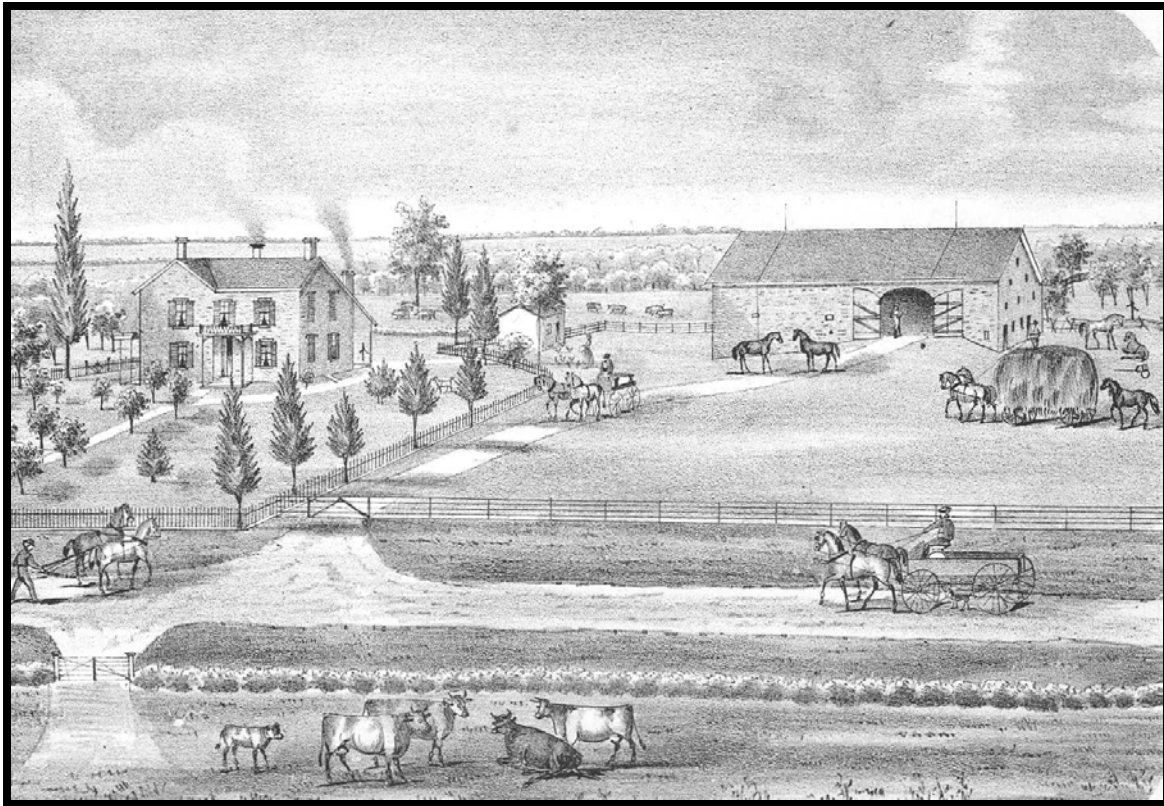


HISTORIC STRUCTURE REPORT:

HOWARTH HOUSE AND BARN
WILDLIFE PRAIRIE STATE PARK, PEORIA COUNTY, ILLINOIS



1873 Lithograph of the Howarth Farmstead

Fever River Research
Springfield, Illinois

FINAL

June 2002

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for
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and the
Illinois Department of Natural Resources (Springfield)

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FINAL

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Fever River Research staff that participated in the project included Floyd Mansberger (Principal Investigator), Christopher Stratton (Project Manager), Amy Easton, and Christina Lowry. Easton conducted much of the historical research for the project and wrote portions of the site-specific history, while Lowry provided graphics support through her scanning of original maps and atlases. Stratton conducted the field investigation and was the principal author of the report.

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INTRODUCTION

The Howarth House and Barn are part of a historic farmstead that is located in rural Kickapoo Township, Peoria County, Illinois, approximately ten miles west of the city of Peoria (see Figures 1 and 2). The farmstead was settled in 1842 by the Richard Howarth family, and it remained in that family's hands for the next 143 years. The property currently is incorporated within Wildlife Prairie State Park, a 2,000-acre zoological park owned by the Illinois Department of Natural Resources and operated by the Forest park Foundation. Natives of Lancashire, England, the Howarths were part of a large migration of English immigrants to Peoria County during the middle nineteenth century. The Howarth House is a one-and-one-half-story, L-shaped dwelling of stone and frame construction. The house originally was built as a side-gabled, single-pile, stone structure but later had several additions made to it. Family tradition relates that the residence was begun by Richard Howarth, Sr. (who was a skilled stonemason), and was completed by his son, Richard, Jr. following the father's premature death in 1844. The barn at the farmstead is a large, side-gabled, stone building erected by Richard Howarth, Jr. in 1859. This barn is unique in Illinois in that its form matches that of an English barn type referred to as a "Lancashire Barn." Although common in England, this barn type appears to be rare in the United States. The Howarth House and Barn currently are utilized for staff housing.

Early in 2001, the Illinois Department of Natural Resources requested that Fever River Research prepare a historic structures report on the Howarth House and Barn. This work was to be carried out in conjuncture with a comprehensive assessment by Basalay, Cary & Alstadt of the entire site complex at Wildlife Prairie State Park. The principal goals of the historic structure report were to: 1) assess the eligibility of the farmstead to National Register of Historic Places; 2) develop of a detailed site-specific history, as well as a broader historical context for English settlement and stone construction in rural Peoria County during the nineteenth century; 3) determine the evolution of the house and barn over time; 4) identify structural and integrity concerns; 5) make recommendations for addressing those concerns; and 6) provide a series of preservation alternatives for each property. The project presented a unique opportunity to investigate a stone house and barn, in a region that is known to have had a strong tradition of stone construction during the nineteenth century but has relatively few surviving examples of such building types –particularly at a single site. The fact the builders were Englishmen and experienced stonemasons, who were residing in an enclave English settlement, made the investigation even more intriguing. Historical research for the project was conducted at the Peoria County Courthouse, Peoria Public Library, Illinois State Library, Illinois State Archives, Illinois Historic Preservation Agency, and Wildlife Prairie State Park. Some survey work also was conducted in the area around the Howarth Farmstead in order to identify other extant stone buildings. Sites visited as part of this survey included Jubilee College State Historic Site, Christ Episcopal Church, and the Lonsdale House.

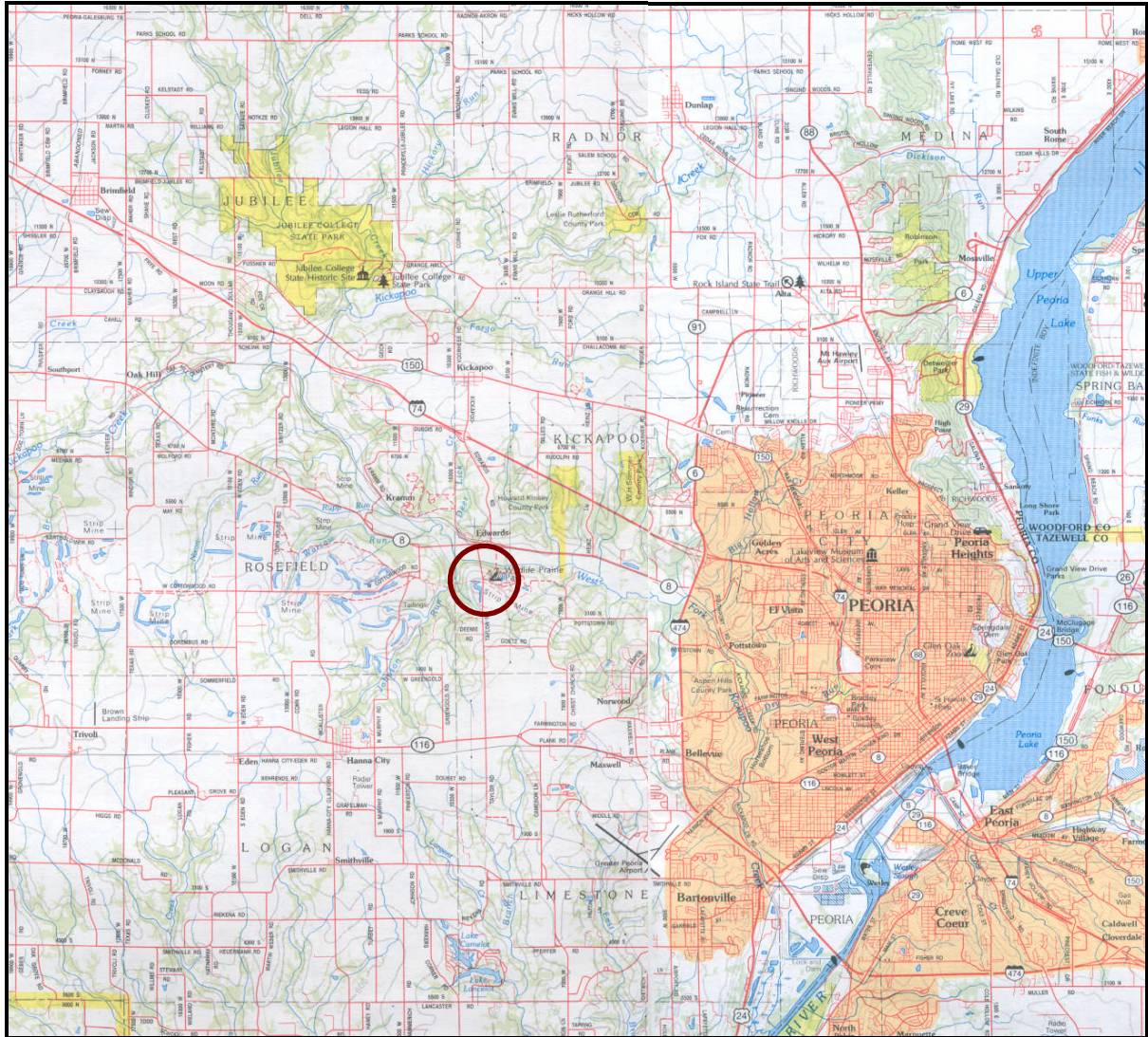


Figure 1. Map showing the location of the Howarth Farmstead and Wildlife Prairie State Park (circled in red) in relationship to the City of Peoria and surrounding region (DeLorme Mapping 1991:40-41).

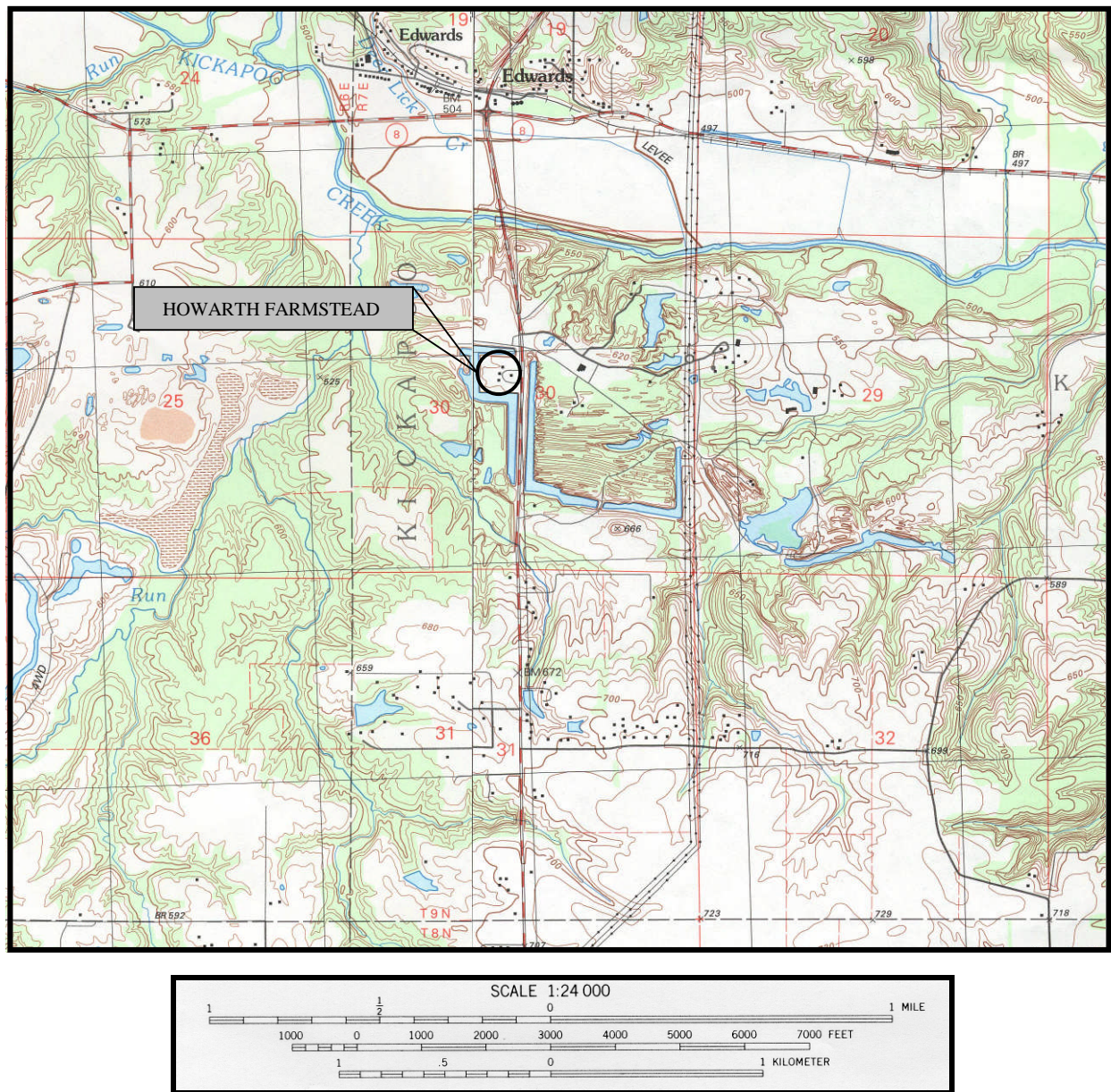


Figure 2. Location of the Howarth Farmstead as shown on the most recent United States Geological Survey (USGS) 7.5-minute topographical maps of the area (USGS, Hanna City and Peoria West Quadrangles 1996).

GEOGRAPHICAL AND HISTORICAL SETTING

The Howarth Farmstead is located on the SE1/4, NW1/4 of Section 30 of Kickapoo Township (Township 9 North, Range 7 East), in central Peoria County (see Figure 1). It is situated on a ridge crest in the dissected uplands that border the southern edge of the Kickapoo Creek valley. Kickapoo Creek flows less than one-half mile north of the farmstead. Peoria County, itself, lies approximately seventy-five miles north of the geographical center of Illinois and is bounded by the Illinois River on the east; the Illinois River and Fulton County on the south; Fulton and Knox County on the west; and Marshall and Stark counties on the north. One of the significant aspects of the county's location is its position at a sharp bend of the Illinois River, which divides that river's lower and upper segments. The county covers approximately 630 square miles and is divided up into nineteen townships. The Illinois River runs approximately fifty miles along the eastern and southeastern borders of the county. The northwestern townships are intersected by about twelve miles of the Spoon River, and Kickapoo Creek runs through the center of the county (Johnson and Company 1880: 291). Originally, the county was equally split between timber and prairie. Most of the prairie land was located in the northern and western sections of the county. Another portion of prairie, about one to three miles wide, ran along the river from the county's northeast corner to the Kickapoo outlet (Johnson and Company 1880: 291). Both coal and stone resources were abundant in the county.

The county and city of Peoria are named after the Peoria Tribe, a band of Illiniwek (or Illinois) Indians who occupied this part of Illinois during the seventeenth and eighteenth centuries. The band's principal village, Pimitoui, was located near the foot of Lake Peoria, close to where the city of Peoria eventually would be founded. The first non-natives to enter the central Illinois River Valley were Father Jacques Marquette and Louis Jolliet, who passed through the area in 1673 after their voyage down the Mississippi. In 1680, La Salle led an expedition down the Illinois River and established Fort Crevecoeur on the east side of Illinois River, one mile south of Peoria Lake. This installation was intended to serve as a trading post and a symbol of French hegemony in the Illinois Country. Only three months after its construction, however, the fort was looted and destroyed by its own garrison during La Salle's absence. It was never rebuilt. (Howard 1972:28, 31; Alvord 1987:82-83). During the winter of 1691-1692 Henri de Tonti, La Salle's former lieutenant, relocated Fort St. Louis from Starved Rock (opposite present-day Utica) to Pimitoui. This post eventually attracted a number of permanent French settlers, thus becoming the first permanent European village in Illinois (Alvord 1987:100).

When Great Britain acquired the Illinois Country from France in 1763, the region had about 3,000 non-native occupants (i.e. French and Africans). The majority of this population was concentrated in the American Bottom region of southwestern Illinois, where the French had founded the villages of Cahokia, Kaskaskia, Prairie du Rocher, Chartres, and St. Phillippe along the Mississippi River. Pimitoui represented an isolated enclave of French settlement on the Illinois River (Andreas 1873: 18). In 1778 the French settlers at Pimitoui started a new village south of the old one that was positioned adjacent to the southern outlet of Lake Peoria. This village was named La Ville de Maillet after John Baptiste Maillet, the first non-native who built there. By the middle 1790s, the old village had been abandoned completely, and La Ville de

Maillet was known more simply as “Peoria” (Johnson and Company 1880:274, 287; Andreas 1873:18). In 1800 there were approximately 100 residents in Peoria (Alvord 1987:407).

The French inhabitants at Peoria suffered grievously during the War of 1812, when their village became the target of several American military expeditions. In November 1812 a force of Illinois militia under the command of Captain Thomas E. Craig plundered and burned the village, under the suspicion that the French inhabitants were sympathetic to the British and were aiding their Indian allies. In addition to destroying the village, Craig’s men carried off forty inhabitants as prisoners. Craig’s actions were widely censured at the time, and the French inhabitants eventually received partial compensation for their losses (Alvord 1987:445; Johnson and Company 1880:275). In the fall of 1813 a joint force of Illinois and Missouri militia under the command of Brigadier General Benjamin Howard marched on Peoria with the intention of destroying a number of Indian villages in the surrounding region. After reaching Peoria, Howard’s men erected a wooden stockade they named Fort Clark (in honor of Revolutionary War hero George Rogers Clark) that was briefly garrisoned to protect American interests in the area. After the fort’s garrison was withdrawn, the village of Peoria seems to have remained abandoned for a couple of years. In 1818 or 1819 the Indians set fire to the unoccupied fort (Johnson and Company 1880:276-278).

One result of the military expeditions to Peoria during the War of 1812 was that it stimulated American settlement in the region. Militiamen who had participated in the expeditions brought back glowing reports about the beauty and quality of the land in the “Fort Clark Country.” It was reports of this kind that encouraged a group of settlers from Shoal Creek, in Clinton County, to move, en masse, to Peoria County in the spring of 1819. The Abner Eads Family was the earliest of the Shoal Creek families to arrive, and they had the distinction of being the first Americans to settle at the site of Peoria. During this period, American settlers generally referred to the village as Fort Clark, rather than Peoria (Johnson and Company 1880:279-280; Andreas 1873: 18). Peoria County was included within Illinois’ extensive Military Tract,¹ which had been set aside by Congress as bounty land for veterans who had served in the War of 1812. In lieu of cash payment for their services, veterans were offered 160 acres of land in the Tract. While a good number of veterans did take this opportunity to make a new start in Illinois, many sold their patent rights to Eastern speculators or other parties.

Peoria County formally was organized by an act passed by the Illinois General Assembly on January 13, 1825. Among other things, this act established the county boundaries, the county seat (Peoria/Fort Clark), and set the dates of the first county election. The first duty of the newly elected county commissioners was to secure title to the land on which the county seat was located. This effort was complicated, however, by pre-existing French land claims and a counter-claim issued by James Latham. The controversy was not finally settled until 1834, when James Latham’s heirs settled out of court (Johnson and Company 1880:318-320; Rice 1912:87, 93). In the meantime, Peoria had been surveyed and platted, along American lines, in 1826 (Johnson and Company 1880:318). The town eventually developed into a major river port, transportation hub, and manufacturing center. By 1860 it had become the second largest city in the state.

¹ The Military Tract covered some 3.5 million acres located between the Mississippi and Illinois Rivers.

When Peoria County was created in 1825, the lands of Cook, Tazwell, Putnam, Warren, and several other future counties were attached to it. By 1831, all of these counties had been organized, and Peoria County had been reduced to its present boundaries. During this period, the county was divided into three large precincts for voting and administrative purposes; these were the Peoria, La Salle, and La Marsh precincts. Subsequent population growth created the need for smaller voting units, and in June of 1837, the county was divided into thirteen units precincts (Rice 1912:98-99). In the fall of 1849, the electors voted to adopt the township system form of government, and in 1850 the following townships were organized: Hollis, Rosefield, Orange, Richwoods, Chillicothe, Benton, Akron, Limestone, Princeville, Jubilee, Millbrook, and Trivoli. Benton was later renamed Fremont, and then called Radnor, after one of the early European settlers of that area. In June of 1850, Orange Township was renamed Kickapoo (Rice 1912:101).

Kickapoo Township (Congressional Township 9 North, Range 7 East) is located in the east-center of Peoria County and was named after Kickapoo Creek, which flows through the southern end of the township. The 1880 *History of Peoria County* related that “Kickapoo” was an Indian term for Red Bud, a species that grew in abundance along the banks of the stream (Johnson and Company 1880:598). Yet, it also is the name of an Indian tribe that occupied central Illinois during the late eighteenth and early nineteenth centuries. Whether the stream owes its name to the tree or the tribe is unclear. Kickapoo Creek drains a large section of Peoria County and was of utmost importance to the early settlers of the area as a source of waterpower for their mills (Bateman and Selby 1902:725).

The earliest American settlement in Kickapoo Township dates to 1834, when the Wakefield, Kingsley, Coyle, Pinckney, and Voorhees families arrived. Most of these families were from the New England and Mid-Atlantic region. George and Francis Kingsley, for example, were from Vermont, while Israel Pinckney was a New Yorker, and John L. Wakefield was from Pennsylvania. Joseph Voorhees technically already was a “westerner,” since he had been born and raised in Hamilton County, Ohio (Johnson and Company 1880:598; Andreas 1873:38 41). An 1836 map indicating the “Names and Residences of Bounty Land Owners” in Kickapoo Township provides some indication of the early settlement pattern in the township (see Figure 3). The map shows most of the settlement in township as being concentrated along the Kickapoo Creek valley and in the uplands adjacent to it. Settlement was less dense in the northern half of the township, where much of the land had been claimed by right of preemption (presumably through military patents) but had apparently not been settled upon and improved by this date (Peoria County Survey Record A:12). The majority of the land in the township had been deemed “unfit for cultivation” when the area was first surveyed in 1816, perhaps on account of the preponderance of dissected uplands there (USGLO Vol. 23, p. 31). Yet, ironically, these so-called “barrens” were among the earliest lands to be settled, since the non-resident bounty holders had jumped on the high prairie ground in the northern part of the township. The ethnic composition of Kickapoo Township would change during the 1840s and 1850s when English and German immigrants began to settle in the area. More will be said of the English settlement in a separate section below.

William Hale was responsible for the construction of the first saw and flour mills in the township. Hale, a native of Oswego County, New York, made a scouting trip to Kickapoo Township in 1834. Impressed by the country, Hale decided to settle there permanently and

selected a good mill site along Kickapoo Creek. He then went back to New York in order to resign his position as Sheriff of Oswego County and collect an emigrant party. Hale returned to Kickapoo Township in the spring of 1835, accompanied by his brother Ashael and friends George Greenwood, John Easton, and Waldo Holmes. Later that year, the Hale brothers and Greenwood received permission to dam the Kickapoo and erected a water-powered sawmill on the NE1/4 of Section 35 of the township. The men constructed a flouring mill at the same location in the spring of 1836, which became fully operational by the following year. The mills' formal title was "Hale and Greenwood's," but their location was more commonly referred to as "Hale's Mill." During the early years of its service, the flouring mill reportedly "was visited by settlers for a radius of thirty miles, and was crowded with business." In 1848, Hale converted the mill to steam, on account of the diminished waterpower supplied by the Kickapoo. He continued to operate the mill until his death in 1859. The complex later was used as a distillery, before being destroyed by fire in 1867 (Johnson and Company 1880:598; Bateman and Selby 1902:726).

In 1836, while Hale and Greenwood's flour mill was under construction, Norman H. Purple and Andrew M. Hunt laid out a village named Hudson on E1/2, NW1/4 of Section 35, a short distance upstream from the mill. Hudson seems to have been a speculative venture, based on the expectation that the area's mills and coal mines would attract settlers to the town. It never experienced much development, though William Hale did donate land for a church, school, and cemetery adjacent to town (Bateman and Selby 1902:725-726).

Another early village to be established in the township was Kickapoo, which was laid out on Section 6 by John Coyle² in 1836. Early on its history, the town received many visitors, as it was the first stop on the old stage route running northwest of Peoria to Knoxville (corresponding to modern-day U. S. Route 150). The community also commonly served as a site for political conventions, since it was conveniently located in the center of the county. The need for these services diminished after the introduction of rail service during the 1850s, and Kickapoo, having been bypassed by the railroad, lost much of the trade that it had formerly enjoyed. At one time, the town boasted a hotel, two retail stores, two blacksmiths, and four churches (Bateman and Selby 1902:726; Johnson and Company 1880:599).

Certainly the most prominent individual to settle in central Peoria County during the first half of the nineteenth century was Philander Chase, who served as first bishop for the Episcopal Diocese of Illinois from 1835 to 1852. Born in New Hampshire in 1775, Chase had joined the Episcopal Church while a student at Dartmouth College and went on to compile an illustrious career in the service of his faith. After being ordained a priest in 1799, he had served at parishes in Poughkeepsie, New York (1799-1805), New Orleans (1805-1811), and Hartford, Connecticut (1811-1817). Chase moved to Worthington, Ohio in 1817, and the following year he was elected bishop of the newly formed diocese of Ohio. In 1824 he established a theological seminary, named Kenyon College, on his farm in Worthington, which was relocated to Gambier, Ohio (northwest of Worthington) in 1828. Chase served as president of Kenyon and bishop of Ohio until 1831, when he resigned both positions amid controversy. He then spent the next four years

² Coyle, along with Gideon Thomas and John Williams, was listed as a viewer for a road that started at the foot of the bluff opposite the head of Main Street in Peoria to Charleston, via Kickapoo (Road Book of Early Peoria County 1842:123).

as a farmer and itinerant preacher in Millersburg, Ohio and Gilead, Michigan, before being elected first bishop of the Illinois diocese in 1835. Chase had not sought this position, but he accepted it and embarked upon his new duties with energy. One of his first goals was the establishment of a theological seminary for the training of Episcopal ministers in the West (Richmond 2001:1-3). After surveying a number of different locations around the state (including Chicago, Danville, Jacksonville, Peoria, and Springfield), Chase purchased a large farm in the southwest corner of Jubilee Township, some fourteen miles west of Peoria, that was to serve as the site of his new seminary, Jubilee College. The first building erected at the site was Chase's log house, which he named "Robin's Nest"—a title that eventually was extended to the surrounding farm as well. The main college building was a two-story, stone, Gothic-Revival structure that was constructed two phases in 1839-1840 and 1842-1844. The college "campus" later expanded to include separate housing for the teachers, scholars, and workmen. Chase also constructed a sawmill and flour mill on Kickapoo Creek that were intended to generate income for the college. Other business located at Jubilee included a store, blacksmith shop, shoemaker's shop, and printer's shop (Madden 1974:155).

While mostly a theological seminary, Jubilee College also offered collegiate and preparatory departments and a school for young women. Never a large institution, Jubilee nonetheless remained open for nearly twenty years and claimed some prominent individuals among its alumni. By the late 1850s, however, the school was in obvious decline, and it finally was closed its doors in 1868. A principal factor contributing to the school's demise was the death of Bishop Chase in 1852; without him, the institution was deprived of inspired leadership and its best fundraiser. The school's remote setting also may have hurt enrollment, which is ironic, since Jubilee's isolation was an important consideration for Chase, who believed that it was best for the students to be free from urban distractions. Fire also played havoc with school's finances. One fire, in 1849, destroyed the Jubilee mills, while a second in 1857 gutted the west wing of the college and resulted in costly repairs. The Civil War represented a final blow to Jubilee College's fortunes. Bishop Chase had received a great deal of financial support from Southern donors, and many of the school's students were from the South. Hence, once the war started, Jubilee lost much of its student body, tuition base, and ancillary financial support (Historic American Buildings Survey 1936:3-4; Richmond 2001:3).

In addition to his connection with Jubilee College, Bishop Chase played an influential role in the establishment and support of Episcopal parishes in Peoria County and elsewhere in Illinois between 1835 and 1852. He often preached at the churches located in the vicinity of Jubilee. Through these activities, the bishop developed a bond with the many English settlers of the Episcopal faith who settled in the county during the 1840s.

Coal mining developed into a major industry in Kickapoo Township during the latter half of the nineteenth century. The mineral had been mined on a very limited scale in the vicinity of Hale's Mill as early as 1836, but it wasn't until 1849-1850 that extensive commercial mining began in the township. English immigrants eventually came to dominate the local coal industry, both as operators and miners. However, it was a group of Germans who were among the first to conduct large-scale mining in Kickapoo Township. The earliest of these was Joseph Darst, who started "stripping" coal around Hale's Mill in 1849 and 1850 and continued with this activity for about five years. In 1851, Darst sold some adjacent land to two other Germans, Frederick

Ruprecht and John Woolenscraft, who mined coal by “drifting” into the bluffs for several years. By 1860, these early mines had been purchased by Samuel Potts. Potts was an experienced miner from England and ultimately became the largest coal operator in the township. The mining community of Pottstown was developed on Section 35 around the former site of Hale’s Mill. Another important mining center in the township was Edward’s Station, which was located on Section 19. Both towns were serviced by the Peoria and Galesburg Branch of the Chicago, Burlington, and Quincy Railroad. This railroad had been constructed in the early 1850s, as the Peoria and Oquawka Railroad, and ran along the northern edge of the Kickapoo Creek valley. Coal from the Kickapoo Township mines was shipped exclusively to the Peoria market (Johnson and Company 1880:600-602; Bateman and Selby 1902:726).

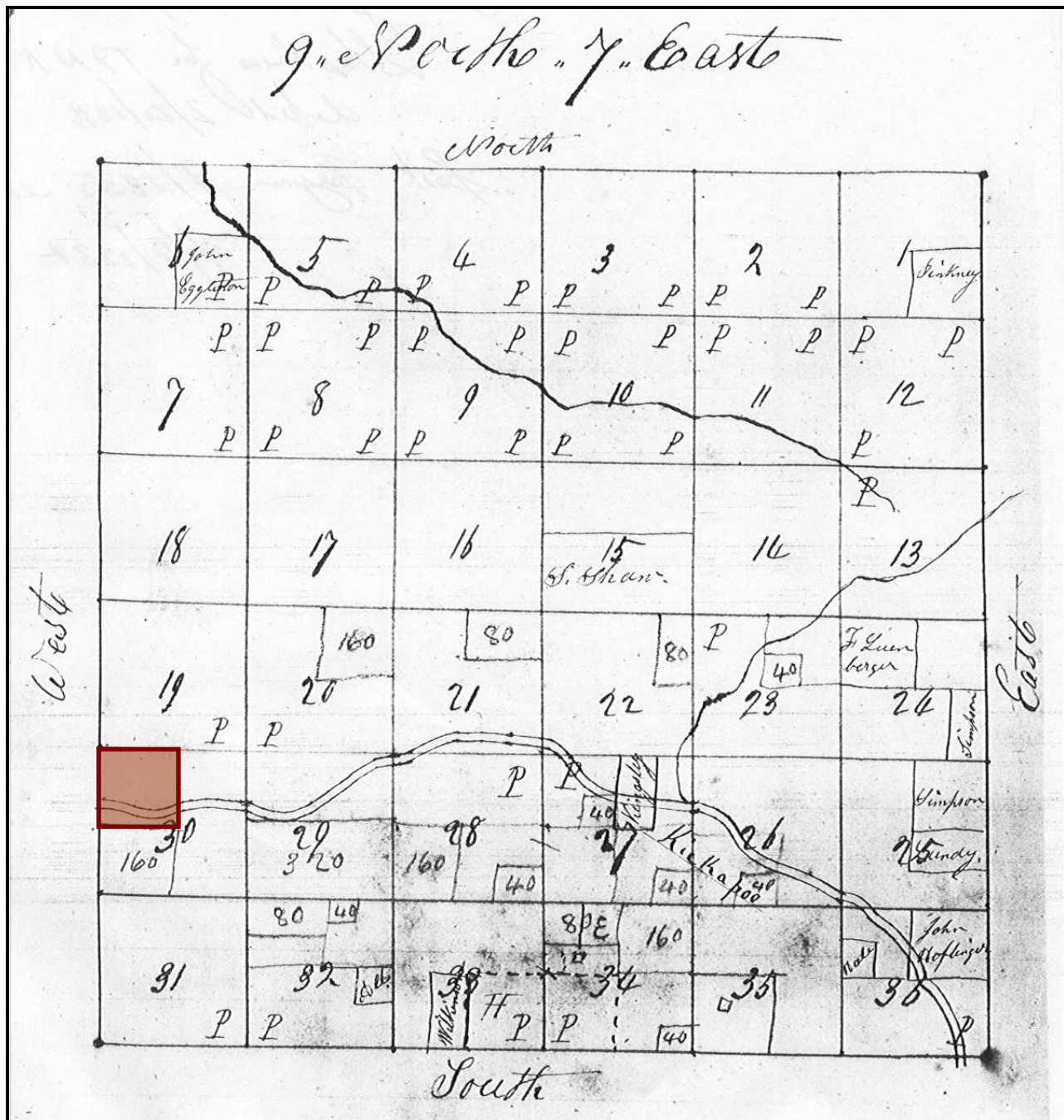


Figure 3. Survey map of Kickapoo Township produced in 1836 showing the “Names and Residences of Bounty Land Owners.” The lands marked with a “P” likely represent properties that had been claimed by right of preemption. No improvements or bounty land holdings are indicated on the NE1/4 of Section 30 (highlighted in red), where Richard Howarth, Senior, was to settle six years after the production of this map. The course of Kickapoo Creek through Howarth’s land is incorrectly drawn, being placed well south of its actual route (Peoria County Survey Record A:12).

ENGLISH SETTLEMENT IN ILLINOIS AND PEORIA COUNTY

The English, along with their fellow Britons the Welsh and the Scotch, represented one of the largest immigrant groups to come to the United States during the nineteenth century. Official American immigration statistics indicate that roughly 4.25 million British immigrated to the United States between 1820 and 1930, and this number does not include the many immigrants who came to the States via Canada (as opposed to an American port-of-entry). Although the flow of British immigration was continual throughout this period, it was punctuated by three distinct surges: the first, occurring between 1845 and 1855, when nearly one-half million immigrants arrived; the second, between 1863 and 1873; and the third and largest from 1879 through the late 1880s (Van Vugt 1999:7-8). Despite their numbers, the British did not represent as distinct and monolithic an ethnic group in the United States as did others, such as the Germans for example. This was due in part to their common language and similar cultural and religious (multi-denominational, but overwhelmingly Protestant) backgrounds as Native-born Americans. The British, as a group, also were able to fill a broad spectrum of occupations and brought with them skills and expertise that were in high demand in the United States, particularly in the mining and industrial sectors. Their settlement pattern in America also tended to be more diffuse and evenly distributed than other immigrant groups, which made their presence less obvious, and less threatening, to their American neighbors (Higham 1994:15). Real cultural differences did exist between the British and Americans, and Anglophobia remained an active part of American foreign policy throughout the nineteenth century; yet the distinctions between the two peoples paled in comparison to other groups. Under these conditions, British immigrants often found “so ready an acceptance that contemporary observers scarcely noticed their coming” (Higham 1994:25). Indeed, a number of historians have described the British in America as “invisible immigrants” (Van Vugt 1999:3; Meyer 2000:250). This contrasts sharply with the experience of the Irish, who despite their use of the English language and integration into American society, continued to be viewed as a distinct ethnic group well into the twentieth century, due in large measure to their identification with Catholicism. Of course, this does not mean that British immigrants made a negligible contribution to the development of the United States or had little influence in the shaping of its cultural landscape. Their contributions and experiences both as a national group (British) and as individual ethnic groups (English, Scotch, Welsh) simply received less attention from contemporary observers and have been the subject of less modern scholarly research than those of other immigrant groups (Van Vugt 1999:4-5).

The best-known enclave of English immigrants in Illinois during the nineteenth century was English Prairie Settlement, which was located in Edwards County in the southeastern part of the state. This settlement was founded in 1817 by George Flower and Morris Birkbeck, two affluent Englishmen who had been successful farmers in England but had become disenchanted with the limited economic and political opportunities prevailing in their homeland following the end of the Napoleonic Wars. Flower and Birkbeck purchased adjoining tracts of 1500-acres in Edwards County with the intention of developing personal estates of their own and attracting free-holding farmers and tradesmen from England. Interest in the colony was fueled by Birkbeck’s writings, which extolled the quality, abundance, and affordability of land in Illinois, as well as the political enfranchisement to be enjoyed in the United States. His *Notes on a Journey in America, From the Coast of Virginia to the Territory of Illinois* was first published in 1817 and went through eleven editions in English and one in German in two years. He also

published *Letters from Illinois* (Birkbeck 1966: forward). Unfortunately, a feud arose between Birkbeck and Flower soon after the colony's establishment, which resulted in the foundation of two rival towns, located two miles apart from one another, in 1818. Birkbeck established Wanborough, while Flower platted Albion, the latter of which ultimately proved to be the stronger of the two and became the seat of Edwards County. By 1819, the English Prairie Settlement reportedly had attracted 400 English and 700 American settlers to its environs. The English who settled there represented a cross-section of British society and included rich and poor, farmers, tradesmen, and unskilled laborers (Pease 1918:15). Although the colony continued to draw new settlers and many interested visitors in the years that followed, its population remained in flux and even declined to some extent. An informal census conducted by William Hall in 1822 found less than 800 settlers, who were dispersed as follows: 68 residents, in addition to the Birkbeck family, at Wanborough; 170 residents, plus the Flowers, at Albion; and 522 rural residents scattered between English, Birks, Burnt, Village, and Long Prairies (Boewe 1962:116). In the end, Birkbeck and Flower's aspirations for the colony were never fully realized. The settlement was hamstrung to a large extent by the proprietors' own personal differences, which not only diluted the overall effort at creating a self-sufficient colony but also polarized the sympathies of the wider community into rival camps and damaged the image of the settlement abroad. Published commentaries criticizing the colony also had a detrimental effect. The most virulent of these critics accused Birkbeck and Flowers of being aristocratic land speculators who were misrepresenting the promise of the English Prairie Settlement in order to attract unwary immigrants to their lands. Finally, Birkbeck's accidental death by drowning in 1825 deprived the settlement of its most articulate and recognized advocate (Pease 1918:14; Boewe 1962:97-116). Despite their many failures, Birkbeck and Flower were successful in sparking a widespread interest in Illinois, both in the United States and abroad, and hence contributed significantly to the State's early settlement. They also were pioneers in promoting the use of scientific agriculture (utilizing such techniques as fertilizing and crop rotation) – a concept largely foreign to American farmers at the time. The English farmers who settled in Edwards County also were pioneers in farming the Illinois prairie. Whereas the typical American of period found prairies foreboding, the English felt at ease with them, since they reminded them of the meadows found their homeland (Pease 1918:15-17).

Subsequent English immigration to Illinois was far less organized than that characterized by the English Prairie Settlement. There was no direct recruiting of settlers of the sort Flower did during his visit to Britain in 1818. Yet, English residents continued to come, inspired by the writings of Birkbeck and other books whose authors either had settled in Illinois or had made lengthy visits there. Even more important than these published sources were the letters sent by immigrants back to family and friends in Great Britain describing their experiences in America. These letters were highly valued for the practical information and advice they offered and were often widely circulated within a village and surrounding district; some were even printed in newspapers (Meyer 2000:245). One prospective immigrant, John Burlend, "traveled many miles to obtain a sight of private American letters" prior to making a final decision on whether to immigrate to the United States and to what location. Among the letters he viewed were ones sent by Chares Bickerdike, who had settled in Flint Township, Pike County, Illinois in 1828, to his brother in England. Bickerdike's letters ultimately influenced John Burlend to leave Barwick-in-Elmet, Yorkshire for Pike County, Illinois in 1831 (Burlend and Burlend 1968:8). Letters of this sort fueled chain migration patterns that resulted in enclaves of English settlers in Illinois, which

often were comprised of extended family groups connected by marriage and/or location in England (Meyer 2000:245-6; Van Vugt 1999:2).

One of the factors fueling English immigration to the United States during the middle nineteenth century was the depressed farm economy in Britain. This is illustrated by the case of John Burlend, who has already been discussed above. Prior to leaving Yorkshire in 1831, Burlend and his wife Rebecca had worked a small tenant farm, which they had first occupied in 1817 under the terms of a fourteen-year lease. At the time they signed the lease, grain prices were very high and the rent accordingly was elevated as well. Grain prices subsequently dropped, however, and the family—though never quite falling into debt—struggled to pay their rent over the remainder of their long lease, while their modest personal wealth was steadily eroded away. Given this difficult financial situation, it not surprising that John Burlend, once his lease was up, resolved to abandon the familiar, but unpromising, agricultural scene of Britain in favor of an uncertain future in America (Burlend and Burlend 1968:7-8). The Burlends' fear of becoming poor was shared by many other small-scale agriculturalists (tenants and free-holders alike) in Britain and became a particular concern of this class after the protective Corn Laws were repealed in 1846.³ Van Vugt (1999) notes that the laws' repeal was the reason most often cited by contemporary observers in explaining the exodus of farmers from Britain to the United States during the late 1840s and early 1850s. In truth, tenant farmers had been struggling for some time before this. The same problem faced by the Burlends prior to their emigration in 1831—diminishing returns in the face of exorbitantly high rents and comparably low grain prices—remained a problem two decades later. Hence, the introduction of free trade presented a tremendous threat to these farmers. Some farmers successfully adapted to the new situation by diversifying their production. Many others, however, lacked the expertise and financial means required to make this transition (Van Vugt 1999:24-5).

Even immigrants who had wide experience with farming were not fully prepared for agriculture in the United States. They had to adapt to unfamiliar crops and new methods of clearing and cultivating the land, fencing, grazing, and building construction. In some instances, English farmers failed to prosper in America and were forced into other occupations or even into returning to Britain. It presumably was failures of this sort that William V. Pooley was thinking of when he made the following assessment: "Their minds were hampered with prejudices in favor of the customs and habits of the mother country, which combined with the lack of those qualities that make good pioneers, kept the English from being classed with the successful settlers of the new country (Pooley in Pease 1918:397). Pooley's assertion, however, is unfair and far too general. Many English immigrants did become successful farmers. John and Rebecca Burlend, for instance, overcame considerable difficulties and hardships to become the owners of 360 acres of land by 1846 (Burlend and Burlend 1968:151). A significant percentage of the English who took up farming in the United States actually had been involved in other trades in Great Britain. For some of these former tradesmen, farming represented a whole new

³ The Corn Laws refer to a series of protective tariffs on imported grains to Great Britain that were enacted by Parliament during the late eighteenth and early nineteenth centuries. The most restrictive of these laws, passed in 1815, forbade the importation of any foreign grain so long the price for domestic grain was below eighty shilling a quarter bushel. While the Corn Laws protected native farmers (especially large landholders), it artificially inflated the price of bread in Britain and thereby posed a significant hardship upon the laboring class. Indeed, the common folk referred to the 1815 statute as the "Famine Law" (Hulme 1924:544-5).

endeavor, but for many others—those who had grown up on farms but had been forced to seek employment in other sectors due to the depressed farm economy—it represented a return to their roots (Van Vugt 50-51). Regardless of their backgrounds, the taste for land was strong amongst the English. In his research on British textile workers who immigrated to United States, William E. Van Vugt found that “roughly half of those found in county histories became farmers, usually within a short time of their arrival” (Van Vugt 1999:65). In contrast to Pooley, Van Vugt concluded that those British immigrants who did take up farming the United States generally enjoyed success rather than failure (Van Vugt 1999:59, 64-65).

Farming, of course, represented but one occupation adopted by the English in the new homeland. Coming from the leading industrial nation in the world, English immigrants (considered as a group) tended to be highly skilled in a wide range of industries, including iron and steel, textiles, pottery, and mining. As such, they were able to find ready employment in these same industries after immigrating to the United States, in many cases as foremen and managers. Mining was one industry, in particular, that the English were identified with and enjoyed a reputation as experts in. English miners played a prominent role in the exploitation of lead resources found in the Driftless Region of northwestern Illinois, southwestern Wisconsin, and northeastern Iowa. Americans initiated the “rush” into this mining frontier during the middle 1820s, but it was immigrant miners from England—Cornwall and Yorkshire especially—who expanded lead production beyond its primitive beginnings by utilizing the hard-rock mining and smelting techniques they had learned in their homeland. English miners were drawn into the Lead Mining District in the large number during the 1830s and 1840s, and many of them settled permanently in the region. Chain migration, of the sort previously described, was common. By 1850, there were 13,114 people of British-birth residing in the Driftless Region, of which an estimated 7,000 were from Cornwall. Mineral Point, Wisconsin was especially noted for its Cornish character (Van Vugt 1999:80-85). Across the state line, in Jo Daviess County, Illinois, the English comprised 39.3% of the mining population in 1850 (Meyer 2000:248). One of the distinguishing characteristics of the English lead miners was their occupational flexibility. Many of them owned farms in addition to mining. This practice allowed a safety net of sorts, in the event lead prices fell or the mineral was exhausted, but it also was a reflection of the seasonal nature of agriculture. Miners with farms would devote the warmer months of the year to agriculture and would spend the winter mining lead. For many, this was a repetition of an old pattern they had followed in England. In addition to mining, English immigrants assumed prominent positions as tradesmen, mechanics, and merchants in the Lead Mining District (Van Vugt 1999:85-87).

In other parts of Illinois, English miners applied their expertise to the exploration and extraction of coal (Van Vugt 1999:93-95). Unlike its lead deposits, which were concentrated principally in one county (Jo Daviess), Illinois’ coal reserves extended across two-thirds of the state. Commercial mining of these extensive resources was relatively limited until the 1850s, when the state’s expanding railroad network opened up distant markets and created a new demand for mineral as a fuel, but coal production expanded dramatically in the decades that followed and ultimately became one Illinois’ largest industries (Bogart and Thompson 1920:420-421). Opportunities in this growing field drew English miners to points all around the state during the nineteenth century (Van Vugt 1999:93-95).

By 1850 there were 18,600 residents of English birth living in Illinois (Pease 1918:397). In his study of settlement patterns in Illinois in 1850, Douglas K. Meyer found that the English represented 17.9% of the foreign population in the state at that time, making them the third largest group there after the Irish and the Germans (Meyer 2000:246). Meyer discusses the pattern of English settlement around the state in terms of “core”, “domain”, “sphere,” and “avoidance” counties (in declining order), based on the percentage of population represented by the English in those counties (see Figure 4). Nearly a third of the English population (28%) in 1850 was concentrated around Cook County and the surrounding collar counties. Cook was a core county of settlement, containing 13.4% of the total English population in the state. Many of these immigrants resided in the burgeoning city of Chicago. The collar counties of Lake, Will, and Kankakee had significant enough English populations to be rated as domain counties. Aside from Cook County, there were three other core counties of English settlement in the state. These were the Jo Daviess, Peoria, and Morgan counties, which Meyer describes as being “situated astride waterways with dynamic market centers and with access to regional and national space-economies.” The domain counties of Madison, Adams, La Salle, and Winnebago likewise were distinguished by having regional market centers and good transportation networks—aspects that would have had great appeal to the English, with their diversified occupational background and entrepreneurial spirit. Broadly speaking, Meyer’s data shows the English gravitating toward northern Illinois, the Illinois River Valley, and segments of the Mississippi River, while generally avoiding southern and eastern Illinois. The one notable exception to this pattern was Edwards County, which had attracted its English population early in the century but remained an isolated domain county in southeastern Illinois (Meyer 2000:245-250).

English settlement in Peoria County began as early as the 1830s, but was relatively slow until the early-to-middle 1840s. Some of the immigrants located in the City of Peoria, the county seat and an important river port and manufacturing center. An even greater number, however, decided to settle in the rural hinterland. According to the 1850 census, 70% of the English population in Peoria County was residing in rural areas, and they represented the largest foreign group in the countryside (Meyer 2000:248). Besides becoming successful farmers, English immigrants played a leading role in the development of the county’s coal industry.

One rural enclave of English settlement in Peoria County was located in northern Limestone and southern Kickapoo Townships. John Benson probably was the first Englishman to settle in this area; he came to Limestone Township in 1834, preceding the main influx of English settlement by nearly a decade (Johnson and Company 1880:787). Immigrants who arrived during the 1840s included the families of Richard Howarth (1842), Jacob Scofield (1844), and Thomas Lonsdale (1842), all of whom came from Lancashire and settled within one mile of one another. Later arrivals included Charles Greenwood (1850) from Cumberland, Richard Radley (1850) and Richard Stear (1850) from Devonshire, Joseph Burdett (1851) from Northhamshire, Samuel Potts (1857) from Leicestershire, Richard Glaze (1862) from Warwickshire, and Henry Vicary (1864) from Cornwall (Andres 1873:41, 109; Johnson and Company 1880:771-772, 779-780, 782, 784, 788). These men had been engaged in a wide range of occupations in England. Richard Howarth, for example, had been stonemason (Biographical Publishing Company 1890:763). The background of Thomas Lonsdale in England is not known, but his son Richard, who joined his parents in America at a slightly later date (1849), had practically been raised in the textile industry. Richard started as a hand-loom weaver when he

was eight and at age eleven was hired at a cotton mill where he was employed for twenty-one years, that last thirteen of which were spent superintending the engines powering the mill (Johnson and Company 1880:778). Henry Vicary had been a wool-comber in his native Cornwall, while Jacob Scofield had been employed in the express business (Johnson and Company 1880:780, 784). A number of the settlers had been coal miners in England, including Richard Howarth, Junior, Samuel Potts, and Richard Glaze (Johnson and Company 1880:772-773, 779). Very few of the settlers appear to have been career farmers prior to immigrating. One of these was Richard Stear, who “was bred a farmer” in Devonshire. Joseph Burdett began his working career as a farm laborer, at age eleven, but abandoned it in favor of coal mining when was seventeen (Johnson and Company 1880:771, 782). Yet, nearly all of the Englishmen discussed above took up farming in Peoria County, following the pattern discussed by Van Vugt (1999). Some entered agriculture immediately after coming to the county, while others followed a less direct path. Joseph Burdett, for example, first worked at Aquilla Moffat’s coal mines for two years, then mined coal on his own, and finally, in 1863, took up farming full-time in southern Kickapoo Township. By 1880, Burdett had become the image of a successful, progressive farmer: he owned 360 acres of land, belonged to the Patrons of Husbandry and the South Kickapoo Grange, was president of the Peoria County Grange Co-operative Association, and was a member of the Big Hollow Butter and Cheese Manufacturing Company (Johnson and Company 1880:771). Some of the English engaged in both farming and mining after immigrating, in the same manner of their countrymen who had settled in Lead Mining District. The most notable example of this practice (for the purposes of this report) was Richard Howarth, Junior, who became a very successful farmer and stockbreeder but also mined coal at different periods of time. Samuel Potts, the proprietor of Pottstown and owner of several hundred acres of coal land in Kickapoo Township, principally made his wealth as a coal operator; yet, he also identified himself farmer (Johnson and Company 1880:779; Andreas 1873:41). Henry Vicary likewise combined farming and coal mining (Johnson and Company 1880:784).

