

United States Department of the Interior
National Park Service

NR 1/29/07

National Register of Historic Places
Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name United States Army Snow Plow #SN-87

other names/site number Site #JE0690

2. Location

street & number 1700 Port Road

☐ not for publication

city or town Pine Bluff

☐ vicinity

state Arkansas code AR county Jefferson code 069 zip code 71601

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this ☒ nomination ☐
request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic
Places and meets the procedural and professional requirements set for in 36 CFR Part 60. In my opinion, the property ☒ meets ☐
does not meet the National Register criteria. I recommend that this property be considered significant
☐ nationally ☒ statewide ☐ locally (See continuation sheet for additional comments.)

Signature of certifying official/Title

Date

Arkansas Historic Preservation Program

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

Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

☐ 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:)

Signature of the Keeper

Date of Action

5. Classification**Ownership of Property**
(Check as many boxes as apply)

- ☒ private
☐ public-local
☐ public-State
☐ public-Federal

Category of Property
(Check only one box)

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

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

Contributing

Noncontributing

buildings
sites
structures
objects
Total

1

1

Name of related multiple property listing

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

**Number of Contributing resources previously listed
in the National Register****6. Function or Use****Historic Functions**

(Enter categories from instructions)

TRANSPORTATION/rail-related/snow plow

Current Functions

(Enter categories from instructions)

VACANT/NOT IN USE

7. Description**Architectural Classification**

(Enter categories from instructions)

N/A

Materials

(Enter categories from instructions)

foundation N/A

walls N/A

roof N/A

other STEEL

Narrative Description

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

8. Statement of Significance**Eligible National Register Criteria**

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

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

Criteria Considerations

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

Property is:

- ☐ A owned by a religious institution or used for religious purposes.
- ☐ B. removed from its original location.
- ☐ C. birthplace or grave of a historical figure of outstanding importance.
- ☐ 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.

Levels of Significance (local, state, national)

State

Areas of Significance (Enter categories from instructions)

Engineering

Period of Significance

1953

Significant Dates

1953

Significant Person (Complete if Criterion B is marked)**Cultural Affiliation** (Complete if Criterion D is marked)**Architect/Builder**

O. F. Jordan Company, Builder

Narrative Statement of Significance

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

9. Major Bibliographical 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:

- ☒ State Historic Preservation Office
- ☐ Other State Agency
- ☐ Federal Agency
- ☐ Local Government
- ☐ University
- ☒ Other

Name of repository: Cotton Belt Rail Historical Society, Inc./
Arkansas Railroad Museum

United States Army Snow Plow #SN-87
Name of Property

Jefferson County, Arkansas
County and State

10. Geographical Data

Age of Property Less than one.

UTM References

(Place additional UTM references on a continuation sheet.)

1	<u>15</u>	<u>593448</u>	<u>3787904</u>
	Zone	Easting	Northing
2	<u> </u>	<u> </u>	<u> </u>

3	<u> </u>	<u> </u>	<u> </u>
	Zone	Easting	Northing
4	<u> </u>	<u> </u>	<u> </u>

☐ 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	<u>Ralph S. Wilcox, National Register & Survey Coordinator</u>		
organization	<u>Arkansas Historic Preservation Program</u>	date	<u>August 15, 2006</u>
street & number	<u>1500 Tower Building, 323 Center Street</u>	telephone	<u>(501) 324-9787</u>
city or town	<u>Little Rock</u>	state	<u>AR</u>
		zip code	<u>72201</u>

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 FPO for any additional items.)

Property Owner

(Complete this item at the request of SHPO or FPO.)

name	<u>Arkansas Railroad Museum</u>		
street & number	<u>PO Box 2044</u>	telephone	<u> </u>
city or town	<u>Pine Bluff</u>	state	<u>AR</u>
		zip code	<u>71611</u>

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listing. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 *et seq.*)

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P. O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reduction Projects (1024-0018), Washington, DC 20303.

