and reared a family of three sons and two daughters: George, Robert, Joseph, Katharine and Ann. George Jacobs [father of Joseph Jacobs] was born September 15, 1810, and died April 11, 1889. He followed lime burning and farming, and a few years before his death engaged in the general mercantile business at Aldham [a village north of Devault, in Charlestown Township]. He was a democrat in politics, and a member of the Methodist Episcopal church, and was also a member of Sugartown Lodge, Independent Order of Odd Fellows. George Jacobs was a man of influence and high standing in his community, and served as supervisor of East Whiteland Township, and after removing into Charlestown, as tax collector of that township. He married Mary Ann McCool, and to their union were born eight sons: Samuel, Charles, Robert, George, William, John, Morgan, and Joseph [the subject of this sketch]. Mrs. Jacobs was a daughter of Samuel and Hesther McCool, and died in September, 1876, when in the sixty-fourth year of her age. . . .

[Joseph Jacobs] was born in Plymouth Township, Montgomery County, Pennsylvania, December 29, 1839. He grew to manhood on the farm, received his education in the public schools of East Whiteland Township, and was engaged successively in farming in Charlestown and East Whiteland Townships until 1886. . . . On February 24, 1862, he was united in marriage with Sarah K. Detwiler, daughter of Henry and Catherine Detwiler. Mr. and Mrs. Jacobs have six children, two sons and four daughters: George, Katie E., H.H. [Henry Hosea], Blanche, Jennie and Lulu. . . . [Joseph] served in a regiment of Pennsylvania militia during Lee's invasion of the State in 1863.

In census records compiled in June 1880, Joseph Jacobs was identified as a 40-year-old farmer living in East Whiteland Township with his 41-year-old wife Sarah and six children ranging in age from 2 to 12. The 96-acre Jacobs farm was an average eastern Chester County dairy farm in most respects. The average size of farms in this vicinity in 1880 was 86 acres, down 10% from a decade earlier. The shrinking of the average farm size only partly accounted for the dip in average farm value from \$11,928 in 1870 to \$9,040.40 in 1880. A greater role was no doubt played by the economic depression triggered by the Panic of 1873, which suppressed real estate, livestock, and agricultural product values across the nation. Farmers who managed to remain viable through 1880 utilized labor-saving devices and more efficient technologies and techniques to boost their productivity in almost every area of measured activity. The annual hay harvest on the average farm was up 70% since 1870 (34.87 tons vs. 24.17 tons). Less dramatic increases were registered in

Indian corn production (451.24 bushels vs. 374.56 bushels); wheat production (179.57 bushels vs. 151.78 bushels); and Irish potato production (81.95 bushels vs. 74.21 bushels). The average oats harvest (284.53 bushels) was about what it had been in 1870.

Rebounding from the dip in butter production recorded in 1870, the average eastern Chester County farm produced 1,276.58 pounds of butter in 1880. The emphasis on butter-making was part of the regional trend, which saw farm-based butter production peak in Chester, Delaware, and Lancaster Counties in 1880. This pinnacle was reached even with roughly half of the farmers in the region not producing any butter at all, electing instead to send their milk to creameries or to market.

Poultry statistics were not recorded on agricultural schedules prior to 1880, perhaps because chickens “were considered to be the particular charge of women.” Data compiled in 1880 thus fills an important gap in the farming picture, as chicken had long been a staple of the farm family’s diet, and the farmer’s wife often bartered with eggs. The average farm in the region had about 50 “barnyard poultry” (chickens, primarily) on hand in June 1880, along with eight to nine “other poultry.” The laying hens among this population produced 240 dozen eggs annually. While some or all of the chickens may have been allowed to wander the farmyard freely, they required a chicken house or protected space in some other outbuilding for night-time roosting and safe egg-laying.

The livestock population on the average eastern Chester County farm in 1880 comprised 3 or 4 horses, a dozen dairy cows, 3 or 4 other cattle, and 8 pigs. The average number of dairy cattle had been creeping upward for several decades. Now it leveled off, as only so many cows could be efficiently hand-milked twice daily on a family farm.

The Jacobs farm diverged significantly from the average in only a few categories of farm measurement recorded in 1880. Most notably, the farm’s value as a piece of real estate was not quite up to par. This deficiency was not reflected in the value of its livestock or products, however. In the one area where the farm appeared to stand head-and-shoulders above most of its neighbors—butter production—a closer look reveals that the average annual butter production of 89 farms surrounding the Jacobs farm (1,276.58 pounds) is deceptive in that roughly half of those farms had adopted the practice of sending their milk to creameries and/or to urban markets via railcar, rather than retaining it for on-site butter production.

In 1886, Joseph Jacobs moved a mile to the northwest, to the village of Aldham, and there began operating a general store. Seven years later he was described as “one of the successful business men of the great Chester valley. . . . He came to Aldham and established his present general mercantile business. He has a good store building and a heavy stock of goods, and enjoys a large trade. On his East Whiteland farm of ninety-five acres is situated one of the finest flint quarries in the county. This quarry is now operated by Breeder, Adamson & Co., of Philadelphia. Mr. Jacobs is a democrat in politics, has served as postmaster at Aldham since 1888, and is now tax-collector in Charlestown Township. . . . He is kind and courteous, has become justly popular, and has achieved well-merited success in his line of business.” The author of this sketch also noted that, in moving to Aldham in 1886, Jacobs had left his farm in East Whiteland and Tredyffrin Townships to the care of his sons George and H.H. (“Harry”).

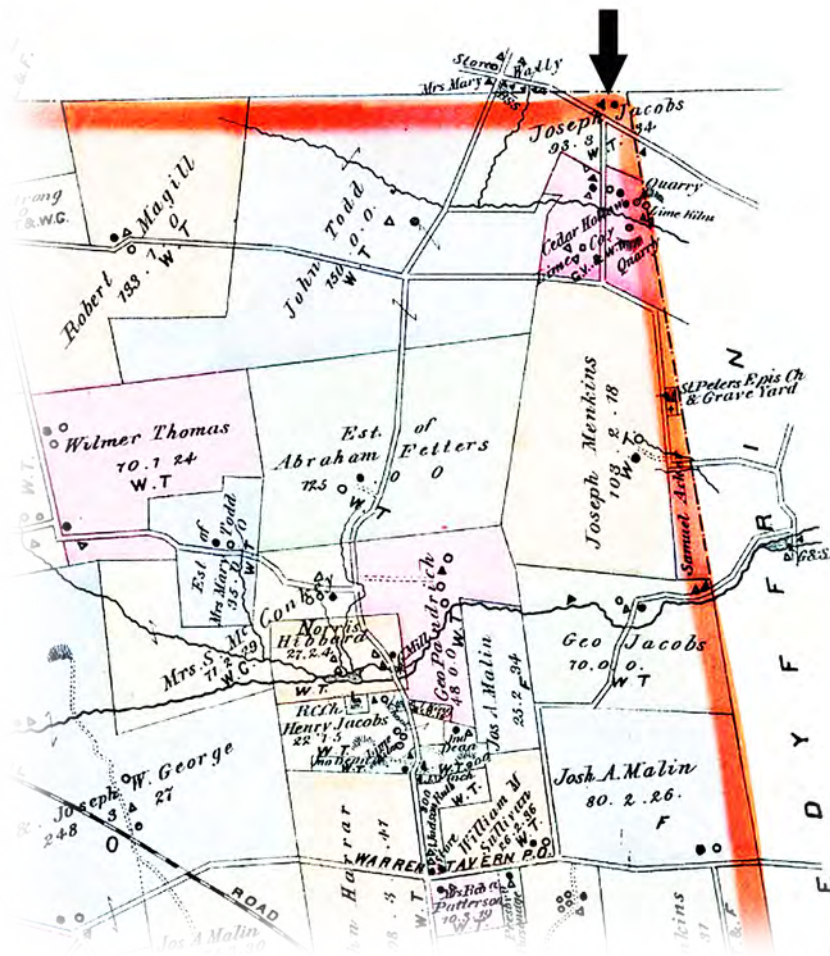


Figure 7: The Joseph Lewis Farmstead (arrow) was attributed to Joseph Jacobs on a map of East Whiteland Township published in an 1883 Chester County atlas. The solid circle represents a stone dwelling, and the solid triangle represents a stone barn.

Joseph Jacobs died sometime prior to June 4, 1900, on which date his wife Sarah was identified in Charlestown Township census schedules as a 61-year-old widow and a grocer, living with her 32-year-old bachelor son Harry (occupied as a paper-maker) and her 24-year-old daughter Jennie. The Jacobs farm in East Whiteland and Tredyffrin Townships was occupied at this time by Sarah's 35-year-old son George Jacobs, and his 35-year-old wife Mary (née Bowman), to whom he had been married for about a year. George rented the farm from his mother, and worked it with help from 19-year-old resident farmhand George P. Ritchie.

Sarah Jacobs died on April 18, 1901. Two years later, by a deed dated April 1, 1903, the five adult children of Sarah and Joseph Jacobs, along with their spouses, conveyed the Jacobs farm to Jonathan S. Billig of Phoenixville Borough, in consideration of \$5,000. Later that day, Billig conveyed the farm for the same consideration to its long-time resident and renter, 38-year-old George Jacobs.

George Jacobs would own and occupy the Joseph Lewis Farmstead for the remaining 26 years of his life. His occupation and ownership of the two-tract farm (free of mortgage) was recorded in an East Whiteland Township census enumeration conducted on April 20, 1910. The other members of his household in April 1910 comprised his 45-year-old wife Mary; Mary's 75-year-old, widowed mother Mary Bowman; and 22-year-old hired man John Macnimman.

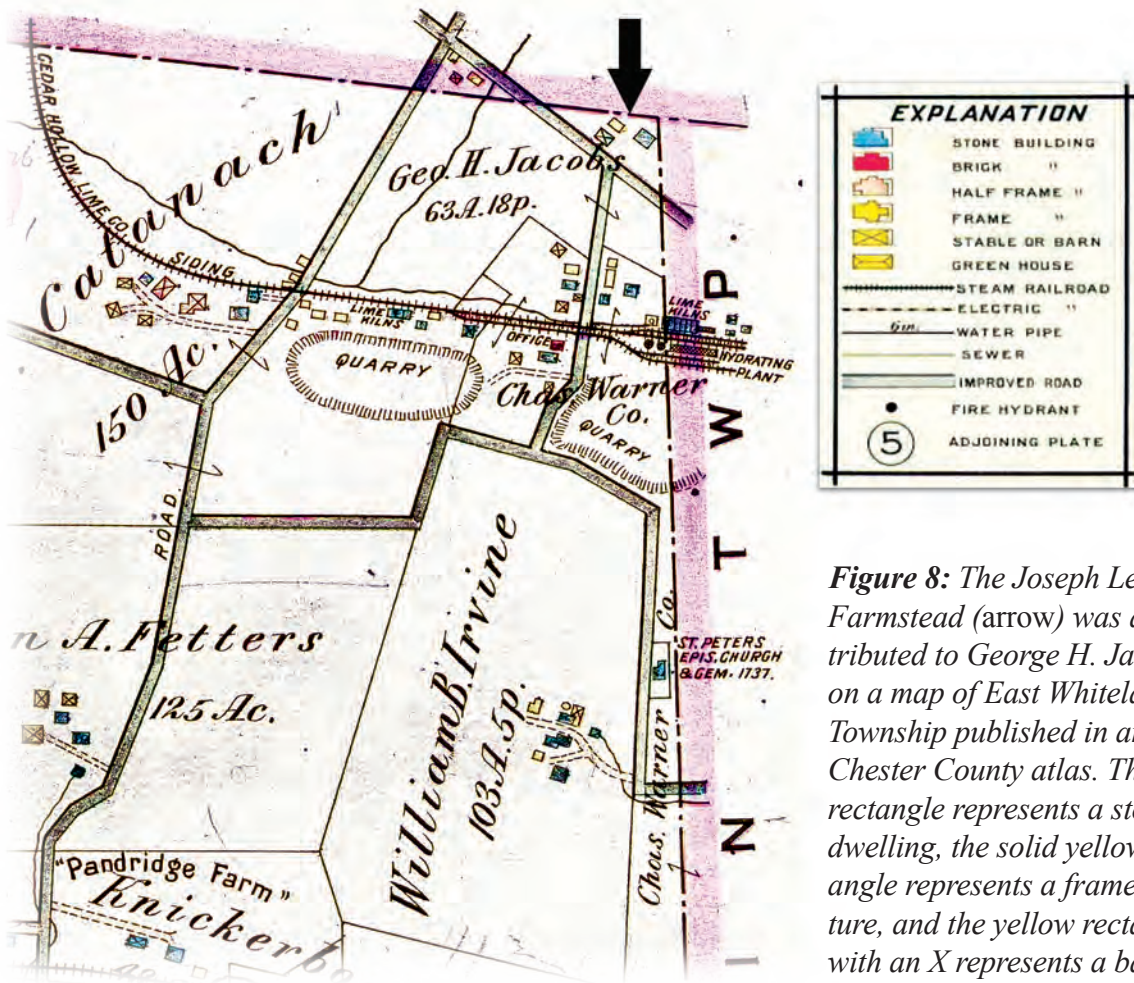


Figure 8: The Joseph Lewis Farmstead (arrow) was attributed to George H. Jacobs on a map of East Whiteland Township published in an 1883 Chester County atlas. The blue rectangle represents a stone dwelling, the solid yellow rectangle represents a frame structure, and the yellow rectangle with an X represents a barn.