The most visible institutional symbol of this English community was Christ Episcopal Church,⁴ which was located on Section 4 of Limestone Township. Many of the English settlers were members of the Anglican Church (Church of England), and after immigrating they joined its American counterpart, the Protestant Episcopal Church. Christ Church was one of Bishop Chase’s earliest foundations in Peoria County, having been organized in 1836. During the early years of its existence, this congregation met in the homes of John Benson (who served as rector for many years) and several other members. The size of the congregation grew considerably during the early 1840s, with the influx of English immigrants settled in the area, and by 1843 it was apparent that the group required a regular house of worship. John Pennington subsequently donated two acres of land in the northwest corner of Section 4 for a church and cemetery. The cornerstone of the church was laid in May 1844, and construction on the stone structure continued through the fall of the following year. Formal consecration of the church occurred in December 1845. Donations from Britain covered \$1,100 of the \$1,500-cost entailed in constructing the building. Among the donors who contributed toward the project were Dowager Queen Adelaide (the mother of Queen Victoria) and Lord Kenyon (Johnson and Company 1880:603). It is possible that Bishop Chase may have aided the congregation in soliciting British donations. Lord Kenyon, for one, had been one of the principal donors to Chase’ earlier fund-

⁴ This institutional also is referred to as the “North Limestone” and “Limestone” Episcopal Church in some of the historical records.

raising efforts for Kenyon College, a contribution for which he had been honored in the school's name (Richmond 2001:2). Christ Church was located 1-1/2 miles southeast of the Howarth Farmstead and counted the Howarth family among its members. In his later years, Richard Howarth, Junior, served as a Trustee of the church (Peoria County Estate Record No. 6374).

Another Episcopal congregation in the area was based in the Village of Kickapoo. This congregation erected a church building in 1845, which they occupied for fifteen years until 1860 when a fire partially destroyed the structure. After the fire, the church building was sold to the German Catholics in Kickapoo, and the Episcopal congregation apparently was dissolved (Johnson and Company 1880:599). The ethnic composition of the Episcopal congregation in Kickapoo is not known.

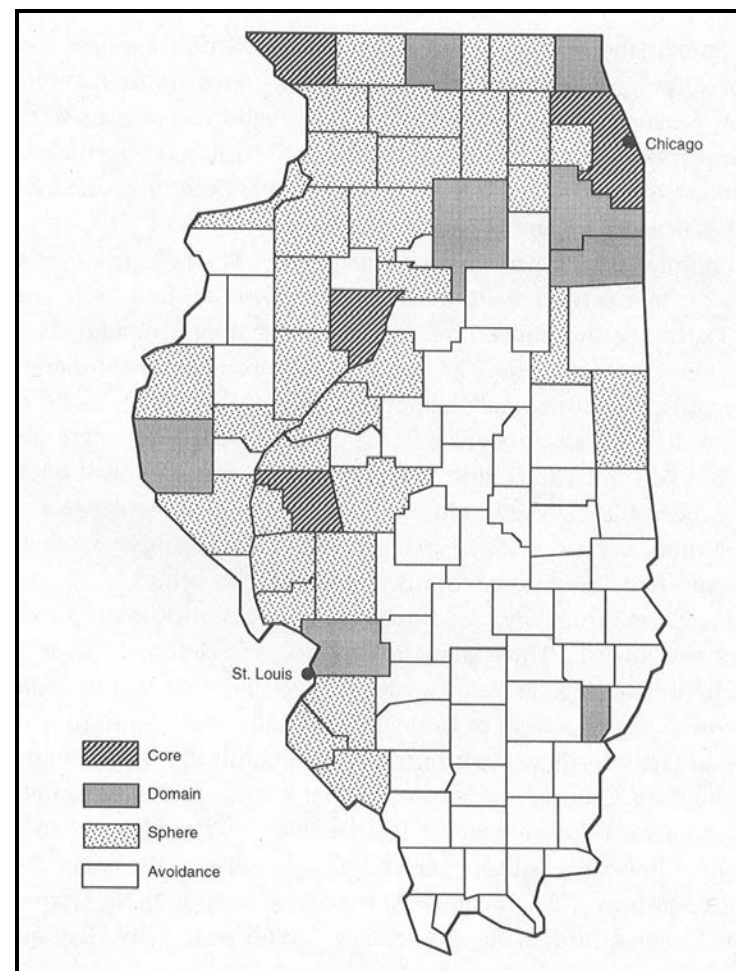
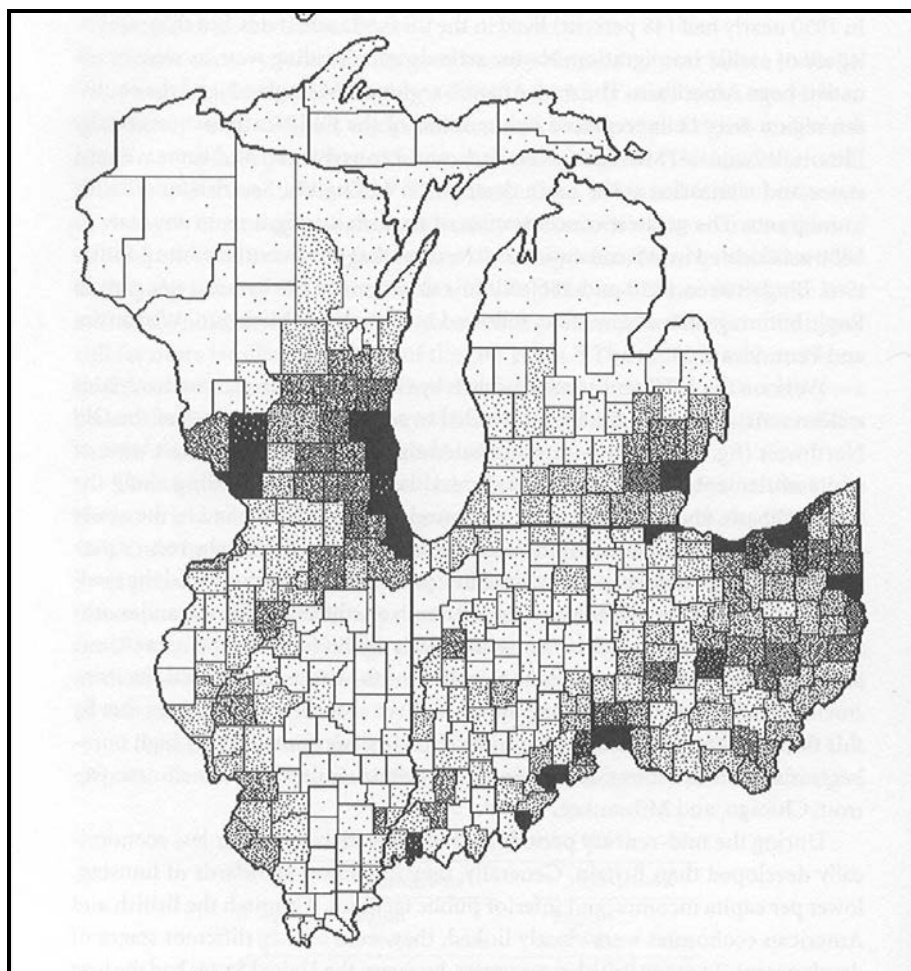


Figure 4. (Left) Map of the Old Northwest, illustrating the distribution of British settlers in 1850. Each dot represents ten settlers (from Van Vugt 1999). (Right) Distribution map of English settlement in Illinois in 1850, using Douglas Meyer's criteria of "core," "domain," sphere," and "avoidance" counties (from Meyer 2000:247).

STONE CONSTRUCTION IN PEORIA COUNTY

Peoria County has considerable limestone and sandstone deposits that are suitable for building construction. During the nineteenth century, these resources were extensively quarried and saw use in buildings located in the City of Peoria and in the rural hinterland beyond it. Stone had great appeal as a building material due to its strength and durability. Yet, it also was more expensive material than either wood or brick, on account of the high costs, time, and skilled labor involved in its use. After first being extracted and roughly dressed in a quarry, the stone then had to be transported to a construction site, where it underwent further dressing before finally being laid in place by a stonemason. As such, fine stone construction represented a significant social statement, indicating personal wealth and prosperity in some instances, and, more generally, a sense of permanence.

Some of the largest quarries in Peoria County were located along Kickapoo Creek in Limestone Township, where the stone appeared at many outcrops and could be quarried relatively easily. The quarries on Aiken and Griswolds' land on Section 24 of this township exposed a perpendicular face of sandstone twenty feet thick. This sandstone was described by contemporary sources as being "rather soft when freshly quarried and can be easily dressed, and splits freely into blocks suitable for building and for foundation walls." Cut stone from the quarries was shipped into Peoria and to other locations by rail (Worthen 1882:261; Johnson and Company 1880:291). John Lonsdale's quarries, located on Section 14 of the Limestone Township, produced "a fine-grain, compact, light bluish-gray limestone" which was considered to be a "very good building stone" and also good for lime-burning. Much of stone at these quarries appeared in beds only four to six or eight inches thick. Despite its thinness, this material was commonly used for foundation walls in the surrounding area and also was used for the entire construction of several small buildings in the vicinity. A portion of the limestone in Lonsdale's quarries was five to six feet thick, and it was from this lower bed that the best building stone was obtained (Worthen 1882:249, 263; Johnson and Company 1880:292).

Smaller quarries undoubtedly were opened elsewhere along the Kickapoo Creek valley and in the dissected uplands bordering it, though little specific is known about them. Short-term operations providing stone to their immediate vicinity, these small quarries often were opened for a specific building project and then were exploited on an as-need basis for a number of years afterward. One such quarry, a limestone pit, is indicated on the 1844 United States General Land Office (USGLO) plat of Kickapoo Township, on the southern edge of Section 33 (USGLO 1844).

There is no single publication or survey that comprehensively addresses historic stone architecture in rural Peoria County during the nineteenth century. However, information on the subject can be derived from a number of sources. The best contemporary source available is the 1873 *Atlas Map of Peoria County, Illinois*, which contains lithographs of properties throughout the county. Taken as group, the lithographs provide both a general sense of the prevalence of stone architecture and a representative sample of stone building types present in the county during this period. The atlas also illustrates buildings that are no longer extant, and hence would be omitted from modern architectural surveys. Another source is the records of the Illinois

Historic Sites Survey for Peoria County, which are on file at the Illinois Historic Preservation Agency in Springfield. Rather than conducting an all-inclusive survey of buildings more than fifty years old (the standard cut-off date for National Register eligibility), the Historic Sites Survey attempted to inventory properties considered to be of special historical or architectural significance in the county. These properties were identified by conducting local-history research and through consultation with local historical societies and preservation groups. The survey work conducted for the project largely was confined to assessing the integrity of the sites identified in the foregoing manner (Illinois Department of Conservation 1977:77). Stone buildings were not especially targeted, though a number of such properties were included in the inventories compiled for the county.⁵ The Howarth House was included in a preliminary list of historic sites but was not placed on the final inventory of sites considered to be the most significant (Kenyon [1972]; Illinois Historic Sites Survey 1972c). To supplement the information provided by the 1972 Illinois Historic Sites Survey and the 1873 county atlas, Fever River Research conducted an abbreviated windshield survey of the area around the Howarth Farmstead, in order to identify additional stone buildings. While by no means comprehensive, this combined research data provides examples of a variety of institutional, domestic, and agricultural buildings constructed of stone in central Peoria County during the middle nineteenth century.

Certainly the most impressive institutional example of stone construction in the area is Jubilee College (see Figures 5 and 6). Located on ridge above Kickapoo Creek, six miles north of the Howarth Farmstead, the college is a large, two-story, L-shaped building that was erected under the supervision of Bishop Philander Chase. The college was built in two episodes, in 1839-1840 and 1842-1844. The south wing represents the earlier section and provided space for a chapel and classrooms on its interior, while the later west wing served as a dormitory. Bishop Chase had planned on building a complete quadrangle, but the envisioned north and east wings were never erected (Historic American Buildings Survey 1936). The overall architectural style of the college is Gothic Revival, though Greek-Revival elements also are integrated into its design. The exterior walls of the college are built of sandstone that was quarried in the vicinity of the site. Some of the stone may have been obtained from a quarry located along the banks of Jubilee Creek, close to where the Brimfield-Jubilee Road crosses that stream (Jim Tucker, pers. comm., 2001). Jubilee College was placed on the National Register of Historic Places in 1972.

Two of the Episcopal churches founded by Bishop Chase in the county also are constructed of stone. One of these is Christ Episcopal Church (1844-1845), whose history has already been discussed above (see Figure 7). The limestone used to build this vernacular Gothic-Revival structure may have been obtained from the quarry noted on the 1844 USGLO plat of Kickapoo Township. The distance between the quarry site and Christ Church is only one-quarter of a mile. The other church founded by Bishop Chase in the area that is built of stone is Zion Protestant Episcopal Church, which is located on the eastern edge of the town of Brimfield approximately seven miles northwest of the Howarth Farmstead. Zion Church was erected in 1845 and is built of native limestone (Johnson and Company 1880:576; Illinois Historic Sites Survey 1972b). St. Patrick's Church, in the village of Kickapoo, also is built of stone (see Figure

⁵ The Illinois Historic Sites Survey was divided into two divisions—the Illinois Historic Landmarks Survey and the Illinois Historic Structures Survey—and each compiled a separate inventory of buildings in Peoria County, based on whether they were considered historically or architecturally significant (Illinois Historic Sites Survey 1972c, 1973).

8). This Catholic house of worship reportedly is the oldest in the county, but we do not know its exact construction date or anything specific about its history (Illinois Historic Sites Survey 1972a).

In addition to the Howarth House, we know of a number of other stone dwellings built in southern Kickapoo Township during the middle nineteenth century. One is the Lonsdale House, which is located one mile southeast of the Howarth Farmstead. Erected by Thomas Lonsdale in 1845,⁶ this dwelling is a two-story, side-gabled, three-bay, double-pile structure whose exterior walls are constructed with regularly coursed, rough-cut limestone (see Figure 9). Like the Howarths, Lonsdales were natives of Lancashire. Baptismal records indicate that the family resided in Blackburn (a textile center located approximately twelve miles west of the Howarth's hometown of Bacup) during the late 1820s, and it was perhaps from this city that they had emigrated in 1844 (Family Search, Alice Longsdale).⁷ The two families became connected by marriage when Richard Howarth, Jr. married Thomas and Ellen Lonsdale's daughter, Alice, in 1849. On its first floor, the Lonsdale House has a three-room plan divided between a parlor/bedroom, kitchen/dining room, and pantry. The two larger rooms on the lower floor have a stone fireplace centered on the gable-end wall. The second floor is divided into two large rooms, the southern of which appears to have been accessible via an exterior stairway originally. Although the Lonsdale House is larger than the Howarth House (as originally built), it lacks some of the sophistication of the latter dwelling. Its stonework is not as finely dressed, and wood, rather than stone, lintels are used above the door and window openings. Nor does it have a formal stairway leading to the second floor, as the Howarth House does, having instead a simple, utilitarian stairway located in the pantry room. The differences between the two houses, in respect to floor plan and workmanship, are of interest given their similarities in regard to material of construction, dates of construction, origins of their builders, and geographic location. Unfortunately, a section of Lonsdale House's rear wall has collapsed in recent years, and the dwelling is threatened within eminent destruction if nothing is done to correct the damage. Floor plans and an architectural description of the Lonsdale House are attached to this report as Appendix IV.

Another stone house was built by James Greenough just one-quarter mile south of the Howarth Farmstead, on the east side of modern-day Taylor Road. This house is referenced in an 1868 survey (Peoria County Surveyor's Record D:44)⁸, but we know nothing specific about its character since it is no longer extant. Like many of his neighbors, Greenough was English (U. S. Bureau of the Census [USBC] 1860a:490). Jonathan Howarth (Richard Howarth, Jr.'s brother) later purchased Greenough's farm (Andreas 1873:135-137).

⁶ The house has a date stone that is inscribed: "Thos. Lonsdale/Built This House/1845." The current owner of the property, Ted Miller, has removed the date stone for safekeeping.

⁷ Thomas and Ellen Lonsdale's daughter Alice was christened at Ebenezer Primitive Methodist Church in Blackburn, Lancashire on September 29, 1828. The records misspell Lonsdale as "Longsdale" and the mother's maiden name—Halstead—as "Alstade" (Family Search, Alice Longsdale).

⁸ In October 1868, Richard Howarth had the NW1/4, SW1/4 of Section 30 surveyed, and the surveyor used the "NE corner of 'J. Greenough's Stone House'" as a reference point for one the southwest corner of the tract (Peoria County Surveyor's Record D:44).

One of the more interesting examples of domestic stone architecture in Kickapoo Township was the house erected by Francis O. Kingsley on Section 26, on the northern edge of the Kickapoo Creek valley. This house, which is no longer extant, had an asymmetrical plan comprised of a central square tower and two flanking wings (see Figure 10). Kingsley hailed from Battleboro, Vermont and settled in the Kickapoo valley in 1833-1834, along with his brother George (Johnson and Company 1880:598, 776).

An abbreviated windshield survey of the wider region around the Howarth Farmstead found several extant stone structures along Illinois Route 116 (Farmington Road), in northern Trivoli Township. One of these was a small, single-story, front-gabled, schoolhouse that now serves as a residence, while the other is an impressive two-story, double-pile, side-gabled farmhouse (see Figure 11). Both of these properties are located in an upland area, near the headwaters of West Fork and Clark Branch—two tributaries of Kickapoo Creek. Another stone residence once located in this same vicinity was built by Sylvester Orton, a New Yorker, on Section 8. The Orton House had an I-House form, being two-story, side-gabled, and having a three-bay façade (see Figure 12).

The number of stone barns built in Peoria County may have been quite limited. A survey of the barns illustrated in the 1873 *Atlas of Peoria County* found only two clearly built of stone. One of these was the Howarth Barn. The other was a raised, three-bay English barn located on the farm of Nathaniel Meeker in Section 28 of Trivoli Township (see Figure 13). Meeker, a native of Ohio, had a frame house but chose to build his barn of stone. His farm was located approximately ten miles southwest of the Howarth Farmstead. Further survey work may result in the identification of other stone barns in the area. The locations of the stone buildings referenced in the preceding discussion are indicated on Figure 14.

Relatively little is known about the stonemasons who worked in Peoria County during the nineteenth century. One notable exception, of course, is Richard Howarth, Sr.. Though the specific details of his early career are lacking, we know that Howarth was trained stonemason and had been engaged in contract work prior to emigrating from his native Lancashire. More importantly, we have a surviving example of his craftsmanship, in the form of the stone residence he constructed for his family in 1844. It is not known whether he constructed any other stone buildings in the county during the short, two-year interval between his immigration and death. Given the fact that he was trying to improve a farm and build his own residence during this same time period, Howarth possibly had neither the time, nor the inclination, to take on any other construction projects. However, it is tempting to speculate that he may have participated in the construction of Christ Church (1844-1845) and perhaps even on the west wing of Jubilee College (1842-1844). He was a member of the Christ Church congregation, and construction on the stone church started several months before his death. Howarth's connection to Jubilee College is more tenuous, though he certainly was acquainted with Bishop Chase through the church. Chase also assisted the Howarth family after Richard's death (Johnson and Company 1880:773), which suggests that the two men may even have been friends. More importantly, Howarth's stonemasonry skills would have been in great demand on a project as large as Jubilee, especially since the number of skilled masons in the area likely was limited at that time. Another individual who possibly was involved in stone construction in the Kickapoo

Creek valley was George O. Kingsley. Kingsley has not been associated with any of the stone buildings discussed above, but he was a contractor for some of the masonry-related construction work (“mason work, viaducts, etc.”) done on the Illinois and Michigan Canal during the course of its construction (Johnson and Company 1880:776).

Determining the identities of other stonemasons in the area is complicated by the fact that this occupation is virtually absent from the census rolls for Peoria County. A search through the 1850 and 1860 federal population censuses of Kickapoo Township and six adjacent townships found not one “stonemason” listed. Two brick masons do appear in Kickapoo Township, but no individuals clearly associated with stone construction, as a mason, cutter, or quarryman.⁹ This presents the researcher with a situation of having some very fine examples of stone architecture in an area but no stonemasons to be had. One explanation for this apparent paradox lies in the fact most (if not all) of the individuals skilled in stonemasonry in the area also had other occupations, and it was these occupations that ended up being listed in the census –whether it be laborer, farmer, or coal miner. Unless that person was employed as stonemason full-time, their skill and experience in this trade would be invisible in the census. In the case of Richard Howarth, Sr., had he lived long enough to be recorded in the 1850 census, he likely would have identified himself as a “farmer”, since that was his principal occupation after immigrating. Similarly, Richard Howarth, Jr., identified himself as a “miner” in the 1850 census and as a “farmer” in subsequent censuses. Unlike his father, Richard, Jr. had never been a professional stonemason, yet he was quite skilled in the trade, as is amply evidenced by his successful completion of the family home, his subsequent construction of stone addition onto the dwelling, and the erection of the large stone barn on the property. In summary, it is fair to conclude that Kickapoo Township and the townships adjacent to it had a group of knowledgeable stonemasons whose expertise could be drawn upon when a stone building was to be erected, but that none of these tradesmen practiced their craft professionally on full-time basis.

⁹ A variety of other building-trade-related occupations were listed in these censuses. These occupations included those of brick mason, carpenter, joiner, plasterer, and marble cutter.



Figure 5. Two views of Jubilee College. (Top) The college complex, looking southwest. (Bottom) Close-up of the chapel, looking southwest (FRR June 2001). The locations of Jubilee College and the other stone buildings discussed in report are indicated on Figure 15.

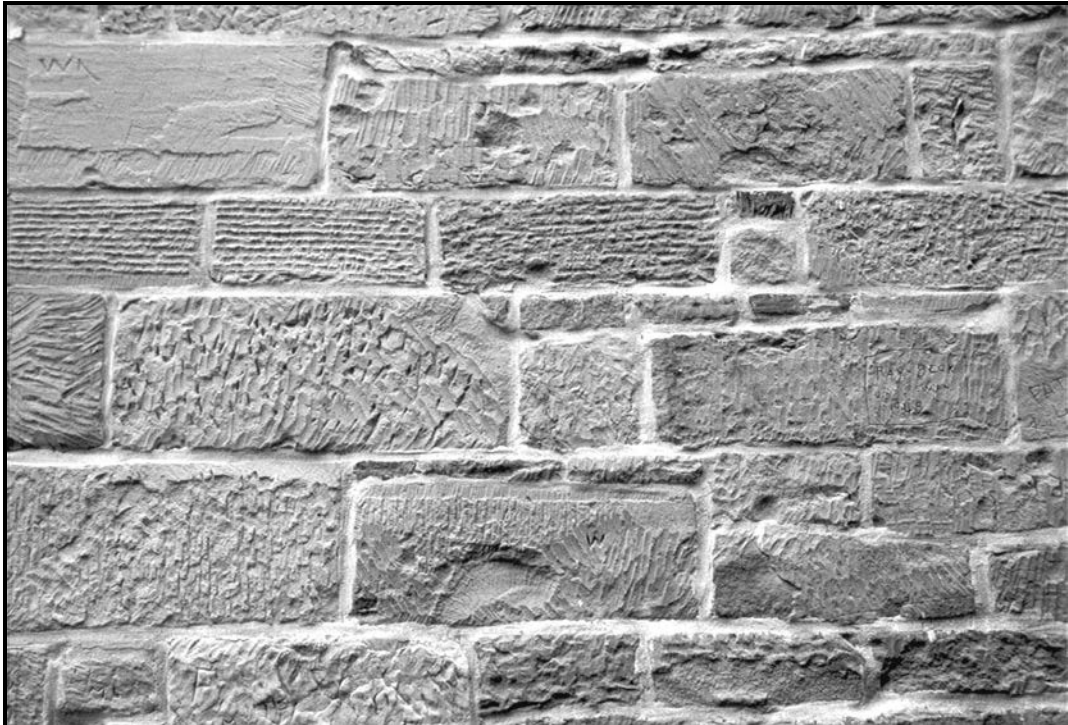


Figure 6. Detail of the stonework on Jubilee College, showing the range of dressing methods utilized by the workmen. The variety of dressing used suggests that numerous stonemasons were employed on the project (FRR June 2001).

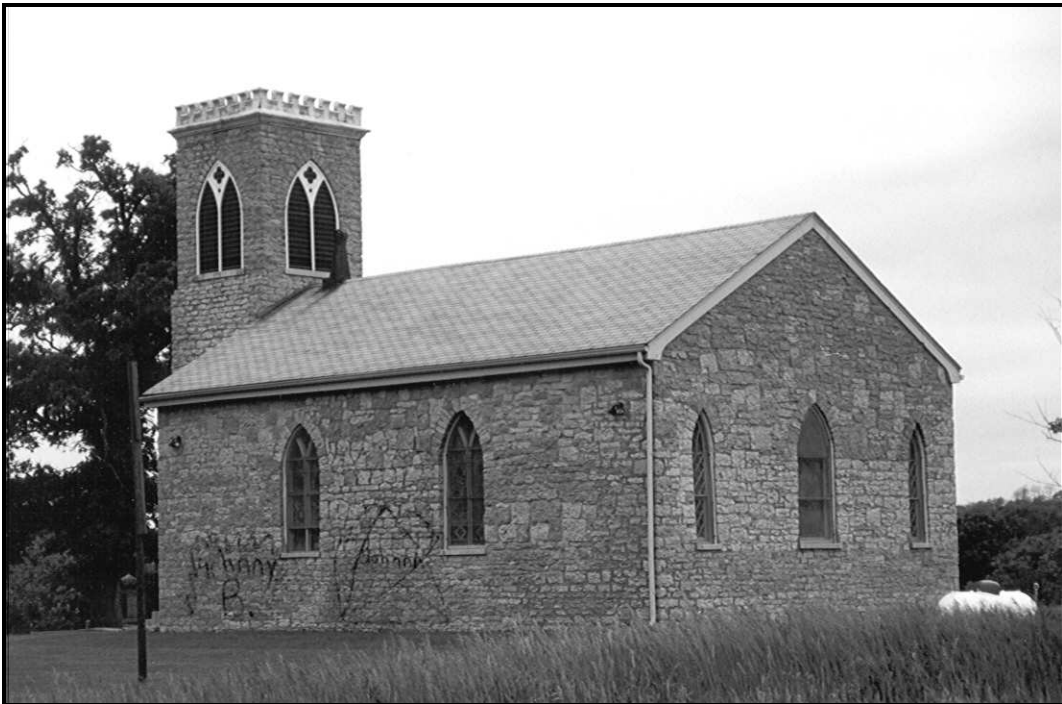


Figure 7. Two views of Christ Episcopal Church in northern Limestone Township. This church was erected in 1844-1845 to service the large English population in the area. Richard Howarth served as a trustee for the church and is buried in the cemetery adjacent to the chapel. The bell tower represents a later addition (FRR June 2001).



Figure 8. St. Patrick's Church, located in St. Mary's Cemetery, in the village of Kickapoo. This church reportedly is the oldest in Peoria County (Illinois Historic Landmarks Survey 1972b).



Figure 9. Two views of the stone house erected by Theodore Lonsdale in 1845. The Lonsdales were natives of Lancashire, England, as were the Howarths (FRR June 2001).

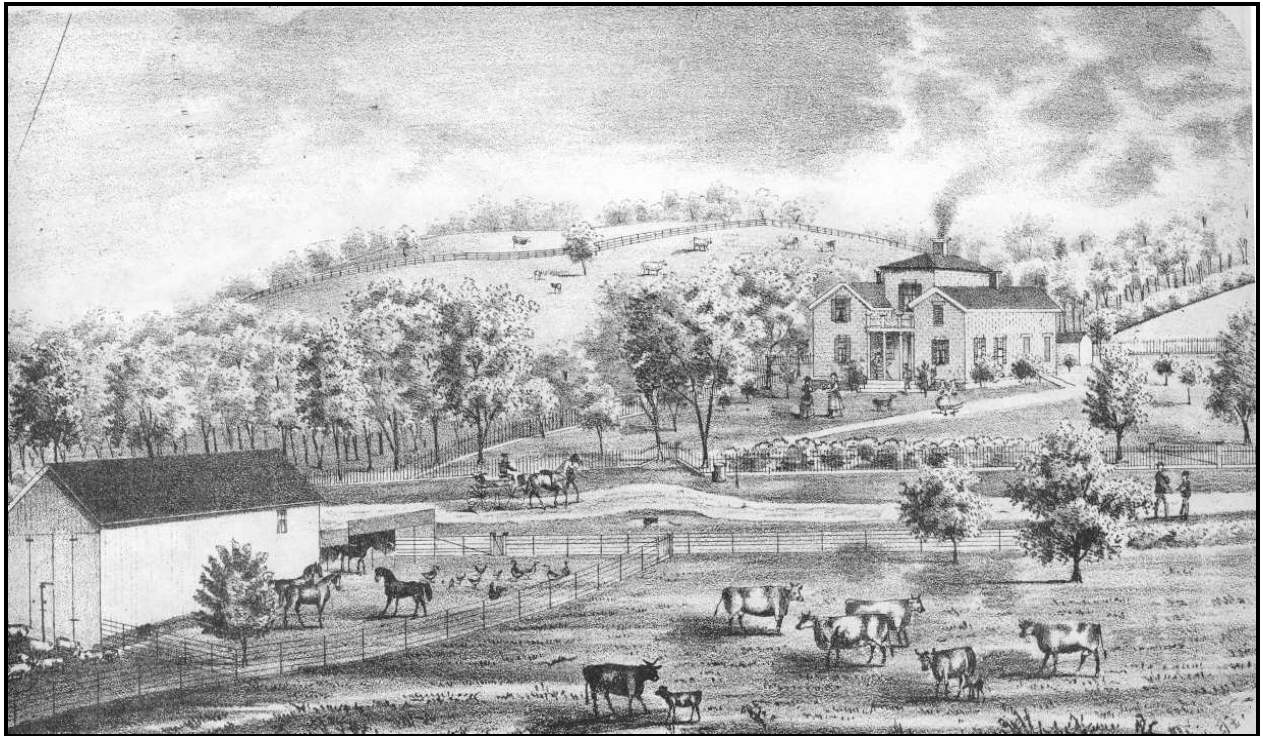


Figure 10. An 1873 lithograph showing the residence of Francis P. Kingsley. This unique stone home, which is no longer extant, was located several miles east of the Howarth House (Andreas 1873).



Figure 11. (Top) A substantial stone house located along Illinois Route 116 (Farmington Road), approximately eleven miles west of the Howarth Farm. (Bottom) A stone schoolhouse (now a residence) that is situated less than two miles west of the house above, at the juncture of Illinois Route 116 and Stone School Road. Both of these buildings lie in northern Trivoli Township, in southwestern Peoria County (FRR November 2000).

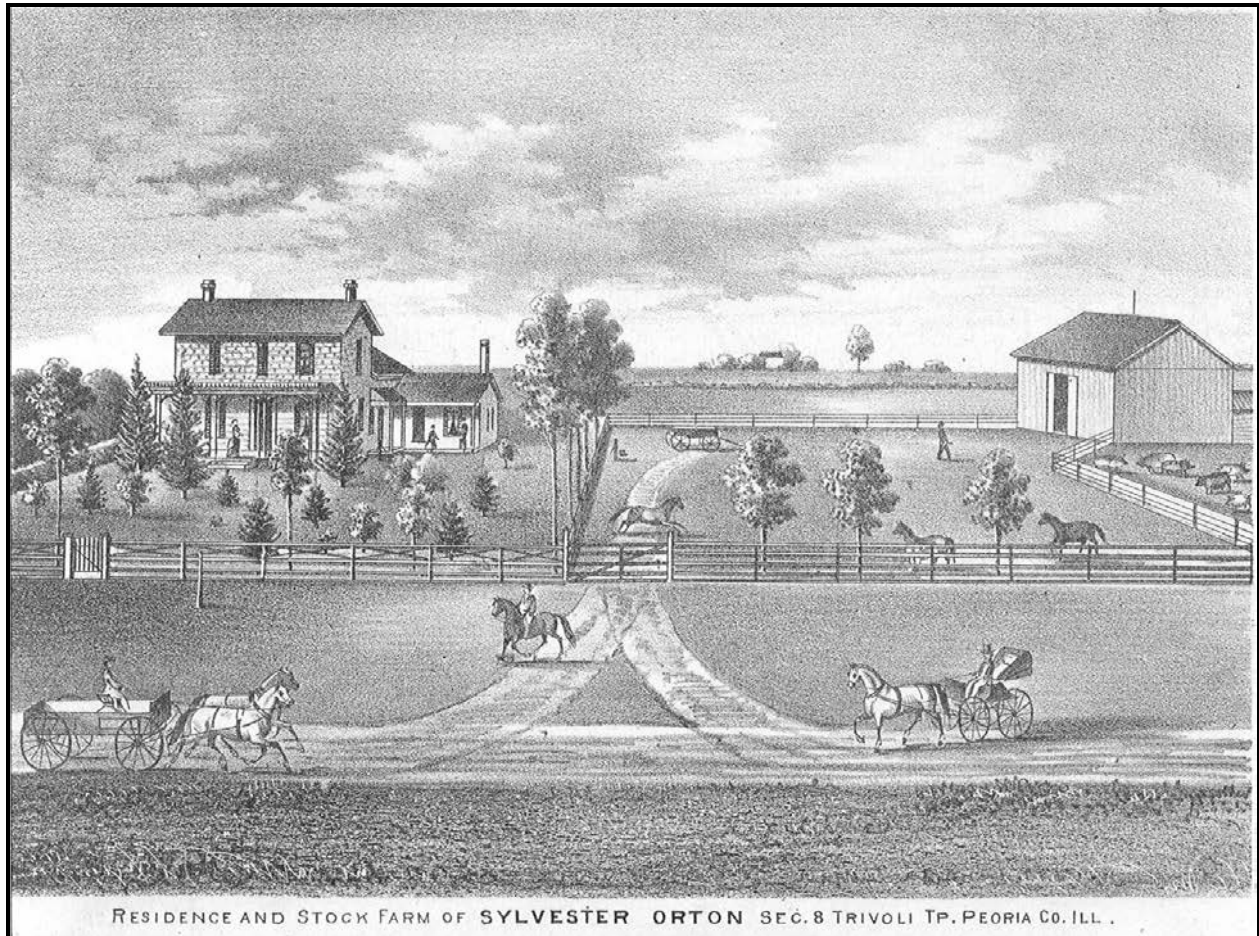


Figure 12. The stone residence of Sylvester Orton, as illustrated in the 1873 atlas of Peoria County. This dwelling was located on the same section as the residence shown above in Figure 11. Orton was a native of Oneida, New York and settled in Peoria County in 1836 (Andreas 1873).

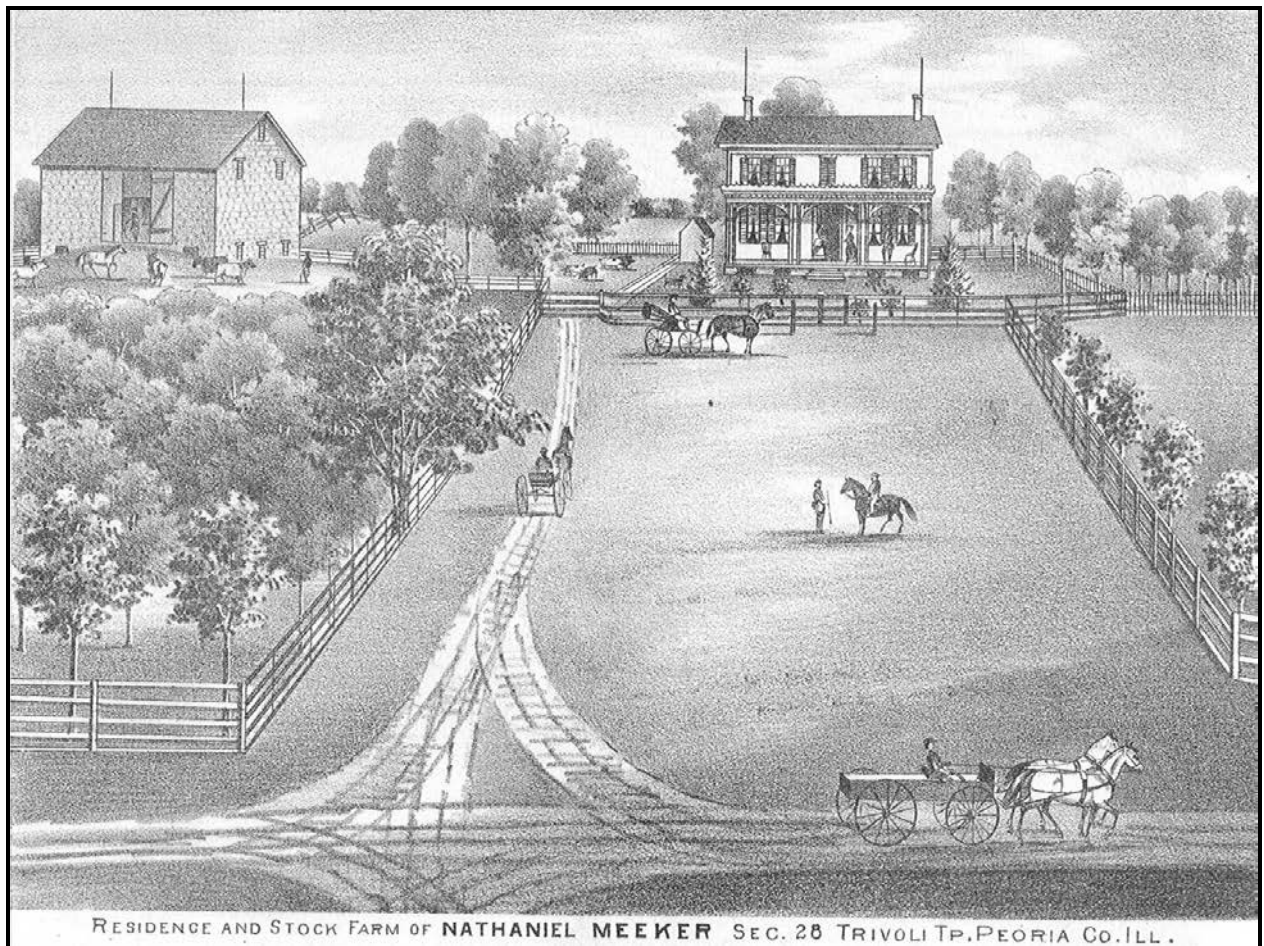


Figure 13. An 1873 lithograph of the Nathaniel Meeker Farmstead, in Trivoli Township. Note the stone barn at the left of the view (Andreas 1873).

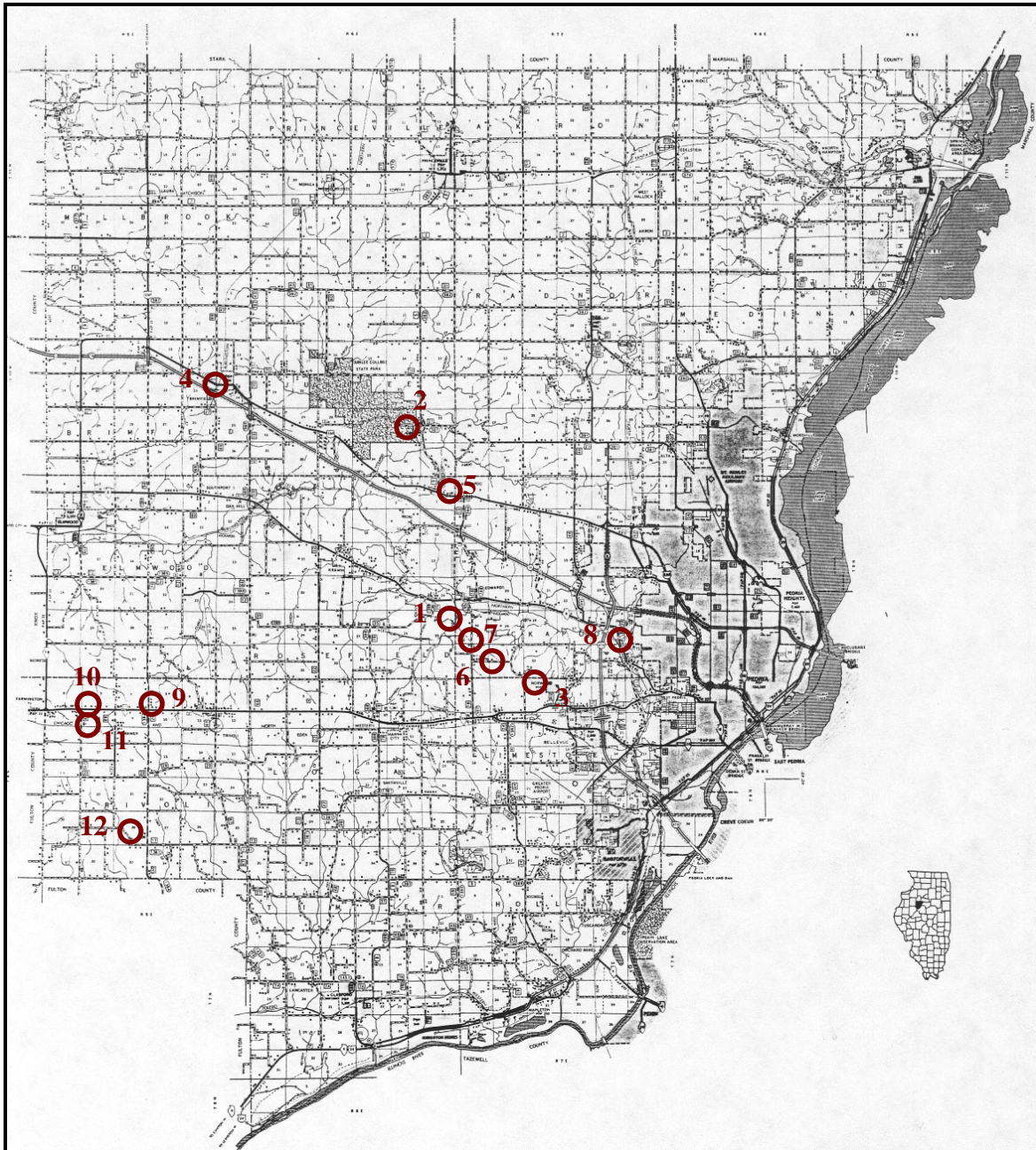


Figure 14. Map of Peoria County showing the location of the stone structures discussed in this report: (1) Howarth House and Barn, (2) Jubilee College, (3) Christ Church, (4) Zion Protestant Episcopal Church, (5) St. Patrick's Church, (6) Lonsdale House, (7) Greenough House, (8) Kingsley House, (9) Stone House on Farmington Road, (10) Stone School on Farmington Road, (11) Orton House, and (12) the Meeker Barn.

HISTORY OF THE HOWARTH FARMSTEAD

The Howarth Farmstead was settled by Richard Howarth, Sr. in 1842 and remained under the ownership of his descendents for the next 143 years. The Howarths were one of number of families from Lancashire who settled in close proximity to one another in this area during the 1840s. During this period, Lancashire was the center of Britain's textile industry and was home to the growing industrial cities of Liverpool and Manchester. Prior to immigrating to the United States, the Howarths had resided in the town of Bacup, which was located on the western slopes of the Pennine Mountains, in eastern Lancashire (see Figure 15). Interestingly, we have no direct evidence of them having been engaged in agriculture in their homeland. Richard Howarth, Sr. was a stonemason by trade and had been engaged as a contractor, while his son, Richard, Jr. began his work career as a miner in Lancashire's coal fields (Johnson and Company 1880:773; Biographical Publishing Company 1890:763). The Howarths' apparent lack of prior farming experience was a characteristic shared by many of the English immigrants who took up farming in central Peoria County during the middle nineteenth century; a good number of these immigrant farmers had been coal miners in England, while others had been involved in the textile industry and other trades.

The Howarth family sailed from Liverpool in February 1842 and finally arrived in Kickapoo Township in September of that year, having come to Illinois via New Orleans and St. Louis (Johnson and Company 1880:773). On July 18, 1842 Richard Howarth had purchased the NW1/4 of Section 30 in Kickapoo Township (Township 9 North, Range 7 East) for \$191.68 (State of Illinois 1984). This quarter section of land contained 153.34 acres and was located in the uplands bordering the Kickapoo Creek Valley (see Figure 16). The family's first home was a sod house, but this was only a temporary arrangement until a more substantial stone residence could be erected. It was during the construction of the stone house, in 1844, that the entire family was stricken with the so-called "Reaper Death," a sickness that claimed the lives of Richard Howarth, Senior and his son Samuel (Johnson and Company 1880:773). Richard Howarth, Jr. completed the house and subsequently took over management of the farm.

Born in Bacup, Lancashire on April 12, 1824, Richard Howarth, Jr. one of fifteen children ultimately born to Richard and Martha (Greenwood) Howarth (Biographical Publishing Company 1890: 763). In the sixty years that separated his father's death from his own, the younger Richard steadily improved his farm and eventually became one of the wealthiest farmers in Kickapoo Township, owning some 900 acres land, as well as real estate in Peoria. In addition to farming, Howarth also was involved in the local coal industry in Kickapoo Township. He mined coal on his own land until 1867-1868, when he abandoned in the trade in order to devote his full attentions to his farm. In the 1876, however, he would reenter the industry and become a partner in several local mines (Johnson and Company 1880:773; Biographical Publishing Company 1890:764). This juggling of mining and agriculture was a common practice among English immigrants.

In 1849, Howarth married Alice Lonsdale, who also was a Lancashire native. Alice's father, Thomas Lonsdale, came to the United States in 1842. The following year, the rest of his family emigrated from England, and they made their home in Kickapoo Township. Richard and Alice Howarth had only two children: Samuel, who died when he was only one year old, and

Martha Ellen, who was born in December of 1851 (Biographical Publishing Company 1890:763; USBC Population Schedule 1900:122A).

Richard Howarth, Jr.¹⁰ is listed in the 1850 census of Peoria County as a 25-year old miner who had been born in England. Other inhabitants of the Howarth household in 1850 included Richard's wife Alice (age 22), his 66-year old mother, and two other tenants. The tenants were David Bond, an 18-year old laborer, and Jacob Waalslen, a 25-year old miner. All of the members of the household were from England. No values of personal property were recorded in the 1850 census of Peoria County, but Howarth's real estate value was recorded as \$2,000, indicating that some improvements had been made to the land (USBC 1850b:138).

Even though Richard Howarth was reported as "miner" in the 1850 census he also was engaged in farming. His farm was listed in the 1850 United States Agricultural Census with a value of \$2,000, while his farm implements and machinery listed as being worth \$100. Only 50 of Howarth's 200 acres were improved. The value of his livestock was \$215, for he owned only four horses, three "milch" cows, two other cattle, and twelve pigs. He had produced 150 bushels of wheat, 500 bushels of Indian corn, and 200 bushels of oats (USBC 1850a: 267). Howarth significantly expanded his land holdings over the course of the next decade. On June 2, 1851, he purchased 160 acres in the SE ¼ of Section 30 from Alfred G. and Antoinette Curtenius, John and Elizabeth Griswold, and Matthew and Charlotte Griswold, all residents of Peoria County, for \$550 (Peoria County Deed Record 2: 144). He purchased an additional 160 acres in the NE ¼ of Section 30, T9, R7W on May 16, 1855 from Eliza Eadon, Eliza Crawley, and Marianne Eadon, of Peoria County, for which he paid \$1,800 (Peoria County Deed Record MA:635).

In the 1860 census of Kickapoo Township, Peoria County, Richard Howarth was reported as a farmer, with real estate now valued at \$11,200 and personal property worth \$3,000. Since the last census was taken, his mother had passed away and his wife had given birth to Martha Ellen, who was born in Illinois, eight years before. The Howarths also had three farmhands and one servant residing with them, all from England (USBC 1860b:120). The Howarth residence and barn appear on the 1861 land ownership map of Peoria County. The map also indicates that Howarth owned the northern two-thirds of Section 30 by this date (see Figure 17) (Allen 1861).

The 1860 agricultural schedule listed the cash value of Howarth's¹¹ farm as \$6,000, the value of farm implements and machinery as \$500, and 150 acres as improved. While Howarth owned several animals and grew different produce, his biggest crop was Indian corn, of which he produced 2,000 bushels. Other produce included rye, 160 bushels; oats, 300 bushels; wheat, 350 bushels; peas and beans, 300 bushels; buckwheat, 20 bushels; hay, 20 tons; Irish potatoes, 300 bushels; and grass seeds, 15 bushels. The total value of orchard produce was \$20. For livestock, Howarth owned twenty heads of cattle, twelve pigs, nine horses, and eight "milch" cows. The value of livestock was listed as \$1525; the value of animals slaughtered was \$200 (USBC 1860a:1).

¹⁰ The 1850 census misspelled Howarth's name as "Haweth."

¹¹ The 1860 agricultural schedule misspelled Howarth's name as "Howerth."

The 1870 population census shows that Howarth's real estate property had increased in value over the preceding decade to \$20,000, while his personal property had decreased to \$2,000. His household in 1870 consisted of himself, his wife, and daughter, in addition to two farmhands and one "domestic." In contrast to their hired help a decade before, the domestic and farmhands employed by the Howarths in 1870 had all been born in Illinois (USBC 1870b:15). The agricultural schedule of 1870 indicates that Richard Howarth's real estate had expanded to include 300 acres of improved land and 300 acres of woodland. Despite the increase in tillable acreage, the schedule reports a decrease in the amount of produce Howarth turned out. He had more livestock than in 1860, although it was less valuable at only \$1,220. He also had slaughtered \$1,000 worth of livestock, substantially more than what was recorded in the 1860 schedule. The estimated value of Howarth's farm production was \$2,000 (USBC 1870a:3). On February 24, 1872, Richard Howarth purchased the N1/2, SE1/4 of Section 30 from his neighbor, James Greenough. That same day, Greenough purchased the S1/2, SE1/4 of Section 30 from Howarth. The Greenoughs later sold that parcel of land to Jonathon Howarth, Richard's brother (Peoria County Deed Book ZD:11).

An 1873 atlas of Peoria County includes a map of Kickapoo Township, which illustrates Richard Howarth's own residence and three other houses (presumably tenant-occupied) on his land holdings. An orchard is depicted lying south of the Howarth House. The map suggests that Howarth had improved a large portion of the 300 acres that were recorded as woodland in 1870. Coal measures are shown on his land, as well as adjacent properties to the south and west of his (see Figure 18). The 1873 atlas also includes a lithograph of the Howarth's Farmstead, which illustrates the residence there and impressive stone barn (see Figure 19) (Andreas 1873:128, 135-137).

On April 12, 1876 Martha Howarth married William Taylor, who had emigrated from England only three years before (Bateman and Selby 1902:728). Rather than establishing a separate household, the couple lived at the Howarth Farmstead with Martha's parents. The 1880 census lists William and Martha Taylor (ages 24 and 28, respectively) residing with Richard and Alice Howarth, along with their two young daughters, Alice (age 3) and Susanna (age 3 mo.). Other occupants of the Howarth household at this time included a domestic servant, from Virginia, and two farm hands, from England and Kentucky (USBC 1880b:27).

The value of Howarth's farm, including land, fences, and buildings, was reported in the 1880 agricultural schedule as \$18,000. Only two other farms in Kickapoo Township were valued higher than Howarth's, and two others had an equal value to his. Howarth, however, actually owned more land than any other farmer in the township (Agricultural Schedule 1880: 1-17). At this time, 500 acres of his land were improved, while the remaining 100 acres were woodland and forest. His farming implements and machinery were valued at \$300, and his livestock was worth \$3350. The estimated value for all farm products for the past year was \$2,000. Howarth had increased his livestock holdings considerably since 1870. He now owned 100 head of cattle and 7 "milch" cows, 110 swine, and 70 poultry (presumably chickens). His cattle and swine were the largest herds in the township. Indian corn was the principal crop grown on the farm, with 4,000 bushels produced on 100 acres. Oats, rye, potatoes, and apples also were grown (USBC 1880a: 14). Table 1 below summarizes the agricultural production of the Howarth Farmstead for the period 1850 through 1880.

