

United States Department of the Interior
National Park Service

For NPS use only

National Register of Historic Places
Inventory—Nomination Form

received

date entered

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

1. Name

historic Steffens, Joseph, House

and/or common Rammed Earth House

2. Location

street & number _____ not for publication

city, town Milledgeville —X vicinity of

state Illinois code 012 county Carroll code 015

3. Classification

Category	Ownership	Status	Present Use	
<input type="checkbox"/> district	<input type="checkbox"/> public	<input type="checkbox"/> occupied	<input type="checkbox"/> agriculture	<input type="checkbox"/> museum
<input checked="" type="checkbox"/> building(s)	<input checked="" type="checkbox"/> private	<input checked="" type="checkbox"/> unoccupied	<input type="checkbox"/> commercial	<input type="checkbox"/> park
<input type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in progress	<input type="checkbox"/> educational	<input type="checkbox"/> private residence
<input type="checkbox"/> site	Public Acquisition	Accessible	<input type="checkbox"/> entertainment	<input type="checkbox"/> religious
<input type="checkbox"/> object	<input checked="" type="checkbox"/> in process	<input checked="" type="checkbox"/> yes: restricted	<input type="checkbox"/> government	<input type="checkbox"/> scientific
	<input checked="" type="checkbox"/> being considered	<input type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial	<input type="checkbox"/> transportation
		<input type="checkbox"/> no	<input type="checkbox"/> military	<input checked="" type="checkbox"/> other: Unoccupied

4. Owner of Property

name Anthony Glenn

street & number RR#1 (Box 125)

city, town Milledgeville _____ vicinity of state Illinois (61051)

5. Location of Legal Description

courthouse, registry of deeds, etc. Carroll County Courthouse

street & number _____

city, town Mount Carroll state Illinois (61051)

6. Representation in Existing Surveys

Inventory of Historic Landmarks in Carroll County:
title Interim Report (Ted Hild) has this property been determined eligible? yes no

date March 1973 federal state county local

depository for survey records Illinois Department of Conservation

city, town Springfield state Illinois

7. Description

Condition		Check one	Check one
<input type="checkbox"/> excellent	<input type="checkbox"/> deteriorated	<input checked="" type="checkbox"/> unaltered	<input checked="" type="checkbox"/> original site
<input checked="" type="checkbox"/> good	<input type="checkbox"/> ruins	<input type="checkbox"/> altered	<input type="checkbox"/> moved date
<input type="checkbox"/> fair	<input type="checkbox"/> unexposed		

Describe the present and original (if known) physical appearance

The Joseph Steffens House was originally a one and one-half story cottage with a rectangular floor plan. Its rammed earth walls were protected by a wide porch on all but the back side. The present exterior is the product of only three significant changes: one, construction in the 1890s of two moderate size, one story rooms on the back to create the present T-shaped floor plan; two, extension in the 1890s of the porch along the east side of the addition; and, three, addition in the 1960s of an enclosed porch on the south side of the house at the west end.

The roof is covered by asphalt shingles, originally wooden, and has two dormers on the north and south side of the original section. The thick exterior walls of rammed earth are apparently protected by a short masonry sheath covered with a thin layer of rough cast mortar which is white-washed. Where it has fallen away, the masonry sheath is brick in two places and stone in another. The rammed earth walls rest on a foundation of coursed, but undressed, limestone which enclose a cellar beneath the east half of the house. The cellar floor was cemented at some unknown time in the recent past. The one-story addition of the 1890s is balloon frame with clapboard siding on a brick foundation with no cellar.

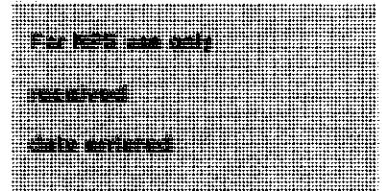
Facade openings are arranged symmetrically except for minor deviations on the 1890s addition. All windows are two over two, double-hung, and have wooden sills. Four transom lights are above the door which opens into an entrance hall. A fireplace is centered on the east and west walls. Room arrangement is symmetrical on the ground floor. A stairway located centrally behind the entrance hall leads to a loft with two equal size-rooms.