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SUMMARY

United States Army Snow Plow #SN-87 is a mid twentieth-century wedge snow plow that was built by the O. F. Jordan Company in December 1953. It has a light weight of 74,000 lbs. It was operated by the U.S. Army until c.1990 when it was acquired by the Arkansas Railroad Museum and brought to Pine Bluff. The snow plow is now on display at their museum, which is housed in a building where the Cotton Belt built and repaired steam locomotives.

ELABORATION

United States Army Snow Plow #SN-87 is a mid twentieth-century wedge snow plow that was built by the O. F. Jordan Company in December 1953. It has a light weight of 74,000 lbs. It was operated by the U.S. Army until c.1990 when it was acquired by the Arkansas Railroad Museum and brought to Pine Bluff. The snow plow is now on display at their museum, which is housed in a building where the Cotton Belt built and repaired steam locomotives.

The snow plow rests on two sets of four-wheel trucks. The walls of the snow plow are sheathed in steel and it is crowned with a very shallow gable roof covered in metal. A small cupola, called the pilot house, pierces the roof towards the front of the plow to allow the operator outside visibility. The front part of the plow is dominated by the wedge-shaped plow and is where the operator piloted the plow from. The rear of the snow plow is for storage and also houses some of the plow's operating apparatus.

Front Façade

The front façade of the snow plow is dominated by the large wedge-shaped plow that threw the snow to both sides of the track. The bottom of the plow has small metal extensions that allow the plow to remove the snow from in between the track's rails. Also, near the bottom of the plow, in the center, is a metal bar that projects forward from the plow and holds the plow's front coupler and air hose for the braking system on its end.

The front of the pilot house has a predominant wedge shape on its front façade. On each plane of the wedge is a window that allows outside visibility for the operator. In between the wedge's planes is a small panel that houses the plow's headlight.

Side Façades

The side façades of the plow at the front are dominated by the large curved profile of the plow itself. Above the rear of the plow section is the side of the pilot house, which is fenestrated by a two-panel sliding glass window. Proceeding towards the rear of the plow is a hinged wing that swings out from the plow's side to allow it to plow a wider path.

The rear section of the side façades have a single-pane window near the top of the wall. Below the window is the logo for the Army Transportation Corps with "TRANSPORTATION" painted above it and "CORPS"

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painted below it. The logo consists of a ship's wheel with a shield inside of it that contains a wheel with a wing coming from it. At the rear of the snow plow is a door that provides access to the interior with rungs underneath it and grab irons to each side. The door is followed by a ladder that provides access to the plow's roof.

Rear Façade

In the center of the rear façade is a single-pane window near the top of the wall, and the rear coupler projects from the snow plow's frame. Just to the left of center, at the top of the snow plow, is the large wheel for the handbrake with a platform below to allow the operator access to the wheel. To the left of the wheel and platform, at the plow's corner, is a ladder allowing access to the platform and roof.

the upper right hand corner of the rear façade is stenciled "SN87."

Integrity

Snow Plow #SN-87 possesses good integrity. Since Snow Plow #SN-87 was built, parts of the plow have been replaced and repaired. However, this is a normal practice for railroad equipment as parts wear out. Snow Plow #SN-87 currently resides at the Arkansas Railroad Museum, which is housed in the building where the Cotton Belt built and repaired steam locomotives. As a result, its current setting still reflects Snow Plow #SN-87's period of significance while it was in operation in railroad service for the U.S. Army.

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SUMMARY

United States Army Snow Plow #SN-87 is being nominated to the National Register of Historic Places with **statewide significance** under **Criterion C** for its engineering as an excellent example of a wedge snow plow built by the O. F. Jordan Company of East Chicago, Indiana. Although this example was brought to Arkansas fairly recently, the Jordan Company was an important snow plow manufacturer and the wedge plow design has been used extensively throughout the United States for snow removal on railroad lines.