In addition to farming, Richard Howarth also mined coal on his land. The extent of his early mining operations are not known, since he is not listed as a coal operator in either the 1850 or 1860 Industrial Schedules of Peoria County.¹² Yet, as mentioned above, he reported his occupation as “miner” in the 1850, at the very time that the first extensive coal operations in the county were starting up in around Hale’s Mill (later Pottstown). He possibly worked the coal measures the 1873 atlas of Peoria County illustrates on his land on the NE¼ of Section 30, south of Kickapoo Creek (Andreas 1873:127) (reference Figure 19). Howarth retired from mining in 1867-1868, but he reentered the field in 1876, in partnership with William Taylor, his son-in-law. Taylor, like Howarth, was a native of Lancashire, and one wonders if he too might have worked in the coal fields of that region prior to emigrating in 1873 (Johnson and Company 1880:773; Biographical Publishing Company 1890:764; Bateman and Selby 728). In 1882 Richard Howarth also established a coal-mining partnership with Isaac Wantling. Their co-partnership agreement stated that the men intended to open a mine (or mines) on Howarth’s lands in Section 30 of Kickapoo Township.¹³ Howarth relinquished his coal rights on Section 30 to the partnership, and also agreed to give land in Section 19 for the construction of a grocery store, tenant house and other buildings that might be necessary for the operation of the mine. In consideration for providing the coal, the right-of-way, and the land to the business, Howarth was to receive six cents per each ton of coal mined, beginning after December 1, 1885. Profits above this royalty were to be shared equally, and the two men also agreed to split the costs of establishing and operating the mine. Another stipulation of the agreement allowed Howarth to substitute William Taylor for himself as partner in the firm (Peoria County Deed Record MG: 126-127). A 1902 biography Taylor emphasizes his long-term involvement in mining coal on the Howarth Farm (Bateman and Selby 1902:728), and it is possible that he oversaw day-to-day operations of the mines, while his father-in-law devoted the bulk of his attentions to farming.

The 1891 coal report for Peoria County lists seven mines operating at, or in the vicinity of Edwards Station, all of which were drift mines. The largest of these mines was operated by “Howarth and Taylor Brothers” (a firm comprised of Richard Howarth, William Taylor, and James Taylor), which employed thirty miners on average and had extracted 13,600 tons of coal for the year. This mine was one of two at Edwards Station that functioned as a shipping mine (presumably serving the Peoria market), and it was the only one that employed steam power; the other mines being either horse or hand powered. The coal report makes no mention of “Wantling and Howarth” (the name proposed in the co-partnership agreement) at Edwards Station (State Bureau of Labor Statistics 1891:120-121). An 1890 biography of Howarth, however, specifically states that he was “engaged with Isaac Wantling in a separate coal mine” (Biographical Publishing Company 1890:764). This suggests that the partnership between the men either had dissolved or was operating under a different title by this date.

¹² The fact that Howarth’s coal mine is not listed in the Industrial Schedules for 1850 and 1860 does not mean that he was not mining coal, since the schedules are notoriously spotty in their reporting of rural industries.

¹³ The articles of agreement specifically identified the NE¼, the NW¼, the N½, SE¼, and the N½, SW¼ of Section 30 as the potential location for the mine(s) (Peoria County Deed Record MG:126-127).

Table 1
Agricultural Schedule Summary for the Richard Howarth Farmstead
1850-1880

	ACREAGE			REAL ESTATE	PERSONAL ESTATE	IMPLEMENT	RES. FARM	WAGES	FARM PRODUCT
	IMPR	UNIMP.	TOTAL	VALUE	VALUE	VALUE	LABORERS	PAID	VALUE
1850	50	140	190	\$2,000	\$?	\$100	1	N/L	N/L
1860	150	0	150	\$6,000	\$3,000	\$500	3	N/L	N/L
1870	300	300	600	\$20,000	\$2,000	\$300	2	N/L	\$2,000
1880	500	100	600	\$18,000	N/L	\$300	2	\$300	\$2,000

	LIVESTOCK	HORSES	MILCH	OTHER	CATTLE	CALVES	SWINE	POULTRY	VALUE OF ANIMALS
	VALUE		COWS	CATTLE	SOLD	DROPPED			SLAUGHTERED
1850	\$215	4	3	2	N/L	N/L	12	N/L	N/L
1860	\$1525	9	8	20	N/L	N/L	12	N/L	\$200
1870	\$1220	12	10	20	N/L	N/L	36	N/L	\$1,000
1880	\$3300	12	7	100	17	7	110	70	N/L

	WHEAT	CORN	OATS	RYE	BARLEY	IRISH	HAY	GRASS	BUTTER	ORCHARD
						POTATOES		SEED		PRODUCTS
1850	150 bu.	500 bu.	200 bu.	0	0	?	?	?	?	?
1860	350 bu.	2,000 bu.	300 bu.	160 bu.	100	300 bu.	20 tons	15 bu.	500 lbs.	\$20
1870	18 bu.	500 bu.	600 bu.	200 bu.	0	100 bu.	30 tons	0	0	
1880	0	4000 bu.	400 bu.	560 bu.	0	150 bu.	32 tons	0	200 lbs.	\$100
		(on 100 acres)	(on 40 acres)	(on 30 acres)		(on 2 acres)	(on 65 acres)			(200 bu. apples)

In the 1900 census, Richard Howarth's son-in-law, William Taylor, was listed as the head of the family household. Howarth himself was a widower by this date, his wife Alice having died in 1887. William and Martha Taylor's six surviving children—Alice (age 22), Susannah (age 20), James (age 18), Ella (age 16), Mabel (age 10), and Walter (age 5)—were still residing at home in 1900. Despite his active involvement in coal mining, Taylor reported his occupation as "farmer" in the census. Richard Howarth was retired, but he retained ownership of the family farm; in the census, he was reported as a landowner, and Taylor as a renter (USBC 1900:122A; Biographical Publishing Company 1891:763-764). An 1896 plat map of Kickapoo Township illustrates the landholdings associated with Richard Howarth's home farm during this period. Howarth also owned land on Sections 21 and 27, several miles to the east of his residence (George Ogle and Company 1896) (see Figure 20). His combined real estate holdings in Kickapoo Township during this period came to some 900 acres of land (Biographical Publishing Company 1890:764). A lithograph portrait of Howarth, drawn late in his life, is attached as Figure 21.

Richard Howarth died on February 3, 1904. In his Last Will and Testament, he left all of his real estate to his daughter Martha, except for those lands he previously had conveyed to her children (through deeds held in escrow). The will indicated that he deeded 240 acres to his oldest granddaughter, Alice Conley. The monies received by his heirs was as follows: Alice R. Conley, \$1,000; Susannah Taylor, \$7,900; Ella Taylor, \$4,900; James Richard Taylor, \$4,900; Martha Ellen Taylor, guardian of Mabel Ellen Taylor, \$9,400; and Martha Ellen Taylor, guardian of Walter William Taylor, \$16,400. Martha, acting as Walter's guardian, was given the option of keeping his money in interest until he was of age or to use the money to purchase a farm for him at any time before he reaches a lawful age. Howarth also left \$500 to the Episcopal Church of North Limestone (Christ Episcopal Church), of which he was a long-time member. He was buried in that church's graveyard, next to his wife Alice, whose death had preceded his own by some twenty years (see Figure 22). Howarth's estate paid out a total of \$45,359.91 to his debtors and heirs. No real estate or chattel was listed in the inventory of Howarth's personal estate, due to the fact that he deeded all of his property to his daughter prior to his death (Peoria County Estate Record No. 6374).

On July 15, 1903, Richard Howarth had deeded the following property in Kickapoo Township to his daughter: The NW¹/₄ of Section 30, totaling 153 acres; NE¹/₄ of Section 30; the NE¹/₄, SW ¹/₄ of Section 30; so much of the W¹/₂, SE¹/₄ and the E¹/₂, SW¹/₄ of Section 19, as lies south of the center line of the main track of the Chicago, Burlington, and Quincy Railway; and the S¹/₂, SW¹/₄ of Section 19, containing 160.46 acres. He also deeded her Lot 11 of Adam's Addition to the City of Peoria, and Lots 3 and 4 in Kellog Place (laid out in part on Lot 4 and in part of the reservation in Ashael Hale's Addition to the City of Peoria). The transaction was not recorded until February 8, 1904, four days after Richard's death (Peoria County Deed Record VI:490, roll D-192). Martha Ellen Taylor is designated as the owner of the Howarth Farmstead on a 1904 Peoria County map (Hendrickson and Richardson 1904) (see Figure 23). Martha and William Taylor continued to reside in the Howarth House after her father's death,¹⁴ and the

¹⁴ Martha Ellen Taylor and her younger children were listed as residents of Hanna City in the Petitions for Letters Testamentary for Richard Howarth's estate, but Hanna City is believed to be their post office rather than their actual address (Peoria County Estate Record No. 6374).

couple is believed to be responsible for the construction of the circa 1910 wing on the west end of the dwelling. A photograph of William Taylor is attached as Figure 24.

In 1910, the Taylor Household consisted of William and Martha (then aged 54 and 58, respectively) and three of their children: Mable L., Walter, and Alice Cohley. Several of the older children had moved out since the preceding census. Alice, the oldest sibling, also had left her parents home after 1900, but had returned after being widowed. William Taylor was reported in the 1910 census as a farmer engaged in operating a stock farm (USBC 1910:12).

In 1930, Walter Taylor, who was William and Martha Taylor's youngest son, took over the Howarth Farmstead. Walter Taylor later sold much of acreage associated with his grandfather's farm to Morgan Mines, which strip-mined the area for coal. He did, however, hold onto the ten acres surrounding the farmstead and continued to occupy the residence there with his wife Josie Marie. Sometime around 1953, Morgan Mines excavated a 50'-deep trench around the ten-acre tract after the Taylors refused to sell the property to the company. Morgan Mines later was purchased by the Peabody Coal Company (*Peoria Journal Star* 5 December 1963, p. E-3)

The Howarth farm remained in the Howarth family until 1985, when Richard Howarth's great-granddaughter, Dorothy Ness, deeded the property to Peoria Wildlife Prairie Park. The site now serves as housing for employees of the park. The transaction took place under the Trust Agreement dated November 18, 1985, in which Ness, of Hanna City, in a deed-in-trust and quit-claim deed, granted Robert E. Ness (not personally) as trustee of the Robert E. Ness Trust, the family's remaining property in Sections 19 and 30 (Peoria County Deed Record, Document No. 86-02625 through 86-02631). Founded in 1939, the Forest Park Foundation started purchasing land in the vicinity of the Howarth Farmstead in late 1960s for the purposes of developing a park devoted to preserving Illinois' natural heritage. By the mid-1980s, the foundation had acquired roughly 2000 acres of land, much which had been subjected to coal mining (below ground and strip) during its previous history. Wildlife Prairie Park was first opened in 1978. William L. Rutherford, executive vice-president of the Forest Park Foundation, has served as the director of the facility since it was opened. The park has only recently been sold to the Illinois Department of the Natural Resources.

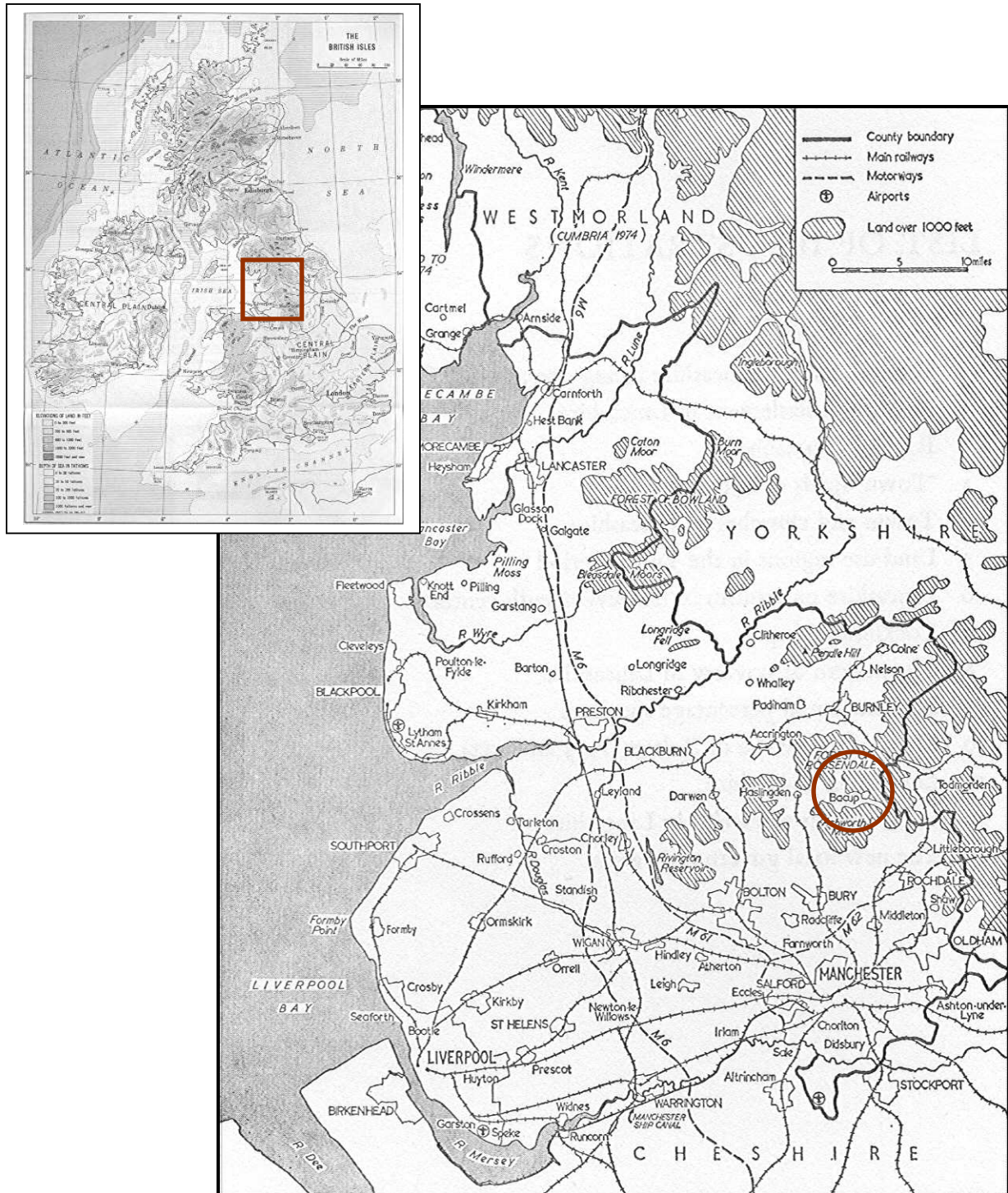


Figure 15. Map of Lancashire, showing the location of Bacup, the town in which the Howarth family resided prior to immigrating to the United States (Marshall 1974). Lancashire's relationship to the rest of Great Britain is indicated on the inset (Hulme 1924:opp.5).

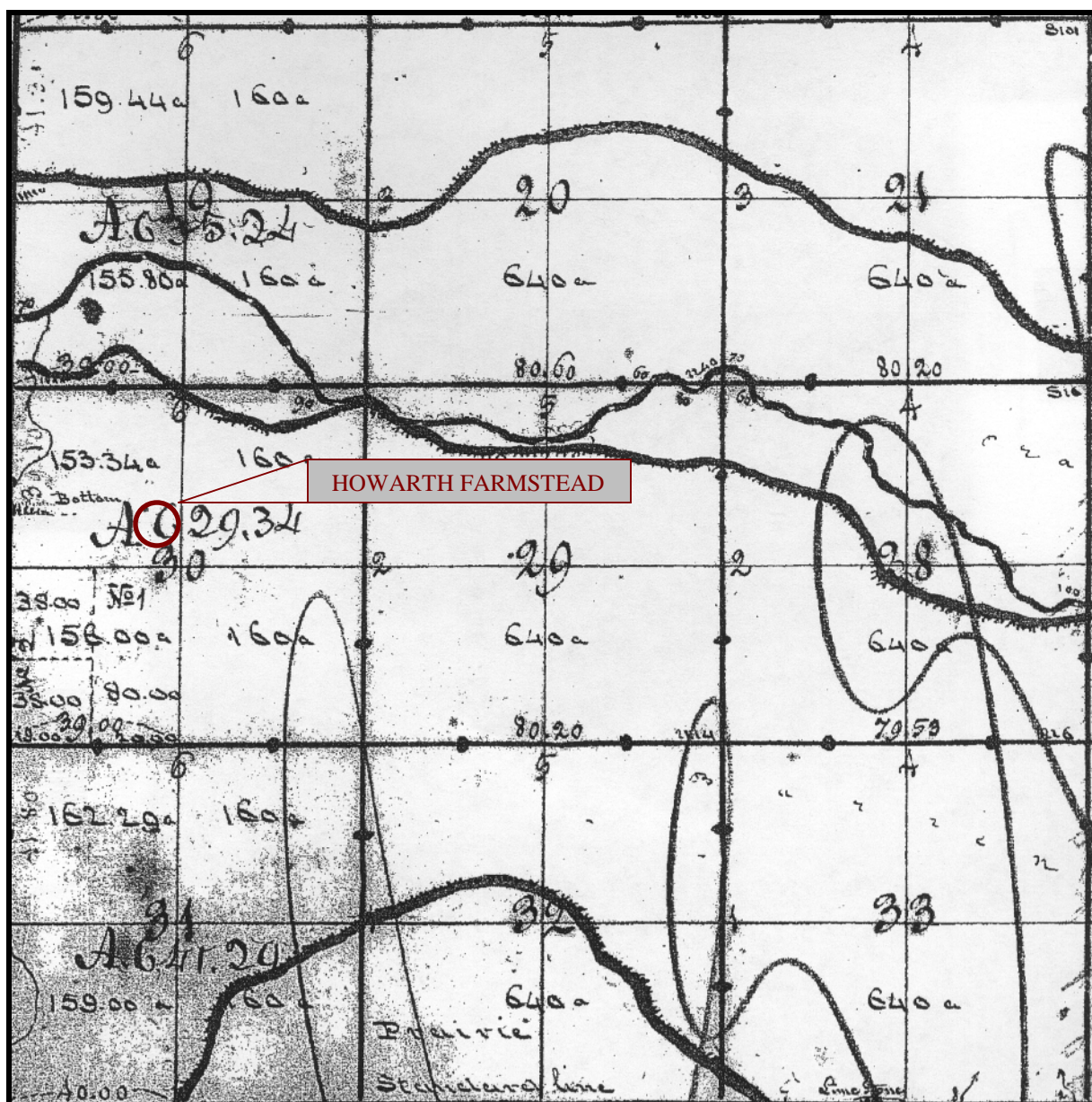




Figure 17. Location of the Howarth Farmstead, as shown on an 1861 County land ownership map of Peoria County (Allen 1861). The farmstead has been marked by a heavy circle on this map and on subsequent county maps that are incorporated into the report. Howarth's landholdings also have been outlined. The only copy of this map currently available at the Illinois State Library is on microfilm (hence its poor quality).

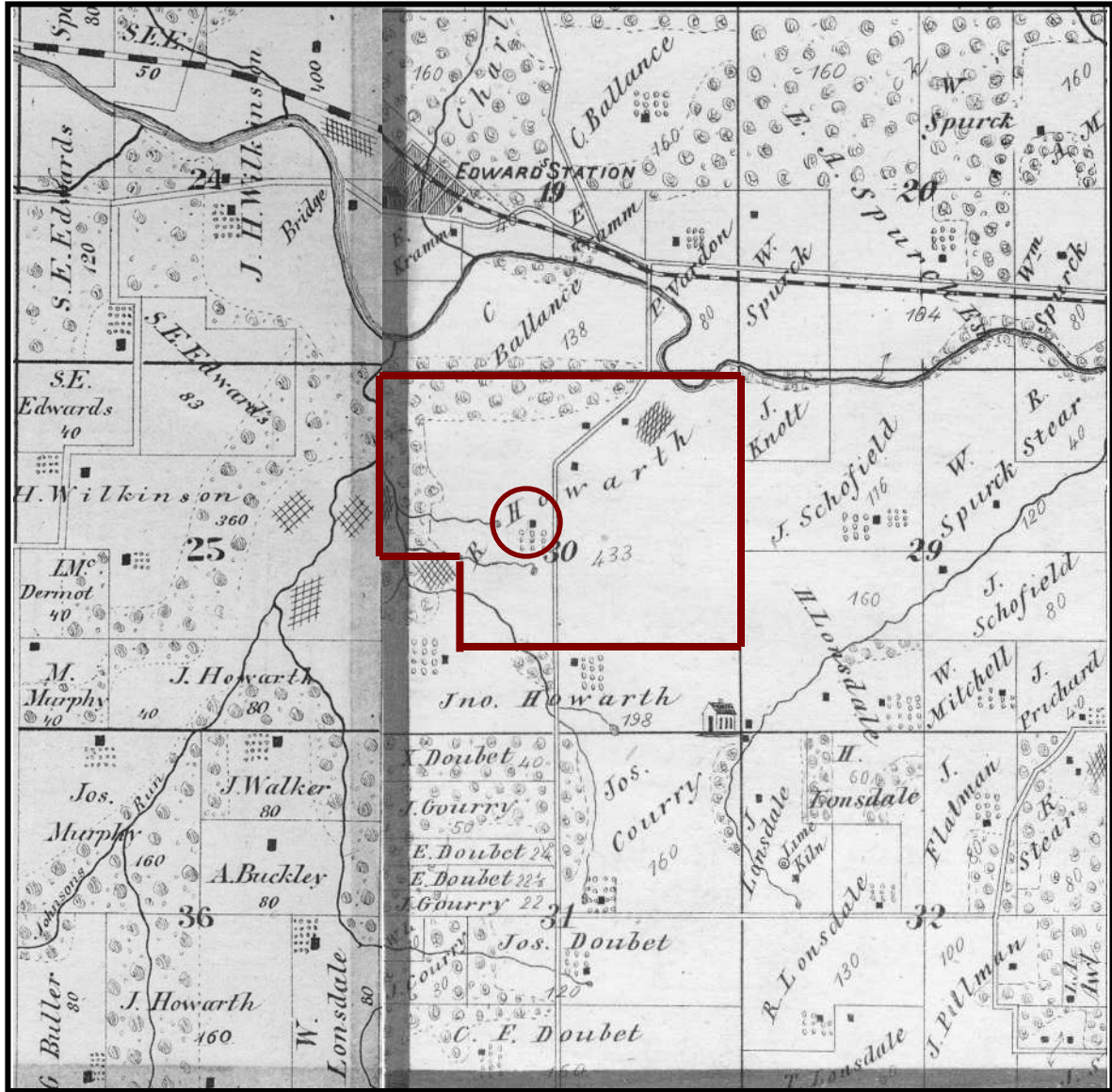


Figure 18. Location of the Howarth Farmstead, as shown on the 1873 plat map. The cross-hatched areas on the map indicate coal outcroppings (Andreas 1873:135-137).

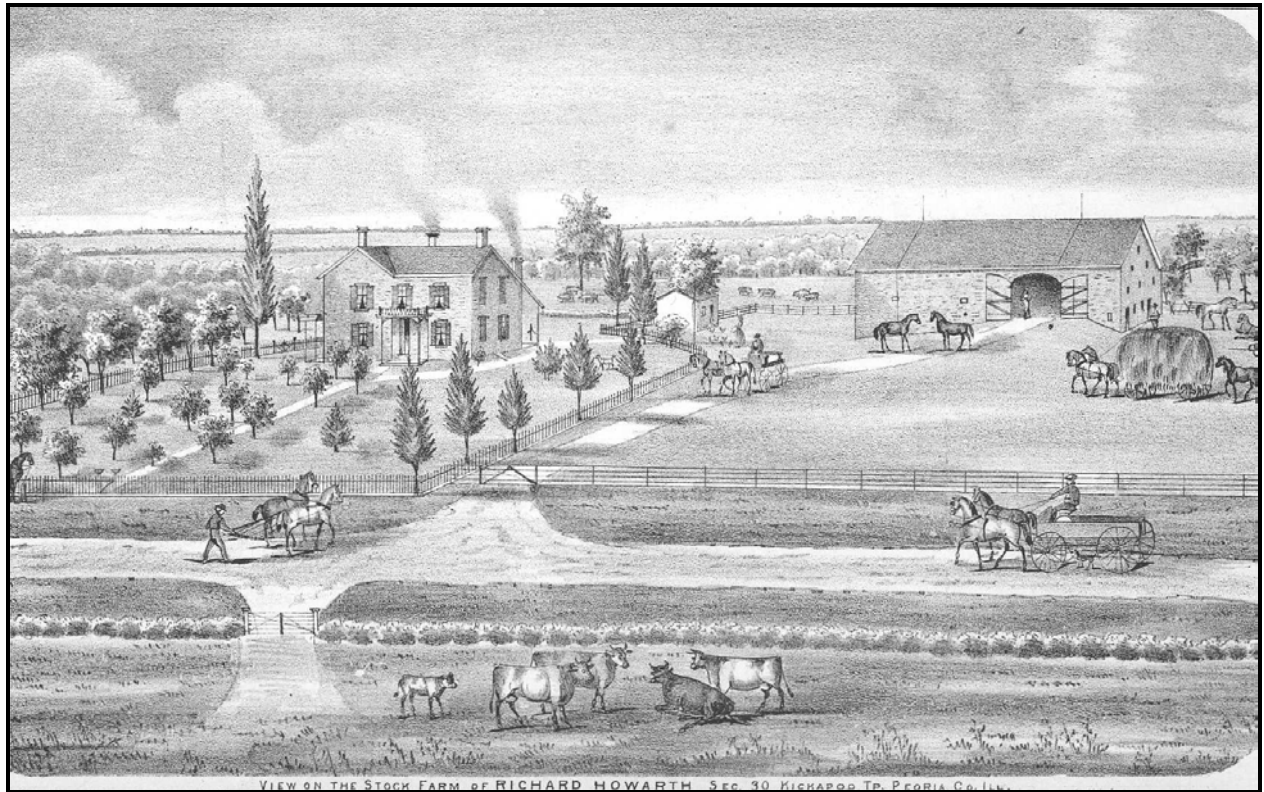


Figure 19. An 1873 lithograph of the Richard Howarth Farmstead, showing the stone house and barn (Andreas 1873:128)

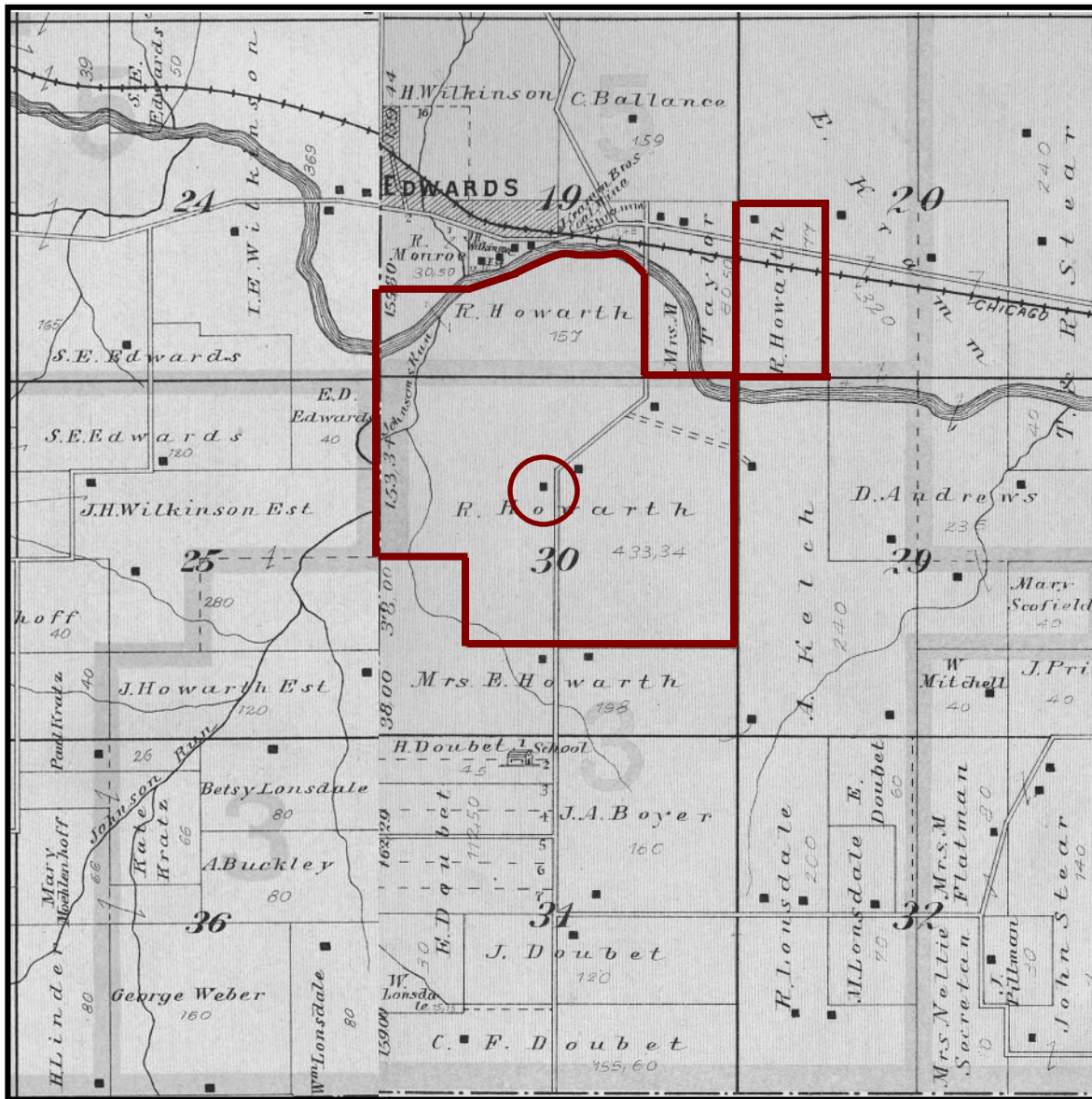


Figure 20. Location of the Howarth Farmstead, as shown on the 1896 plat map of Kickapoo Township). By this date, Richard Howarth's land holdings had pushed north, to Edwards Station and across Kickapoo Creek. The Howarth and Taylor Brothers Coal Mine is not indicated on the map, though the Kramm Brothers mine—on the east side of Edwards Station—is noted (George Ogle and Company 1896).

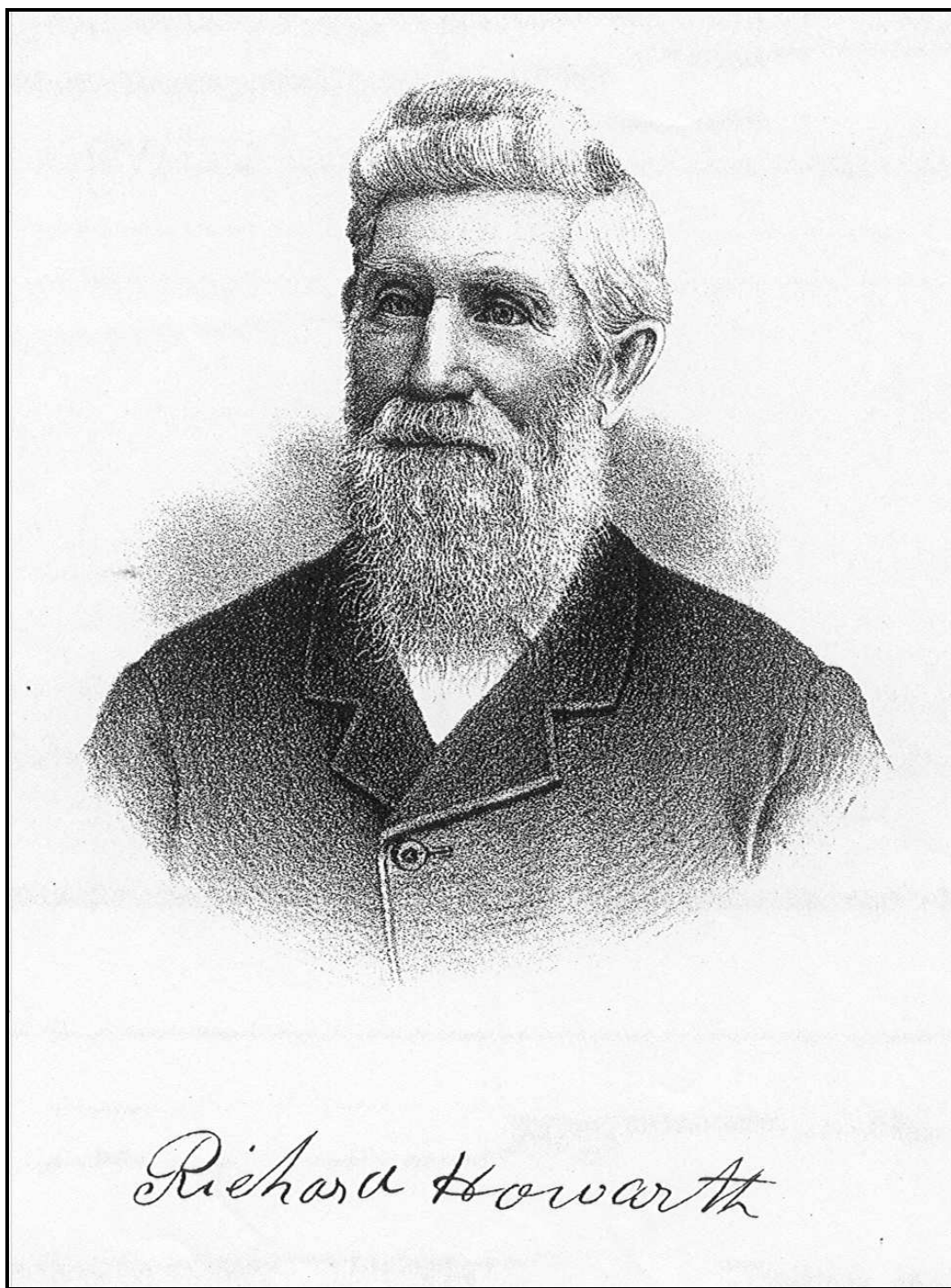


Figure 21. Lithograph of Richard Howarth, Jr. This image was published in the 1890 *Portrait Biographical Album of Peoria County, Illinois* and shows Howarth in his later years and at the height of his success as a farmer and coal operator (Biographical Publishing Company 1890:762).



Figure 22. Photograph of Richard Howarth's tombstone, with Christ Episcopal Church in the background. Richard Howarth was a long-time member of this church and left \$500 to the congregation upon his death (FRR June 2001).

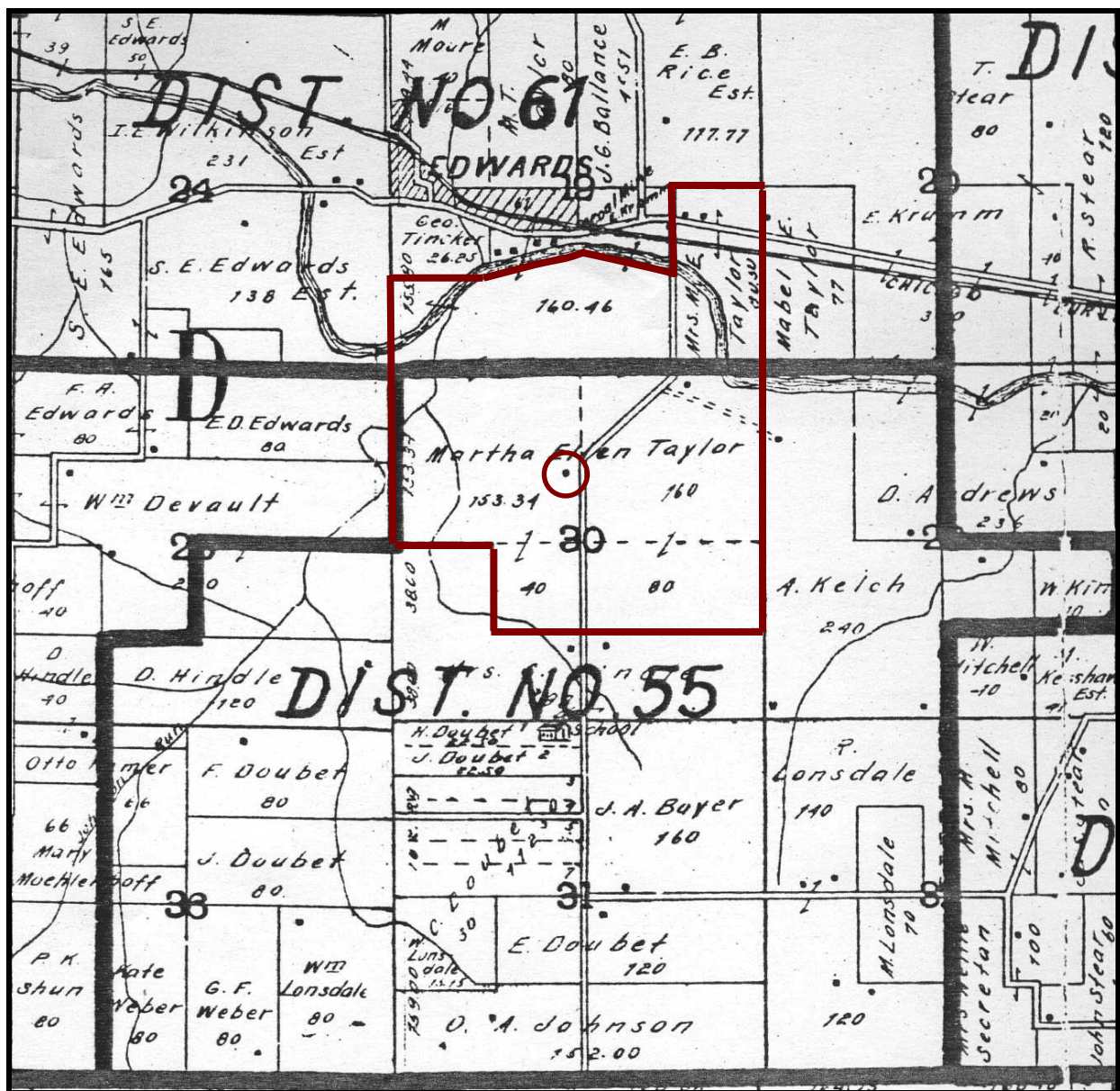


Figure 23. Location of the Howarth Farmstead, as shown on the *Map of Peoria County, Illinois*. By this date, the farmstead was owned by Martha Ellen Taylor and her husband William (Hendrickson and Richardson 1904).

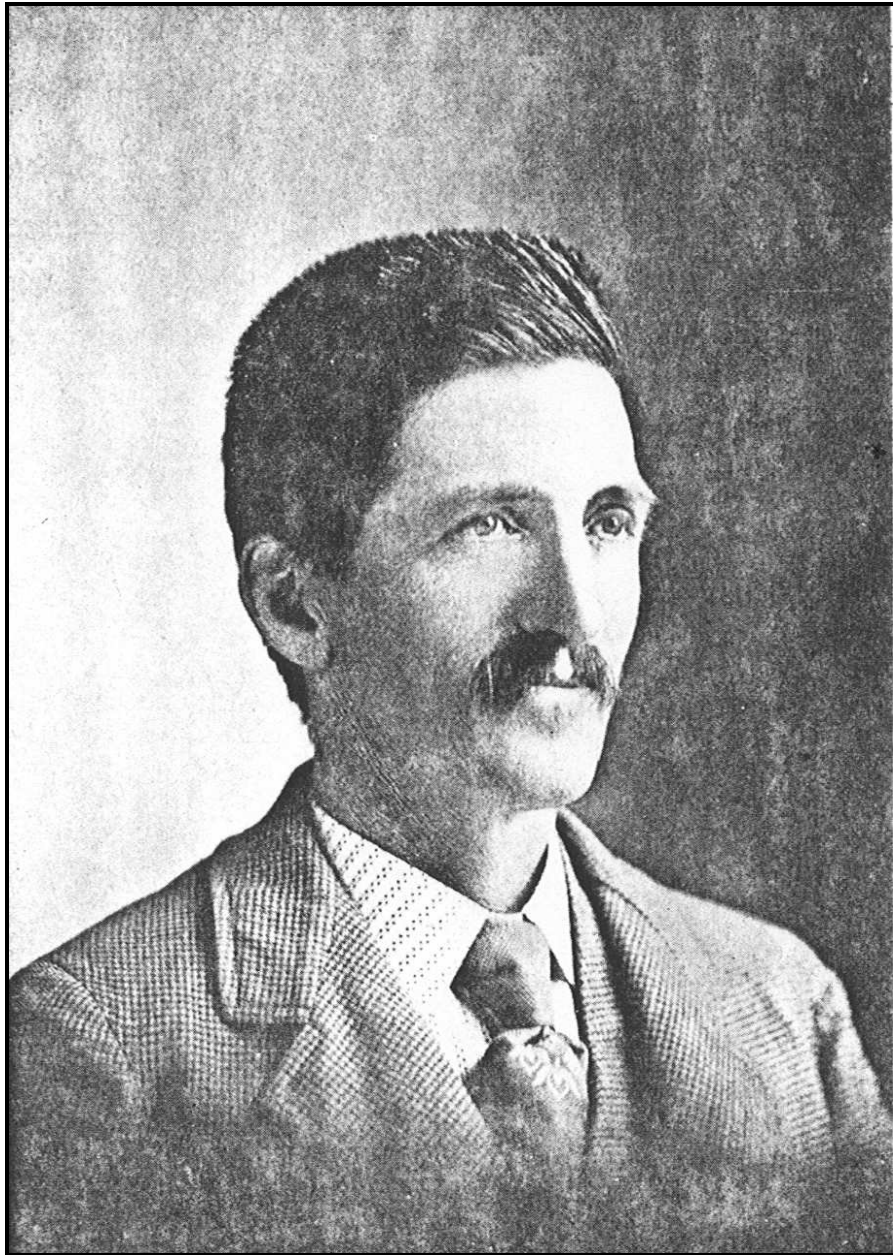


Figure 24. A circa 1902 photograph of William Taylor. A native of Lancashire, Taylor married Martha Howarth in 1876 and subsequently became partners with her father in mining coal at Edwards Station (Bateman and Selby 1902:728)

STATEMENT OF SIGNIFICANCE

The Howarth Farmstead is a historic site that was settled upon by the Richard Howarth family in 1842. Natives of Lancashire, the Howarths were part of a large migration of English families to Peoria County during the middle nineteenth century. Two buildings at the site date from the nineteenth century: a one-and-one-half-story, L-shaped house of stone and frame construction; and a large, side-gabled, stone, Lancashire Barn. The stone house was built as a side-gabled, single-pile dwelling, but later had several additions made to it. Family tradition relates that the house was started by the elder Richard Howarth and was completed by his son (also named Richard) following the father's premature death in 1844. Trained stonemasons, the Howarths provided their home with exterior walls of dressed ashlar, a more finely dressed façade, and a stone-vaulted cellar—features that not only exhibited the Howarths' pride and excellence at their craft, but also provide an air of quality to their otherwise diminutively sized dwelling. Circa 1860, the younger Richard Howarth constructed a one-and-one-half-story stone wing on the north side of the original house. The addition was as well built as the original and was designed to blend in with it. During the early twentieth century (circa 1900-1910), Alice and Richard Taylor (Richard Howarth, Junior's daughter and son-in-law) erected a frame addition on the north side of the house and replaced the south porch with a new one. A second frame addition was built later in the twentieth century.

The stone barn at the farmstead was built in 1859 by Richard Howarth, Junior. This barn is unique in Illinois in that its form matches that of an English barn type referred to as a "Lancashire Barn." A combination barn, the Lancashire Barn melds the traditional Three-Bay English Barn and a "cow house" within a single structure and, when built along a hillside (like the Howarth Barn), it provided a partial basement that was often used for stabling horses. Although common in the England, this barn type appears to be rare in the United States. The fact that the Howarth Barn was erected seventeen years after Richard Howarth's emigration from his native Lancashire suggests that the barn, while functional, may also have represented a piece of nostalgia for its builder. Circa 1900, the roof over the main part of the barn was removed and replaced with a more steeply pitched roof that provided additional room for hay storage. The original roof system over the cow house, however, was left intact. Portions of the interior of the building have been remodeled for staff housing.

The house and barn at the Howarth Farmstead represent excellent examples of middle-nineteenth-century stone construction in east-central Peoria County. The limestone and sandstone resources found in this part of the county were readily exploited for building purposes during the nineteenth century, and this tradition appears to have been particularly strong among the English immigrants who settled there. Although scattered examples of stone buildings (both institutional and domestic) survive in the surrounding region, the Howarth Site is unique in that it has both an extant stone residence and barn. We also know the identities of the stonemasons who built those buildings and thus can document a family tradition of stone construction at a single site over time. The barn alone is historically significant as a rare example of a Lancashire Barn type in Illinois. But as a pair, the house and barn are mutually complimentary and serve to augment the Howarth Farmstead's eligibility to the National Register of Historic Places under Criterion C (architecture), in recognition of the type and method of construction used there.

Admittedly, the modern additions and modifications that have been made to the house and barn have compromised their integrity of design, materials, and feeling to some extent. However, we do not feel that these aspects have been so diminished on either building to preclude them from National Register eligibility. Despite the changes that have been effected, the house and barn retain sufficient integrity of design, materials, and feeling—besides having good integrity in respect to location, setting, workmanship, and association—for the Howarth Farmstead to be eligible to the National Register under Criterion C, both for method of construction and building type. Significant dates for the house are 1844, circa 1860, and circa 1900-1910, while those for the barn are 1859 and circa 1900.

We also feel that the Howarth Farmstead may be potentially eligible to the National Register under Criterion D (archaeology). The stone house and barn at the farmstead represent complex cultural artifacts that can offer a wealth of information about the socio-economic status of the Howarth family, ethnicity, construction methods, agricultural strategies, and activity areas on the farm over time. Complimenting this data set are the subsurface archaeological resources that are likely present at the site. For example, the sod house occupied by the Howarth Family during their first year in Illinois presumably is located somewhere on the site, though we do not know exactly where that dwelling was located. Furthermore, we know from the 1873 lithograph of the farmstead that there was at least one other outbuilding at the site that is no longer extant. Beside this, there probably were a number of smaller, undocumented buildings at the site, such as privies, at one time or another. Additional features possibly present at the site include trash pits, wells, and middens. Such features would aid in understanding site structure and could yield significant artifact assemblages. In addition to answering site-specific research questions, the archaeological resources at the Howarth Site may have the potential to yield significant information that can be used as comparative data in addressing broader questions about English settlement in Peoria County and elsewhere in Illinois. The suggested period of significance for the Howarth Farmstead under Criterion D is 1842-1904, a period that begins with the establishment of the farmstead and ends with Richard Howarth, Junior's death in 1904.

SETTING AND SITE CONDITIONS

Spacial Organization and Landscape: The Howarth Farmstead is located on the SE1/4, SE1/4, NE1/4 of Section 30 of Township 9 North, Range 7 East of the Fourth Principal Meridian (Kickapoo Township), in central Peoria County. It is situated on the west side of Taylor Road, approximately three-quarters of a mile south of the town of Edwards Station. Topographically, the farmstead lies on the crest of a ridge bordering the southern edge of the Kickapoo Creek Valley. A tributary of the Illinois River, Kickapoo Creek drains much of central and northern Peoria County, and the stream's valley is nearly one-half mile wide in the Edwards vicinity. Another important stream in the area is Johnson's Run, which drains the uplands lying south and west of the Howarth Farmstead and flows into Kickapoo Creek one-half mile northwest of the site.

The limits of the farmstead are defined on the east by Taylor Road and on the north, west, and south by a broad, water-filled strip-mine trench that was excavated during the middle twentieth century for the purpose of extracting coal. The building complex forms a rough square and is comprised of four buildings that date from the period that the site was used as a farm: the stone barn on the north; a frame dairy barn and a frame chicken house on the west; and the stone house on the south. A large, open-sided, frame pavilion has been constructed immediately south of the frame barn. The house is surrounded on all four sides by a grass-covered lawn. The yard lying east and north of the barn is used as a horse paddock, while the yard to the west of it has been planted with prairie grass. The southern end of the farmstead is presently utilized as a visitor parking area. For reference purposes in the following discussion, we have included a copy of the 1873 lithograph of the Howarth Farmstead (see Figure 25) and a site plan showing existing site conditions (see Figure 26).

Outbuildings: We know nothing specific about either the number or character of the earliest outbuildings associated with the farmstead. Given that the farmstead was established in 1842, seventeen years prior to the construction of the stone barn, it is reasonable to assume that an earlier barn (possibly of frame construction) was located at the site, since such a structure would have been a necessity for grain/hay storage. Similarly, there may have been a number of other, smaller outbuildings (e.g. animal pens, corn crib, privy, smokehouse) present at one time or another. Unfortunately, the archival record provides clear evidence for only two outbuildings at the farmstead during the nineteenth century: the 1859 stone barn, which is illustrated on both the 1861 Peoria County Map and on the 1873 lithograph of the Richard Howarth farm; and a small, building that is shown lying midway between the house and barn on the same lithograph. The latter building is depicted as a small one-story, presumably frame, structure with a side-gabled roof and a single window and door on its north elevation. Considering that this small building is pictured as being fenced-in within the barnyard and has chicken (or other fowl) in front of it, the structure is suspected to have functioned as a chicken house (see Figure 27). It is no longer extant. Some agricultural outbuildings associated with the farm may have been located on the east side of the Taylor Road, and hence would not have necessarily been illustrated on the 1873 lithograph.

Two of the extant outbuildings at the farmstead date from the early-to-middle twentieth century.

One of these is a frame dairy barn that has a tile silo positioned off its south end (see Figure 28). The barn and silo have both been converted into housing for the staff employed at Wildlife Prairie State Park. A shed-roofed, frame chicken house is located along the north end of the frame barn (see Figure 29). The chicken house also dates from the twentieth century. Neither of these buildings will be discussed in any detail in the Historic Structure Report.

A 1963 aerial photograph¹¹ of the Howarth Farmstead shows two additional agricultural outbuildings at the site, which have since been removed. One of these buildings was located in the paddock between the stone barn and Taylor Road, while the other was located in the pasture northwest of the existing chicken house (reference Figure 26).

Wells, Cisterns: The 1873 lithograph of the Howarth farm illustrates a hand-operated pump located off the northwest corner of the porch that abuts the north wing. It is uncertain whether this pump was positioned over a cistern or well, since a concrete pad currently covers the site of the pump. While the pump's location on the corner of the porch fits well with a cistern (since these features typically were sited at building corners in order to collect rainwater draining off the roof), it is possible that this relationship is entirely by chance, considering that porch represents a later addition and pump (or at least, the shaft-feature below it) might therefore pre-date the porch. If the latter is true, then it is reasonable to believe that the pump was associated with a well that was located away from, but in convenient proximity to, the Howarth House, as originally built.

A brick-lined cistern is located off the northwest corner of the original stone house. This cistern was covered over when the frame addition that was built onto the west end of the original house during the early twentieth century, but the feature remains intact and can be viewed from the basement room located beneath the wing. Water draining into the cistern first passed through a smaller, brick-lined chamber that possibly was filled with charcoal during the cistern's active period of use. The charcoal would have filtered the water and rendered it suitable for cooking and/or drinking.

Fences, Walls: A picket fence is shown circuiting the east, north, and south sides of the yard surrounding the Howarth House in the 1873 lithograph. Two entrances through this fence are visible in the lithograph: one, with a single gate, is located on the south side of the yard and is associated with a sidewalk leading from the house to the Taylor Road; while the second entrance has a double gate and leads into the south yard. The barnyard is surrounded by both post-and-rail and split-rail fencing in the lithograph. One section of post-and-rail fencing extends off the northeast corner of the picket fence and continues north along the Taylor Road, while another section runs along portions of the south and west sides of the barnyard. The split-rail fencing appears in the background of the view, running along the northwest end of the barnyard. The lithograph also shows a hedgerow running along the east side of the public road, closing in a cattle pasture (Andreas 1873).

