NPS Form 10-900
(Oct. 1990)

OMB No. 10024-0018

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

1. Name of Property

historic name Adams, John A., Farmstead Historic District

other names/site number Cedarcroft Farm

2. Location

street & number 431 SE "Y" Highway [n/a] not for publication

city or town Warrensburg [X] vicinity

state Missouri code MO county Johnson code 101 zip code 64093

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this [X] 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 [X] meets [ ] does not meet the National Register criteria. I recommend that this property be considered significant [ ] nationally [ ] statewide [X] locally.
(See continuation sheet for additional comments [ ].)

Signature of certifying official/Title Claire F. Blackwell/Deputy SHPO Date 3 June 1994

Missouri Department of Natural Resources
State or Federal agency and bureau

In my opinion, the property [ ] meets [ ] does not meet the National Register criteria.
(See continuation sheet for additional comments [ ].)

Signature of certifying official/Title

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is: Signature of the Keeper Date

[ ] entered in the National Register
See continuation sheet [ ].
[ ] determined eligible for the National Register
See continuation sheet [ ].
[ ] determined not eligible for the National Register.
[ ] removed from the National Register
[ ] other, explain
See continuation sheet [ ].

5 Classification

Ownership of Property

[X] private
[ ] public-local
[ ] public-State
[ ] public-Federal

Category of Property

[ ] building(s)
[X] district
[ ] site
[ ] structure
[ ] object

Number of Resources within Property

Contributing	Noncontributing	
3	0	buildings
0	0	sites
1	0	structures
0	0	objects
4	0	Total

Name of related multiple property listing.

n/a

Number of contributing resources previously listed in the National Register.

0

6 Function or Use

Historic Function

DOMESTIC/single dwelling
AGRICULTURE/animal facility
AGRICULTURE/irrigation facility

Current Functions

DOMESTIC/hotel
AGRICULTURE/animal facility
AGRICULTURE/irrigation facility

7 Description

Architectural Classification

OTHER: gabled ell farmhouse
OTHER: bank barn

Materials

foundation sandstone
walls steel
wood
roof asphalt
other tin

Narrative Description
(Describe the historic and current condition of the property on one or more continuation sheets.)

8 Statement of Significance

Applicable National Register Criteria

[X] **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.

Criteria Considerations

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 of age or achieved significance within the past 50 years.

Areas of Significance
Agriculture

Periods of Significance
circa 1875-1921

Significant Dates
n/a

Significant Person(s)
n/a

Cultural Affiliation
n/a

Architect/Builder
Adams, John Albert [tile drainage system]

Narrative Statement of Significance
(Explain the significance of the property on one or more continuation sheets.)

9 Major Bibliographic References

Bibliography
(Cite the books, articles and other sources used in preparing this form on one or more continuation sheets.)

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

#_____

Primary location of additional data:

[X] State Historic Preservation Office

[ ] Other State Agency

[ ] Federal Agency

[ ] Local Government

[ ] University

[ ] Other:

Name of repository:_____

10 Geographical Data

Acreage of Property 80 acres

UTM References

	Zone	Easting	Northing
A.	15	441880	4283460
B.	15	442280	4283440
C.	15	442260	4282650
D.	15	441860	4282670

[ ] See continuation sheet

Verbal Boundary Description
(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification
(Explain why the boundaries were selected on a continuation sheet.)

11 Form Prepared By

name/title see continuation sheet

organization _____ date _____

street & number _____ telephone _____

city or town _____ state _____ zip code _____

Additional Documentation
Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location.

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional Items
(Check with the SHPO or FOP for any additional items)

Property Owner
(Complete this item at the request of SHPO or FOP.)

name Bill and Sandra Wayne

street & number 431 SE "Y" Highway telephone 816/747-5728

city or town Warrensburg state Missouri zip code 64093

SUMMARY: The John A. Adams Farmstead Historic District, Warrensburg vicinity, Johnson County, consists of four contributing properties--three contributing buildings and one contributing structure. The buildings are a circa 1867-1876 house, a circa 1867 barn, and a circa 1880 barn. The structure is a system of sewer and drainage tiles and dams constructed beginning in 1875 and which underlays much of the eighty acre district. The various components of the system, which was designed to control erosion and to reclaim farmland, operate as a single unit and are counted as one resource. The district retains integrity of association, setting, design, and workmanship.

NARRATIVE: Located approximately six miles southeast of Warrensburg off of state highway Y, the farmstead currently associated with the house and surviving outbuildings of John A. Adams includes eighty acres. The topography remains rolling and moderately hilly. East Bear Creek enters the farm near its southwest corner and meanders along the west side of the farmstead, with a minor seasonal branch which flows roughly southeast to northwest, joining the creek about the center of the farm and effectively dividing it into two sections.

The house sits approximately 750 feet north of Highway Y and is reached by a level graveled driveway which runs along an earth embankment. The house consists of three distinct sections constructed at different times. The original portion was a one and one-half story gabled ell with the facade facing west. It is not known if there was a porch on the facade. There was a rear porch fitted in the northeast corner of the ell. This porch was later enclosed and a portion used as a pantry. About 1876, a one and one-half story addition was attached to the north end of the facade. An L-shaped, shed-roofed porch originally sheltered the two entry doors in the ell formed by the addition; circa 1890-1895, a mansard roofed porch replaced the original porch. The later porch, with chamfered posts, decorative brackets, and a decorative frieze with jigsawn cutouts, has been retained and largely restored, although the chamfered posts were stored and have been temporarily replaced by square posts. The roof is covered with asphalt shingles. The house was remodeled in 1986 and a substantial addition added to the north elevation. The house was also sided with steel siding which duplicates the width and appearance of the original weatherboard; the weatherboard was left in place beneath the siding and the weatherboard under the entry porch was not covered, however. The plan and much of the interior detailing was retained, and the original house remains much as it was after the circa 1876 remodeling.

The circa 1876 house formed an ell, with the facade facing west. The one and one-half story house originally contained two rooms on the ground floor and one room above each in the half story loft; each loft room was reached by a separate stairway with no connection between the two rooms. The two units formed by the rooms and loft rooms were set at right angles to each other and each was under a gable roof. The gable of the westernmost room extended north and south and was set lower than the gable of the easternmost room, which extended east and west, with the ridge higher than the north-south gable. At the point of connection of the two ridges a slight hip was formed.

The south elevation contains four symmetrically placed windows on the ground floor and two smaller windows in the gable end at the loft level. Original four-over-four windows and trim on all elevations were replaced in 1986 with six-over-six windows with vinyl clad sash, although the size and configuration of the original openings has been retained. The ell on this elevation is set

flush with the gable end. The east elevation of the ell's gable end contains only one centered, full sized window in the loft level.

A portion of the original facade, or west elevation, was obscured by a circa 1876 one and one-half story addition which added two more rooms, a ground floor room used as a parlor and another loft room. A door and window remain on the original facade, while another door and window are on the south elevation of the parlor addition. An irregularly shaped, three-sided porch shelters the altered entryway. Although the original chamfered posts were stored and replaced by square posts, the roof and post brackets and jigsawn frieze were restored and retained.

The addition of the circa 1876 parlor and loft at a right angle to the original facade resulted in a rough S-form, essentially adding an ell to the front of the original house. The roofline of the north-south gable may have been altered with the construction of the addition; with the construction of the addition, which also had a higher ridge than that of the north-south gabled roof, a slight hip was added at their juncture. No north gable end remains on the north-south gable roof, but the east-west roofline extends west to a lower gable which ends in a wall dormer with a four-over-four window in the gable end which lights the interior stairway. The gable wall dormer also joins the intersecting rooflines at the low hip junction of the north-south and east-west gables. This dormer remains in place, with only its peak visible, under the gable roof of the 1986 addition.

The original circa 1867 and 1876 portions of the house rest on sandstone foundations, and the walls of the cellar under the circa 1876 addition are also sandstone. The stone for these foundations and for the foundations for the barns was quarried from sites on the farm, and one quarry remains within the boundaries of the district, southwest of the house.

On the north elevation, a gabled roof addition with basement was added in 1986 to serve as living quarters for the Waynes, with the historic portions of the house used as a bed and breakfast. The enclosed L-shaped rear porch on the northeast elevation, which had severely deteriorated, was rebuilt and incorporated into the new addition; its shed roofed porch was removed. Doors which opened in the north elevation of the original house were retained, as well as an entrance in the gable end of the circa 1876 addition which led to the cellar under the original living room. A well which was sheltered under the porch has also been retained. The north elevation of the circa 1876 addition originally had two windows. The window which opened into the parlor remains in place, but the window which opened into the hallway has been converted to a door.

The floor plan of the original house has been preserved. An enclosed stairway located in the southwest corner of the easternmost room, the original kitchen, but accessible from the original living room, lead to the loft room above the kitchen, which is not connected with the other upstairs rooms. A stairway, vestibule, and built-in storage cabinets are located in the north end of the original living room. This stairway opens into a hallway in the loft which leads to two bedrooms, one above the original living room and one above the parlor.

The 1986 addition extends much of the width of the original house and its circa 1876 addition. Its east elevation is flush with the east gable end of the original house and incorporates the enclosed rear porch, which is now a

pantry between the historic and nonhistoric portions of the house. A window opens into the hallway, with a door which opens into the modern addition immediately north of it. A casement window is placed in the center of the addition's elevation, with a double awning window near the north end of the elevation.

On the north elevation of the addition, three double awning windows are asymmetrically arranged. On the west elevation, a recessed porch runs the length of the addition. Two doors are placed side by side near the south end of the addition's elevation; the southernmost door opens into the original house, while the second door opens into the modern addition. Paired windows complete the elevation. The porch has turned posts and a spindlework balustrade. A bulkhead at the north end of the addition provides exterior access to the new basement. The addition houses a living room, bedroom, kitchen, two bathrooms, and a hallway. Despite the 1986 addition and the application of steel siding, the house still preserves the form and plan of the original house and its circa 1876 addition. By its location and the retention of details on its primary elevations, it still reflects the period of significance and its function as the center of Adams's farm operations. The house retains integrity of design and association. It is counted as a contributing building.

Approximately sixty-four feet west of the house is the earliest barn in the district; family tradition attributes a date of circa 1867 to the building. The braced frame barn may have been constructed in two stages and a portion may date to John Albert Adams earliest tenure on his farm. There are two distinct sections to the building. The largest portion is gable roofed, with vertical board siding and is oriented north-south. The smaller portion is also gable roofed, with some original weatherboard siding and placed at right angles to and across the north elevation of the larger section. Both roofs are covered with standing seam sheets of tin; the roof of the east-west section is lower than the roof of the north-south section, so a portion of the gable end of the north elevation of the larger section is exposed. A cupola has been removed. The framework of a hanging gable hay hood is in place on the south elevation.

The barn is partially banked. An aisle, or drive, runs north-south the length of the building along its east side, similar to the plan of the subtype A bank barn described by Noble, which placed the drive to one side or end of the barn.[1] creating a large version of the side crib plan. The area under the drive is not excavated. The remainder of the building consists of two levels, with the upper area devoted to feed and possibly equipment storage and the lower area used for animal shelter. The mow area is elevated several feet above the aisle and is floored; there is no separate loft area. Below the mow are stalls. The area under the east-west portion is formed by a continuous stone foundation with a single, wide opening on its west elevation and is separate from the area under the north-south portion. The area under the larger portion of the barn also has a continuous stone foundation, although the blocks are less finished than those under the north portion. The area is now open except for wooden beam supports on stone piers, but may have been

[1]Allen G. Noble, Wood, Brick & Stone: The North American Settlement Landscape, 2 vols. (Amherst: University of Massachusetts Press, 1984), vol. 2: Barns and Farm Structures, p. 22.

divided into stalls earlier. The stone blocks which form the foundation continue south of the barn along the embankment, forming a retaining wall. A concrete trough is at the base of the wall, with a pump set into a concrete cap above the trough. The barn is counted as a contributing building.

Approximately 117 feet east of the house is the circa 1876 braced frame barn. Its tin covered gable roof is also oriented north-south, and it is also partially banked; a cupola has also been removed from this barn. The circa 1882 barn is similar to the subtype B bank barn described by Noble. The plan of the upper level of this barn type was nearly identical to the English barn, with three units, a runway or drive flanked by cribs; in the case of the subtype B barn, however, the English barn plan was over a banked lower story. Adams's circa 1876 barn also resembles the Pennsylvania barn type E, in which the elevation of the barn which opened into the stable yard was sheltered by a shed or pent roof.[2] As with the circa 1867 barn, functions are divided, with the upper level devoted to feed and equipment storage and the lower level used for animal shelter. The lower level is located under only the north half of the barn and the pent roofed portion which wraps around the north end of the barn.

The south one-fourth of the barn originally consisted of two cribs; the horizontally slatted fronts of the cribs and their individual doors remain, although the partition between them has been removed. A narrow loft is above the cribs. The drive runs east-west and is bordered by the roughly dressed sandstone blocks which form a continuous foundation for the excavated portion of the barn. The sliding track doors which closed the west end of the drive have been removed; the doors at the east end remain in place. A hay mow elevated about four feet above the drive floor borders the drive on the south. The mow extends the length of the gable roofed portion of the barn.

Entrance to the partial lower level, which extends under the mow area, is through the pent roofed extension which covers the north elevation and wraps around the east and west sides of the barn. Milk cows were housed in the northernmost portion of the extension, with a calves' room in the section which wraps around the northwest corner of the barn. The area under the hay mow has a concrete floor, with a manger between the floored area and the holding area for the milking cows. The pent roofed extension is the most deteriorated portion of the barn, with a number of the vertical siding boards missing. This barn is also counted as a contributing building.

A number of other features are present on the farmstead, but are included as elements of the setting, rather than counted as either contributing or noncontributing elements. A stone foundation for a silo, razed at an unknown date, is adjacent to the barn on its west elevation. Simple fences, with wooden posts and wire mesh below strands of barbed wire create corrals and enclosures around the barns and along the drive and highway. North of the house, a brooder house, reportedly bought from Sears, is severely deteriorated; outside the period of significance and in a ruinous state, it is not counted. Similarly, a frame privy northeast of the house is in a state of collapse and is also not counted.