ELABORATION

In the early days of American transportation, snow removal was not as important as it is today. In fact, the opposite was the case when sleds were a main form of transportation in the colder climates – keeping snow on the roads was more important. However, as motorized transportation developed in the early 1800s with the construction of the country's first railroads, it became necessary to deal with deep snows that clogged the lines and made them impassable.¹

Throughout the nineteenth century, there was great interest among the railroads in creating a snow plow that would easily keep the rail lines open. The *Railroad Gazette* reported in 1891 that:

Not less than 280 patents have been taken out in the United States in the last 30 years, but probably not a dozen of these have ever been actually built and tried in snow. They include devices to plow the snow, to melt it, to explode cartridges in a snow bank, to remove it with knives and spoons and buckets and wheels. Some of these have proved more or less efficient in service, especially those styles now familiar in the northwest, which are invaluable in their field. But as long as a machine plow is too costly for roads which are afflicted with only one snow storm a year, and as it is so expensive to operate that even those roads owning one deem it expedient to use a common plow in dealing with a moderate depth, the old fashioned method must remain much more common, and improvements in the details of push plows will interest a great many operating and mechanical officers.²

The earliest snow plows that the railroads used to clear the tracks, especially in the East and on the Prairies, were designed as large wedges, which pushed the snow to either side of the tracks. The design worked like an enlarged version of a locomotive's cow-catcher, and were sometimes mounted directly onto the front of the locomotive, but were often a separate piece of railroad equipment. Although they worked well in light

¹ Heirdon, Keith C., Ph.D. "Weather Almanac for December 1999: Moving the Snow." Found at: http://www.islandnet.com/~see/weather/almanac/arc_1999/alm99dec.htm.

² Mergen, Bernard. *Snow In America*. Washington: Smithsonian Institution Press, 1997, p. 45.

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snow, they were not always practical in heavy or deep snow or in areas with avalanches. Deep snow or snow slides that were mixed with other debris, such as rocks or trees, could cause the plow to derail. This was especially dangerous in mountainous areas, where the railroad lines were often built on narrow ledges.³

The solution to the problem came in the 1870s when a Toronto dentist, J. S. Elliott, patented the basic design for a rotary snow plow. The concept of the rotary snow plow was similar to the design of today's snow blowers. Snow was collected from the tracks by a funnel that directed the snow to a set of revolving blades. The blades took the snow and threw out a hole in the top of the apparatus. The design was modified in the 1880s by Orange Jull, and the design became known as the Jull-Elliott rotary snow plow. The first tests of the design were conducted in Toronto in the winter of 1883-1884. After a few modifications over the next few years, the design was improved and the Union Pacific ordered four units c.1887 and the Canadian Pacific ordered eight units into service in 1888.⁴

The O. F. Jordan Company, which built Snow Plow #SN-87, was one of the most prominent snow plow manufacturers of the twentieth century, and was most famous for a type of plow that became known as the "Jordan Spreader." The Jordan Spreader was a very versatile machine that could be used for plowing snow in the winter and for spreading new ballast during railroad line maintenance or construction during warmer weather. The company was founded by Oswald F. Jordan, a native of Canada who began work as a roadmaster on the New York Central's Canada Southern in the Niagara Region. It is believed he became involved in snow plow construction c.1900 with the supervision of the construction of the first few Jordan spreaders in the Canadian Southern's St. Thomas, Ontario, shops. Circa 1905, the O. F. Jordan Company was founded and their manufacturing plant was located in East Chicago, Indiana. Until the company was acquired by Jackson Vibrators in 1981, the Jordan Company manufactured over 1,000 plows.⁵

Little history is known about Snow Plow #SN-87. It is known that it was built in December 1953 by the O. F. Jordan Company under Contract #DA-44-177-TC-130 for the U.S. Army.⁶ The design of Snow Plow #SN-87 indicates that it was meant for use on single-track lines. The wedge-shaped plow would have thrown snow to both sides of the track, which would have made it impractical on double-track lines since the plow would have thrown snow onto the adjacent track.