At the present time, a barbed-wire fence surrounds the barnyard, which has been reduced to

¹¹ This photograph accompanied an article about the Howarth Farmstead that was published in the December 5, 1963 edition of the *Peoria Journal Star*. A copy of the newspaper article can be found in the museum at Wildlife Prairie State Park.

perhaps two-thirds of its nineteenth century proportions and now serves as a horse paddock/pasture. A wire-mesh fence extends along the south side of the house yard, parallel to Taylor Road. The remainder of the house-yard is no longer fenced in.

Driveways, Sidewalks: The 1873 lithograph illustrates a driveway extending west off the Taylor Road that passes through a gate into barnyard and continues into the central drive of the stone barn. This is the only driveway shown within the main farm complex in the lithograph, and it appears to have served as the principal drive within the farmstead following the construction of the stone barn in 1859. A two-horse surrey is shown using the driveway in the view, and the roadway also would have been used by other wagons, farm equipment, and livestock being moved in and out of the barnyard (Andreas 1873). The existing entrance to the farmstead, extending off Taylor Road, appears to correspond to the driveway shown in the 1873 lithograph, but it is no longer is directed into the barnyard. Instead, the driveway runs due west, passing along the south side of the barn, and then curves around the west side of the house-yard, and finally feeds into the large visitor parking lot that lies to the south of the house. The driveway is paved with gravel.

The only sidewalk that appears in the 1873 lithograph extends from Taylor Road to the exterior entrance on the side of the Howarth House's north wing. This sidewalk was accessed through a gate in the picket fence surrounding the house-yard (Andreas 1873). The walk is still present and is now paved with concrete. A modern concrete sidewalk runs from the gravel driveway to the rear porch of the house.

Vegetation, Plantings: Although the historic plantings present at the Howarth Farmstead during the nineteenth century are not really known, the 1873 lithograph provides some indication as to their character. The lithograph shows the sidewalk leading from the house to the Taylor Road as being lined with small, bushy trees that potentially represent fruit or flowering species. In addition, the north side of the house-yard, flanking the driveway, is lined with tall, conical-shaped trees that might be ornamental cedars (based on their shape and their popular appeal during this period). An orchard was located south of the house. The barnyard is illustrated in the lithograph as being grass-covered and devoid of trees (Andreas 1873).

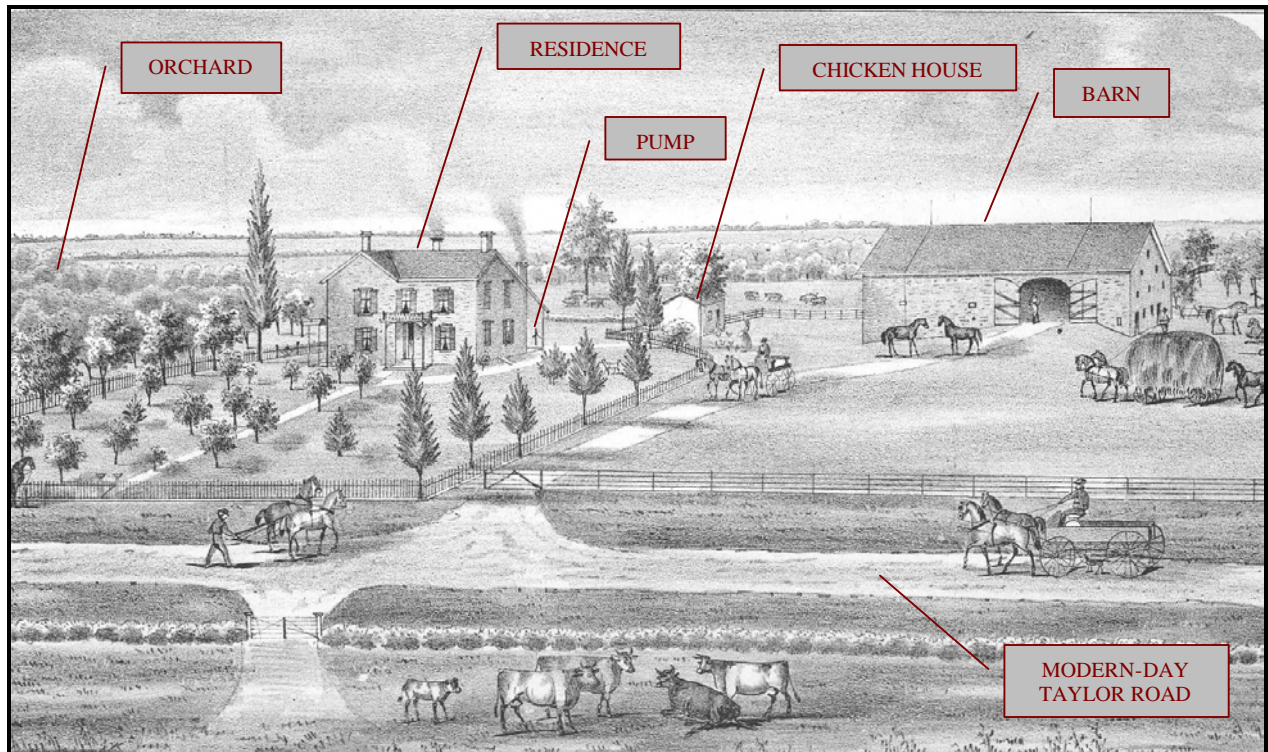


Figure 25. Another image of the 1873 lithograph of the Howarth Farmstead, showing the outbuilding, fences, and plantings present at the site during that period. Key buildings, structures, and landscape features have been labeled for reference purposes (Andreas 1873).

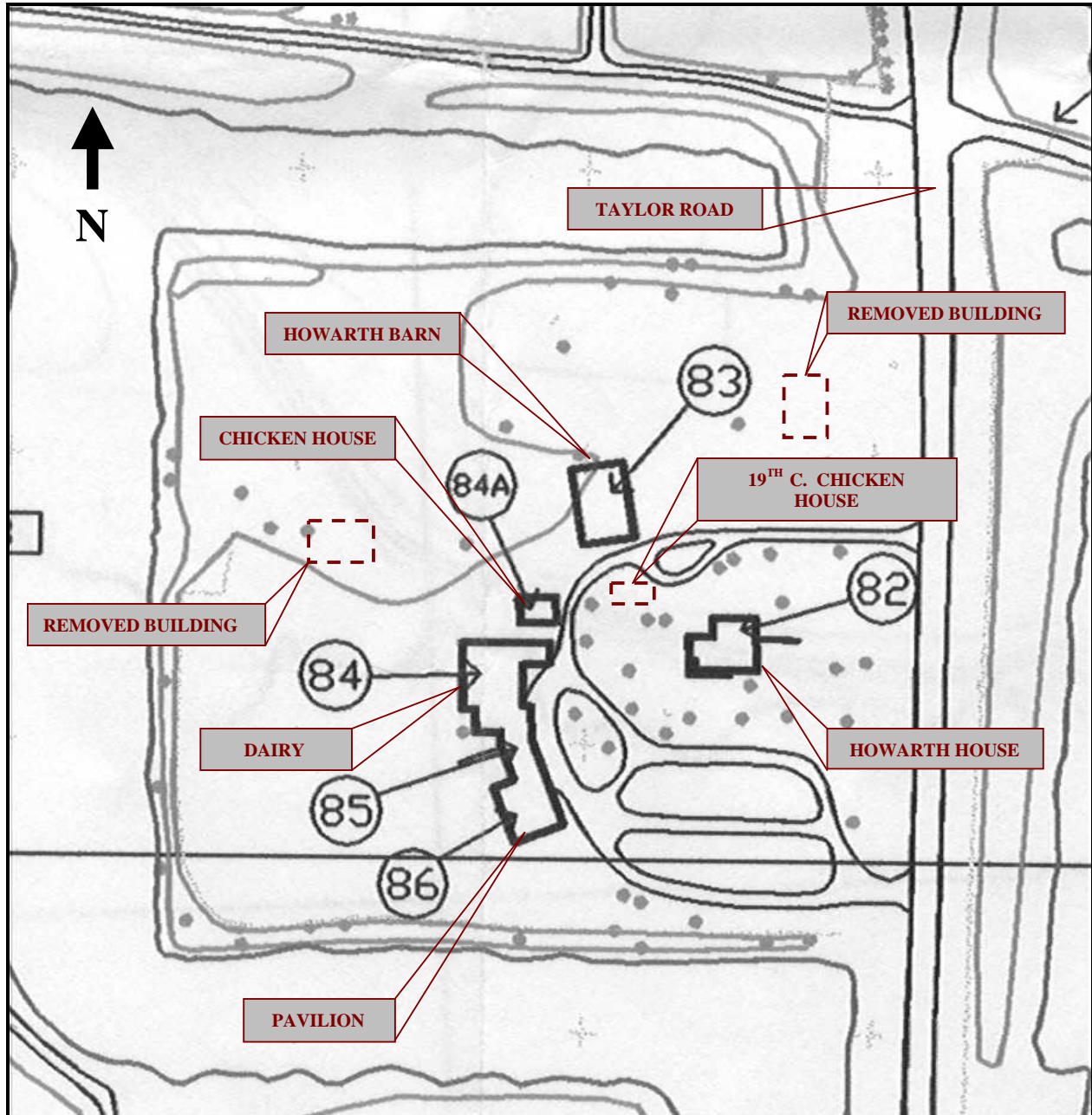


Figure 26. Site plan of the Howarth Farmstead, showing existing conditions (Basalay, Cary, and Alstadt 2001). The building identification numbers used on the map refer to the master plan for Wildlife Prairie State Park.

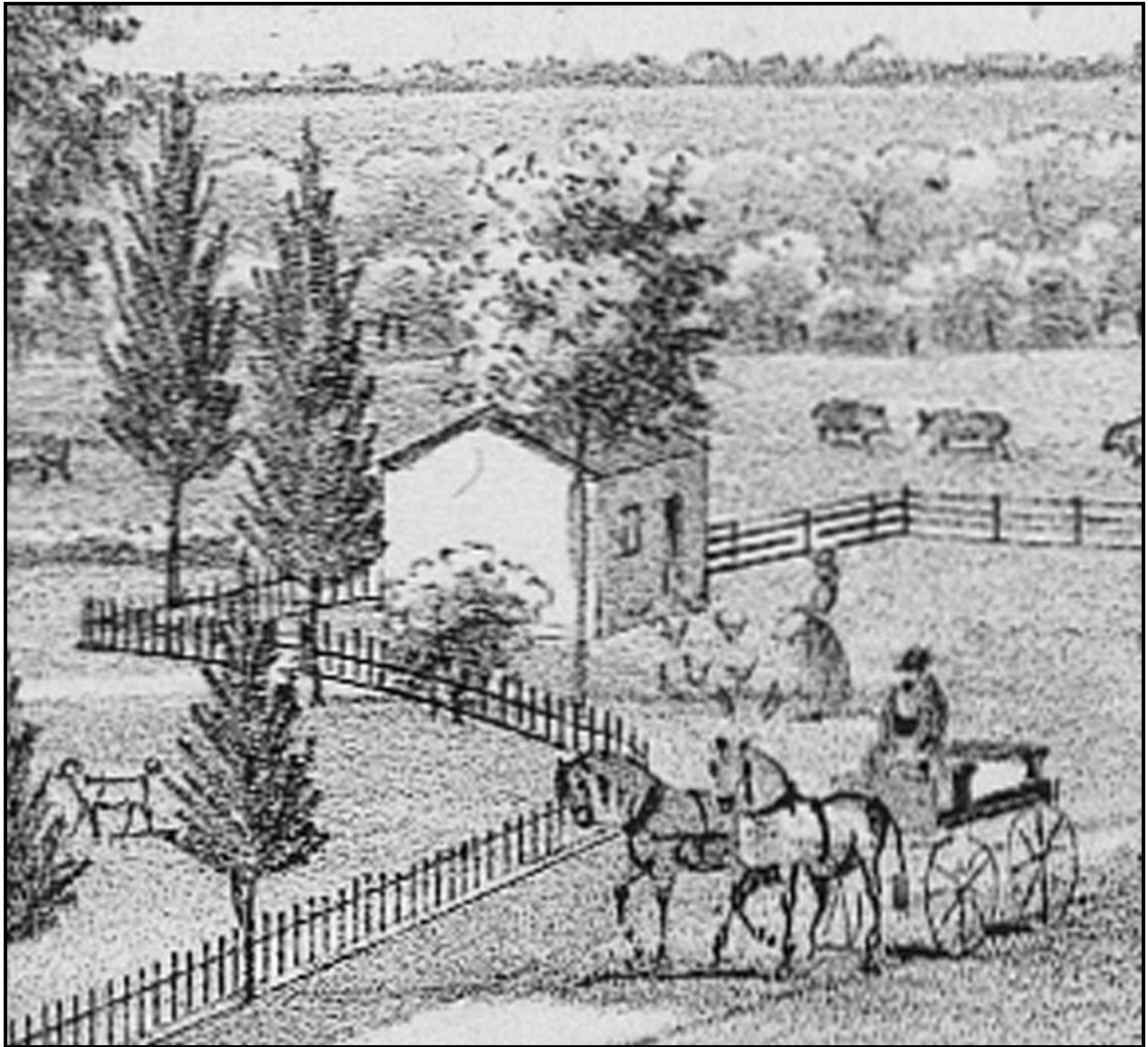


Figure 27. Detail of the 1873 lithograph of the Howarth Farmstead, showing the outbuilding believed to have served as a chicken house. This small, frame building was located between the house and stone barn but is no longer standing. Chickens, or other poultry, are shown in the front of the building. Also note the different types of fencing used around the farmstead (Andreas 1873).



Figure 28. (Top) Dairy barn and silo at the Howarth Farmstead, looking northeast. Erected during the twentieth century, these structures have been modified and expanded for use as staff housing (FRR September 2001). (Bottom) View of the pavilion that has been added onto the southern end of the dairy barn (FRR September 2001).



Figure 29. View of the frame chicken house at the Howarth Farmstead. Like the dairy darn, this building was erected during the twentieth century (FRR September 2001).

HISTORIC AND EXISTING CONDITIONS ***HOUSE:***

DESCRIPTION OF EXTERIOR

General Statement: The Howarth House is a one-and-one-half-story, L-shaped, stone and frame dwelling. Originally constructed as a small, side-gabled stone residence in 1844, it was enlarged to its present configuration through the construction of several additions. A stone and frame wing was added onto the north side of the house around circa 1860 (see Figure 30). This addition not only significantly expanded the house but also resulted in the front of the house being reoriented from the south to the east, in order to present a formal façade to the public road that passes by the farmstead (modern Taylor Road). The date at which this road originally was surveyed has not been determined, though it was in place by 1861 (Mathews, Crane, and Company 1861) and certainly would have had a use following the establishment of Edward's Station circa 1851. The elder Howarth probably faced his home to the south in order to take advantage of the increased sunlight and warmth provided by that exposure. During the early twentieth century (circa 1900-1910) a second wing, one of frame construction, was added onto the west side of the original stone house. The suggested date for this wing is based primarily on the framing materials used in its construction (which will be discussed in more detail below), but also on the size of the Howarth/Taylor household during this period. In 1900, William and Martha Taylor had six children living at home, in addition to the aged Richard Howarth. Several of the children were young adults, and it would not be surprising if they required, or at least requested, additional bedroom space. By 1910, the household had decreased in size to five family members, but the children remaining were older, and one them—Alice—had returned home after being widowed; as such, it would not be surprising if those occupants still had an expectation of having personal living space. Later in the twentieth century, a small, single-story bathroom addition was attached to the south side of the west wing (see Figure 31). Another addition formerly extended across the west side of the west wing but was demolished after Forest Park Foundation purchased the farmstead (William Rutherford, pers. comm., July 2001). The removed addition, which appears in a 1963 aerial photograph of the Howarth Farmstead (*Peoria Journal-Star* 5 December 1963, p. E-5), had a shed roof and possibly served as an enclosed(?) porch.

Overall Dimensions: The Howarth House, as originally constructed, measured 18'-7" (north/south) by 36'-4" (east/west).¹² The wing that was added onto the north side of the house circa 1860 measures 18'-0"x30'-2½". The west wing measures 17'-10"x12'-8". Considered as a whole, the existing house measures 36'-7"x49'-1" at its greatest extent.

Foundations: The foundations beneath the original house and north wing are constructed with rough-cut, irregularly coursed limestone and generally measure 1'-6" in thickness. The foundations beneath the west addition are brick.

An examination of the foundation walls in the original cellar resulted in the discovery of two sherds of black transfer-printed whiteware that had been mixed in with the mortar (see Figure

¹² Building and room dimensions provided in the report will always be north/south by east/west.

32). These sherds appear to have come from the same plate, which was manufactured by the English pottery firm Davenport¹³ and was decorated with a pattern named “Cyprus.” The Cyprus pattern is a traditional romantic transfer-printed pattern that is illustrated in Williams (1988:39). Williams (1988) illustrates the pattern applied onto a twelve-sided paneled plate that also was manufactured by the Davenport firm. Although Williams (1988) assigns a circa 1850 date for this pattern, flow black transfer printed wares were commonly used during the 1840s. The sherds incorporated into the mortar at the Howarth House presumably were deposited during the period that the house was under construction, circa 1844.

Walls: The walls of the original house are of stone construction and generally measure 1’-6” in thickness. In contrast to the foundations, the walls are built with sandstone that is ashlar (square-cut) and regularly coursed on the exterior of the house but likely have stone rubble masonry as backing. The south elevation represents the original façade of the dwelling, and, accordingly, the stone here is more finely dressed than found on the other sides of the house (see Figure 33). The stones on the other elevations were finished with rough point work (see Figure 34). In describing English stone vernacular buildings with regular masonry, Brunskill (1978) notes:

In ashlar work, regularity and high quality of finish are characteristic, and where the designers of vernacular buildings wished to show to the world, the ashlar might well be used for the front wall of the house. But such a show was confined to the surface. The ashlar itself was backed by rubble or brick, and the end walls were nearly always in an inferior technique, either rubble masonry or brick. The rear wall of a house was always in the poorest material and showed the crudest technique of building construction (Brunskill 1978:40).

At some point, the west and south elevations of the original house were covered with flat-finish stucco (see Figure 34). The stucco could be original to the house. Brunskill (1978:41) describes stucco as the “ashlar equivalent to rendering on rubble masonry.” Stucco applied to inferior stonework gave it a more finished appearance.

The east and north elevations of the north wing also are of regularly coursed ashlar sandstone. Instead of being finished with points, like the face stones on the original house, the stones on north wing were dressed with chisels (see Figures 35 through 39). Oddly, the west wall of the wing is of frame construction, rather than of stone. The reason for this switch in construction materials is unknown, though it may reflect a certain conservatism on the part of Richard Howarth. Since the west wall faced away from the public highway and was half covered by the rear porch, Howarth may have seen little need in expending the time and added expense of building a masonry wall here. The original cladding on the west wall has yet to be determined, though it is possible that it was either covered with weatherboard or was stuccoed in order to match the north elevation of the original house and thus hide its frame construction. The wall has since been covered with aluminum siding.

¹³ The firm of W. Davenport and Company was an extremely productive and influential English pottery located within the Staffordshire district of England. This firm produced a wide range of wares (including creamwares, pearlwares, whitewares, and ironstones) during the years circa 1793 to 1887. The early wares often contained an impressed mark that incorporated an anchor into its design. Often the last two digits of the year of manufacture were incorporated into the impressed anchor design. During the period 1820 to 1860, the firm produced a wide range of transfer printed wares (both pearlwares and whitewares) with printed backstamps that incorporated the name of the pattern and the word “DAVENPORT” into the design (Godden 1964:189-190).

The west wing on the house is of frame construction and likely had weatherboard siding originally. However, it is now covered with aluminum siding.

Structural System, Framing: The first floor on the west half of the original house (Room 101) is supported by 2"x6" joists that are laid north/south. Rather than resting in pockets within the exterior walls, the ends of the joists rest on top of oak log sills whose upper surface has been hewn down to receive them. The character of the floor joists in the east room of the original house (Room 102) is unknown, since that area is inaccessible. On the upper story, the floor joists measure 2"x8" or 2"x9" in size.¹⁴ The original interior partition walls are framed with 2"x4" vertical-sawn oak studs that are set 2'-0" on-center. Coursed brickwork, or nogging, is laid up between the studs. The nogging strengthened the walls, in addition to insulating them, and also created a flat surface that could be plastered without the application of wood lath. The original dwelling is covered with a common-rafter-and-collar roof. The common rafters are 3"x5", vertical-sawn, unsurfaced oak and have 2'-0" centers. They are bridged by 3"x6", vertical-sawn, oak collar beams, whose ends are half-lapped around the rafters and attached with treenails (see Figure 40). The collar beams also function as the ceiling joists for the upper floor of the house. The roof sheathing is oak, varies between ¾" and 1" in thickness and 6" to 1'-5" in width, and is laid with a ½" to 3"-gap between the individual boards. The sheathing was planked with a vertical saw but was not edged in any manner. Reference Figure 52 for more detail on the structural system utilized in the original house.

Howarth/Taylor family lore relates that the lumber used in the original Howarth House had to be hauled from Chicago by ox-drawn wagon, due to the scarcity of timber in the vicinity of Edwards Station (*Peoria Journal-Star* 5 December 1963, p. E-3). This scenario seems implausible, however, given that large sections of the township were timbered at the time of settlement (USGLO 1844) and that several local sawmills were in operation during the period in question (those at Hale's Mill and Jubilee College being two examples). Furthermore, the fact that oak lumber was used in the roof framing certainly suggests that local timber resources were used to some extent. It is true that the pine used for the interior trim and second-floor stairway probably was imported from a distant locale, such as western Pennsylvania or the recently opened pineries of Wisconsin. Yet, this lumber more likely would have been shipped by steamboat via St. Louis or Grafton, Illinois (at the mouth of the Illinois) up the Illinois River to Peoria, as opposed to being transported overland from Chicago. The preponderance of Peoria County's commercial traffic was directed southward toward the St. Louis and New Orleans markets until 1848, when the Illinois and Michigan Canal was completed and trade began to shift toward Chicago (Bateman and Selby 1902:343-344). Regardless, it seems unlikely that the Howarths would have had to haul their lumber from any farther away than Peoria.

The first floor of the north wing is supported by 2"x8" joists that run east/west and have 1'-4" centers. The floor span is carried by two sets of joists whose interior ends overlap in the middle and are supported by a 7-½"x7", hand-hewn oak beam. Like the lower story, the second-story floor joists measure 2"x8" and have 1'-4" centers. The ceiling joists on the upper floor measure 2"x4" and are laid between the rafters to act as cross-braces. In contrast to the original house,

¹⁴ Since the joists are not accessible (without tearing into the ceiling), their size has been estimated based on the ceiling thickness.

the ceiling joists/cross-braces are simply nailed to the rafters rather than being attached by half-lap and treenail. The rafters measure 2" to 2-1/4"x4" and are joined with a 1"x3-1/2" ridge-board. Except for the oak beam that was used to support the lower-story floor joists, all of the lumber used in the construction of the north wing is unsurfaced white pine, the majority of which has been planked with a vertical saw and edged with a circular saw. The differences in the types of framing materials found in the original house and in the north wing reflects the transition from the utilization of locally procured, hardwood stock (i.e. oak) to non-local, white pine lumber (likely imported from Wisconsin) between the middle 1840s and middle 1850s.

The lumber used in the construction of the west wing is nominal-sized yellow pine/cypress, which has been surfaced-planed on two sides. The surfaced character of the lumber, coupled with the use of wire nails, both suggest an early-twentieth-century construction date for the addition.¹⁵

Porches, Stoops: Although the house currently has four separate porches attached to it, none of these is contemporary with the original house. Indeed, it is quite possible that the Howarths built the dwelling without any porches attached to it. Though common to American homes of the period, porches were not typically found on English residences. Furthermore, it seems unlikely that the Howarths would have expended the time and effort involved in dressing the stonework on the south elevation of the house only to partially obscure that façade by building a porch across it. Hence, it is not unreasonable to believe that Howarths went without a porch until the circumstances of their new homeland (e.g. warmer, more humid climate) and their own evolving domestic needs, or tastes, encouraged them to add one. Lacking a front porch, the house originally may have had an unroofed, frame stoop positioned adjacent to the formal entrance on the south elevation. Determining the presence or absence of such a stoop was not possible during the field investigation, however, because the stoop—if ever present at all—has been removed and replaced with a full length porch. Hence, the physical evidence remaining from the stoop likely is limited, and the little that might be present (such as piers) is located in an inaccessible area beneath the existing porch deck.

At least two different porches have been attached to the south elevation of the house. The first of these porches is illustrated on the 1873 lithograph, which serves as our principal source of information for the structure (see Figure 41). Although only the east end of the porch appears on the lithograph, there is enough detail to tell that the structure was open, ran the full-length of the façade, and had a slightly-pitched flat roof supported by posts. A paint outline, or "ghost", of one of the porch posts is still evident on the stonework on the southeast corner of the house. This image suggests that the posts were square and had applied moldings nailed to their upper ends, emulating capitals (see Figure 42). The posts do not fall neatly into any particular architectural style but rather represent vernacular detailing that would have complimented a number of the Romantic architectural styles popular during the middle nineteenth century, including Greek

¹⁵ Determining the date of construction for any building or structure based solely on the materials used is never precise. However, there are identifiable transitions in regards to the species of wood, sawing methods, surface finishing, and nails used over time. Broadly speaking, the transitions from machine-cut to wire-drawn nails and from rough-sawn to surface-planed lumber occurred circa 1900. The fact that the west wing on the house has surfaced-planed lumber, whereas the replacement roof on the barn does not, suggests that the former has a slightly later date of construction than the latter.

Revival, Gothic Revival, and Italianate. We suspect the porch to have been added to the house at, or around, the same time period that the west wing was constructed. The existing porch on the south elevation dates to the early twentieth century (circa 1900-1910). Like its predecessor, this porch is full-length, open, and is of frame construction; it contrasts to the former, however, in regard to its half-hipped roof and its classically inspired Tuscan-style columns and entablature (see Figure 43). The ceiling on the porch is covered with narrow beadboard, while the deck has tongue-and-groove flooring. No balustrade appears ever to have been present. The west end of the porch has been partially framed in order to accommodate a laundry room.

The 1873 lithograph illustrates a small porch centrally located on the east elevation of the house. No longer extant, this porch was aligned to the exterior entrance leading into the north wing and likely was added at the same time that the wing was constructed. The porch measured approximately 6'x6' in size¹⁶ and was covered with a flat roof supported by two full-posts (set on the outer corners) and two half-posts (set on the inner corners, against the building). Decorative side brackets were placed at the upper ends of the posts. The porch roof was circuted by a balustrade, which, while potentially a purely decorative feature, might indicate the use of the roof as a sitting/sleeping porch by the Howarth family. The date of the porch's removal has not yet been determined, though it may have occurred during the early twentieth century, at the same time the front (or south) porch was replaced.

Another porch is located in the reentrant angle formed by the original house and the north wing. This porch, which measures roughly 7'x18', is aligned along the west elevation of the north wing and dates to the construction of that wing. As such, it represents the oldest extant porch on the Howarth House. The porch is open and is covered beneath a continuous shed roof that extends off the principal roof of the house and is supported by square frame columns. Simple jig-sawn side brackets and trim run between the porch columns, emulating a flattened arch –detailing that is indicative of vernacular Gothic Revival (see Figure 44). The ceiling on the porch is finished with wide tongue-and-groove paneling. The original frame porch deck has been removed and replaced with a poured-concrete pad.

An open, shed-roofed, frame porch is located alongside the north elevation of the west wing. Believed to be contemporary with the west wing, this porch dates to the early twentieth century and formerly sheltered an exterior doorway that has since been framed in. The ceiling on the porch is covered with narrow beadboard (see Figure 43). The original deck has been replaced with a poured-concrete pad.

A third extant porch is positioned along the west elevation of the west wing. The most recent of the porches added to the house, this structure has a shed roof that is supported by three wood posts. The porch replaced the single-story, frame addition that was dismantled following the acquisition of the house by the Forest Park Foundation.

Bulkheads: The main basement can be entered through a stone-line bulkhead that is positioned adjacent to the north elevation of the north wing. Built at the same time as the north wing, this bulkhead encloses a set of stone steps that have subsequently been parged with concrete. A

¹⁶ These dimensions are approximate and are based on the scale and articulation of the porch to adjacent door and window openings, as depicted in the 1873 lithograph.

second bulkhead, formed with poured-concrete, is located on the west side of the west wing and allows access to a separate, smaller basement. This bulkhead originally would have enclosed within the frame addition discussed in the preceding section, but it presently is exposed and covered with trap door.

Chimneys: For its size, the Howarth House has had a surprising number of chimneys throughout its history. As originally constructed, the house had two chimneys: a small, interior brick chimney located on east gable-end wall; and a large stone or brick chimney, positioned on the west gable-end wall, that measured approximately 1'-10"x3'-5". The smaller of these chimneys would have vented wood-burning stoves located in the east rooms of the house, while the larger chimney probably vented a large cooking fireplace in the kitchen. When the north wing was constructed two more chimneys were added to the house. One of these was an interior brick chimney centered on the gable-end of the wing, while the other was located on the northeast corner of the wing. All four of the aforementioned chimneys appear on the 1873 lithograph (reference Figure 41). The addition of a central furnace in the house during the early twentieth century eliminated the need for the older chimneys in the house. As such, the east and north gable-end stacks were taken down below the roofline (see Figure 45), while those on the west gable end and on the northeast corner of the north wing were removed altogether. The cutout for the west gable-end chimney is still evident in the roof framing. The boiler that was installed in the basement of the house was vented through new exterior brick chimney that was constructed on the north side of the north wing (see Figure 46). A second new brick chimney—used used to vent a kitchen stove—was raised at the same, along the common wall dividing the original house and west wing. The latter chimney has been taken down below the roofline, but the furnace chimney remains in use.

Openings:

Doorways and Doors: The original house was built with two exterior doors. These were positioned opposite one another, in the center of the north and south elevations. The south doorway, whose opening measures 3'-1/2"x6'-4 1/2", originally served as the formal entrance to the house and is framed-out with dressed-stone jambs, sill, and lintel. The door in this entrance originally was four paneled, but its upper panels have been removed and replaced with glazing. A non-original screen door also is present at this doorway (see Figure 47). The north doorway in the original house also was framed-out with dressed-stone jambs, sill, and lintel. It was enclosed within the interior of the house when the north wing was constructed.

The north wing has two exterior doorways, located in the east and west elevations. The east doorway has a 3'-4"-wide opening (stone-to-stone) and has a dressed-stone lintel and sill. Instead of having one-piece dressed-stone jambs (like the original house), the sides of the opening are framed by coursed stonework. The doorway holds a four-paneled, through-tenon door, measuring 3'-0"x6'-10-1/2"x1-1/2", that is original to the north wing. After the construction of the north wing, the east elevation appears to have become the recognized "front" of the house, and the doorway here succeeded the older south doorway as the formal entrance to the dwelling. Indeed it is the east elevation of the house, with its attached entrance porch, that is the focus of attention on the 1873 lithograph. The west doorway in the north wing differs from that on the east since this

elevation is of frame construction rather than of stone. Nevertheless, the door associated with this entrance is of exact same style and type of construction as the east door, though it is slightly smaller (2'-9"x6'-5"x1-¾") (see Figure 48).

The west wing of the Howarth House was constructed with two exterior doorways, which were located opposite one another in the north and south elevations. The north doorway eventually was framed in, and a new doorway was cut through the west wall. This modification presumably was done after the single-story frame addition (now removed) was constructed across the west side of the wing. The south doorway in the wing is still intact but became an interior doorway when the bathroom/laundry-room addition was constructed. Exterior entrances are located on the south and east sides of the latter addition.

Windows: The south elevation of the original house has two windows in the first floor and three windows on the second, while the east gable-end wall has one window on each floor. In contrast, the north and west elevations of the dwelling may have been devoid of window openings, though this assessment is difficult to determine with complete certainty due to the addition of the west wing and the nearly complete removal of the west wall of the original house. In the case of the west elevation, the large cooking fireplace that is believed to have been located here likely left no space for a window on either floor. With the north elevation, the Howarths may have foregone windows in order to better shelter the house against winter winds. In the same respect, whatever window openings may have once been present here would have been filled in when the north wing was constructed. The one window that is located on the north elevation—while apparently not original—may represent a reconfiguration of an original window that had to be closed off when the addition was made. The existing window is smaller than the others on the first floor and is aligned more to the rear porch rather than to the window opposite it; yet, it does utilize a dressed-stone sill and lintel that may have been salvaged from an original opening.

The window openings on both floors of the original house have dressed-stone sills and flat lintels. The openings on the first floor, as well the east-gable-end window on the second floor, generally measure 3'-0"x5'-6" (stone-to-stone) and they hold double-hung sashes with two-over-two lights. These sashes possibly represent late-nineteenth or early-twentieth century replacements, however, since older sashes with six-over-six lights are found elsewhere on the building. Due to the short half-story knee walls, the windows on the second floor of the south elevation have much shorter, nearly square openings (2'-11½"x3'-1", stone-to-stone), though they do have dressed-stone sills and flat lintels similar to those found on other window openings. Paired casement sashes currently are installed in these openings, but these are not original to the building. The type of window sash installed in the upper-story windows originally is not known, though they may have been double-hung sashes with three-over-three lights.

The window openings in the north wing are nearly identical to those in the original house, with some minor differences. They measure 2'-11" to 3'-0"x5'-6" (stone-to-stone) and have dressed-stone sills and flat lintels. The lintels measure 8"x4'-2¾", while

the sills measure 6"x3'-7". One feature that distinguishes them from the window openings on the original house is the manner in which the upper surface of the sills is cut down in order to allow rainwater to drain away from the window casing. The windows on the first floor of the wing have double-hung sashes with two-over-two lights. Those on the second floor vary depending on the elevation: the two windows on the east elevation have shorter openings (due to the half-story knee wall) and have double-hung sashes with three-over-six lights; while those on the north elevation measure 2'-11" to 3'-0"x5'-6" (stone-to-stone) and have two double-hung sashes with six-over-six lights. The three-over-six and six-over-six sashes are original to the wing, whereas those with two-over-two lights represent replacements. A large 6'-wide "picture" window has been installed on the west side of the north wing. This window, which looks out onto the rear porch, is a late modification to the house and possibly was installed at the same location of an original, but smaller, window opening. The 1873 lithograph indicates that windows shutters were present on the both the original house and the north addition (reference Figure 41).

In the west wing, the windows on the first floor have double-hung sashes with one-over-one lights. On the second floor of the wing, north and south elevations each have one small window with a single one-light sash measuring 2'-4"x2'-7-1/2." On the upper story of the west elevation, there are two narrow window openings that have double-hung sash with one-over-one lights and measure 1'-8"x5'-2."

Roof:

Shape, Covering, Material: As originally constructed, the Howarth House had a moderately sloped (approximately 6"-in-12") side-gabled roof. The addition of the north wing, with its gable roof, created the house's present cross-gabled shape. The roof over the west addition butts into that over the original house and has the same slope as it does. The roofs over the original house and north wing originally were covered with sawn-wood shingles. Shingle fragments found in the attic of the house indicate that the shingles had 4-1/2" to 5" exposure. The west wing may also have had sawn-wood shingles originally. In time, the metal roofing (possibly standing-seam) eventually was installed on the dwelling. This roofing was still in place in 1980s but was removed immediately prior to the property being integrated into the Wildlife Prairie Park (William Rutherford, pers. comm., July 2001). The house then had new plywood sheathing and composition-shingle roofing put on. Most recently, a ribbed-metal roof has been installed on the dwelling. The same ribbed-metal roofing has been used on the porch that is attached to the west side of the west wing. The north porch on the west wing, however, has a composition-shingle roof, as do the east porch and the bathroom/laundry-room addition.

The 1873 lithograph of the farmstead does not illustrate any lightening rods on the house. However, there are pieces of old, solid-strand, lightening rod cable stored in the attic space above the porch on the west side of the north wing. At present, there are a number of older-style copper lightening rods, with glass balls, along the roof ridge (see Figure 49).

Cornice, Eaves: The original house and the north wing have open eaves, with enclosed rafters, that generally measure 1'-2" deep. The cornices and rakes on these sections of the house are unadorned with any trim or moldings, except on the south elevation of the original house, where there is a flat frieze board, with 4" exposure, and a flat bed molding. The frieze board wraps around onto the east gable-end wall, in manner similar to Greek-Revival-style cornice returns (see Figure 50). On the west gable-end wall, however, the frieze board appears to have been continued at an angle along the rake, rather than as a cornice return. The fact that wood nailer blocks are spaced at intervals *below* the bottom of the frieze board suggests that an earlier trim piece may have been in place here. If so, the existing frieze board may have been installed when the north wing was constructed. The west wing has boxed eaves.



Figure 30. (Top) View of the Howarth House, looking northwest, showing the south and east elevations of the dwelling. The south elevation (shown with the porch stretching across it) represents the original formal façade of the house. (Bottom) View of the east elevation of the house, showing the existing formal entrance (FRR November 2000).



Figure 31. (Top) View of the Howarth House, looking southeast, showing the north and west elevations. The frame extension on the west end of the house is a twentieth-century addition. (Bottom) View of the house, looking northeast, showing the south and west elevations (FRR November 2000).



Figure 32. (Left) Two fragments from a black transfer-printed plate that were found incorporated into the foundations of the original house. (Right) The backstamp one of the sherds, indicating the manufacturer (Davenport) and the pattern (Cyprus). The plate likely was manufactured in the 1840s.

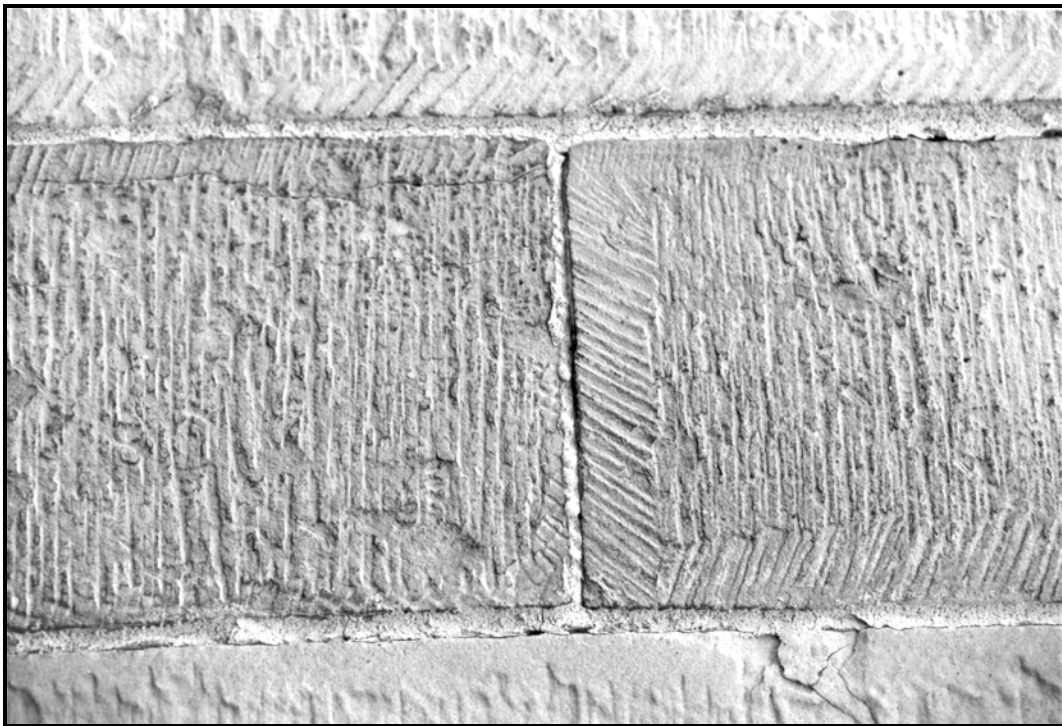


Figure 33. Details of the dressing used on the stonework on the south elevation of the original house. This dressing is finer than that used on other elevations and was meant to create a formal façade (FRR June 2001).



Figure 34. (TOP) Detail of the stonework on the southwest corner of the Howarth House, illustrating the different dressing techniques used. The stones to the right face east and have been roughly dressed with pointwork, while those on the far left are associated with the façade of the original house and have a finer finish. (BOTTOM) View of the stucco that covers the north elevation of the original house, looking from the attic of the porch that stretches across the west side of the north wing. The date of the stucco's application has yet to be determined (FRR June 2001).



Figure 35. View of the juncture between the original house and the north wing. The window and door opening shown butt into the southeast corner of the original house.



Figure 36. View of the east doorway, illustrating the different stone dressings found on the original house and the north wing. The stone to the left of the door is part of the original house and has been dressed with a point. The stonework on the north wing was dressed with a chisel (FRR June 2001).



Figure 37. Comparison of the different dressings used on the stone sections of the Howarth House. The stones on the left are found on the east elevation of the original house, while those on the right are from the north wing (FRR June 2001).

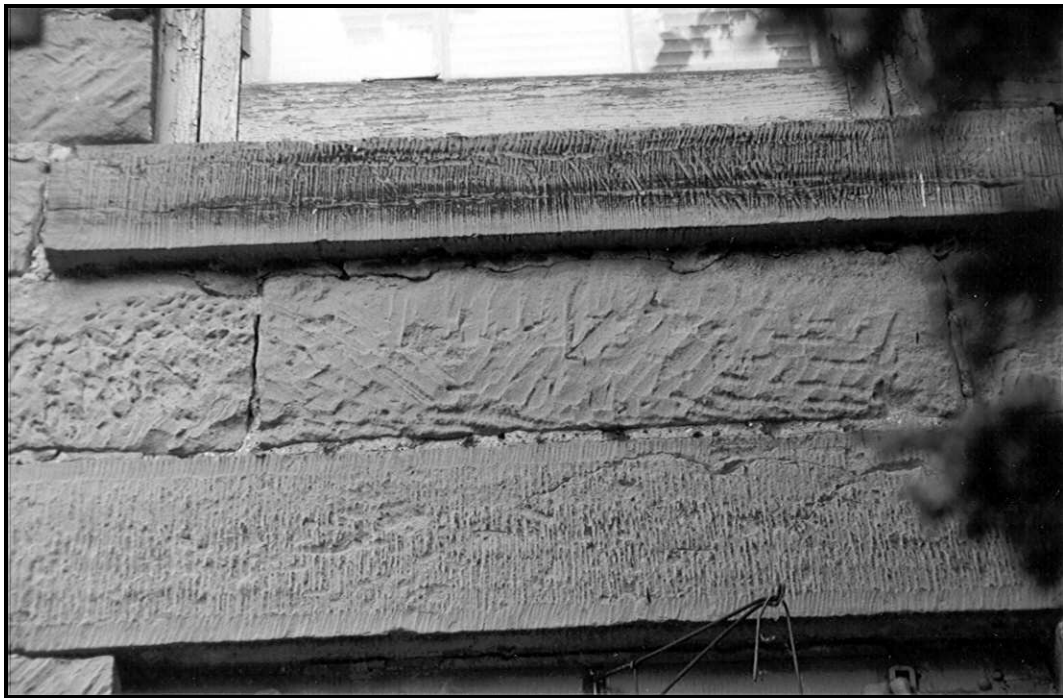


Figure 38. Another comparison of the different stone dressings used on the Howarth House, emphasizing the window sill and lintel treatments. The TOP photograph shows window openings in the original house, while the BOTTOM view is of openings in the north wing (FRR June 2001).

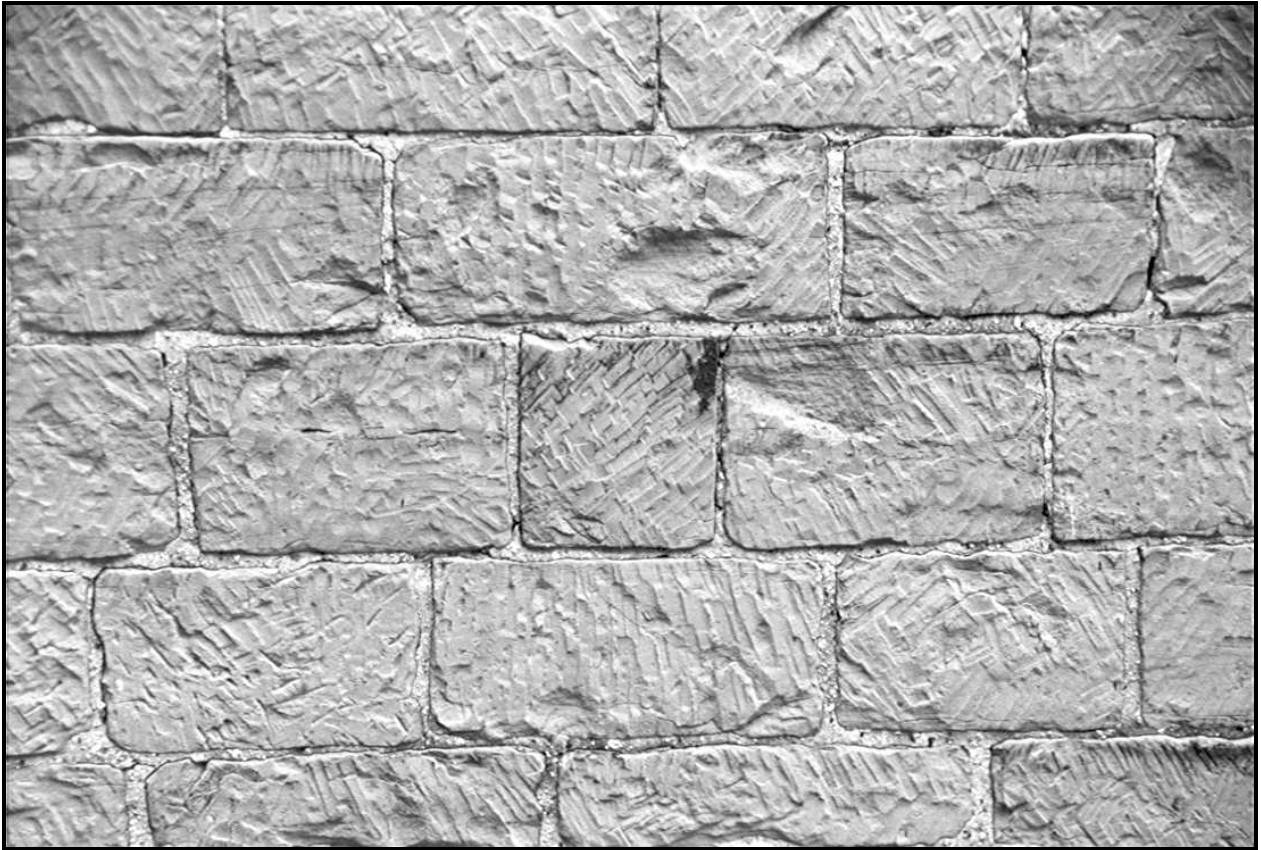


Figure 39. Representative view of the stonework used on the north wing of the house. Note the ashlar character of the stone and the chisel work used to dress it (FRR June 2001).



Figure 40. View of the joint between a rafter and ceiling joist in the original house. The ceiling joist also functions as a collar brace. It and the rafter are rabbitted together, and their joint is fixed with a wood dowel.

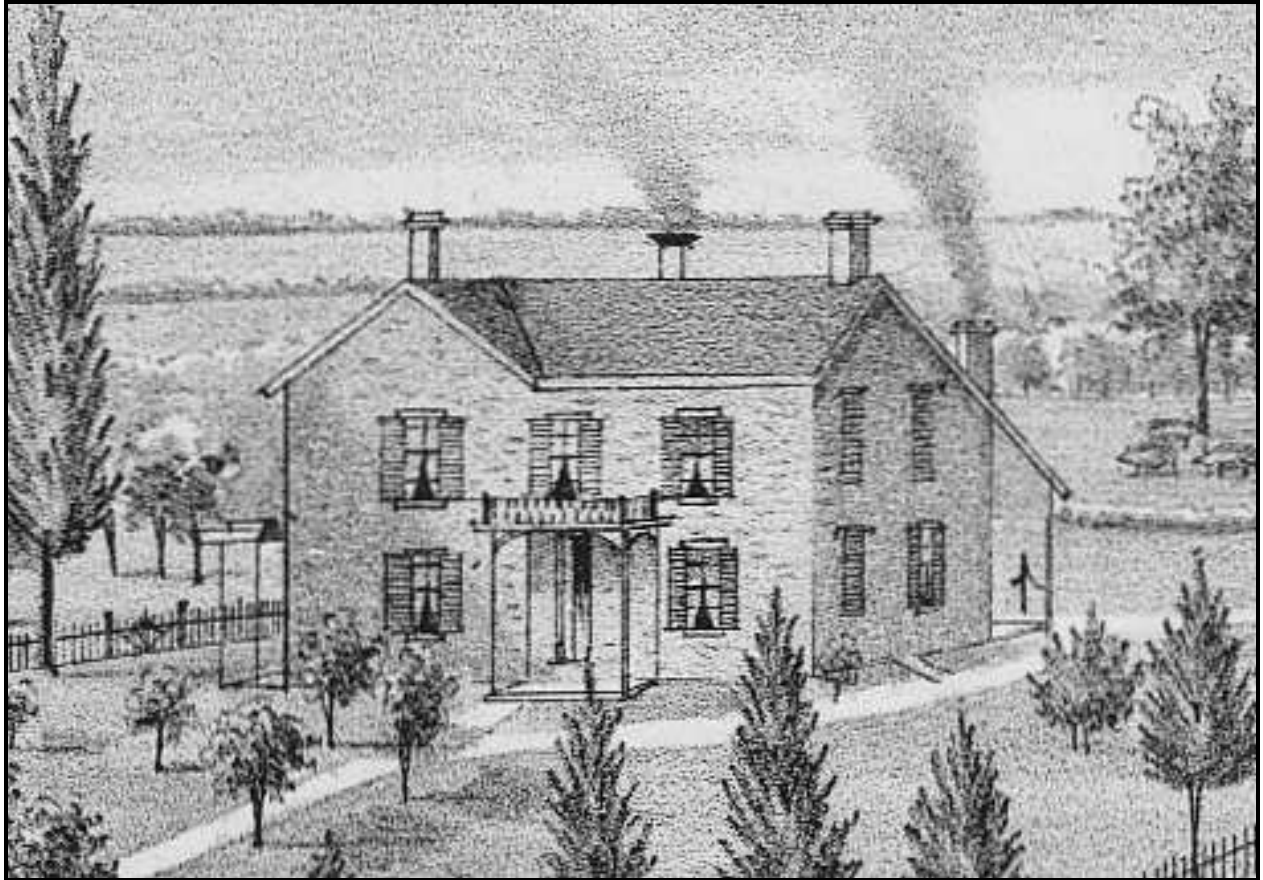


Figure 41. Detail of the 1873 lithograph of the Richard Howarth Farmstead, showing the stone house. Note the porches present on the south elevation of the original house and on the east and west sides of the north wing. Other features of note include the four chimneys, window shutters, and the bulkhead basement entrance positioned on the north side of the north wing (Andreas 1873).

