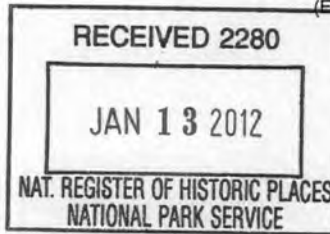


United States Department of the Interior
National Park Service



42

National Register of Historic Places Registration Form

1. Name of Property

historic name Roberts, Thomas Zane, House and Workshop

other names/site number BE-1057

2. Location

street & number 5074 Middle Creek Road

city or town Burlington

state Kentucky code KY county Boone code 015 zip code 41005

<input type="checkbox"/> NA	not for publication
<input checked="" type="checkbox"/> X	vicinity

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property meets does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

national statewide local

Signature of certifying official/Title Lindy Casebier, Acting SHPO

1/3/2012
Date

Kentucky Heritage Council/State Historic Preservation Office
State or Federal agency/bureau or Tribal Government

In my opinion, the property meets does not meet the National Register criteria.

Signature of commenting official

Date

Title _____ State or Federal agency/bureau or Tribal Government

4. National Park Service Certification

I hereby certify that this property is:

entered in the National Register

determined eligible for the National Register

determined not eligible for the National Register

removed from the National Register

other (explain) _____

[Signature]
Signature of the Keeper

2/28/2012
Date of Action

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5. Classification

Ownership of Property
 (Check as many boxes as apply.)

- private
- public - Local
- public - State
- public - Federal

Category of Property
 (Check only one box.)

- building(s)
- district
- site
- structure
- object

Number of Resources within Property
 (Do not include previously listed resources in the count.)

Contributing	Noncontributing	
3		buildings
		district
1	1	site
		structure
		object
4	1	Total

Name of related multiple property listing
 (Enter "N/A" if property is not part of a multiple property listing)

Historic and Architectural Resources of Boone County, Kentucky, 1789-1950 MPS

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions
 (Enter categories from instructions.)

DOMESTIC/single dwelling

Current Functions
 (Enter categories from instructions.)

Religion: church-related residence

7. Description

Architectural Classification
 (Enter categories from instructions.)

No style

Materials
 (Enter categories from instructions.)

foundation: Limestone
 walls: wood

 roof: metal
 other: Wood

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Narrative Description

Summary Paragraph

The Thomas Zane Roberts House (BE-1057) is a frame temple-front dwelling with inset corner entry porch, built in 1900. It was designed and built by its original owner, a master carpenter as well as a farmer, miller and inventor. Presently used as a retreat center, it is in very good condition. Beside the house stands Roberts' former workshop, a frame structure built around 1900. Behind it is a frame smokehouse, likely built around the same time. The Roberts property is located on Middle Creek Road in rural western Boone County, Kentucky, approximately three miles southeast of the Ohio River. The area proposed for listing is a one-acre parcel, which includes the house, workshop and smokehouse, within the larger property, a 16-acre tract.

Site Character and Changes Over Time. In 1842, Thomas Zane Robert's parents moved to Boone County and bought 250 acres of land. This land was labeled the "steam mill tract" in deed records; it borders Middle Creek and contains the acreage proposed for listing. The family established a farm and gristmill, where local farmers brought corn and wheat to be ground. The mill, no longer extant, is indicated on D.J. Lake's 1883 northern Kentucky atlas (Lake 1883).

On March 16, 1897, Roberts sold 154 acres to his nephew, Ralph G. Cason, for \$4,500 cash in hand and a \$3,000 mortgage, and sold 14.9 acres to Ralph Z. and Josephine Cason. The property subsequently remained in the Cason family until the 1970s.

The Roberts House is located in the picturesque, wooded bottomlands of Middle Creek, one-and-a-half miles south of Burlington Pike (Kentucky 18). A quiet, narrow, country lane, Middle Creek Road meanders along the creek for which it is named. Most of the farm's original 250 acres are now part of the scenic Middle Creek Park, operated by the Boone County Parks Department.

The Roberts property occupies a strip of land between the road and a wooded hillside. Nestled against the base of the hill, the main house faces the road and is adjoined by the workshop and smokehouse. Present during Roberts' tenure, both structures are contributing resources. The property also includes two low stone retaining walls, a contributing resource. Other features appear to have been added after Roberts' tenure and are therefore considered noncontributing: a barbecue pit and stone-bordered firepit. There is also a small flagstone-paved parking lot built in 2007 that is noncontributing due to age. On the other side of the road, beside the creek, stood the Roberts mill, which has been demolished. The mill site is not included in the nominated area.

Exterior description. The main house, which displays the date "1900" carved into a window frame, is a two-story frame dwelling with gently pitched front-gabled roof. The broad facade, which contains two bays, is articulated by slender pilasters and culminates in a boxed pediment. The main entrance is contained in an inset corner porch carried by slender turned posts and accentuated by a spindled frieze. The body of the house is covered with clapboards and the porch with flush horizontal siding. The front and rear doors exhibit a distinctive design with two or three horizontal glazed panels above vertical wood panels. The front door, the more elaborate of the two, features a central panel of red glass. At the north end of the porch is an unglazed four-panel door. Behind the house's main block is an enclosed former porch.

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Like its original owner, the house is idiosyncratic and not easily characterized. The closest stylistic approximation is to a temple-front Greek Revival house, with boxed pediment, juxtaposed by a fashionable Victorian porch. The Boone County dwelling it mostly closely resembles is the Rice House (BE-613; demolished) in Richwood, a front-gabled, side-passage frame Greek Revival residence built several decades earlier. In the 19th-century rural tradition of recycling building materials and structures, the house was built in part using materials from a smaller earlier house constructed by Roberts on the hillside and occupied by him from 1881 to 1892.

Interior Description. The interior of the Roberts house was built with wainscoting, carved ceilings and elaborate woodcarvings fashioned by Roberts from a variety of fine hardwoods, including walnut and white birch; Roberts is said to have set aside the finest wood he could find for use in the house. "Roberts not only chose trees from his land, but his diary shows that he went to his neighbors and bought certain of their finer trees. Roberts would personally cut the trees and haul them to Parsons' sawmill" (Frohlich 2008: 93). The sawmill was run by a business associate and friend.

The house still has an abundance of woodwork, some varnished, most painted often. Most of the walls are covered with pine boards, and the ceilings with beaded wood. Some of the second-floor walls, however, are plastered. Doors are of a typical late-Victorian-era five-panel design with iron rimlocks and white porcelain knobs.

As built, the house contained four rooms on each floor. The original floor plan is still evident, although some alterations have been made to accommodate the change of use to a retreat center. The first floor layout now contains a living room, dining room and kitchen, and a bath/laundry in what was formerly Roberts' bedroom. The living room and the bath/laundry exhibit the most elaborate decorative finishes. Centerpiece of the living room is a walnut mantelpiece with raised square, rectangular and diamond panels. The diamond panels, on the lintel, are carved with the letters "G-O-D," reflecting Roberts' deep religious faith. Paneled walnut wainscoting surrounds the walls. The living room and the bath/laundry exhibit ribbed woodwork with bullseye corner blocks. Similar, but simpler, wood moldings are found in the dining room, which also exhibits a Greek Revival post-and-lintel mantelpiece that appears to have been relocated from another, earlier building. The bath/laundry retains a two-tier wooden paneled ceiling.

A two-run staircase leads to the second floor. The first flight is enclosed; the second features a balustrade with turned spindles and a circular, ribbed newel with ball finial. Like the mantels, living room wainscot, and bedroom ceiling, the staircase is dark-stained and covered with high-gloss varnish. The second floor contains three bedrooms with simple, flat wood trim. A fourth room has been converted to two bathrooms in a recent remodeling. A hatch leads to the unfinished attic.

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List of Changes to these Features since Roberts' Tenure

The house has seen some exterior alterations. The windows have been replaced with vinyl units of the same size, and the front gable and soffits covered with vinyl. The roof is covered with V-groove metal that, because of the pitch of the roof, is minimally visible from ground level.

Minor changes to the interior of the house, some noted previously, include kitchen remodeling, conversion of a former bedroom to a bath/laundry, and conversion of a bedroom to bathrooms. A stained glass window was removed from the landing in the 1970s when the house passed out of the family, and a smaller, multi-paned window installed in its place. A shallow bay window was added to the kitchen at an unknown date. The house had several changes in 2007. The kitchen was remodeled, and exhibits modern finishes. Dropped ceilings and non-historic floor coverings were removed from the interior of the house during the 2007 renovation.

Description of the Outbuildings and Landscape Features

Workshop (1900) Contributing Building.

Located south of the house, facing the road, the Roberts workshop is a two-story frame building under a gabled tin roof, covered with unpainted vertical wood siding. The vertical supports and some secondary support members are hewn, mortised timbers recycled from another earlier structure. The first floor of the workshop is an open shed. It includes a loft accessible by a flight of steps with slender, hand-planed spindles. The first story also includes a handmade wood pulley that appears to be original to the structure; like the spindles, it is built of hand-planed wood. The second story of the workshop is enclosed and the door kept locked. The workshop is in good condition.

