JOSEPH H. MARSHALL FARMSTEAD, SILO
West side of U.S. Route 50
.7 miles south of Guysville
Athens County Guysville Vic.
Ohio

HABS No. OH-2408-E

HABS
OHIO
5-GUYS.V
5E-

~~PHOTOGRAPHS~~

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
Midwest Support Office
National Park Service
1709 Jackson Street
Omaha, Nebraska 68102-2571

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HISTORIC AMERICAN BUILDINGS SURVEY

HABS No. OH-2408-E

JOSEPH H. MARSHALL FARMSTEAD, SILO

Location:	East side of U.S. Route 50, .7 miles south of Guysville, Athens County, Ohio USGS Stewart Quadrangle, Universal Transverse Mercator Coordinates: 17.419951.4348500
Present Owner:	James Brent Hayes Guysville, OH
Last Occupant:	Becky and Ted Gibson Guysville, Ohio
Last Use:	Ensilage storage
Significance:	The Joseph H. Marshall Farmstead is a rare surviving example of Allegheny plateau agricultural practices, land uses and farm architecture. The silo was constructed after farm practices changed to include ensilage as a component of cattle food. This poured concrete silo follows a pattern dating from 1900-1920 for silo construction. This is the only silo among the farmstead buildings located on the farmsteads along Green Branch Creek in Rome and Carthage Townships, Athens County, Ohio.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: 1900-1920.

2. Original and present owner: Original owner was Joseph H. Marshall.

3. Builder: Unknown.

4. Original Plans: none.

5. Alterations and additions: The silo roof and doors are missing.

B. Historical Context: Silos were first constructed in the United States in the 1870s and early 1880s, following German publication of the benefits of ensilage for cattle food (Noble, 1992). The experiments with ensilage, stored fodder, usually corn fodder, were much published in the agricultural press of the 1880s. Nonetheless, the Rome and Carthage Township farmers seem to have not experimented with the process until at least a decade later. No examples of wooden silos or pit silos exist among the Green Branch Creek farmsteads.

As farmers decided that circular silos were the most practical, new construction methods were tested. About 1900, both masonry and concrete were under consideration for round silo construction. Masonry and wood silos could be built higher than wooden ones and they were air tight. Finally, they required less maintenance but were tricky to cover with a roof (Noble).

By the time Joseph Marshall considered construction of a silo so that he could give his livestock the benefit of ensilage during the winter, he had the choice of the most modern technology in masonry or concrete. In 1914, Karl Ekblaw remarked that the use of concrete for silos "had become almost universal." Ekblaw went on to praise the fireproof qualities of concrete and its lack of permeability that kept the ensilage healthy.

Ekblaw mentioned that a number of commercial forms for making monolithic concrete silos were on the market in the 1910s, and that homemade forms could also be used. Directions include remarks on reinforcing bar and concrete curing times (Ekblaw, 1914).

Marshall's silo is from this era, made of concrete that

used river gravel and sand, poured as a monolith with reinforcing rods. It may have been constructed by Marshall and other local men from standardized, commercial forms or the forms may have been produced locally.

If the doors of the silo had survived intact, they likely would have supplied clues to the date of the silo. This silo is from the decades when patents were taken on each new, small innovation in latches and fasteners.

PART II. ARCHITECTURAL INFORMATION

A. General Statement

1. Architectural character: The Joseph H. Marshall Farmstead silo is a typical twentieth century round silo likely produced from a standardized plan and from standardized parts. Many silos were produced from patented designs. If not patented, a design usually was the preferred design promoted by a specific agricultural specialist, a farming tract or a materials manufacturer.

2. Condition of fabric: Structurally sound, abandoned and open to the weather.

B. Description of the Exterior:

1. Overall dimensions: The building is circular, 9'-10" across, with rectangular access doors to the ensilage storage space. The circular storage tower building is 30'-6" from the ground to the top of the concrete wall. The access doors are protected by long cylindrical hood that begins 7' above grade and continues to the top of the tower. The hood is nearly elliptical, 2'-7" at the widest and 2'-4" at the narrowest. The hood wall is 2-1/2" thick, the silo wall is 3" thick.

2. Foundation: Poured concrete pad.

3. Walls: Exterior walls are poured concrete 3" thick. The tower looks as if it is made of large concrete blocks as it retains the pattern of the form work used to made the thin walls of the tower and the access tower. The concrete mix contains pea gravel and bank-run aggregates.

