

United States Department of the Interior  
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES  
REGISTRATION FORM

1. Name of Property: Park's Gap Bridge

historic name: Lane Bridge; Park's Gap Bridge

other name/site number: N/A

2. Location

street & number: Route 6

not for publication: N/A

city/town: N/A

vicinity: Tomahawk

State:WV code:WV county:Berkeley code:003

zip code:25401

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this   x   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 36 CFR Part 60. In my opinion, the property   x   meets        does not meet the National Register Criteria. I recommend that this property be considered significant        nationally   x   statewide        locally.

(See continuation sheet for additional comments.)

William C. Larran  
Signature of Certifying Official

10/3/94  
Date

State or Federal agency and bureau

Date

In my opinion, the property \_\_\_\_\_ meets \_\_\_\_\_ does not meet the National Register criteria. (See continuation sheet for additional comments.)

\_\_\_\_\_  
Signature of Certifying Official Date

\_\_\_\_\_  
State or Federal agency and bureau

=====  
4. National Park Service Certification  
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I, hereby certify that this 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

=====  
5. Classification  
=====

Ownership of Property: Category of Property  
(Check as many boxes as apply) (Check only one box)

- |  |   |
|--|---|
| <input type="checkbox"/> private                 | <input type="checkbox"/> building(s)          |
| <input checked="" type="checkbox"/> public-local | <input type="checkbox"/> district             |
| <input type="checkbox"/> public-State            | <input type="checkbox"/> site                 |
| <input type="checkbox"/> public-Federal          | <input checked="" type="checkbox"/> structure |
|  | <input type="checkbox"/> object               |

NUMBER OF RESOURCES WITH PROPERTY:

Contributing	Noncontributing	
		buildings
		sites
1		structures
		objects
1		TOTAL

NAME OF RELATED MULTIPLE PROPERTY LISTING: N/A

NUMBER OF CONTRIBUTING RESOURCES PREVIOUSLY LISTED IN THE NATIONAL REGISTER: N/A

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6. Function or Use

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HISTORIC FUNCTIONS:  
Transportation/road related

CURRENT FUNCTIONS:  
Transportation/road related

=====

7. Description

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ARCHITECTURAL CLASSIFICATION:  
Other/Modified Howe Truss

MATERIALS:

Foundation: Stone

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  
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APPLICABLE NATIONAL REGISTER CRITERIA

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.

X 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:

Property is:

N/A A owned by a religious institution or used for religious purposes.

N/A B removed from its original location.

N/A C a birthplace or grave.

N/A D a cemetery.

N/A E a reconstructed building, object, or structure.

N/A F a commemorative property.

N/A G less than 50 years of age or achieved significance within the past 50 years.

AREAS OF SIGNIFICANCE:  
Engineering

PERIOD OF SIGNIFICANCE:  
1892.

SIGNIFICANT DATES:  
1892.

SIGNIFICANT PERSON:

N/A

CULTURAL AFFILIATION:

N/A

ARCHITECT/BUILDER:

Vulcan Road Machine Company

NARRATIVE STATEMENT OF SIGNIFICANCE

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

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9. Major Bibliographical References

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BIBLIOGRAPHY

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

N/A preliminary determination of individual listing (36 CFR 67) has been requested.

N/A previously listed in the National Register

N/A previously determined eligible by the National Register

N/A designated a National Historic Landmark

N/A recorded by Historic American Buildings Survey #

N/A recorded by Historic American Engineering Record #

Primary Location of Additional Data:

State Historic Preservation Office

Other State agency

Federal agency

Local government

University

X Other

Name of Repository:

Berkeley County Historic Landmark Commission

126 East Race Street

Martinsburg, WV 25401

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10. Geographical Data

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Acreage of Property: .036 acres.

UTM References: Zone Easting Northing    Zone Easting Northing  
                  17. 754790. 4377640.

VERBAL BOUNDARY DESCRIPTION

(Describe the boundaries of the property on a continuation sheets.)