Interior features are simple, mostly functional, such as the built-in cabinets beside both fireplaces and the chair rail in the east room on the first floor. The few modest decorations in the original section include the false-grained doors in the entrance hall, the raised panels on the mantels, and beaded baseboards. Window openings are chamfered in the original section. Wainscoating of beaded board and lathed door mouldings distinguish the otherwise bare quality of the frame addition.

Rammed earth's rarity make its construction details noteworthy. Although a comprehensive analysis is impossible without destructive examination, many features are exposed. Two large, hewn summer beams are arranged (8' 3" apart) at grade level. Pit-sawed joists rest on the summer beams. Interior walls on the ground level and loft are balloon frame. Another two summer beams are arranged along the loft walls (11' apart). At right angles to these loft beams and located at both ends of the loft are two large, hewn beams. They intersect the hewn plate and rest on the rammed earth wall (1' wide at the top). Rafters are pit-sawed and covered with wooden sheathing.

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Floor boards in the original section on both levels are random width (5 1/4" to 7 3/4") tongue-and-groove except for the large east side room which is floored with uniform tongue-and-groove boards. The only accessible screw was a blunt, machine-turned screw, in the jamb of the west door of the entrance hall. This screw is probably original to the house; machinery for making pointed screws was not patented until 1846 (Walters and Mansberger 1981: 26).

Preliminary examination of the frame addition reveals construction with steel cut nails. Door hinges are of the butt variety with ornamented faces and pins implying late Victorian production.

At present, the House is structurally sound. This includes the corners of the rammed earth section where failure is common (Ellington 1924: 36). The front porch has caved in and portions of the rammed earth wall must be replastered. Otherwise, the house is intact.

8. Significance

Period	Areas of Significance—Check and justify below			
prehistoric	archeology-prehistoric	community planning	landscape architecture	religion
1400-1499	archeology-historic	conservation	law	science
1500-1599	agriculture	economics	literature	sculpture
1600-1699	architecture	education	military	social
1700-1799	art	engineering	music	humanitarian
X 1800-1899	commerce	exploration settlement	philosophy	theater
1900-	communications	industry	politics government	transportation
		invention		X other (specify) Building Construction

Specific dates 1843 Builder ~~ARCHITECT~~ Joseph Steffens

Statement of Significance (in one paragraph)

The Joseph Steffens House is the only house known to be built of rammed earth in Illinois. Therefore, the house satisfies National Register criteria C ("method of construction").

A Brief History of Rammed Earth:

Rammed earth is an unusual construction technique and requires a brief history to provide the context necessary for a full understanding of the individual example which is the subject of this nomination. Rammed earth or pisé (derived from the French pisé de terre) belongs to the family of building materials using soil. Of these, kiln-dried brick, adobe, sod, and mud-walling, are the most common (Gilman 1839: 10). The others of this family, rammed earth and cob, are the least common. Although often mistaken for adobe or sod, rammed earth is correctly distinguishable as the technique by which walls of earth are formed on foundations under great pressure by pounding in moulds (e.g., Thiem 1968: 15). Adobe is earth mixed with water, gravel, clay, or straw, and cast in sun-dried bricks (Phillips 1983: 33). Sod is cut from the surface of the earth whose vegetation is a sufficient cohesive agent to permit formation of bricks.

The absence of an adequate history of rammed earth has been lamented (Phillips 1983: 37). Most historical information appears as random introductory remarks in technical publications reporting its relative merits. An historical summary, however, can be assembled from these sources.

Rammed earth construction by ancient people throughout Europe, Asia, and North Africa has been reported (Clough 1950: 14). One of the most notable cases are the watch towers built in Spain by Hannibal during the Second Punic War and noted by Pliny, Natural History. Contrary to common mis-conception rammed earth has been most common in humid and rainy parts of the earth (Clough 1950: 15; Winkler 1983: 44).

A vernacular tradition apparently was strong in southern France where many Lyons merchants built homes of rammed earth. Publicity for the technique in the French language Ree's Cyclopedia diffused knowledge of the technique more widely (Gilman 1839: 7 and 19; Ellington 1924: 88).