Smokehouse (late-19th-century) Contributing Building.

Behind the workshop, facing the house, is the smokehouse. Built into the hill slope, it is a small frame structure with tin shed roof and vertical wood siding, on a rubble limestone foundation. It is in poor condition.

Landscape features (19th-century through late-20th-Century) Contributing site.

The front lawn is shaded by mature maples and young fruit trees.

Landscape features (mid-20th-Century) Non-contributing site, collectively

Surrounding the house are small landscape features, most of rubble limestone. These appear to date from the mid-20th century. North of the house is a stone-bordered firepit. Near the smokehouse, at the foot of the hill, is a stone barbecue pit. Outside the kitchen door is a Seneca well pump on a concrete platform. A low stone retaining wall of coursed rubble limestone extends along the base of the hill, a few feet behind the house. The lower portion of the hill is terraced with a second wall of similar construction. No structures have been added to the property since 1925, and no new landscape features have been added since the mid-20th-century, apart from the parking lot.

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8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B Property is associated with the lives of persons significant in our past.
- C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D Property has yielded, or is likely to yield, information important in prehistory or history.

Areas of Significance

(Enter categories from instructions.)

Invention

Period of Significance

1900-1925

Significant Dates

1900, 1925

Significant Person

Roberts, Thomas Zane

Cultural Affiliation

NA

Architect/Builder

Roberts, Thomas Zane

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- A Owned by a religious institution or used for religious purposes.
- B removed from its original location.
- C a birthplace or grave.
- D a cemetery.
- E a reconstructed building, object, or structure.
- F a commemorative property.
- G less than 50 years old or achieving significance within the past 50 years.

Period of Significance (justification)

The Period of Significance is confined to the years that Roberts occupied the dwelling and used the workshop, from their 1900 construction to his death in 1925.

Criteria Considerations Criterion Consideration A has been selected because the property is now used for religious retreats. That use is recent, has not caused severe alterations to the property, and is not associated with the historic use of the property.

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Statement of Significance

Summary. The Thomas Zane Roberts House is significant under Criterion B in the area of invention for its association with Thomas Zane Roberts (1851-1925), an inventor who created useful products for his own use on home and farm during the late-19th- and early-20th-centuries. A gifted polymath, his fame spread far beyond the quiet farming community he called home. Roberts built the house himself, resided there for the rest of his life and created his inventions in the workshop; therefore it is the property that best represents his life and work. The house has been evaluated against other properties in the county associated with the National Register theme of Invention, analyzed within the context "Inventors in Boone County, Kentucky, 1880-1991." In this comparison, Roberts occupies an important sector within the larger story of Inventors and American ingenuity. He typifies the self-taught inventor, who created products more for himself than for a mass market. Of the 3 people compared in the context, he is closest to the average citizen, someone who might be an ambitious laborer or tinkerer. By casting light on Roberts, this nomination reveals a generally held American value: that innovation and product refinement are efforts prized by most people in this country. Roberts lived at the end of the time when inventors could rely solely on their native intelligence for their breakthroughs. American icons such as Thomas Edison, as well as the rise of professional experimental scientists, enabled other types of innovators to eclipse the Everyman inventor that Roberts portrays so well. The Roberts House was recommended for National Register listing under Criterion B in 1996 as part of a comprehensive survey of the historic and architectural resources of Boone County. The house's period of significance extends from 1900, the date of its construction, to 1925, the date of Roberts' death.

Historic Context: Inventors in Boone County, Kentucky, 1880-1991

Research design. The significance of the Thomas Zane Robert House was evaluated by comparison with other properties associated with the context of invention in Boone County. One of these resources, the Sperti Farm, was identified during a comprehensive survey of the county's historic and architectural resources conducted from 1993 to 1996. Another, the Frank S. Milburn Machine Shop, was listed in the National Register in 2006 under Criterion B. It has since been demolished.

The **Sperti Farm (BE-1042)** near Burlington is the most significant property associated with George Sperti Sperti (1900-1991), an engineer, inventor and scientific researcher of considerable renown. After completing his doctorate, Sperti became the director of the University of Cincinnati's Basic Science Research Laboratory. The laboratory investigated the effects of different kinds of light on living organisms. He later became the director of the Institutum Divi Thomae, a graduate school established by the Archdiocese of Cincinnati, which concentrated on cellular research. Here Dr. Sperti developed his lifelong passion of finding a cure for cancer. By the 1940s, Dr. Sperti was one of the six American members of the Pontifical Academy of Sciences. Among Dr. Sperti's inventions and discoveries were an electric motor sold to the Westinghouse Company; a selective process for the commercial irradiation of foods, sold to the General Foods Corporation; and a salve for the cure, without scarring, of severe burns.

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George Sperti purchased the land for his Boone County farm in the 1930s. While he initially used the property as a summer residence, he eventually came to live there year-round. The Colonial Revival-style main house was built to his own design, using materials found on the property, as were visually compatible farm manager and farmworker houses. On this 250-acre gentleman farm, Sperti raised cattle, corn, tobacco and horses; he also raised the rats and rabbits used in his medical research.

In addition to Criterion B, the Sperti farm was recommended as eligible under Criterion A in the Area of Agriculture as a significant example of a gentleman farm in Boone County, and under Criterion C in the Area of Architecture as an ensemble of Colonial Revival buildings unique in the county. The property has since been subdivided and many of its outbuildings have been demolished; therefore, it no longer appears eligible for listing under Criterion A. The main house, however, is still standing. It may be eligible for listing under Criterion B for its associations with Sperti, and under Criterion C as a significant expression of the Colonial Revival style in the county.

The **Frank S. Milburn Machine Shop (BE-1479)** in Burlington was the place most closely associated with the life and work of Frank Sinton Milburn (1910-1984). Dubbed the "Cornfield Edison" by *Mechanix Illustrated*, Milburn was a highly talented inventor, machinist and tinkerer. He was a die-maker, tool designer, welder, watchmaker and pattern maker. In partnership with Henry Jenisch, Milburn owned and operated a die-casting plant in Paoli, Indiana, called the Jayemm Company. He also manufactured lathes, dies and other metal articles in his Milburn Products Company in Osgood, Indiana, which was founded in 1934 (Becher 2005). Milburn was a technical consultant for about seventy companies in nine states in different manufacturing and industrial fields, but preferred to be called "cornfield engineer" (ibid.). His motto was, "I can improve it with a few slight modifications." He was so well known for this that his friends joked that his initials, "FSM," stood for "Few Slight Modifications" (ibid.).

Milburn also held at least three patents under his own name, including:

- Apparatus for fertilizing #2057785 (October 20, 1936)
- Bottle holders #2075217
- Milburn Water Filter (number unknown--1949)--purified tap water for darkroom use (ibid.).

During World War II, Milburn served as a technical consultant to the United States military, helping to solve complex engineering problems. He was retained as a consultant by numerous defense contractors and designed ways to boost production. In addition, he quietly manufactured components for one of America's most closely guarded military secrets of the Second World War: the Norden bombsight, an analog computer that was used to determine the exact moment bombs had to be dropped to hit the target accurately.

Milburn is best known, however, as "an inventor for inventors." His greatest contribution to invention may be his lifelong passion for assisting other inventors to achieve their dreams. He specialized in taking an idea and making it reality, rather than coming up with ideas of his own. "He dedicated his life to helping the 'little guy' develop ideas into reality" (ibid). During the 1940s and 1950s, Milburn and his associate Henry Jenisch helped amateur inventors develop working models of their inventions. "After starting a full-time model-making business, he became disillusioned by the lack of product development and marketing skills of amateur inventors. So he started coaching would-be inventors instead, supporting himself through consulting. About one in 30 prospective inventors

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decided to pay to have Milburn develop his model" (ibid.). The Milburn machine shop was demolished in 2006.

Thomas Zane Roberts: Personal History

Early years. The ninth child of Thomas Roberts and Rozanna Odell Roberts, Thomas Zane Roberts was born on October 4, 1851, in his parents' frame house on Middle Creek. The Roberts family, originally from New Jersey, was related to Zane Grey, famed author of Western novels.

The 1870 U.S. Federal Population Census reveals that Roberts' father, also Thomas Roberts, was 64 years old at the time, and born in New York State; his Mother, Rozanna Odell Roberts, age 57, was born in Maine. The enumerator also listed sons John O., 27, and Thomas Z., 18, both of whom worked on the farm. The family also included daughters Ella, 14, and Isabelle, 16. Thomas Zane Roberts was the family's 9th child.

Farmer, miller, builder. Under the tutelage of his father, a skilled woodworker, young Thomas learned the trades of carpentry, farming and milling. He attended the Locust Grove country school, then at age 22 enrolled in the Morgan Academy, a private school in Burlington. He then began farming on his own account and in 1874 bought 16 acres of land from his father. He also joined the local Grange and in 1875 was elected its secretary.

After the death of his father in 1876, Roberts worked full-time at the farming and milling trades to support his mother. According to Boone County deed records, Roberts acquired his farmland through a series of eight transactions over a period of years, in small increments. Roberts ran a diversified and progressive farming operation, and would either sell corn and wheat by the bushel or grind and sell the meal.