BOUNDARY JUSTIFICATION

(Describe the boundaries of the property on a continuation sheets.)

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11. Form Prepared By

=====

Name/Title: Michael Gioulis, Historic Preservation Consultant  
                  Don C. Wood, Genealogist & Historian

Organization: N/A

Date: June 1, 1994

Street & Number: 612 Main Street  
                  126 East Race St.

Telephone: (304) 765-5716  
                  (304) 267-4713

City or Town: Sutton  
                  Martinsburg

State: WV  
          WV

ZIP: 26601  
          25401

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ADDITIONAL DOCUMENTATION

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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)

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**PROPERTY OWNER**

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

**Name:** State Roads Commission

**Street & Number:**

**Telephone:** (    )

**City or Town:** Charleston

**State:** WV

**ZIP:**

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(NPS Form 10-900)

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NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET

Section 7 Page 1

Park's Gap Bridge  
Berkeley County, WV

The Park's Gap Bridge is located in Berkeley County, West Virginia. It is situated on Park's Road, County Route 6, crossing Back Creek. It is located approximately 15 miles north west of Martinsburg. The terrain around the bridge is predominantly cultivated fields, and the immediate surroundings consist of a gap in the hill that the road passes through. The creek bank is relatively steep on the east side of the bridge and flat on the west.

The bridge rests on stone abutments and the deck surface is approximately twenty two feet above the surface of the water at the midpoint of the span. The total span is ninety three feet, and it is twelve feet wide. The overall length of the bridge is ninety seven feet six inches from back of backwall to back of backwall.

The bridge is a simple span pony truss supported on stone abutments. The abutments have concrete bridge seats and backwalls. The lower chords of the trusses rest on the stone abutments. The bridge contains seven panels and is a variation of the long truss design. The structural system consists of railroad rails for top, bottom, and diagonal chords of the truss. There are rails placed vertically at the ends of the center panel as well. The rails are stamped "67 M.S. Co. 1892." Connections are made with "U" bolts and the tension diagonals and hanger rods are iron rods. The hangers are looped over the top chords. There are modern steel beams installed as supplemental joist supports for the deck. The transverse deck supports consist of railroad rails with iron rods and spacers forming a shallow truss.

There are modern flex rails at the sides of the bridge. The deck is oak timber plank running transverse.

The truss is nine feet ten inches tall and each center panel is fourteen feet one inch center to center. The end panels are twelve feet wide. One interesting aspect of the construction technique is that the top chords are continuous from end to end and the rails are bent to form the diagonals of the truss system. The rails are spliced together using bolted plate connections.



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Section 7 Page 2

Park's Gap Bridge  
Berkeley County, WV

Each subsequent rail section, forming top chords is also continuous and is connected to the uppermost chord with "U" bolts. The result is that in the center panels the top chord is composed of a built-up section of three rails stacked on top of each other. There are bridge plates on each truss at opposite ends of the bridge. The plates read "LANE BRIDGE Built by VULCAN ROAD MACHINE CO. Charles Town, W.Va. 1892."

The main rails are five inches tall and five inches wide. The vertical rail at the center panel is three inches by three inches.

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Section 8 Page 1

Park's Gap Bridge  
Berkeley County, WV

The Park's Gap Bridge is significant under Criterion C as a rare extant example of an unusual patented bridge truss and construction system. The bridge is unusual in its design, structural system, and materials. It is one of only three or four known lane truss bridges in the eastern United States. It is the only lane truss bridge in West Virginia.

The region of Back Creek is one of the earlier settled sections of the county. The Park's Road was constructed early to provide access for local residents to the surrounding communities. By 1847 the John P. Kearfott map of Berkeley County indicates a bridge at this location. Prior to the construction of the first bridge at this location, access was provided by a ford at the same site known as Park's Gap. The road was named for an early settler, John Park. The road connected the area to Hedgesville to the north and to Tomahawk and Jones Spring in the south. It provided important connections for the residents of the area. Two schools were located on the road, the Cannon Hill School and the Hedgesville Colored School. Settlement occurred early in the vicinity of the bridge, including a cabin prior to 1751 by John Mauritz. Other families in the neighborhood include Samuel and Mary Hedges, Richard Wood, and the John Myers family.