A few cases have been reported of rammed earth construction in England and North America. In the seventeenth century, English built many examples surviving between Norwich and London. Also, a notable home was designed (1858) by an architect for a client east of Sidmouth (Ellington 1924: 81). The first American example was a house built (1556) in what is now St. Augustine, Florida (Ellington, 1924: 15). Jefferson personally supervised the construction of several rammed earth buildings at Monticello later in the

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Colonial period. And, in what later became Washington, D.C., "Hilltop House" was built (1773) by slaves. S.W. Johnson built a home of rammed earth in Brunswick, New Jersey, and included the construction details among other topics in the book Rural Economy (1806). This probably guided W.W. Anderson, a doctor, to rebuild the wings of a house, ten outbuildings, and a church (c. 1820-1854) of rammed earth on Hill Crest Plantation near Sumter, South Carolina (Miller 1926: 1; Clough 1950: 160). E. Gilman, The Economical Builder: A Treatise on Tapia and Pise Walls (1839), illustrated a raised, one-story house with Greek Revival details and described the preferred details for construction. These grand examples seem not to have influenced modest owners to build rammed earth homes despite the proclaimed advantages of ease, low cost, and durability.

It is the greater cost of conventional building materials, especially following wars, which seems to help popularize rammed earth as a temporary expedient. The first instance is a pamphlet published after the Napoleonic Wars (1822) by S. Sachs, a Prussian building inspector, who directed construction of several rammed earth buildings (Ellington 1924: 91-93). The greatest number, however, appear to have been built after World War I as a result of a campaign by Karl J. Ellington. The shortage of alternative building materials, the high cost of labor, and the general housing shortage were the conditions in which Ellington successfully advocated rammed earth construction in Denmark, Norway, and Sweden. His Modern Pisé-Building (1924) extolled the virtues of the technique, described the best means of construction, insisted on its durability, and cited cases of its growing popularity to promote the "Gospel of Country Life and Pise." In England the technique was officially encouraged by the Ministry of Agriculture. And, the Farmers Handbook, published in Australia, encouraged construction in rammed earth for that continent's vast frontier.

The Depression and World War II sustained interest in rammed earth. In the 1930s and 1940s the South Dakota Agricultural Experiment Station conducted numerous experiments which comprise by far the largest body of literature on the subject (Clough 1950: 9). And, the federal Resettlement Administration built an experimental group of rammed earth buildings in Gardendale, Alabama, in 1936 (Clough 1950: 16). High construction costs and the scarcity of materials combined in World War II to sustain interest in rammed earth. In Germany, the government published two pamphlets on rammed earth toward the end of the war (1944) under the auspices of the Service for Building in Mud (Lembaudienst). Interest concentrated immediately following the war in the American Southwest where, in New Mexico, a number of rammed earth buildings were constructed. The University of New Mexico also published Richard Hudson Clough, A Qualitative Comparison of Rammed Earth and Sun-Dried Adobe Brick (1950), a considerable contribution to the literature proving rammed earth's superiority over adobe. Several recent publications, including Morgan

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Phillips, "A Rammed Earth House in Massachusetts," in the influential Association for Preservation Technology Bulletin, constitute the latest periodic surge of interest in a technique which has seldom been used except by a few architectural reformers (Phillips 1983: 33-37).

The origins of Joseph Steffens' rammed earth house:

Joseph Steffens chose the unusual material with which to build his house in Illinois because his house in Canada was built of rammed earth, according to family tradition (Williams 1966: 6). The author of this form has identified no Canadian tradition of rammed earth. Steffens was born (July 5, 1800) in Chippewa, Willoughby Township, Upper Canada. Steffens was wealthy; he paid \$1.25 in silver per acre for the 200-acre farm to which he moved (1840) in Carroll County. He was regarded as a community leader, probably because he was a minister of the locally influential Methodists (Encyclopedia 1913: 902; Thiem 1968: 139). Steffens had possibly read the above-mentioned literature promoting rammed earth in the early nineteenth century. However, wealth and prominence in an evangelical movement are no guarantee of familiarity with contemporary literature. It is known that there was a temporary shortage of timber in the vicinity where Steffens settled, the south edge of Elkhorn Grove. Large enough to provide the name for the township in which it was located, Elkhorn Grove had yielded enough timber for the log structures which predominated in the early settlement (1830s). The Steffens family itself lived four years (1840-3) in a log house that was purchased with the 200-acre farm (Encyclopedia 1913: 902). Sawed lumber was a locally common building material at the time of Steffens' settlement (Encyclopedia 1913: 708). Steffens was part of a flood of settlers into the Elkhorn Grove area beginning in the late 1830s (History 1878: 252). Thefts of lumber from the sixteenth section of the township reserved for public education helped cause organization of a Committee of Vigilance (December 1838) (Encyclopedia 1913: 674). Timber was scarce; and Steffens chose an alternative material, perhaps the one he knew from his Canadian home.