4. Structural system: The thin walls of the concrete tower are held by threaded steel wire turnbuckles. The

turnbuckles are placed every 2'-6-1/2". On the lower part of the silo tower below the concrete hood, turnbuckles are every 1'-4-1/2".

5. Openings

   a. Doorways and doors: Inside the concrete silo hood are eleven access "doorways" to the ensilage storage area. The openings are 1'-6" wide and 1'-11" tall, placed every 2'-6". The doors were tight fitting, double construction of wood with a cast-iron wing closures on each side of each door. All doors have been removed. Several doors are rotting and deteriorated on the floor of the silo.

   b. Windows and shutters: None.

6. Roof: None.

C. Description of Interior: The interior of the silo is empty with a concrete floor.

1. Floor plans: none.

2. Flooring: Concrete.

3. Wall and ceiling finish: Concrete.

4. Openings:

   a. Doors: None.

   b. Windows: None.

6. Decorative features and trim: None.

7. Hardware: The turnbuckles are manufactured for use on silos. The have a double cast barrel fastener that threads onto the wire that circles the silo tower. Each barrel is threaded and both ends of wire are threaded.

   The covers for the silo "doors" were hung on steel pintels cast into the silo concrete.

8. Mechanical equipment: none.

9. Original furnishings: None.

PART III. SOURCES OF INFORMATION

A. Architectural drawings: None.

B. Historic views: None.

C. Interviews: None.

D. Bibliography:

Ekblaw, Karl, J. T.
1914 Farm Structures. New York: The Macmillan Company.

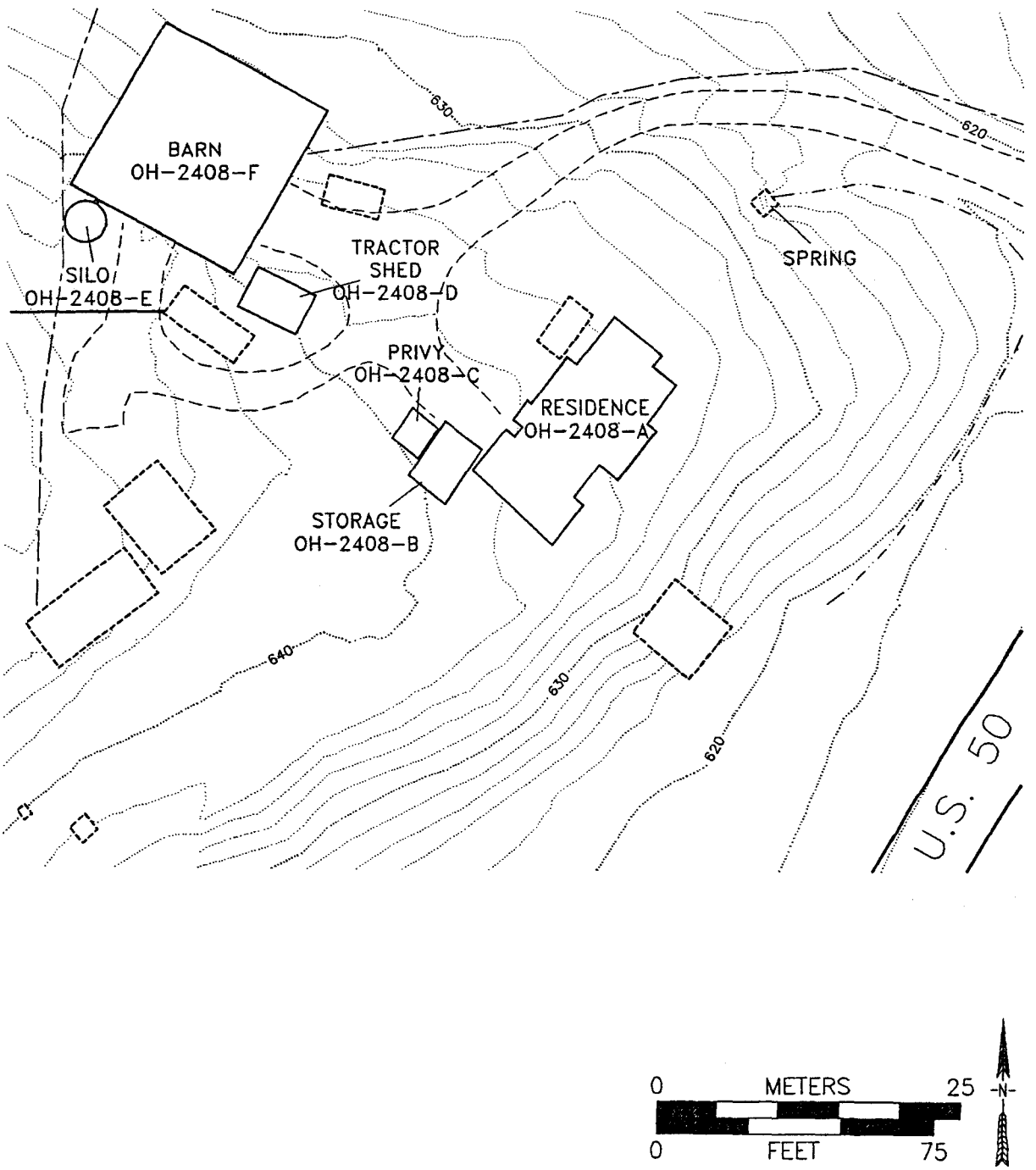
Gordon, Stephen C.
1992 How to Complete the Ohio Historic Inventory. Columbus, OH: Ohio Historical Society.

