

FINAL
FILE

United States Department of the Interior
National Park Service

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 Rush County Bridge No. 188
other names/site number 139-555-56002

2. Location

street & number County Rd. 150 West over Little Flatrock River N/A not for publication
city or town Milroy vicinity
state Indiana code IN county Rush code 139 zip code 46156

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.)

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

Name of Property

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)

Table with columns: Contributing, Noncontributing, buildings, sites, structures, objects, 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)

OTHER Not in Use

7. Description

Architectural Classification

(Enter categories from instructions)

OTHER: Pratt through truss

Materials

(Enter categories from instructions)

foundation STONE

walls

roof

other METAL

WOOD

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.

Areas of Significance

(Enter categories from instructions)

TRANSPORTATION

ENGINEERING

Period of Significance

1901-1950

Significant Dates

1901

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

New Castle Bridge Company

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:

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

Name of repository:

Historic Landmarks Foundation

10. Geographical Data

Acreage of Property less than 1 acre

UTM References

(Place additional UTM references on a continuation sheet.)

UTM grid 1: Zone 16, Easting 631820, Northing 4373500

UTM grid 3: Zone, Easting, Northing

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 Jennifer Hoffman-Stonebraker, community services intern
organization Historic Landmarks Foundation of Indiana date 04/27/00
street & number 304 W. Michigan St. telephone 317-639-4534
city or town Indianapolis state Indiana zip code 46202

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 Rush County Commissioners
street & number 101 East Second Street telephone 765-932-3791
city or town Rushville state Indiana zip code 46173

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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Rush County Bridge # 188
Rush County, Indiana

Narrative Description

Rush County Bridge # 188 is located in the town of Milroy in Anderson Township. Bridge # 188 carries Railroad Street, or County Road 150 West, over the Little Flatrock River on the north side of town. The historic setting of the bridge is still evident as it crosses the tree-lined river providing a link between the town and nearby farmland. Although currently closed to traffic, Rush County Bridge # 188 remains an important link to the transportation history of Rush County and the town of Milroy.

Rush County Bridge # 188 was fabricated and erected by the New Castle Bridge Company of New Castle, Indiana in 1901. Bridge # 188 is a pin-connected Pratt through-truss. The single 93 foot span has six panels. The end posts are seated upon cut stone masonry abutments with wingwalls.

The inclined end posts, top chords, and bottom chords mark the perimeter of the truss. The end posts and top chords are constructed of a pair of channels with cover plates riveted above and stay plates riveted below. The end posts and top chords are in compression. The bottom chord consists of a pair of eyebars per panel that are in tension. The size of the eyebars varies because the amount of tension varies across the span.

The outer, hip verticals consist of a pair of eyebars, which act as hangers for the floor beams. Three intermediate verticals consisting of two sizes of laced channels subdivide the truss into most of its six panels. Eyebars provide the diagonals, which are in tension. Pairs of die-forged and rectangular eyebars stretch toward the center of the span from the top of each panel and point to the bottom of all except the end post panels. Cylindrical eyebars with turnbuckles provide the counter bracing in the two most central panels of the truss.

Bracing between the trusses helps to stabilize the structure. Braced "A" portal bracing is found between the end posts. The portal struts are in compression. They consist of a pair of laced channels, similar to the intermediate verticals. Round bars in tension create an "X" between the struts, forming the upper lateral bracing. There is no sway bracing on the bridge.

U-bolted to the lower pins are I beams that serve as the floor beams. They support seven longitudinal I-beam stringers that support the timber deck. The top lateral bracing is mirrored in the substructure's bottom lateral bracing. A timber deck is carried on the I beams and provides 15'8" roadway with 14' of vertical clearance.

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Rush County Bridge # 188
Rush County, Indiana

The bridge is not in use currently, and both ends of the bridge are blocked by guard rails. The original guardrail along the sides of the bridge has been replaced with a more modern one. There is essentially no decoration on the bridge other than the name plate which reads:

1901
Owen L. Carr, Aud.
George R. Kelly, Eng.
M. L. Sisson
John H. Frazee
W. S. Thompson
Commissioners
Built by New Castle Bridge Co.

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Rush County, Indiana*Narrative Statement of Significance*

Rush County Bridge # 188 is eligible for inclusion in the National Register of Historic Places under Criterion A for significance in transportation and Criterion C for significance in engineering. The bridge is an excellent example of what was probably the most popular and influential type of metal truss bridge in the country during the last half of the nineteenth and early twentieth centuries. The bridge also is an important link to the transportation history of Rush County. It is currently the only surviving Pratt through-truss bridge in the county.