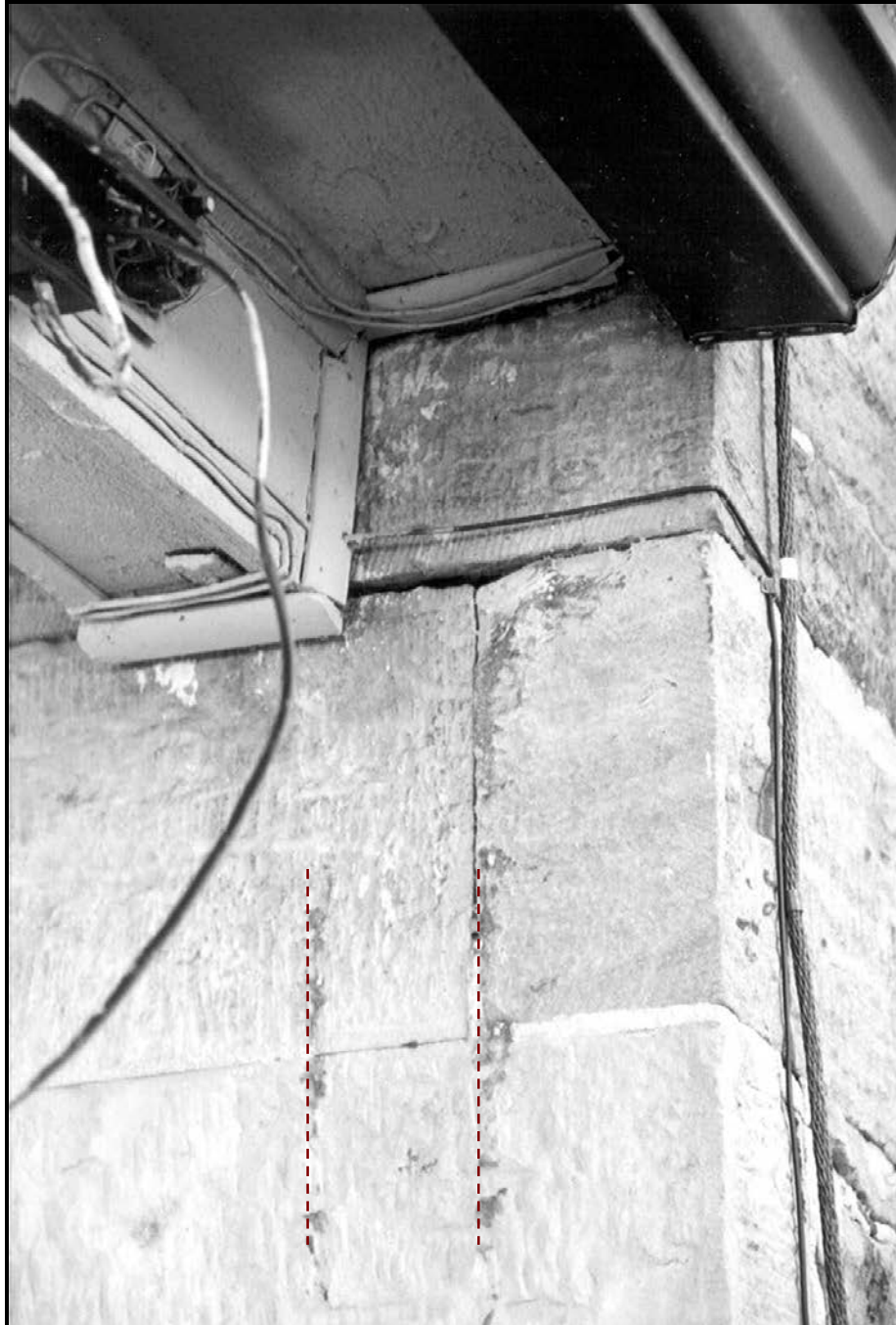


Figure 42. View of the paint line (or “ghost”) of a porch post that was left behind after the midde-nineteenth-century-era south porch was removed during the early twentieth century. The two dashed lines indicate the edges of the removed post (FRR June 2001).

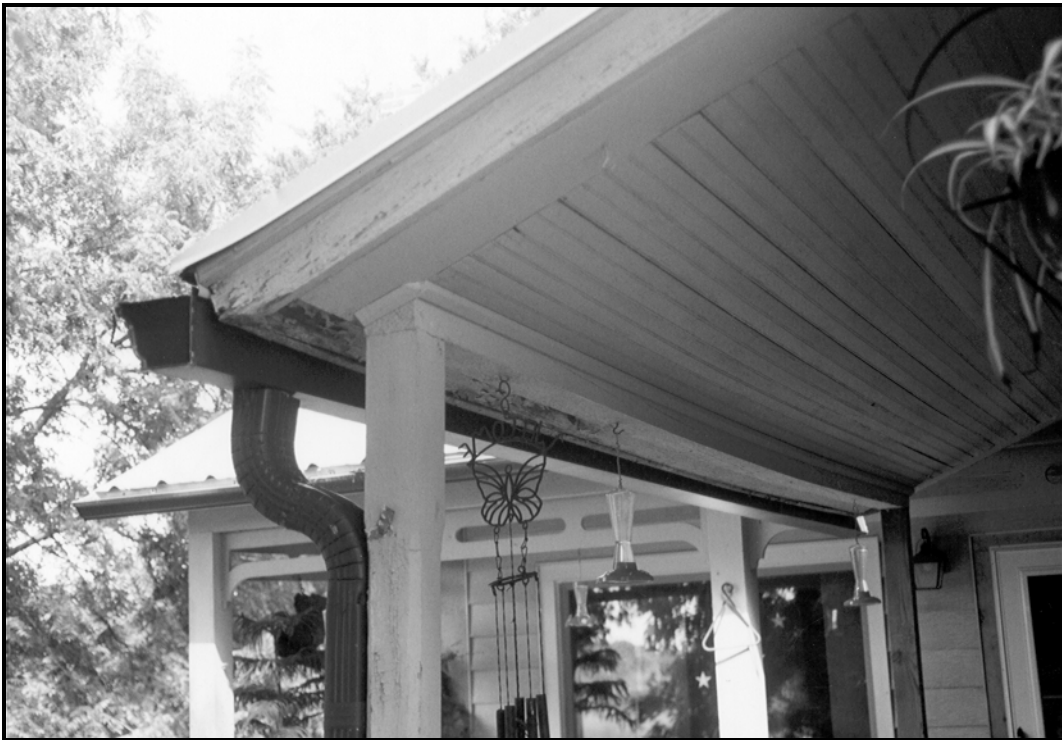


Figure 43. (TOP) Detail of the porch posts, cornice, and ceiling on the existing south porch. This classically inspired porch was added during the early twentieth century. (BOTTOM) A similar view of the porch that extends across the north side of the west wing. This porch is simpler and more utilitarian than the one shown above (FRR June 2001).



Figure 44. (TOP) View of the west porch on the north wing. An original feature to the wing, this porch retains all its historic fabric except for its wood deck, which has been replaced a modern poured-concrete pad. (BOTTOM) Close-up of the Gothic-Revival-inspired corner brackets on the porch (FRR June 2002).



Figure 45. View of the interior brick chimney that is located on the east gable-end wall of the original house. An original feature to the house, this chimney is no longer in use and has had its stack removed below roof level (FRR June 2001).



Figure 46. Photograph of the northwest corner of the north wing, showing the exterior brick chimney that vents the boiler currently used to heat the house. A hot-water heating system was installed in the house during the early twentieth century (FRR June 2001).

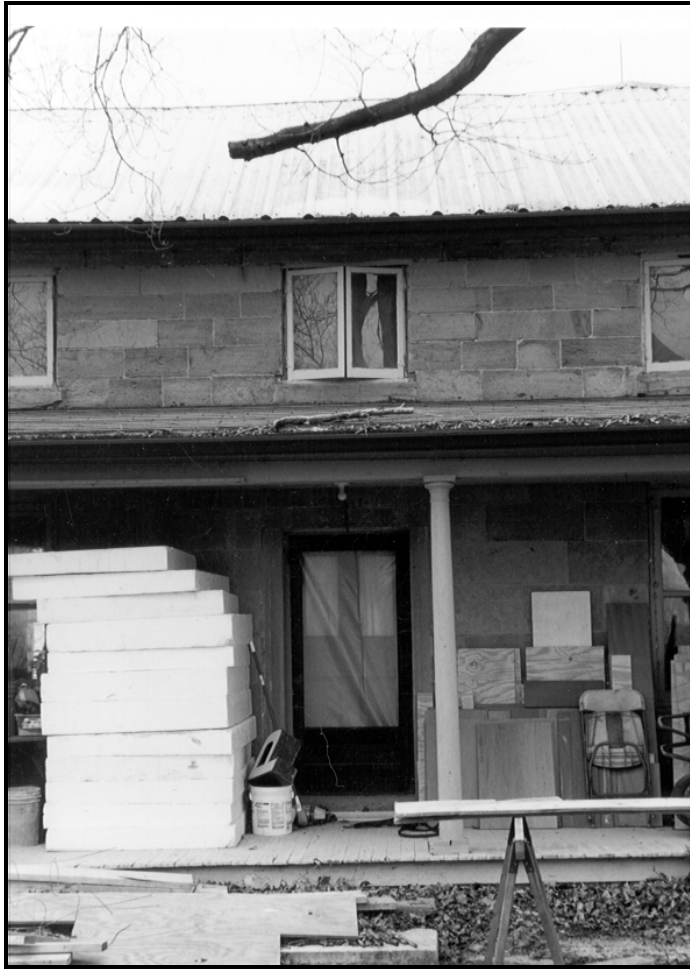


Figure 47. (Left) View of the south elevation of the Howarth House, showing the original front entrance to the house and the short windows in the second floor of the house. The casement windows currently present on the second story represent modern replacement. (Right) View of the original front entrance to the house, showing the finely dressed stonework flanking the doorway (FRR November 2000).

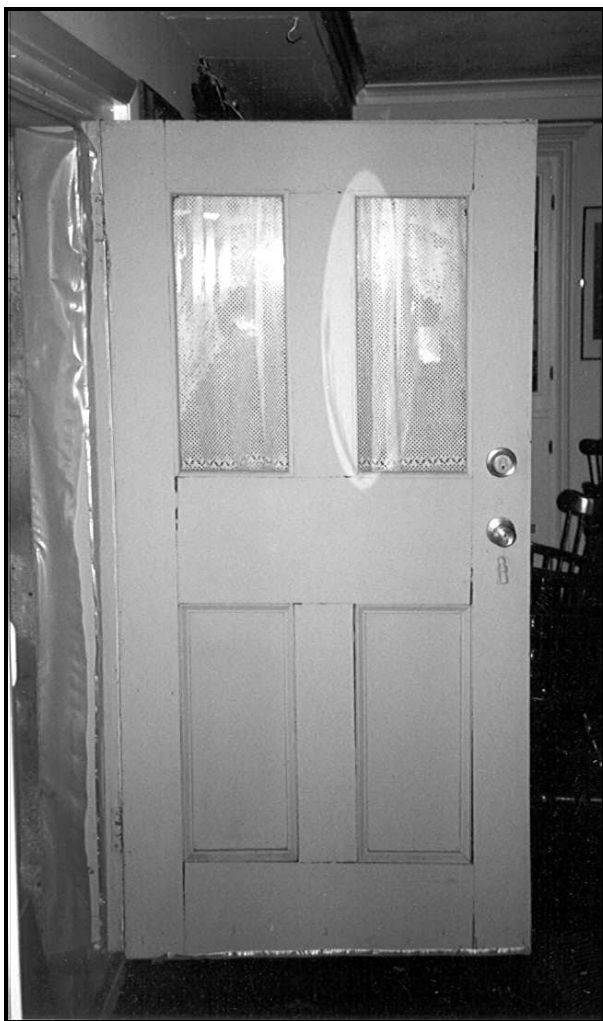


Figure 48. (LEFT) Photograph of the four-paneled door that is present on the south exterior entrance to the original house. The upper panels on this door would have been solid originally; the glazing represents a modification. (RIGHT) View of the west exterior door on the north wing. The eastern exterior door on the wing is similar in character (FRR June 2001).

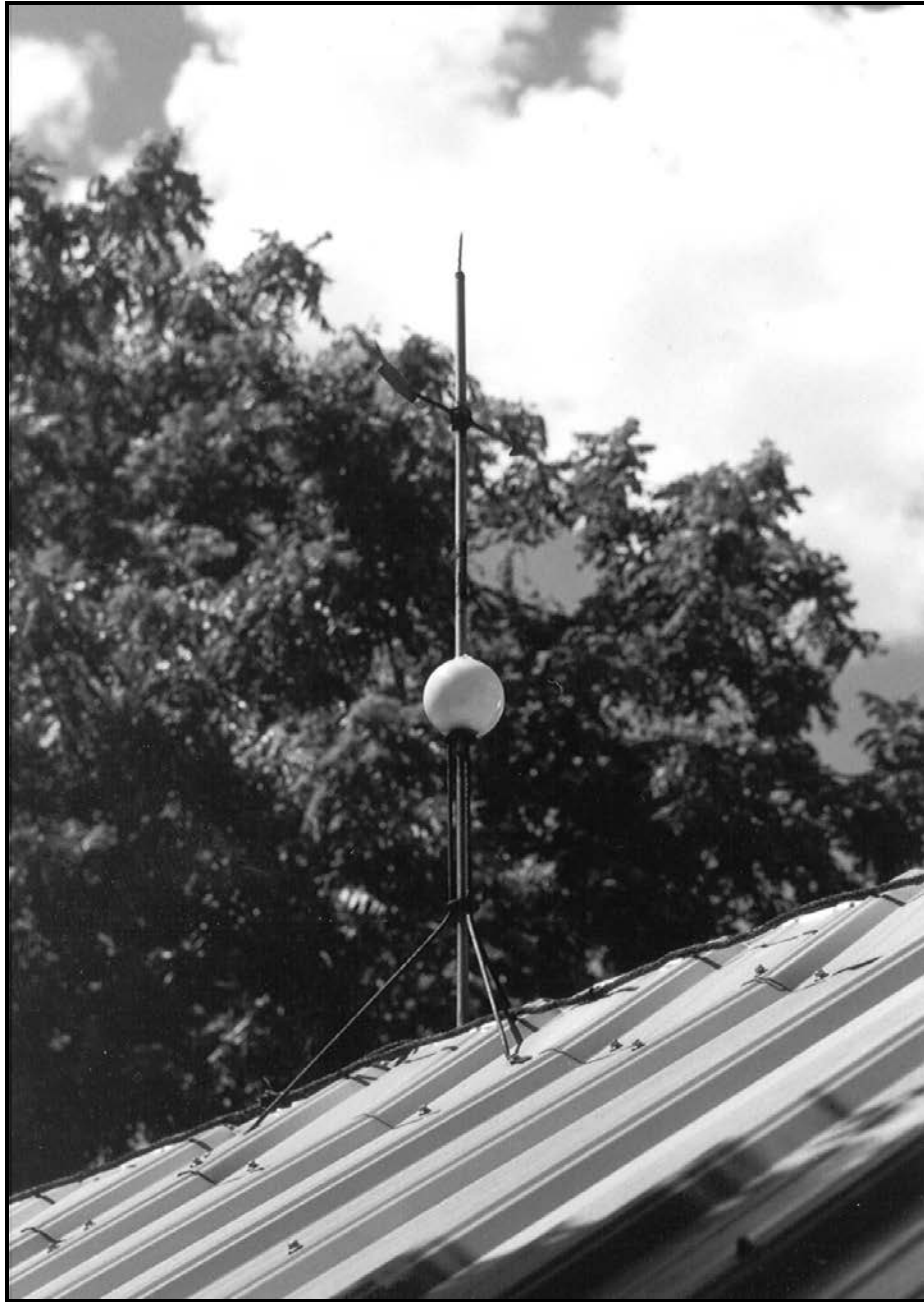


Figure 49. View of one of the lightning rods that is present on the roof the house. Also note the ribbed-metal roofing that has been installed in recent years (FRR June 2001).



Figure 50. View of the cornice and eave on the southwest corner of the original house (FRR June 2001).

DESCRIPTION OF INTERIOR

Floor Plans: Floor plans illustrating the evolution of the Howarth House through time have been attached as Figures 51 through 56.

First Floor Description: As originally constructed, the first floor of the Howarth House had a traditional two-room Hall-and-Parlor plan (see Figures 51 and 52). The larger of these rooms (Room 101) was located on the east end of the house and served as the “Hall” –a multipurpose public room that served as kitchen, dining room, and general living area. Measuring approximately 15’-6”x21’-0”,¹⁷ Room 101 could be entered through exterior doorways on the north and south and is believed to have had a large cooking fireplace positioned along its west wall (based on the presence of the large chimney cut-out in the roof). Built-in cupboards, or shelving, may have been positioned to either side of the fireplace. Natural light to the room was provided by one window on the south and possibly by a second window on the north. The stairway leading to upper floor rose along the east wall, and below this was a second stairway accessing the cellar. A doorway in the east wall of Room 101 lead into the “Parlor”, a private space that may have served as a bedroom and/or formal sitting room (Room 102). Room 102 measured approximately 15’-6”x12’-0” and was illuminated by a window on the east and on the south.

The construction of the north wing added two rooms to the first floor of the house (see Figure 53). The eastern of these rooms (Room 103) measured approximately 16’-2”x12’-0” and could be entered via an exterior doorway on the east side of the wing. It was lit by two windows, which were located on the east and on the north sides of the room. An interior doorway between Room 103 and Room 102 is believed to have been added as part of the wing construction. The western room in the north wing (Room 104) measured approximately 16’-2”x12’-6” and an exterior doorway on its west side that led onto the rear service porch. Interior doorways on the east and south allowed access to Rooms 103 and 101, respectively. Room 104 had one window in each of its exterior walls (located on the west and north). The 1873 lithograph of the Howarth Farmstead suggests that an interior brick chimney was located in the northeast corner of Room 104. Although the original use of the first-floor rooms in the north wing is not known with any certainty, we suspect that these rooms assumed some of the functions that Room 101 (and possibly Room 102) had been fulfilling, thus allowing a greater segregation of public and private space within the home. Since the front of the house seems to have been shifted from the south to the east elevation, we suspect that Room 103 likely served as the formal parlor. Given its connection with Room 101 and the rear service porch, Room 104 potentially served as a dining room. Thus, in the original part of the house, the role of Room 101 was reduced to that of a kitchen, while Room 102 continued as a downstairs bedroom but lost whatever semi-public role it may have originally held in the traditional Hall-and-Parlor design.

¹⁷ The original dimensions of this the other rooms in the house is difficult to determine precisely, on account of the modern wall coverings that have been added to the interior.

An additional room was added to the first floor when the west wing was constructed during the early twentieth century (see Figure 54). This room (Room 105) measured approximately 6'-8"x13'-8" and became the new kitchen in the house. Openings in the room included two exterior doorways, located on the north and the south, one window on the north, and two windows on the west. In building the addition, the west gable-end wall of the original house was removed, and, in its place, a thick frame partition wall was constructed between Rooms 101 and 105. Incorporated within this partition were two built-in cabinets and an interior brick chimney.

At some point during the middle twentieth century, a bathroom addition was built onto the south side of the north wing. Later expanded eastward, onto the south porch, this addition currently includes a full bath (Room 106) and a laundry room (Room 107) (see Figure 55).

One of the more significant modifications that have been made to the first floor of the house is the removal of the partition wall between Rooms 103 and 104. This has resulted in the creation of a single large chamber that currently serves as the living room of the house (Room 108). Additional modern modifications to the first floor include: the infilling of the doorway between Rooms 102 and 103; the construction of a new partition wall around the interior basement stairway in Room 101; the addition of a closet in Room 102; the addition of a large picture window on the west side of Room 108; the infilling of the northern exterior doorway in Room 106 and the construction of a new doorway on the west; and the updating of the kitchen facilities (new counters, cabinet, sink) in Room 105.

Second Floor Description: As originally constructed, the Howarth House is believed to have had two rooms on the second floor that were stacked directly above Rooms 101 and 102 below. Although the dimensions of these rooms were the same as those on the first floor, they would have appeared to be smaller, and more confining, on account of their garret ceilings and lower ceiling height. Both rooms would have served as bedrooms or been used for storage. The stairway leading to second floor opened onto a large room that measured approximately 15'-6"x21'-0" and was illuminated by two windows on its south side (Room 201). Lying to the east of Room 201 was a smaller room, measuring 15'-5"x12'-0", that had one window on the east and a second window on the south (Room 202).

When the north wing was added to the house, a doorway was cut through the north wall of Room 202 (directly opposite the stair landing) in order to access the one room that was located on the second floor new addition (Room 203). Measuring approximately 16'-2"x25'-0", Room 203 was largest bedroom on the floor and also one of the best lit, having two windows on its east side and two others on the north. Considering these factors, the room may have served as the master bedroom originally.

The remodeling of the second floor during the early twentieth century (in conjunction with the construction of the north wing) resulted in the partitioning of the space within Room 201 into a smaller bedroom (Room 204) on the south, a hallway (Room 205) on the north, and two closets. The bedroom measured approximately 11'-4"x20'-0" and had

a 4'-9"x4'-10-1/2" walk-in closet positioned off its west end. A doorway on the north side of Room 204 opened into the hallway, which extended from the head of the second-floor stairway to the west wing. Originally, there was only one room in the west wing (Room 206). Likely used as a bedroom, Room 206 measured approximately 10'-4"x16'-8" and was lit by a total of four windows (two on the west and one each on the north and south). A doorway on the east side of Room 206 accessed the second of the walk-in closets that had been partitioned out of Room 201.

A number of modifications were made to the second floor when the house was converted into staff housing for Wildlife Prairie Park. Two bathrooms were added to floor, one of which partitioned out of the eastern half of Room 204 (Room 207) and the other which was installed in the northeast corner of Room 206 (Room 208). In addition, a large closet was added along the west side of Room 203, and a small closet was built in the southeast corner of Room 202.

Basement/Cellar Description: The basement of Howarth House originally consisted of a single cellar room (Room 001) that was positioned below, and accessed from, Room 101. Room 001 measures 12'-2"x19'-11". The most distinguishing feature of this cellar room is its low-arched barrel-vaulted ceiling, which is constructed with rough-cut limestone flagstones (see Figures 57 and 58). The stone ceiling and surround stone foundation walls create a relatively cool environment that would have made the cellar an ideal cold storage area for food prior to the introduction of artificial refrigeration in the home. Another unique feature of the room are two small wall niches that are located within the south foundation wall. Measuring approximately 2'-square and 1'-deep, these niches likely served as cold storage chambers during the nineteenth century (see Figure 59). Raised stone shelves extend around the west end of Room 001, as well as parts of the north and south sides of the room. A small window opening, or vent, is centrally located in the west wall.

The west wing has a full basement beneath it that is divided into two rooms by means of a brick partition wall. The western room (Room 002) measures 16'-10-1/2"x10'-1-1/2" and can be accessed from Room 001 through a non-original doorway that was added when the wing was built. This room has functioned as a boiler room since the installation of central heating in the house during the early twentieth century. The eastern basement room in the wing (Room 003) originally measured 16'-10-1/2"x13'-0" at its full extent and can be entered through an interior doorway from Room 002. A second doorway, located on the north side of Room 003, accesses the exterior bulkhead stairway leading to the basement. Following the installation of a central furnace in the house circa 1900-1910, Room 003 was divided in half by a stud-and-plank partition wall, and the eastern half of the chamber was utilized as a coal room (Room 004). An exterior coal chute was added to the north side of the coal room.

Stairways: The interior stairway leading to the basement is located below the second-floor stairs and descends from north to south. The basement stairway is quite unique in that it is comprised of large stone slabs that extend out from the adjacent foundation wall and hang in mid-air, with no stringer to support them (see Figure 58). There are nine stone steps that rise to a frame

landing. The stair treads are 9" to 10" wide, while the risers vary between 2" and 11" (9" on average).

The second floor of the house is accessed via an open stairway that rises from south to north, along the east end of Room 101. This stairway, which is original to the dwelling, is 2'-10" wide and has thirteen steps with 10" treads and 8" risers. The balustrade is comprised of a simple handrail, square balusters, and classically influenced newel posts (see Figure 59). White pine lumber was used for the stair stringers, treads, and risers. The stair opening on the second floor is suspected to have been open and surrounded by a balustrade originally; the stair opening was framed around, however, as part of the early-twentieth-century remodeling.

Flooring: The original house has 1"-thick, tongue-and-groove, oak(?) flooring on the first and second floors. The flooring in the north wing is 1"x4-3/4" to 5-1/4", tongue-and-groove, white pine.

Wall and Ceiling Finishes: On the first and second floors of the house, the interior surfaces of the exterior masonry walls originally were coated with plaster. The brick-nogged, frame partition wall between Rooms 101 and 102 also was plastered, without the application of lath. Original frame walls in the west and north wings were covered with sawn-wood lath and plaster, as were the ceilings in all sections of the house. Although interior paint samples were not taken during the field investigation, an examination of the area below the second-floor stairway suggests that Room 101 was whitewashed early in its history (see Figure 60). Modern drywall and wood paneling has been installed in some areas of the house.

Decorative Features and Trim: The original interior trim in the Howarth House is relatively plain. The doorways in the original section of the house have flat, 1"-thick, white-pine trim. The doorway between Rooms 101 and 102 is further trimmed out with a thin nosing that is applied around the interior edge of the trim, creating a bead. The original baseboard in this section of the house one-piece and has a thick bead (see Figure 61). Beading also is present on the open stringer of the second-floor stairway. The interior trim in the north wing also is flat white-pine stock. The interior trim that was installed on the second floor as part of the early-twentieth-century remodeling included 3/4"x3-3/4" flat door trim and 3/4"x7" baseboard. Similar trim was used in the north wing. Much of the original window and door trim and baseboard in the house either been removed or has been covered up by modern wall coverings. Modern trim has been applied throughout the dwelling.

Pressed tin has been applied around one-half of the second-floor stair opening. This decorative feature is suspected to date to the early twentieth century.

Openings:

Doorways and Doors: The two interior doorways that date to the construction of the original house access Rooms 102 and 202. Both doorways have two-paneled doors with through tenons (see Figure 62). The door leading into 102 measures 2'-9-1/2"x6'-5-1/2"x1-1/2", while the one opening into Room 202 measures 2'-8-1/4"x6'-2-3/4"x1-1/2". The doors that were installed on the second floor as part of the early-twentieth-century remodeling are four-paneled and have through-tenons. They measure 2'-3" to 2'-3-3/4" wide, 6'-2-

¾” to 6’-3-¾” tall, and 1-3/8” thick.

Windows: The window openings in those sections of the house that are built of stone widen on the interior of the dwelling. The east gable-end windows in the original house, for example, widen out from 2’-8” at the window jamb to 3’-5-½” at the interior wall surface. This tapering was intended to increase the amount of natural light shed into the dwelling and thereby compensate for the interior shadowing often resulting from deep window openings.

Hardware: The doors in the original house are hung with butt hinges that have set pins (swaged). Although the hinges are not stamped with a patent date, the original blunt-tipped screws that were used to hold them provide some indication of their date of installation. The manufacturing process used to make pointed-tip screws, of the sort used today, was not patented until 1849.¹⁸ Hence, blunt-tipped screws generally are a strong indicator of pre-1849 construction, though there likely would have been a transition period, lasting perhaps several years after that date, where blunt-tipped screws continued to be used before their stocks were finally exhausted. Most of the doors are equipped with rim locks. The one exception is the south exterior door, which formerly had a rim lock (as evidenced by its latch plate that is still in place) but has had a modern mortise lock and deadbolt set installed.

In the north addition, the doors hung with are swaged butt hinges and have rim locks with brown-agate knobs. These locks are not stamped with a manufacturer’s name/mark or a patent date. The doors that were installed on the second floor during the early-twentieth-century remodeling are equipped with “Corbin” rim locks (model 583) and black-porcelain knobs.

Machine-cut nails were used in the framing of the original house and the north addition. Wire-drawn nails were used in the construction of the west wing.

Mechanical Equipment:

Heating, Air Conditioning, Ventilation: The Howarth House originally was heated through a combination of wood stoves and the kitchen fireplace, which were used to heat the individual rooms in which they were located. At a later date, one or more coal-burning heating stoves may have been used in the house. These stoves would have been removed when the house was equipped with a central hot-water heating system during the early twentieth century. This system may have been installed in conjuncture with the construction of the west wing circa 1900-1910. Radiators were installed in all of the principal rooms on the upper floors of the house. The boiler for the system, which was coal fired, was located in the basement (Room 002). A modern gas-steam boiler is now in use.

Lighting: While one can speculate on the general evolution of the lighting system in the Howarth House with some assurance, we know nothing specific about the early lighting devices that were used (sconces, lamps, lanterns, etc.). More than likely, the dwelling was illuminated with candles and oil-burning lamps originally. By circa 1870, these had

¹⁸ Cullen Whipple, an employee of the New England Screw Company, invented and patented the process for manufacturing pointed screws (Rybczynski 2000:77-8).

probably been supplanted by kerosene lamps, which would have remained in use until the installation of electric lighting.

Plumbing: Throughout the nineteenth century and into early twentieth century, the household drew its water from an outdoor well and a cistern. These features were located on the north side of the dwelling, within the reentrant angle formed by the original house and north wing. They were thus conveniently placed in close proximity to the rear porch and inner rear yard – areas that would have been scene of a number of common domestic activities requiring water, such food preparation and the washing of laundry. Drinking and cooking water typically were drawn from the well, while the cistern provided much needed, but less potable, water used for laundry and general cleaning. The house was probably equipped with limited interior plumbing (such as running water to a kitchen sink) at the same time that the hot-water heating system was installed. A bathroom wasn't added to the dwelling until the middle twentieth century. Prior to that, outdoor privies would have been use. At the present time, there are three bathrooms in the house: one, located in the addition attached to the south side of the west wing, and two others on the second floor. The bathroom on the first floor is the oldest those currently present.

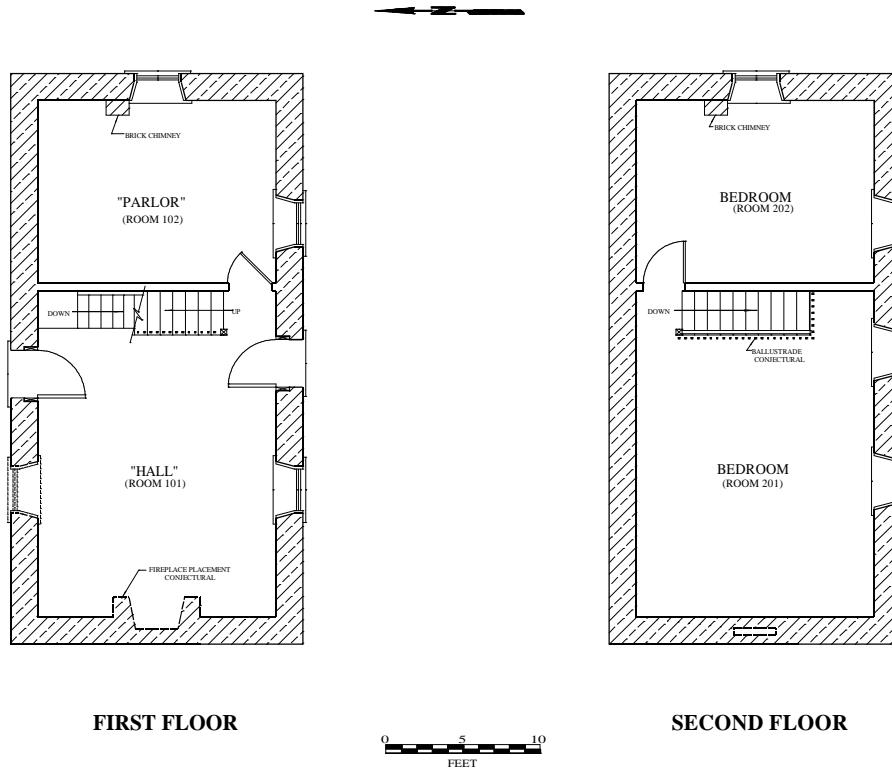


Figure 51. First and second floor plans of the Howarth House, showing the house as originally constructed (circa 1844).

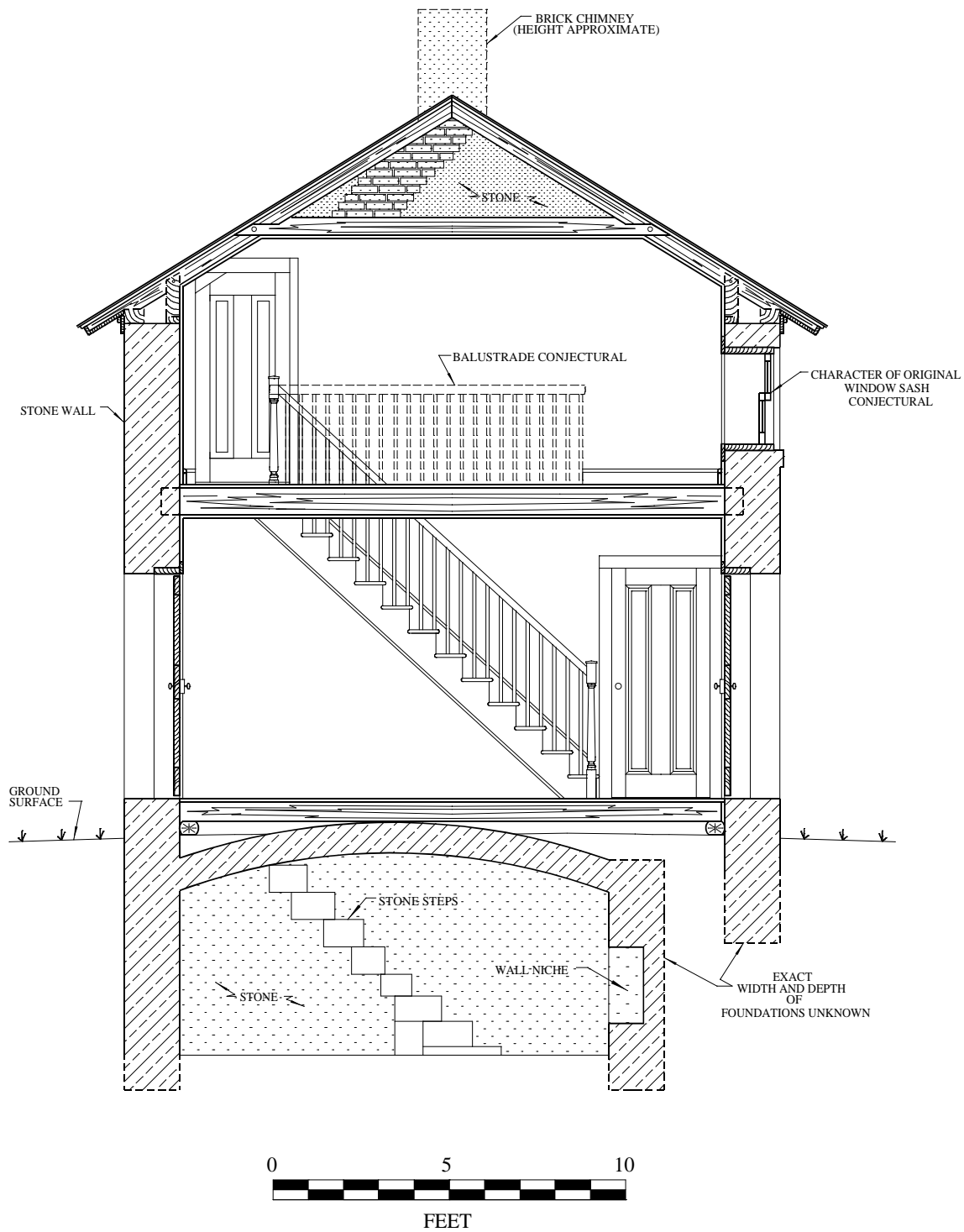


Figure 52. Sectional view of the Howarth House, as originally constructed. This view cuts through the center of the original house and illustrates the east end of Rooms 001, 101 and 201.

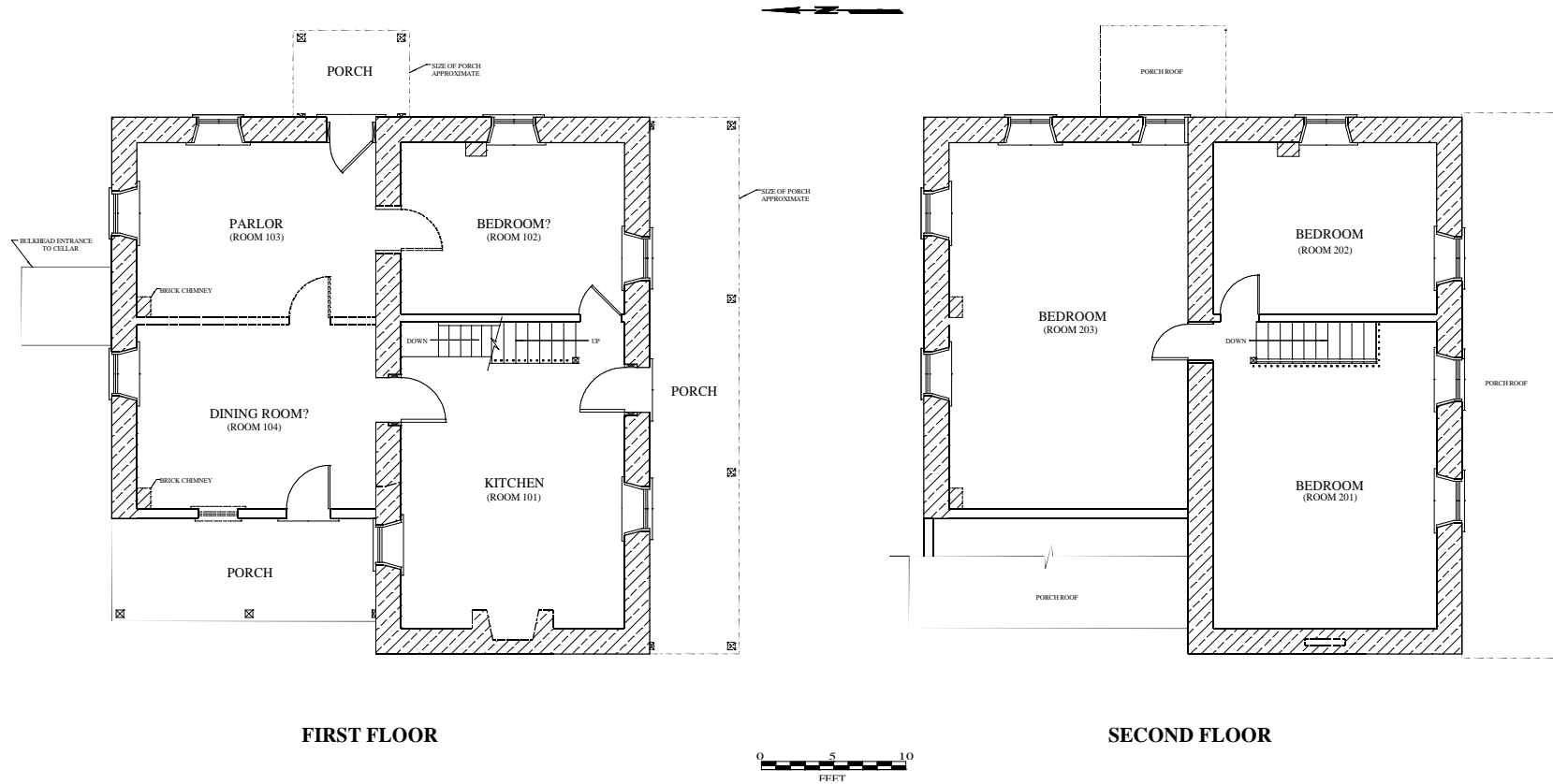


Figure 53. First and second floor plans of the Howarth House, showing the construction of the north wing (circa 1860).

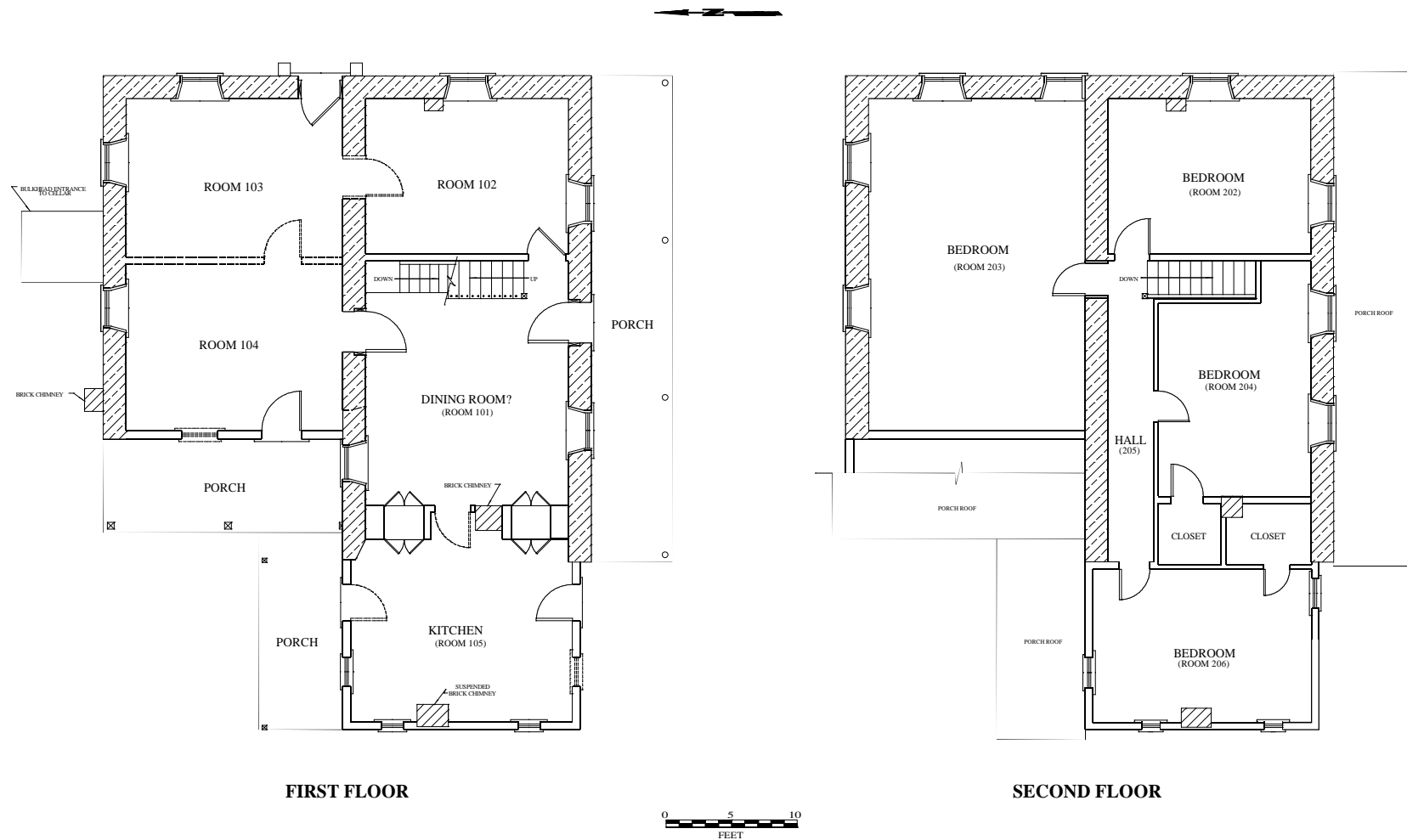


Figure 54. First and second floor plans of the Howarth House, showing the construction of the west frame wing (circa 1900-1910).

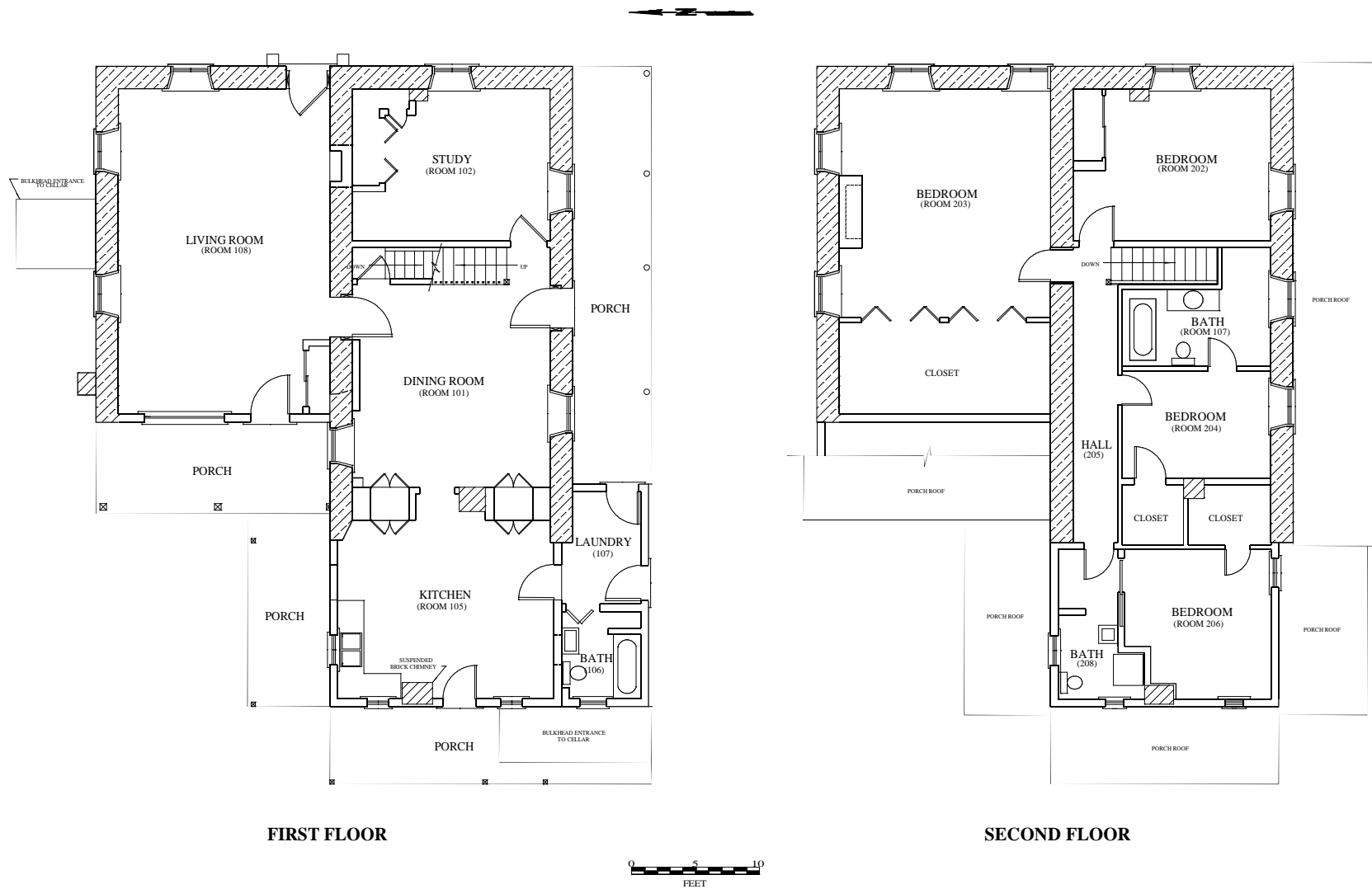


Figure 55. First and second floor plans of the Howarth House, showing existing conditions (2001).

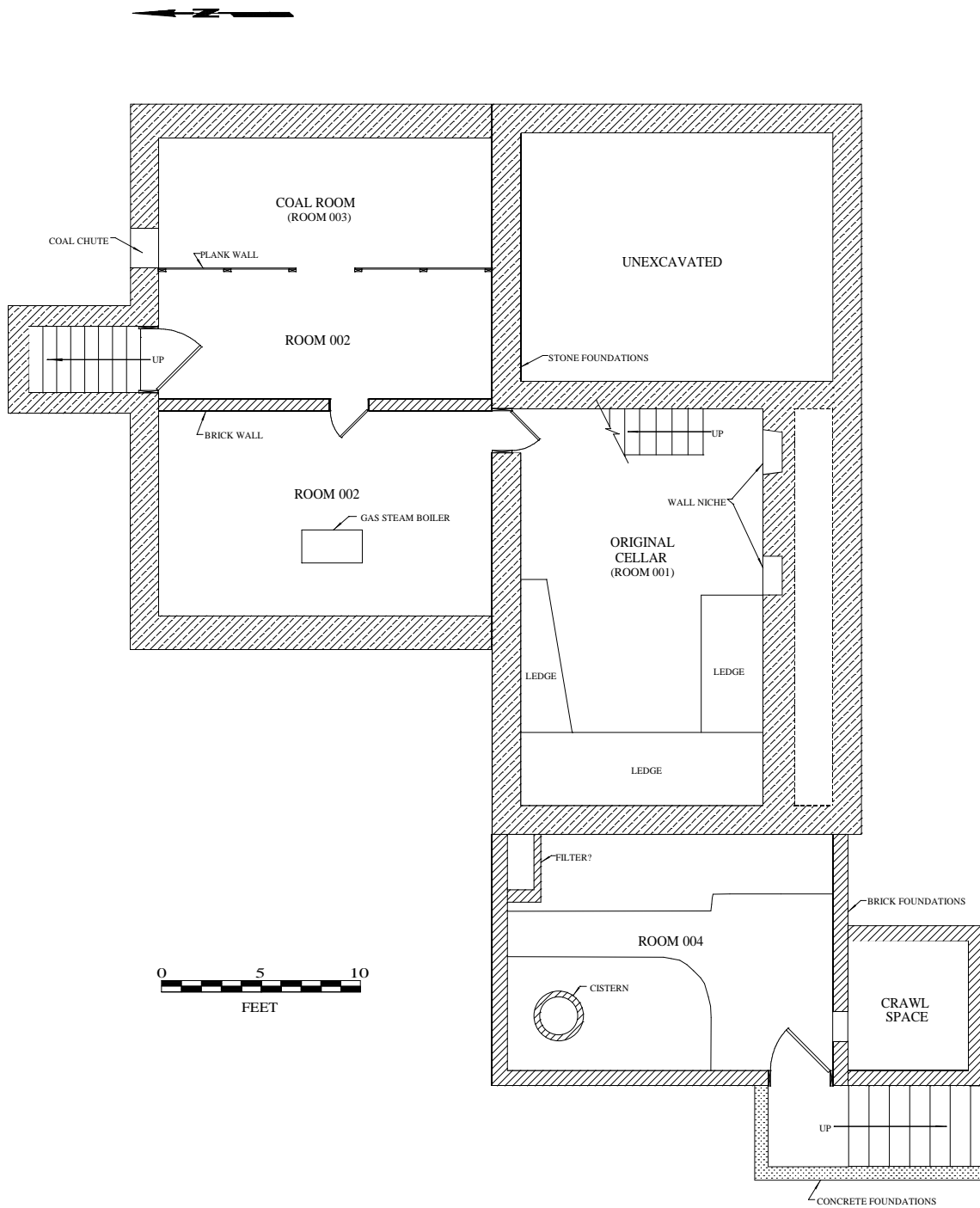


Figure 56. Basement plan of Howarth House, showing existing conditions (2001).

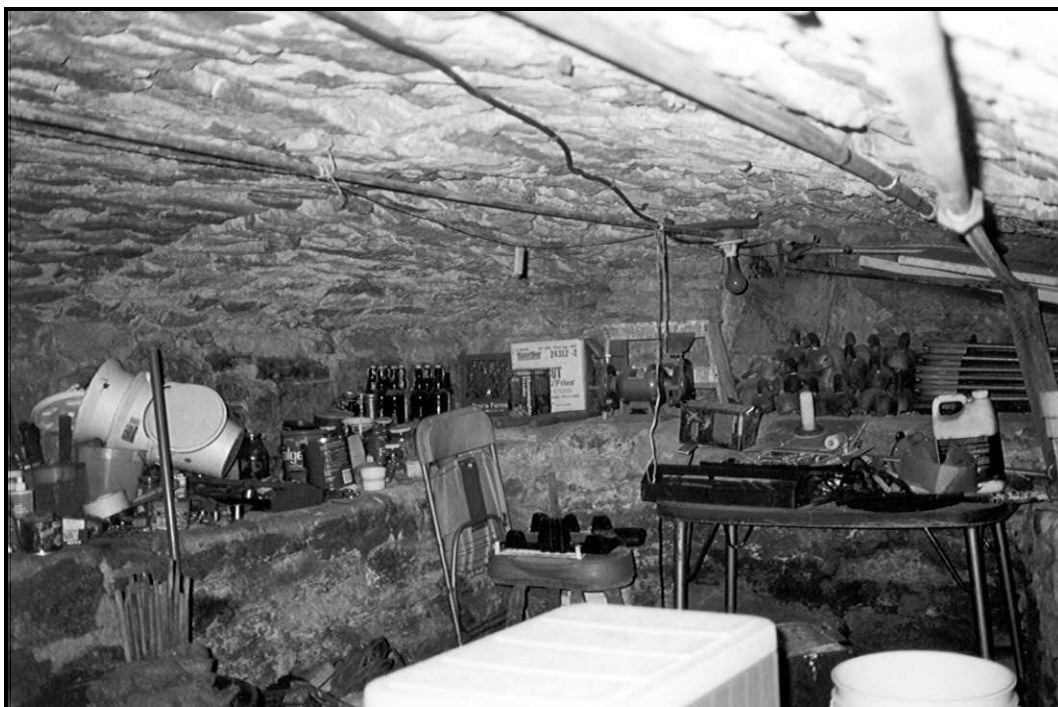


Figure 57. (TOP) View of vaulted cellar room located beneath original house, looking west. (BOTTOM) View of one of the two wall niches that are present along the south side of the vaulted cellar room. Niches of this type often were used as cold storage chambers for food and/or drink (FRR June 2001).