George Jacobs' wife Mary died in 1919. When a federal census enumerator visited the Jacobs farm on January 20, 1920, he found George living there alone as a 55-year-old, widowed farmer. Agricultural data recorded in 1927 indicate that, at least following his wife's death, George operated a fairly typical east-central Chester County dairy farm. The data were recorded in an era when farmers across southeastern Pennsylvania were transitioning—some more eagerly than others—to a new technological mode dependent on petrol-powered and electrical engines. There were still 3 or 4 horses on most farms, at least while animals were needed to power traditional implements. But their days had become numbered as soon as dependable and affordable tractors, automobiles, and trucks were made available. Approximately 60% of farms in the region were equipped with at least one tractor in 1927. As farmers finished assembling a full array of tractor-driven implements, their horses became obsolete. Virtually every farm was equipped with at least one automobile in 1927, and just under half had a "motor truck" in service.

There were significantly fewer farms operating in the region in 1927 than there had been a half-century earlier. The fact that the average farm now embraced 114.20 acres suggests that as some farms had ceased functioning and been subdivided for residential or industrial development, others were expanded through the acquisition of adjoining fields. Tractors and tractor-driven implements allowed farmers to cultivate more land, even as the pool of farm laborers shrank.

Processing and storing corn and grasses as silage (a favorite fodder of dairy cattle) was a relatively new agricultural activity closely tied to the proliferation of stationary engines around the turn of the twentieth century. Roughly half of the farms in the region were equipped with at least one wooden, brick, or concrete silo by 1927, and slightly fewer were outfitted with a gasoline engine. Even though silo-equipped farms now had the capacity to feed larger herds of dairy cattle year-round, the average dairy herd on eastern Chester County farms in 1927 still numbered roughly a dozen head (as had been the case in 1880). Milking machines would eventually bring servicing larger herds within reach of the typical family farm, but as of 1927 only a handful of farms had made the substantial investment of installing a milking machine.

Poultry husbandry played a larger role in Chester County agriculture in 1927 than it had played at any time during the nineteenth century. The average farm in the region housed 110 laying chickens and pullets, as well as 22 “other chickens” (presumably for breeding and consuming). To service flocks of that size and protect them against disease, poultry was typically housed in separate accommodations—if not a freestanding chicken house then an addition to the barn or other major outbuilding. Farms on which poultry raising was a primary activity were also equipped with electrically-heated brooder houses, where chicks could be safely and efficiently hatched.

Most farms had a proper orchard or at least an area reserved for fruit trees. Some of these orchards may have been extensive, as the average farm was equipped with 45 bearing apple trees, 24 peach trees, and 5 pear trees.

Finally, an enumeration of modern “conveniences” included in the 1927 agricultural census revealed that two-thirds of the farmhouses in eastern Chester County were outfitted with “running water in the kitchen,” half were warmed with a “furnace heating system,” and just over half had use of a radio and telephone. These data indicate that a tipping point had passed, as a majority of farmers in the region had joined agriculture’s progressive movement.

By these measures, George Jacobs’ farm was largely typical. In 1927, it varied from the norm in only two categories: number of dairy cattle (Jacobs’ herd of 19 was 56% larger than the local average), and number of chickens other than hens and pullets (his flock exceeded the local average by a factor of 14). While Jacobs still milked by hand (as did all but three of his 53 neighbors within a 2½-mile radius), he was among the region’s early adopters of new technology.

George Jacobs died on January 4, 1929, a few weeks shy of his 65th birthday. In his will, he bequeathed all of his real estate to his five brothers and sisters and their spouses, and named as executors of his estate his brother Harry H. Jacobs (of East Whiteland Township) and his brother-in-law Frank A. Young Sr. (of Charlestown Township). By a deed dated March 18, 1930, the heirs conveyed the Joseph Lewis Farmstead on 32.54 acres to Alfred D. Warner Jr. of Wilmington, Delaware. Warner was a principal in the family-owned Warner Company of Philadelphia and Wilmington, Delaware. The Company had been reincorporated from the Charles Warner Company in 1929 “to consolidate the operations of [the earlier firm’s] various subsidiaries.” Three decades earlier, the Charles Warner Company had acquired the Cedar Hollow Lime Company, renowned for working “one of the largest dolomite deposits in the East for the production of lime” on the south side of Yellow Springs Road, across from the Joseph Lewis Farmstead.

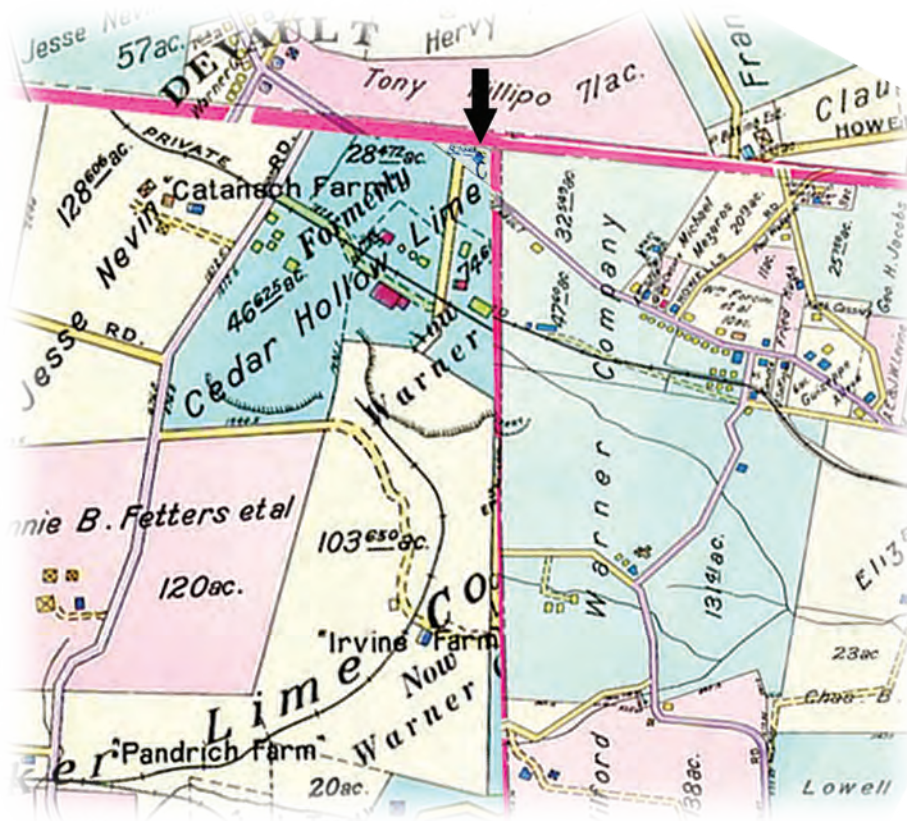


Figure 9: The farmhouse on the Joseph Lewis Farmstead (indicated by arrow) was attributed to the “Warner Co., Formerly Cedar Hollow Lime Co.,” on maps of Charlestown, East Whiteland, and Tredyffrin Townships published in a 1933 Chester County property atlas. This image is a composite of details of those three township maps.

No occupants of the Joseph Lewis Farmstead have been identified during the 18 years (1930-1948) it was owned by representatives of the Warner Company. In February 1947, Alfred Warner and his wife Eleanor Betts (residents of Wilmington, Delaware) conveyed the 32.54-acre Joseph Lewis Farmstead parcel to the Warner Company. The Warner Company turned around and conveyed the parcel a year later (on April 12, 1948) to Henry Richards and his wife Eva for \$7,350. The Richardses owned the property in 1949-50 when the Pennsylvania Turnpike was extended 100 miles eastward from the Susquehanna River to Valley Forge. The new highway, passing through East Whiteland and Tredyffrin Townships a few dozen feet north of the Richards residence, was opened to traffic on November 20, 1950.

Henry and Eva Richards owned the Joseph Lewis Farmstead until September 18, 1953 when they conveyed the house and barn on 13.09 acres south of the Turnpike to Louis A. Solitario and his wife Dolores. Upon Louis’ retirement around 1969, the Solitarios opened a dog kennel in the barn. Dolores continued running this business after Louis died in 1977. She provided this information to a newspaper reporter in 2006, and the reporter subsequently published an article in which Mrs. Solitario was referred to as a “73-year-old widow” who had lived for 50 years in “her 1801 farmhouse.” The reporter went on to note that “Solitario’s daughter runs a hairdressing business in the house,” and that “Main Line Animal Rescue operates a kennel in the barn, which holds 90 dogs and cats.” By 2006, the Joseph Lewis Farmstead parcel had been reduced to 5 acres. The Solitarios owned the parcel until its acquisition by the Pennsylvania Turnpike Commission in 2007, in a pre-construction phase of the Commission’s S.R. 0029 Slip Ramps Project.

Architectural Analysis

Archaeological investigation of the Joseph Lewis Site included examination and evaluation of the Site's existing above-ground structures. Of primary interest was the stone farmhouse, whose core and multiple additions reflected architectural trends spanning two centuries (see photographs *below*). While the majority of the dwelling had been altered in the mid-1930s when the house was remodeled in Colonial Revival style, enough structural fabric remained from earlier periods to allow CHRS's preservation historians to determine approximate construction dates and styles. The original one-room core had been erected around 1807, the first addition was attached around 1813, the second addition was constructed around 1850, the entire building was remodeled and a third addition was constructed around 1935, and a final addition was attached during the 1970s.



Figure 10 (left): Construction phases in the evolution of the stone farmhouse on the Joseph Lewis Farmstead are denoted on an elevation profile of the dwelling (top) and a footprint projection (bottom).

The oldest section of the farmhouse is a 1½-story, single-room structure. The exterior of this core measures approximately 18 feet square. The building originally featured a doorway and window on its southern exposure (fronting on Yellow Springs Road), and a second doorway on its northern exposure. The northern doorway was later filled in and converted into a window opening (*Plate 1*). An interior stairway was part of the original one-room dwelling, but the remaining interior elements—a fireplace, other window openings, an interior doorway, and flooring—were later improvements.



Plate 2: Core of the dwelling.

Plate 1: Converted window opening.

In its original form, the farmhouse was a stone, single-pen residence. This type of one-room, gabled dwelling is also known as a log-pen, single-bay, one-bay, or hall-plan structure. Of European origin, this house-type was variously constructed of logs, hewn lumber, brick, or stone, and featured a fireplace and chimney at one end. Single-pen dwellings also featured an offset entrance and half-story loft serving as sleeping quarters. The earliest dwellings of this type in America were erected by English colonists in the Chesapeake Bay region, using heavy timber framing. Later examples were constructed by English and Scots-Irish settlers along migration routes leading away from the Delaware Valley. Construction materials evolved over time from wood to stone and brick. Single-pen houses were still being built in the early nineteenth century, but many of them received major additions within a few years of their construction.

With its single room, offset entrance, and eastern gable end chimney, the circa-1807 core of the farmhouse on the Joseph Lewis Farmstead exemplified single-pen construction. The building also featured a narrow winding stairway in its southeastern corner, leading to the loft. Beside the loft door was a doorway leading to the cellar—a feature also typical of single-pen dwellings (*Plate 2*). Less typical was an exterior cellar doorway and below-grade access apparently created in the early twentieth century. To provide access to the exterior cellar door, the ground had been cut away

and retained by two stone walls (*Plate 3*). The main entrance of the circa-1807 core was located on its southern exposure.

A hall-and-parlor addition was attached to the west side of the single-pen core around 1813. The addition's east wall included a small section that was actually the southwest corner of the original structure (*Plate 4*). The old wall section was retained for incorporation into a new chimney. The former fireplace and chimney were discovered by preservation historians when they removed modern paneling and a thin layer of plaster from this wall (*Plate 5*).

The circa-1813 stone addition was three bays wide, one room deep, and 2½ stories high. It was nearly square, with a footprint measuring 25½ by 24½ feet. The interior of its main room measured 14½ by 18¾ feet. Along the west side of this room was a hallway with an exterior door at each end. The southern doorway was later enclosed and fitted with a window (*Plate 6*). A second, smaller room (most recently functioning as a bathroom) was located under the stairs at the northern end of the hallway.

Plate 3: Exterior cellar access.



Plate 5: Chimney outline.



*(LEFT) Plate 4:
East wall of
circa-1813
addition.*



*(RIGHT) Plate 6:
Former exterior
doorway.*

Hall-and-parlor structures were often erected as additions to single-pen and double-pen dwellings, with the joined structures forming multi-roomed dwellings. The roofs of the additions were typically side-gabled, like the buildings to which they were attached. Most of these additions also featured end-gable chimneys and side-hall entrances.

The farmhouse on the Joseph Lewis Farmstead was expanded again around 1850 as an addition was affixed to the west side of the circa-1813 addition. This second addition, with a footprint measuring 14½ feet by 24½ feet, was two bays wide, one room deep, and 2½ stories tall. A seam in the stonework of the farmhouse's southern façade reveals where the new structure was joined to the old (*Plate 7*). The expanded farmhouse was five bays wide and configured as a center-hall structure, one of the most common forms in American architecture during the mid-nineteenth century. The dwelling's main entrance, having previously served as the front door of the circa-1813 addition, was located in the center of the enlarged dwelling. A fireplace was installed in the center of its west wall.