The following quotation from the Carroll County history of 1913 is noteworthy, both for the description of the construction and the claim for the house's integrity three-quarters of a century after construction:

The excavation for the new house made a vat in the yard into which clay and straw were thrown with water and this composition was trampled back and forth by oxen until the proper consistency was produced for the walls of the house. They were two feet in thickness and plastered on the outside. There are two rooms on the second floor, and six below....Little change has been made in the house, all the old features, including the great fireplaces, being retained....(Encyclopedia 1913: 903).

9. Major Bibliographical References

See Continuation Sheet

10. Geographical Data

Acreeage of nominated property less than one

Quadrangle name Hazelhurst, Illinois

Quadrangle scale 1:24000

UTM References (provisional edition 1983)

A 16 274820 4649400
Zone Easting Northing

B
Zone Easting Northing

C

D

E

F

G

H

Verbal boundary description and justification The property is located in T23N,R7E,section 20, NE $\frac{1}{4}$,SW $\frac{1}{4}$. More specifically, the nominated property is approximately 700 feet east of Sunshine Road and approximately 50 feet south of Elkhorn Road and includes only the house and its immediate land, which includes 10 feet on all sides of the house.

List all states and counties for properties overlapping state or county boundaries

state	code	county	code
NOT APPLICABLE.....			

11. Form Prepared By

name/title Sculle, Keith A., National Register Coordinator

organization Illinois State Historic Preservation Office date August 1984

street & number 405 East Washington telephone (217) 782-3340

city or town Springfield state Illinois

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

national state local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

State Historic Preservation Officer signature _____

title _____ date _____

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I hereby certify that this property is included in the National Register

date _____

Keeper of the National Register

Attest:

date _____

Chief of Registration

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Clough, Richard Hudson.

- 1950 A Qualitative Comparison of Rammed Earth and Sun-Dried Adobe Brick, Albuquerque, University of New Mexico Press, (Publications In Engineering No. 4).

Ellington, Karl J.

- 1924 Modern Pisé -Building: House-Building With Compressed or Rammed Earth (Pisé De Terre), By the author, Port Angeles, Washington.

Gilman, E.

- 1839 The Economical Builder: A Treatise on Tapia and Pise Walls, Jacob Gideon, Washington, D.C.

The History of Carrol County, Illinois.

- 1878 H. F. Kett and Co., Chicago.

Hostetter, Charles L. (editor).

- 1913 Historical Encyclopedia of Illinois and Carroll County (Vol. II). Munsell Publishing Co., Chicago.

Miller, Thomas A. H.

- 1926 Report on the Condition of Rammed Earth Buildings Built 1820 To 1854 On the Plantation of Mr. W. L. Sanders Located Near Sumter, South Carolina, Washington, D.C., United States Department of Agriculture, mimeographed.

Phillips, Morgan.

- 1983 A Rammed Earth House in Massachusetts, Association for Preservation Technology Bulletin, XV: 3, p. 44.

Thiem, E. George (editor).

- 1968 Carroll County---A Goodly Heritage, Kable Printing Co., Mount Morris, Illinois.

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Walters, Jr., William D. and Floyd Mansberger.

1981 Two Houses of the Lower Illinois River Valley, Western Illinois Regional Studies, IV, (1) pp. 25-36.

Williams, Margaret.