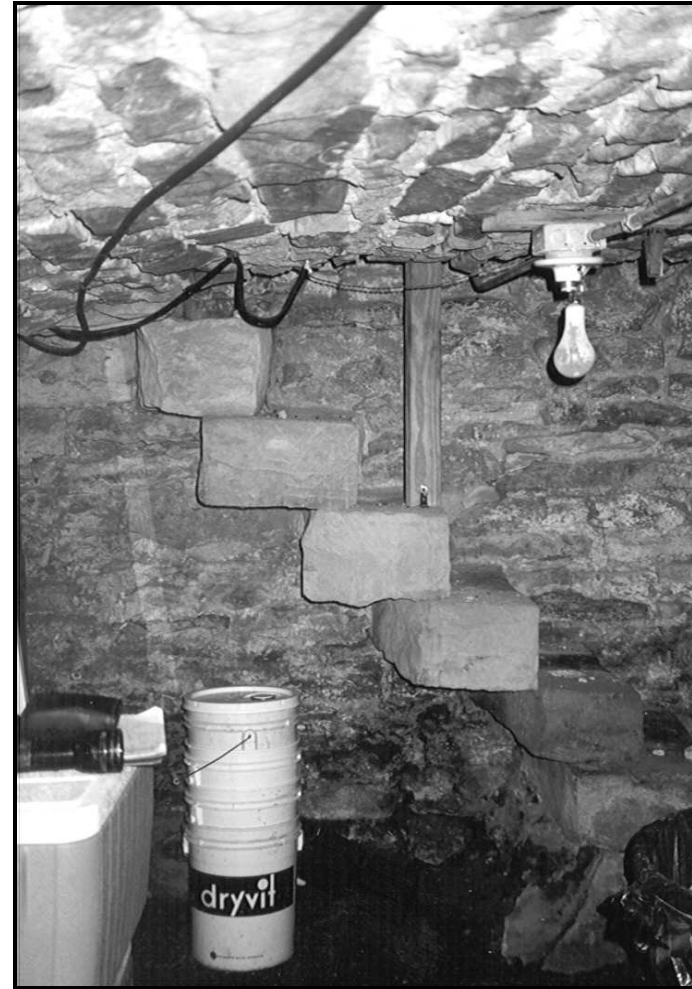


Figure 58. (Left) View of the top of the stone vault over the original cellar room. Note the log floor joist (or “sleeper”) above the vault. (Right) The interior stairway leading between first floor and original cellar room. The stone steps are tied into the foundations and are suspended without the aid of a stringer.



Figure 59. View of the newel post and balustrade present at the top of the second-floor stairway (FRR June 2001).



Figure 60. View of the area beneath the second-story stairway, illustrating the character of the original wall and ceiling finishes in the house. The ceiling was covered with sawn wood and plaster. The wall to the right of the view, which separates Rooms 101 and 102, was covered with a thin coat of plaster and then whitewashed; no lath was required on account of the brick nogging between the studs. The wall at the center of the view is the rear (north) wall of the original house, and its interior face was covered with a rough coat of plaster applied directly over the stone (FRR September 2001).



Figure 61. Original beaded baseboard found on the second floor of the house.

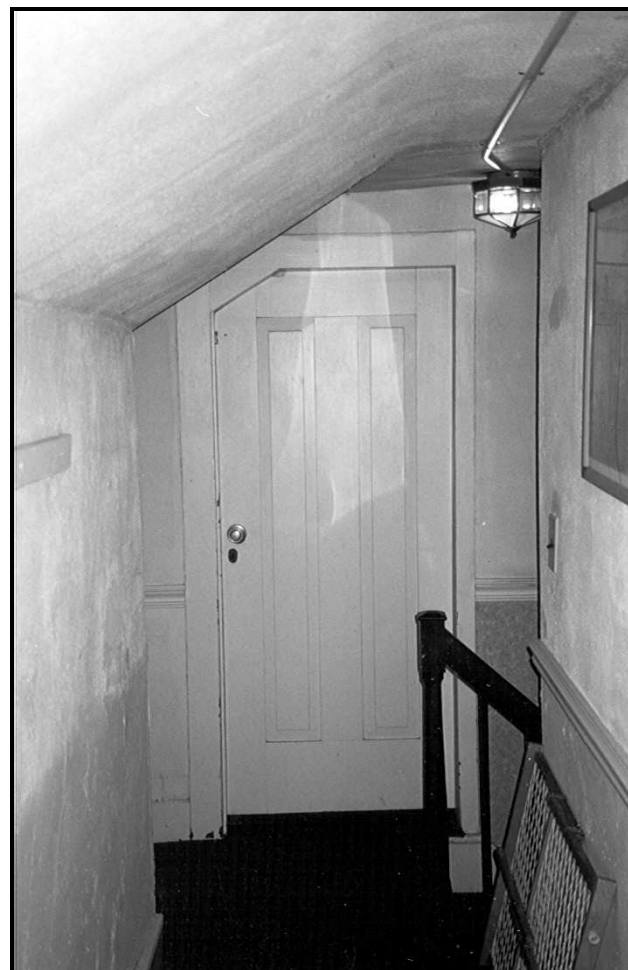


Figure 62. (LEFT) View of the two-paneled door between Rooms 101 and 102. The base of the second-floor stairway appears in the foreground. (RIGHT) View of the door leading into Room 202, looking down the second-floor hallway (FRR June 2001).

HISTORIC AND EXISTING CONDITIONS

HOWARTH BARN:

DESCRIPTION OF EXTERIOR

General Statement: The Howarth Barn is large stone, side-gabled, four-bay structure whose distinctive form has been designated by cultural geographers as the “Lancashire Barn”. Named after the county in England where it was first identified and is commonly found, the Lancashire Barn combined the conventional hand-flail threshing barn and cow house within a single building. Both sections of the barn retained their traditional functions and use of space: the threshing barn having a central driveway, where sheaves of grain were threshing and winnowed, and flanking storage bays that accommodated unthreshed sheaves, separated grain and straw, and hay; while cow house was used for the feeding and sheltering of cattle during the winter (particularly for those head regarded as either too precious or not hardy enough to winter over in the fields). One of the key identifying features of the Lancashire Barn is the arrangement of three cattle doors in the gable end occupied by the cow house; these doors accessed a central feeding passage and flanking manure passages. Straw for the cattle was stored in a loft on the upper floor of the cow house and thus could be easily dropped to the feeding floor below. It is quite common on English examples of this barn type for the cow house section to be wider than the remainder of the barn. Discussing the development of the Lancashire Barn in England, R. W. Brunskill has observed that, “Changes in the role of the barn which accompanied increased productivity of the arable fields, as well as the increasing efficiency in converting sheaves of corn into grain and straw, led to a tendency to merge other building uses with the barn rather than having the barn as an isolated self-sufficient building on the farmstead.” He dates the most active period of construction for the Lancashire Barn in England to 1750-1850. Particularly associated with northwestern England, the barn type is found in other parts of the country as well (Brunskill 1987:62, 111-113).

In the case of the Howarth Barn, the northern three-quarters of the building represents the equivalent of a Three-Bay English Barn, having a central threshing floor/driveway that is flanked to either side by bays used for grain, straw, and hay storage. The southern quarter of the barn is the cow house, which is distinguished by its three doorways in the south gable-end wall. Both sections of the barn have the same width (see Figures 63 and 64). Another feature that the Howarth Barn shares with some of the Lancashire Barns in England is its perpendicular alignment to the hill slope on which it is built. This orientation leaves room for small basement room at the northern end of the barn that is accessible at grade. It thus represents a variant of the traditional bank barn, which runs parallel to the slope and has a full basement beneath it. According to Brunskill, this bank-barn variant “seems to be related to the Lancashire barn and is, in fact, commonly found in the Lune Valley” (Brunskill 1987:116). The Lune River flows through the southern Lake District and northern Lancashire.

Given Richard Howarth, Sr. background as a stonemason and the abundance of building stone in the area, it is not that surprising that he chose to construct his home out of stone. Nor is it entirely surprising that his son—though presumably less experienced a mason than the father—constructed a stone barn. One question that remains to be answered, however, is why Richard

Howarth, Jr. chose to erect such a unique and distinctly English style of barn. As mentioned earlier, the fact that the Howarth Barn was erected seventeen years after the family's emigration from their native Lancashire suggests that the barn –while functional—may have represented a piece of nostalgia for its builder. But what was basis of this nostalgia? Howarth does not appear to have grown up on a farm in Lancashire, and, as such, he presumably would have been among the most likely of immigrant farmers to adopt American agricultural practices and building types. Indeed, an 1880 county history describes Howarth as an “Americanized” farmer (Johnson and Company 1880:773). But how deep did this Americanization go? He may have intended the barn to be a statement of his English origins. Whatever the source of its inspiration and intended purpose, Richard Howarth, Jr.'s impressive stone barn, along with its associated residence, became potent symbols of his agricultural success in America. An 1890 biography of Howarth observed that,

Not only does the smiling prosperity everywhere visible over the broad expanse of his domain bespeak his thrift, prudence, and intelligent adaptation of means to secure the desired ends, but the substantial and tasteful building of stone which he has erected to accommodate his family and serve the needs of his stock, also proclaim in unmistakable terms that the owner has been no laggard in the “world's great field of battle” (Biographical Publishing Company 1890:763).

The Howarth Barn has been subjected to a number of modifications over its history. The most notable of the exterior modifications was the replacement of the original roof over the main barn with a higher pitched one. This change, which likely occurred circa 1900 (based on the framing materials used), is suspected to have been made in order to provide increased space for hay storage. As part of the roof replacement, the stonework in the north gable was removed and the void created was framed in. The stonework may have been removed on account of the structural failure of the north wall. At some point, the north wall had to be bolstered by three large stone buttresses (later to be supplemented by a fourth, built out of concrete block), and it is possible that the stonework in the gable was removed in order to save the lower extent of the wall. The buttresses were installed post-1873, as is evidenced by their absence from the historic lithograph of the Howarth Farmstead (compare Figures 64 and 65); and they perhaps are contemporary with the new roof system. Circa 1960, Walter Taylor converted the cow house portion of the barn into a three-story apartment for his daughter and son-law-law, Dorothy and Bob Ness (*Peoria Journal Star* 5 December 1963, p. E-3). This apartment is now used for staff housing. The south end of the main barn also has been turned into staff housing.

Overall Dimensions: The barn measures 64'-4” (north/south) by 24'-2” (east/west).

Foundations: The foundations of the barn built with regularly coursed, rough-cut sandstone. The perimeter foundations measure 1'-6” to 1'-8” thick, while the interior basement foundations generally measure 1'-3” thick (see Figure 67).

Walls: The walls of the barn are constructed of sandstone and generally measure 1'-6” to 1'-8” thick. The exterior stonework is regularly coursed ashlar and has been dressed with a chisel. It coursing varies between 6” and 12” in thickness. The stones on the corners of the building are larger and have a slightly neater finish, which gives them the appearance of quoins (see Figure 66).

Structural System, Framing: The exterior walls of the Howarth Barn are of stone construction, as is the interior wall that divides the main barn from the cow house. All of the lofts in the barn are carried by 2"x8" white pine joists, which have been edged with a circular saw and planked with a vertical saw. The outer ends of the joists are set within pockets in the stone walls. In the case of the upper loft in the main barn, two joists (which are overlapped and nailed together) were used to span the distance between the east and west walls; these joists are supported from below two large, hand-hewn, oak girts. The only portion of the original roof that remains intact is located over the cow house section. The roof is carried by 2"x4" white pine rafters set 1'-10" to 2'-0" on-center. Like the floor joists, the rafters have been edged with a circular saw and planked with a vertical saw. A 3"x10-1/2" circular-sawn, white pine purlin is positioned below the central span of the rafters on each slope of the roof (see Figure 68). The rafter plate is 7-1/2"x8", hand-hewn oak.

The roof framing in the main section of the barn is fairly intricate and includes a braced purlin system, which employs fairly large diameter stock (8"x8" plates, 6"x6" posts, 5-1/2" x7-1/2" purlins, and 4"x4" braces) connected with mortise-and-tenon joints. The purlin system is illustrated in Figures 68, 69, 77, and 78. The rafters measure 2"x6" and are placed 2' on-center, while the roof sheathing varies in size from 1"x6" to 1"x10". All of the lumber used in the construction of the new roof is yellow pine. The lumber is not surfaced planed (i.e. rough on all four sides), and the sawing method used in its production varies: some materials being all circular-sawn or vertical (band?)-sawn, and others being edged with one type of saw and planked with another. Broadly speaking, the character of this stock—the species of wood,¹ rough finish, and mixture of full-dimensional and nominal-sized material—is indicative of the period 1890-1910. Hence, we have suggested a circa 1900 construction date for the new roof system, a dating we feel also is supported by the mixture of machine-cut and wire-drawn nails used (see discussion of hardware below).

Porches, Stoops, Balconies, Bulkheads: None of these features are known to have been present on the barn, historically. However, a modern shed-roofed porch has been constructed on the west side of the barn in recent years. Measuring approximately 12'x10', this porch extends outward from the west end of barn's central driveway. It is open-sided and has a frame superstructure and a poured-concrete deck. The porch was added when a section of the central driveway was framed in and converted into a staff apartment.

Openings:

Doorways and Doors: The barn was built with a total of eight exterior doorways. Two of these were located at opposite ends of the central drive on the east and west elevations of the barn. These doorways measured 11'-0" wide, had arched openings, and held large double doors (see Figure 70). A third arched entrance was centrally located on the south elevation and allowed access to the feeding aisle in the cow house. Although narrower and shorter than the two driveway entrances, this opening nonetheless quite wide (8'-0") and originally was enclosed with double doors (see Figure 71). Lying to either side of

¹ Yellow pine is a Southern species, which was lumbered and exported on a large scale in the late nineteenth and early twentieth centuries. Yellow pine lumber was first introduced to the Chicago market in 1877, but it really wasn't until the 1880s that it started to be widely distributed in Illinois, as the reserves of northern white pine began to be exhausted (Cronon 1991:196-197; Fries 1951:82).

this central arched entrance were 4'-2"-wide (stone-to-stone) doorways; that were wide enough for livestock (see Figure 72). In a classic Lancashire Barn, these narrower doorways would have served the manure aisles that flanked the central feeding aisle. The basement at the north end of the barn was accessed at grade through three exterior doorways. Two of these were 4'-2"-wide livestock doors, which were located on the north elevation, while the third was a narrower personnel-access door located on the north end of the west elevation (see Figure 72).

None of the existing doors on the barn appear to be original to the building. This is not entirely surprising, given regular wear and tear they would have been subjected to by the movement of livestock and equipment in and out of the building. Nonetheless, the vertical-plank-and-cross-braced construction used on the majority of the existing doors may very well reflect the character of the original doors. The exceptions to this are the doorways accessing the cow house. The doorways associated with the central arched entrance have been removed altogether and the opening has been converted into a window, while the doorways located either side of it have had more substantial residential doors installed.

Windows: There are three window openings on the south elevation of the barn. Two of these are located on the second floor level and measure 3'-8"x5'-8" (rough opening). Although these openings currently hold double-hung sash with one-over-one lights, they originally may have served as mow doors for the loft (see Figure 73). The third window opening is smaller, measuring 2'-7"x4'-0", and is located nearly at the peak of the gable. A number of shorter window openings are located on the east, west, and north elevations. These vary in width between 2'-0" and 2'-6", and most have had their sash removed and have been framed in (see Figure 73).

In addition to standard window openings, air vents are interspersed around the periphery of the barn, as well as along the interior wall that separates the cow house from the main barn (see Figure 73). The vents vary in size between 8"x8" and 10"x12." Oral tradition holds that these openings originally were intended to serve as gun slits for fighting off the Indians (*Peoria Journal-Star* 5 December 1963, p. E-3). This hardly seems likely, however, considering that the barn was constructed more than two decades after the last Native-American groups were removed from Illinois. Instead, the openings served an equally functional, but agricultural, role in venting the interior of the barn. The storage of large amounts of cut hay in an enclosed space always posed a threat of spontaneous combustion, so it was a matter of prime importance to assure adequate ventilation in the barn. Three of the six vents originally present in the north gable-end wall were eliminated when the upper section of this wall was demolished in circa 1900 (compare Figures 64 and 65).

Roof:

Shape, Covering, Material: The entire barn originally was covered with a relatively low-sloped, side-gabled roof that was covered with sawn wood shingles. The taller, and more steeply pitched, gable roof that was constructed over the main barn circa 1900 also was covered with sawn wood shingles. The wood shingles remain in place but have since

been overlaid with composition-shingle roofing. The cow house roof has been covered a ribbed metal roof in recent years. The 1873 lithograph illustrates two lightening rods on the ridge of the roof (reference Figure 65).

Cornice, Eaves: The barn has open eaves with enclosed rafters that measure roughly 11” deep. The cornice is adorned with a 1”-thick flat frieze board (with 7-½” exposure) and a plain, square bed molding. The frieze board and bed molding continue along the rake on the south gable-end of the building (Such also likely would have been the case on the north gable-end wall prior to removal of the stone gable here).

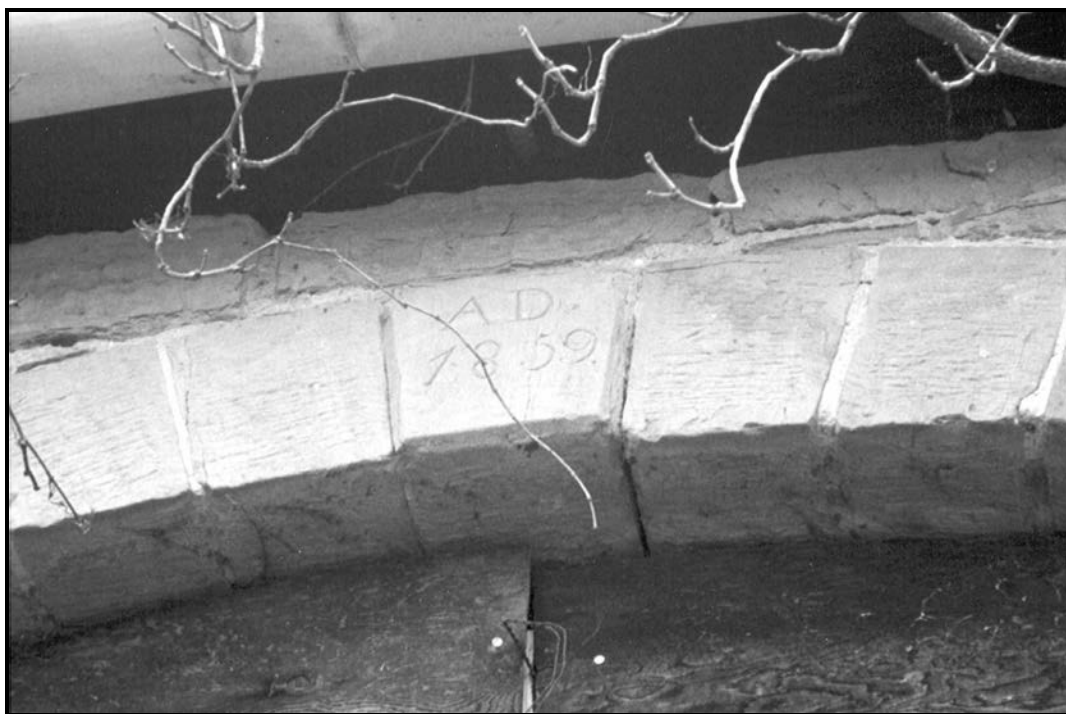


Figure 63. (Top) View of the south end of the Howarth Barn, showing the attached cow house that is the identifying feature of the Lancashire Barn type. (Bottom) Construction date for the barn that is inscribed on the keystone for the arched doorway on the east side of the barn (FRR November 2000).



Figure 64. (Top) The Howarth Barn, looking northwest. (Bottom) View of the barn, looking northeast (FRR November 2000).

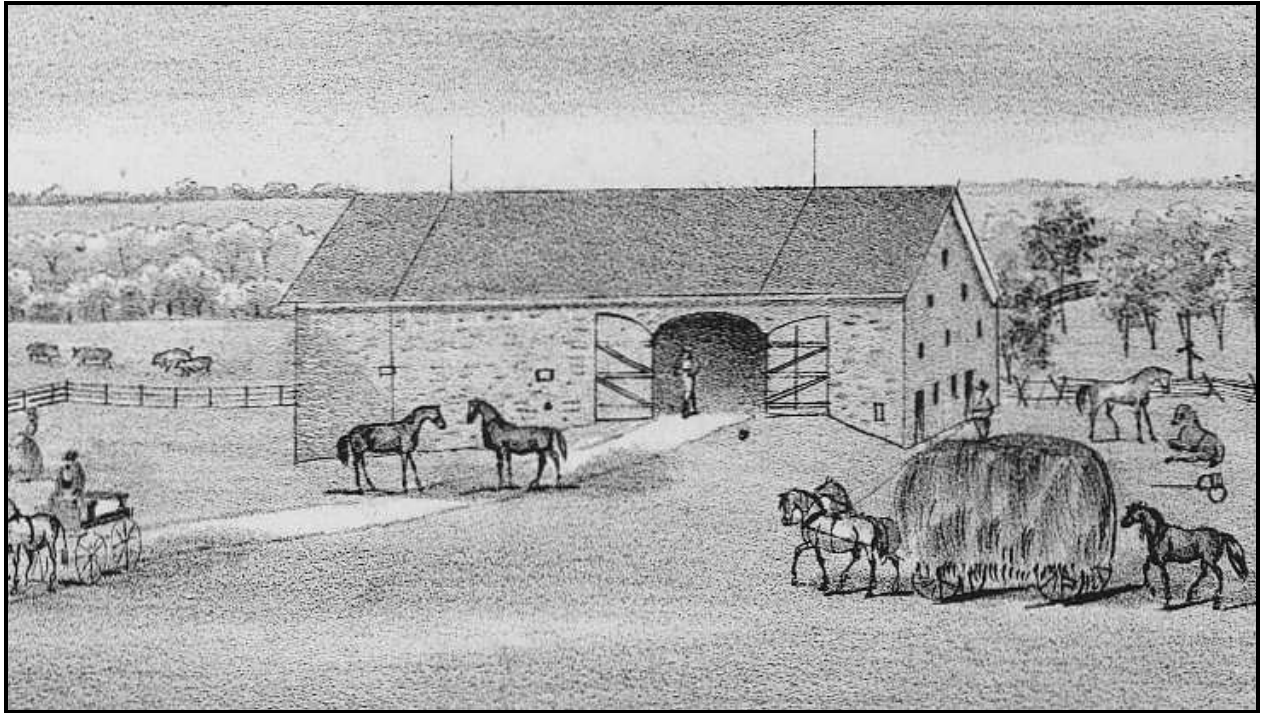


Figure 65. Detail from the 1873 lithograph of the Richard Howarth farmsite, showing the stone barn. Note the absence of buttresses on the north end of the barn. This figure also illustrates lightening rods and shows the location of windows and vents on the east and north elevations. Also of interest is the wagon filled with cut hay that is being hauled toward the barn (Andreas 1873).

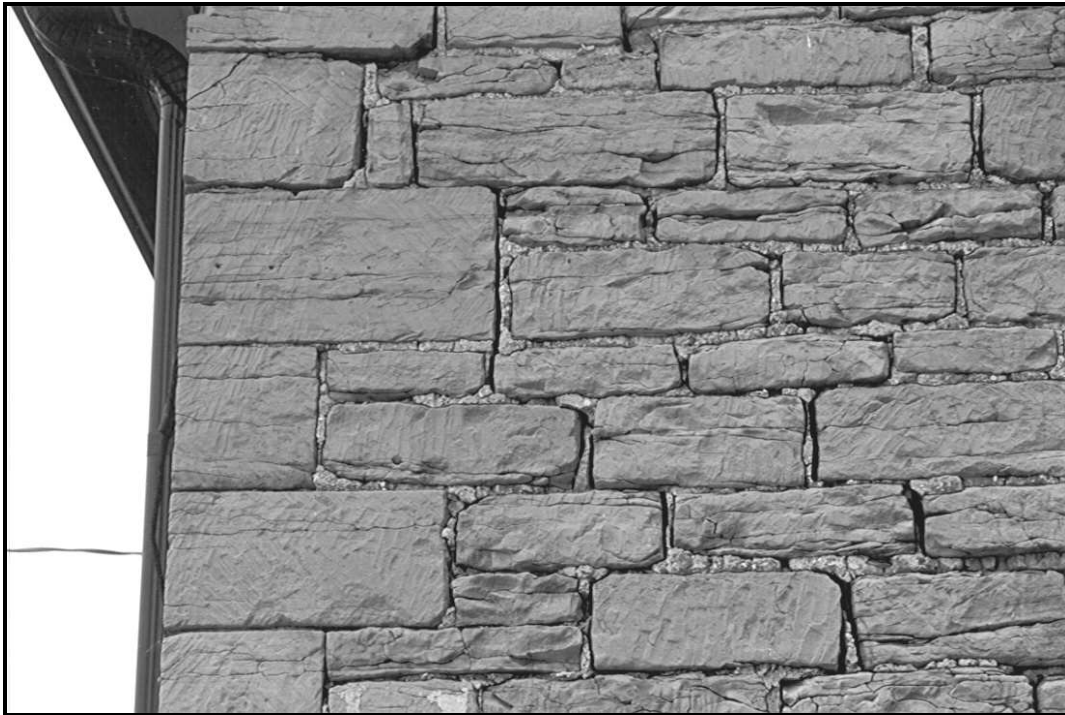


Figure 66. (Top) View of the stone buttresses that were added to bolster the north wall. (Bottom) Detail of the stonework on the barn, showing the southwest corner (FRR November 2000).



Figure 67. View of the interior foundations along the south side of the basement. The pier on top of the foundation wall helps support the north framing bent in the barn (FRR June 2001).

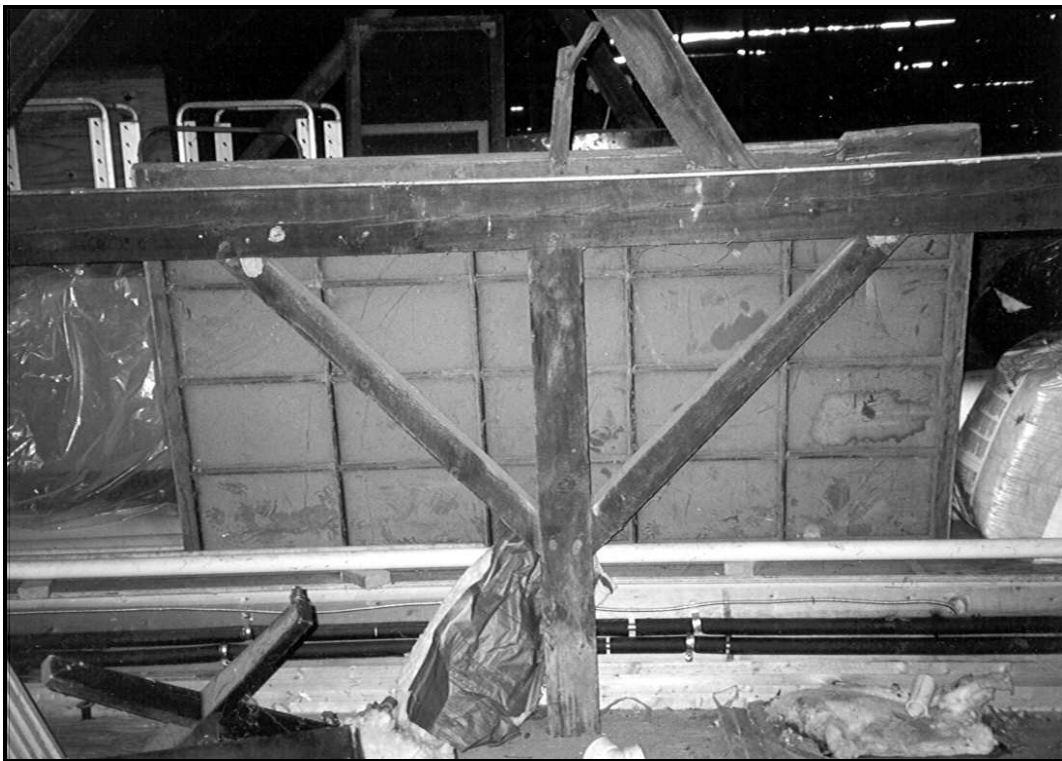


Figure 68. (Top) View of the roof framing in the cow house, showing the rafters and supporting purlin. (Bottom) View of a post and girt with diagonal bracing, located in the main barn. This framing was installed circa 1900, at the same time that the roof was replaced (FRR June 2001).



Figure 69. (Top) View of the roof system in the main barn, showing the underframing. (Bottom) View of the framing at the north gable. The stonework originally present in the gable has been removed down the level of the rafter plate (FRR June 2001).

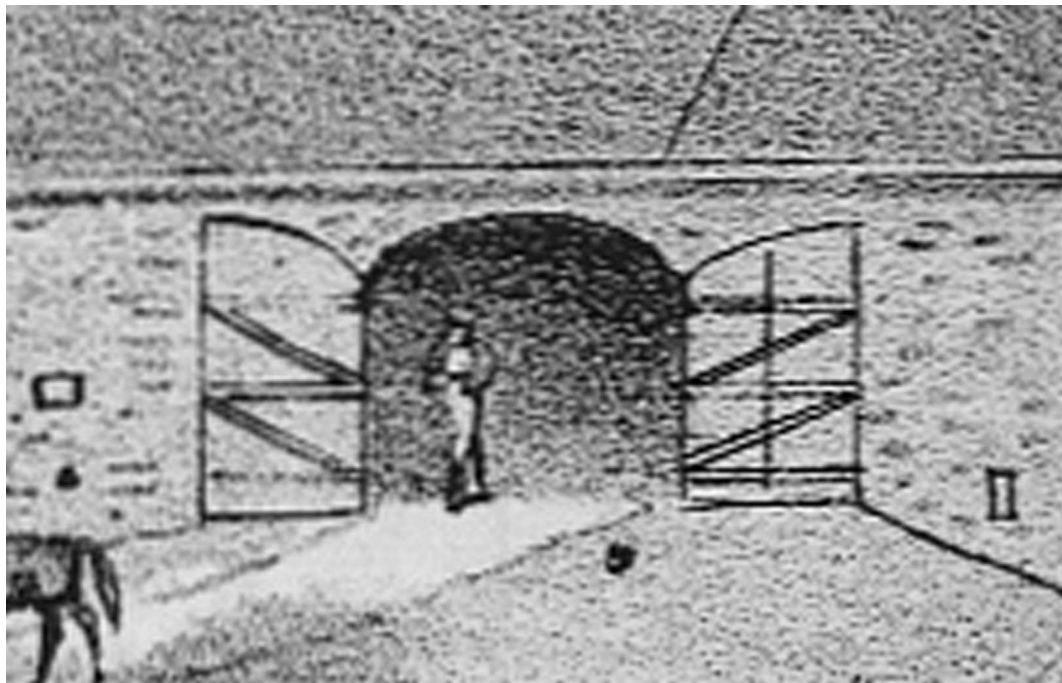


Figure 70. (Top) Arched doorway on the east elevation of the barn. This entrance formerly accessed the central aisle and threshing floor in the building. The current doors are twentieth-century replacements (FRR June 2001). (Bottom) Detail of the 1873 lithograph, illustrating the character of the original doors present on the east entrance. Also note the small window openings located to either side of the doorway (Andreas 1873).



Figure 71. (Top) View of the central arched entrance in the cow house. The doors have been removed and the opening converted into a window. (Bottom) Detail of the arched doorway for the cow house, showing one of the pintels on which the original doors were hung (FRR June 2001).



Figure 72. (Left) View of the western door that accesses the cow house section of the barn. This doorway originally serviced livestock, but now functions as the principal entrance to the living quarters that have been installed in the cow house. (Right) View of the personnel door on the west side of the barn. The plank construction of this door was probably typical of the original doors on the barn (FRR June 2001).



Figure 73. Representative examples of the three types of original window openings that are present in the Howarth Barn. (Right) A small window on the west elevation that has been framed in. Similar-sized windows are present on the east and north elevations. (Center) A large window openings on the south elevation that formerly served as a mow door for the hay loft over in the cow house. (Left) One of the small vents that punctuate the exterior walls, as well as the interior wall that separates the main barn and cow house (FRR July 2001).



Figure 74. View of the eave and cornice at the southeast corner of the barn.

DESCRIPTION OF INTERIOR

Floor Plans: Floor plans of the Howarth Barn are attached as Figures 75 and 76. A sectional and a longitudinal view also are included, as Figures 77 and 78.

First Floor Description: The first floor of the barn was divided into four main sections, or bays. The southernmost of these was the cow house, which was separated from the remainder of the barn by interior stone partition wall. The physical layout of the cow house during its period of active use is not known, though English cow houses were divided into three aisles: a central feeding aisle and flanking manure aisles. The cow house measured 12'-5"x32'-2" on its interior and had an interior doorway that led into the main section of the barn. The main part of the barn was divided into three bays. The central bay served a dual purpose as a driveway and as a threshing floor, while the two sides bays were devoted to the storage of crops. The northern bay was full height and may have been used exclusively for hay storage—a use suggested in part by the eight exterior vents originally present along its perimeter. In contrast, the side bay on the south was divided into two levels, the upper of which likely functioned as a hay loft. Grain bins may have been located below the loft, but this cannot be determined with any certainty at this time, due to the fact that this area has been turned into residential living space.

Hay was moved into the barn through the central drive as opposed to a mow door. Originally, the hay had to be pitched by hand (or rather by pitchfork) into the adjacent lofts. After the new roof was constructed, however, a hay fork was installed in the barn. This fork ran along a track aligned to the ridge of the roof and allowed hay to be moved relatively easily from a hay wagon parked in the central drive into either of the adjacent bays. The track associated with this mechanism is still present.

Except for the northern bay, the first floor of the barn has been converted into living space. This process began circa 1960, when Walter Taylor converted the cow house into an apartment for his daughter, Dorothy Ness, and her husband Bob (*Peoria Journal-Star* 5 December 1963, p. E-3). The first floor of the cow house has been divided between a kitchen/dining area on the west and a living room on the east. In the main barn, the south bay has been partitioned into a laundry/utility room, bathroom, and a large bedroom. A separate apartment has been constructed within the western two-thirds of the central drive.

Second and Third Floor Description: The cow house section of the barn originally had only two floors, and the upper floor is believed to have functioned as a hay loft. The possibility of the upper floor having been used as living quarters for farm hands has been considered, but this seems unlikely, given the unfinished character of the walls and ceiling and the need for hay storage adjacent to (and preferably above) a cattle feeding area. Hay would have been tossed into the loft through two exterior mow doors in the south elevation (which now function as window openings). The fodder then could then be tossed down into the feed aisle below, as needed. When the cow house was converted

into an apartment, the space on the second floor was partitioned up to accommodate a bedroom, sitting room, stairhall, and several closets. In addition, a completely new third story was added, in order to accommodate a bathroom.

Basement/Cellar Description: A basement room is located directly below the northernmost bay on the main level of the barn and measures 15'-5"x38'-2". This room has two livestock doors on its north side and also can be entered at grade through a personnel door on the west. A tack rack is affixed to the north wall (see Figure 77). We suspect that the basement was used for the feeding and stabling of horses.

Stairways: The only stairway of any size in the barn leads between the first and second floors in the cow house. This stairway is not original to the building, however. It is possible that the upper story of the cow house originally was accessed by means of a ladder, rather than a stairway. The same can be said for the loft in the main part of the barn.

Flooring: Most of the original flooring in the building has either been removed or covered with modern materials. Some 1"-thick white pine flooring does remain in place, however, in the north bay of the barn (see Figure 80). Similar flooring probably was used for the loft in the south bay and on upper floor of the cow house. A portion of the basement floor has a flagstone pavement that may be original, while the remainder of has a dirt floor. The central drive had a dirt floor, and it likely that livestock aisles in the cow house also were unpaved in any manner. A concrete floor has been poured on the first floor of the cow house; this presumably was added circa 1960.

Wall and Ceiling Finishes: The interior wall and ceiling surfaces in the barn originally were unfinished, leaving the stonework and framing exposed. Knotty pine paneling was installed on the frame partition walls that were added in the cow house during its circa 1960 remodeling.

Decorative Features and Trim: Given the barn's utilitarian function, it is not surprising that the interior decorative features were extremely limited. The field investigation did not find any remnants of original door or window trim, and, more than likely, there never was any in the barn. The cow house, however, does have a number of interesting inscriptions on its interior walls, including Richard Howarth's initials and the date of 1859 (see Figure 81).

One interesting decorative feature that is not original to the barn is the baseboard that runs along the stair opening on the second floor of the cow house. Carved in the baseboard are a number of biblical scenes and passages that recount the life of Jesus Christ. This artwork is believed to have been done during the period that Dorothy and Bob Ness occupied the apartment (William Rutherford, pers. comm., July 2001).

Hardware: The framing in the original barn was attached using machine-cut nails typical of middle-nineteenth-century construction. Wire-drawn nails were used to construct the enlarged roof and supporting framing system over the main barn, except in the case of the wood shingles which were attached with machine-cut nails. This mix of nails types is not uncommon on buildings and structures that were erected circa 1890-1910, a period that witnessed a transition in the predominance of machine-cut nails to wire-drawn ones.

The three sets of double doors that were originally present on the barn were hung from iron pintles set within the stonework framing the doorways. Some of the pintles remain in place, even though their doors have long since been removed.

Mechanical Equipment:

Heating, Air Conditioning, Ventilation: The barn probably lacked any of this mechanical equipment until the cow house was converted into an apartment circa 1960. Each of the apartments is equipped with a air conditioning unit.

Lighting: The barn may have been wired for limited incandescent lighting at the same time that the house received electricity (circa 1940?). The building has been completely rewired since it has been turned into living quarters.

Plumbing: It is doubtful that the barn had any interior plumbing until the building was remodeled for housing. A well head with a modern pump is located along the west side of the barn.

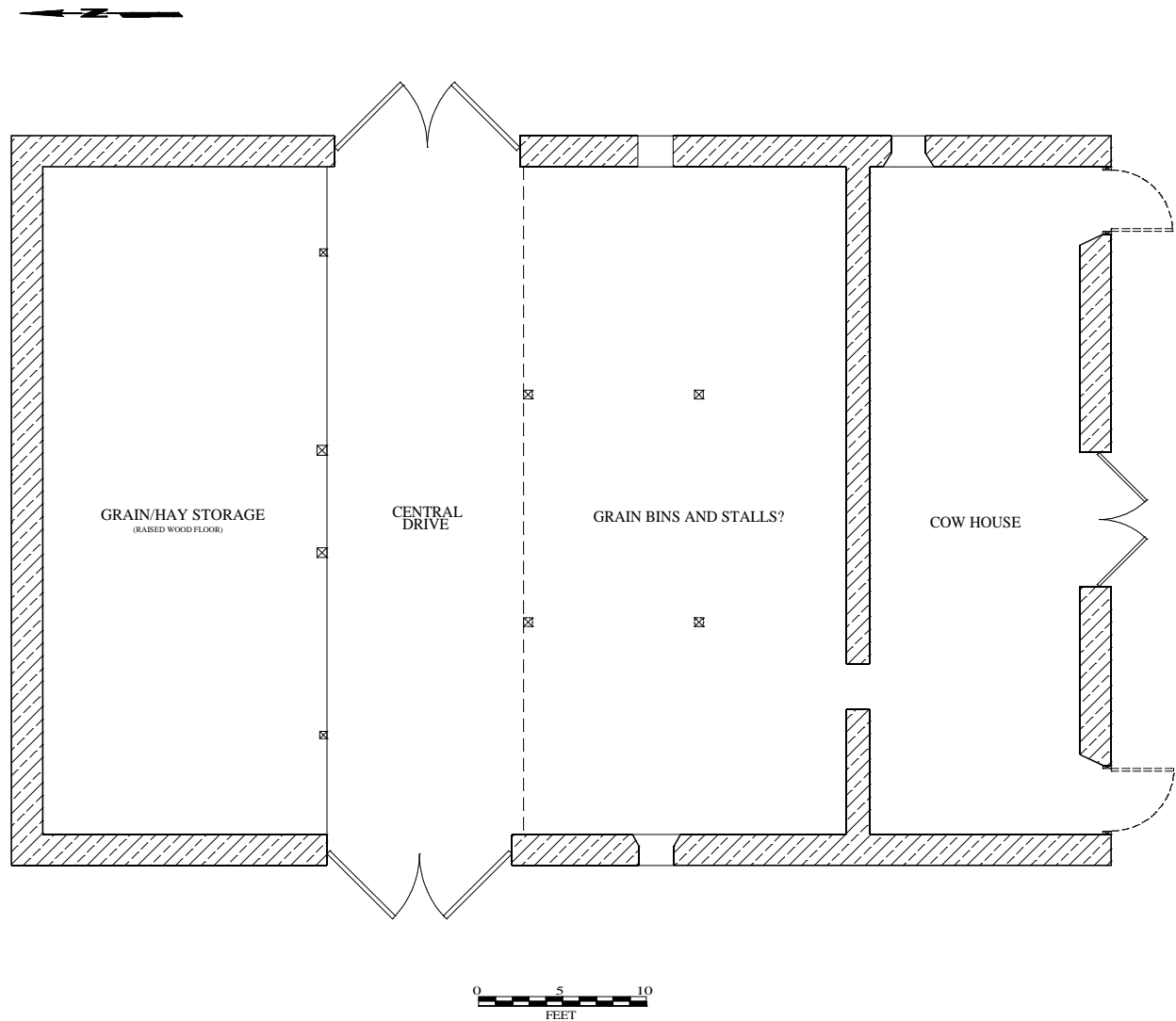


Figure 75. First floor plan of the Howarth Barn, showing the layout of the structure prior to its conversion to living quarters (FRR 2001).

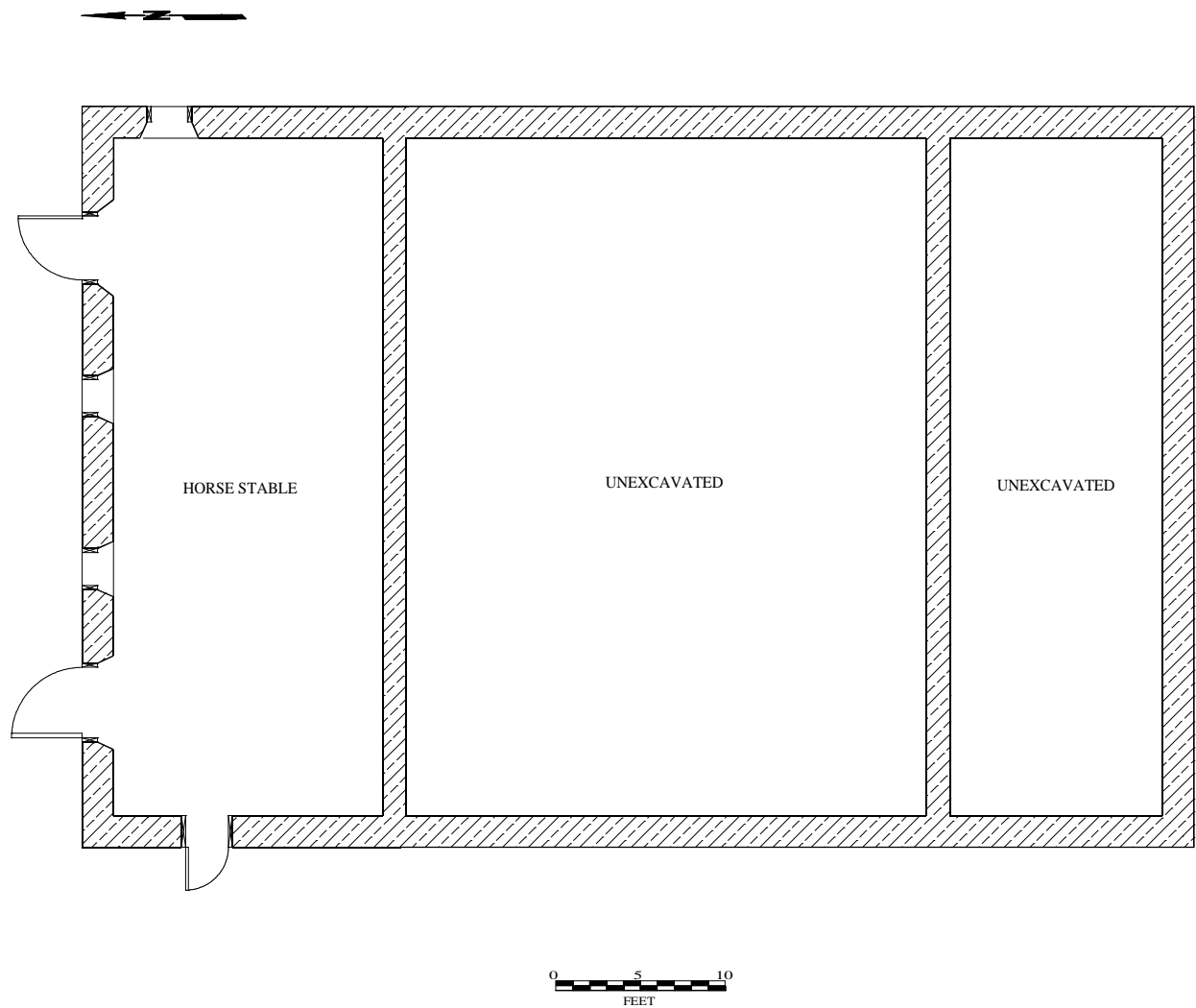


Figure 76. Basement floor plan of the Howarth Barn. The buttresses that were added at a later date to bolster the north wall are not illustrated on this figure (FRR 2001).

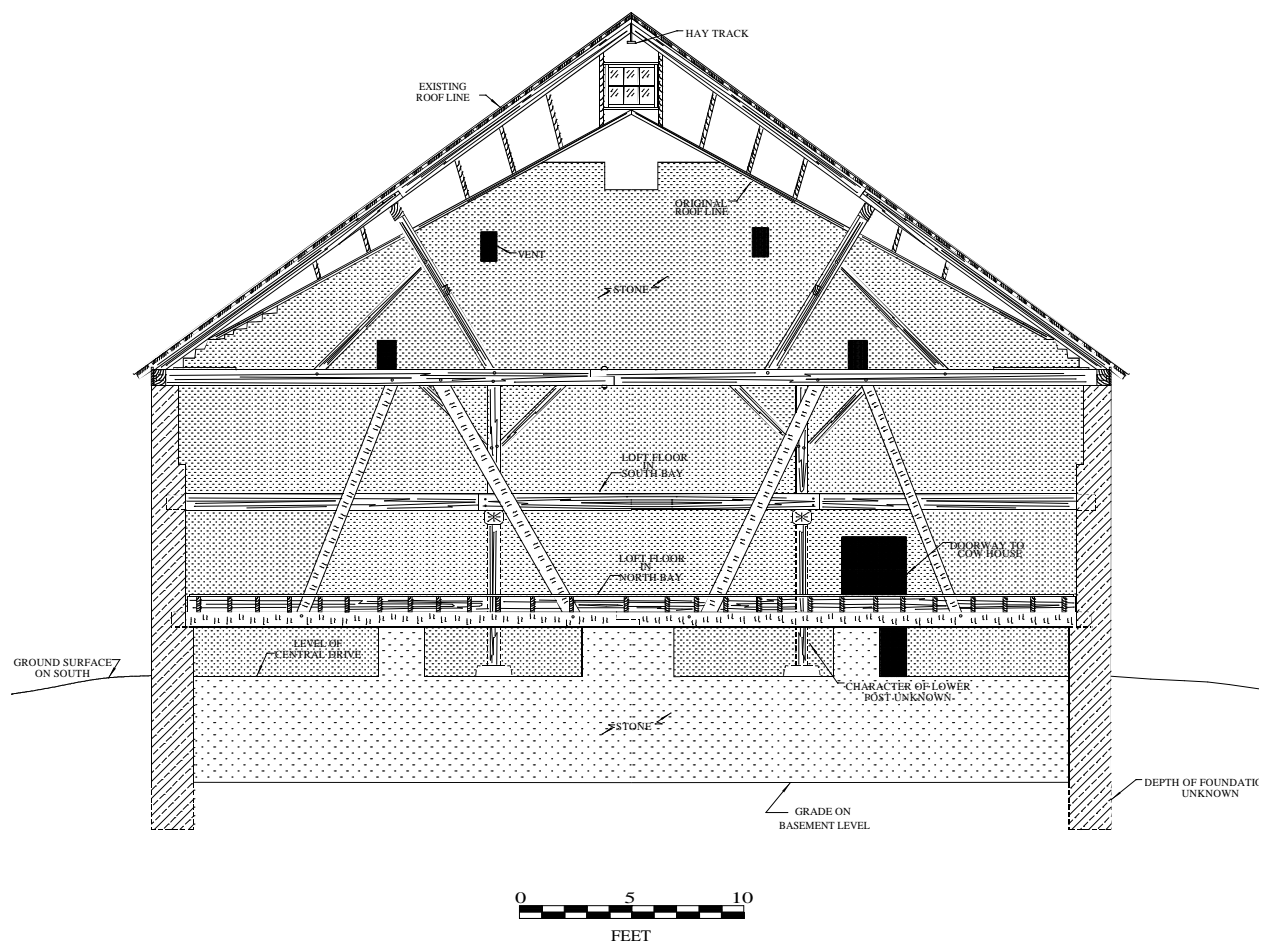


Figure 77. Sectional view of the Howarth Barn, looking south through the main section of the bay. This view cuts through the northernmost bay of the barn (FRR 2001).