Roberts grew many commodities on his farm including tobacco, corn, wheat, grapes and potatoes. He grafted and planted apple trees over the years on his farm. At the time of his death he maintained two separate orchards.... Roberts also maintained beehives.... He made his own beehives and sold beehives that he had made. Most of his income from farming came from the products of tobacco, corn and wheat. (Frohlich 2008: 99)

Like his father, the master builder, "Roberts developed into a master craftsman whose services were also sought after over the years" (Frohlich 2008: 94). He assisted with the construction of the Belleview Baptist Church (BE-7) and built at least three houses in addition to his own, as well as many barns, fences and farm buildings.

Teacher and writer. While on the farm, Roberts sharpened his intellectual skills by attending educational lectures and debates, and in 1877 organized a literary society at the Locust Grove country schoolhouse. He began writing poetry and stories for new *Boone County Recorder* under the pen name "Zane." Roberts took up astronomy and purchased a telescope to study the skies. He also became a justice of the peace. The book where he recorded his transactions also contains articles on science, astronomy, mathematics and poetry, but it is not known if any are his work.

In the 1870s Roberts turned to teaching as a profession and in 1878 received his teaching certificate. Roberts secured a position as a schoolmaster at Locust Grove, where he taught 17 students of

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various ages. He then taught at the Cason schoolhouse, near East Bend Road (now Kentucky Route 338), and in eastern Boone County at Frogtown. Between 1882 and 1885 his career was temporarily interrupted, possibly by an injury that occurred while chopping wood.

In 1885 Roberts resumed teaching and renewed his social ties, returning to the Cason School for several terms over the next 14 years. Roberts eventually earned the title "professor" and was elected repeatedly to the four-person executive committee at the Teachers Institute held annually in Burlington. An accomplished singer and lover of music, Roberts also taught a vocal music class in the western Boone County river community of Belleview, and at a singing school in Big Bone in southern Boone County. In 1891 he was elected president of the Beech Grove Debate Society. For a time Roberts taught in the town of Hebron in northern Boone County, where he boarded with a family in town. Following a final engagement at Beech Grove School, Roberts retired from teaching in 1902. "Roberts then became more involved in the pursuits that led him to design the monumental clock that is his legacy" (Frohlich and Becher 2009: 763).

Inventor. Despite the local fame he garnered from his teaching career, Roberts is best known for his inventions. His house, built in 1900, became a showplace for these devices, including the two-tier paneled ceiling in his bedroom, and a swinging bed suspended from the ceiling so he could rock himself to sleep. Roberts designed a fireplace vented with outdoor air; cast into the vent cover, which could be opened or closed to regulate airflow, was the legend, "Don't I Blow." By adjusting the vent, it acted as a blower, and the result was a very hot fire with no smoke. The dining room and kitchen could be divided by swinging partitions.

Roberts also devised a piping system to bring water to his home from a spring on the nearby cliffs, and a conveyor to carry tobacco and hay from hilltop fields directly to the mill/barn. The tobacco field was on one side of Middle Creek, and the barn was on the other at a distance of about six hundred feet. Roberts would place the tobacco on the pulley system near the tobacco field, and its own weight would carry the tobacco from the field to the barn (Frohlich 2008: 115). It does not appear that any of these inventions was ever patented or introduced commercially.

Celestial clock. Roberts is most famous for a remarkable celestial clock, famed as the "Clock of Middle Creek." The grandfather-style clock, standing seven feet tall, was built by Roberts of walnut cut on the farm, using hand tools. The wood was carefully chosen by Roberts "for its intrinsic value as well as its extrinsic beauty. Some came from furniture in his home or from particular places on the farm. Roberts could recite a story about each piece in the wood casement" (Frohlich 2008: 18).

The clock includes a Seth Thomas timepiece, a planetarium, a lunarium, and a dial showing the days of the week; the clockworks provides motive power for all the other functions. The planetarium contains an abbreviated model of the solar system, built to scale, and shows the earth's position relative to Jupiter, Mars and Venus. "The orbit of each planet is precisely geared: while Venus gains one degree of arc in 1,656 days, Jupiter loses one degree of arc over 250 years" (Frohlich and Becher 2009: 763). The lunarium depicts the moon phase, and a dial indicates diurnal and nocturnal hours. The clock features an eight-day spring motor that sounds an alarm as it turns low and keeps ringing until attended to. Roberts built the clock in the frame workshop beside the house that is still standing and is included in the nomination boundary.

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"In 1909 Roberts discontinued most of his other pursuits to devote himself to the Clock of Middle Creek" (Frohlich and Becher 2009: 763). He is believed to have completed it a year later. Many colorful legends, most of which have not been substantiated, surround the construction of the timepiece. One legend states he built the clock so he would always be reminded of the day and time of church services. Roberts built a smaller calendar clock in the 1880s and probably built the celestial clock as an improvement upon the earlier one. Another legend holds that he built a lookout tower behind his house, equipped with a powerful telescope, and studied the heavens for a year to make the necessary calculations. "In fact, he had begun working with clocks in 1882; the only time he ever forgot about Sunday church was in 1883" (ibid.). More recent research suggests that he built the clock as an intellectual challenge. Regardless of the reason, Roberts continued to work on and perfect the clock throughout his lifetime.

Roberts also hoped to build an even more ambitious clock, with a striking mechanism, but those plans never came to fulfillment. "Josephine Cason [wife of Roberts' nephew] wrote that Roberts was not satisfied with the clock, and at his death was working on a clock 'he said was more perfect than the first one'" (Frohlich 2008: 18).

In addition to better-known inventions such as the clock and the bed, Roberts designed and built a remarkable array of tools, devices, instruments and machines. These included ice skates, a square fiddle, a violin and flute, croquet balls, a money box, a wind engine, a shingle-making machine, a jigsaw, a forge, wheel spokes, pulley blocks, plows, wheelbarrows and washing machines (ibid).

Later years. Roberts died on January 15, 1925 and is buried in the Burlington International Order of Odd Fellows Cemetery. After his uncle's death, nephew Ralph Z. Cason inherited the farm and for the next 50 years kept his uncle's inventions intact. Cason was offered the chance to display his uncle's greatest invention at a World's Fair but refused, fearing the clock would be damaged. He also was offered \$1,000 for the clock but turned down the offer.

Cason welcomed visitors from all over the world, including Swiss watch and clock makers, who traveled to Middle Creek to see the famous clock.

Cason had an open door policy at the Middle Creek home. Visitors were always welcome to come and see the clock and the home. There were annual school trips to the home from around the area schools. People came from all over the U.S. and the world to see the clock, and Cason began a visitors log on June 24, 1934, which he kept until his death (Frohlich 2008: 133).

After Cason's death, the clock was displayed in the science building of Northern Kentucky University. It is now preserved in a bank in Burlington, enclosed in a walnut case and wound twice a week.

Evaluation of the Significance of Thomas Zane Roberts House and Workshop within its Historic Context of Invention. The American story of inventors reached its climax, and draws from numerous themes, in the legendary account of Thomas Edison (1847-1931). Edison lacked formal training, giving hope to all that greatness could come as much through hard work as through the lottery of genius. In reality, he was a shrewd businessman and manager, employing teams of scientists in particular fields to carry out his work. He was equally renowned for making vital improvements to existing devices that others invented, as he was known for the few truly novel things

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he invented, such as the phonograph. While his work certainly benefitted human society through the development of labor saving technologies and entertainments, he was a savvy capitalist, laboring to enrich his personal fortune through patenting his products, and improving his competitors' devices just enough to escape charges of patent infringement. His workshop became a place of popular fascination, the place where many implements of the modern age were conceived and brought to life. He gave every hard-working American hope, with this mythic way of accounting for his accomplishments: "Genius is 1 percent inspiration, 99 percent perspiration."

The Edison story provides the dominant themes by which to understand Boone County's three signature innovators of the 20th century. Of the three, Roberts, as Edison, possessed little formal training, though unlike Edison, Roberts seemed almost disinterested in commercial enrichment. He created labor-saving new products, it appears, mainly for himself. He made implements for home and farm, using hand tools in a home workshop. Based on the available histories, no other northern Kentucky inventors of the period have been identified who gained such fame for creating such unique devices for daily life. Born the earliest of the three Boone County inventors, he shows us the aspect of inventors that was more prominent in the 19th than 20th century, a very localized impact, the brilliant accomplishment of the amateur.

Working in the mid-20th-century, Frank Milburn benefitted from more formal education than Roberts, graduating from a Cincinnati technical school. He, also more than Roberts and more like Edison, had a greater interest in capitalizing on his fertile mind. He wisely associated with a business partner, Henry Jenisch, and together they made the experimental practical. Later, after his work became a stable profession, he turned attention to assisting amateur inventors. After learning how Edison mined riches from the innovations of scientists under his direction, we can ask whether Milburn assisted those amateurs out of altruistic motives or as a way to scout out a marketable idea. As did Edison, people who knew Milburn observed that he was comfortable taking an idea from another and refining it. This tendency, innovation through improvement of existing devices, probably deserves a greater share of the story of success in American enterprises, even though success narratives tend to focus on the breakthroughs, on the revolutionary over the evolutionary. As with Edison and Roberts, Milburn's activities were highly identified with his workshop.