The Jordan Company was committed to providing its customers with a high quality product and their literature noted that, "prior to departure from the O. F. Jordan Co. works at East Chicago, Indiana, every machine is thoroughly inspected and tested. It is shipped in perfect working order and ready for immediate

³ *Ibid.*

⁴ *Ibid.*

⁵ Information on the O. F. Jordan Company found at: <http://www.midcontinent.org/collectn/service/lstt55.html>.

⁶ Information on United States Army Snow Plow #SN-87 from the Arkansas Railroad Museum.

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use.” Customers were urged to “read the operating and maintenance instructions carefully before using machine and then give a general inspection of machine and a full working test to assure that machine received no damage in transit. When shipping in revenue freight train...front plow must always be facing towards locomotive.” Ironically, the company’s slogan was that the plow “does the work of an army of men.”⁷

It is unknown where Snow Plow #SN-87 was assigned, but it remained U.S. Government property until it was acquired by the Arkansas Railroad Museum in the 1990s. It is currently housed at their facility, a building where the Cotton Belt built and repaired steam locomotives. (The building is where Engine #819 – NR-listed May 8, 2003 – was built in 1942.)

Today, United States Army Snow Plow #SN-87 is a living reminder of Arkansas’s rich railroad history. United States Army Snow Plow #SN-87 is an excellent example of a mid-twentieth-century snow plow built by the O. F. Jordan Company, one of the most prominent snow plow manufacturers in the United States. United States Army Snow Plow #SN-87 is also a monument to the dedication of the Arkansas Railroad Museum to the preservation of Arkansas’s railroad past.

STATEMENT OF SIGNIFICANCE

United States Army Snow Plow #SN-87 is being nominated to the National Register of Historic Places with **statewide significance** under **Criterion C** for its engineering as an excellent example of a wedge snow plow built by the O. F. Jordan Company of East Chicago, Indiana. Although this example was brought to Arkansas fairly recently, the Jordan Company was an important snow plow manufacturer and the wedge plow design has been used extensively throughout the United States for snow removal on railroad lines.

⁷ O. F. Jordan Company. “Repair Parts List.” c.1980. From the author’s collection.

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BIBLIOGRAPHY

Heirdon, Keith C., Ph.D. "Weather Almanac for December 1999: Moving the Snow." Found at:
http://www.islandnet.com/~see/weather/almanac/arc_1999/alm99dec.htm.

Information on the O. F. Jordan Company found at:
<http://www.midcontinent.org/collectn/service/1stt55.html>.

Information on United States Army Snow Plow #SN-87 from the Arkansas Railroad Museum.

Mergen, Bernard. *Snow In America*. Washington: Smithsonian Institution Press, 1997.