Center-hall dwellings are characterized by symmetrical organization of rooms on either side of a hallway passing through the center of the building, from front to rear. The hallway provides access to various rooms, and is usually equipped with the building's only exterior doors

and a stairway leading to the second floor. Typically 1-to-2½ stories in height, and one or two rooms deep, the central passage house generally has a side-gable, gambrel, or hipped roof. Chimneys are situated either at the gable ends or in the interior partition walls. The central hallway was an eighteenth-century introduction to the hall-parlor plan that endured through most of the nineteenth century, reflecting the transmission of high style architectural concepts from England.

Plate 7: Seam in wall, southern façade.



The Joseph Lewis Farmstead house was remodeled and expanded in the mid-1930s, during an era when it was common for homeowners to renovate older dwellings in the Colonial Revival style. The fireplace located on the eastern wall of the house's oldest section was rebuilt, and the window sills and lintels were modified. The fireplaces on the east wall of the circa-1813 section appear to have been removed at this time, along with the chimney stack in the basement.

The fireplaces on the west wall of the circa-1850 addition were probably closed off as part of this remodeling. An L-shaped addition was attached to the south and east sides of the farmhouse's oldest section. This addition may have been in the form of a wrap-around porch. If that was the case, the structure was enclosed sometime before the turn of the twenty-first century.

The Colonial Revival style both mimicked and reinvented architectural expressions of the Colonial period, including Georgian massing, Dutch gambrel roofs (with a steeper pitch), and English second-story overhangs. Frequently incorporating classical columns and Palladian windows, Colonial Revival houses featured other components rarely utilized in Colonial structures, such as broken pediments; sidelights with no fanlight or transom above the front door; porticos with curved undersides; paired, triple, or bay windows; continuous dormers; and combinations of single-pane and multi-pane sashes. An outgrowth of renewed interest in American heritage engendered by the 1876 Centennial, the Colonial Revival movement emerged in the late nineteenth century as a major influence on Queen Anne and Shingle-style structural design. In the early twentieth century, the movement strongly inspired designers of suburban developments and public buildings.

The widespread remodeling of older American houses in Colonial Revival style reflected a growing perception of architecture as indicative of wealth and status. Europeans had held this view for centuries, but the concept did not gain traction in the United States until after the Civil War, as American elites began looking for ways to conspicuously signal their elevated status. The architectural style they embraced—sometimes called Picturesque; encompassing portions of the Gothic Revival, Second Empire, Greek Revival, Tudor Revival, and Colonial Revival periods—did not rationalize or romanticize older architectural styles, but simply exaggerated certain elements in an effort to denote wealth and status. Such was the case with the renovation of the farmhouse on the Joseph Lewis Farmhouse in the mid-1930s.

Around 1970, the owners of the farmhouse constructed a fourth and final addition, affixing a single-room annex to the house's western gable end. The only access to this addition was an exterior door.

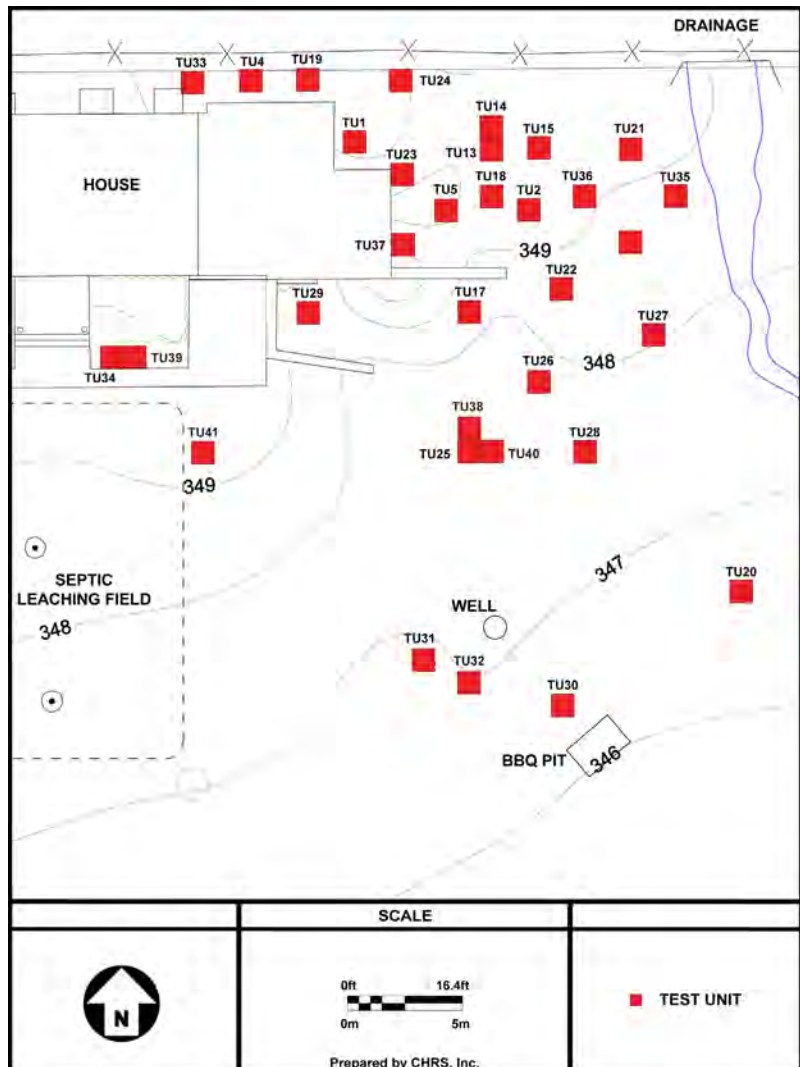
Several outbuildings stand to the west and southwest of the farmhouse, along a driveway extending northward from Yellow Springs Road. The roofline of the farmstead's large, stucco-clad, stone barn is parallel with the house's roofline, strongly suggesting that the barn was built after the oldest portion of the house was in place. Configured originally as a Swiss bank barn, the barn had undergone extensive alterations in the 1970s, as its forebay was enclosed and louvered windows were installed. Two other modern additions were attached to the barn in the 1970s when the property owners converted the structure into a dog kennel.

A stone milkhouse stands parallel with the barn approximately 20 feet south of the barn's southeastern corner. The structure originally had stone gable-end walls, wooden side-gable walls, and a forebay along its northwest side for sheltering animals. The forebay was later filled in with stone, the building's roof was raised, and its wooded walls were replaced with stone walls, around 1850. A seam indicating the original roof pitch and height is visible on the southeast wall (*Plate 8*). The milkhouse was converted into an apartment sometime in the latter twentieth century.



Plate 8: Former milkhouse, southeastern façade.

Figure 11: Archaeological Test Unit Locations



Archaeological Excavation

Phase III testing of the Joseph Lewis Site entailed the hand-tool excavation of 41 one-meter-square test units, as well as the mechanical stripping of topsoil across approximately one-half acre. Most of the test units were excavated, and most of the mechanical stripping was performed, in the yard east of the farmhouse, because other portions of the Site had been disturbed by twentieth-century construction and landscaping (*Figure 11*). Soil layering in the east yard was complex, as illustrated by a composite stratigraphic profile of the area (*Figure 12*). Each test unit encountered at least five soil strata, and several units encountered more than seven. Virtually every test unit exhibited a unique profile, indicating that artifacts had been deposited in the east yard over the course of many years.

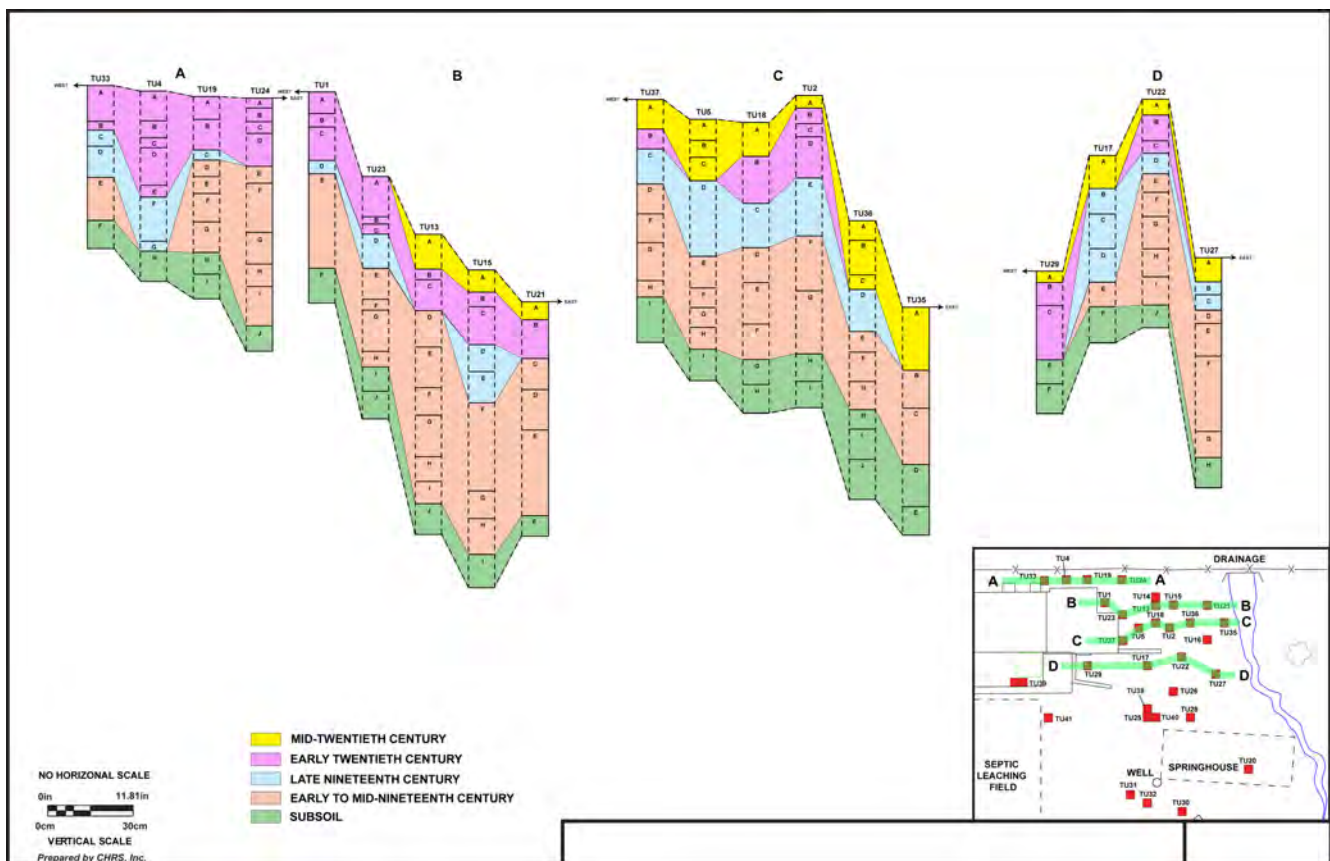


Figure 12: Composite Stratigraphic Profile, East to West

Making sense of the east yard's complex stratigraphy required an understanding of the ways in which materials become buried archaeological artifacts. One widely-accepted classification of primary, secondary, and *de facto* refuse maintains that materials enter the archaeological record through a broad range of human behaviors, including accidental loss, intentional discard, and re-deposition (relocation of discarded material). Artifacts recovered from the complex fills and soil layers in the east yard of the Joseph Lewis Site appeared to have been deposited through a combination of discard and redeposition.

The east yard deposits were in an intermixed state much like deposits typically encountered in filled-in privy shafts. Such deposits usually include datable artifacts lodged in soil layers that were formed significantly earlier or later than those particular artifacts, together with ceramic fragments located in multiple soil layers that can be fitted together (cross-mended) into a single reconstructed vessel. When deposits are mixed in this way, other analytical methods can be useful in discerning connections between them. Among the most useful methods are: analysis of surrounding soil types (pedology); analysis of spacial relationships between soil layers; analysis of chronological relationships between soil layers; and analysis of cross-mended artifacts within various strata. All four of these assessment techniques were employed in the attempt to make sense of mixed deposits encountered in the east yard of the Joseph Lewis Site. Results of the analyses allowed archaeologists to draw up a basic stratigraphic profile of the entire Site, comprising four artifact-bearing strata resting on subsoil. The four strata appeared to correspond with the four eras of Site occupation reflected in artifact assemblages recovered from test units in the east yard: a mid-twentieth-century period, an early-twentieth-century period, a late-nineteenth-century period, and an early-to-mid-nineteenth-century period.

