

United States Department of the Interior  
National Park Service

FILE COPY  
FINAL

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 Burton Lane Bridge  
other names/site number Sheerer Bridge / Bruce Ford Bridge 109-386-60029

2. Location

street & number 1/3 mi. S of SR 37 on Burton Lane over Indian Creek N/A  not for publication  
city or town Martinsville  vicinity  
state Indiana code IN county Morgan code 109 zip code 46151

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this  nomination  request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36CFR 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.)

*Patricia R. Roberts* 2-7-97  
Signature of certifying official/Title Date

Indiana 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 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

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Burton Lane Bridge  
Name of Property

Morgan IN  
County and State

**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
- district
- site
- structure
- object

**Number of Resources within Property**

(Do not include previously listed resources in the count)

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

**Name of related multiple property listing**

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

N/A

**Number of contributing resources previously listed in the National Register**

0

**6. Function or Use**

**Historic Functions**

(Enter categories from instructions)

TRANSPORTATION: Road-Related (vehicular)

**Current Functions**

(Enter categories from instructions)

TRANSPORTATION: Road-Related (vehicular)

**7. Description**

**Architectural Classification**

(Enter categories from instructions)

OTHER: Davenport Howe Truss

**Materials**

(Enter categories from instructions)

foundation CONCRETE; WOOD

walls

roof

other METAL: Iron

**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**

(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** 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.

**Narrative Statement of Significance**

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

**Areas of Significance**

(Enter categories from instructions)

TRANSPORTATION

ENGINEERING

**Period of Significance**

1872-1946

**Significant Dates**

1872

1899

1900, 1925, 1930

**Significant Person**

(Complete if Criterion B is marked above)

N/A

**Cultural Affiliation**

N/A

**Architect/Builder**

Davenport, Joseph

Massillon Iron Bridge Company

**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:**

- State Historic Preservation Office
- Other State agency
- Federal agency
- Local government
- University
- Other

Name of repository:

Indiana Historic Sites & Structures Inventory

Burton Lane Bridge  
Name of Property

Morgan IN  
County and State

## 10. Geographical Data

Acreeage of Property <1

### UTM References

(Place additional UTM references on a continuation sheet.)

1	1 6	5 4 8 4 4 0	4 3 6 1 1 1 0	3			
	Zone	Easting	Northing		Zone	Easting	Northing
2				4			

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 Joanne Raetz Stuttgen & Dr. James L. Cooper  
organization Morgan County Historic Preservation Society date 10-29-96  
street & number P.O. Box 1377 telephone 317/349-1537  
city or town Martinsville state IN zip code 46151

## 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 Morgan County Commissioners  
street & number 10 East Washington Street telephone 317/342-1007  
city or town Martinsville state IN zip code 46151

**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 listings. 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 Reductions Projects (1024-0018), Washington, DC 20503.

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NATIONAL REGISTER OF HISTORIC PLACES  
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ARCHITECTURAL DESCRIPTION

Fabricated in 1872, the Burton Lane Bridge is a single-span, single-lane "Davenport wrought iron Howe truss" structure, sometimes identified as a bowstring arch pony-truss, of 14 panels. The 99' span is seated to the north on creosote-sealed wood beams and to the south on four concrete bents. The 16' wide deck carries a 15'4" roadway between M-shaped metal guardrails on steel-grid flooring.

The top chords carry Davenport's "Howe truss" feature. They consist of four 23' wrought iron cover plates 7" wide and 3/4" thick latticed to wrought iron stay plates with cast iron pipe diagonals and fittings (for compression) and pairs of threaded wrought iron rods as verticals (for tension). In Howe fashion, the diagonals angling upward and inward toward midspan are doubled. The plates and the chord webbing are bolted together.

Each bottom chord consists of two parallel plates made of bolted sections which wrap around the ends of the top chord. The bottom chord plates are spaced by and bolted to the ends of the truss webbing. Fifty-six floor I beams sit atop the lower chord plates and are U-bolted around them.