By the mid-20th-century, George Sperti came to embody invention in ways that greatly differed from Roberts. Sperti was a highly educated man, no longer toiling in a home workshop but in a laboratory, using the most advanced equipment of the day, to perfect industrial processes. These inventions were patented, sold to industry and produced commercially. By the mid-20th century, the place where important innovations would happen would rarely be in an earthy utilitarian building in the back yard, because the world was conceived as having become a much more technical place. Sperti stands as an example of the kind of inventor that had supplanted the Milburns and the Roberts—those celebrated as backyard Edisons—he was an inventor of the Modern era, with a workplace that conformed to this new vision of invention.

Not any one of the three is more important than the other, and none of the three narratives associated with these men will cease to account for ongoing inventiveness among our citizens. Many of the stories of Internet-era start-up companies and technologies occur in the late-20th-century's analogue to the workshop—the garage—where the outsider to conventional technological processes toils on something that will revolutionize the industry, or will create a whole new way of life. Our

Thomas Zane Roberts House and Workshop
Name of Property

Boone County, Kentucky
County and State

celebration of Roberts, Milburn, and Sperti are a celebration of not just science, but of the very idea of America itself—partly a refinement of Old World models of society, and partly a completely new invention.

Evaluation of the Integrity of the Significance of the Thomas Zane Roberts House and Workshop with respect to its physical character.

Integrity Considerations

Integrity is defined as the ability of a property to convey its significance in its material form. With this building's significance a product of seeing its form as important, integrity factors have been selected which reinforce that view of significance. Of the seven components of integrity, the most critical to conveying the significance of the Thomas Zane Roberts House and Workshop are location, setting, design, workmanship, feeling and association. The Roberts House retains enough of these defining characteristics to convey its significance as the home of inventor, teacher, farmer and miller Thomas Zane Roberts during the peak of his creativity.

The Roberts house and workshop have integrity of **location** because they have not been moved.

The Roberts house and workshop have integrity of **setting** because they remain in a rural locale, surrounded by a bucolic landscape with open land, trees, a wooded hillside, and complementary outbuildings and landscape features. No new structures have been built on the property apart from an unobtrusive new parking lot. The house and workshop still maintain the same relationship to the road, the hillside, and the creek as in 1900. This rural location and setting, in contrast to the more urban situation of the Milburn workshop, help tell the story of an outsider intellect that Roberts embodied.

The Roberts house and workshop have integrity of **design**. The house's temple-front form and massing are almost unaltered apart from the enclosure of a rear porch, minimally visible because of its location. No window or door openings have been covered over and no modern additions are present. The workshop also appears to be largely unaltered since Roberts' time. Therefore, the house and workshop retain sufficient integrity of *design* because their original form is essentially unimpaired.

The Roberts house and workshop have integrity of **workmanship**. Roberts, a skilled builder and woodworker, designed and built the house and workshop. Evidence of his ingenuity and woodworking skill are evident throughout, including the house's fireplace, wainscoting, tiered ceiling, woodwork and staircase, and the joinery, steps and pulley system in the workshop.

The Roberts house has reduced integrity of **materials** because some fabric has been removed or covered over. Although the gable and soffits are covered with modern siding and the windows have been replaced, the residence retains clapboard siding and wood trim on the body of the house, an original porch, original doors, and many original interior features. It appears few, of any materials, have been removed from or added to the woodshop since Roberts' time; therefore it retains a high degree of material integrity.

Thomas Zane Roberts House and Workshop
Name of Property

Boone County, Kentucky
County and State

Finally, the Robert house and workshop possess integrity of **association**. Roberts owned 250 acres in the scenic, remote Middle Creek Valley, bordering the waterway of the same name. Here he spent his whole life, living first in the home of his parents and, later, in homes of his own devising and construction: first, a modest cottage, and, second, the larger and more elaborate dwelling that is the subject of this nomination. In the workshop Roberts designed the Clock of Middle Creek and other inventions that brought him fame. The property retains its rural character, providing a suitable setting for this 19th-century country dwelling. Therefore, the house retains integrity of *association*. This view leads to the conclusion that the house retains sufficient integrity to meet National Register standards.

9. Major Bibliographical References

Bibliography (Cite the books, articles, and other sources used in preparing this form.)

Becher, Matthew E.

2005 "Frank S. Milburn: Burlington's Cornfield Edison." Paper presented to Boone County Historical Society. On file at Boone County Historic Preservation Office, Burlington, Kentucky.

Boone County deed records. Boone County Administration Building, Burlington.

Frohlich, Anthony W.

2008 *Time Keeper: Thomas Zane Roberts, a Kentucky Renaissance Man*. Enchanted Valley Publishing Company, Union, KY.

_____ and Matthew E. Becher

2009 "Thomas Zane Roberts," entry in *The Encyclopedia of Northern Kentucky*. The University Press of Kentucky, Lexington.

Kentucky Heritage Council

Kentucky Historic Resource Inventory Forms for Boone County. Kentucky Heritage Council, Frankfort.

Lake, D.J.

1883 *An Atlas of Boone, Kenton and Campbell Counties of Kentucky*. D.J. Lake and Company, Philadelphia.

Warminski, Margo

2006 "Frank S. Milburn Machine Shop," National Register nomination. Kentucky Heritage Council, Frankfort.

Thomas Zane Roberts House and Workshop
Name of Property

Boone County, Kentucky
County and State

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67 has been requested)
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey # _____
- recorded by Historic American Engineering Record # _____
- recorded by Historic American Landscape Survey # _____

Primary location of additional data:

- State Historic Preservation Office
- Other State agency
- Federal agency
- Local government
- University
- Other
- Name of repository: _____

Historic Resources Survey Number (if assigned): BE-1057

10. Geographical Data

Acreage of Property 1 acre

UTM References

Rising Sun quad

UTM Coordinates below expressed as NAD 83

NAD 27 Coordinates = Zone 16; Easting 691 471; Northing: 4318,182

NAD 83 Coordinates:

1	<u>16</u>	<u>691,466</u>	<u>4,318 389</u>	3	_____	_____	_____
	Zone	Easting	Northing		Zone	Easting	Northing
2	_____	_____	_____	4	_____	_____	_____
	Zone	Easting	Northing		Zone	Easting	Northing

Verbal Boundary Description (Describe the boundaries of the property.)

According to Boone County Property Valuation Office records, the Thomas Zane Roberts House and Workshop occupy parcel 018-00-018.11, which comprises one acre.

Boundary Justification (Explain why the boundaries were selected.)

The nominated area includes the one-acre parcel on which Robert House and workshop are located. It excludes surrounding acreage that is historically associated with the Roberts farm but is under different ownership.

11. Form Prepared By

name/title Margo Warminski

organization Boone County Planning Commission date October 6, 2011

street & number 340 East Second Street telephone 859-581-2883

city or town Newport state KY zip code 41071

e-mail Mmw10@fuse.net

Thomas Zane Roberts House and Workshop
Name of Property

Boone County, Kentucky
County and State

Photographs:

Information common to all photographs:

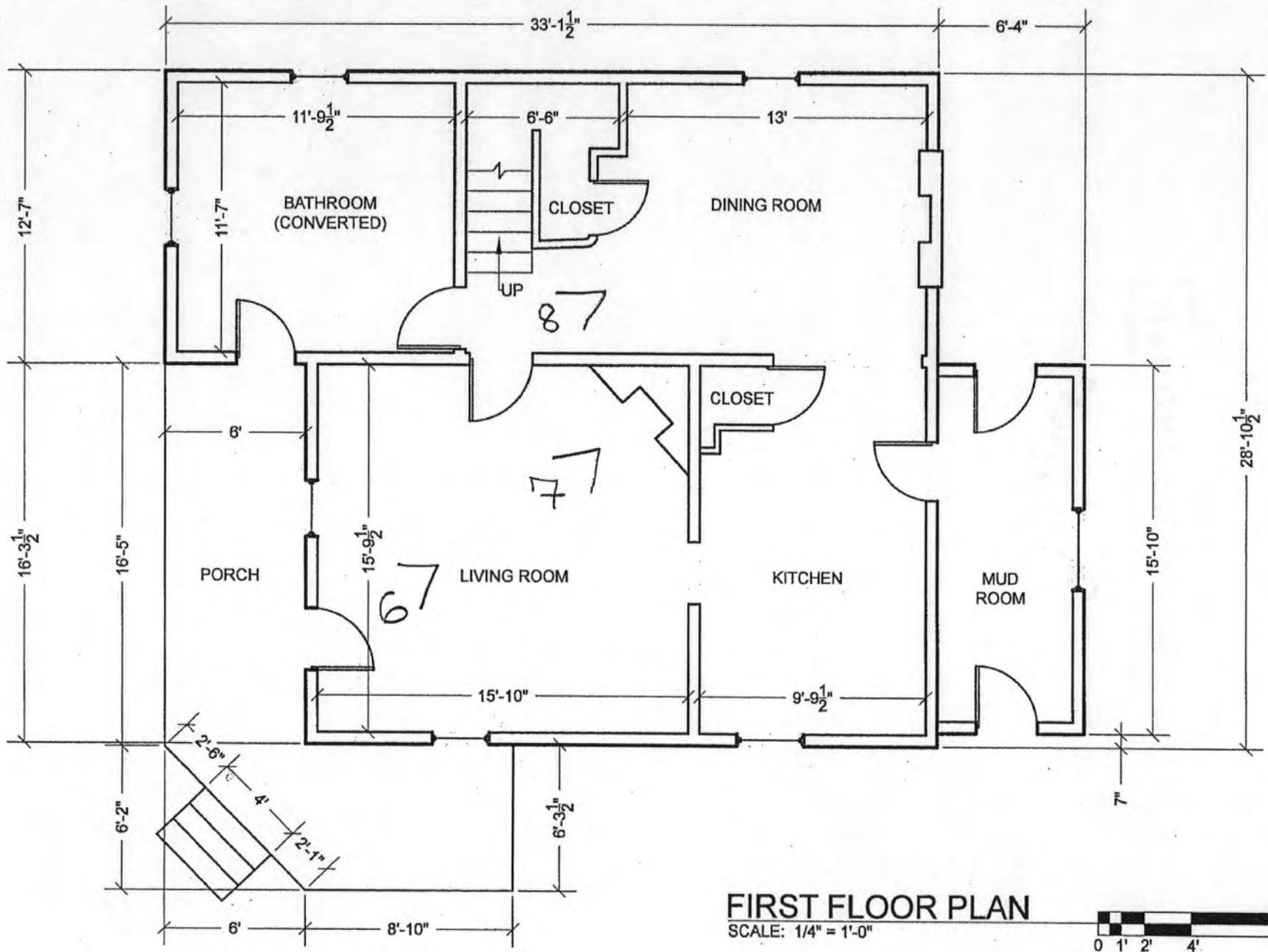
Name of Property: Roberts, Thomas Zane, House and Workshop
City or Vicinity: Burlington vicinity
County: Boone
State: Kentucky
Photographer: **Margaret Warminski**
Date Photographed: September 27, 2011 (unless noted otherwise)

Description of Disc Image and number:

- 1 of _12_.** General view of Roberts property from Middle Creek Road. View of main (west) façade of house. Camera direction: east.
2 of _12_. General view of house and workshop from road. View of main and north elevations of house, with workshop in background. Camera direction: southeast.
3 of _12_. View of main (west) façade of house. Camera direction: east. Date photographed: September 29, 2011.
4 of _12_. View of front porch. Camera direction: east.
5 of _12_. View of rear (east) elevation of house. Camera direction: south.
6 of _12_. View of living room from front doorway. Camera direction: northeast.
7 of _12_. Detail view of living room mantelpiece. Camera direction: northeast.
8 of _12_. View of dining room. Camera direction: northeast.
9 of _12_. View of staircase from second floor. Camera direction: northwest.
10 of _12_. Main (west) façade of workshop. Camera direction: east.
11 of _12_. View of pump, retaining wall, smokehouse. Camera direction: south.
12 of _12_. The Clock of Middle Creek, on display at Heritage Bank, Burlington, Kentucky.

Property Owner:

name Enchanted Valley Realty LLC
street & number 9253 Old Union Rd telephone _____
city or town Union state KY zip code 41091

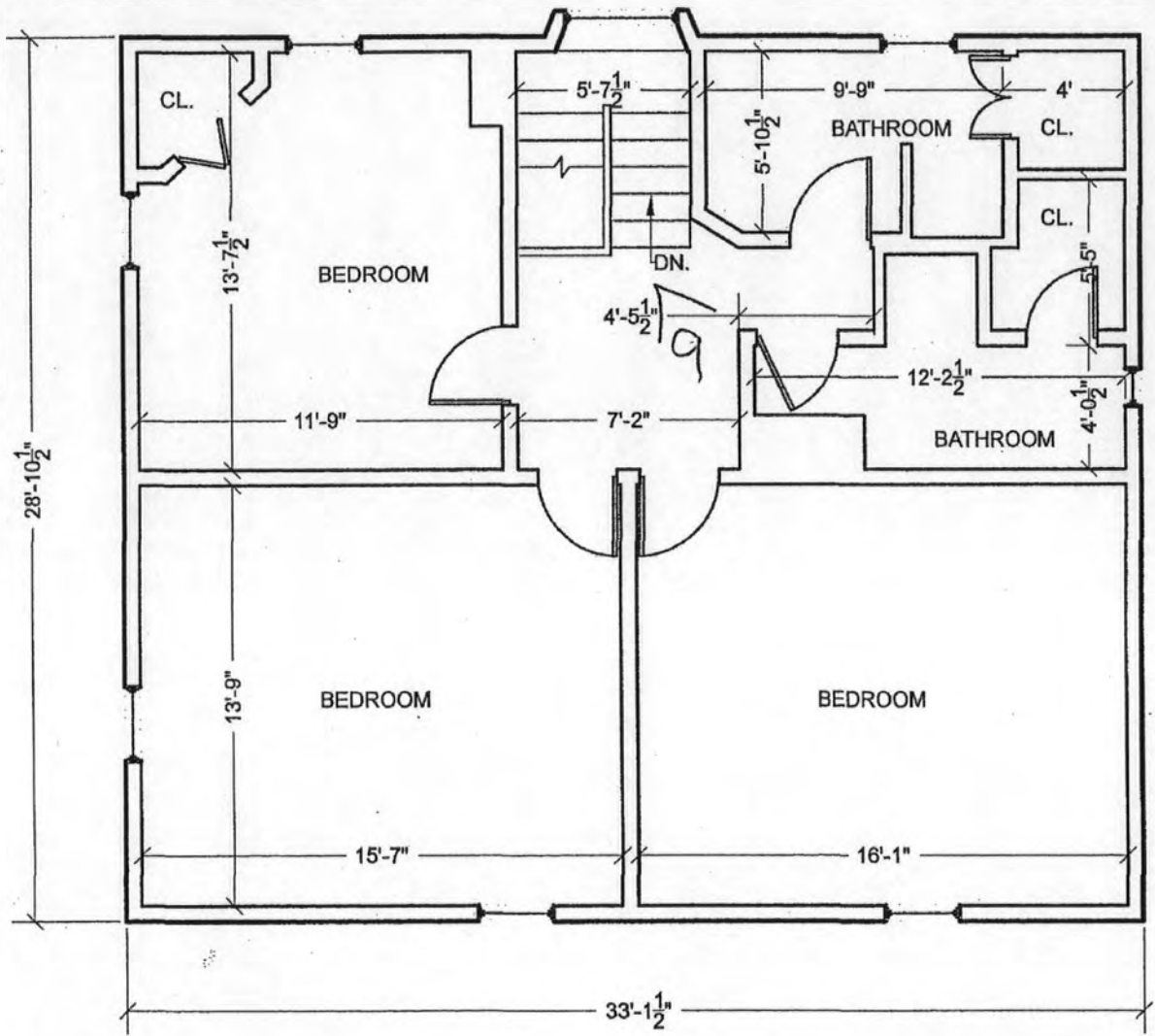


FIRST FLOOR PLAN

SCALE: 1/4" = 1'-0"