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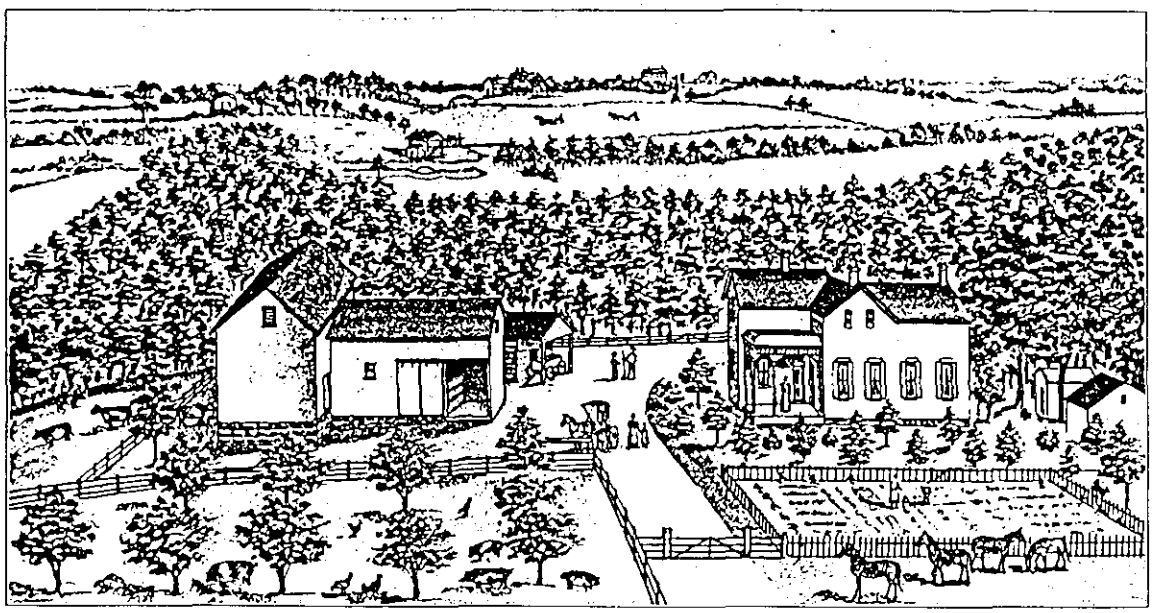
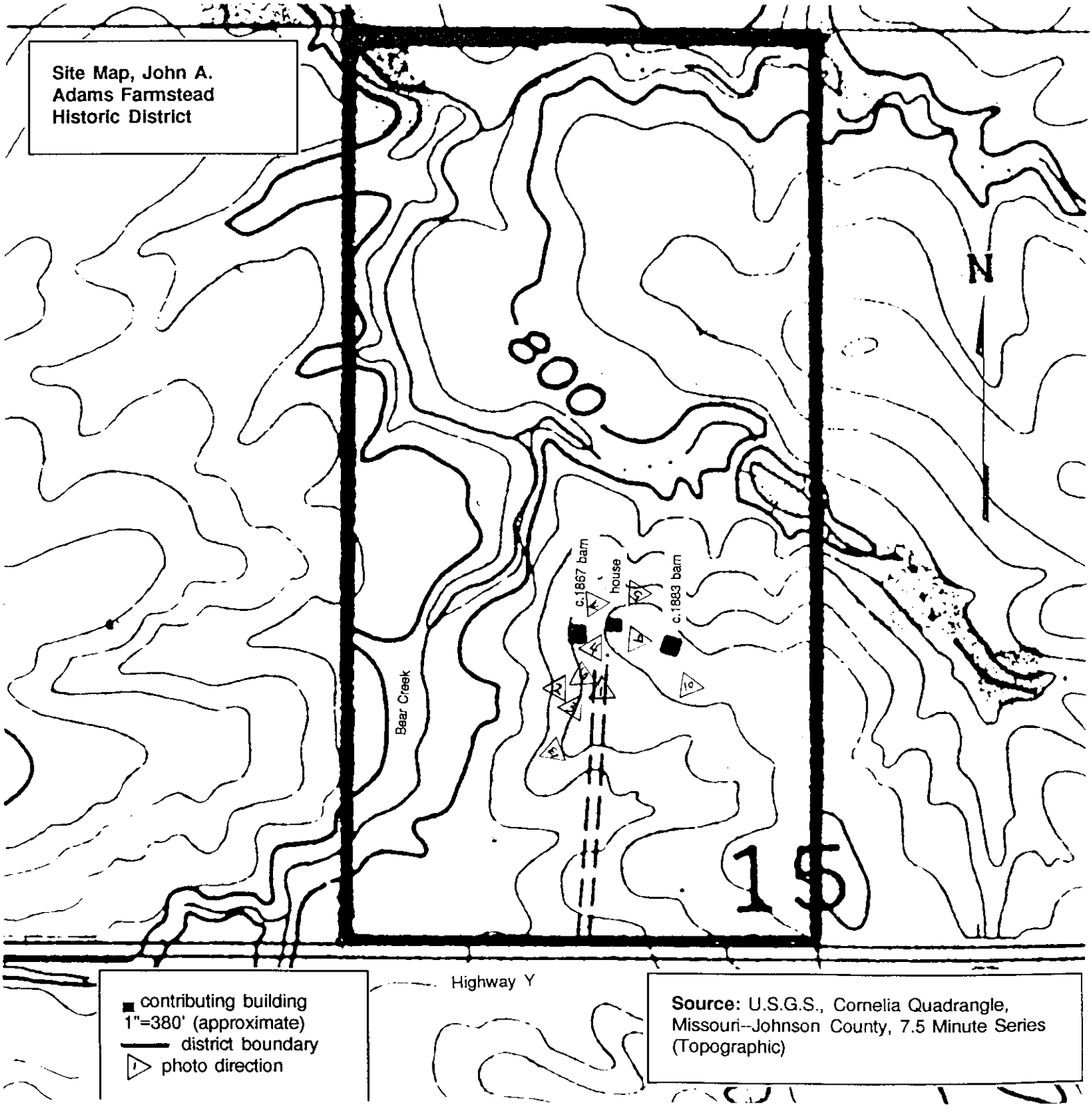
[2]Ibid.

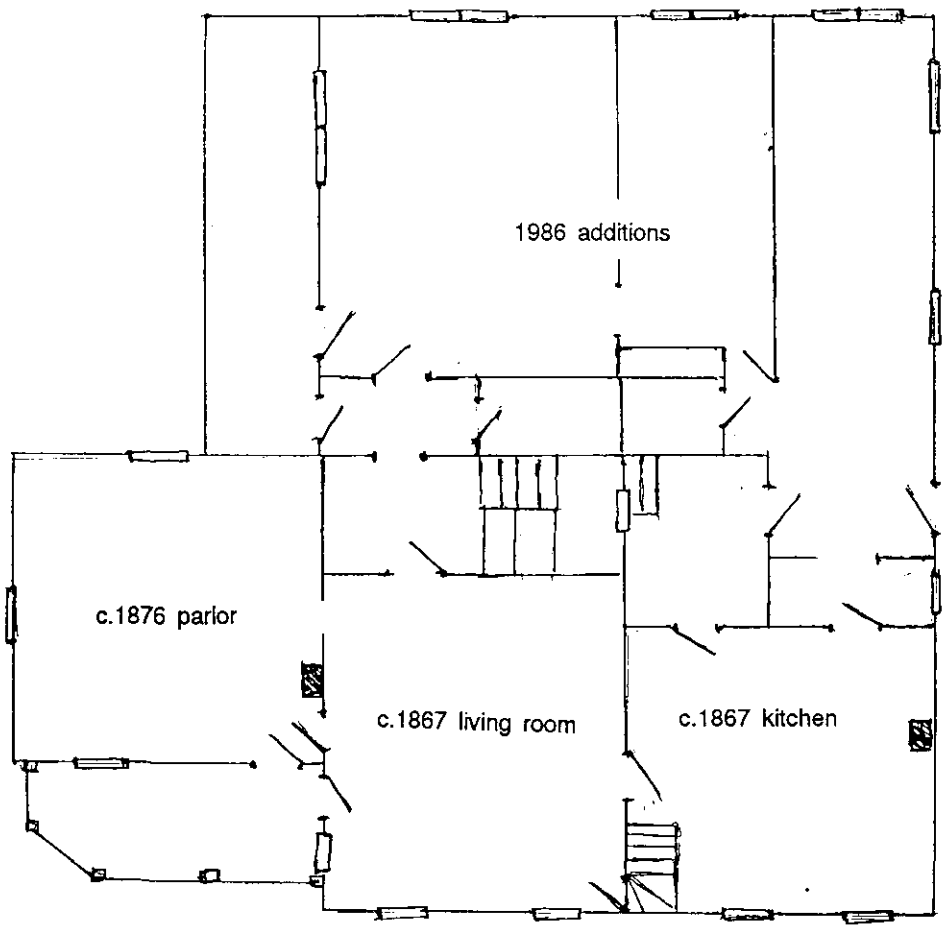
The most significant feature of the farmstead is largely subterranean. By 1895, about two miles of tiles drained the 240 acres which comprised the Adams farm. Within the eighty acre parcel included within the district, an extensive network of tiles and dams, components of the system developed by Adams to control erosion and reclaim his ravaged farmland, remain in place and continue to function, although portions have deteriorated. For example, an extensive drain field has been identified and the upper portions of several dams are visible in the pasture southwest of the house, between Bear Creek and Highway Y. Other drain fields extend east of the circa 1876 barn and southeast of the house. The system, as described by Adams and others, used a combination of vitrified clay sewer and drain tiles, ranging in diameter from eight to fifteen inches. The drainage lines have collapsed in several places, allowing the tiles to be examined, although the integrity of the system remains intact and it still functions. The ends of some tile are also visible where the system drains into East Bear Creek. Some tile were destroyed in the excavation for the 1986 basement. As an interrelated system of clay drain and sewer tiles and erosion control dams, it is counted as a contributing structure.



[1]Residence and Farm of John A. Adams, Johnson County, Mo. Source: Portrait and Biographical Record of Johnson and Pettis Counties (1895).

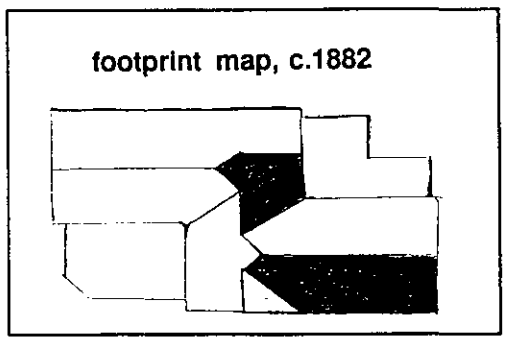

Site Map, John A. Adams Farmstead Historic District
800
N
c.1867 barn
house
c.1883 barn
Bear Creek
15
Highway Y
contributing building
1"=380' (approximate)
district boundary
photo direction
Source: U.S.G.S., Cornelia Quadrangle, Missouri--Johnson County, 7.5 Minute Series (Topographic)