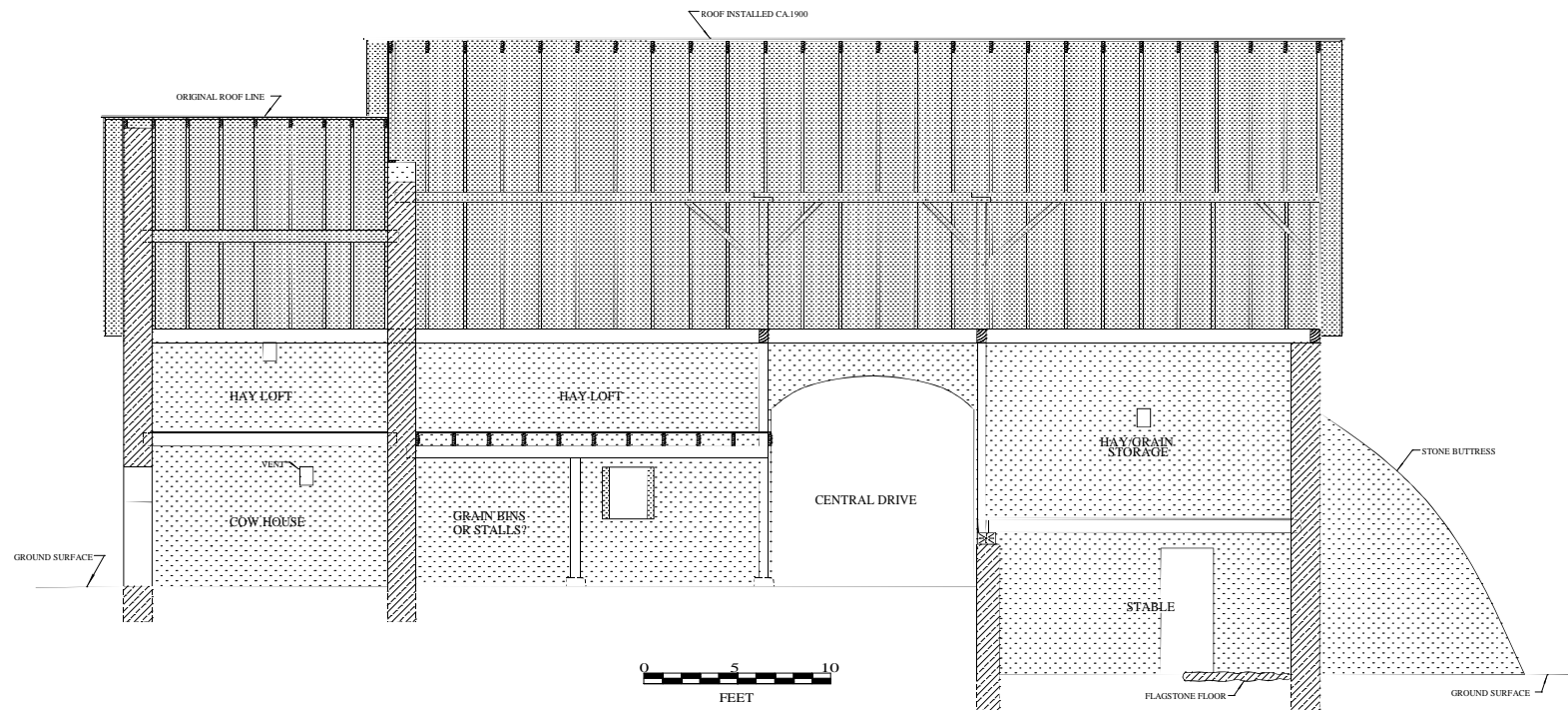


Figure 78. Longitudinal view of the Howarth Barn, looking west. Note the partial basement and the distinctive separation of the cow house from the main section of the barn (FRR 2001).

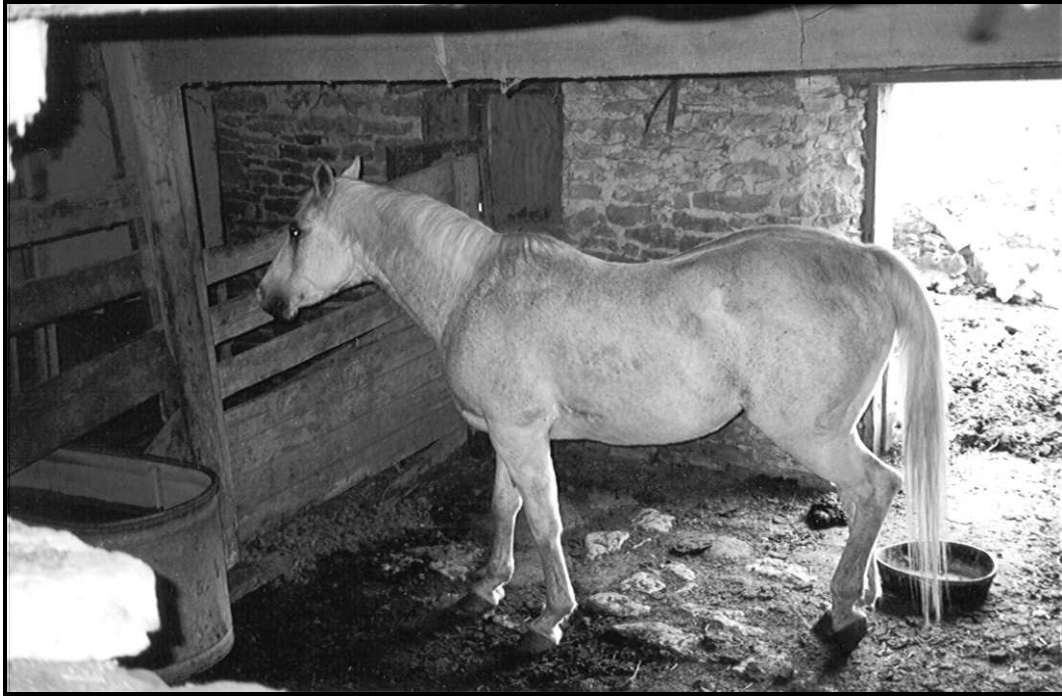


Figure 79. (Top) View of the basement room in the barn. This room historically has been used to stable or feed horses and continues to be used so to this day. Note the stone pavement on the floor. (Bottom) View of the tack rack still present on the north wall of the basement (FRR June 2001).



Figure 80. View of a flooring remnant still in place along the north side of the central driveway in the main barn (FRR June 2001).



Figure 81. A number of inscriptions have been etched on the interior walls of the cow house. (Top) An “1859” that presumably was intended to mark the date of construction for the barn. (Bottom) A stone with Robert Howarths initials carved into it. This stone is located beneath the window opening at the east end of the cow house (FRR June 2001).

TREATMENT ALTERNATIVES

The objectives of any historic structure report is to identify the historic fabric of the building under study, assess the integrity of the historic fabric of the structure, and make recommendations as to the appropriate treatment of the historic resource. Whether a particular element of the building is considered a part of the building's historic fabric (or not) is dependent on whether that particular element is associated with the period of significance of that building. If a particular element of the building (such as the lighting fixtures or a particular partition wall) post-dates the period of significance, it is not considered a historic element that contributes to the significance of the property.

As with most historic buildings, there are several preservation options or treatment plans that warrant discussion. Decisions for carrying out one treatment plan over the others is dependent on multiple, interrelated factors that include, among other things, 1) prospective use of the building (whether historic, residential or commercial), 2) existing integrity of the building, 3) and available funds.

The least involved alternative is the **NO ACTION** plan. Although this option represents the least costly alternative, it is the least effective with regard to the preservation of the historic resource, ultimately leading to the demolition of the historic property due to continued neglect. Due to the deteriorated condition of the sill plate, the No Action plan will soon lead to the collapse of this structure, and will have an Adverse Effect on the historic resource.

The second option (**STABILIZATION**) contemplates the stabilization and/or preservation of the buildings in their current condition. This option includes all the necessary work to repair damaged structural elements (such as the roof and open doorways) that threaten the continued stability of and/or access to this historic structure. It does not entail sufficient work to bring the building into compliance with current health and safety codes allowing for the use of the building.

Option 3 contemplates the adaptive reuse or **REHABILITATION** of the structure. Rehabilitation is the process of bringing the building to contemporary standards for a particular use, and at the same time preserving the historic fabric of the structure. Whereas all work performed on a building in this option should be performed in keeping with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, it does not entail returning the building to a particular period in time. The rehabilitation of a building can be accomplished at multiple levels. At the low end, the building is brought up to minimal health and safety standards allowing it to function as a viable building in today's society. At the upper end, the building is rehabilitated to a level that not only brings it up to current building codes, it also restores significant character-defining features of the property (such as the replacement of period doors). It is the latter option that we refer to as Rehabilitation/Restoration within the following discussion.

The most involved and costly option is **RESTORATION**. This option entails the removal of all non-historic elements, recreation of missing historic elements, and the return of the building to a particular period in time. The duplication of missing elements (such as doors

and window casings) using like materials is an expensive proposition due to the high cost of skilled labor and period materials. Additionally, this option generally produces a building that has limited use in today's society. Generally, the most appropriate use of a restored historic building dating from the nineteenth century is for historic site interpretation.

It is not the purpose of this report to furnish construction documents (plans and specifications) for the above preservation options, but to outline the character of the work needed to achieve these options with all work keeping with the Secretary of the Interior's *Standards for the Treatment of Historic Properties*. Our evaluation of the mechanical and electrical systems, as well as the review of the existing structural condition and/or integrity of the buildings, are meant to be preliminary in character. The purpose of these evaluations is not meant to be comprehensive but only to draw attention to future needs. More detailed inspections and recommendations by a licensed architect and/or structural engineer may be warranted. Similarly, many of the preservation alternatives discussed in this report are dependent on the proposed use of the buildings. For example, different building codes come into play depending on the planned use of the building (i.e., whether it will be open to public or not), and plans for the rehabilitation and/or restoration of the building can not be prepared until the proposed use of the building has been determined.

General Principles for Stabilization and Rehabilitation:

1. Historic building fabric is an identifying feature of a building and contributes to its historic significance. Therefore, that fabric should be retained in place as much as possible. When deteriorated, this fabric should be replaced or augmented with similar materials.
2. Any interior remodeling undertaken should protect the integrity of original floor plans and avoid the subdivision of original rooms or the removal of original partition walls, doors, trim, hardware, etc. This does not mean that the modern partitions that have already been made to the house necessarily need to be removed.

RECOMMENDATIONS: SITE

Spatial Organization and Landscape: The house and barn retain their original setting and orientation. No specific actions are called for under any of the options that are discussed here. However, one should be aware of impacting potential archaeological features on the site in the event significant ground disturbance takes place on the site.

Outbuildings: No specific actions are called for in respect to either the dairy barn or the twentieth-century chicken house at the farmstead. Neither building dates from the proposed period of significance (1842-1904). Furthermore, the integrity of the dairy barn has been compromised by modern additions.

As discussed previously, there undoubtedly were a number of other outbuildings that were present during the nineteenth century but are no longer extant. Although these buildings have been razed, remnants of them may yet survive as subsurface archaeological features. One such outbuilding is the chicken house that is illustrated on the 1873 lithograph. Another potential archaeological resource that is certainly present, but for which we have no specific information on, is the one or more privy shafts used throughout the history of the farmstead. These features may contain significant artifact, structural, and special-related data that contributes towards a better understanding the site and its occupants, besides addressing broader research questions. As such, activities involving ground disturbance at the site should take into consideration the possibility of impacting significant archaeological resources.

Wells, Cisterns: No specific action is required under any of the options discussed here. The location of the well at the site is known and is safely closed off.

Fences, Walls: The approximate limits of the fence line that formerly surrounded the house and barn yards can be derived from the 1873 lithograph. Hence, in the event that full-scale restoration is ever undertaken at the site, these fence lines can be recreated. However, no specific action is called for here.

Driveways, Sidewalks: Stabilization calls for no specific action in respect to driveways or sidewalks. In event any historic restoration is contemplated, the 1873 lithograph provides the best documentary evidence at our disposal for the location of historic walks and driveways. However, the existing driveway and sidewalk extending off Taylor Road to the house seem to correspond with those shown in the lithograph.

RECOMMENDATIONS: HOUSE

EXTERIOR

Foundations: The foundations of the house appear to be good condition overall. There is no visible evidence of settling or bulging, nor does there appear to be significant seepage of ground water through the foundations into the basement. No specific actions on this point are called for in this report.

Walls: On the whole, the stone walls of the house appear to be good condition, particularly when compared to the barn. One of the few places where significant deterioration was observed is a second-floor window sill on the south elevation of the house (see Figure 83). This sill has started to fissure and will eventually require the application of an adhesive and sealer in order to properly conserve it. One long-term solution to helping maintain the good condition of the stonework is the removal of vines and other vegetation from the building. Vegetation retains moisture and will prevent the stone from drying out, and over time, this will contribute to the cracking and spalling that readily seen on the barn (see Figure 82).

Some of the mortar joints require repointing. Appropriate methods of repointing historic buildings are addressed in the National Park Service's *Preservation Brief* Number 2, "Repointing Mortar Joints in Historic Buildings" (Mack and Speweik 1998), and the Illinois Historic Preservation's *Illinois Preservation Series* Number 15, "Masonry Repointing of Twentieth-Century Buildings" (Coney 1989). Any new mortar used should match the original as closely as possible in respect to hardness and color. Similarly, new mortar joints should be struck in the same manner as the historic ones. Samples of the original mortar used on the house have been collected and presently are curated at Fever River Research, Springfield, Illinois.

In the event that rehabilitation is undertaken, it might be appropriate to remove the aluminum siding that currently covers the exterior of the west wing and expose the original siding beneath it. If the original siding is still present and is good condition, it should be retained and refurbished. Deteriorated siding should be repaired or replaced in kind. This action is considered an optional recommendation, however.

Structural System, Framing: No specific structural problems were observed during the field investigation. As a matter of practice, future repairs that might be needed should strive to retain the original fabric as much as possible. Sistering new framing material onto old should be utilized where practicable.

Porches, Stoops, Balconies, Bulkheads: Under stabilization and rehabilitation, the existing porches on the house should be retained, and their woodwork should be scraped, primed, and painted, as needed. Historic fabric on the porches should be retained wherever possible, particularly in respect to defining decorative elements such as the bracketing found the north wing's west porch. When irreparable, historic fabric should be replaced with like material.

The deck on the south porch ought to be assessed, and deteriorated flooring should be replaced as needed with similar narrow, tongue-and-groove flooring. In the event that the porch deck is

taken up, it is recommended that the area beneath porch be subjected to a minimal archaeological investigation in order to determine the presence and character of an earlier porch and/or stoop. Similarly, in the event that the bathroom/laundry addition is removed, care should be taken to preserve and document any sections of the south porch that may have been incorporated into the addition (i.e. roof or deck), so that the porch can be restored to its original character.

An optional recommendation under rehabilitation calls for the removal of the porch on the west side of the west wing. This porch a modern addition and detracts from the historic character of the Howarth House.

Chimneys: Most of the chimneys originally present on the building either have been removed completely or have been taken down below the roofline and therefore present no particular problem. One future research goal is better determining the placement and character of the fireplace believed to have been located at the west gable-end wall of the original house. The cutout for chimney of this fireplace has already been documented. However, there may be additional evidence in the flooring in Room 101, assuming that the flooring here is original and was not replaced when the west gable-end wall was demolished. At the time of the field investigation, the flooring was covered with carpeting.

Openings

Doorways and Doors: The majority of the exterior doorways and doors on the Howarth House appear to be original and in good condition, and therefore should be retained at their present locations. The one exception is the west entrance to the west wing. This doorway is not original and was installed at same time that an original entrance on the north side of the wing was framed in. An optional recommendation under rehabilitation calls for this modification to be undone, with the west entrance being framed in and the original doorway on the north being reopened.

Windows: The frame window casings and sashes in the house appear to still be in good condition and should be retained. Stabilization and rehabilitation both call for the casings and sash to be scraped, primed, and painted wherever needed. Re-glazing should be done on any sash requiring it. In the event restoration is ever undertaken, louvered wood shutters should be reinstalled on the windows.

An optional recommendation that might be considered under rehabilitation would be to remove the large picture window currently present on the west side of the north wing and replace it with a more appropriately sized opening, more in character with the other windows in the wing.

Roof:

Shape, Covering, Material: The majority of the house has been re-roofed in recent years, and therefore will require no work under either the stabilization or the rehabilitation options. The one exception is the roof over the bathroom/laundry room addition on the south side of the house, which is very deteriorated and is leaking (see Figure 83). Should stabilization be adopted, this addition will need to be re-roofed. Rehabilitation calls for the addition to be removed completely.

Cornice, Eaves: The cornice and eaves appear to be good shape overall. However, the soffits, frieze board, and fascia on the original house and north addition do require scraping and painting—tasks that should be done under both stabilization and rehabilitation (see Figure 84). Any woodwork that is too damaged to retain in place should be replaced with like material.

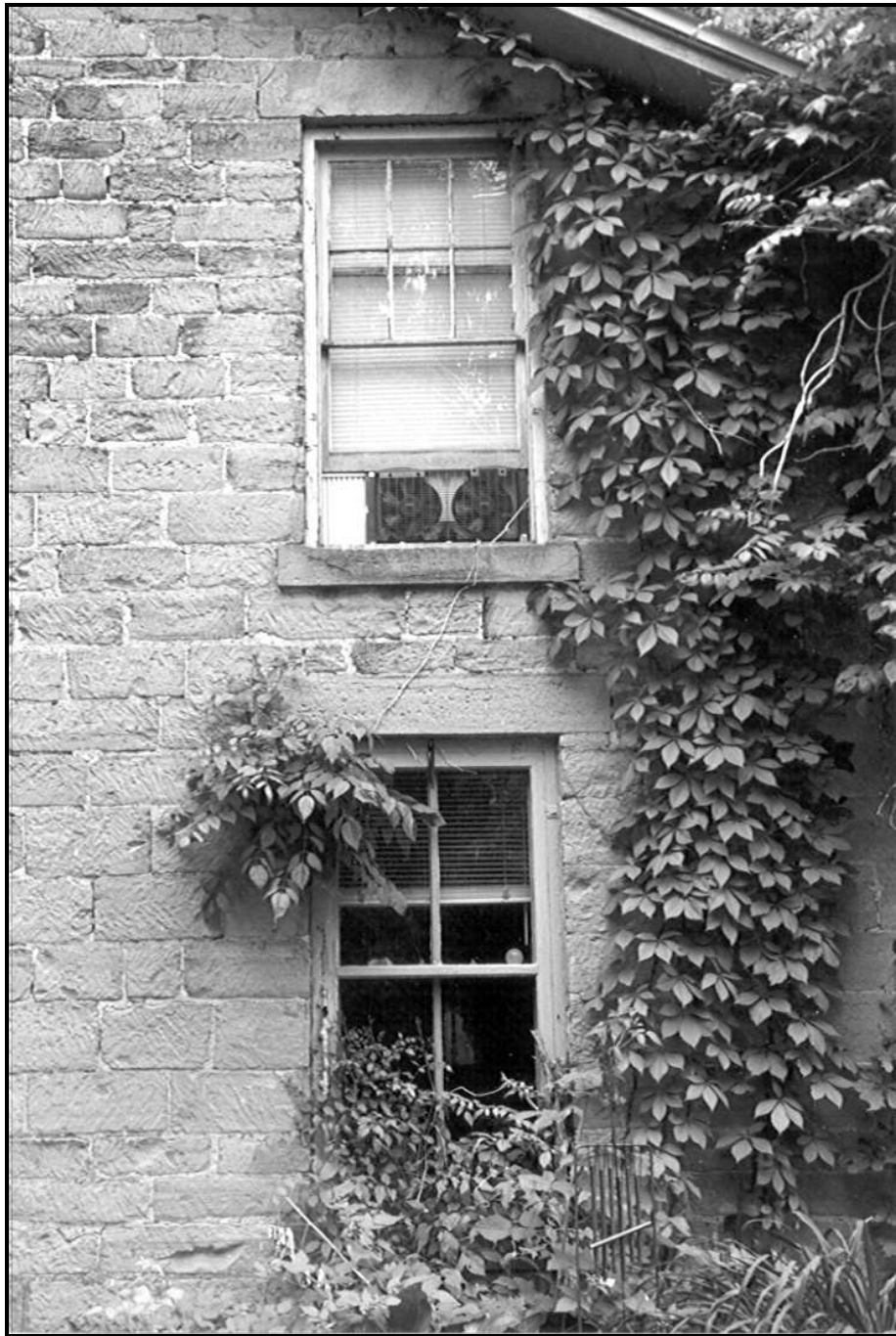


Figure 82. View of vine growth on the north elevation of the house. All vines such as these should be removed from the walls of the house and measures should be undertaken to prevent its growth there in the future (FRR June 2001).



Figure 83. (Top) Cracked and fissured window sill on the south elevation of the house. (Bottom) Deteriorated roofing over the bathroom/laundry room addition (FRR July 2001).



Figure 84. View of the eave at the southwest corner of the original house, illustrating the poor condition of the paint. The eaves on the original house and north addition should be scraped, primed, and painted (FRR July 2001).

INTERIOR

Floor Plans: The principal concern on this point involves the possibility of further alteration of the house's historic floor plan. Partition walls and openings that are original to the house should not be removed or significantly modified, nor should historic rooms be subdivided. This does not mean that modern partition walls post-dating the 1910 modification necessarily have to be removed. We simply recommend that the integrity of the house's floor plan not be further compromised.

Stairways: The two existing interior stairways in the house are in good condition and require no specific action under either stabilization or rehabilitation.

Flooring: Historic flooring in the house should be retained and, where deteriorated, replaced with like material.

Wall and Ceiling Finishes: The Secretary of the Interior's *Standards* recognize original plaster as a character-defining feature of a building and recommend that it be preserved (Weeks and Grimmer 1995:64-6). For information on appropriately repairing historic flat plaster walls and ceilings, refer to the National Park Service's *Preservation Brief* Number 21 (MacDonald 1989). The one area in the house where new plaster is required immediately is on the ceiling located beneath the second-story stairway.

Decorative Features and Trim: Original trim needs to be preserved in place. Any trim that may require replacement in the future should match the original materials.

Openings:

Doorways and Doors: The original interior doors remain in place and have good integrity. No specific recommendations are called for, other than these doors needing to be preserved in place.

Hardware: Original hardware in the building ought to be preserved in place or, when necessary, be replaced with similar hardware appropriate to the period of construction.

POINTS WORTHY OF FUTURE INVESTIGATION

Due to the fact that Howarth House is presently being used as a residence and is not slated for a major remodeling in the immediate future, the structural investigation of the dwelling was more circumscribed than might otherwise have been the case. As such, a number of questions regarding the character of the original house and its evolution had to be left unanswered for the moment. Future work on the house, however, may present opportunities for addressing these questions over time. The following is a list of points worthy of future investigation. These have been keyed to the floor plans that follow (see Figure 85).

- 1) Better determine the dimensions and placement of the fireplace believed to have been present at the west gable end of the original house. This goal can be best be accomplished by examining the flooring and ceiling at the west end of Room 101. There ought to be evidence of a cutout or a header beam in the ceiling, even if the flooring has been replaced. The investigation might also yield evidence of cupboards flanking the fireplace.
- 2) Assess the presence/absence of a window opening that in the north wall of Room 101 that might have been infilled after the constructed of the north wing. The existing window along this wall is small than and is not aligned to the window opposite it, which suggests that it represents a later addition. It is possible that the north elevation of the house was completely devoid of window openings originally.
- 3) Determine the age of the doorway that formerly allowed access between Rooms 102 and the north wing. Now closed off and used as cupboard, this doorway is suspected to date to the construction of the north wing, but there was no opportunity to closely examine it.
- 4) Assess evidence for an earlier porch or stoop on the south elevation of the house. This can be done in event that the ceiling paneling and/or decking on the existing porch is ever removed.
- 5) Document any remnants of the south porch that may have been incorporated into the bathroom/laundry-room addition.
- 6) Determine the character of the west wall of the frame addition. The portion of this wall that is visible from the attic of the adjacent porch suggests that the wall is framed with 2"x4" studs and has brick nogging. However, it is unclear whether the wall was stuccoed to blend in with the north elevation of the original house.
- 7) Determine the presence/absence of windows on the north side of the second floor of the original house. If window were present here originally, they may have been infilled following the construction of the north addition. However, it is just as possible that the Howarth's avoided putting windows on this elevation since they north.

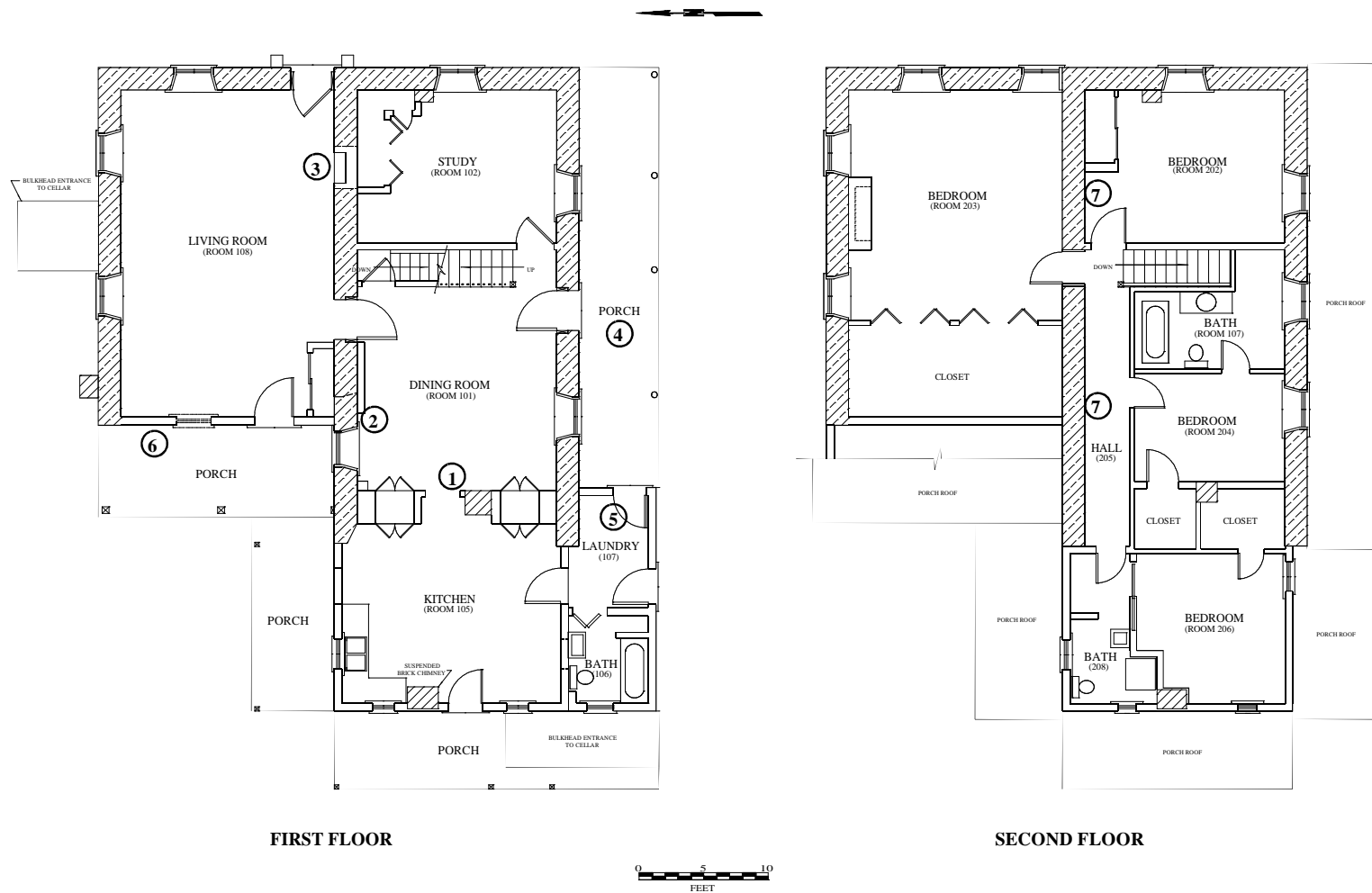


Figure 85. First and second floors plans of the Howarth House, showing existing conditions. The numbers reference points worthy of future investigation.

RECOMMENDATIONS: BARN

EXTERIOR

Foundations: The repointing of all deteriorated mortar joints is called for whether stabilization or rehabilitation is undertaken. The mortar used in repointing should match the original in respect to hardness and color. Likewise, the new mortar joints should be finished off the same as the originals were. Appropriate methods of repointing historic buildings are addressed in the National Park Service's *Preservation Brief* Number 2, "Repointing Mortar Joints in Historic Buildings" (Mack and Speweik 1998), and the Illinois Historic Preservation's *Illinois Preservation Series* Number 15, "Masonry Repointing of Twentieth-Century Buildings" (Coney 1989). Original mortar samples have been collected from the barn and are presently curated at Fever River Research, Springfield, Illinois.

Walls: The poor condition of the exterior stonework on the barn is one of the most serious concerns facing the building. Although many of the stones are in fine condition, a high percentage of them are spalling, cracked, or are severely weathered. This deterioration may be attributable to a number of factors, including the variable quality of the stone itself, temperature extremes, and poor drainage. Besides the deterioration evident in individual stones, the walls at the northern end of the barn are cracked and bulged at a number of points. Mine subsidence is suspected to be partly to blame for this damage. A subsidence study recently conducted for Wildlife Prairie State Park indicates that the Silver Creek Mine extended to within close proximity to the barn (Marino 2001:29, 31). Given that the stone buttresses on the north end of the barn likely pre-date the period that the mine was in operation (1919-1922), however, other factors may also have been (or still are) at play. Some of the deterioration seen in individual stones can be alleviated by reducing the moisture level in the stone, which can be done by cutting back the vegetation around the building and by installing new guttering and drain spouts. The existing guttering on the main section of the barn is poor condition, and this has directly contributed to the weathering of some stones. Vegetation control and improved drainage are called for under all of the preservation plans discussed here. Admittedly, these actions are only part of the solution, but they are simple, low-cost, and can only help in stopping further deterioration of the stonework. Determining a comprehensive conservation plan for the exterior stonework presents a serious preservation challenge, as does the repair of the structural cracks and bulging stonework at the north end of the barn (see Figure 86 through 90).

Structural System, Framing: No specific structural problems were observed with the roof or interior framing in the barn. As a matter of practice, future repairs that might be needed should strive to retain the original fabric as much as possible. Sistering new material onto old should be considered as an option.

Porches, Stoops, Balconies, Bulkheads: The modern porch that has been added on the west side of the barn presents no structural concerns, and therefore will not be impacted by stabilization. However, it does detract from the historic character of the barn, and it is recommended that it be removed in event rehabilitation or restoration is undertaken.

Openings

Doorways and Doors: None of the doors on the barn appear to be original, though a number of wood plank doors remain from the period that the barn was used for agricultural purposes, and it is recommended that these doors be retained. In the event that the living quarters are removed from the barn, similar plank doors might be installed there. Dutch doors would be appropriate for the livestock doorways, while a set of paired doors could be installed on the arched central entrance.

Windows: None of the original window sashes in the barn survive. The original window casings are present, however. These need to be scraped, primed, and painted.

Roof:

Shape, Covering, Material: The cow house section of the barn has been re-roofed in recent years with ribbed-steel roofing and requires no work. The roof over the main section of the barn, however, is covered with asphalt shingles. Although no major leaks were observed during the field investigation, the shingles appear to be near the end of their life and may need to be replaced. Stabilization calls for the roof to be examined and re-roofed if required

Cornice, Eaves: The cornice and eaves of the barn generally appear to be in good condition, though they need to be scraped, primed, and painted. Deteriorated fabric needs to be replaced with like material.

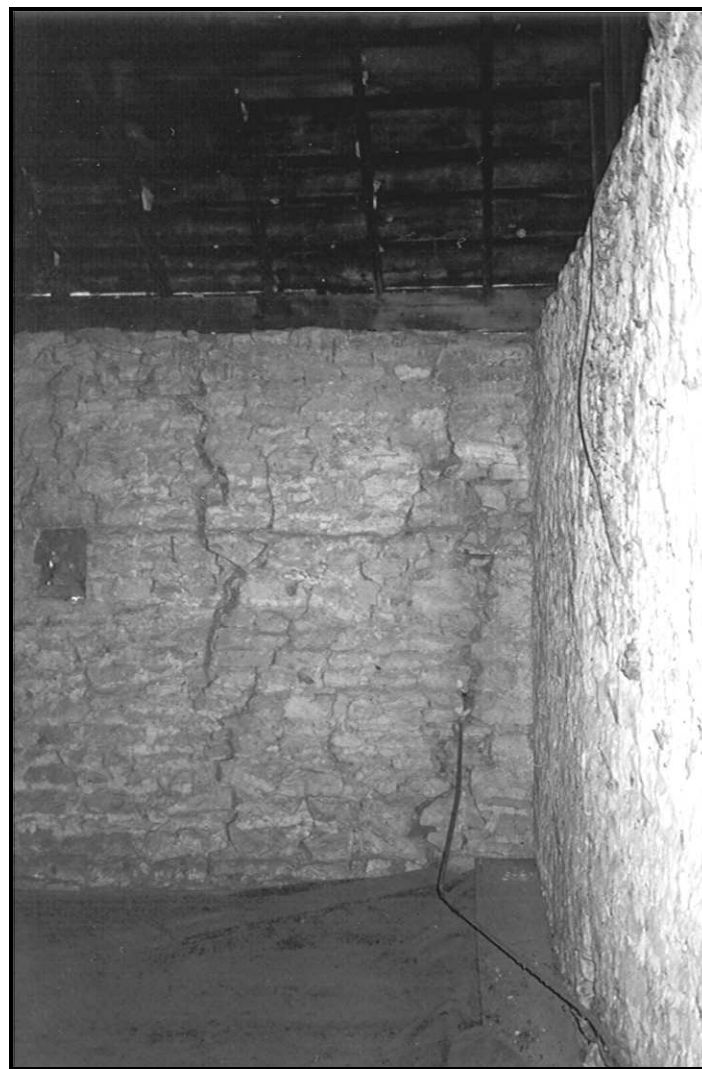


Figure 86. (Left) Section of wall on east side of barn that is bulging out. (Right) Stress fractures on interior of the west wall of barn (FRR June 2001).

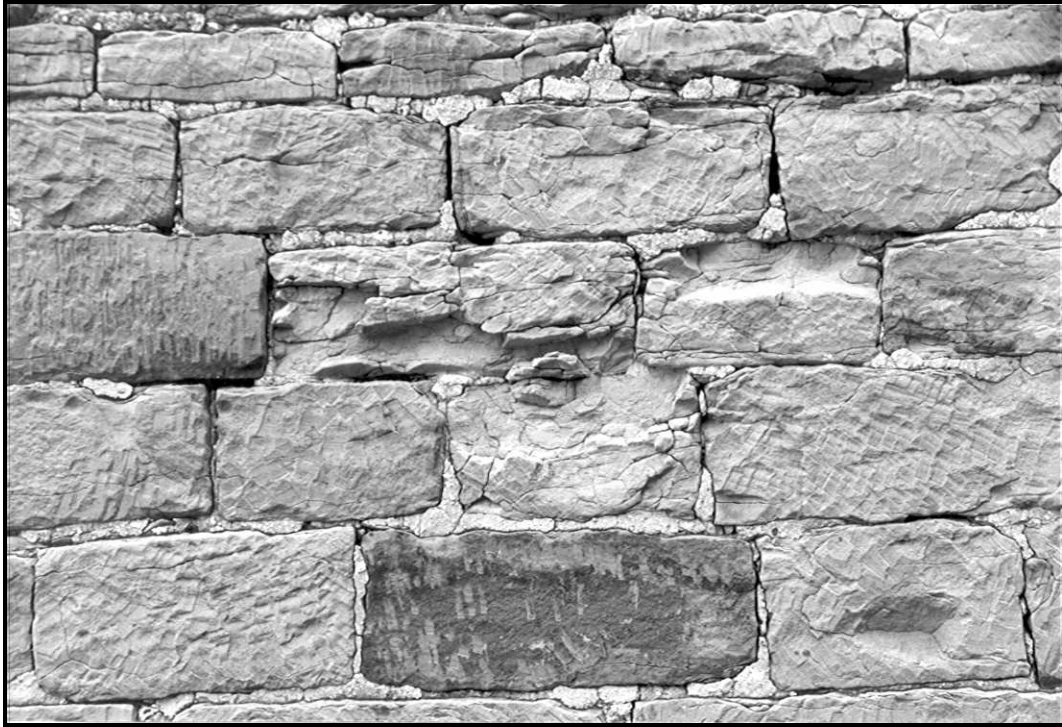


Figure 87. Two views of the differential weathering seen on the exterior of the barn. Cracking and spalling is prevalent (FRR June 2001).



Figure 88. View of concrete parging that has been applied at the southwest corner of the barn. Future conservation efforts should avoid using such methods (FRR June 2001).



Figure 89. Poor drainage in the past has contributed to the deterioration of the exterior stonework on the barn. This view is of the northeast corner of the barn (FRR May 2001).

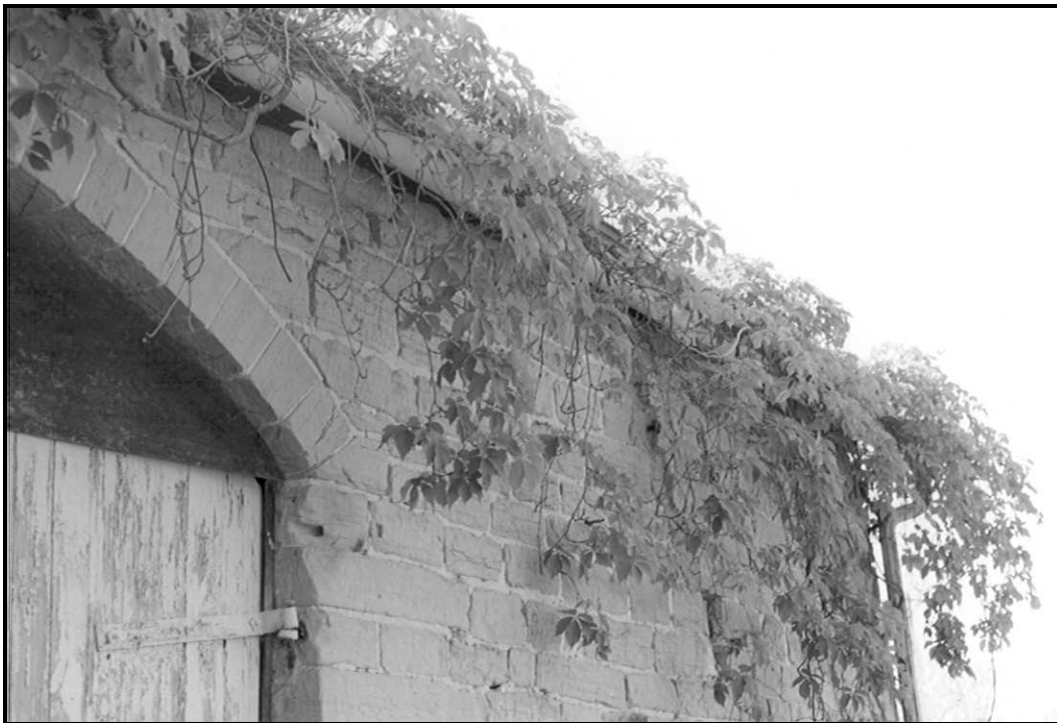


Figure 90. (Top) The existing guttering on the barn is adequate and needs to be replaced. (Bottom) All vines on the building need to removed, and any vegetation growing adjacent to it should be cut back, in order to reduce the moisture content (FRR May 2001).

INTERIOR

Floor Plans

First Floor: The majority of the first floor of the barn presently is taken up by living quarters, which made it difficult to thoroughly investigate it. A number of questions regarding the interior layout of the barn remain unanswered, particularly in respect to the configuration of the south bay of the main barn and the cow house. As such, should the original wall and ceiling surfaces in these areas ever be exposed (through the course of a remodeling or general tear out), it would present an opportunity for further investigation. Determining the location of removed partitions walls, indicative of stalls or bins, would be of particular interest. Any future interior remodeling should protect the integrity of the historic framing in the barn.

Basement: No specific recommendations are called for here, other than emphasizing the need to preserve historic building fabric and features such as the tack rack that is present on the north wall of the basement.

Flooring: Original flooring in the barn that is good condition should be retained in place wherever possible. Deteriorated flooring should be replaced with like material. The flooring that has been taken up and stacked in the north bay of the barn might be able to be reused there, if rehabilitation or restoration is undertaken.

Wall and Ceiling Finishes: As originally constructed, the barn had unfinished walls and exposed ceiling. This pattern should be followed if restoration is ever undertaken.

Decorative Features and Trim: Mr. Rutherford had expressed some interest in removing the carved baseboard from the cow house section of the barn and moving it to the park museum. This would not be a problem, considering that it is not original to the building.

Hardware: Original hardware in the building ought to be preserved in place or, when necessary, be replaced with similar hardware appropriate to the period of construction for the barn.

Mechanical Equipment: No specific recommendations are made in respect to the existing mechanical systems in the barn. However, it is recommended that whatever new mechanical systems may be installed in the future not compromise the structural or historic integrity of the building. One of example of where this has happened in the past is the plumbing that services the north apartment. The sewer pipes were run through the exterior wall and the surrounding stonework was damaged in the process.

SCOPE OF WORK: HOUSE

OPTION 1: NO ACTION

Since the Howarth House is in good condition overall and is presently maintained as an occupied residence, the NO ACTION option could be adopted without threatening the structural integrity of the main residence in the *short term*. The bathroom/laundry-room addition, however, has been incurring water damage from a leaking roof. If this problem is not addressed, the addition will continue to deteriorate and eventually pose a liability to the main house. Furthermore, there are a number of maintenance-related actions that need to be undertaken on the main house in order to assure the integrity of the building over the long term. Given the Howarth House's potential National Register eligibility and the fact that it serves a useful role as a staff living quarters, we feel that the long-term protection of the building should be a goal of IDNR. With this goal in mind, we do not consider NO ACTION to be an appropriate preservation option for the Howarth House. At a minimum, stabilization should be undertaken.

OPTION 2: STABILIZATION

Stabilization of the Howarth House would involve relatively limited repairs, which would primarily occur on the exterior of the house. Stabilization envisions maintaining the current footprint of the house and would not involve the removal of any modern additions. The following recommendations for the house's exterior should be carried out regardless of the intended future use of the building's interior.

Exterior of House

1. Repair the roof over the bathroom/laundry room addition on the south side of the house.
2. Remove all vines and other vegetation currently growing on the building. The removal, or cutting back, of such growth should be included as part of the routine maintenance schedule for the building in the future.
3. Scrape, prime, and paint the eaves and cornice on the original house and the north addition. Repair deteriorated historic woodwork through recognized preservation methods, utilizing patching, piecing-in, or consolidation where possible, and replacing in kind if the wood is too deteriorated to repair.
4. Scrape, prime, and paint the window casings and sash. Re-glaze any sash requiring it. The existing wood sash on the house should be retained and repaired as needed.
5. Assess the condition of the south porch deck and make repairs as needed. Deteriorated deck flooring should be replaced with similar narrow, tongue-and-groove flooring. Other deteriorated fabric also should be replaced with like materials. In the event that the porch decking is taken up, the area beneath the porch should be subjected

to minimal archaeological investigations in order to determine the presence and character of an earlier porch and/or stoop.

Interior of House

1. Repair the damaged plaster ceiling located above the basement stair landing. The repair should be done with lath and plaster.

OPTION 3: REHABILITATION

The rehabilitation of the Howarth House would involve all of the actions recommended under Option 2 (Stabilization), in addition to several others. The most significant difference between the two options is that rehabilitation involves the removal of the bathroom/laundry-room from the south elevation of the house. This addition was the last to be made to the house and does not date from the period of significance. Furthermore, it encloses the west end of the south porch and thus detracts from the façade of the original stone house. Removing the addition will assist in restoring the historic lines of the dwelling. An ancillary effect of the addition's demolition is space will have to be found inside the main dwelling for a washer and dryer. A number of optional recommendations have been included with the scope of work for the exterior of the house. These principally affect the west wing of the house and are geared toward a partial restoration of the house's exterior to its circa 1910 appearance. The recommendations for the interior are quite limited since Option 3 envisions the dwelling continuing to be used in its present role as staff housing.

Exterior of House

1. Remove the bathroom/laundry-room addition on the south side of the house.
2. Make necessary repairs to the south elevation of the west wing, which will be exposed following the removal of the bathroom/laundry-room addition. Consideration should be given to reopen a previously enclosed window opening on this elevation, if one is found to be present.
3. Remove all vines and other vegetation currently growing on the building. The removal, or cutting back, of such growth should be included as part of the routine maintenance schedule for the building in the future.
4. Scrape, prime, and paint the eaves and cornice on the original house and the north addition. Repair deteriorated historic woodwork through recognized preservation methods, utilizing patching, piecing-in, or consolidation where possible, and replacing in kind if the wood is too deteriorated to repair.
5. Scrape, prime, and paint the window casings and sash. Re-glaze any sash requiring it. The existing wood sash on the house should be retained.

6. Repoint all deteriorated mortar joints as necessary, using appropriate mortar. The mortar used should match the original in respect to hardness, color, and texture, and the finished joints should be either flush, or slightly raked, like the original joints are.

7. Treat any stonework that is cracked and spalling to arrest further deterioration. In contrast to the barn, only a small percentage of the stonework on the house would require any work in this regard (the second-floor window sill on the south elevation, being one example). The conservation treatment adopted should be tested on a small area prior to general application, in order to assess its effectiveness. It may be necessary to consult with a specialist experienced with stone-building conservation as to the most appropriate method of treatment.

8. Assess the condition of the south porch deck and make repairs as needed. Deteriorated deck flooring should be replaced with similar narrow, tongue-and-groove flooring. Other deteriorated fabric also should be replaced with like materials. In the event that the porch decking is taken up, the area beneath the porch should be subjected to minimal archaeological investigations in order to determine the presence and character of an earlier porch and/or stoop.

9. OPTIONAL RECOMMENDATIONS:

a. Remove the aluminum siding (and all previous layers of replacement siding) from the west wing in order to expose original siding on the wing. If the original siding is still present and is still in good condition, it should be retained and refurbished. Deteriorated siding should be repaired or replaced in kind.

b. Remove the porch currently attached to the west elevation of the west wing. This porch is a late addition to the house and detracts from the dwelling's historic appearance and design.

c. Reconfigure the exterior doorways in the wing to their original locations. This would entail the infilling of the existing doorway on the north and the reopening of the original, and now-enclosed, entrance on the north. One advantage of this option is that the west porch would no longer be needed and the north porch could resume its historic role as an entrance porch. One drawback would be that the existing kitchen layout would have to be reconfigured.

d. Remove the aluminum siding from the west elevation of the north wing and expose the original siding, if still present. In the event that the original siding has been removed (which may have been done when the large picture window was installed) and its character cannot be determined, install siding appropriate to the period of construction (e.g. weatherboard with 4-1/2" exposure) or a siding that matches that used on the west wing.

e. Remove the large picture window from the north wing and install a new window that is more appropriate, historically. Ideally the size, character, and placement of the replacement window should match those of the window that was

originally at this location. If this information cannot be determined, the dimensions and sill height of the new window should be the same as the other windows on the first floor of the north wing and have the same type of sash as they do.

Interior of House

1. Repair the damaged plaster ceiling located above the basement stair landing. The repair should be done with lath and plaster.
2. Install a washer and dryer in the house. It is recommended that this be done in a manner that will protect the integrity of the historic floor plan and not entail the further subdivision of original rooms.

OPTION 4: RESTORATION

The restoration of the Howarth House would be the most expensive of the options considered in this report, and might go in one of two directions. The most involved of these options would be to restore the house to how it appeared during the late-nineteenth-century, following the construction of the north wing (circa 1860). The exterior appearance of the house during this time period is fairly well understood thanks to the 1873 lithograph of the farmstead. A restoration of the house to its circa 1873 appearance would not be a simple task, however. To begin with, it would involve the removal of the west wing and result in the loss of valuable living space. It would also entail the reconstruction of the north wall of the original stone house (which was removed when the west wing was built), the reconstruction of the east porch, and the replacement of the existing south porch with a reconstructed version of the one that was present in circa 1873. The work necessary to restore the interior of the house to its circa 1873 appearance also would be quite extensive, since the existing floor plan on the upper story largely dates from the early twentieth century. The late-nineteenth-century floor plan is well understood, but its restoration would involve considerable interior demolition. The restoration also would likely result in the building no longer being able to be used for living space.

An alternative restoration option would be to restore the house to its circa 1910 appearance. This plan poses an advantage over the circa 1873 restoration, in that it would involve much less work and maintain the current level of usable space in the house. Some of the actions necessary for a circa-1910 restoration of the dwelling's exterior have already been discussed as Item 9 under Option 3 (Rehabilitation). An accurate restoration of the interior of the house would involve the tear-out of some modern partitions, such as recently added closets and bathroom walls, and possibly the reconstruction of the wall that formerly divided the first floor of the north wing into rooms.

The question of whether or not a restoration of the Howarth House should be undertaken hinges in large measure on the expected use of the house in the future. In the event that there is a commitment to the interpretation of the house as a historic site, then restoration should be regarded as the ideal option. If there is no such commitment, however, it might be better for the house to continue in its present role as staff living quarters and that rehabilitation be undertaken.

SCOPE OF WORK: ***BARN***

OPTION 1: NO ACTION

If followed, the NO ACTION option will inevitably lead to the further decay and eventual destruction of the Howarth Barn. As it stands now, the barn faces a number of structural problems that will only grow worse if nothing is done to solve them. Of particular concern are the bulge in the east wall, the cracks evident in the opposite wall, and deterioration of the exterior stonework through cracking and spalling. There are a several reasons why no action is not considered an appropriate option for the barn: 1) the structural concerns, if not addressed, are serious enough to render a large and utilitarian building unsafe for future use by the state park (whether as residential quarters, storage, or otherwise) and create a safety hazard in bargain; and 2) no action also will result in the needless destruction of a historically significant building that is considered potentially eligible to the National Register of Historic Places. Moreover, we believe that the barn's structural problems—serious as they may be—can be effectively addressed through sensitive conservation efforts. One source that discusses stone conservation methods is “Joliet-Lemont Limestone in Illinois: Its History and Preservation,” published as bulletin No. 21 of the *Illinois Preservation Series* (Terry 2001). Although this bulletin specifically addresses Joliet-Lemont Limestone, rather than sandstone, the methodology and treatments discussed by are applicable to the Howarth Barn. A list of publications on stone conservation is provided in Appendix II. Specialized services and products for stone conservation (water repellants, stone consolidants, mortar patch, etc.) are available through such companies as Jahn Masonry Restoration Products (see Appendix III).

OPTION 2: STABILIZATION

The stabilization measures detailed below focus on the exterior of the barn and are particularly aimed at reducing the moisture to which the exterior stonework is exposed. Successive seasons of freezing and thawing over the past 142 years have caused much of the exterior sandstone to crack and spall. This problem is linked in part to the soft, porous character of the sandstone itself, as well as the extremes of the Illinois climate. Yet, the stone used to construct the barn is not inherently flawed, as is readily exhibited by the good condition of the sandstone found on the house. The cracking and spalling on the barn has been exacerbated (if not in large measure caused) by a combination of deteriorated gutters and downspouts, poor drainage, and vegetative growth, which has created higher moisture levels in the stone, kept it from drying out, and thus rendered it more susceptible to climatic stresses. Stabilization is aimed at addressing the major problems currently facing the barn and at arresting the building's further deterioration in the short term. The following actions are recommended regardless of the future use of the barn's interior.

Exterior of Barn

1. Repair exterior walls as needed to stabilize the barn. Areas of particular concern are the bulge in the east wall, the cracks in the west wall, and the stone buttresses on the

north side of the barn. It may be possible to implement the recommended repairs on a graduated schedule—based on the severity of the problem—rather than all at once and still achieve the goal of stabilization. Repairs requiring the reconstruction of walls should utilize original stone as much as possible and follow the original coursing. Stones framing the corners of the barn and door/window openings ought to be numbered prior to removal and relayed in their original location. It may be necessary to consult with a specialist experienced in stone-building conservation as to the most appropriate method of stabilization.

2. Repoint severely deteriorated mortar joints as necessary, using appropriate mortar. The mortar used should match the original in respect to hardness, color, and texture, and the joints should be either flush, or slightly raked, like the original joints are.
3. Remove all vines and other vegetation currently growing on the building. The removal, or cutting back, of such growth should be included as part of the routine maintenance schedule for the building in the future.
4. Install new gutters and downspouts on the main part of the barn, taking care to assure that they are large enough for the roof and will not overflow.
5. Assess the condition of the composition roof currently covering the main part of the barn. Re-roof this section of the barn if needed. It is suggested that any new roofing installed should be ribbed metal to match that over the cow house section of the barn.
6. Scrape, prime, and paint the eaves and cornice boards. Repair deteriorated historic woodwork through recognized preservation methods, utilizing patching, piecing-in, or consolidation where possible, and replacing in kind if the wood is too deteriorated to repair.
7. Scrape, prime, and paint window casings and sash and all exterior doors.