By 1892 it was necessary to replace the old bridge on the site, and the county court appropriated \$1,500.00 dollars for a new bridge. B.M. Kitchen, G.P. Riner, and H.J. Seibert were the commissioners at the time. Following the appropriation, a committee was appointed to supervise the construction and insure that it remain within budget. The committee was composed of Kitchen, Riner, D.N. Kees, James B. Shipper, and James Murphy. They were empowered to advertise for bids, select contractors, purchase materials, and contract for the construction.

The committee selected a new and unusual construction technique and the successful bidder was the Vulcan Road Machine Company of Charles Town, West Virginia. The design is unusual in that it used new railroad rails for structural members and connected them with iron rods and ties. The deck was hung from the truss members with the rods. The truss itself is a variation on the Howe truss,

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Section 8 Page 2

Park's Gap Bridge  
Berkeley County, WV

using the railroad rails as compression members for the top and bottom chords of the truss and for transverse supports for the decking. Iron rods were used as tension members to hang the deck supports and as diagonals using turnbuckles to fine tune the structure. The rails were bent to accommodate the diagonal configuration. "U" bolts are used to connect the members.

The interesting aspect of the design is that the simplicity of the materials and connections made it possible for small companies to produce the bridge and reportedly was possible for field fabrication. This allowed for local construction and for quick access to the technology. The use of readily available materials, railroad rails, iron rods, and "U" bolts, made this possible. The Park's Gap Bridge is an excellent example of exactly what the designer intended. The bridge is a successful application of, then, modern engineering technique in a remote location by a small local company. Another interesting application is the composite truss system of the transverse beams supporting the deck. This system has been observed in many railroad related structures. This transfer of technology is related to the use of railroad rails.

In summary, the Park's Gap Bridge is significant under Criterion C as an example of the application of a unique engineering system to the construction of a rural bridge. The bridge is the only extant example of this system in West Virginia and one of the few in the United States.

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CONTINUATION SHEET

Section 9 Page 1

Park's Gap Bridge  
Berkeley County, WV

BIBLIOGRAPHY

Kemp, Emory, Professor Report.

Wood, Don C. Park's Gap Bridge Unpublished manuscript.