Floorplan, House

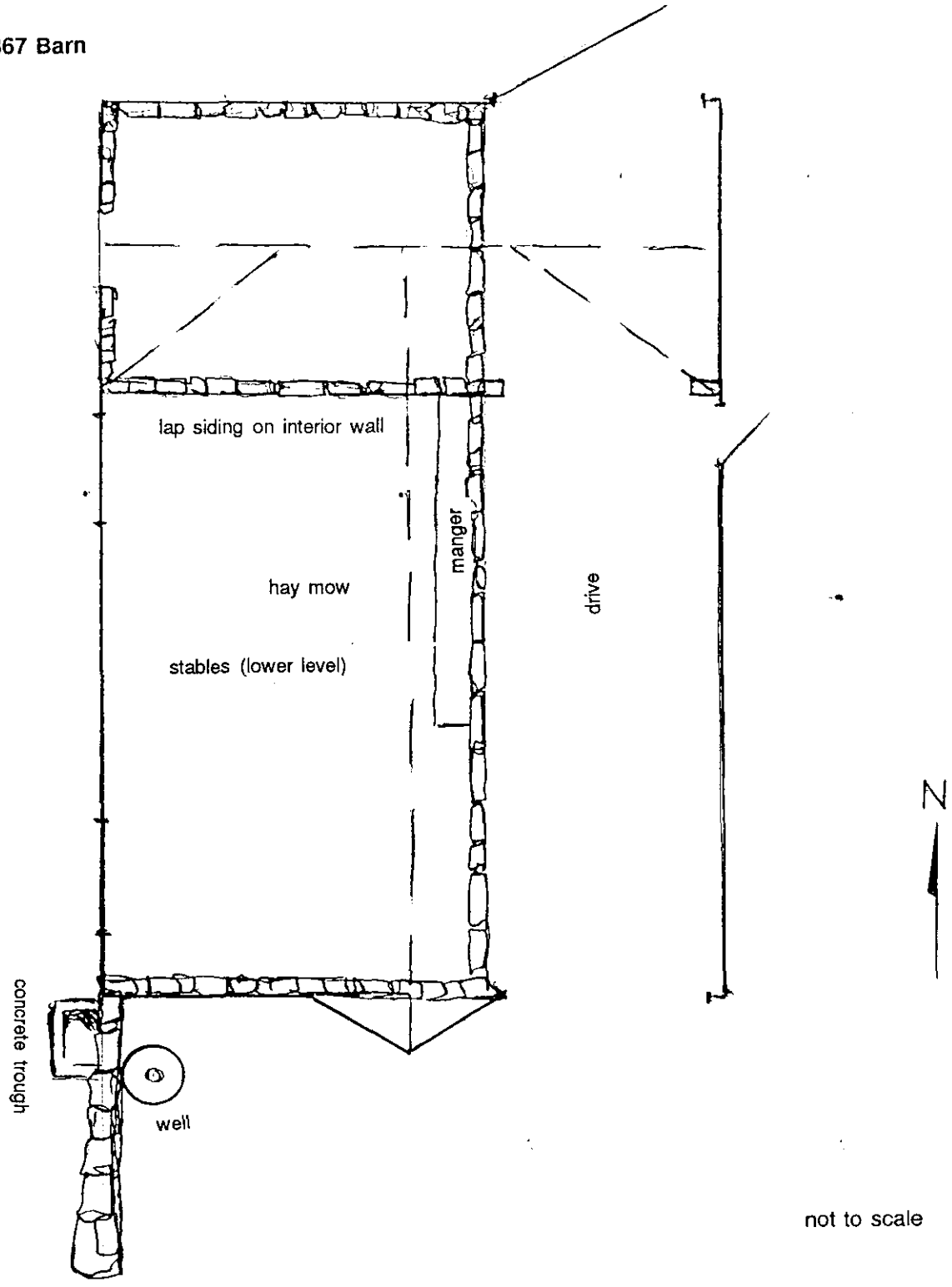


N

not to scale



Floorplan, c.1867 Barn



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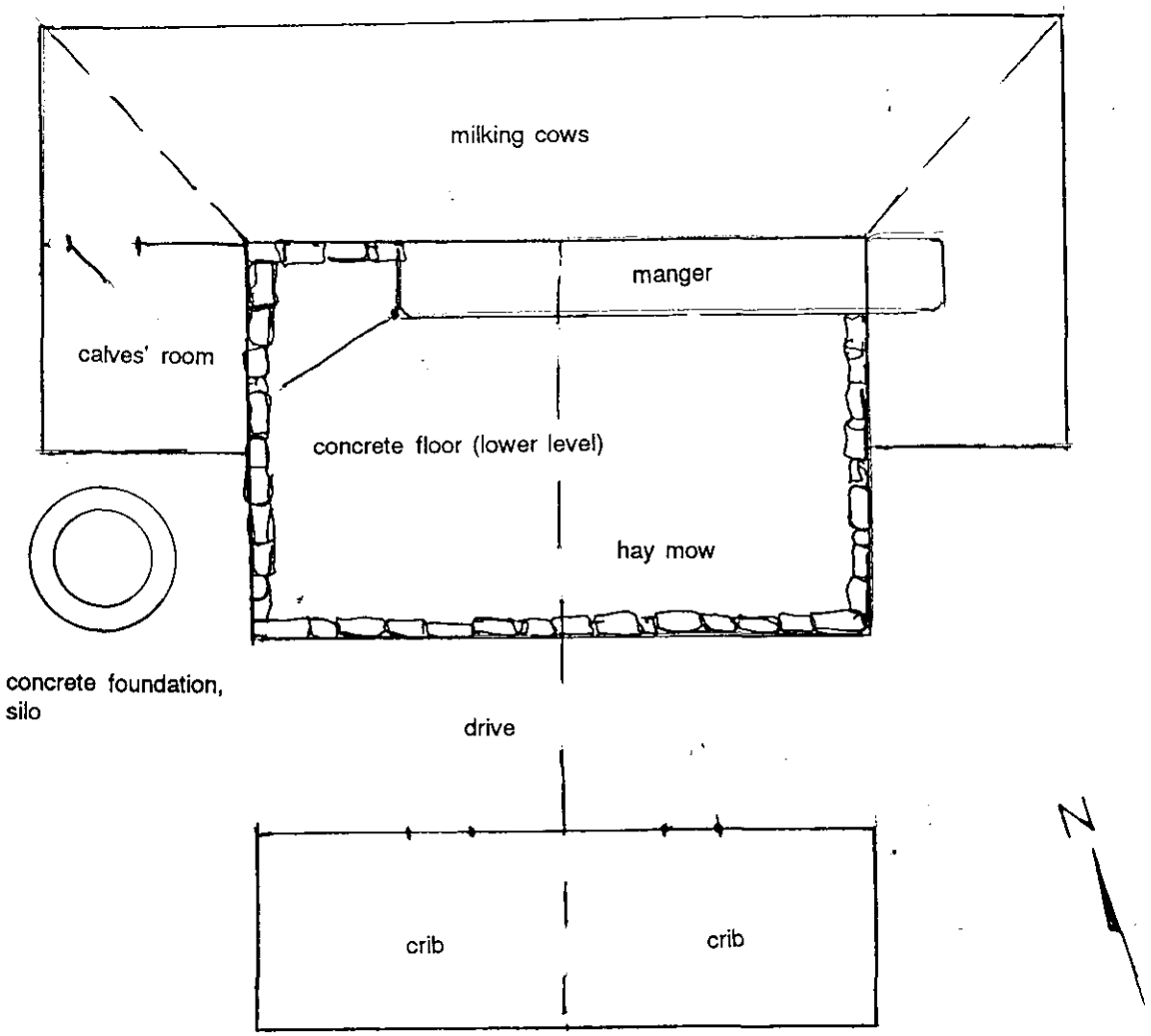
Floorplan, c.1882 Barn



not to scale

SUMMARY: The John A. Adams Farmstead, Missouri Highway Y, Warrensburg vicinity, Johnson County, is significant under Criterion A in the area of agriculture. About 1875, Adams developed and installed a combination erosion control and drainage system on his farm which was widely promoted in the agricultural press and by a number of midwestern agricultural colleges. His system was eventually adopted by farmers across the midwest. The period of significance extends from circa 1875, when Adams began his first experiments with what became his soil-saving dam, until 1921, when he died.

NARRATIVE: The origins of agricultural drainage reach back into antiquity. Clay drainage pipes which date to 3100 B.C. have been recovered in the Middle East. Herodotus observed and recorded the results of agricultural drainage in the Nile Valley in 400 B.C. In 2 B.C., Cato offered specific written instructions for land drainage, and, in 1 A.D., Pliny recommended the construction of drains by half filling a trench with stones, gravel, or a "'rope of sprays tied together and the whole covered with earth that had been thrown out.'"[3] Also in 1 A.D., Columella recommended that drains be placed three feet deep. The Romans were aware of, and used, soil information for drainage design and advocated the use of deep, covered drains under certain circumstances.[4]

Underground drains were often constructed of boards and stones, although the widespread use of tile drains in Europe dates from 1810, when they were used on the estate of Sir James Graham, Northumberland, England. An earlier use, at the convent garden at Maubeuge in France, which dated from 1620, was not widely emulated.

On most farms, drainage was primarily accomplished with ditches, facilitated in some areas by the invention of the mole ditcher about 1854.[5] On midwestern farms, the necessary labor for the construction of these ditches was often performed by immigrants. An 1851 immigrants' guide urged the Irish to avoid the vices of the city and seek agricultural labor, such as ditching;

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[3]James N. Luthin, Drainage Engineering (New York: John Wiley and Sons, 1966), p. 7; and Kevin P. McGowan and Eric Lautenschlager, "Nineteenth Century Agricultural Drainage Technology in the Midwest," Material Culture 20 (Fall 1988): 62.

[4]Luthin, p. 7.

[5]Allan G. Bogue, From Prairie to Corn Belt: Farming on the Illinois and Iowa Prairies in the Nineteenth Century (Chicago: University of Chicago Press, 1963), p. 84. The mole ditcher was described as a "'wedge of iron . . . attached to a sharp coulter, some three or four feet long . . . fastened to a frame, so as to work above the surface of the ground. In lands inclined to be wet . . . this instrument is plunged into the ground the desired depth, and with two yoke of cattle attached to a windlass, it can be forced readily through the earth at the rate of one-half mile a day.'" Ibid. The drains created by the mole ditcher had varied success. In porous soils they tended to break down almost immediately.

farms in Indiana, Illinois, Iowa, and Missouri were recommended for the best openings.[6]

In the United States, the first drain tiles were apparently laid by Scottish immigrant John Johnston on his farm at Geneva, New York, in 1835. Johnston, who immigrated to America in 1821, was the grandson of John Johnstone, an early exponent of tile drainage systems and the author of An Account of the Mode of Draining Land According to the System Practiced by Mr. Joseph Elkington. First published in 1797 and reissued in a second edition in 1801 in London, Johnstone's book antedated the use of tile drains on Graham's estate. Johnstone's book was published in America in 1838.[7]

Johnston first began laying tiles on his farm in 1835, using pattern tiles he had brought to the U.S. from Scotland; in 1838, Benjamin F. Whartenby began the manufacture of pattern tiles in New York. By 1851, Johnston had installed sixteen miles of drains on his farm, and, by 1856, he had completely drained his 306 acre farm with over 210,000 tile in a fifty-four mile long drainage system.[8] According to Johnston, "thorough draining is the starting point to successful farming."[9] Johnston's example was widely adopted, so that, by 1853, "'almost every county in western New York is now doing more or less at tile drainage.'"[10] His efforts were also widely reported in the Midwestern agricultural press, which extolled him as "'The Great Tile Drainer.'"[11] Johnston wrote articles on agriculture for the New York Herald Tribune, Rural New Yorker, Country Gentleman, American Agriculturist, Boston Cultivator, and others. In 1859, he received 164 letters from every state in the Union requesting information on his methods.[12]

In 1848, the invention of a tile making machine stimulated the use of drain tiles to increase agricultural productivity of the lands along the Eastern

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[6]David E. Schob, Hired Hands and Plowboys: Farm Labor in the Midwest, 1815-60 (Urbana: University of Illinois Press, 1975), p. 120.

[7]Marion M. Weaver, History of Tile Drainage (In America Prior to 1900) (Waterloo, NY: M.M. Weaver, 1964), 5-25. On his arrival in America, Johnston dropped the final "e" from the family name.

[8]John Johnston [sic], "Draining," Transactions of the N.Y. State Agricultural Society 15 (1855): 257; and Weaver, pp. 33, 57, and 221..

[9]Johnston, p. 17.

[10]Ohio Cultivator 9 (1853), pp. 3-4, quoted in Clarence H. Danhof, Change in Agriculture: The Northern United States, 1820-1860 (Cambridge, MA: Harvard University Press, 1969), p. 255.

[11]Bogue, p. 84.

[12]Weaver, pp. 279-280.

Seaboard. In 1853, tiles were first manufactured in Indiana. By 1860, about 20 percent of the agricultural land of the major states of the corn belt--Iowa, Indiana, Illinois, and Ohio--was drained, primarily by tile. The tiles were usually two to four inches in diameter and cost eight to twelve dollars per thousand. Between 1850 and 1859, there were sixty-six tile factories in the U.S. Between 1860 and 1869, the number increased to 234, and between 1870 and 1879, there were 840. By 1882, the center of the use and manufacture of drainage tiles had shifted from the east to the midwest. There were 1140 factories producing the tiles, with 486 located in Indiana, 320 in Illinois, and 230 in Ohio.[13]

John Albert Adams was born October 16, 1841, at his family's farm in the Bear Creek community near Warrensburg, Johnson County, Missouri. John Albert's father, Judge Daniel Adams, was born in Wilkes County, North Carolina, in 1813, and, in 1834, came to Johnson County, Missouri, with his father, John. The elder John Adams bought two warrants for land in Township 45, Range 25, and built a house in section 11. Daniel bought a single warrant for 160 acres in section 15, and, after his marriage to Susan McCreary of Howard County, entered an additional 300 acres in sections 14 and 15.[14] Daniel Adams; John Adams, Sr.; Abraham Adams, also a son of Daniel; and John Jones established a subscription school on John Adams Sr.'s land where local children, including John Albert, were educated.[15]

In April 1862, twenty year old John Albert enlisted in Company G, 7th Cavalry, Missouri State Militia. In April 1864, Corporal Adams was ordered discharged and imprisoned for three years by a General Court Martial on the charge of grand larceny for stealing three mules in Johnson County. The following month the sentence was remitted and Adams returned to his company. He served the remainder of the war in Missouri and was mustered out in April 1865 at Warrensburg.

After his discharge, Adams returned to the Bear Creek community to continue to assist his grandfather in the development of his farm. The following year John Albert Adams married Dorothy Mack, who was born in Bavaria in 1847, and erected a house overlooking Bear Creek on forty acres which belonged to his father, one-half mile from his birthplace. A barn was apparently already in place on the property. The house built by Adams was a story and one-half gabled ell, what Fred W. Peterson classified as a type 3 balloon frame farmhouse. Both Peterson's type 3 farmhouse and type 4 farmhouse, which was a full two story version of the same form, were described as asymmetrical and

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[13]Schob, p. 116; McGowan and Lautenschlager, p. 62; Luthin, p. 10; and Weaver, pp. 222 and 227. The locations of the remaining tile factories were: Michigan--63; Iowa--18; Wisconsin--13; New York--8; and Pennsylvania--2. Weaver, p. 227.

[14]"Typical Johnson County Farm," Warrensburg (Missouri), Daily Star, September 3, 1899, p. 1.

[15]History of Johnson County, p. 970.

"essentially two units of one structure right angled to each other, resulting in a cross-wing effect."[16] In the case of the type 3 variant, one unit was usually taller than the other.

The Adams house originally consisted of two rooms on the ground floor, with a basement under the front room, and a loft room above each; the variation in the height of the two units was minor. Each upstairs room had its own stairway and there was no access between the rooms. According to Peterson, the gabled ell or T farmhouse, in both its two story and less than two story forms, was the most numerous type identified in the upper Midwest. The form was preferred, in part, because of its economy and efficiency of construction, the flexibility and adaptability of its interior spaces, and its adaptability to individual variations. Peterson concluded that the gabled ell and T forms were perpetuated both through vernacular building practices and through traditional house types published in professional stylebooks.[17]

By 1870, according to the agricultural census, Adams owned forty improved acres, apparently the land which was originally part of his father's holdings, and $120 worth of implements and machinery. His livestock, which consisted of two horses, four mules, two milch cows, and four other cattle, was valued at $950. John Albert raised a diversified array of crops, producing sixty-five bushels of wheat, one hundred bushels of oats, 250 bushels of Irish potatoes and twenty bushels of sweet potatoes, and three hundred bushels of Indian corn. In addition, his sheep yielded eighty pounds of wool, and one hundred pounds of butter were produced by his milch cows. Adams's primary income probably derived from the sale of livestock. His animals could have consumed all the corn produced for the year, leaving little or none for marketing.[18] One county history noted that the combination of livestock raising and grain production was the prevalent type of agriculture in the county and that, "with the exception of wheat, practically all the crops grown in the county are fed to stock."[19] In September 1872, John Albert bought an additional 40 acres from the estate of his grandfather, who had died in 1870.

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[16]Fred W. Peterson, Homes in the Heartland: Balloon Frame Farmhouses of the Upper Midwest, 1850-1920, Rural America Series (Lawrence: University Press of Kansas, 1992), p. 96.

[17]Ibid., p. 124.

[18]1870 Agricultural Census (microfilm copy in State Historical Society of Missouri, Columbia, MO). The consumption of corn as supplementary feed by livestock is based on Jeremy Atack and Fred Bateman, "Self-Sufficiency and the Marketable Surplus in the Rural North, 1860," Agricultural History 58 (July 1984): 303.

[19]Ewing Cockrell, ed. History of Johnson County, Missouri (Topeka: Historical Publishing Company, 1918) p. 346.

However, Adams quickly discovered that, as the natural ground cover was removed and the land plowed, the soil began to erode, often at a rapid rate. As Adams later explained to the author of a pamphlet on drainage tiles,

> . . . no sooner was the soil fairly broken and crops planted than the farm, so dearly wrought out of the wilderness, began to go to ruin. Each rolling field began to develop scars and creases of erosion. These rapidly became large gullies.[20]

According to Adams, one gully soon became "'a ravine big enough to drive in four yoke of oxen, turn 'em round and drive 'em out again.'"[21]

According to an 1881 county history, about three-fourths of Johnson County was still undulating natural prairie; the remaining portion of the county was timber land. The prairies were cut into small parts by the numerous streams which intersected the county. The southwest portion of the county was drained by Big Creek and its two principal tributaries, Walnut and Bear creeks,[22] all a part of the Blackwater principal drainage basin. Washington township, where the Adams farms were located,[23] was described in a contemporary history as "quite rolling, and in some places very abrupt and hilly."[24]

The clay and shale-based siltloams which comprised the majority of the county soils were especially prone to erosion with the removal of timber and grass covers.[25] Bennett placed much of Johnson County within the Claypan Prairies and the Residual Limestone and Shale Plains of the Central Prairie and Eastern Timbered Border Region. Within this region, he observed that "about 60 per cent of the entire area slopes sufficiently to make erosion a definite problem under conditions of clear-tillage farming."[26] Although sheet erosion was

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[20]Dickey pamphlet, p. 35.