Archaeological Features

Hand-tool excavation and mechanical stripping of soils on the Joseph Lewis Site exposed numerous artifacts and features. The largest features were foundations of outbuildings that had been moved or razed in the late nineteenth or early twentieth centuries. One foundation was located in the farmhouse's western yard. This structure had been disturbed by both natural and human activities. A large tree overlay the foundation's northwest corner. The structure's eastern wall had been destroyed when a metal bin was installed. This bin had been partially capped by cement steps poured

in the 1970s when the house's westernmost addition was constructed. The northern portion of the foundation had been destroyed by the installation of a capped pipe protruding from an underground tank (*Plate 9*). On a map prepared by the Pennsylvania Turnpike Commission in 1951, a square structure denoted atop this foundation was labeled "Old Stone Spring House."

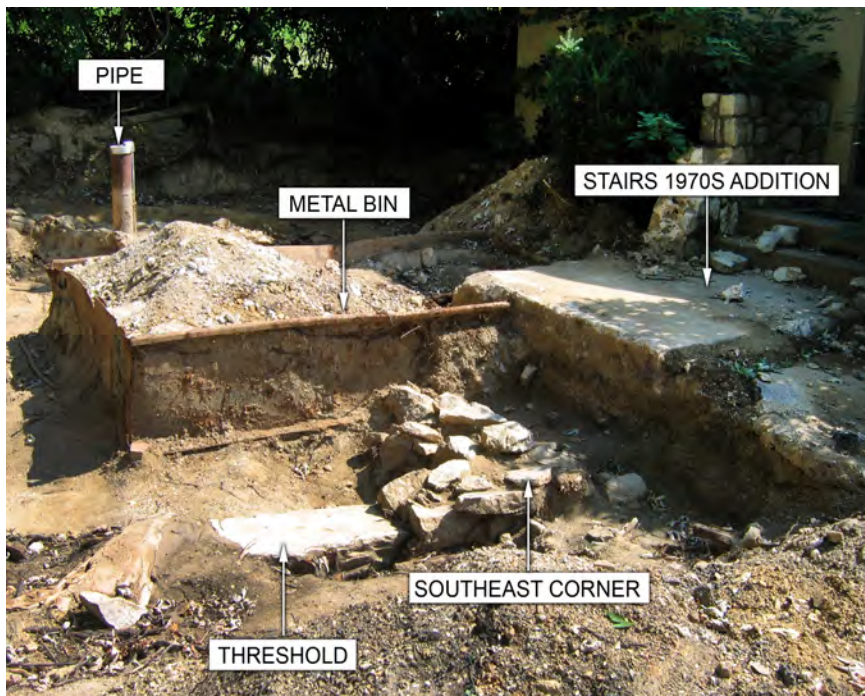


Plate 9: Remnants of "Old Stone Spring House" foundation.

Another foundation was discovered in the northwest corner of a parking area west of the farmhouse and north of the barn. A structure denoted in this location on the 1951 Pennsylvania Turnpike Commission map was labeled “Wagon Shed” (drive-through central section) and “Corn Crib” (flanking sections). Portions of the 30-foot-long foundation had recently been destroyed by the installation of a large commercial oil tank. Only the northern row of mortared fieldstone piers had survived the oil tank installation and parking lot construction (*Plate 10*). The exact age of this multi-purpose structure could not be determined. It probably dated to the late nineteenth century or early twentieth century, as that is when most farmers in southeastern Pennsylvania adopted the practice of cribbing corn.

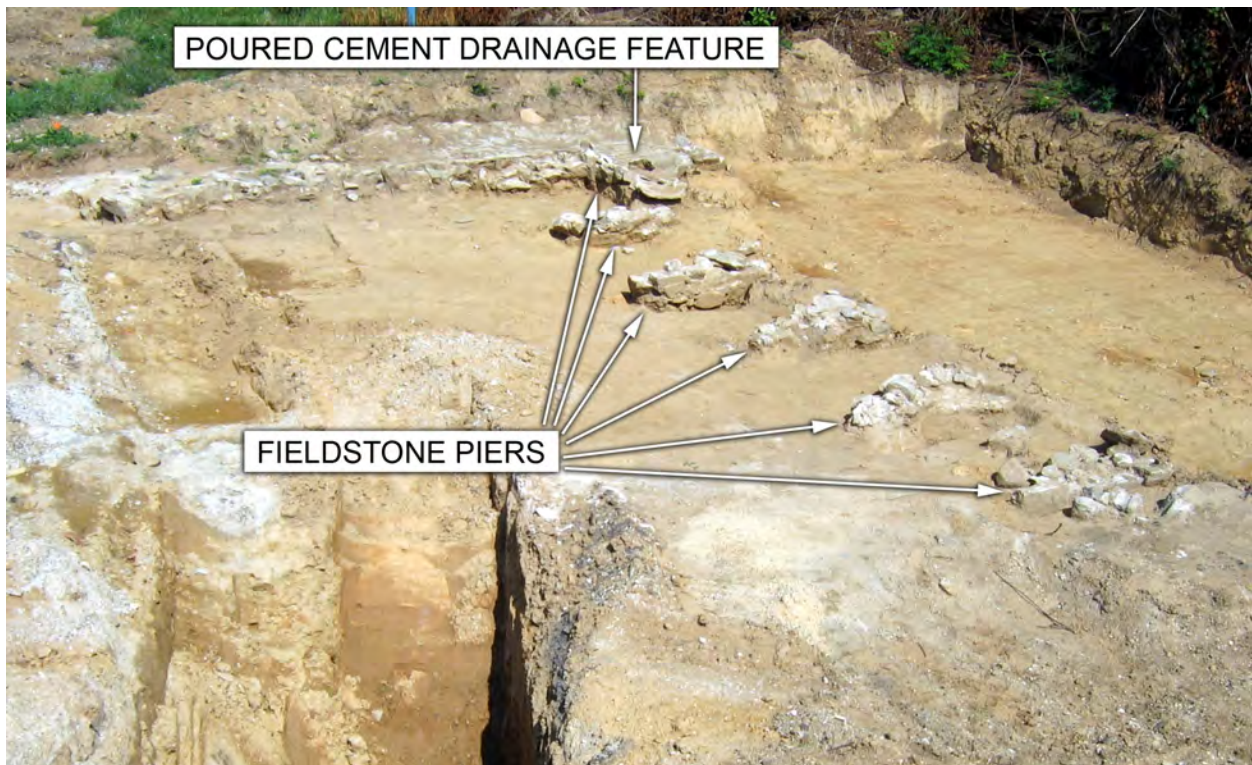


Plate 10: Foundation in northwest corner of the parking area.

A third foundation was discovered southwest of the barn and west of the milkhouse. Extensively disturbed by the installation of a septic tank in its southern end, this unmortared fieldstone foundation measured 13 feet square (*Plate 11*). The age and function of the building it had formerly supported could not be determined. The structure’s footprint and proximity to the barn suggest that it might have served as a milkhouse.

The most extensive foundation discovered through mechanical stripping was located approximately 50 feet southeast of the farmhouse. Stripping exposed a stone step just beneath the ground surface in this location. Further excavation revealed eight more steps leading down to stone and cement remnants of a structure that had once served as a springhouse. The eastern section of the



Plate 11: Unidentified foundation remnants south of the barn.

structure was the oldest, dating to the early nineteenth century (*Plates 12-14*). Its walls were mortared stone, and its floor was cement-covered stone. The structure's original entrance was set in the west wall, slightly off-center. A small window was located in the north wall. A mortared-stone addition had been attached to the west side of the early-nineteenth-century structure. This addition was accessed by a set of steps leading directly to a doorway in the structure's west wall. This doorway was later filled in, and the steps leading to it were disassembled and buried.

A set of stone steps unearthed on the west side of the addition had been constructed using stone slabs 5 feet long and approximately 3 feet wide. These steps led down to a landing in front of the south wall of the addition. They provided access to a new doorway created in the south wall of the addition, as well as to a pathway extending northward to the south side of the building. The pathway was lined with ornamental stone walls capped with a coping course of upright fieldstones cemented into place, creating a pointed, ornamental design along the top of each wall.



Plate 12: Westward view.



Plate 14: Northward view.

Three views of springhouse remnants in the east yard.

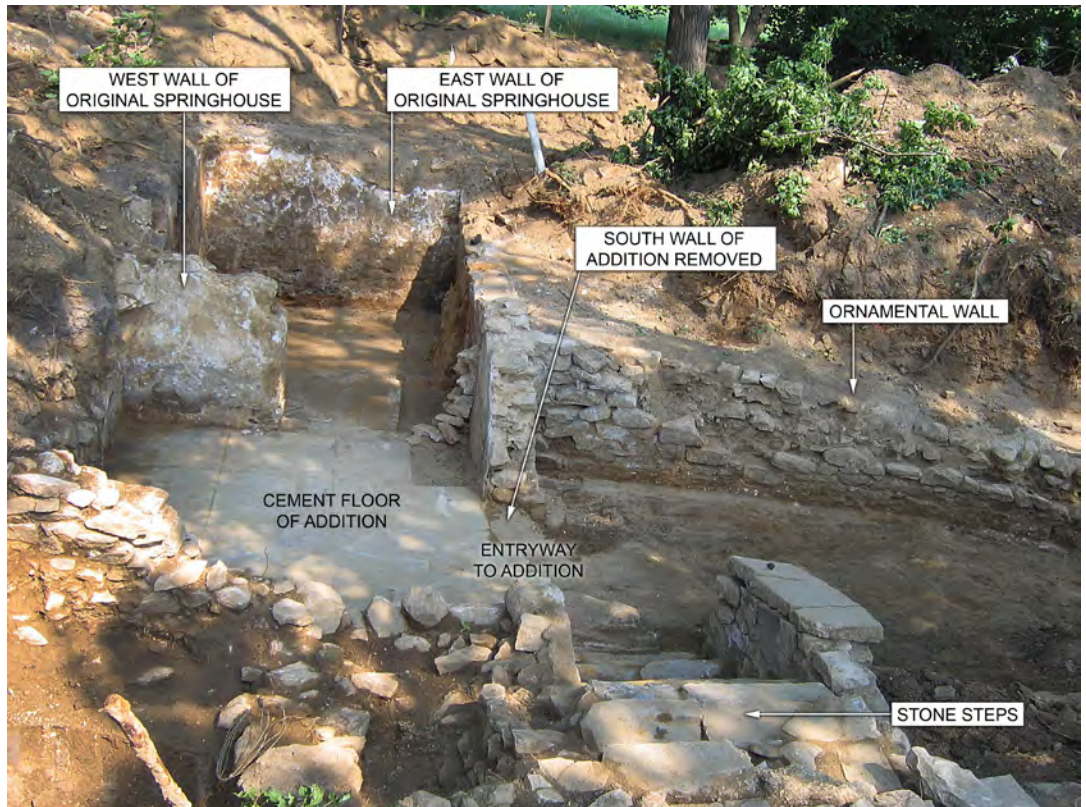


Plate 13: Eastward view.

Artifact Analysis

More than 25,000 artifacts were recovered from the Joseph Lewis Site through archaeological excavation. (see photos of selected items on Page 32). The artifact assemblage included nails and window glass associated with the farmhouse and outbuildings, as well as bottle glass and ceramics associated with food preparation, storage, and consumption. Among the other artifacts were buttons and buckles, coins and combs, tobacco pipes and drainage pipes, toys, tools, and a variety of agricultural items.

After identifying and creating an inventory of these objects, the archaeologists attempted to ascertain their significance. Generally speaking, it is the presence or absence of specific artifacts or types of artifacts on a site that helps archaeologists determine what kind of site they have encountered, and what activities took place there. Architectural debris indicates the presence of a house or outbuilding. The presence of ceramic plates and bowls reflects food preparation and consumption activities. Mason jars indicate food preservation and storage. Horseshoes or horseshoe nails on a site indicate animal maintenance activities, or, in special circumstances, blacksmithing. An absence of bottles of the type traditionally filled with alcoholic liquids may indicate that no alcohol was consumed on a site.

Data derived from the locations of recovered objects can shed light on a site's former layout. Concentrations of nails, for example, might attest to the former presence of frame buildings. Concentrations of window glass can be used to locate door and window openings. A large number of bones can indicate where animal butchering occurred. Areas with high artifact densities are often revealed to be refuse dumps. The vertical locations of artifacts within soil layers or strata are also recorded, as that information can help archaeologists determine the period in which artifacts were deposited.

Information regarding the size and condition of artifacts can also be used to interpret a site and its inhabitants. Nails, for example, can be analyzed according to size. Nails of various sizes were used in the construction and maintenance of different parts of a building. The condition of recovered nails can reveal if a building in that vicinity had been torn down, or if it collapsed in place. Marks on an artifact can help identify how the artifact had been used. Redware bowls, for instance, were variously utilized as milk containers in dairying, as food serving containers, and as food preparation equipment. By scrutinizing the wear and tear on a redware bowl fragment, archaeologists can ascertain the bowl's principal use (*Plate 15*).

Artifacts also provide information about the people who deposited them. The relative affluence of occupants can be deduced from the goods they owned. Ceramic objects can be graded according to how expensive they were to purchase. Porcelain items cost more than those fashioned from redware. White paste ceramics were generally more expensive than stonewares. Highly decorated ceramics were usually more expensive to produce and purchase than minimally decorated or non-decorated items. Well-made items were more costly than poorly-made items and factory seconds.