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CONTINUATION SHEET

Section 10 Page 1

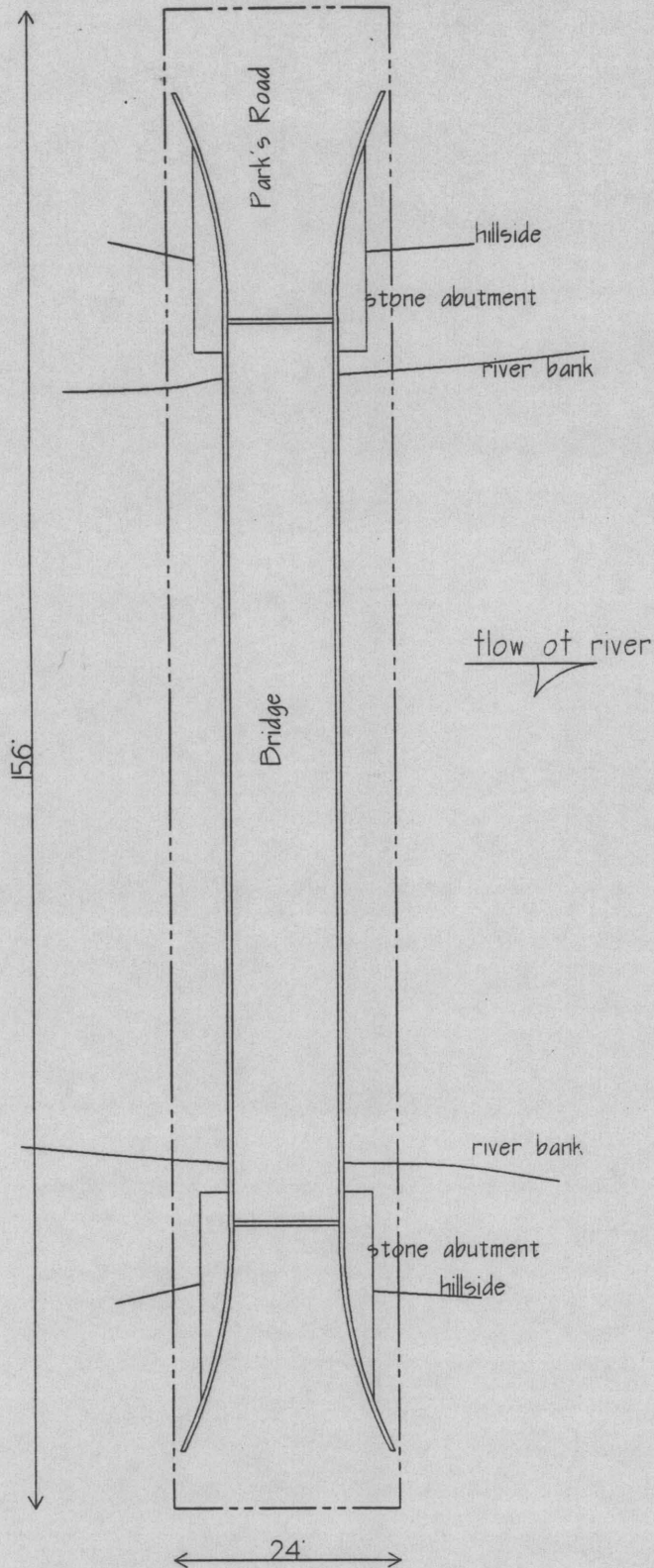
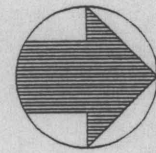
Park's Gap Bridge  
Berkeley County, WV

**VERBAL BOUNDARY DESCRIPTION:**

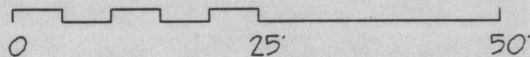
The boundary for the Park's Gap Bridge National Register nomination is shown as the dotted line on the accompanying sketch map titled "SITE PLAN PARK'S GAP BRIDGE BERKELEY COUNTY, WEST VIRGINIA" dated March, 1994.

**BOUNDARY JUSTIFICATION:**

The boundaries encompass the Park's Gap Bridge, the only structure within the period of significance.



SCALE:



KEY:

— National Register Boundaries

PARKEL.GCD

DWG.  
NO.  
1 of 2

SITE PLAN  
PARK'S GAP BRIDGE  
BERKELEY COUNTY, WEST VIRGINIA

MICHAEL GIOULIS  
HISTORIC PRESERVATION  
CONSULTANT  
612 MAIN STREET  
SUTTON, WV 26001  
304 765-6716

REV.