[21]Ibid.

[22]There are two Bear creeks in Johnson County; it is not clear if this Bear Creek is the one which runs through the Adams farmstead, which is designated East Bear Creek on modern topographic maps.

[23]The Adams Farmstead is currently located in Monserrat Township.

[24]History of Johnson County, p. 487.

[25]History of Johnson County, Missouri (Kansas City, MO: Kansas City Historical Company, 1881), pp. 194-196; and Joy Stevenson, Roger Maserang, and Warren Tom Christopher, "One Hundred Years of Architectural Resources in Johnson County, Missouri," Survey Projects 29-85-9311-016 and 29-86-10011-039-A, June 1987 (copy in Missouri Cultural Resources Inventory, Missouri Department of Natural Resources, Jefferson City, MO), n.p.

[26]Bennett, p. 685. The most recent soil survey of the county identified the soils found on the Adams farmstead as belonging primarily to the Mandeville-Norris-Bolivar association, shallow and moderately deep, gently sloping to steep, and well drained to moderately well drained. With sloped

most common, gullying was prevalent in the rolling sections where shallow soil overlaid stiff clay subsoils. According to Courtney C. Aldrich Jr., Johnson County lay within the Scarped, or Osage, Plain, with nine-tenths of the county classified as upland. Aldrich identified the soils as primarily Bates Fine Sandy Loam, with Osage Silt Loam along the drainages. The Bates soils were well drained and especially susceptible to erosion, with the loss of up to one-half their surface depth due to sheet erosion; they also were subject to moderate gullying. Aldrich located the county within the Corn and Winter Wheat Belt.[27]

At first Adams tried traditional methods to combat erosion, controlling runoff by filling ditches with rails and rocks and then covering them with dirt, and checking the effects of erosion by filling gullies with brush, hay, logs, and other debris.[28] About 1875, on a visit to the Missouri Botanical Garden in St. Louis, Adams claimed to have gotten the idea for an alternate method of controlling erosion. At the Botanical Garden, Adams observed a pond formed by an earthen dam which was constructed across the path of a small brook. Two feet below the top of the dam an iron pipe carried off the overflow from the pond. Adams noted that the soil brought down by the brook had settled to the bottom of the pond and almost filled it.[29]

Adams returned to his farm where he constructed an earth dam across one of the gullies which cut through his land. Through the middle of the dam, about three feet below the top, he inserted a hollow sycamore log for a drain. During heavy rains, the dam held the muddy run-off from Adams's and his neighbors' fields; when the water filled the gully to the level of the hollow log, the surplus, almost clear after the suspended soil had settled, drained away.[30]

Encouraged by the success of this crude prototype, Adams expanded and refined the system. Water draining through the hollow log eroded the dam, so vitrified clay tile, usually employed for underdrainage, or sewer pipe was laid along the bottom of the gullies which scarred his farm and under the base of the earth dams thrown across those gullies. At the end of the upstream

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ranging from 2 to 16 percent, all are subject to erosion. United States Department of Agriculture, Soil Conservation Service, in cooperation with Missouri Agricultural Experiment Station, Soil Survey of Johnson County (February 1980), pp. 5-6 and passim.

[27]Courtney C. Aldrich Jr., "Johnson County: A Geographical Study Representative of the Western Plains Region of Missouri" (Ph.D. dissertation, Louisiana State University, 1955), pp. 4-13 and 48-53.

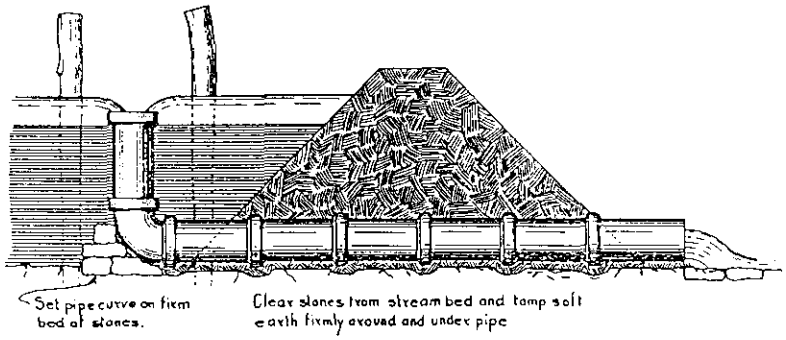
[28]Cockrell, p. 370; and A.B. Macdonald, "Lost at Sea," Country Gentleman, July 19, 1924, p. 13.

[29]Macdonald, p. 13.

[30]Ibid.

tile or pipe, a vertical pipe was fitted in an elbow or T joint to allow the impounded water to drain after it had accumulated to the height of the vertical pipe. (See figure #2) As the height of the accumulated soil deposits neared the open end of the vertical pipe, another joint would be added until the level of the soil reached within two feet of the top of the dam. A fence or screen kept brush and debris away from the open end of the pipe.[31]

As the system proved effective, Adams continued to refine its details. In general, fifteen inch pipe would be laid under the earth dams. As details of the system were disseminated, its low cost was emphasized as one of its most desirable features. At a cost of about thirty-five cents per foot, it required about eight to ten dollars worth of tile for each dam, with additional expense for erecting the earth barrier.



Lengthwise section of gulley showing cross section of earth dam and installation of vitrified clay sewer pipe underflow.

[2]Source: "Vitrified Clay Sewer Pipe and Drain Tile on the Farm" (Kansas City, MO: W.S. Dickey Clay Manufacturing Company, n.d.), p.2.

Previously, in an agricultural setting, clay tile and pipe had been used primarily for underdrainage, to remove excess moisture from soil to permit its tillage.[32] The system devised by Adams was innovative, utilizing the tile to both conserve and reclaim land ravaged by the effects of erosion. However, he also employed tiles in a more traditional manner in combination with his erosion control dam. To drain the soil which accumulated as the eroded gullies were filled, T-joints were fitted in the upright pipe through which the surplus water drained to allow the attachment of subdrains. The subdrains allowed water to soak into the soil and be carried off through the pipe without the

[31]Adams was apparently familiar with the use of tile for drainage. According to the 1881 History of Johnson County, "when just a lad, he read an article concerning the use of tile in Illinois and, being a bright and observing youth, he noticed the ill results of poor drainage on his father's farm and he often made the statement that when he became a man and owned a farm, his farm would be tiled" (p. 971).

[32]M.F. Miller, The Soil--Its Improvement and Conservation (Columbia, MO: Lucas Brothers, 1950), p. 60.

dangers of erosion. The pipe were usually eight inch No. 2 sewer pipe, which had interlocking joints and were easy to lay; the No. 2 grade was considered unsuitable for most sewer drains but was effective for underdrainage. These pipes cost ten to twelve cents a foot. Several layers of subdrains might be required as the gully continued to fill; larger gullies might require a series of dams, creating a stepped effect. Eventually, five to eight feet of earth covered many of the pipes originally laid along the gully bottoms.[33]

The author of a pamphlet on the drainage system recalled Adams's service during the Civil War and described the system in terms of a military campaign:

> . . . Adams resorted to throwing up earthworks--dams, in other words, to intercept the devastating streams at the low points in his meadows. At the same time, he tile-drained these same meadows so as to enable the water to soak down through the soil to a considerable extent instead of coursing over its surface; and where the drains ran out under the dams, he joined to them vertical clay pipes reaching up to the surface on the water side of the dams to take care of the remaining surface water and prevent its carrying them away. Below the dams the drains continue under the broad lower fields to the river [East Bear Creek] so as to avoid any open ditches.[34]

The success of Adams's methods was measured by the increase in the productions and size of his holdings. In 1880, he owned 110 acres, most apparently acquired from the estate of his grandfather, valued at $1500. Of these holdings, seventy acres were tilled, thirty were in pastures, meadows, or orchards, and ten were woodland or forest. Farm implements and machinery were valued at $360 and livestock, which included one horse, two mules or asses, one milch cow and two calves, twenty-six swine, and twelve barnyard poultry, were valued at $365. Forty-two acres of corn, which was the only crop recorded, produced 2300 bushels. Ten acres were mown and yielded four tons of hay. In addition, one hundred eggs were gathered. The value of all farm productions was $480. Adams hired laborers for two weeks, probably during the brief harvest season, and paid seventy-five dollars in wages.[35]

Adams's success was also represented by the buildings on his farm. About 1876, probably the result of his concentration on the raising of livestock rather than row crops for income, Adams constructed a second barn. Both the second barn and the original barn, which may have been erected as early as 1867, were bank barns, although the lower level did not extend under the full barn in either case. Both barns were general purpose, including crop storage and animal shelter functions and segregating those functions on separate

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[33]F.B. Nichols, "Giving Land to Your Neighbors," Missouri Ruralist, April 20, 1915, p. 1.

[34]Dickey pamphlet, pp. 35 and 37.

[35]1880 Agricultural Census (microfilm copy in State Historical Society of Missouri, Columbia, MO).

levels. While the earlier barn included only undifferentiated stalls on the lower level, the second barn included separate areas to house calves and milk cows, and cribs and a hay mow on either side of a cross gable drive on the upper floor. A silo was constructed adjacent to the barn. About 1876, Adams constructed a one and one-half story addition to the house, as well. The addition included a parlor on the ground floor and an additional bedroom upstairs. An Eastlake porch with decorative frieze was added to the revised facade and may have replaced an earlier porch on the west elevation, now obscured by the circa 1876 addition. Several smaller ancillary buildings pictured in an 1895 illustration are no longer extant.

By 1895, Adams had enlarged his holdings to their greatest extent, 240 acres, and about two miles of drainage tiles underlay the farm. The value of the farm had increased to $8,000. Two hundred twenty-five acres were in cultivation, including seven acres of orchards, eighty acres of corn, twenty-five acres of wheat, twenty acres of rye, and twenty-five acres of clover and timothy. His livestock included cattle and ten brood sows that raised two litters of pigs each year. He also continued to sell butter and eggs.[36] In the 1914 county atlas his farm, which still contained 240 acres, was shown as "Cedarcroft" Farm.[37]

Adams in many respects exemplified the ideal of a progressive farmer and his farm exemplified fundamental changes in attitude toward farm management and toward crops and soils among many late nineteenth-century farmers. Although the traditional unit of agriculture remained the "single-family farm homestead,"[38] the farm had largely completed its transition from semisubsistence to commercial agriculture and was regarded and managed as a unit of production in a market economy. Adams's successful control of the soils and drainage of his farm and his emphasis on commercial production mark him as an agricultural entrepreneur. This entrepreneurial nature was also reflected by his willingness to adopt the new technology which was also revolutionizing late nineteenth-century agriculture. For example, Adams purchased the first riding plow, the first steam threshing machine, the first patent straw stacker, and the first self binder in the area. With the steam thresher in its first year of operation, he was able to thresh 40,000 bushels of wheat. The new technology and its effect on traditional practices was not always appreciated, however. After he purchased the binder in 1882, angry harvest hands threatened to burn the machine.[39]

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[36]Portrait and Biographical Record, p. 323; and "Typical Johnson County Farm," Warrensburg Daily Star, September 3, 1899.

[37]Plat book of Johnson County, Missouri (Philadelphia: A.R. Stinson, 1914), pp. 28-29.

[38]Danhof, Change in Agriculture, p. 3.

[39]"Typical Johnson County Farm."

Most of the tile and pipe used by Adams was manufactured by the W.S. Dickey Clay Manufacturing Company in Kansas City, Missouri, which did much to publicize the effectiveness of the new system. Adams was one of the progressive farmers featured in an undated pamphlet published by the company extolling its products and the beneficial results of tile drainage.[40] In their pamphlet, "Vitrified Clay Sewer Pipe and Drain Tile on the Farm," the Dickey Company extolled Adams as "a pioneer in the combined use of sub-drainage and run-off control"[41] and as "the first man to employ a combination of the sewer-pipe method and the drain-tile method on his farm," which they labeled the Combination Method.[42]

The success of Adams's erosion control and drainage system was quickly noted and may have first been copied by his Johnson County neighbors. In addition to Adams's farm, the Dickey Company featured in their pamphlet on drainage the farms of J.H. Christopher and J.H. Baile, both near Warrensburg, as examples of the benefits of using drain tile to control erosion. Both farmers used Adams's method of erecting an earth dam across an eroded gully and draining the impounded water with an L-shaped sewer drain. Christopher eventually adapted the system to create a series of stepped ponds or reservoirs, arranged so that each pond drained into the next lower one; the progressively clearer water from the lower ponds was used to supply water to the town of Warrensburg. In his history of Johnson County, Cockrell described the method devised by Adams but did not credit the source:

> a method employed with considerable success in this county consists of building a dam of earth or stone across the gully in the lower part of the field to hold the surface run-off. A pipe passes through the dam and connects with an upright pipe in the upper side to conduct the water away after it reaches the height of the vertical pipe. The sediment is checked by the dam and soon fills the depression.[43]

The simplicity and low cost of the system was emphasized in articles in several agricultural publications: "The system is very simple and requires absolutely no engineering experience to install. It is a great deal more simple than the planning of an ordinary tile drainage system."[44] F.B. Nichols, field editor for the Missouri Ruralist, noted that the system developed by Adams was "used quite a bit in northern Missouri; there are

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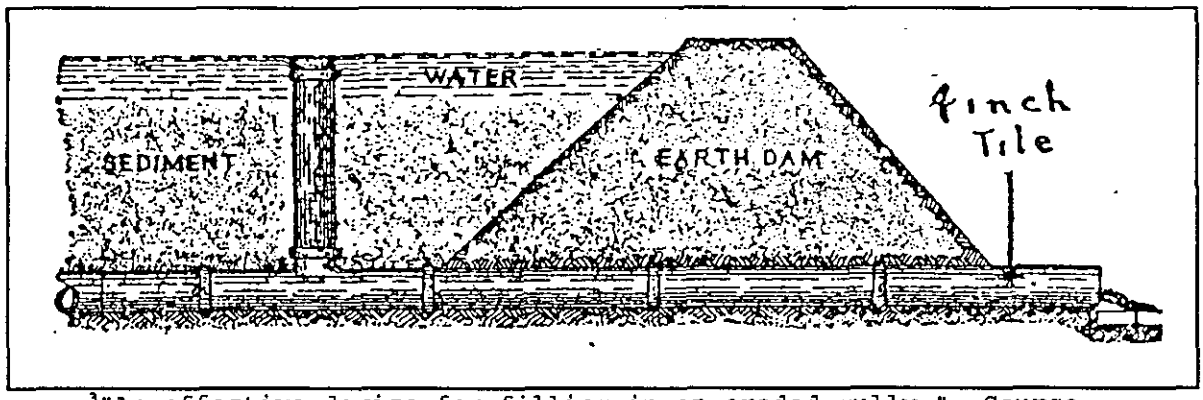
[40]"Vitrified Clay Sewer Pipe and Drain Tile on the Farm" (Kansas City, MO: W.S. Dickey Clay Mfg. Co., n.d.), pp. 35-39. Copy in the possession of Bill and Sandra Wayne, Warrensburg, MO.