ROBERTS, THOMAS ZANE . HOUSE & WORKSHOP
 BOONE COUNTY, KY

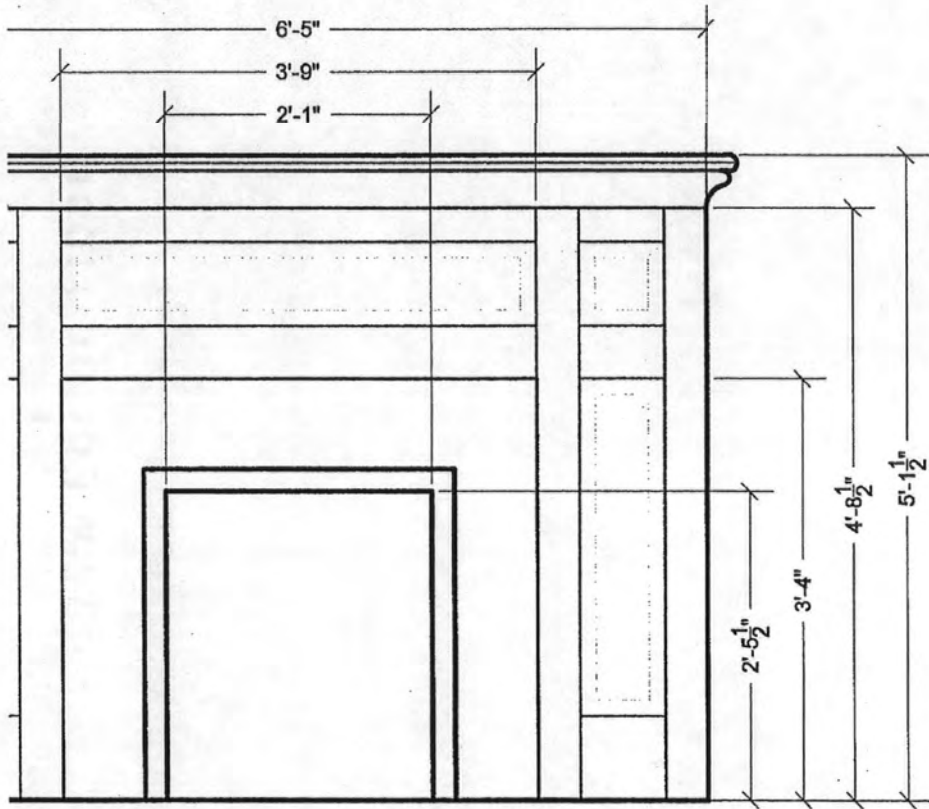


SECOND FLOOR PLAN

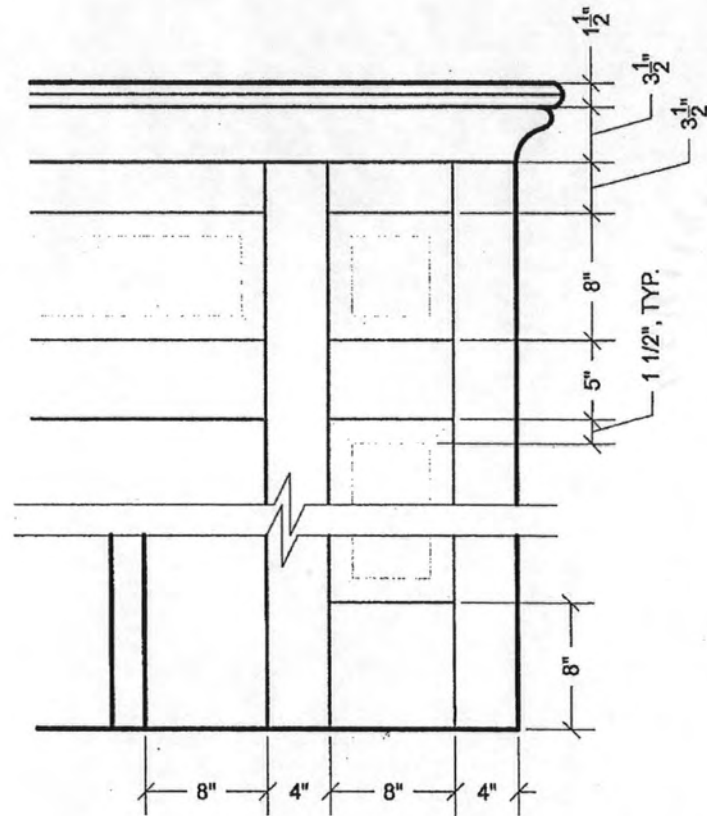
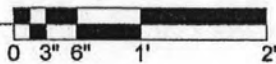
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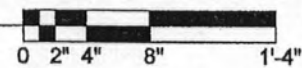
ROBERTS, THOMAS ZANE . HOUSE & WORKSHOP
 BOONE COUNTY, KY

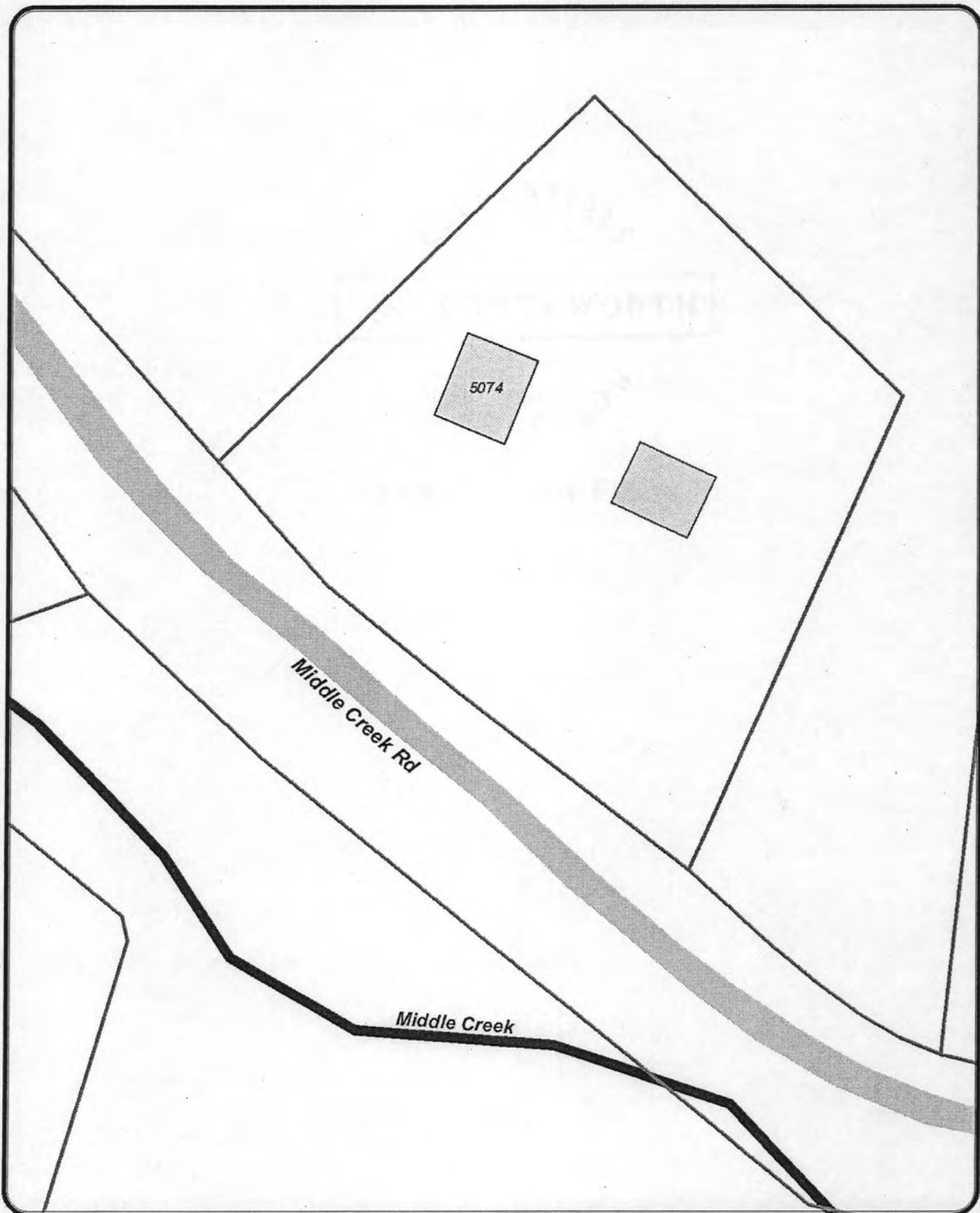


LIVING ROOM
FIREPLACE DETAIL
SCALE: 1" = 1'-0"



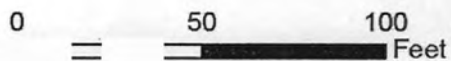
MANTEL DETAIL
SCALE: 1 1/2" = 1'-0"