9 April 1966 Pioneer House of Rammed Earth Type Construction, "The Daily Gazette, Rock Falls, Illinois, 9.

Ap. 19, 1985 listed

- FLORIDA, Duval County, Jacksonville, House at 7246 San Carlos (San Jose Estates TR), 7246 San Carlos (04/10/85)
- FLORIDA, Duval County, Jacksonville, House at 7246 St. Augustine Road (Truman House) (San Jose Estates TR), 7246 St. Augustine Rd. (04/10/85)
- FLORIDA, Duval County, Jacksonville, House at 7249 San Pedro (San Jose Estates TR), 7227 San Pedro Rd. (04/10/85)
- FLORIDA, Duval County, Jacksonville, House at 7288 San Jose Boulevard (San Jose Estates TR), 7288 San Jose Blvd. (04/10/85)
- FLORIDA, Duval County, Jacksonville, House at 7306 St. Augustine Road (San Jose Estates TR), 7306 St. Augustine Rd. (04/10/85)
- FLORIDA, Duval County, Jacksonville, House at 7317 San Jose Boulevard (San Jose Estates TR), 7317 San Jose Blvd. (04/10/85)
- FLORIDA, Duval County, Jacksonville, House at 7330 Ventura Avenue (San Jose Estates TR), 7330 Ventura Ave. (04/10/85)
- FLORIDA, Duval County, Jacksonville, House at 7356 San Jose Boulevard (San Jose Estates TR), 7356 San Jose Blvd. (04/10/85)
- FLORIDA, Duval County, Jacksonville, House at 7400 San Jose Boulevard (San Jose Estates TR), 7400 San Jose Blvd. (04/10/85)
- FLORIDA, Duval County, Jacksonville, San Jose Administration Building (San Jose Estates TR), 7423 San Jose Blvd. (04/10/85)
- FLORIDA, Duval County, Jacksonville, San Jose County Club (San Jose Estates TR), 7529 San Jose Blvd. (04/10/85)
- FLORIDA, Duval County, Jacksonville, San Jose Hotel (San Jose Estates TR), 7400 San Jose Boulevard (04/10/85)
- FLORIDA, Okeechobee County, Okeechobee, Freedman-Raulerson House, 600 S. Parrott Ave. (04/11/85)
- FLORIDA, Palm Beach County, West Palm Beach, Mickens House, 801 4th St. (04/11/85)
- FLORIDA, St. Lucie County, Ft. Pierce, Cresthaven, 239 S. Indian River Dr. (04/11/85)
- ILLINOIS, Carroll County, Milledgeville vicinity, Steffens, Joseph, House, Off of Elkhorn Rd. (04/10/85)
- ILLINOIS, Cook County, Kenilworth, Wild Flower and Bird Sanctuary in Mahoney Park, Sheridan Rd. (04/10/85)
- INDIANA, Huntington County, Huntington, German Reformed Church, 202 Etna Ave. (04/11/85)
- IOWA, Cherokee County, Cherokee, Cherokee Public Library (Public Library Buildings in Iowa TR), 215 S. 2nd St. (04/09/85)
- IOWA, Dubuque County, Dubuque, Andrew-Ryan House, 1375 Locust (04/11/85)
- IOWA, Henry County, Mt. Pleasant, Allen, G. W. S., House, 207 E. Henry St. (04/11/85)
- IOWA, Jones County, Scotch Grove vicinity, Corbett's/Eby's Mill Bridge, Spans Maquoketa River, Scotch Grove Township (04/11/85)
- IOWA, Mahaska County, Oskaloosa, McMullin, Major James W., House, 403 First Ave. East (04/11/85)
- IOWA, Pottawattamie County, Council Bluffs, Haymarket Commercial Historic District, S. Main St. (04/11/85)
- IOWA, Scott County, Davenport, McHarg, Joseph S., House (Davenport MRA), 5905 Chapel Hill Rd. (04/09/85)
- IOWA, Scott County, Davenport, Schricker, John, House (Davenport MRA), 5418 Chapel Hill Rd. (04/09/85)
- IOWA, Scott County, Davenport, Vander Veer Park Historic District (Davenport MRA), Roughly bounded by Temple Lane, W. Central Park Ave., Brady, High, and Harrison Sts. (04/09/85)

JOSEPH STEFFENS
HOUSE