[41]Dickey, p. 35.

[42]Ibid., p. 37

[43]Cockrell, pp. 349-350.

[44]F.B. Nichols, "Giving Land to Your Neighbor?" Missouri Ruralist, April 20, 1915, p. 1.



[3]"An effective device for filling in an eroded gully." Source: Seymour, ed., Farm Knowledge, vol. 2.

hundreds of farms where the Adams system has been employed in the last few years."[45] According to A.B. Macdonald, in a 1924 article in The Country Gentleman, "hundreds of farmers in the Middle West copied [Adams's] plan and stopped the loss of their land, too."[46] The "Adams soil-saving dam"[47] was adopted by the agricultural colleges of Iowa and Nebraska and the University of Kansas, as well.[48] In his text Soil Conservation, Hugh Hammond Bennett noted that, as late as 1939, the Adams dam continued "to be used extensively in erosion-control operations."[49]

By 1918, Adams had reduced his holding to eighty acres, which correspond to the boundaries of the historic district. The progressive agriculturist Adams did adhere to one traditional practice, dividing his farm among his sons in order to keep them near him. According to Danhof, the division of land among children was regarded as a measure of success, much as the initial accumulation of land was. However, Danhof also viewed the practice as an

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[45]Ibid.

[46]A.B. Macdonald, "Lost at Sea," The Country Gentleman, July 19, 1924, p. 13.

[47]Ibid.

[48]Ibid.; Dickey, p. 30; and Lewis J. Bertalotto, General Manager, South-Central Operation, Mission Clay Products, to Sandra and Bill Wayne, July 19, 1991.

[49]Hugh Hammond Bennett, Soil Conservation (New York: McGraw-Hill Book Company, 1939), p. 894.

obstacle in the transition of agriculture from semisubsistence to a market oriented business.[50]

On February 18, 1921, Adams died. His obituary noted that, "while very young, Mr. Adams took up farming, which occupation he has followed all of his life."[51] Adams's innovative method of erosion control antedated organized efforts at control and conservation by the federal government. The Department of Agriculture's Bureau of Chemistry and Soils was created in 1894, the same year the DOA first issued a bulletin which described methods to curb erosion. A division of soil erosion within the Bureau of Chemistry and Soils was not created until 1908, and a bulletin on terracing was issued nine years later. Within state agricultural experiment stations and extension services, programs on erosion control varied. Between 1914 and 1933, the importance of erosion control was especially emphasized in Alabama, Texas, and Iowa. By 1928, "soil saving dams" had been constructed with some assistance by state extension services on 45,058 farms, affecting 1,349,000 acres. Not until 1928, seven years after Adams's death, did the director of the extension service acknowledge that erosion control "'continued to be the major agricultural engineering activity in all areas where the problem of soil erosion is serious' . . ."[52] A soil conservation district was not established in Johnson County until 1944.[53]

Adams's drainage system remains largely intact and still functions, although a small portion of it was destroyed when an addition to the house was constructed in 1986 and other portions have begun to collapse, revealing the extent of the system by the presence of small sinkholes. Tile ends are visible where the drains still empty into Bear Creek. The gullies Adams battled have been filled with soil deposits so that only the upper portions of some dams are visible, with only slight ridges marking the extent of the system he developed and perfected.

[The significance of the district has been set as local. Although the use of Adams's soil-saving system was apparently widespread, in Missouri and adjacent states, the extent of its use has not been clearly established. In 1987, much of the assets of the W.S. Dickey Clay Manufacturing Company, including facilities in Pittsburg, Kansas, and Saspamco, Texas, were purchased by Mission Clay Products, but all Dickey files were destroyed, so the most

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[50]Cockrell, p. 971; and Danhof, pp. 16-17.

[51]"Civil War Veteran Dead," Warrensburg Star-Journal, February 22, 1921, p. 1.

[52]Robert J. Morgan, Governing Soil Conservation: Thirty Years of the New Decentralization (Baltimore: Resources for the Future, Johns Hopkins Press, 1965), pp. 2-3.

[53]Aldrich, p. 205.

convenient source of information no longer exists.[54] Additional research might support expanded significance.]

[54]Lewis J. Bertalotto, General Manager, South-Central Operation, Mission Clay Products, to Sandra and Bill Wayne, July 19, 1991.

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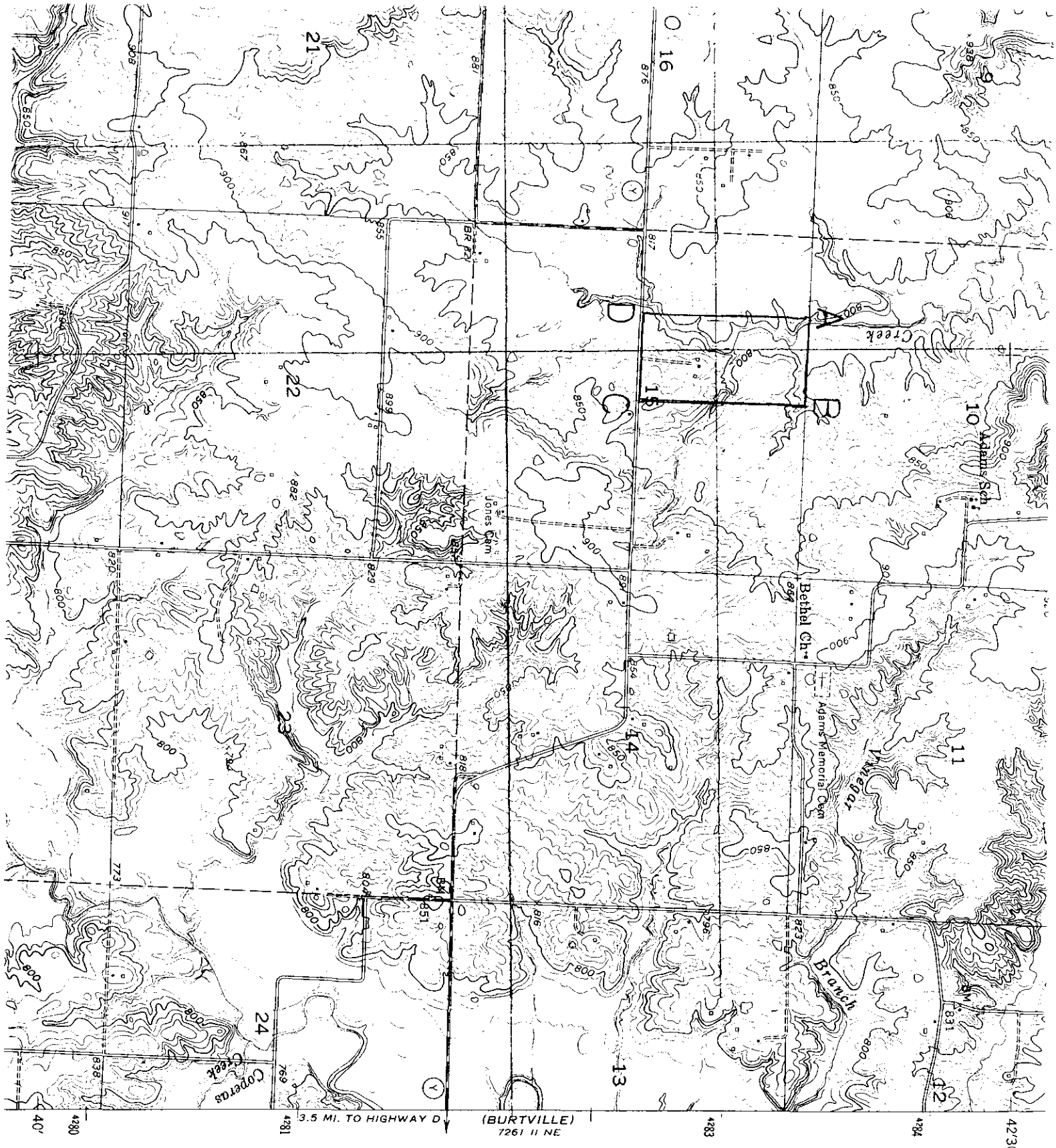
Verbal Boundary Description: The east one-half of the northwest one-fourth of section 15, township 45 north, range 25 west.

Boundary Justification: The nominated eighty acres contains that portion of the original farm, which included 240 acres at its greatest extent, that includes the circa 1867 house, circa 1870 and circa 1880 barns, and extant tile drainage and erosion control system, and that retains integrity. The nominated area corresponds to the extent of the farm by 1918, when Adams had disposed of much of his holdings to his children.

11. Form Prepared By

1. Bill and Sandra S. Wayne
   431 SE Highway "Y"
   Warrensburg, MO 64093
   816/747-5728
   February 27, 1991
   Original research and draft nomination, items 1-10

2. Steven E. Mitchell
   National Register Coordinator
   Missouri Department of Natural Resources
   Division of State Parks
   Historic Preservation Program
   P.O. Box 176
   Jefferson City, MO 65102
   314/751-7800
   April 22, 1994
   Final revised nomination, items 1-11



ADAMS, JOHN A, FARMSTEAD HISTORIC DISTRICT
JOHNSON COUNTY, MO

N

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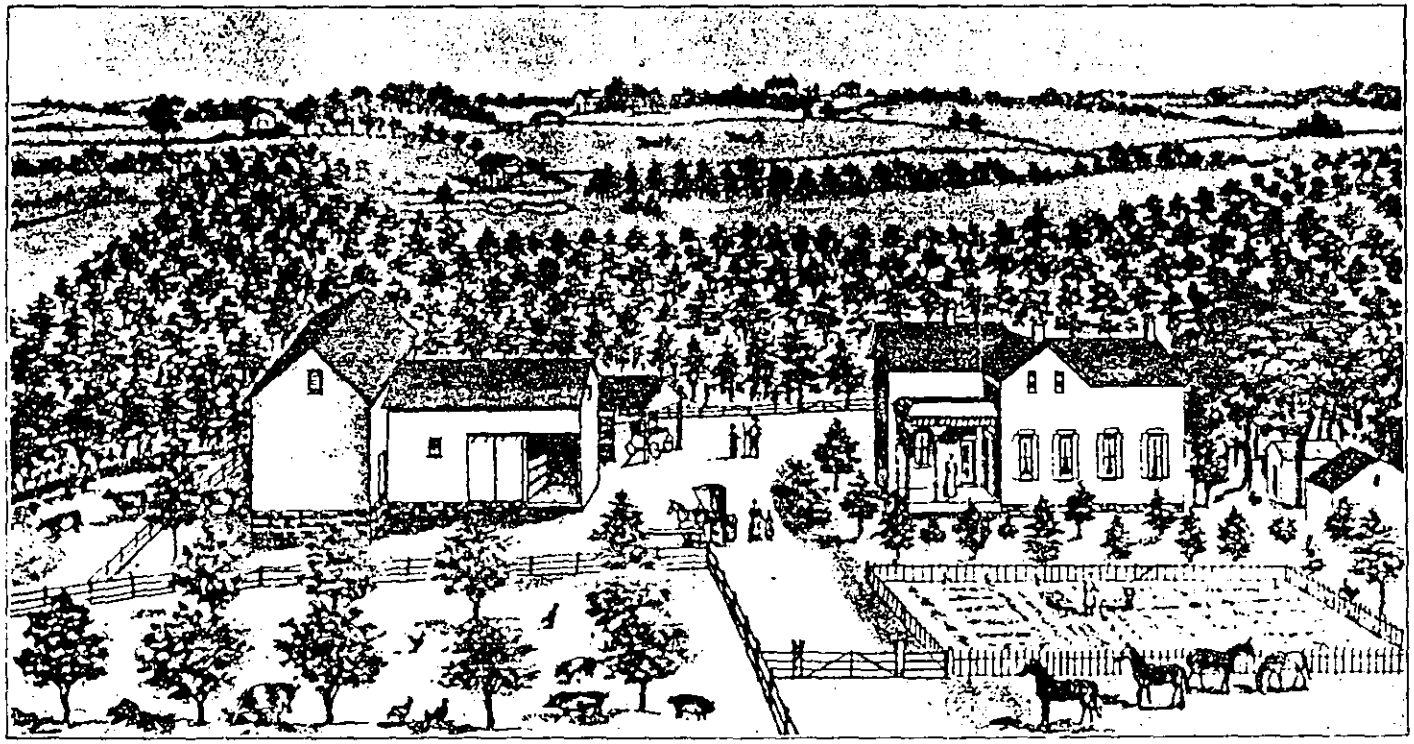
C: 15/442260/4282650 D: 15/441860/4282670



RESIDENCE AND FARM OF JOHN A. ADAMS, SECTIONS 15 AND 10, TOWNSHIP 45, RANGE 25, JOHNSON COUNTY, MO.