Except at span-end, a cruciform rod borders each truss panel. The verticals extend through the top chord plates and are bolted above. Every other vertical carries a second cruciform rod extended beyond the truss as a sway brace. The brace is bolted below through a pipe connector at the end of an extended floor beam. Except for the end panel, each carries one threaded rod as a diagonal and another as a counter. The rods run through the bottom plate of the upper chord and are bolted above it.

The county highway department added three external braces to the bridge in the 1960s. In 1990, the highway department replaced the timber deck with steel grid and the old I floor beams with new ones. The lower lateral bracing has been retained.

The Burton Lane Bridge received a new coat of silver paint in 1990 and is generally in excellent repair. It carries approximately 425 vehicles per day. Within the next ten years, it will be bypassed by a new crossing over Indian Creek. Current county officials desire that the Burton Lane Bridge, a local historic landmark, be maintained for pedestrian and bicycle use.



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SIGNIFICANT DATES (continued)

1925  
1930

STATEMENT OF SIGNIFICANCE

Now at its third location, the Burton Lane Bridge is a product of the design of Joseph Davenport and fabricated by his Massillon Iron Bridge Company of Massillon, Ohio, between August and November, 1872. It was one of approximately a dozen bridges of its category remaining in Indiana as of 1987, the year the Indiana state bridge survey was published. The Indiana Historic Bridge Committee rated the structure as "National Register Eligible." From subsequent research, Cooper has learned that it is perhaps the oldest bowstring arch truss bridge extant in Indiana. It received an "Outstanding" rating in the *Morgan County Interim Report*.

Located over Indian Creek on Burton Lane about one-third mile southeast of Martinsville, the Burton Lane Bridge is eligible for the National Register of Historic Places under Criteria A and C. Its significance lies in its contribution to the development of the local and state highway system, as well as in the area of engineering. Furthermore, it plays a significant role in the local community's traditional culture; for decades it has been locally celebrated as a part of the world's first Ferris Wheel.

The development of Indiana bridges during the period 1860-1910 was dependent on the rapid construction of railway lines, which made bridge fabrication more than a local industry and allowed for the use of metal spans. By 1880, the widespread industrialization of the state had caught up to that of the country at large, and the last years of that decade marked the turning point from wood to metal bridges. The heyday of the iron bridge was between the late 1880s and 1905, the latter date marking the turning point from metal to concrete bridges.

The Burton Lane Bridge is a very early Indiana iron bridge. It appears to have replaced an early 1860s Zenas King patented bowstring-arch bridge over Indian Creek on the Martinsville-Bloomington Road. By December 4, 1899, this same bridge was reported to be "in a dangerous condition." A replacement bridge was to be erected by January 1, 1900.

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The records indicate that the contract for the new bridge was awarded to the Indianapolis Bridge Company. However, Cooper's investigation revealed that the "new" bridge was not new at all. The Morgan County commissioners and the Indianapolis Bridge Company had agreed to the erection of a used bridge! The Burton Lane Bridge is one-half of the original two-span, wrought iron Davenport Howe-truss bridge originally found on Central Avenue at Bruce Ford on Fall Creek in Marion County. On May 12, 1899, the twin span had collapsed under the weight of a sand-laden street railway car.

In August 1872, the Marion County Commissioners had contracted the Massillon Bridge Company of Massillon, Ohio, to build the Bruce Ford Bridge for \$19.75 per lineal foot or \$3,950 for the whole. The bridge's designer was Joseph Davenport, owner of the Massillon Bridge Company. Born in Massachusetts in 1815, Davenport became an avid inventor, building the first American-made passenger cars for railroads and designing the first cow catcher and enclosed cab for locomotives. Arriving in Massillon in 1850, Davenport designed and built bridges in both wood and iron. In 1867 and 1868, he patented an iron, arched "bridge-girder" equivalent of William Howe's wooden truss of the 1840s. In 1873, Davenport incorporated the Massillon Bridge Company for building wooden structures and the Massillon Iron Bridge Company for metal spans.