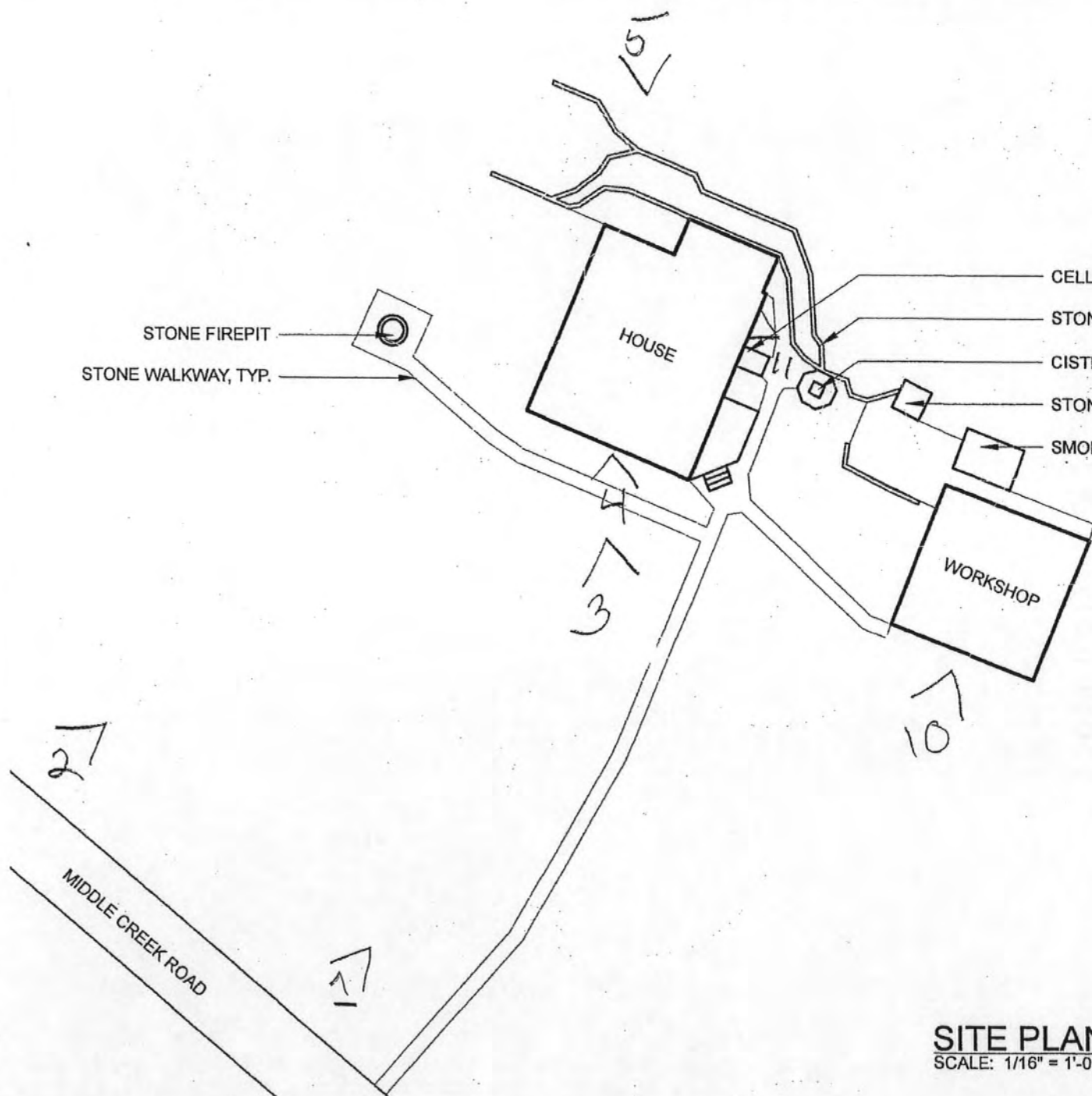


THOMAS ZANE ROBERTS HOUSE

5074 Middle Creek Rd
Boone County, KY

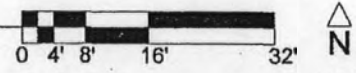


- STONE FIREPIT
- STONE WALKWAY, TYP.
- HOUSE
- CELLAR ENTRANCE
- STONE WALL, TYP.
- CISTERN
- STONE FIREPLACE
- SMOKE HOUSE
- WORKSHOP



MIDDLE CREEK ROAD

SITE PLAN
SCALE: 1/16" = 1'-0"



ROBERTS, THOMAS ZANE . HOUSE & WORKSHOP
BOONE COUNTY, KY

CERTIFIED LOCAL GOVERNMENT REPORT FORM
REVIEW of NATIONAL REGISTER NOMINATION by LOCAL AUTHORITY

(Instructions in parentheses and italics. Print or type your responses. Fuller instructions on additional sheet.)

Name of Certified Local Government Boone County Fiscal Court

Name of Property being considered Thomas Zane Roberts House

INITIATION *(enter one date only on a line below, describing the action on the nomination)*

- nomination submitted by CLG to State Historic Preservation Officer (SHPO). SHPO is asked by CLG to review nomination as soon as possible.
- SHPO submits nomination to CLG for review. CLG has 60 days to review nomination and return this report form to SHPO.

REVIEW BASIS *(checkmark at least one line of Resource Type/Criterion; write the name of corresponding Commission member on one of the following three lines)*

Resource Type	Criterion Selected on nomination form
<input checked="" type="checkbox"/> Historical	National Register Criterion A or B
<input type="checkbox"/> Architectural	National Register Criterion C
<input type="checkbox"/> Archeological	National Register Criterion D

Name of Commission Member Representing Significance Area

Don Clare Historian (when property meets Criterion A or B)

_____ Architectural Historian/Architect (for Criterion C)

_____ Archeologist (when property meets Criterion D)

RECOMMENDATION *(Check mark one of the four blanks below, sign, and enter date)*

- Commission Recommends Approval
- Commission Recommends Disapproval
- Commission Recommends Approval, Report Attached
- Commission Recommends Disapproval, Report Attached

10-2-11 Pat Fox
Date Commissioner's Signature

(Check Mark one of the two blanks below, sign, and enter date)

- Chief Elected Official Recommends Approval
- Chief Elected Official Recommends Disapproval

12/2/11 Gary W. Moore
Date Official's Signature/Title

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY NAME: Roberts, Thomas Zane, House and Workshop

MULTIPLE NAME: Boone County, Kentucky MPS

STATE & COUNTY: KENTUCKY, Boone

DATE RECEIVED: 1/13/12 DATE OF PENDING LIST: 2/06/12
DATE OF 16TH DAY: 2/21/12 DATE OF 45TH DAY: 2/28/12
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 12000042

REASONS FOR REVIEW:

APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N
OTHER: Y PDIL: N PERIOD: N PROGRAM UNAPPROVED: N
REQUEST: Y SAMPLE: N SLR DRAFT: N NATIONAL: N

COMMENT WAIVER: N

ACCEPT RETURN REJECT 2/28/2017 DATE

ABSTRACT/SUMMARY COMMENTS:

Roberts was a noted tinkerman & inventor in this limited area of Ky. While his inventions did not gain a wide audience, Roberts himself gained quite a reputation as a Progressive thinker. Known mostly for his "Clock of Middle Creek" a celestial clock of which, now on display

New Disk to be made

RECOM./CRITERIA Accept B

REVIEWER J. Grubbs DISCIPLINE _____

TELEPHONE _____ DATE _____

DOCUMENTATION see attached comments Y/N see attached SLR Y/N see attached

If a nomination is returned to the nominating authority, the nomination is no longer under consideration by the NPS.