Adams, John A., Farmstead Historic District
431 SE 'Y' Highway, Warrensburg, Johnson County, Mo
Steve Mitchell
Feb. 9, 1993
Missouri Cultural Resource Inventory
house and c. 1867 barn, view from south
1 of 13

Adams, John A., Farmstead Historic District
431 SE 'Y' Hwy, Warrensburg, Johnson County, MO
Steve Mitchell
Feb. 9, 1993
MO Cultural Resource Inventory
circa 1867 barn and house, view from south
#2 of 13

Adams, John A, Farmstead Historic District

431 SE 'Y' Hwy., Warrensburg, Johnson County MO

Steve Mitchell

Feb. 9, 1993

MO Cultural Resource Inventory

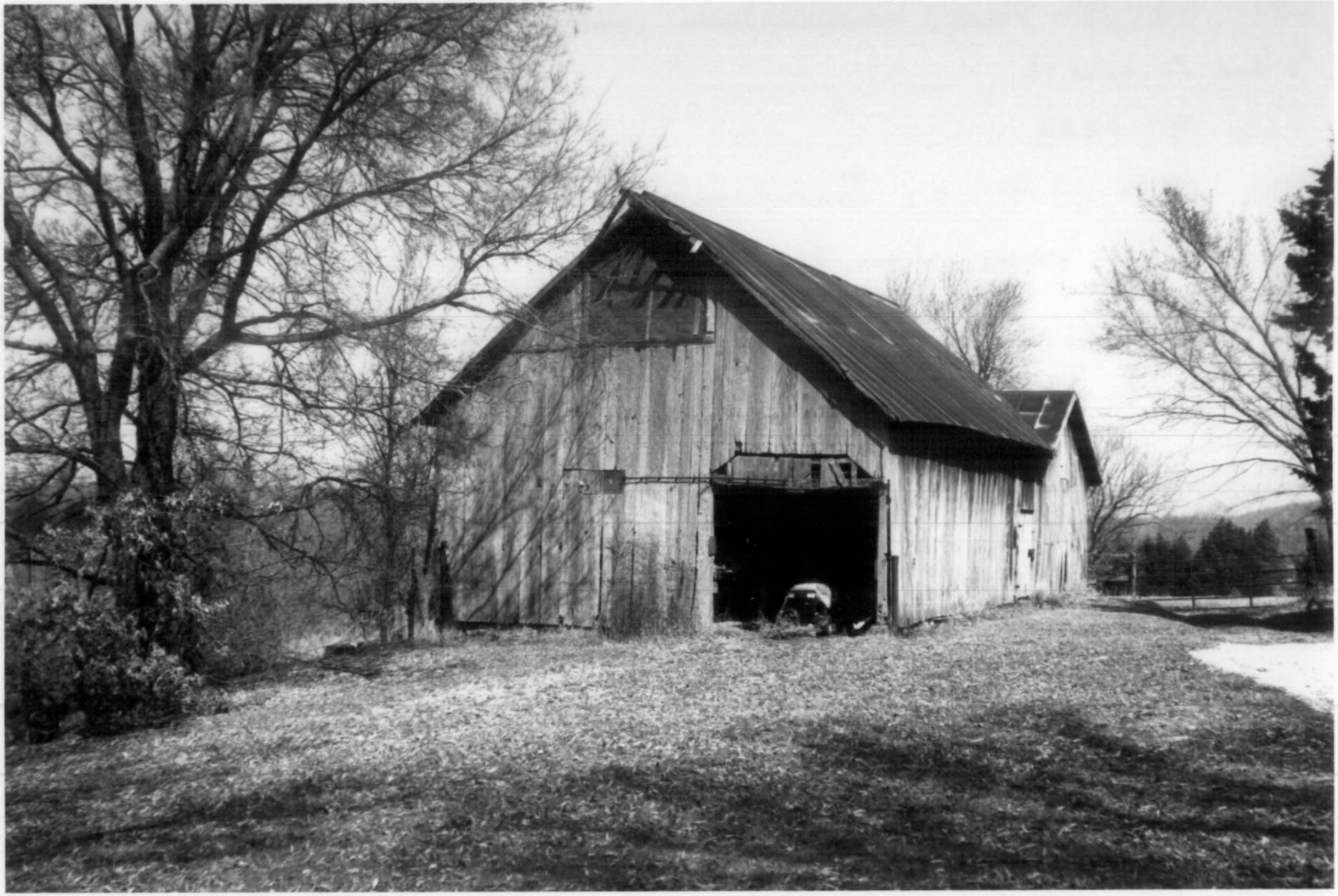
house and circa 1882 barn, view from southwest

#3 of 13

Adams, John A., Farmstead Historic District
431 SE 'Y' Hwy, Warrensburg, Johnson County, MO
Steve Mitchell
Feb. 9, 1993
MO Cultural Resource Inventory
house, view from southwest
#4 of 13

Adams, John A., Farmstead Historic District
431 SE 'Y' Hwy., Warrensburg, Johnson County, MO
Steve Mitchell
Feb. 9, 1993
MO Cultural Resource Inventory
house, view from northeast
5 of 13

Adams, John A., Farmstead Historic District
431 SE 'Y' Hwy. Warrensburg, Johnson County MO
Steve Mitchell
Feb 9, 1993
MO Cultural Resource Inventory
circa 1867 barn, view from southeast
#6 of 13

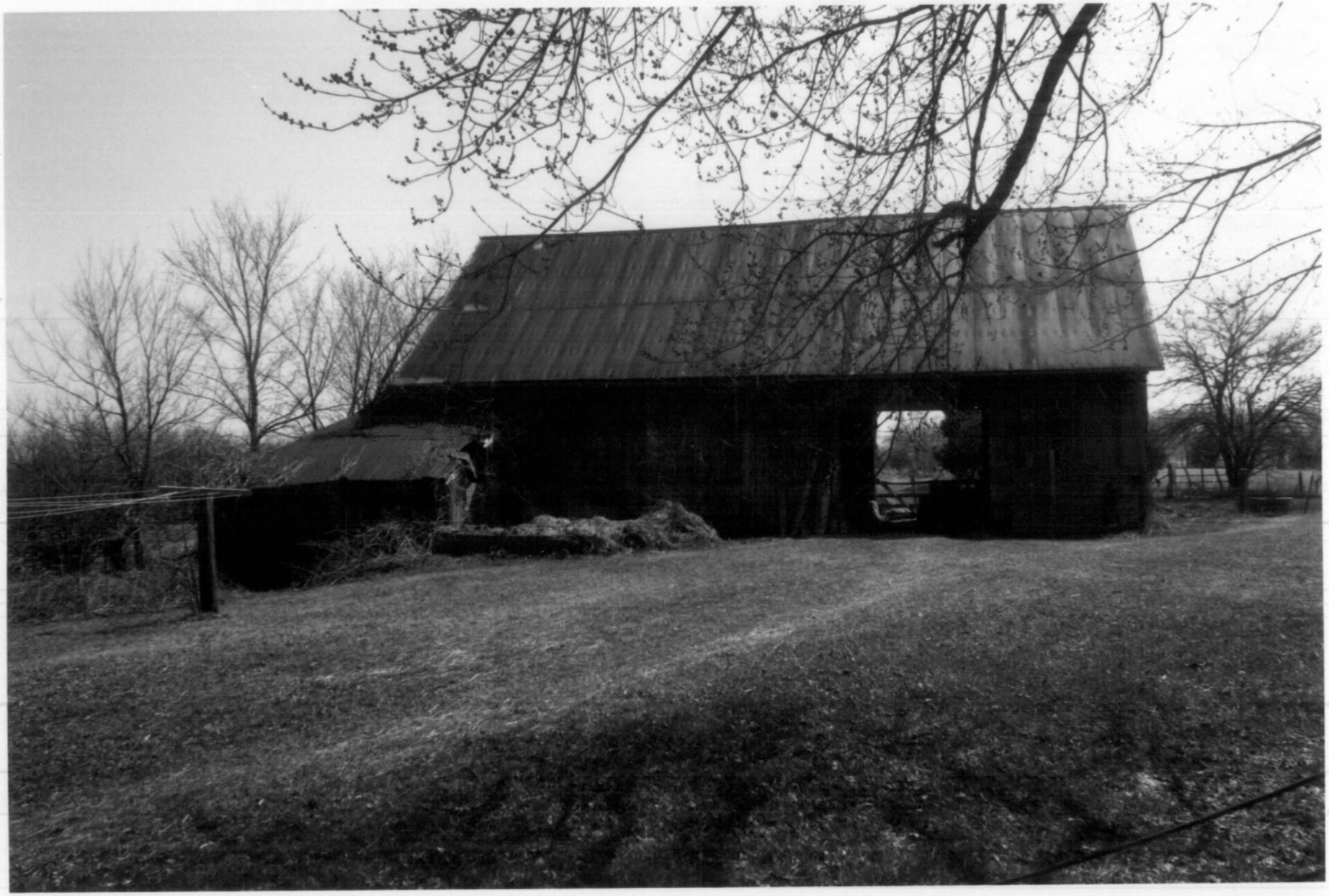


Adams, John A., Farmstead Historic District
431 SE 'Y' Hwy, Warrensburg, Johnson County, MO
Steve Mitchell
Feb 9, 1993
MO Cultural Resource Inventory
circa 1867 barn, view from northeast
#7 of 13

Adams, John A., Farmstead Historic District
431 SE 'Y' Hwy, Warrensburg, Johnson County, MO
Steve Mitchell
Feb. 9, 1993
MO Cultural Resource Inventory
circa 1867 barn, lower level, view from north

#8 of 13

Adams, John A., Farmstead Historic District
431 SE 'Y' Hwy. Warrensburg, Johnson County MO
Steve Mitchell
Feb 9, 1993
MO Cultural Resource Inventory
Circa 1882 barn, View from west
#9 of 13

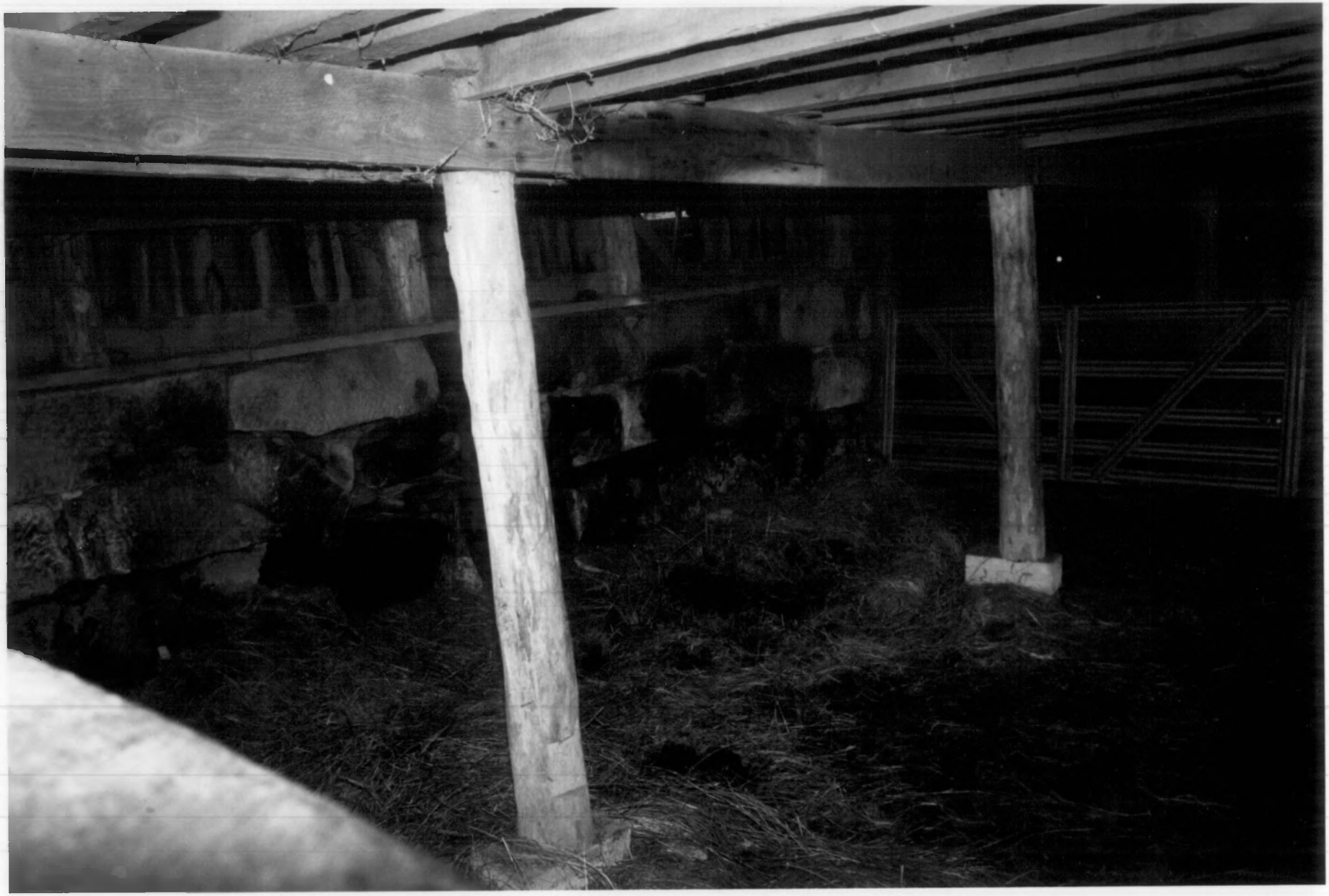


Adams, John A., Farmstead Historic District
431 SE "Y" Hwy., Warrensburg, Johnson County, Mo
Steve Mitchell
Feb. 9, 1993
Mo Cultural Resource Inventory
Circa 1882 barn, view from southeast
#10 of 13

Adams, John A., Farmstead Historic District
431 SE "Y" Hwy, Warrensburg, Johnson County, MO
Steve Mitchell
Feb. 9, 1993
MO Cultural Resource Inventory
circa 1882 barn, inside drive looking toward north, view from
Southwest

#11 of 13

Adams, John A., Farmstead Historic District
431 SE "Y" Hwy, Warrensburg, Johnson County Mo
Steve Mitchell
Feb. 9, 1993
Mo Cultural Resource Inventory
circa 1882 barn, lower level stalls, view from southeast
#12 of 13