F. Jordan Company. "Repair Parts List." c.1980. From the author's collection.

United States Army Snow Plow #SN-87
Name of Property

Jefferson County, Arkansas
County and State

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National Park Service

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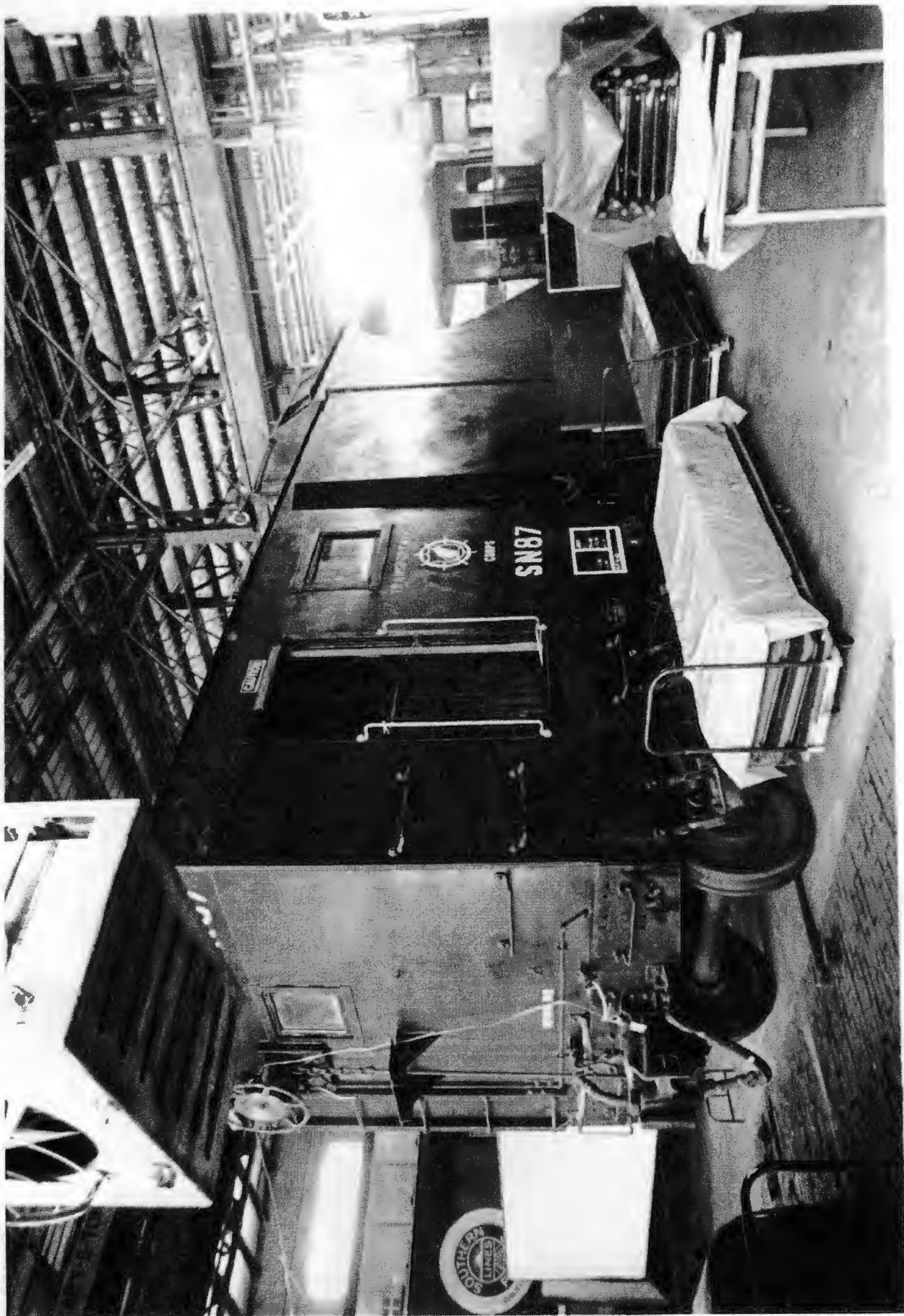
VERBAL BOUNDARY DESCRIPTION

From the northwest corner of the Arkansas Railroad Museum building at 1700 Port Road, proceed southerly along the west wall of the building for 60 feet, thence proceed easterly perpendicular to the wall for 40 feet, thence proceed southerly parallel to the wall for 20 feet, thence proceed westerly perpendicular to the wall for 40 feet, thence proceed northerly along the wall for 20 feet to the point of beginning.

BOUNDARY JUSTIFICATION

The boundary encompasses all of the property that contains United States Army Snow Plow #SN-87.