The development of the prefabricated metal truss bridge was important to the history of transportation and engineering. Mass produced prefabricated bridge members brought low costs, reliability, and quicker speed of erection for bridge building. In 1844, Caleb and Thomas Pratt patented one of the most widely used nineteenth-century and early twentieth century designs for a metal truss bridge. The Pratt is distinguished by vertical members acting in compression and diagonal members acting in tension. This design feature shortened the length of the compression members to reduce bending or buckling. The Pratt truss proved durable, versatile, and economical. Therefore, many variations of the Pratt, such as the camelback, Parker and lenticular trusses, spanned American Rivers. The influence of the Pratt lasted well into the early 20th century.

Milroy, situated on the east bank of the Little Flatrock River, was once the center for trade and social activities in southern Rush County. With the early construction of a tavern, store, and gristmill, the future of the small town looked promising. Milroy grew into the third largest community in the county. When in 1881, the Vernon, Greensburg, and Rushville Railway opened Milroy to rail service with tracks passing through the center of town, Milroy became a center for the local farm trade. That same year, natural gas was discovered near Milroy. These two events spurred the economic growth of the town,¹ and increased the need for improved roads and bridges.

Improved roads provided wider markets for the products produced in Milroy and the surrounding area. A gravel road linked Milroy and Rushville by the 1870's. Rushville, the county seat, was known throughout the region as a good place to trade and sell goods. The link was important for the residents of Milroy and Rushville, who benefited from the easier trade. Bridges were also important throughout the county.

Before the 1890's, most of the bridges in the county were covered timber-truss spans. In November 1896, the commissioners contracted with the Bellefontaine Bridge Company to build a single span

¹ *Historic Sites and Structures Inventory: Rush County Interim Report* (Indianapolis, IN: Historic Landmarks Foundation of Indiana, 1988), 116-177.

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Rush County, Indiana

metal bridge near Carthage. Four years later, the commissioners contracted for sixteen new metal bridges throughout the county. Metal bridges quickly became the standard over the wooden bridges, which were described as "inadequate to meet the demands of traffic placed upon them."²

During a special session of the Rush County Commissioners on April 13, 1901, George R. Kelly, the county surveyor, submitted the plans and specifications for four bridges including the substructure and superstructure of a bridge to be erected north of Milroy over the Little Flatrock River. There was much local interest and investment in the project shown during the meeting. Ms. Bartlett of Milroy agreed to donate the land necessary on which to erect the bridge, and to furnish the stone and dirt to be used in making the approaches and fill for the bridge. Furthermore, B. F. Ballinger, *et al.*, came forward and filed a bond for the faithful performance of an agreement made by the people of Milroy and vicinity to build and construct the approaches of the bridge on the Ft. Wayne Road.³ Notices to contractors of letting were placed in *The Tuesday Republican* of Rushville on April 16, 1901. During a special session on May 21, 1901, the Rush County Commissioners considered bids for the construction of the four bridges. The New Castle Bridge Company placed bids for all four bridges. After consideration of the proposals, the Rush County Commissioners awarded the contracts for all of the bridges to the New Castle Bridge Company, which was the lowest bidder.⁴ The Milroy Bridge contract called for a 93 foot span costing \$1287.00 and a masonry substructure at \$5.25 per cubic yard. The work on all of the bridges was to be completed by October 1, 1901. The commissioners appointed George R. Kelly the superintendent of the work, and he received 5% of the cost of construction.⁵

The Little Flatrock River was probably not forded previously at this location. Had the stream been spanned here previously, there would not have been the need for land acquisition, extensive approaches, or the construction of the substructure. Substructure contracts were not awarded for the other three bridges, indicating that bridges may have already existed at those locations.

The New Castle Bridge Company of New Castle, Indiana, which erected the Pratt through-truss span over the Little Flatrock River in Milroy, was the state's third successful metal bridge building company. Five local men organized the New Castle Steel Sewer Pipe Company in 1895. The company fabricated metal products and as an afterthought also decided to build small bridges. The company quickly began to focus on bridges and in 1897 changed the name to the New Castle Bridge

² A. L. Gary and E. B. Thomas, editors, *Centennial History of Rush County, Indiana*. (Indianapolis, IN: Historic Publishing Company, 1921) 99.

³ Rush County Auditors Office, *Commissioners Record May 1900-January 1903*, 202-203.