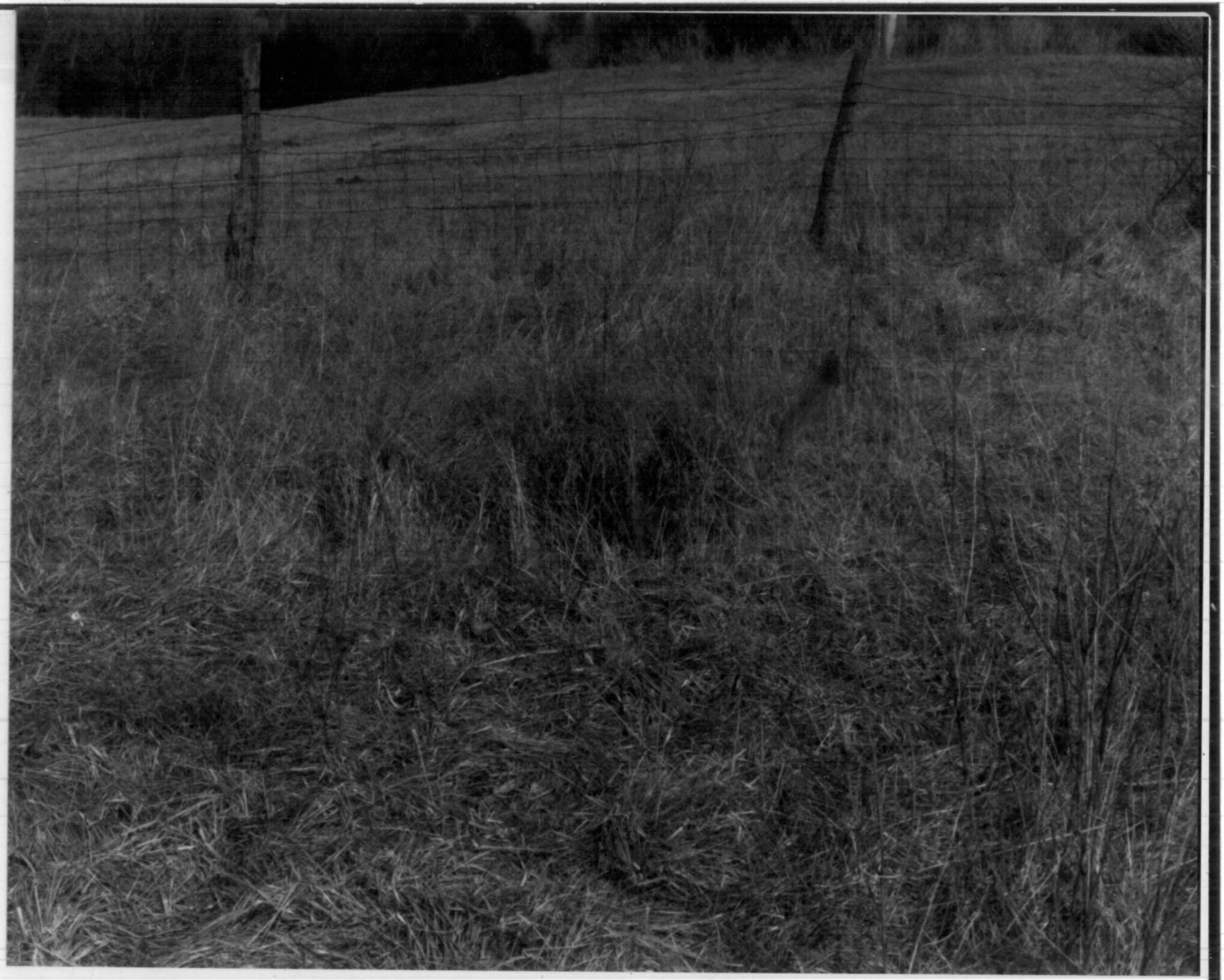


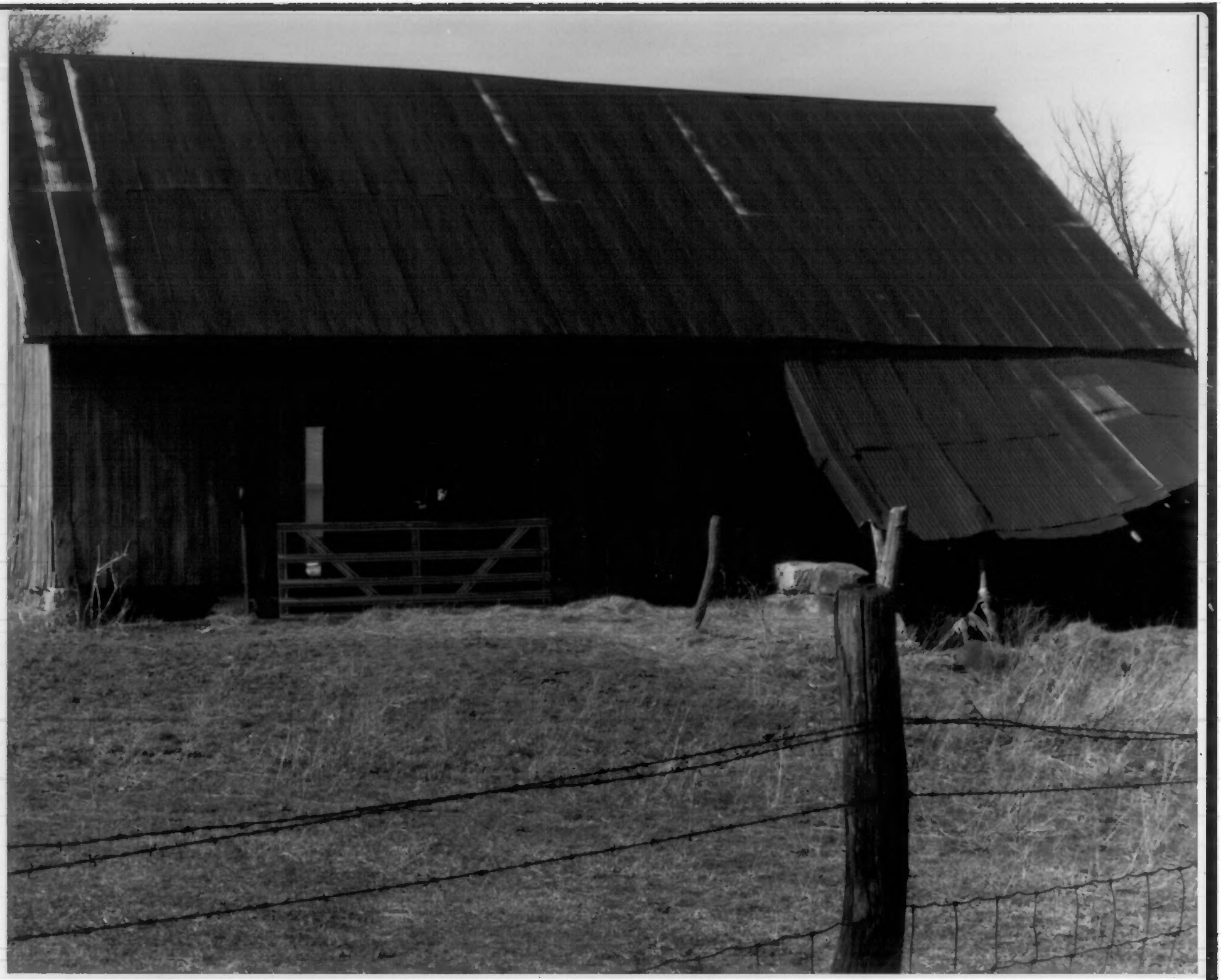
Adams, John A., Farmstead Historic District
431 SE "Y" Hwy., Warrensburg, Johnson County, Mo
Steve Mitchell
Feb. 9, 1993
Mo Cultural Resource Inventory
View of southwest portion of farm, looking toward Bear Creek,
View from northeast