Noble, Allen G.
1992 Barns and Farm Structures.Vol. 2 of Wood, Brick & Stone, The North American Settlement Landscape. Amherst, MA: The University of Massachusetts Press.

PART IV. PROJECT INFORMATION

The architectural and historical documentation of the Joseph H. Marshall Farmstead has been undertaken to fulfill a memorandum of agreement signed by the Advisory Council on Historic Preservation, the Ohio SHPO and the Ohio Department of Transportation as part of requirements under regulation 36 CFR 800 of the National Historic Preservation Act. Recording has taken place prior to removal of structures in the right-of-way of U.S. Route 50.

This documentation has been prepared by: Rebecca M. Rogers, Preservation Consultant, 44 Audubon Road, Youngstown, Ohio, under contract to Center for Cultural Resource Research, 170 William Pitt Way, Pittsburgh, PA. October, 1997-May, 1998.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SHED
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PRIVY
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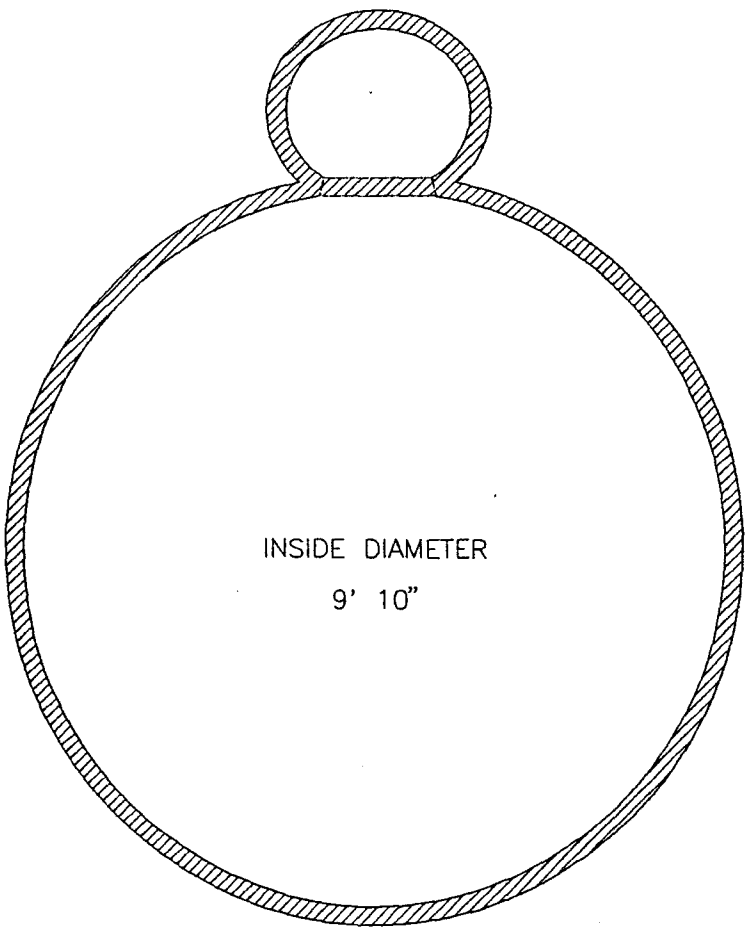
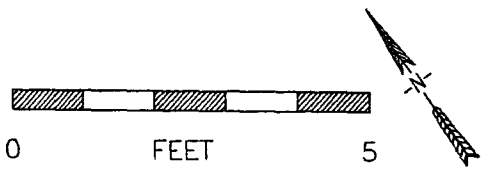

INSIDE DIAMETER
9' 10"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