⁴ *Ibid.*, 226-228.

⁵ *The Friday Republican* (Rushville, Indiana) 24 May 1901.

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Rush County Bridge

Company. The company boasted excellent sales, not only in Indiana, but in Iowa, Virginia, and Michigan. In 1902, the company relocated to Indianapolis and broadened the product line to include structural work. The company continued to grow and changed their name again in 1905 to Central States Bridge Company. Simple and efficient manufacturing led the company to prefer beams to trusses. By the 1920's the company no longer focused on bridges, but they continued to fabricate well beyond World War II⁶.

Time has changed many aspects of life in Milroy. A fire in 1920 destroyed a half block of buildings along Main Street. Furthermore, the decline in railroad traffic and the removal of passenger trains undermined the status of the town as a trading center. In 1933, State Road 3 was rerouted to bypass Milroy's business center. Despite these changes, Milroy still retains much of its historical character and identity. This character and identity is most apparent along Main Street and in the nearly century old metal bridge that crosses the Little Flatrock River.

Rush County Bridge # 188 was listed as "outstanding" in the *Indiana Historic Sites and Structures Inventory: Rush County Interim Report*. Rush County Bridge # 188 is an excellent example of a quickly disappearing cultural and historic resource. Rush County Bridge # 187, also a Pratt through-truss span, was located just to the east of Bridge # 188, and was demolished in 1997. This is not surprising as historic bridges across the state are being replaced at a rapid rate. In 1987, eight Pratt through-truss bridges were identified in Rush County in *Iron Monuments to Distant Posterity: Indiana's Metal Bridges, 1870-1930*. Today, Rush County Bridge # 188 stands as the last remaining metal-truss bridge of any design in the county.

⁶ James L. Cooper, *Iron Monuments to Distant Posterity: Indiana's Metal Bridges, 1870-1930* (Greencastle, IN: 1987), 24-25.

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Rush County Bridge # 188
Rush County, Indiana

Bibliography

BOOKS & ARTICLES

Comp, T. Allan and Donald Jackson. "Bridge Truss Types: A Guide to Dating and Identifying," *American Association for State and Local History Technical Leaflet* 95. 1977.

Cooper, James L. *Iron Monuments to Distant Prosperity: Indiana's Metal Bridges, 1870-1930*. Greencastle, IN: 1987.

DeLony, Eric. *Landmark American Bridges*. Washington DC: US Department of the Interior, National Park Service, 1993.

Gary, A. L. and E. B. Thomas, editors. *Centennial History of Rush County, Indiana*. Indianapolis, IN: Historical Publishing Company, 1921.

Indiana Historic Sites and Structures Inventory: Rush County Interim Report. Indianapolis, IN: Historic Landmarks Foundation of Indiana, 1988.

Kemp, Emory L. "The Fabric of Historic Bridges." *Journal of the Society for Industrial Archaeology* 15 (# 2, 1989): 3-22.

Rush County Auditor's Office. *Commissioners Record May 1900-January 1903*.

NEWSPAPERS

The Tuesday Republican (Rushville, Indiana) 16 April 1901.

The Friday Republican (Rushville, Indiana) 24 May 1901.