Few porcelain artifacts were recovered from the Joseph Lewis Site. Redware artifacts, by contrast, were numerous. White paste ceramics were recovered, but few of them were highly decorated. The ceramic assemblage did not include any factory seconds or poorly-made specimens. These data indicate that the Site's occupants were of modest means.

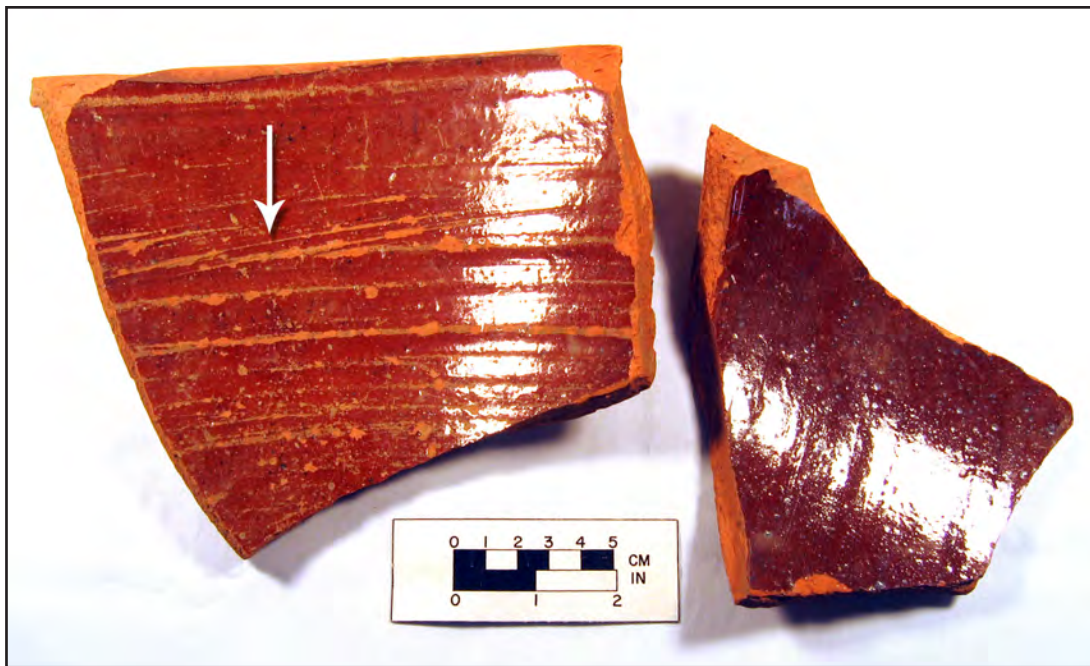


Plate 15: Redware bowl fragments. Note use wear from mixing (arrow).

Artifacts can also shed light on non-tangible attributes of a site's occupants, when viewed alongside the site's documented history. On the Joseph Lewis Site, a large number of redware vessels dating to the late nineteenth century and early twentieth century were recovered. This was unusual for historic archaeological sites in general, but a similar pattern has been discovered on several other farm sites in the region where the former occupants—like those on the Joseph Lewis Site—were German immigrants, or at least of German descent. The atypical, continued use of redware into the late nineteenth century by German-Americans could mean that they regarded the objects as symbols of ethnic identity. The highly decorated redwares were a reflection of social standing. The presence of these types of ceramics on the Joseph Lewis Site suggests that the status of the Site's occupants in the community may have been based on their ethnic heritage more than their wealth.



Plate 16: Yellow trailed slip decorated redware plate fragments.



Plate 17: Manganese glazed redware pot fragments.



Plate 18: Redware pan fragments, slip decorated with iron oxide dots.

Notably absent from the Site’s early-twentieth-century artifact assemblage was glass from alcohol bottles. The Site’s occupants may have eschewed alcohol consumption during that era for one or more reasons. For part of the period, the production and sale of alcoholic beverages was prohibited by law. Even when this law was not in effect, certain religious groups espoused abstinence, often as an expression of spiritual “revival.” Some individuals, families, or even wider communities abstained from alcohol consumption for health reasons. Nothing in the archaeological or historical record accounted for the absence of alcohol bottle glass in the Joseph Lewis Site’s early-twentieth-century deposits.

Methods of artifact analysis are numerous and diverse. Fully 50 pages of the technical report prepared by CHRS, Inc. at the conclusion of the Joseph Lewis Site investigations were devoted to describing and analyzing the array of recovered objects. The report authors ultimately combined this analysis with historical information and other contextual data in an effort to construct a coherent view—summarized below—of how the Joseph Lewis Site evolved over two centuries.

SELECT CERAMIC ARTIFACTS

Below: Highly-fired redware fragments.



Below: Cup.



Above (clockwise from top left): white stoneware, scratch blue; white salt-glazed stoneware; tin-glazed earthenware; Weildonware



Above: Saucer with decal decoration.

OTHER SELECT ARTIFACTS



Above: Gun related items. Note French gun flint in upper lefthand corner.



Above: Clothing items.



Above: Personal Items. A: toothbrush; B: coins; C: comb; D: brooch; E: cameo; F: keys; G: stamped carnival token.



Below: Kaolin tobacco pipe fragments.

Changing Landscapes

Throughout its long history, the Joseph Lewis Site was affected by events that left marks not only on the Site's occupants but also on what goods those occupants owned and how they adapted the Farmstead's buildings to changing circumstances. Several archaeological studies have alluded to the fact that physical changes to properties often coincide with changes in property ownership. The acquisition of a property by new owners can be reflected in alterations to dwellings and outbuildings, as well as by artifact deposition. It is important, therefore, to make as many connections as possible between particular owners of a site and certain features and artifact-bearing soil layers. Changes through time can thus be noted, and questions about particular owners or occupants may be addressed.

Unfortunately, archaeologists investigating the Joseph Lewis Site were not able to associate layers of artifact-bearing soil with specific owners and/or occupants. None of the Site's many occupations lasted long enough to yield a discrete and datable set of archaeological deposits within a single soil layer.

Evolution of the Joseph Lewis Farmstead

By considering archaeological and documentary data collectively, archaeologists were able to infer successive eras in the Joseph Lewis Farmstead's evolution. The original farmstead probably comprised a log dwelling, a log barn, and a stone springhouse, as diagramed on *Figure 13*. The archaeological data indicated that the dwelling was constructed on the foundation located near the eastern limit of the Joseph Lewis Site, and that this original residence later served as a springhouse. Many late-eighteenth-century and early-nineteenth-century farmhouses in southeastern Pennsylvania had spring-water flowing through their basements. The footprint of the Farmstead's log barn is depicted on *Figure 13* as lying parallel to the log dwelling. Neither historical nor archaeological data shed light on the exact placement of this first-generation barn. It is reasonable to assume, however, that the structure was located somewhere near the spot later identified as the optimal location for a full-size, stone, Swiss bank barn.

The Farmstead in the Early to Mid-Nineteenth Century

The Joseph Lewis Farmstead was extensively altered in the first half of the nineteenth century, as diagramed on *Figure 14*. A stone dwelling was erected around 1807. A porch was attached to the north side of this dwelling, and a second porch may have been attached to its southern façade. A frame shed was affixed to the dwelling's east wall, and a frame outbuilding was constructed between the house and its log predecessor, which was converted into a springhouse. Around 1813, a stone addition was constructed on the west side of the circa-1807 dwelling. Also erected around this time were a stone barn and a smaller stone structure south of the barn. The Farmstead was further altered in the 1840s and 50s. A 2½-story stone addition was affixed to the west side of the farmhouse around 1850, and the roof of the circa-1813 section was raised to match the new roof level. The roof of the small stone building south of the barn was also raised around this time. The

Figure 13: Farm Layout, Original Farmstead, 1801-1807

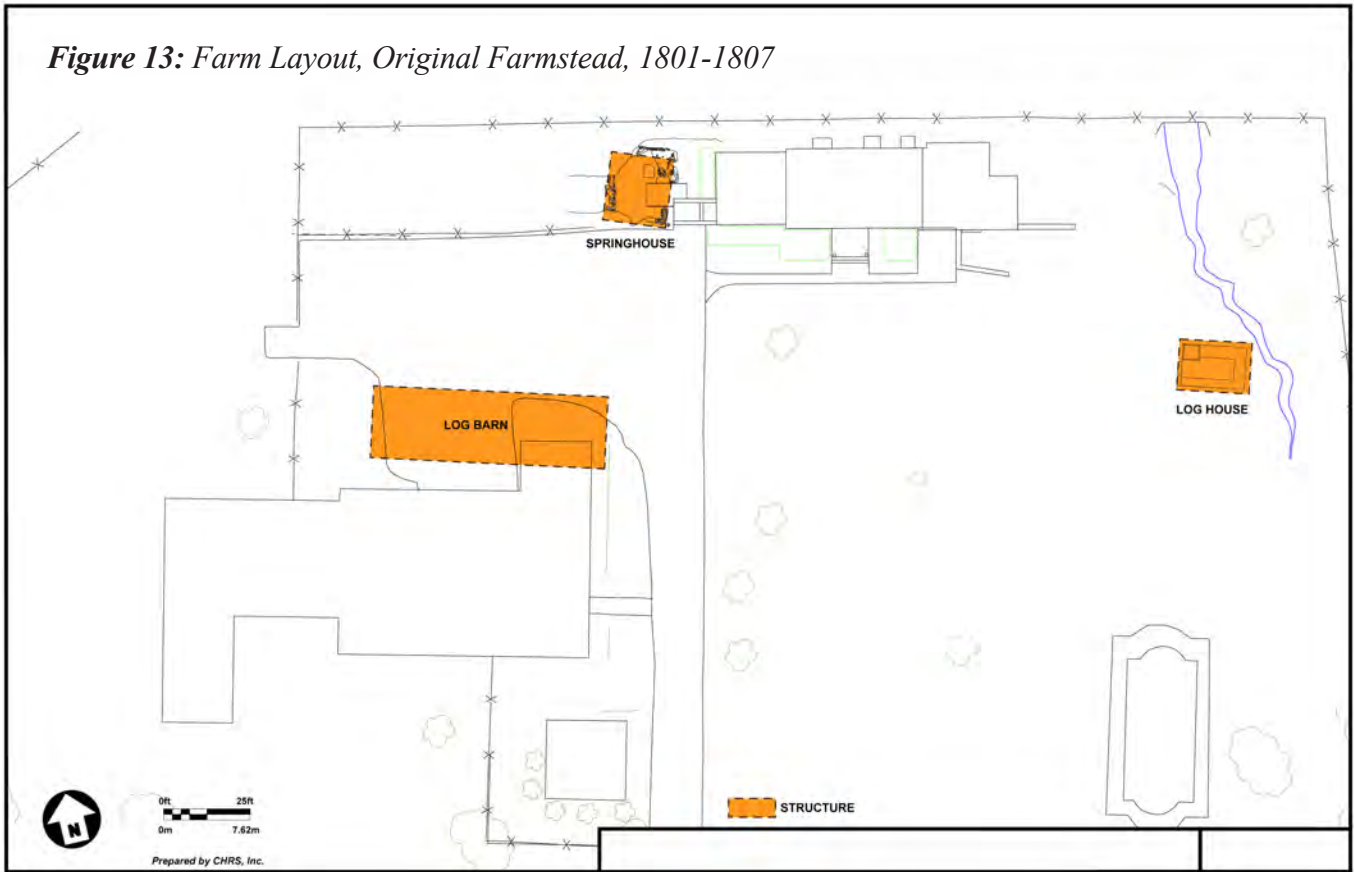
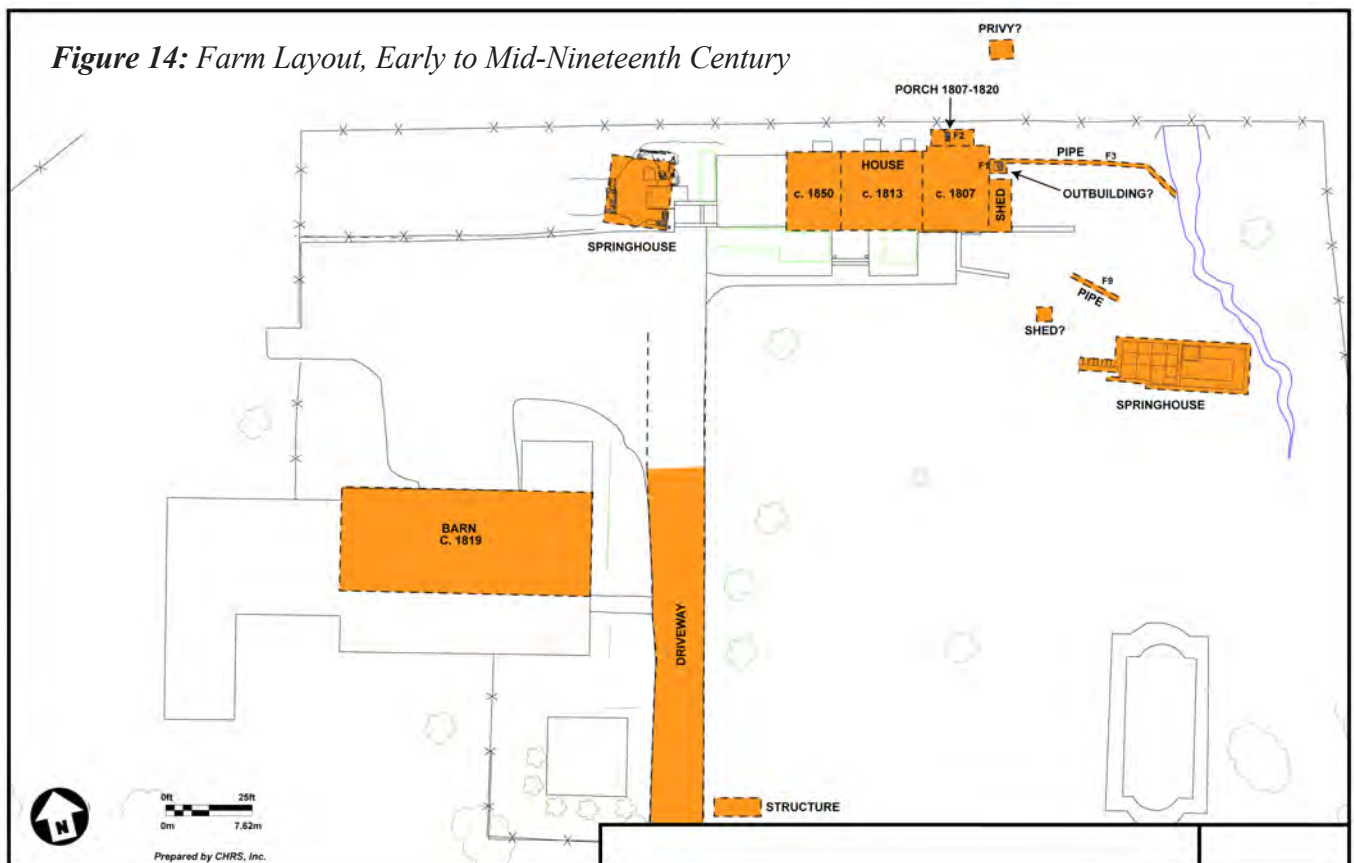