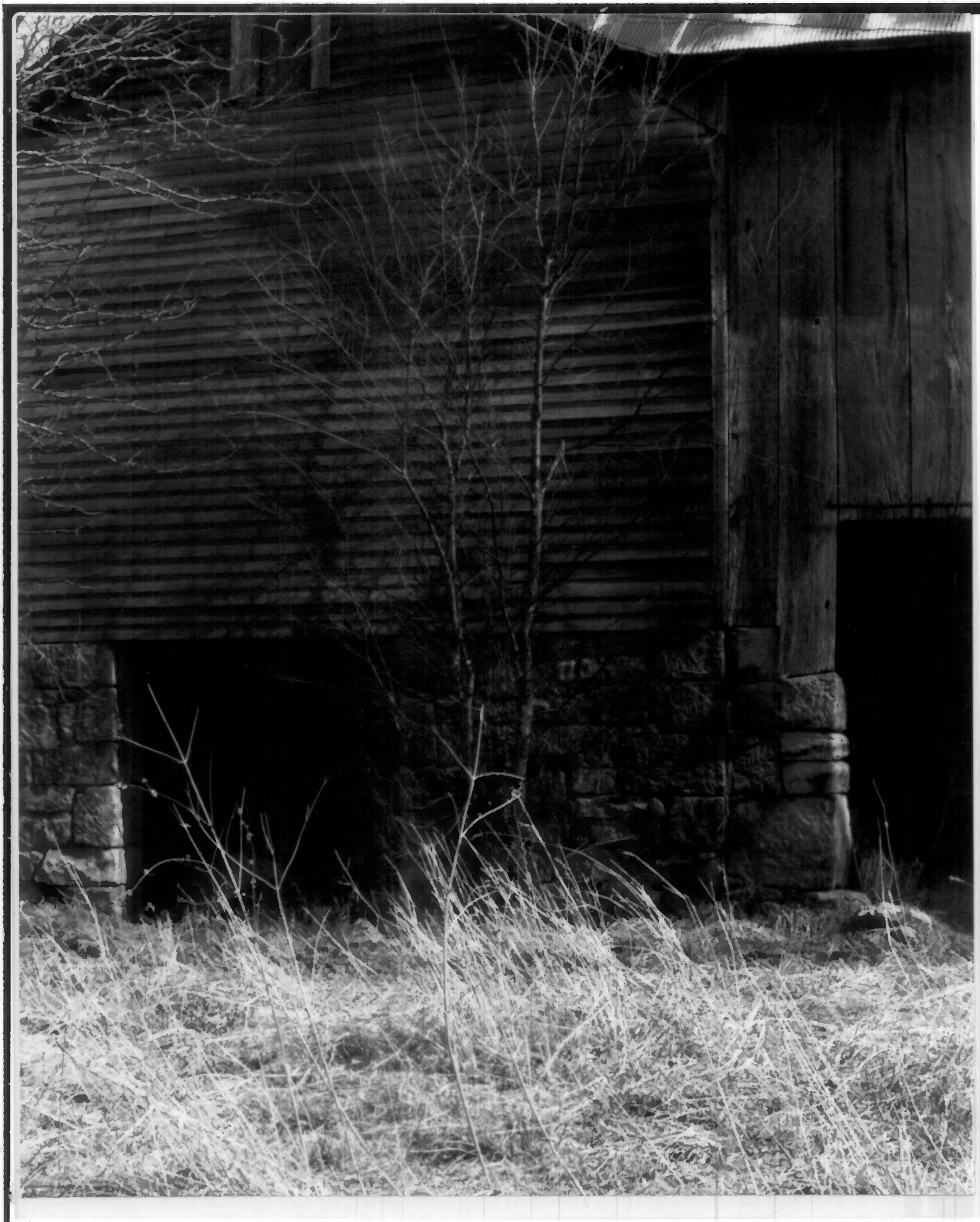
#13 of 13

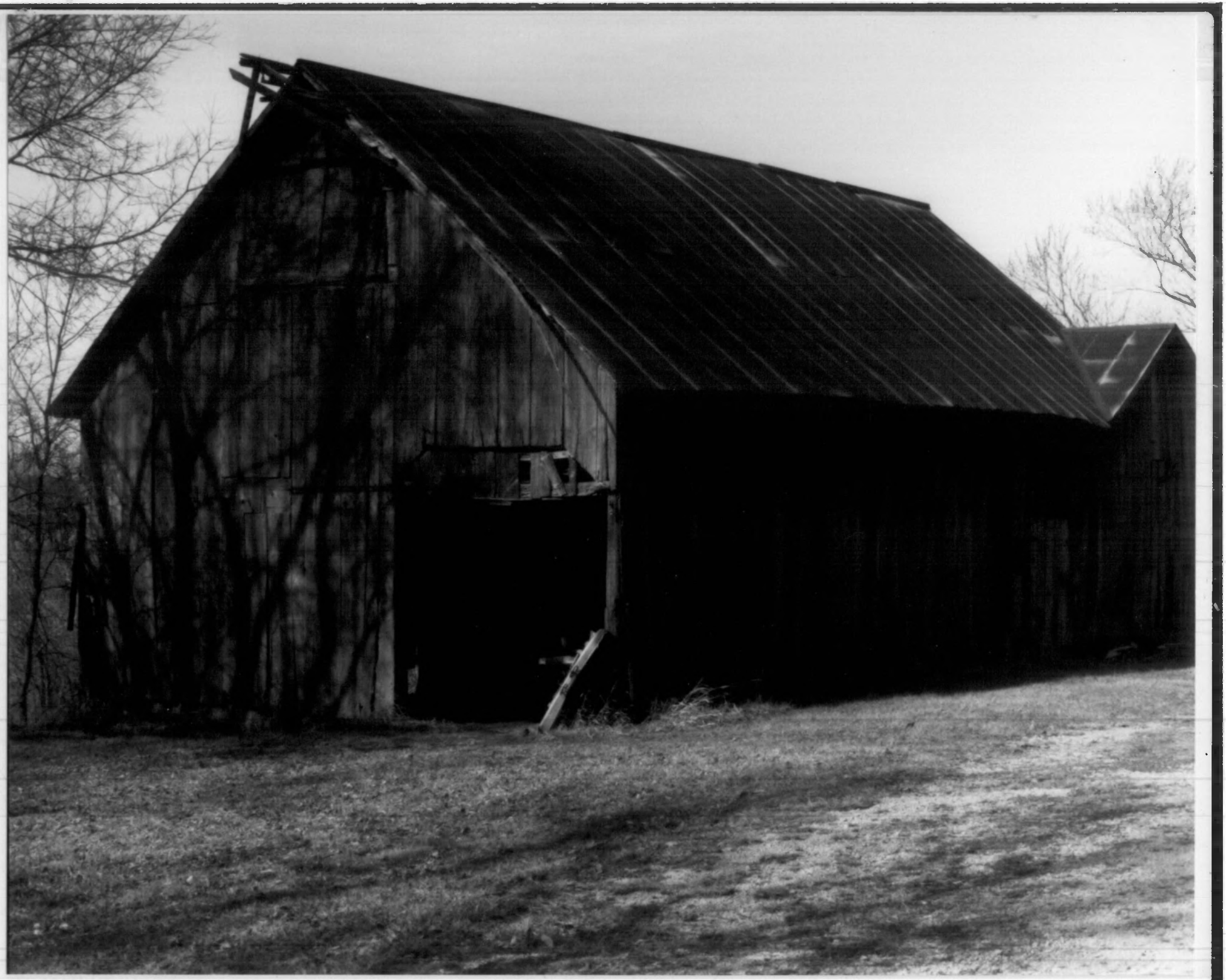
EXTRA

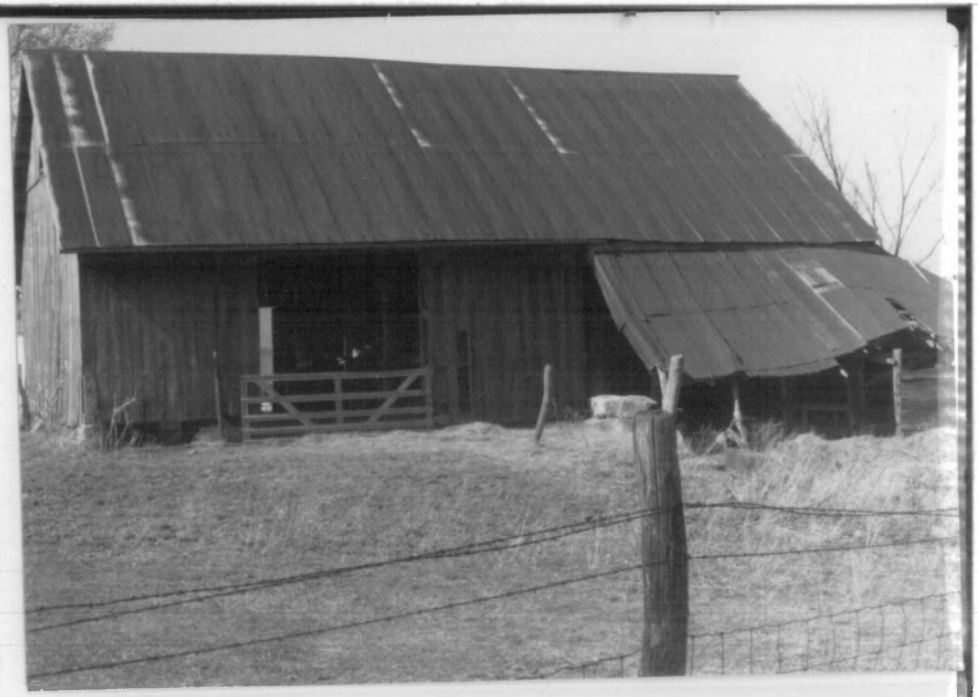
PHOTOS

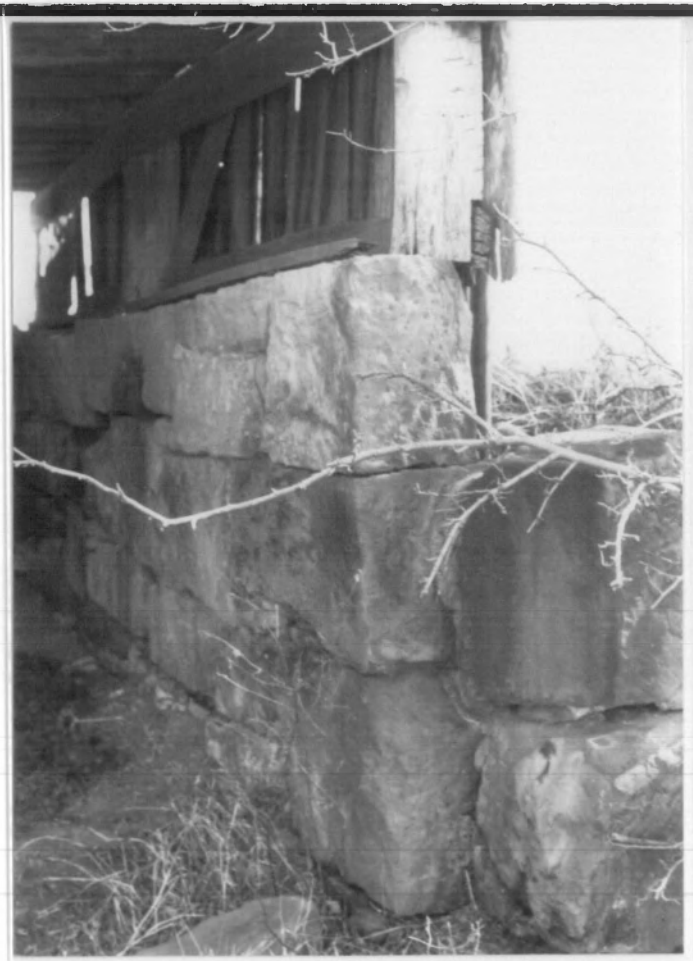


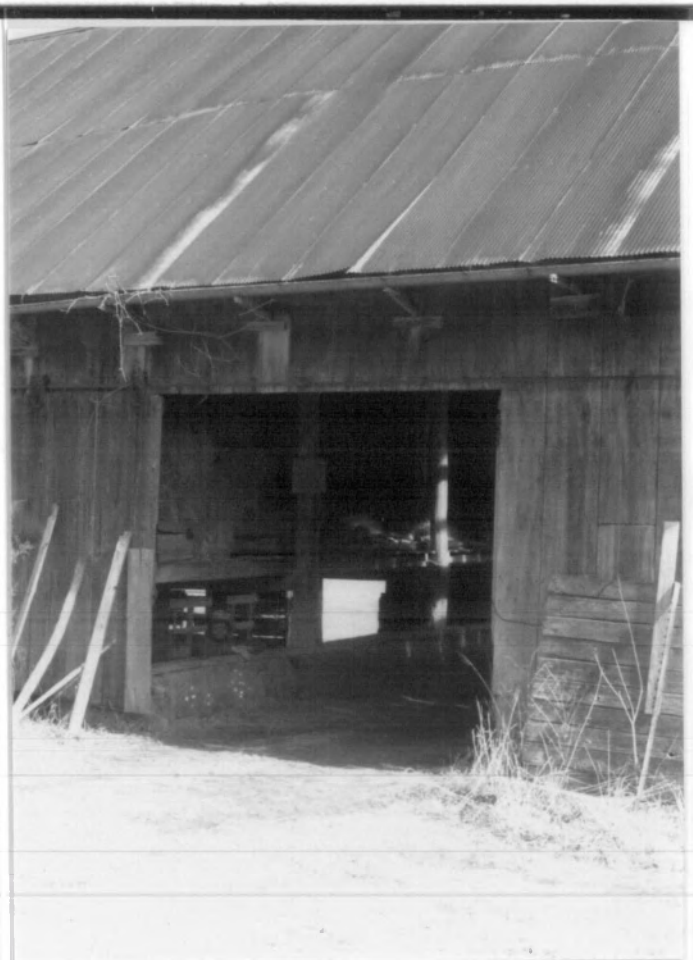


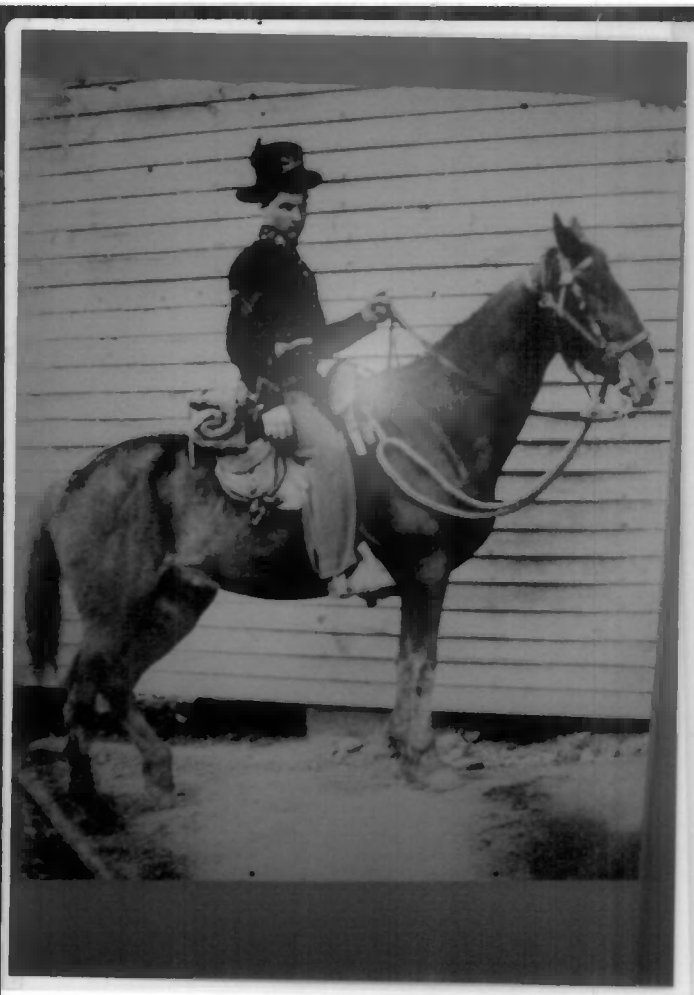


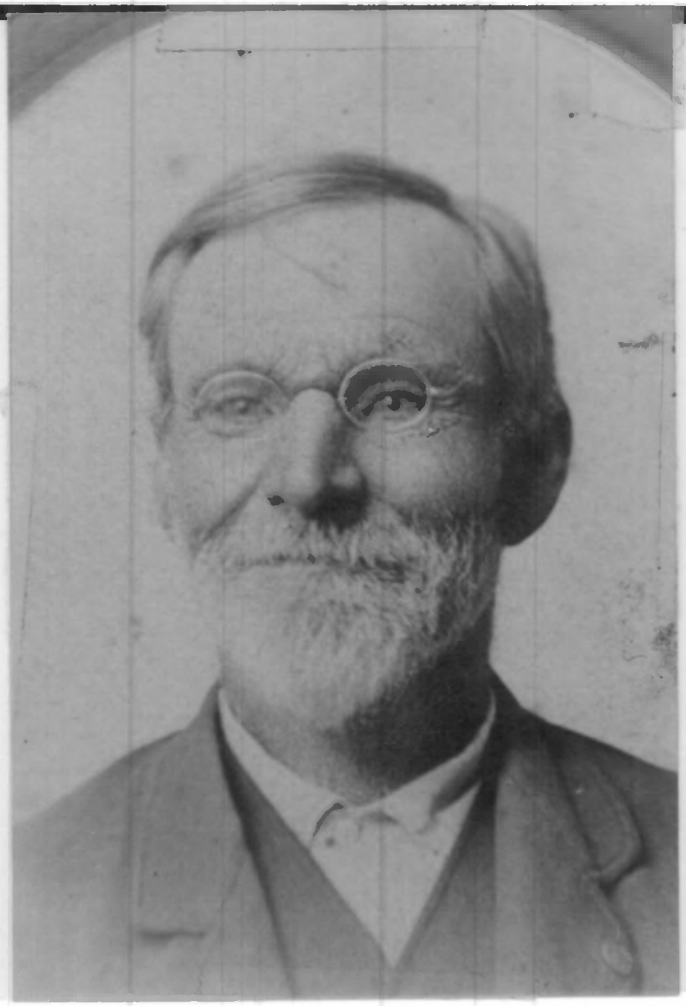




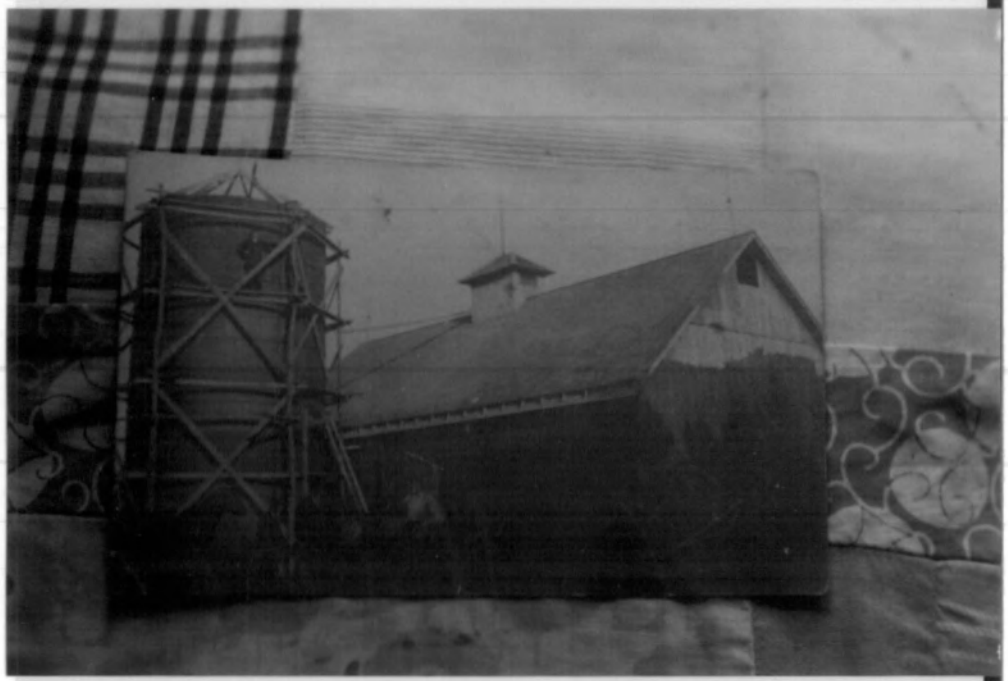




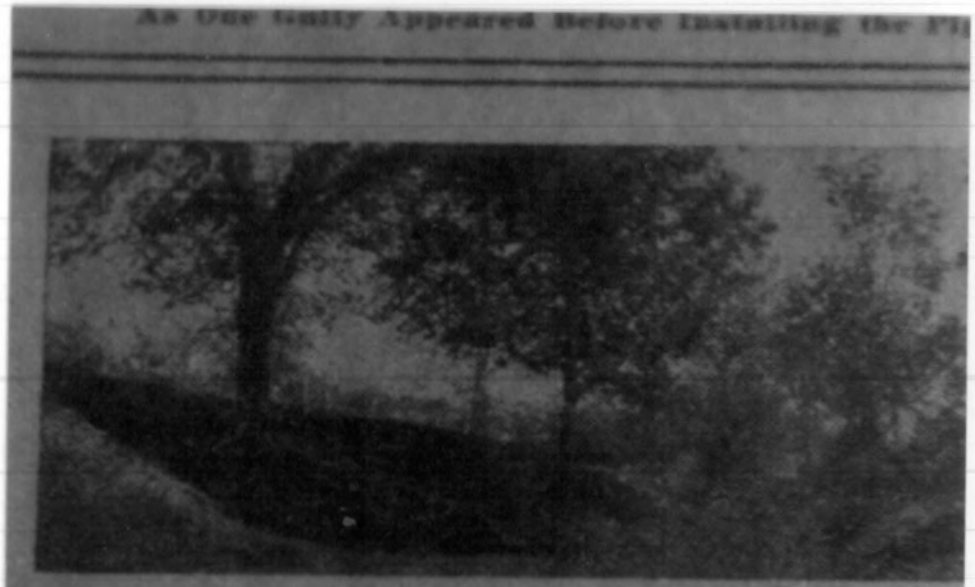




John Adams, Missouri's Pioneer Soil Saver.



View of the Completed Meadow. Water Standing F



The Gully Begins to Fill Up Because of Dam, nat

Protecting a Spring Ground Will Fill Up Around Tile.

As One Gully Appeared Before Installing the Pipe a