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Section number 10 Page 7

Rush County Bridge # 188
Rush County, Indiana

Geographical Data

VERBAL BOUNDARY DESCRIPTION

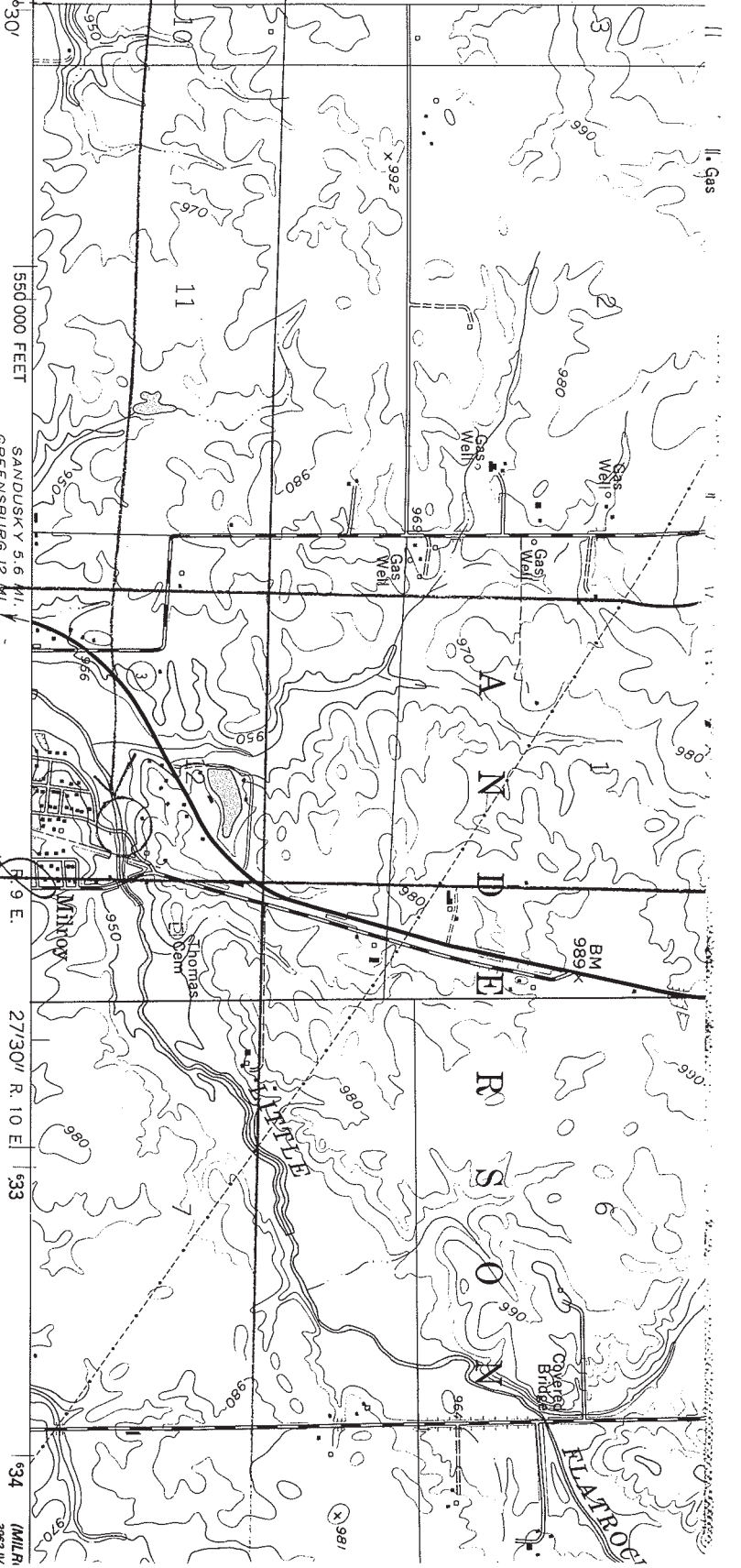
The 93 foot span with the stone abutments that carries Railroad Street, or County Road 150 West, over the Little Flatrock River on the north side of the town of Milroy.

BOUNDARY JUSTIFICATION

The boundary includes the bridge structure and its historic abutments.

FRESH CONVEYER
 BRADDOCK #188
 UTM 16 031 820
 4573500

(ADAMS)
3882 1/4



Produced by the U. S. Geological Survey

Control by USGS, NOS/NOAA, and Indiana Flood Control and Water Resources Commission

Topography by photogrammetric methods from aerial photographs taken 1957. Field checked 1959

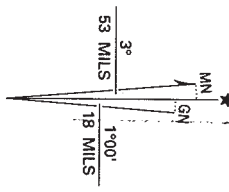
Projection and 10,000-foot grid ticks: Indiana coordinate system, east zone (transverse Mercator)

1000-meter Universal Transverse Mercator grid ticks, zone 16, shown in blue 1927 North American Datum (NAD 27)

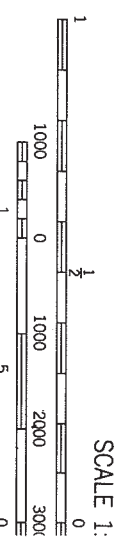
North American Datum of 1983 (NAD 83) is shown by dashed corner ticks. The values of the shift between NAD 27 and NAD 83 for 7.5-minute intersections are given in USGS Bulletin 1875

Red tint indicates area in which only landmark buildings are shown

Photoinspired from 1992 source; no major culture or drainage changes observed. Boundaries revised and names verified 1994



UTM GRID AND 1994 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET



THIS MAP COMPLETES WITH NATION
 FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER,
 AND INDIANA DEPARTMENT OF NATURAL F
 A FOLDER DESCRIBING TOPOGRAPHIC MAPS /

CONTOUR INTER
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