The Massillon Iron Bridge Company, a major Ohio producer of iron bridges, built many of its Davenport patented design bowstring arches in Indiana, including the Bruce Ford Bridge in 1872 and two 155-foot spans across the Wabash River at Vincennes in 1875.

The south span of the Bruce Ford Bridge was relocated in December 1899 by the Indianapolis Bridge and Iron Works to Indian Creek on the Martinsville-Bloomington Road in Morgan County. Apparently replacing the deteriorated Zenas King bowstring-arch bridge, the Sheerer Bridge, as it became known, was incorporated as a part of Indiana State Highway 22 (now Old State Road 37) in 1919.

The Sheerer Bridge was bypassed in 1925 by the Indiana Highway Commission during the enhancement of the state highway system, and a three-span Warren pony truss bridge was erected immediately to the southwest. This bridge still stands, but it too has been bypassed by new State Road 37.

In 1930, the Sheerer Bridge was relocated to its present location

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over Indian Creek on Burton Lane by William H. Kollman of Mooresville, who was paid \$1,138.44 for his effort. It has subsequently been known as the Burton Lane Bridge.

During its long history, the Burton Lane Bridge has stood witness to the development of the state's modern roadway system. As the Bruce Ford Bridge at the Central Avenue location, it was part of a major urban thoroughfare whose use changed with mass transit. In 1899, one of its spans was destroyed by a street railway car, which forced its replacement. The remaining span was then moved to Morgan County and erected as the Sheerer Bridge on the Martinsville-Bloomington Road over Indian Creek, which was already a major regional artery. This artery became the Dixie Highway by 1915, promoted before the establishment of the State Highway Commission in 1919 by automotive interests concerned with cross-country paved roads. By the next decade, the Dixie Highway had become State Highway 22, then State Highway 37. Due to increased automobile traffic, the bridge was bypassed in 1925 and in 1930 was relocated to its third and present location on Burton Lane.

The actual history of the Burton Lane Bridge is as intriguing as local lore. As with Dunn's Bridge in Porter County, another outstanding Indiana example of a metal arch bridge, the Burton Lane Bridge is believed to have been fashioned from the world's first Ferris Wheel at the 1893 World Columbian Exposition. The tale has been repeated again and again by authoritative sources: by the local newspaper; by former county engineer Delbert Hobson; and by Ross Drapalik, a young, local civil engineer who wrote a convincing paper about the bridge's connections to the Ferris Wheel while at Purdue University. ("I had it all mathematically figured out," he says. "My professor was impressed and gave me an A.")

The charm of the tale has made the bridge locally significant, and it has no doubt contributed to the bridge's preservation. Current county highway engineer Steve Wegman reports that the bridge was scheduled for replacement in the early 1980s. He credits his predecessor, Delbert Hobson, who valued the bridge both as an engineering gem as well as a part of the original Ferris Wheel, with saving the bridge from destruction.



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VERBAL BOUNDARY DESCRIPTION

The Burton Lane Bridge is located over Indian Creek on Burton Lane, approximately one-third of a mile east of State Highway 37. More accurate descriptions of the location are 1) 180 South - 50 West and 2) 39 degrees, 24.1 minutes latitude/86 degrees, 26.0 minutes longitude.

BOUNDARY JUSTIFICATION

This is the description of the property contained in the *Bridge Inspection Report--Phase II, Morgan County, Indiana* on file in the office of the Morgan County commissioners.