Figure 14: Farm Layout, Early to Mid-Nineteenth Century



springhouse at the eastern edge of the Farmstead was enlarged to twice its original size, probably in support of the farm's burgeoning dairy business. A privy probably stood in the rear or north yard of the farmhouse during most, if not all, of the early nineteenth century.

The collected documentary and archaeological data strongly suggested that these structural additions and improvements on the Joseph Lewis Farmstead coincided with changes in the property's ownership. But what of the various archaeological deposits? It was tempting to regard the early-to-mid-nineteenth-century deposits as having resulted from Jesse Gyger's acquisition of the property in 1835. Gyger and his family constituted the first owner-occupants of the Farmstead in many years. However, some of the artifacts in those deposits dated to the middle of the nineteenth century (i.e., post-1835). It is more likely, then, that the last of the Site's early-to-mid-nineteenth-century deposits were made in conjunction with Peter and Jane Colehower's sale of the property to Jane Stephenson in 1854. The deposits could thus be attributed to the three families—the Watsons, the Gygers, and the Colehowers—that occupied the Farmstead from the 1820s through the early 1850s. These families had some things in common. Their households were relatively large, and their farming operations were relatively prosperous. They probably dumped most of their domestic refuse in the yard east of the farmhouse. That area was close to the dwelling, was less likely to be frequented by visitors, and was removed from work spaces between the house and the barn, and between the house and the springhouses. A fence extending eastward from the circa-1807 dwelling to an outbuilding at least partly enclosed a yard area immediately east of the dwelling. The property's residents probably dumped refuse on the far side of that fence, beside the outbuilding. There may have been other dumping locations on the Farmstead. Farm residents typically discarded trash behind outbuildings and around privies. Several small frame outbuildings stood on the Joseph Lewis Farmstead southeast of the farmhouse, and at least one privy was located in the house's north yard, in an area extensively disturbed by construction of the Pennsylvania Turnpike in the mid-twentieth century.

Trash disposal patterns on the Farmstead shifted slightly in the second quarter of the nineteenth century. While the preponderance of early-nineteenth-century artifacts had been deposited in the east yard, artifacts dating to the second quarter of the nineteenth century were concentrated in an area just beyond the northeastern corner of the farmhouse. The increased dumping of trash in the latter location suggested that this part of the yard came to be regarded in the second quarter of the nineteenth century as less critical to social interaction and work on the Farmstead. It was during this time that the northern doorway in the oldest section of the farmhouse was converted into a window, and the house was expanded westward.

The economic status and social standing of the Farmstead's early-to-mid-nineteenth-century inhabitants could not be precisely ascertained. The tenant farming Watsons were apparently financially stable, as they managed to maintain their residence on the property for 16 years. A stone barn, stone outbuilding, and stone addition to the house were built during this period. When their landlords sold the property, the displaced Watsons were able to purchase a farm of their own. Jesse Gyger bought the Joseph Lewis Farmstead on 125.83 acres in 1835 for \$6,027.00, and sold it a decade later for \$8,483.33. The increase in market value under his ownership indicates that he and his family maintained and even improved the property. The same could be said of the Colehowers, who bought the farm in 1846 for \$8,483.33 and sold it in 1854 for \$11,000, having further

extended the house and raised its roof. While these data indicated that the Watsons, Gygers, and Colehowers were relatively well-to-do, the artifacts they left behind did not reflect above-average wealth. Studies have shown that, among persons of German descent, wealth was likely to be expressed through social interaction more than possessions such as high quality glass and ceramic goods. This appears to have been the case with the Germanic Gygers and Colehowers.

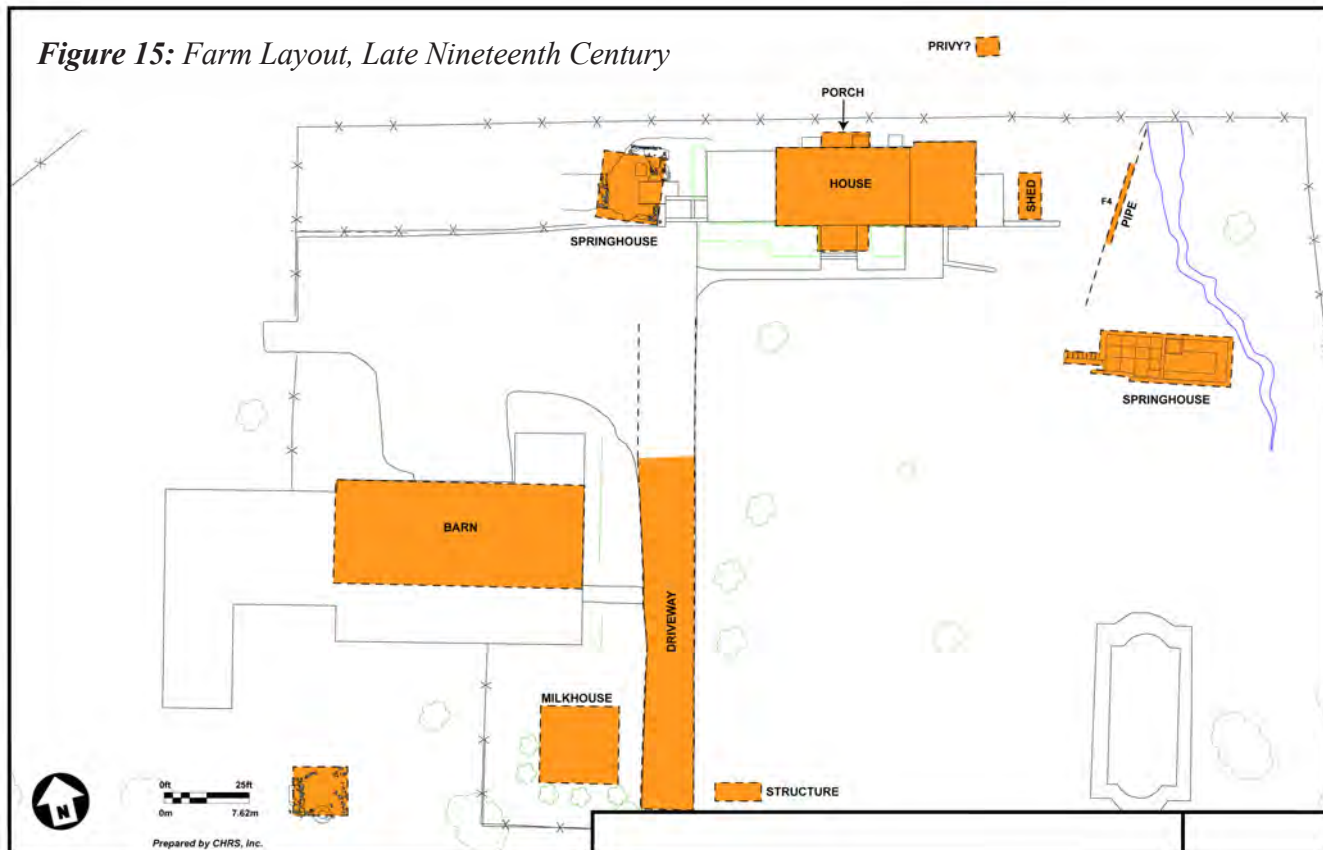
Tax and census data indicated that Peter Colehower owned an unusually large dairy herd during the 1840s and 50s, as the regional emphasis on fattening cattle for market was beginning to taper off. Archaeologists were not able to determine if the Colehowers' predecessors—the Watsons and Gygers—also concentrated on dairying during their occupancies. Faunal remains recovered from the Joseph Lewis Site indicated that dairying was at least part of the Watsons' and Gygers' farming regimes. Those remains also indicated that beef and swine were plentiful on the Farmstead, and were consumed in considerable quantities by the occupants. As Peter Colehower rarely, if ever, owned more than one head of beef cattle, he must have acquired beef from neighboring farms. The same must have held true for the Watsons and Gygers, because no archaeological evidence of cattle or swine butchering was unearthed on the Farmstead. Judging from their outfitting of two springhouses, their construction of a large stone barn, and their apparent disinterest in butchering, the Farmstead's residents during the first half of the nineteenth century appeared to pursue dairying as a principal occupation. That would account for the fact that more than a quarter of the recovered redware artifacts from that era represented pans and other containers used in processing and storing milk.

Latter-day ground disturbances obscured or even obliterated archaeological evidence of nineteenth-century activities in some sections of the Farmstead. Limited inferences about those areas could be drawn from the arrangement of the Farmstead's structures. The farmhouse is oriented so that it sits parallel with Yellow Springs Road, giving the building a south-southwestern exposure. The area between the house and the road (the south or "front" yard) was likely kept open so the road would be visible from the house, and wayfarers on the road might easily view the house. This area was thus a public space, defined on the west by a lane leading from Yellow Springs Road, past the barn, and up to the house (much like the present driveway). There may have been other areas of public interaction on the porch in the front of the house and in front of the barn (particularly if the unidentified building south of the barn served as a milk house). Social interaction unrelated to husbandry or field work likely occurred in the north or rear yard.

The Farmstead in the Late Nineteenth Century

Little evidence was detected of changes in the Farmstead's layout during the late nineteenth century (*Figure 15*). No buildings were razed or expanded. Minor alterations included the addition of porches to the front and rear of the farmhouse, and the shifting of a shed in the east yard a little farther to the east, away from the house. Most of the recovered late-nineteenth-century artifacts—like the preponderance of artifacts from the previous period—were unearthed in areas formerly located behind outbuildings or in portions of the yard not devoted to either socializing, recreation, or labor.

Figure 15: Farm Layout, Late Nineteenth Century



The stability of the Farmstead during the second half of the nineteenth century mirrored the continuity of its residents and their labors. Dairying remained the principal cash-generating industry on the property during the decade-long occupation of widow Jane Stephenson's small household (1854-1864), and then through the decade of the Henry family's occupation (1864-1874). Stephenson's personal estate in 1860 only amounted to \$100 (when most of her neighbors had personal estates in the \$500-\$1,500 range). She had been able to purchase the large farm for \$11,000, but was thereafter land rich and cash poor. Judging from the bargain price William Henry paid for the farm in 1864 (\$5,000), Stephenson must have done little to maintain—let alone improve—the property during her ten-year ownership. Nor did Henry have the combination of wherewithal and ambition to make substantial upgrades, and he ended up losing the farm after experiencing financial difficulties. Archaeologists were unable to determine what proportion of the late-nineteenth-century archaeological deposits were generated by the Henry and Stephenson households, but the households' limited means likely translated into fewer archaeological deposits, just as financial limitations kept the households from significantly improving or even maintaining the property.