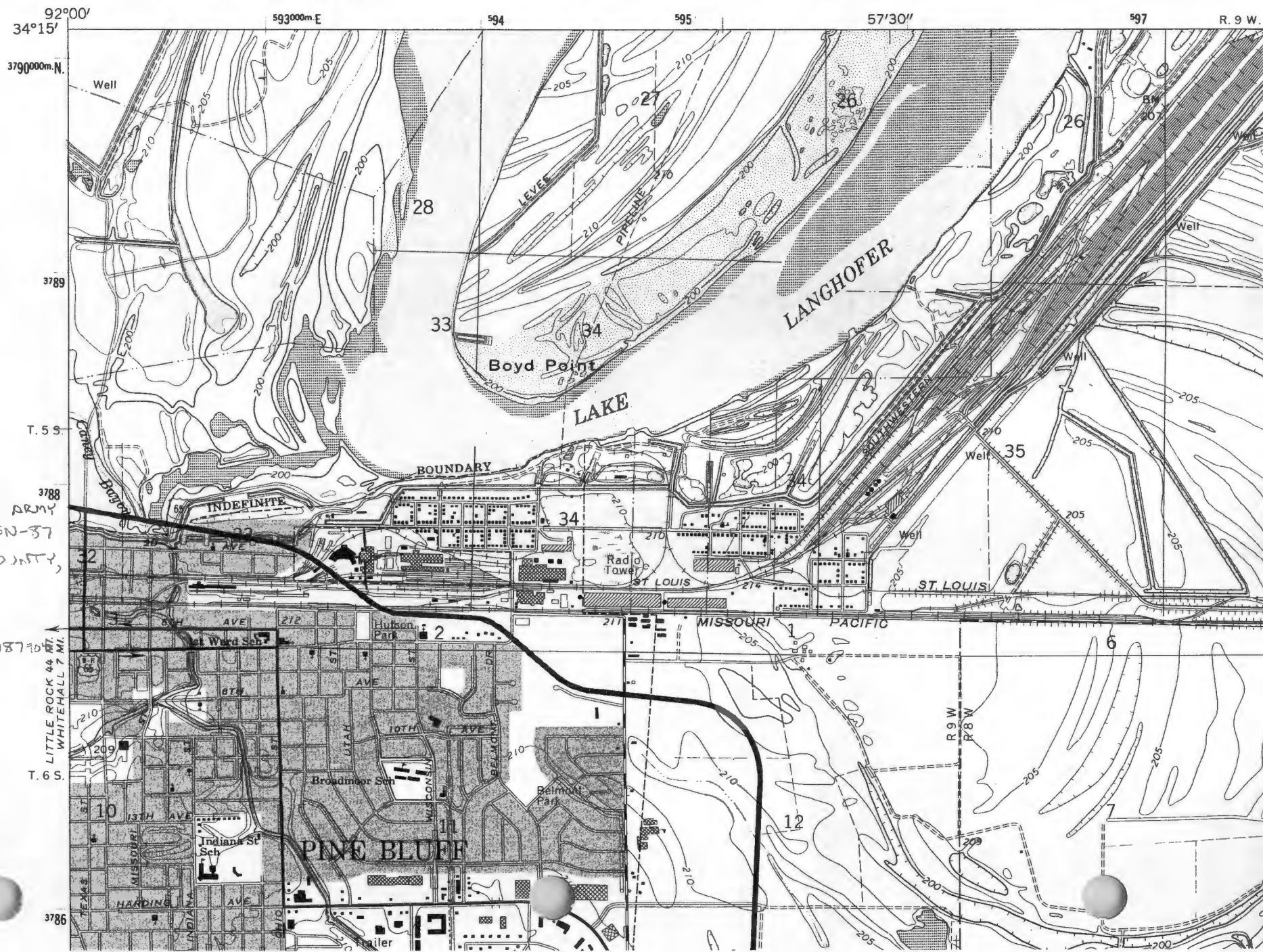






7552 / SE
(WHITE HALL)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



UNITED STATES ARMY
SNOW PLOW #SN-37
JEFFERSON COUNTY,
AR

UTM:

15/593448/378730

LITTLE ROCK 44 MI.
WHITE HALL 7 MI.