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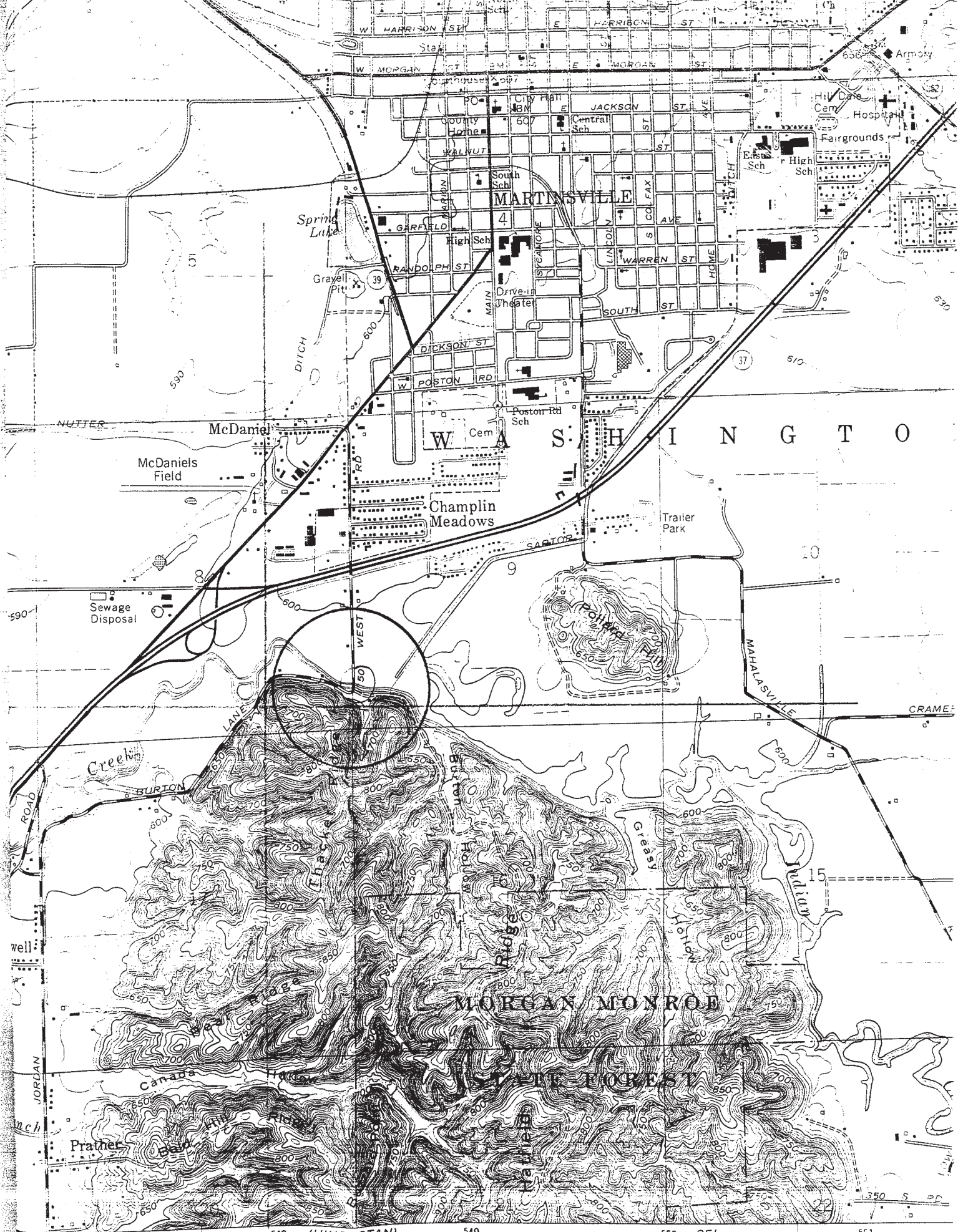
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PHOTOGRAPHS

Note: All proofs and negatives are located in the Morgan County Historic Photograph Collection, Morgan County Public Library, 110 South Jefferson Street, Martinsville, IN 46151. All photographs were taken by Tina Chafey on October 14, 1996.

1. North view.
2. West view.
3. Southwest view.
4. Top chord showing hollow tube diagonals and rod verticals, camera facing west.
5. West view, showing top chords, bracing, floor I beams, and bottom chord.
6. I floor beams and bottom chord, camera facing west.



(HINDUSTAN)  
3762 IV SW  
SCALE: 24000