Interior of Barn

Stabilization calls for no specific repairs or remodeling on interior of the barn. However, it may be necessary for the residential quarters in the barn to be vacated completely during the stabilization effort, or minimally to vacate the two apartments that have been partitioned out of the main section of the barn. The cow house end of the barn appears to be structurally sound and is separated by the main section by a solid masonry wall; hence, occupancy here would seem to pose less of a safety risk. The feasibility of future occupancy in the building, however, is an issue that needs to be addressed by a structural engineer.

OPTION 3: REHABILITATION

The rehabilitation of the Howarth Barn would entail many of the same exterior repairs called for under Option 2 (stabilization), but these repairs would be more comprehensive in scope. In

contrast to stabilization, rehabilitation calls into question the long-term use of the barn's interior. One option would be for the barn to continue in its dual role as staff housing and barn. Under this plan, the housing might be maintained at its current level, or be reduced to the cow house section of the barn. A second option would envision the housing being removed from the barn entirely, and the building being utilized for storage, livestock shelter, and/or other use. Both options include recommendations that are aimed at restoring the building's exterior to how it likely appeared when last used as a barn, without seeking to interpret a specific time period. The following recommendations for the exterior of the barn are considered necessary for rehabilitation, regardless of which interior plan is adopted. We feel that rehabilitation is the most appealing preservation option for the Howarth Barn, since it seeks to assure the long-term survival of the building and its continued multi-functional use.

Exterior of Barn

1. Repair exterior walls of barn. Areas of particular concern are the bulge in the east wall, the cracks in the west wall, and the stone buttresses on the north side of the barn. Make all repairs necessary to assure the long-term structural integrity of the building. Repairs requiring the reconstruction of walls should utilize original stone as much as possible, and exterior face stones should be numbered prior to removal and relayed in their original location. It may be necessary to consult with a specialist experienced with stone-building conservation as to the most appropriate method for repairing the walls.
2. Repoint all deteriorated mortar joints as necessary, using appropriate mortar. The mortar used should match the original in respect to harness, color, and texture, and the finished joints should be either flush, or slightly raked, like the original joints are.
3. Treat the exterior stonework to arrest further cracking and spalling. The conservation treatment adopted should be tested on a small area prior to general application, in order to assess its effectiveness. It may be necessary to consult with a specialist experienced with stone-building conservation as to the most appropriate method of treatment.
4. Remove all vines and other vegetation currently growing on the building. The removal, or cutting back, of such growth should be included as part of the routine maintenance schedule for the building in the future.
5. Install new gutters and downspouts on the main part of the barn, taking care to assure that they are large enough for the roof and will not overflow.
6. Re-roof the main section of the barn with ribbed metal roofing matching that now on the cow house section.
7. Scrape, prime, and paint the eaves and cornice boards. Repair deteriorated historic woodwork through recognized preservation methods, utilizing patching, piecing-in, or consolidation where possible, and replacing in kind if the wood is too deteriorated to repair.

8. Scrape, prime, and paint window casings and sash and all exterior doors.
9. Install replacement wood sash in basement-level window openings.

Interior of Barn

Rehabilitation Option A: Maintain Current Divisions within Barn

No specific recommendations are called for under this option, if it is decided to maintain the current level of housing in the barn. However, it is recommended that the interior of the barn not be further subdivided in the future.

Interior of Barn

Rehabilitation Option B: Reduce Living Quarters to Cow House Section of Barn

An alternative to maintaining the existing living quarters would be to reduce the living quarters to the cow house section of the barn. This plan envisions the removal of the two apartments and the utility room that have been partitioned out of the main barn and the conversion of this area back into a barn. One advantage posed by this option would be that the interior of the barn would regain some of its original lines and sense of space. The exterior lines of the barn also would be partially restored by reopening the central driveway through the barn. Some living space would be lost, but storage and livestock feeding/loafing space would be gained. Disadvantages posed by this plan would be the loss of two staff apartments and a utility room and the reconfiguration of the cow house section of the barn to accommodate a relocated furnace, washer and dryer. If this plan is adopted, the following actions are recommended:

1. Remove all modern partitions in the main section of the barn, taking care to preserve historic building fabric (posts, girts, flooring, etc.). It is suggested that this removal be preceded by, or done in conjuncture with, an investigation that is aimed at identifying historic features that may have been hidden from view during the initial field investigation.
2. Remove the modern porch (superstructure and deck) on the west side of the building and install large double doors in the west doorway for the central drive. These doors should be similar in character to those currently present on the east doorway.
3. Raise the floor level in the south bay of the main barn with earth and/or gravel fill so that it is even with the central driveway.
4. Install wood sash in the window openings that are present in the south bay.
5. Install flooring in the north bay of the main barn. The original flooring has been taken up and is stacked along the wall in the bay. If sound, this flooring should be reused. Original flooring that is damaged or missing should be replaced with like material.

Interior of Barn

Rehabilitation Option C: Single Use as Barn

This option would entail all of the actions called for under Rehabilitation Option B, but also would include the removal of all modern partitions and ceiling coverings from the cow house section of the barn. Several additional actions would also be called for.

1. Remove the large window currently in place in the arched doorway on the south side of the cow house and replace it with a new set of paired vertical-plank doors. These doors should be of similar construction to those found on the east entrance to the central driveway. If possible, the replacement doors should be hung from the original pintles, which are still in place.
2. Remove the existing doors from the two smaller doorways on the cow house and replace them with Dutch doors of plank construction, similar to that found on the basement level of the barn.

OPTION 4: RESTORATION

Restoration would present the most expensive and complicated of the preservation options available for the Howarth Barn. One of the difficulties presented by this option is the period of significance, and thus interpretation. An ideal would be to interpret the barn as originally constructed, or during its early years of use. Thanks to the 1873 lithograph, we have an excellent idea of the how the exterior of the barn during this period. Yet, that exterior appearance has been altered through the construction of a replacement roof over the main section of the barn, the removal of the stonework in the north gable, and the addition of the stone buttresses. Proper interpretation of the barn circa 1873 would involve the removal of the circa 1900 roof structure with a reconstructed version that matches the original in respect to pitch and type of construction, besides involving the rebuilding of the north wall to its original height and the removal of the stone buttresses. Considering the structural problems the north wall has faced in the past, however, these actions quite likely would threaten the structural integrity of the building, or possibly result in the north wall having to be rebuilt from the foundations up—neither of which is desirable from a preservation standpoint. Interpretation of the interior of the barn also is problematic. Even though we understand the gross divisions and activity areas within the barn, we lack the detailed information needed to make an accurate restoration (such as the number and placement of stalls and grain bins). More extensive investigations on the barn's interior will undoubtedly reveal additional structural details, but we do not know to what extent. An alternative to restoring the barn to its original appearance would be a circa 1900 restoration, which would encompass the remodeled roof and the modifications to the north wall. Restoration of the exterior under this plan would involve many of the same tasks detailed above under Rehabilitation Option B, except that it would require more stringent guidelines for the accurate reproduction of missing features associated with the restoration period, including doors, windows, guttering, and roofing. A circa 1900 interior restoration, however, would face the same problem presented by the earlier restoration (i.e. lack of information about interior details). As such, we feel that the Rehabilitation Options B or C present better alternatives to restoration.

REFERENCES CITED

- Allen, D.
1861 *Map of Peoria County*. Mathews, Crane, and Company, Philadelphia, PA.
- Andreas, A. T.
1873 *Atlas Map of Peoria County, Illinois*. Chicago, IL.
- Alvord, Clarence W.
1987 *The Illinois Country, 1673-1818*. University of Illinois Press, Urbana, IL.
- Bateman, Newton and Paul Selby
1902 *Historical Encyclopedia of Illinois and History of Peoria County*. Munsell Publishing Company, Chicago, IL.
- Biographical Publishing Company
1890 *Portrait Biographical Album of Peoria County, Illinois*. Chicago, IL.
- Birkbeck, Morris
1966 *Notes on a Journey in America*. Number 62 of the *March of America Facsimile Series*. University Microfilms, Inc., Ann Arbor, MI
- Boewe, Charles
1962 *Prairie Albion: An English Settlement in Pioneer Illinois*. Southern Illinois University Press, Carbondale, IL.
- Bogart, Ernest Ludlow and Charles Manfred Thompson
1920 *The Industrial State 1870-1893*. Illinois Centennial Commission, Springfield, IL.
- Brunskill, R. W.
1978 *Illustrated Handbook of Vernacular Architecture*. Faber and Faber, London.

1987 *Traditional Farm Buildings of Britain*. Victor Gollancz Ltd., London.
- Burlend, Rebecca and Edward Burlend
1968 *A True Picture of Emigration*. Reprint of 1936 edition, originally published in 1848. Citadel Press, Inc., New York, NY.
- Coney, William B.
1989 *Masonry Repointing of Twentieth-Century Buildings*. *Illinois Preservation Series*, No. 10. Illinois Historic Preservation Agency, Springfield, IL.
- Cronon, William
1991 *Nature's Metropolis: Chicago and the Great West*. W. W. Norton and Company, New York, NY.

DeLorme Mapping

1991 *Illinois Atlas and Gazetteer*. DeLorme Mapping, Freeport, ME.

Family Search International Genealogical Index

Individual records for Richard Howarth and Alice Lonsdale.
<http://www.familysearch.org>.

Fries, Robert F.

1951 *Empire in Pine: The Story of Lumbering in Wisconsin*. The State Historical Society of Wisconsin, Madison, WS.

Godden, Geoffrey A.

1964 *Encyclopaedia of British Pottery and Porcelain Marks*. Schiffer Publishing Company, Exton, PA.

Historic American Buildings Survey

1936 Historic American Buildings Survey Form for Jubilee College (HABS No. ILL-235).

Hixson, W. W. and Company

1904 *Map of Peoria County, Illinois*. Hendrickson and Richardson, n.p.

Higham, John

1994 *Strangers in the Land: Patterns of American Nativism, 1860-1925*. Rutgers University Press, New Brunswick, NJ.

Howard, Robert P.

1972 *Illinois: A History of the Prairie State*. William B. Eerdmans's Publishing Company, Grand Rapids, MI.

Hulme, Edward Maslin

1924 *A History of the British People*. The Century Company, New York, NY

Illinois Department of Conservation

1977 *Preservation Illinois: A Guide to State and Local Resources*. Springfield, IL.

Illinois Historic Sites Survey

1972a Illinois Historic Sites Survey Inventory Form for St. Patrick's Church, Kickapoo, Peoria County (P-H-12). Copy on file at the Illinois Historic Preservation Agency, Springfield, IL.

1972b Illinois Historic Sites Survey Inventory Form for Zion Protestant Episcopal Church, Peoria County (P-H-2). Copy on file at the Illinois Historic Preservation Agency, Springfield, IL.

1972c Inventory of Historic Landmarks in Peoria County. Copy on file at the Illinois Historic Preservation Agency, Springfield, IL.

1973 Inventory of Architecture before World War II in Peoria County. Copy on file at the Illinois Historic Preservation Agency, Springfield, IL.

Johnson and Company

1880 *History of Peoria County, Illinois*. Chicago, IL

Kenyon, Leslie H.

[1972] Historic Sites Survey of Peoria County. Prepared for the Illinois Historic Sites Survey. Copy on file at the Illinois Historic Preservation Agency, Springfield, IL

Mack, Robert and John P. Prewik

1998 Repointing Mortar Joints in Historic Masonry Buildings. *Preservation Briefs*, No. 2. National Park Service, Washington, D. C.

Madden, Betty I.

1974 *Art, Crafts, and Architecture in Early Illinois*. University of Illinois Press, Urbana, IL.

Marino, Gennaro G.

2001 Phase 1 Subsidence Survey of Wildlife Prairie State Park, Peoria, Illinois (October 22 Draft). Prepared for Basalay, Cary and Alstadt Architects.

Marshall, John D.

1974 *Lancashire*. Newton Abbot, North Pomfret, VT.

Meyer, Douglas K.

2000 *Making the Heartland Quilt: A Geographical History of Settlement and Migration in Early-Nineteenth-Century Illinois*. Southern Illinois University Press, Carbondale, IL.

Ogle, George A. and Company

1896 *Standard Atlas of Peoria City and County*. Chicago, IL.

Peoria County

Deed Record. Peoria County Recorder's Office, Peoria, IL.

Estate Record. Peoria County Circuit Clerk's Office, Peoria, IL.

Surveyor's Record. Peoria County Recorder's Office, Peoria, IL.

Pease, Theodore Calvin

1918 *The Frontier State 1818-1848*. Illinois Centennial Commission, Springfield, IL

Peoria Journal-Star

- 1963 120 Year-Old Homestead—Believed to be the Oldest Inhabited Farm House in Peoria County. *Peoria Journal-Star*, 5 December 1963, p. E-5. Peoria, IL

Rice, James Montgomery

- 1912 *Peoria City and County, Illinois: A Record of Settlement, Organization, Progress, and Achievement*. S. J. Clarke, Chicago, IL.

Richmond, Andrew S. (editor)

- 2001 A Brief Biography of Philander Chase. The Papers of Philander Chase. <http://www2.kenyon.edu/khistory/chase/biography/biography.htm>. Kenyon College, Gambier, OH. 15 January.

Rybczynski, Witold

- 2000 *One Good Turn: A Natural History of the Screwdriver and the Screw*. Scribner, New York, NY

State Bureau of Labor Statistics

- 1891 *Statistics of Coal in Illinois. Ninth Annual Report*. H. W. Rokker (State Printer and Binder), Springfield, IL.

State of Illinois

- 1984 Public Domain Sales Land Tract Record Listing. Archives Division, Springfield, IL.

Terry, Andrea C.

- 2001 Joliet-Lemont Limestone in Illinois: Its History and Preservation. *Illinois Preservation Series*, No. 1. Illinois Historic Preservation Agency, Springfield, IL.

United States Bureau of the Census (USBC)

- 1850a Agricultural Schedule of Peoria County, Illinois. Microfilm copy on file at Illinois State Archives, Springfield, IL.
- 1850b Population Schedule of Peoria County, Illinois. Transcript copy on file at Illinois State Historical Library, Springfield, IL.
- 1860a Agricultural Schedule of Peoria County, Illinois. Microfilm copy on file at Illinois State Archives, Springfield, IL.
- 1860b Population Schedule of Peoria County, Illinois. Microfilm copy on file at Illinois State Archives, Springfield, IL.
- 1870a Agricultural Schedule of Peoria County, Illinois. Microfilm copy on file at Illinois State Archives, Springfield, IL.

- 1870b Population Schedule of Peoria County, Illinois. Microfilm copy on file at Illinois State Archives, Springfield, IL.
- 1880a Agricultural Schedule of Peoria County, Illinois. Microfilm copy on file at Illinois State Archives, Springfield, IL.
- 1880b Population Schedule of Peoria County, Illinois. Microfilm copy on file at Illinois State Archives, Springfield, IL.
- 1900 Population Schedule of Peoria County, Illinois. Microfilm copy on file at Illinois State Archives, Springfield, IL.
- 1910 Population Schedule of Peoria County, Illinois. Microfilm copy on file at Illinois State Archives, Springfield, IL.

United States Geological Survey

- 1996 *Hanna City, IL Quadrangle*. 7.5 minute series. Washington, D. C.
- 1996 *Peoria West Quadrangle*. 7.5 minute series. Washington, D. C.

United States General Land Office (USGLO)

- 1844 *Township 9 North, Range 7 East of the Fourth Principal Meridian*. Federal Township Plats, Volume 23, Record Group 953.012, Illinois State Archives, Springfield, IL.
- 1862 *Township 9 North, Range 7 East of the Fourth Principal Meridian*. Federal Township Plats, Volume 50, Record Group 953.012, Illinois State Archives, Springfield, IL.

Van Vugt, William E.

- 1999 *Britain to America: Mid-Nineteenth-Century Immigrants to the United States*. University of Illinois Press, Urbana, IL.

Williams, Petra

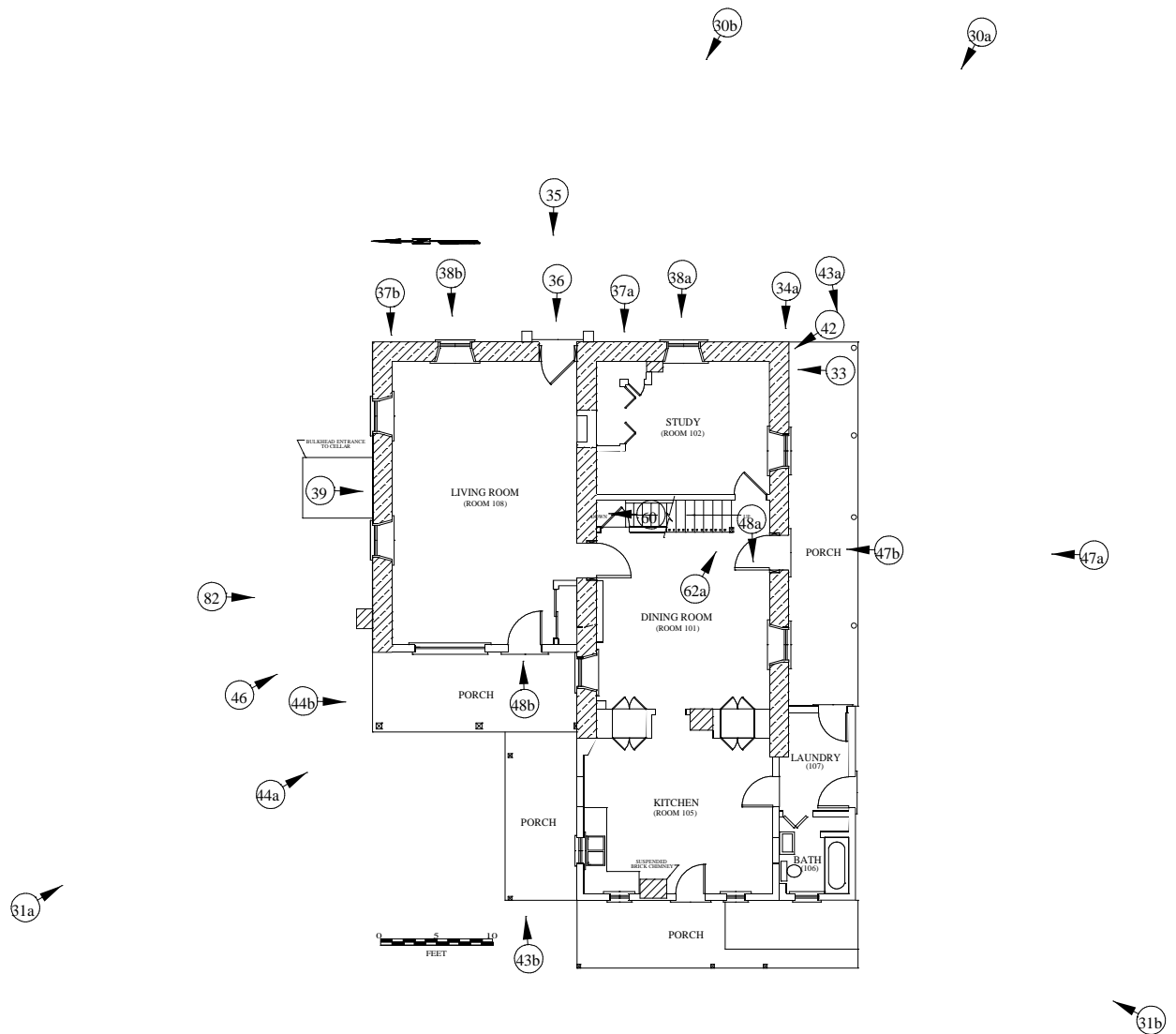
- 1988 *Flow Blue China II*. Fountain House East, Jeffersontown, KY.

Worthen, A. H.

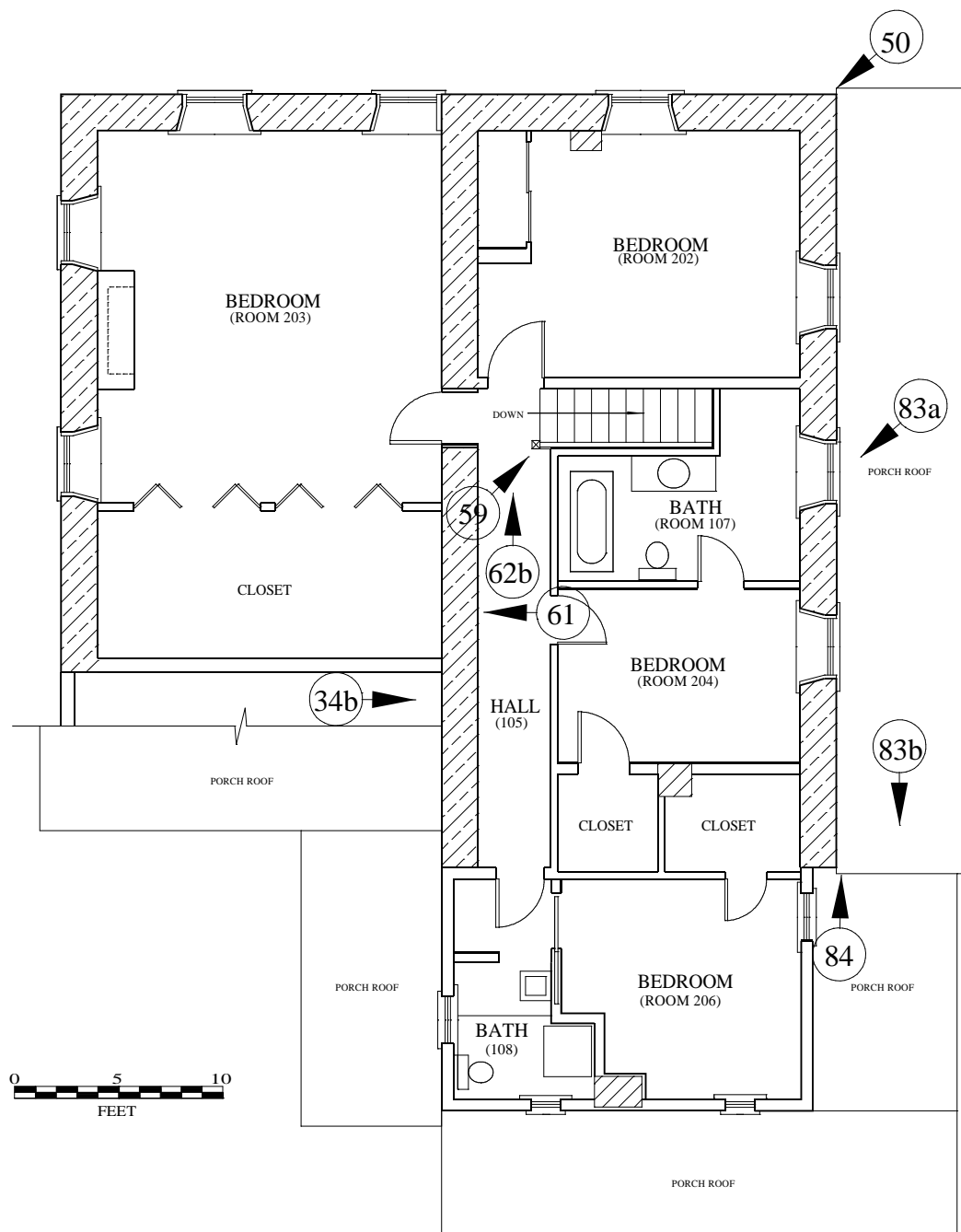
- 1882 *Economical Geology of Illinois*. H. W. Roker (state printer and binder), Springfield, IL.

APPENDIX I: PHOTOGRAPHIC KEYS

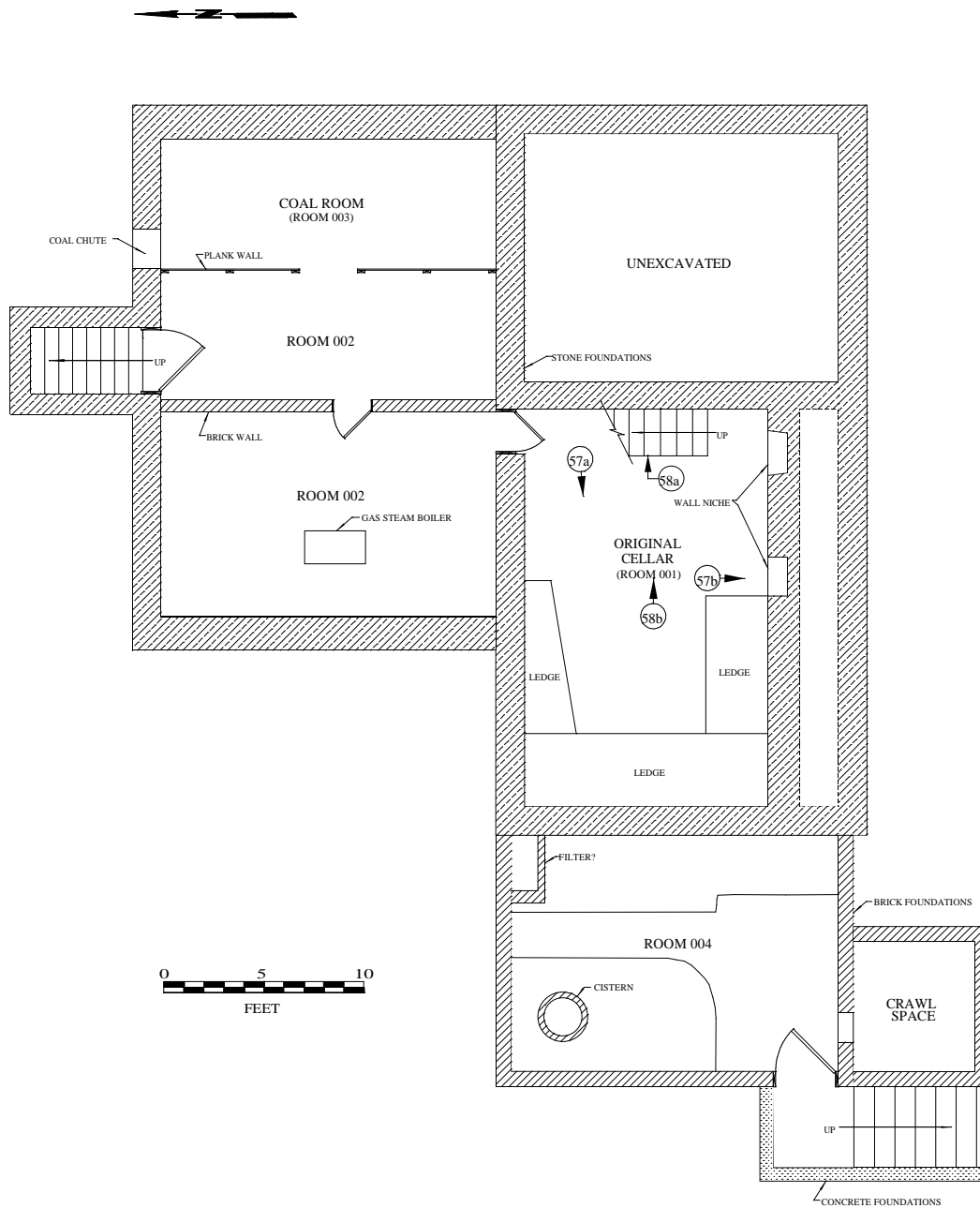
NOTE: The photograph numbering corresponds to the figure number in which a given photograph was mocked-up in the report. A photograph number followed by the letter “a” references the top image in a figure, while those marked with a “b” indicates the lower image.



First Floor of Howarth House

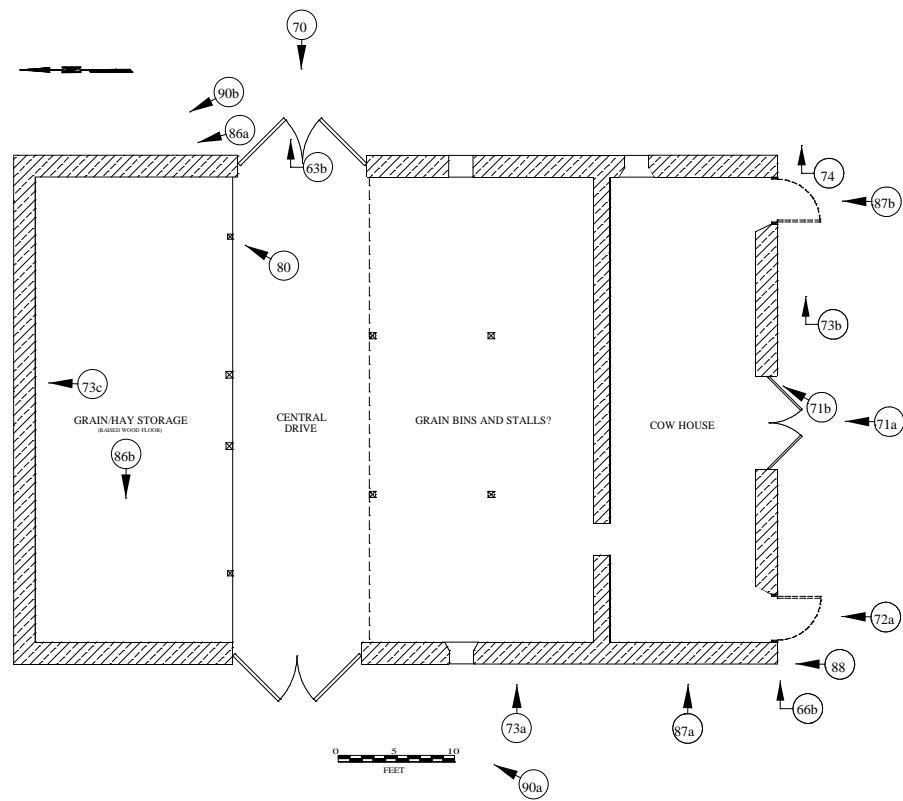


Second Floor of Howarth House



Basement of Howarth House

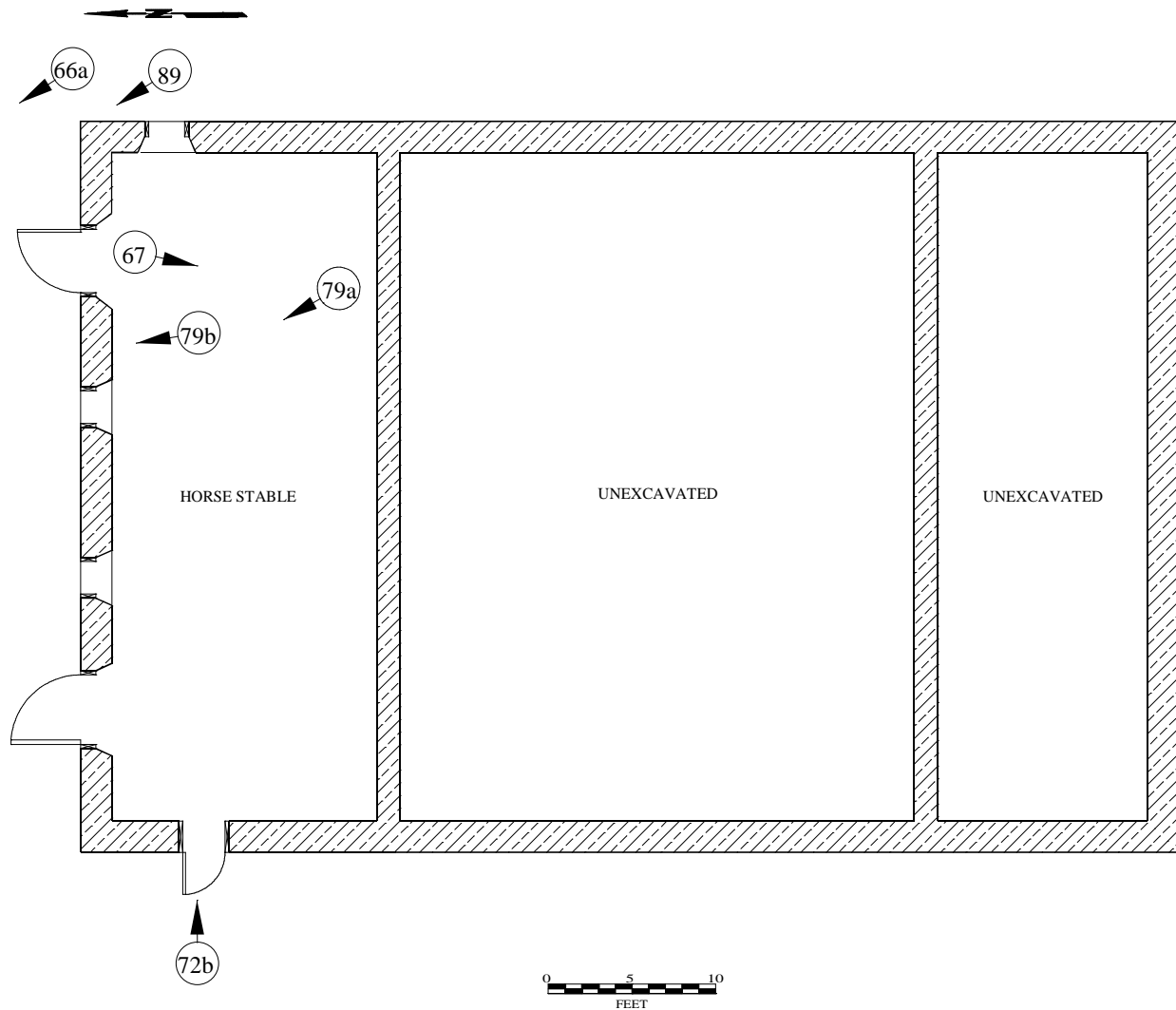
64a



63a

64b

First Floor of Howarth Barn



Basement of Howarth Barn

**APPENDIX II:
PUBLICATIONS ON THE CONSERVATION OF
HISTORIC STONE BUILDINGS**

Ashurst, John and Francis G. Dimes

- 1990 *Conservation of Building and Decorative Stone*. Volumes 1 and 2. Butterworth-Heinemann, Stoneham, MA.

Boyer, David W.

- 1987 A Field and Laboratory Testing Program, Determining the Suitability of Deteriorated Masonries for Chemical Consolidation. *Association for Preservation Technology Bulletin* 4 (1987):45-52.

Clifton, James R.

- 1980 *Stone Consolidating Material: A Status Report*. U. S. Government Printing Office, Washington, D. C.

Coney, William B.

- 1989 Masonry Repointing of Twentieth-Century Buildings. *Illinois Preservation Series*, No. 10. Illinois Historic Preservation Agency, Springfield, IL.

Grimmer, Anne E.

- 1984 *A Glossary of Historic Masonry Deterioration Problems and Preservation Treatments*. National Park Service, Washington, D. C.

Mack, Robert P.

- 1975 The Cleaning and Waterproof Coating of Masonry Buildings. *Preservation Briefs*, No. 1. National Park Service, Washington, D. C.

Mack, Robert and John P. Prewik

- 1998 Repointing Mortar Joints in Historic Masonry Buildings. *Preservation Briefs*, No. 2. National Park Service, Washington, D. C.

Michael, Vincent L. and Deborah J. Slaton (editors)

- 1988 *Preservation of a Historic Building Material: Joliet-Lemont Limestone*. Landmarks Preservation Council of Illinois, Chicago, IL.

National Trust for Historic Preservation

- 1976 *Preservation and Conservation: Principles and Practice*. Preservation Press, Washington, D. C.

Weaver, Martin E.

- 1993 *Conserving Buildings: Guide to Techniques and Material*. John Wiley and Sons, New York, NY.

Weeks, Kay D. and Anne E. Grimmer

- 1995 *The Secretary of the Interior's Standards for the Treatment of Historic Properties, with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*. National Park Service, Washington, D. C.

Winkler, Erhard

- 1985 Testing Techniques for the Effectiveness of Stone Consolidants. *Association for Preservation Technology Bulletin* 17 (1985):35-37.

Terry, Andrea C.

- 2001 Joliet-Lemont Limestone in Illinois: Its History and Preservation. *Illinois Preservation Series*, No. 1. Illinois Historic Preservation Agency, Springfield, IL.

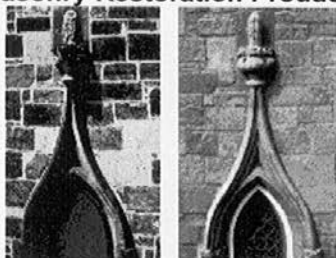
Zinsmeister, Klaus J. H., Norman R. Weiss, and Francis R. Gale

- 1988 Laboratory Evaluation of Consolidation Treatment of Massillon (Ohio) Sandstone. *Association for Preservation Technology Bulletin* 20 (1988):35-39.

APPENDIX III:
STONE RESTORATION PRODUCTS



Masonry Restoration Products



**Masonry Restoration
Products**
are available from:

Cathedral Stone

Products, Inc.
8332 Bristol Court, #107
Jessup, MD 20794

Phone: (800) 684-0901

Fax: (800) 684-0904

Web:

www.JahnMortars.com Call
for the representative nearest
you.

The Jahn masonry restoration products provide solutions for most masonry and terra cotta repair problems:

Ornamental repairs in-situ allow enormous cost savings compared to traditional dutchman or casting replacements.

injection grouts -- Jahn injection grouts seal cracks, fill voids, and stabilize any masonry material. They are one-component, easy to mix and use, completely breathable, and water-based. Products include:

M30 Micro Injection Adhesive

M40 Crack Injection Grout

M50 Void Injection Grout

restoration mortars -- Jahn restoration mortars repair all architectural masonry including brick, bluestone, cast stone, concrete, granite, limestone, marble, plaster, sandstone, slate, and terra cotta. Mortars are all one-component, completely breathable, and contain no synthetic polymers. Products include:

M60 Stucco

M70 Limestone/Sandstone Patching Mortar

M80 Anchor-Setting Mortar

M90 Concrete Patching Mortar

M100 Terra Cotta Patching Mortar

M110 Historic Pointing Mortar

M120 Marble Patching

Mortar M150 Casting

Mortar M160 Hardstone Patching Mortar

training workshops -- Masonry restoration workshops show the proper application and finishing techniques when using the Jahn mortars. More than 600 installers have been trained in these advanced restoration techniques since 1990.

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Cathedral Stone Products, Inc.

Jahn Restoration Mortars: Natural mortars form permanent bond to stone, brick

by the editors of The Old House Web

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Jahn Restoration Mortars are intended for the repair of architectural masonry, including brick, bluestone, cast stone, concrete, granite, limestone, marble, plaster, sandstone, slate and terra cotta. The one-component mortars are easy to mix, contain no synthetic polymers and are fully compatible with existing substrates.

The mortars "breathe," allowing water-soluble salts and other damaging minerals to escape the surface. The mortar mixes are factory controlled to ensure consistency, and can be custom colored to avoid a patched appearance.

Mortars include:

- Stucco: A one-coat, plaster for use on new or existing masonry substrates. It may be applied as a ground coat or finished system, ranging in thickness from 1/4" to 3/4". The one-coat water-based system reduces application time and is available for interior or exterior use.
- Limestone/sandstone mortar repair: A one-component,



Janh stucco was used for the restoration of the Midland County Courthouse in East Lansing, Michigan.

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non-sag mineral based mortar for repair and reconstruction of natural stone surfaces including limestone, brownstone and certain pre-cast concretes. Completely vapor permeable at any depth, the mortar is available in a variety of lab-engineered mixtures to match physical properties of the material being repaired -- from complex ornamentation to basic spalls.

- Historic pointing mortar: A one-component, mineral based pointing mortar formulated for the repair of mortar joints. It contains no synthetic bonding agents or foreign additives and is compatible with historic masonry. Each pointing mortar formula is designed to have a lower compressive strength than the surrounding masonry. It is completely vapor permeable and can be custom colored at manufacture.
- Terra cotta repair mortar: A one-component, mineral based mortar for the restoration of terra cotta and brick surfaces. Vapor permeable and containing no synthetics, the mortar can be site mixed in small quantities. It is specifically designed for oven-fired materials, and can be custom colored for a permanent repair. Available only to authorized installers.

Other products distributed by Cathedral Stone Products include injection grouts, tinting for mortar joints, high calcium lime putty for use in replicating historic lime putty mortars and liquid silicate paints for masonry and plaster.

Specifications	
Cathedral Stone Products, Inc.	
Description	Jahn restoration mortars for repair of architectural masonry, including brick, bluestone, cast stone, concrete, granite, limestone, marble, plaster, sandstone, slate and terra cotta.
Features	One component, easy to mix Water based, easy clean-up Vapor permeable Custom coloring available No synthetic bonding agents Compatible with historic materials
Products	M60: Stucco M70: Limestone/sandstone repair mortar M80: Anchor setting mortar M90: Structural concrete repair mortar M100: Terra cotta and brick repair mortar M110: Historic pointing mortar limestone/sandstone M120: Marble patching mortar M150: Special dry casting mortar M160: Hard stone mortar
Availability	Some products available only to authorized installers. Check manufacturer Web site.

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8/3/2001

**APPENDIX IV:
THE LONSDALE HOUSE,
KICKAPOO TOWNSHIP, PEORIA COUNTY, ILLINOIS**

As part of the context development for the Howarth Farmstead, Fever River Research conducted a partial architectural documentation of the Lonsdale House, an 1840s stone house located off Goetz Road one mile southeast of the farmstead. This house was of interest not only as fine example of middle-nineteenth-century vernacular stone architecture, but also due to the fact that it is contemporary with Howarth House and was built by another Lancashireman. As previously discussed above in the main text, Thomas Lonsdale erected the dwelling in 1845, one year after settling in Peoria County. Prior to immigrating, he had resided in Blackburn, a textile center located only twelve miles west of Richard Howarth's hometown of Bacup. The investigation of the Lonsdale House was made possible through the courtesy of Jeff and Timberly Miller, and Jeff's father Ted, who are the current landowners and live adjacent to the property. The house has sat vacant for many years, with its upper floor being used as hay loft by several generations of the Miller Family. Although no longer used for hay storage, the dwelling faces imminent collapse due to the recent failure of its rear (west) wall. In this respect, the opportunity to record the structure was very timely. Floor plans and photographs of the house are attached below.

The Lonsdale House is a two-story, side-gabled structure with a three-bay façade. The house faces east and has a nearly square footprint measuring 34'-10" (north/south) by 27'-9" (east/west). The first floor of the house is divided between three rooms, which are believed to have functioned as a parlor/bedroom, kitchen/dining room, and a pantry historically. The front (east) door opens into the kitchen/dining room (Room 101). This room measures 17'-6"x14'-4", has a large fireplace along its south wall, and is illuminated by a single window on the east. Functionally, Room 101 would have been the equivalent of the "hall" in the original Howarth House. Located west of the kitchen/dining room is a suspected pantry (Room 102), measuring 14'-4" 8'-9". The function of this chamber is suggested by its relatively small size and its position in relation to the kitchen, the cellar, and rear yard—three areas involved in food storage, preparation, and service. An enclosed stairway accessing the upper floor of the house rises along the east wall of the pantry. Stacked beneath this is a second stairway leading to a small cellar (now largely filled with debris), which is was located just beneath the pantry and not the rest of the house. The north half of the first floor is occupied by a single room extending the full width of the house (Room 103). Measuring 12'-4"x24'8" this space is believed to have served both as a formal parlor and also as bedroom space. It has a large fireplace and its north wall and one window each, on its east and west sides. The wall and ceiling finishes in the first floor rooms are indicative of their suspected uses. In Room 102, for example, the stone walls were simply whitewashed, rather than plastered, and the ceiling joists were left exposed and unpainted—finishes fitting for a utilitarian room such as a pantry. In Room 101, the kitchen/dining room, walls were plastered, and the ceiling joists, though originally left exposed, were whitewashed. Only at a later date was date was the ceiling was covered with plaster and lath. Room 103 was

the most finished in the house, having plastered walls and a plaster-and-lath ceiling apparently from the beginning (as indicated by the lack of whitewash on the ceiling joists).

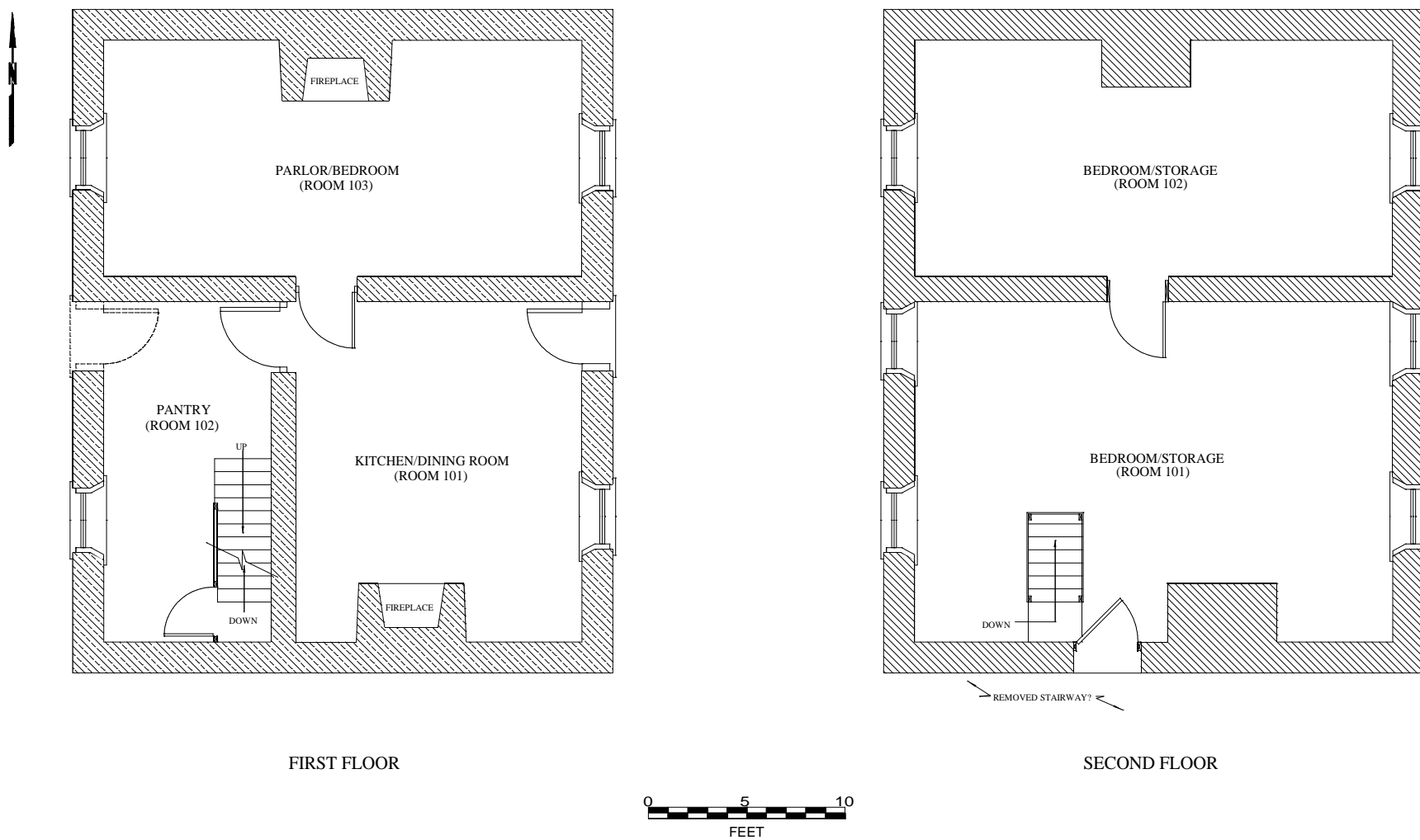
The second floor of the Lonsdale House is divided into two large rooms by a central dividing wall. The southern room (Room 201) is the larger of the two and has two windows each on its east and west sides. In addition, it has an exterior doorway on the south. Given the height at which this doorway is located above the ground, it presumably was accessed by means of an exterior stairway originally. No physical evidence of such a stairway is readily evident, however. The north room (Room 202) on the second floor has only two windows, one being located on the east and the other on the west. Rooms 201 and 202 are believed to have served either as bedrooms or for storage space. They are least finished in the house, having exposed stone walls (lacking even whitewash) and ceilings open to the rafters. However, it is possible that finished ceilings may have once been present, and they were torn out when the upper floor was converted into a hay loft. Ellis Lonsdale, Thomas Lonsdale's son, stenciled his name on the door jamb between Rooms 201 and 202.

The exterior walls of the Howarth House are constructed with regularly coursed, cut limestone and average 1'-6" in thickness. The interior walls also are of stone. All of the large-dimensional lumber used in the construction of the house (joists, sills, etc.) is oak, and this material is of mixture in-the-round, hand-hewn, and vertical-sawn stock. Interior trim and window casing are white pine.

Although the Lonsdale House is larger than the Howarth House (as originally built), it lacks some of the sophistication of the latter dwelling. Its stonework is not as finely dressed, and wood, rather than stone, lintels are used above the door and window openings. Nor does it have a formal stairway leading to the second floor, as the Howarth House does, having instead a simple, utilitarian stairway located in the pantry room. The differences between the two houses, in respect to floor plan and workmanship, are of interest given their similarities in regard to material of construction, dates of construction, origins of their builders, and geographic location.



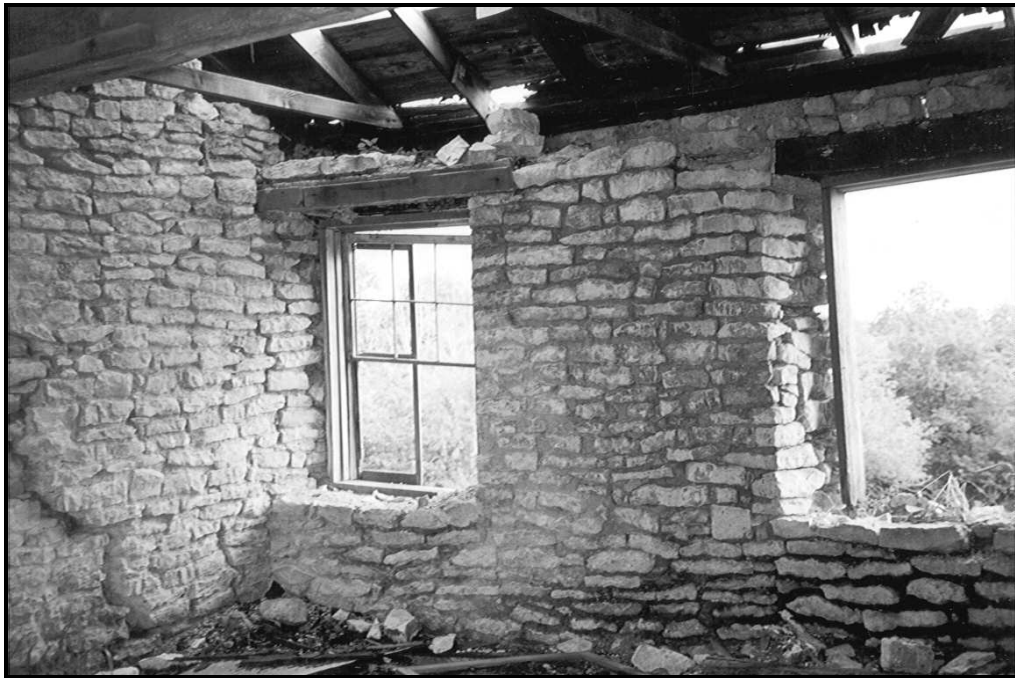
Appendix Figure 1. Exterior views of the Lonsdale House. (TOP) The front, or east, elevation, looking southwest. (BOTTOM) The rear elevation, showing the partially collapsed wall here (FRR September 2002).



Appendix Figure 2. First and second floor plans of the Lonsdale House. There is no evidence of the floor plan having ever been altered (FRR 2001).



Appendix Figure 3. View of the fireplace in the first floor room believed to have been used as a combination parlor and bedroom originally (Room 103). Unlike the other rooms in the house, this room had the fully plastered walls and ceilings.



Appendix Figure 4. (TOP) View of the large stone chimney on the south gable-end of the house. Note the original hand-hewn beams whose ends are incorporated into the chimney. The roof was replaced in the twentieth-century. (BOTTOM) Interior view of Room 201, illustrating the unfinished character of the walls and ceilings on the upper floor. Also note the surviving six-light sash in the left window (FRR September 2001).