In the final quarter of the nineteenth century and into the early twentieth century, the Joseph Lewis Farmstead was occupied by the family of Joseph Jacobs, and then by small households headed by two of Jacobs' adult sons. The Jacobses were characterized in nineteenth-century biographical sketches as prosperous farmers and storekeepers. The farm along Yellows Springs Road was only one of the family's enterprises, and for the last 14 years of the nineteenth century the property may have been home to no more than several renters. Under these conditions, there was little need for major structural additions or alterations to the Farmstead. Given the relative prosper-

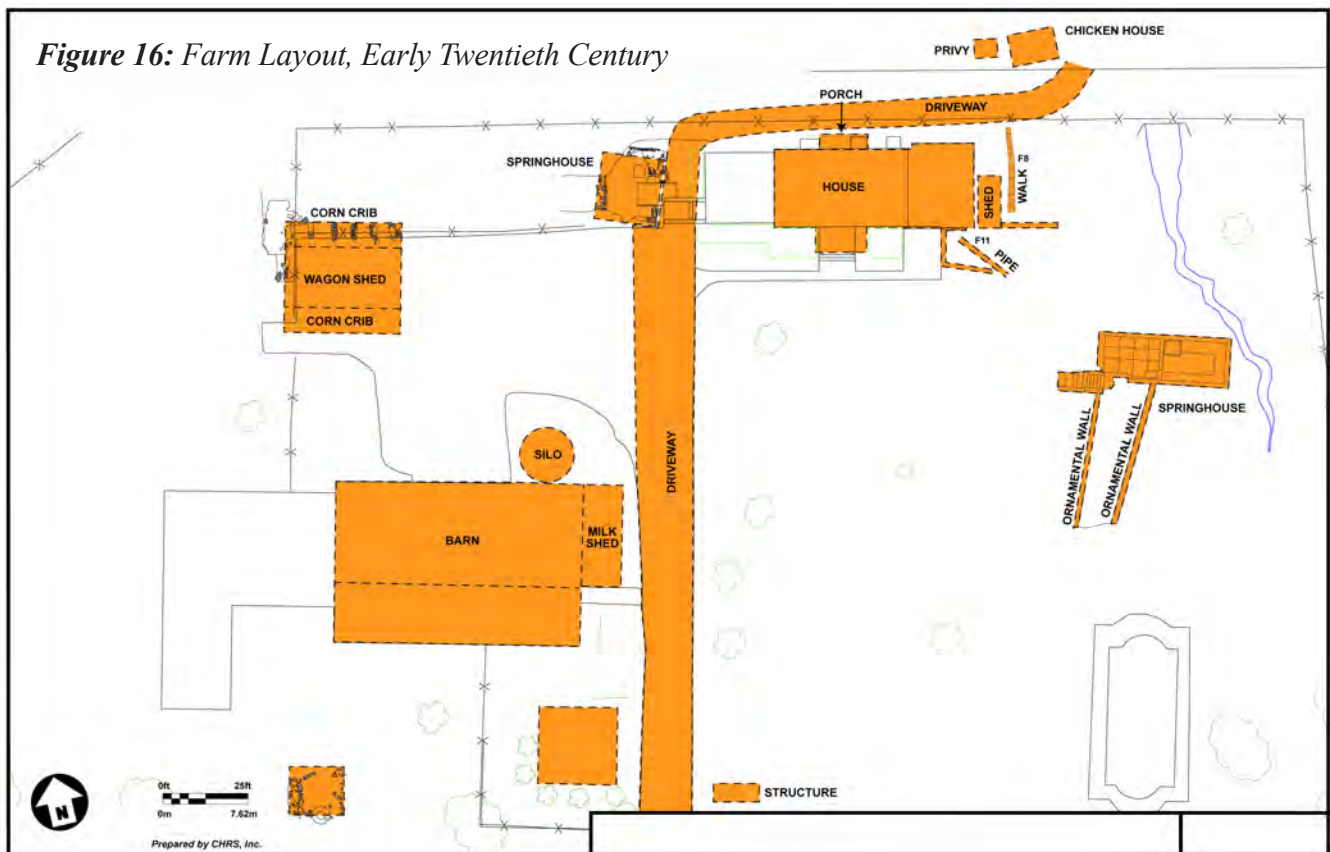
ity and extended stay of the Jacobs family on the property, archaeologists suspected that most of the artifacts recovered from the Joseph Lewis Site had been deposited by members of this family.

The late-nineteenth-century artifact assemblage was similar to the early-to-mid-nineteenth-century collection. Artifacts denoting elevated socio-economic status were relatively scarce, with only a few fashionable ceramics present. The low percentage of teawares and high percentage of redware artifacts was anticipated, in light of the Jacobs family's German heritage. Redware use in the United States declined in the latter years of the nineteenth century, and there is little evidence of its use in the early twentieth century—except on sites occupied by persons of German ethnicity (like the Jacobses). While other ethnic groups made greater use of vessels made from glass and highly fired ceramics such as stoneware and porcelain, German-Americans retained an affinity for redware. In continuing to acquire and utilize locally-produced redware, German-Americans expressed communal cohesion. They did this also through intermarriage with other German-Americans (exemplified by George Jacobs' circa-1899 marriage to Mary Bowman). A few non-locally-produced, highly decorated ceramics recovered from the Joseph Lewis Site indicate that the Jacobses—while clearly community-minded—could also appreciate the value of worldly “status goods.”

Analysis of the Joseph Lewis Site's late-nineteenth-century artifacts revealed a sharp increase in the percentage of tumbler and vessel glass, and a decrease in the number of beverage/food bottles. Significant increases were also noted in the number of large plates and undecorated refined paste ceramics. Those changes appeared to have resulted from the reduction of residents on the Joseph Lewis Farmstead, and possibly a rise in stress levels. Increased stress may have induced residents to consume greater quantities of alcoholic beverages. The use of larger plates likely indicated that the Farmstead's shrinking households adopted more formal dining rituals, with meals completed in one or two courses. Faunal remains from this period revealed that residents consumed cuts of meat similar to those consumed by early-to-mid-nineteenth-century residents, but less frequently. Pork consumption increased 20% during the final quarter of the nineteenth century, while beef consumption declined at a similar rate—just the opposite of the national trend in meat consumption. This may have been due to the fact that fewer beef cattle were available in Chester County after dairying displaced cattle-fattening as a principal revenue generator.

The abundance of redware, together with the scarcity of teawares and other ritualized dining items, in the Joseph Lewis Site's nineteenth-century artifact assemblage indicates that the Site's Germanic occupants largely rejected what is sometimes called “the Cult of Domesticity”—the prevailing ideology in North America at the close of the nineteenth century. In the Cult of Domesticity, the home was regarded as an oasis of virtue, comfort, and perfection in an otherwise rough world. Wives, as keepers of the home, were supposed to embody domestic perfection. This led to a separation of male and female work spheres, the ritualization of meals, and a middle-class ethos incorporating a lower birth rate. Such practices spread to more and more remote corners of the country due to several interwoven factors. One of these was the industrialization of the American economy, when economic ideals shifted from self-reliant subsistence farming to the accumulation of wealth in an expanding capitalist society. The Cult of Domesticity represented aspiration to a higher social class, or a struggle to define a new type of social class. It also reflected a desire to separate domesticity from the workaday world, both physically and metaphorically. Also implied

in the Cult of Domesticity were ideals of industriousness, devoutness, cleanliness, and order. Rubbish was no longer dumped in the front yard. It was either discarded in middens well removed from the residence, buried in pits, or carried away. New houses and their interiors were laid out with an emphasis on symmetry. Acceptance of the Cult of Domesticity implied that the hardships and rarer morals of the capitalist world could not exist in the virtuous home. Barriers between home and work took the physical form of land ridges, trees, walls, fences, ditches, hedges, gardens, and space buffers. Barriers were also expressed culturally. At work, one might adopt to the standards of mainstream industrial culture and behavior, but at home one could practice the more familiar rituals of one's native ethnicity, religious practices, cuisines, and horticulture.



The Farmstead in the Early Twentieth Century

Numerous changes were made to the Farmstead's layout in the early twentieth century, as depicted on *Figure 16*. The barn was enlarged through construction of a southern addition and an easterly milk shed. A silo was erected on the north side of the barn, and a combination corn crib-and-wagon shed was built approximately 100 feet farther to the north. A frame shed was attached to the farmhouse's east wall. A stone walkway was laid alongside this shed, extending northward to the Farmstead's principal lane or driveway. A mid-twentieth-century map of the property indicated that a frame chicken house and a privy were located on the other side (north side) of the driveway (*Figure 17*).

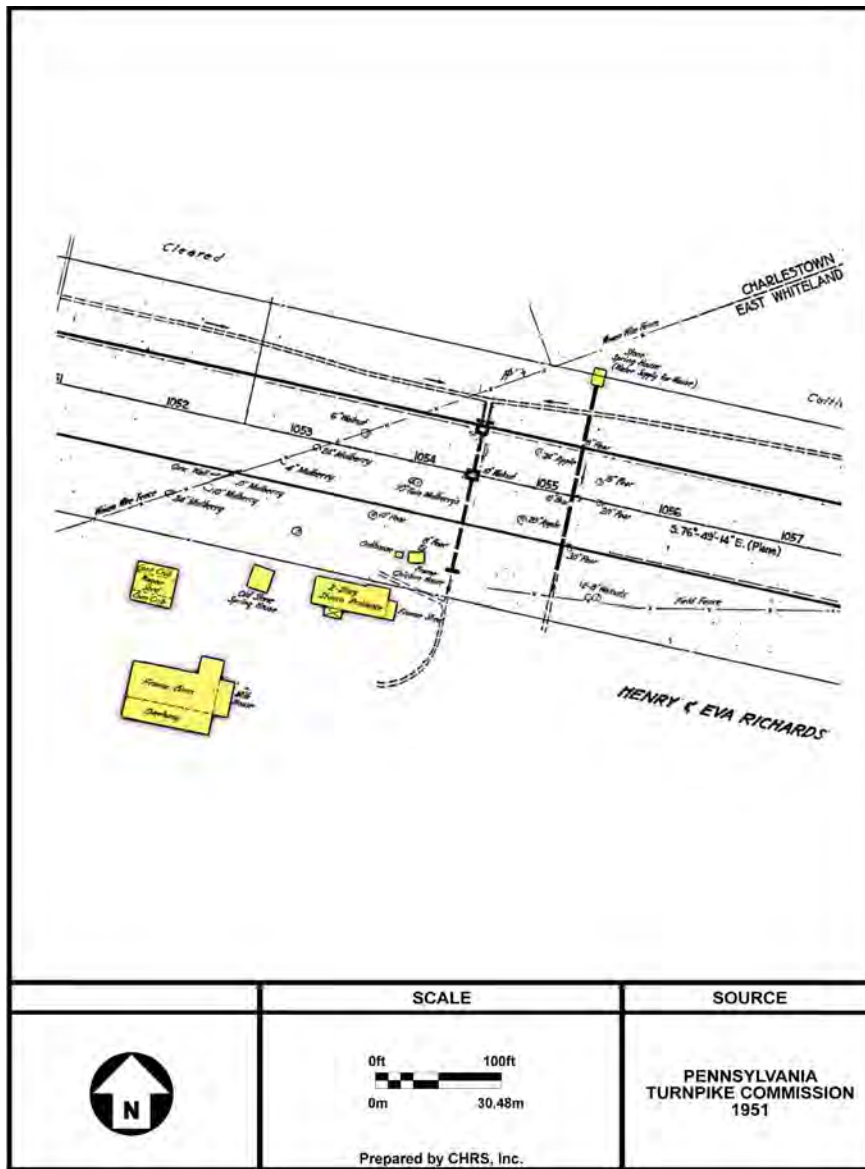


Figure 17: The footprints of the principal structures on the Joseph Lewis Farmstead are denoted on a map prepared by the Pennsylvania Turnpike Commission in 1951. Henry and Eva Richards owned the Farmstead at this time.

It was probably after World War I that an exterior walkway to the farmhouse's cellar was excavated in the house's front yard. Around this time, a set of wide, ornamental, stone steps was laid down to the cellar of the easternmost springhouse, and ornamental stone walls were constructed along a path extending southward from the springhouse. Most of the early-twentieth-century improvements on the Joseph Lewis Farmstead were likely made by George Jacobs, the property's owner-occupant through 1929. As reflected in agricultural census data compiled in 1927, Jacobs maintained an unusually large herd of dairy cattle and a sizable flock of chickens. To feed and accommodate those animals he needed an expansive barn, a place to store silage, storage space for corn, and a substantial chicken house.

After the farm was acquired for industrial and investment purposes in 1930, land lying on the south side of Yellow Springs Road was quarried for limestone, and the farmhouse was remodeled, apparently by non-resident owners.

The Joseph Lewis Site's early-twentieth-century artifact assemblage was similar in some ways to assemblages from earlier eras. Nearly 40% of the ceramic assemblage was redware. While the percentage of porcelain was higher than in previous periods, it was still relatively low, and the percentage of teawares remained unchanged. This was not surprising, given George Jacobs' German heritage and his circa-1899 marriage to a German-American woman. The early-twentieth-century artifact assemblage differed from earlier assemblages in several significant ways, however. While the percentage of beverage/food bottles was little changed from previous periods, the percentages of medicine bottles and tumbler vessel glass declined dramatically. The collection of recovered bottles included some specimens that had once contained branded soda, but no bottles devoted to alcohol or alcohol-based products. If the Farmstead's residents abstained from alcohol use, they may have brought fewer medicine bottles onto the property, because some medicines contained alcohol. Among the recovered bottles formerly filled with non-alcoholic liquids were containers of Bromo Seltzer (a medicine for upset stomach), Magnesia Citrate (a laxative), a Vicks medicine, Wild Root hair cream, and Clorox bleach.