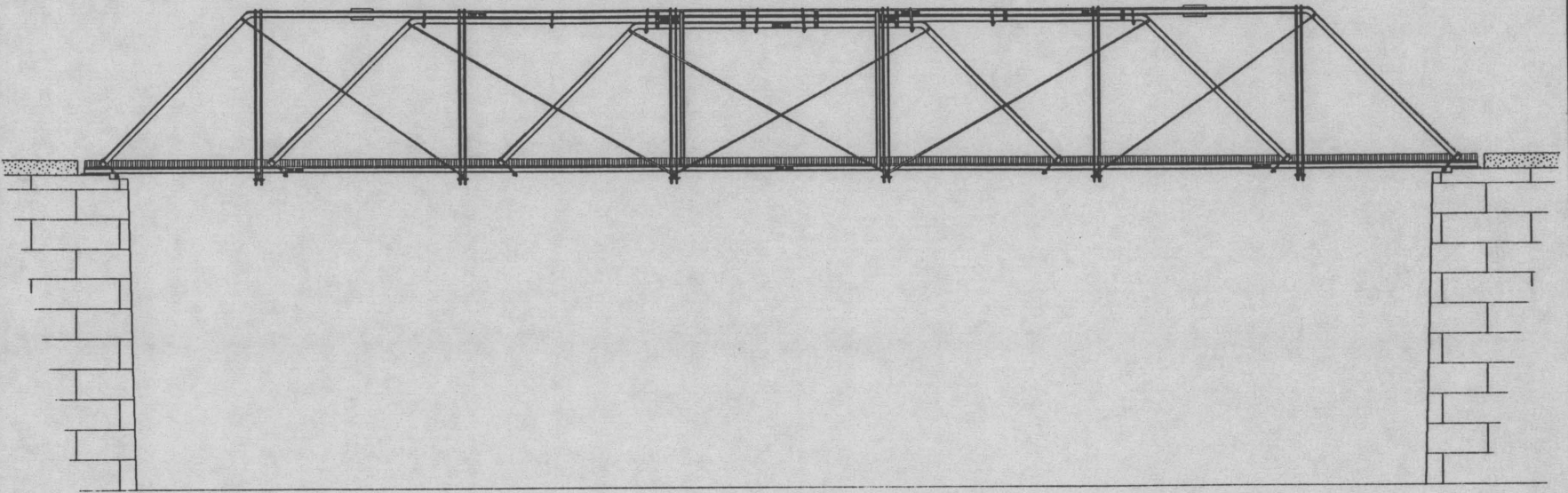
DATE

MAR. 1994

DWG. NO. 2 of 2

PARCEL 64C

ELEVATION  
PARKS GAP BRIDGE  
BERKELEY COUNTY, WEST VIRGINIA



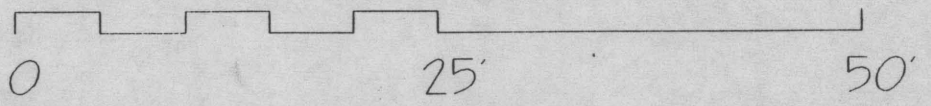
MICHAEL GIULIUS  
HISTORIC PRESERVATION  
612 MAIN STREET  
SUTTON, WV 26051  
304 766-0716

REV.

DATE

MAR 1994

SCALE.





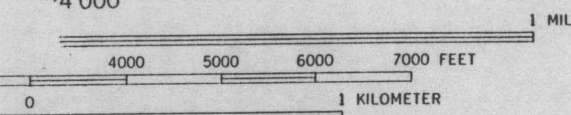
PARK'S GAP BRIDGE  
 FRELEY COUNTY,  
 UTM REFERENCE:  
 17/754790/4377640

74 000  
 753  
 754  
 2'30"  
 510 000 FEET (MD.)  
 756000m E.

4378  
 4378<sup>000</sup>m N  
 610 000 FEET (MD.)  
 39°30'  
 78°00'

INTERIOR—GEOLOGICAL SURVEY RESTON, VIRGINIA—1982  
 NOLLVILLE 3 MI. MARTINSBURG 4 MI.

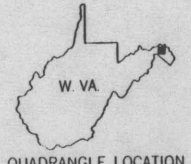
(MARTINSBURG)  
 5462 N NW



**ROAD CLASSIFICATION**

Primary highway, all weather, hard surface	Light-duty road, all weather, improved surface
Secondary highway, all weather, hard surface	Unimproved road, fair or dry weather

- Interstate Route
- U. S. Route
- State Route



QUADRANGLE LOCATION

**BIG POOL, MD.—W. VA.**  
 SE/4 HANCOCK 15' QUADRANGLE  
 N3930—W7800/7.5

NATIONAL MAP ACCURACY STANDARDS  
 FEDERAL SURVEY, RESTON, VA 22092  
 MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

Revisions shown in purple and woodland compiled in 1958

1958