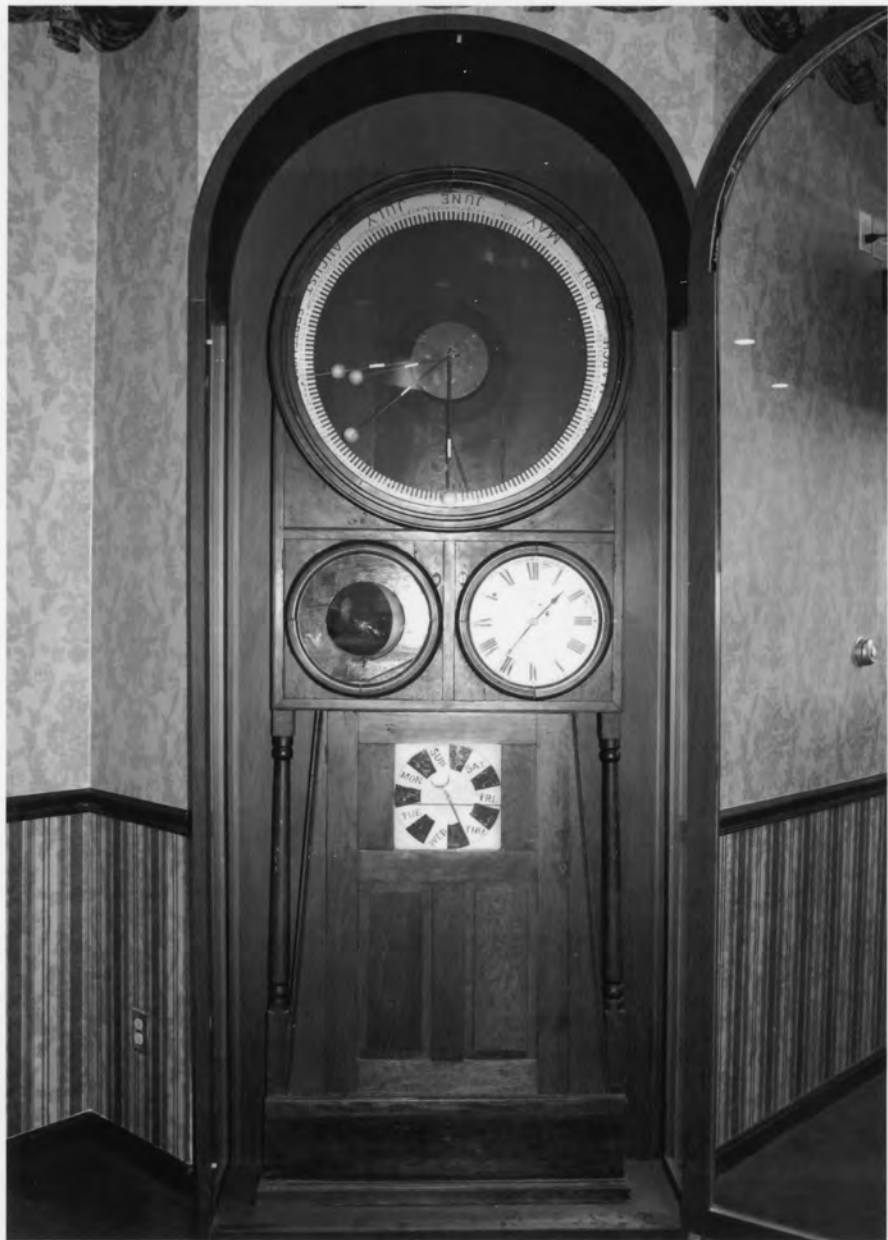










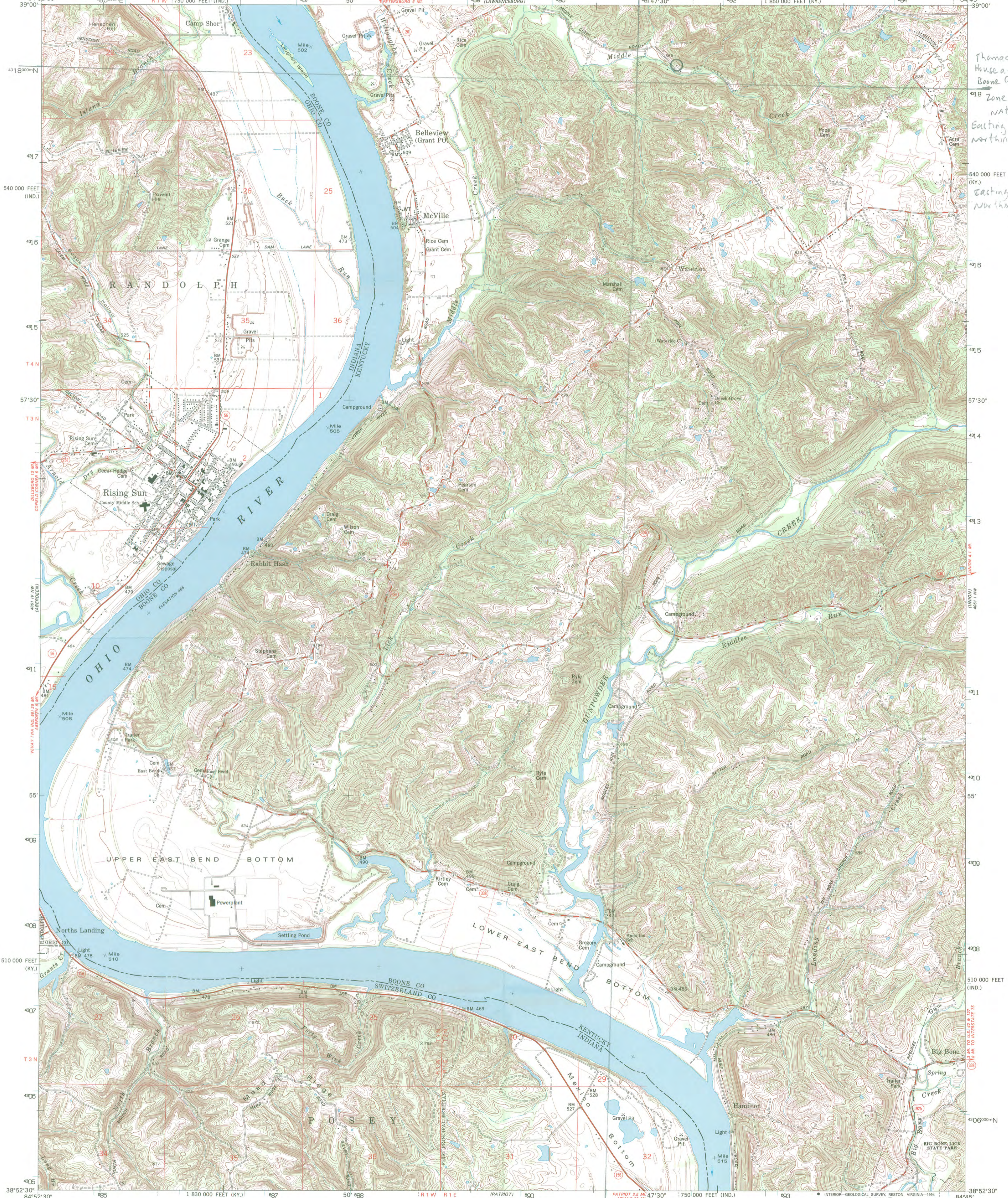






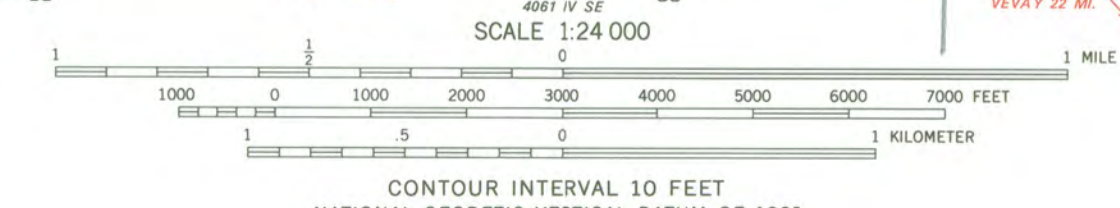
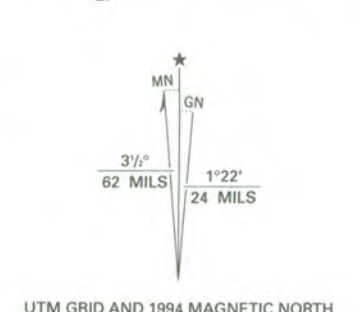






Thomas Lane Roberts
 House and Workshop
 Boone County, KY
 Zone 16
 NAD 27
 Easting 691471
 Northing 4318182
 540 000 FEET NAD 83
 (KY.)
 Easting 691466
 Northing 4318389

Produced by the U. S. Geological Survey in cooperation with Indiana Department of Natural Resources Control by USGS, NOS/NOAA and USCE
 Topography in Kentucky by photogrammetric methods from aerial photographs taken 1949. Topography in Indiana by planetable surveys 1940. Field checked 1951. Revised from aerial photographs taken 1977. Field checked 1977. Map edited 1981
 Projection: Kentucky coordinate system, north zone (Lambert conformal conic)
 10,000-foot grid ticks. Kentucky coordinate system north zone and Indiana coordinate system, east zone 1000-meter Universal Transverse Mercator grid ticks, zone 16, shown in blue 1927 North American Datum (NAD 27)
 North American Datum of 1983 (NAD 83) is shown by dashed corner ticks. The values of the shift between NAD 27 and NAD 83 for 7.5-minute intersections are given in USGS Bulletin 1875
 There may be private inholdings within the boundaries of the National or State reservations shown on this map. Photorevised from 1992 source; no major culture or drainage changes observed. Boundaries revised and names verified 1994



ROAD CLASSIFICATION

Primary highway, hard surface	Light-duty road, hard or improved surface
Secondary highway, hard surface	Unimproved road
Interstate Route	U. S. Route
	State Route

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
 KENTUCKY GEOLOGICAL SURVEY, LEXINGTON, KENTUCKY 40506
 KENTUCKY DEPARTMENT OF COMMERCE, FRANKFORT, KENTUCKY 40601,
 AND INDIANA DEPARTMENT OF NATURAL RESOURCES, INDIANAPOLIS, INDIANA 46204
 A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



RISING SUN, IND.-KY.
 NE/4 RISING SUN 15' QUADRANGLE
 38084-H7-TF-024
 1981
 MINOR REVISION 1994
 DMA 4061 IV NE - SERIES V853



STEVEN L. BESHEAR
GOVERNOR

**TOURISM, ARTS AND HERITAGE CABINET
KENTUCKY HERITAGE COUNCIL**

MARCHETA SPARROW
SECRETARY



THE STATE HISTORIC PRESERVATION OFFICE
300 WASHINGTON STREET
FRANKFORT, KENTUCKY 40601
PHONE (502) 564-7005
FAX (502) 564-5820
www.heritage.ky.gov

MARK DENNEN
EXECUTIVE DIRECTOR AND
STATE HISTORIC PRESERVATION OFFICER

January 3, 2012

Ms. Carol Shull, Keeper
National Register of Historic Places
National Park Service 2280
National Register of Historic Places
1201 "I" (Eye) Street, NW 8th Floor
Washington DC 20005

Dear Ms. Shull:

Enclosed are nominations approved at the December 19, 2011 Review Board meeting. We are submitting them for listing in the National Register:

John J. Walton House, Boone County, Kentucky
Thomas Zane Roberts House & Workshop, Boone County, Kentucky
Annville Institute, Jackson County, Kentucky
Charles D. Jacob Elementary School, Jefferson County, Kentucky
St. Therese Church, Lee County, Kentucky
Wallace Park Neighborhood District, McCracken County, Kentucky
Forsythe-Shewmaker House, Mercer County, Kentucky

We appreciate your consideration of these nominations.

Sincerely,

Lindy Casebier, Acting SHPO and
Executive Director
Kentucky Heritage Council