Most of the faunal remains recovered from the Site's early-twentieth-century soil strata were from swine. They represented meat cuts similar to those of earlier eras, while indicating an overall reduction in meat consumption. Little evidence of chicken butchering or consumption was unearthed, leading archaeologists to conclude that George Jacobs had raised chickens for egg production and/or live sale.

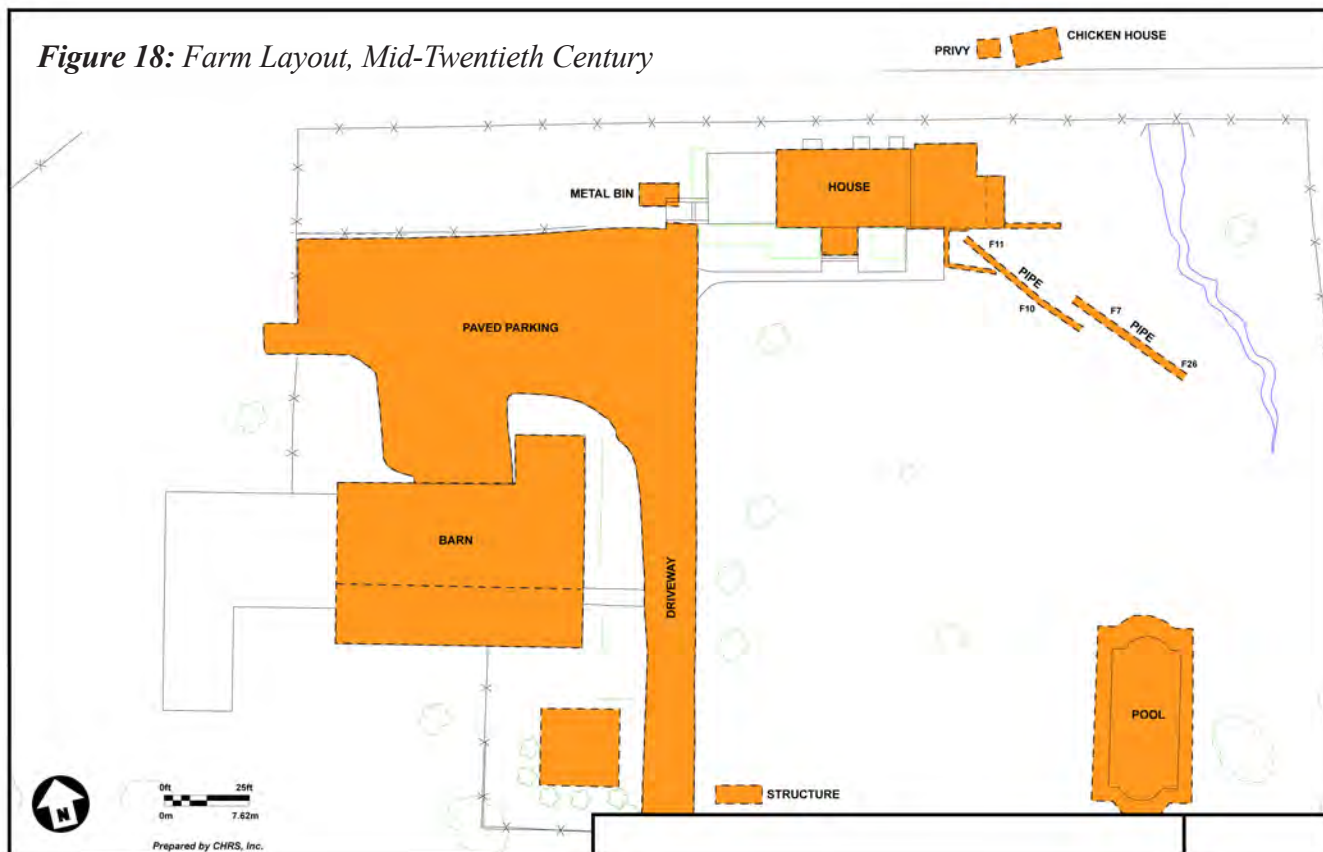
A reduction in artifact deposition in the Farmstead's east yard during the early twentieth century indicated that residents no longer viewed that area as ideal for trash disposal. Their construction of a walkway alongside the house and across a portion of the east yard may have factored into this shifting view. The residents probably began discarding their trash north of the house, on the far side of the farm lane, behind the chicken house and privy. Archaeologists were not able to confirm this hypothesis because that area had been extensively disturbed by construction of the Pennsylvania Turnpike.

In discarding their refuse farther away from the house, the Farmstead's early-twentieth-century residents embraced the Cult of Domesticity's idealization of cleanliness and order. Their construction of ornamental stairs and walls, particularly in the vicinity of the eastern springhouse, was further evidence of their increasing sensitivity to the Farmstead's appearance. This sensitivity appears to have peaked in the mid-1930s with the farmhouse's remodeling in the Colonial Revival style.

The Farmstead in the Mid-Twentieth Century

The layout of the Joseph Lewis Farmstead was radically altered in the mid-twentieth century, as diagrammed on *Figure 18*. Right-of-way acquisition by the Commonwealth of Pennsylvania, and the Pennsylvania Turnpike Commission's extension of Turnpike through the northern tip of East Whiteland Township, drastically reduced the acres of farmland associated with the Farmstead. As farming was discontinued, the combination corn crib-and-wagon shed was demolished, a large commercial oil tank was installed under the paved parking lot, and the silo beside the barn was re-

Figure 18: Farm Layout, Mid-Twentieth Century



moved. The springhouse in the west yard was razed, and a large metal bin was buried where it had stood. The springhouse in the east yard was covered with earth, along with the ornamental steps and pathway leading to it. An in-ground swimming pool was installed south of the ornamental walk location. The chicken house, privy, and any other outbuildings in the farmhouse's north yard were demolished or moved to make way for a massive Turnpike berm.

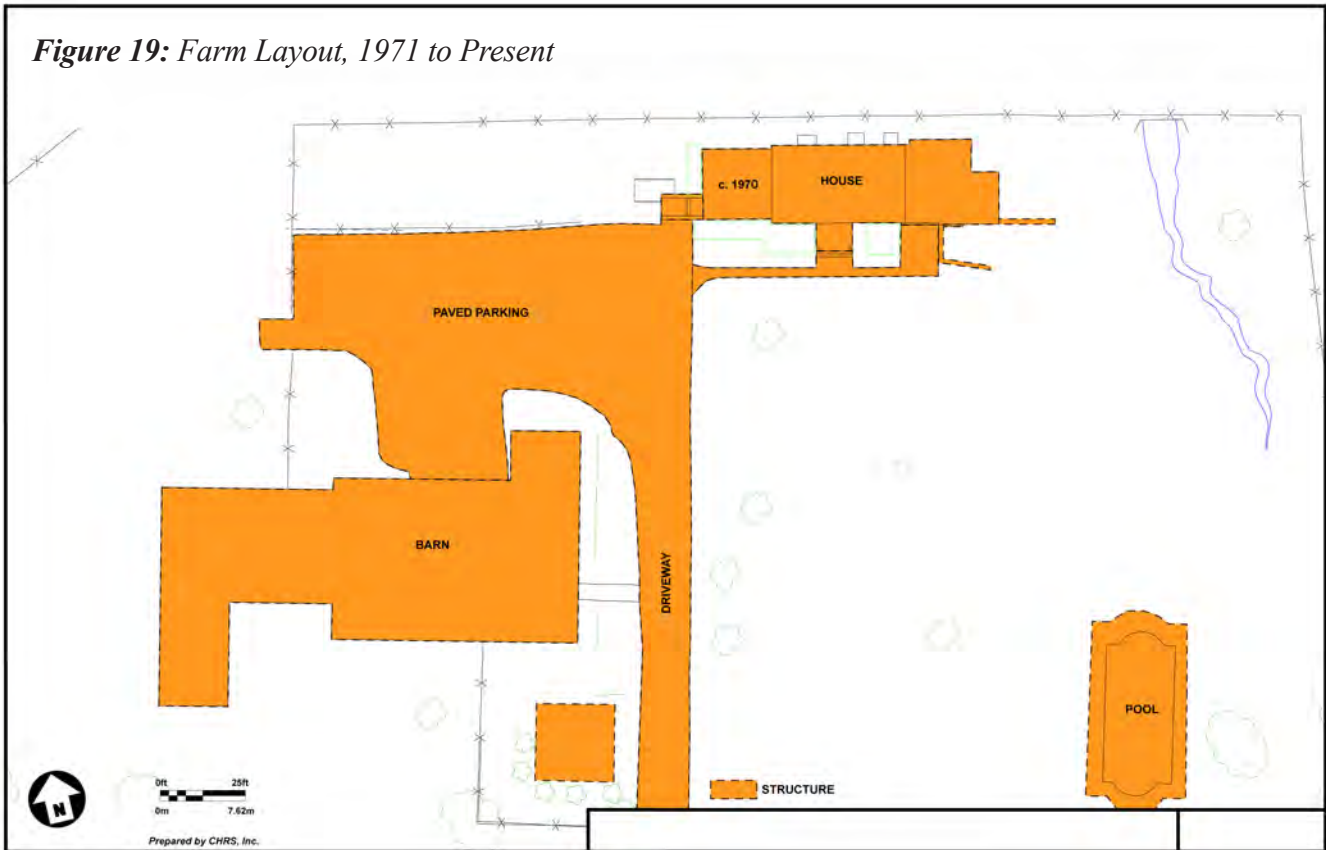
Few mid-twentieth-century artifacts were recovered from the Joseph Lewis Site. Of these, most were unearthed along the eastern edge of the east yard, adjacent to a drainage ditch created or significantly enlarged as part of the Turnpike's construction. The only inference archaeologists could draw from this assemblage was that the Farmstead's mid-twentieth-century inhabitants did not use this area for trash disposal after dumping locations in the northern yard were no longer available due to placement of the Turnpike berm. No evidence of mid-twentieth-century trash disposal was discovered elsewhere on the Joseph Lewis Site. The absence of such deposits could mean that the Farmstead's inhabitants took advantage of municipal trash collection services.

The Farmstead in Recent Decades

More changes were introduced to the Farmstead's layout in the latter decades of the twentieth century, as reflected on *Figure 19*. The barn was expanded and remodeled for use as a dog kennel. A septic tank was installed overtop the unidentified foundation southwest of the barn, and a septic

drain field was created on the opposite side of the farm lane, south of the farmhouse. A railroad tanker car was buried closer to Yellow Springs Road, for storage of heating oil. An addition was attached to the western end of the farmhouse. This structure housed a beauty salon and could be entered only through an exterior doorway in its western wall. Concrete walkways were laid from the driveway eastward along the front of the addition and older sections of the farmhouse. These construction activities disturbed most of the archaeological deposits in front of the house.

Figure 19: Farm Layout, 1971 to Present



Conclusions

Increasingly, archaeologists have looked at farm sites as sums of their parts—that is, as rural landscapes. Elements of farm complexes such as fences and outbuildings can be interpreted according to how they were used for specific agricultural purposes. On a larger scale, farms can be viewed as functioning entities within the rural environment. Understanding the purpose of a farm as a place of food production is the first step toward understanding people’s motivations for altering the landscape. The National Park Service defines rural historic landscapes as places featuring continuity of “areas of land use, buildings, vegetation, roads and waterways, and natural features.” Rural landscapes “reflect day-to-day activities of people engaged in traditional work,” and have “developed and evolved in response to both the forces of nature and the pragmatic need to make a living.”

The archaeological view of the Joseph Lewis Site as a rural landscape is incomplete, because large portions of the Site were too disturbed to merit archaeological testing. Only limited inferences can be drawn from the assembled archaeological, documentary, and archaeological data. These data indicate that the occupants of the Joseph Lewis Site were average folks living ordinary lives on a southeastern Pennsylvania farmstead of unexceptional style and layout. The Farmstead was established, and some of its earliest structures were later enlarged and/or replaced, by owners and/or occupants of British heritage. Those buildings were similar in size, shape, and function to farm structures throughout the region. Most of the Site’s residents from the mid-nineteenth century through the mid-twentieth century were of Pennsylvania German ethnicity (even though Pennsylvania Germans were a decided minority in this part of the Great Valley during that era). While it became apparent that Pennsylvania Germans presided over peaks in the property’s agricultural productivity and domestic prosperity, archaeologists were unable to attribute specific changes in the Joseph Lewis Farmstead’s layout or particular artifact-bearing soil layers to particular sets of Pennsylvania German occupants. The Germanic affinities of the Joseph Lewis Farmstead’s owner-occupants after 1834 were expressed archaeologically through their continued preference for red-ware over more refined and non-local ceramic wares. The inhabitants’ apparent resistance to the prevailing Cult of Domesticity relaxed in the early decades of the twentieth century, presumably under strong acculturation pressures from non-Germanic neighbors and friends. Members of the resident Jacobs family acquired more status goods, ritualized their mealtimes, deployed ornamental architectural flourishes on new yard structures, carried trash farther away from the farmhouse for disposal, and, ultimately, remodeled the farmhouse in Colonial Revival style. By the mid-twentieth century, the Farmstead’s reversion to non-Pennsylvania German owner-occupancy was complete, and it no longer functioned as the hub of a working farm.

For Further Reading and Research

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