

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

LISTED ON:	
VLR	09/30/2010
NRHP	01/07/2011

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form*. If any 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 certification comments, entries, and narrative items on continuation sheets if needed (NPS Form 10-900a).**

1. Name of Property

historic name Wolf Creek Bridge
 other names/site number VDOT Bridge No. 9000; VDHR No. 010-0072

2. Location

street & number Old State Route 61 – Wolf Creek Road not for publication
 city or town Rocky Gap vicinity
 state Virginia code VA county Bland code 021 zip code 24366

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 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 at the following level(s) of significance:

national statewide local

Signature of certifying official [Signature] Date 10/16/10
 Title _____ State or Federal agency/bureau or Tribal Government _____

In my opinion, the property meets does not meet the National Register criteria.

Signature of commenting official _____ Date _____
 Title _____ State or Federal agency/bureau or Tribal Government _____

4. National Park Service Certification

I, hereby, certify that this property is:

entered in the National Register determined eligible for the National Register
 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)

Category of Property
(Check only **one** box)

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

<input type="checkbox"/>	private
<input checked="" type="checkbox"/>	public - Local
<input type="checkbox"/>	public - State
<input type="checkbox"/>	public - Federal

<input type="checkbox"/>	building(s)
<input type="checkbox"/>	district
<input type="checkbox"/>	site
<input checked="" type="checkbox"/>	structure
<input type="checkbox"/>	building(s)
<input type="checkbox"/>	object

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

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

N/A

0

6. Function or Use

Historic Functions
(Enter categories from instructions)

Transportation - bridge

Current Functions
(Enter categories from instructions)

Recreation - bridge

7. Description

Architectural Classification
(Enter categories from instructions)

No style

Materials
(Enter categories from instructions)

foundation: concrete

structure: steel

roof: n/a

other: wood

Narrative Description

Summary Description

The Wolf Creek Bridge in Bland County, Virginia, identified as VDOT Bridge no. 9000, is a former metal truss railroad bridge built about 1912 and incorporated into the state highway system in 1946, carrying vehicles traveling north and south on Highway 61 across Wolf Creek. The bridge was closed to all but pedestrian traffic in 1987, and has since become the focal point of a county recreational park. A new bridge that carries the re-aligned Route 61, identified as VDOT Bridge no. 1034, was built a few hundred feet upstream in 1986.

Narrative Description

Bridge

The bridge consists of a one-span, one-lane, steel Pratt through truss structure, fabricated c.1912. The pin-connected steel structure is 206 feet in length and the wooden deck is 16 feet in width. There are 8 panels measuring each 25 ½ feet. The lateral struts and sway struts are Phoenix columns connected w/ cylindrical tie-rods. The top chords and end posts are 15 ½ inches in diameter. The posts are 8 inches in diameter. The bottom chords are double and quadruple rectilinear eve bars, die forged. The diagonals are paired rectilinear eye bars, die forged. The counters are paired cylindrical tie rods.¹ The original abutments, presumably constructed of stone, were replaced, probably in 1946, with poured concrete abutments. The patented "Phoenix columns," are vertical compression members, each made up of several steel pieces forming a cylindrical shaft with riveted ribs. The columns are the main identifying feature of Phoenix Bridge Company structures.

Site

Wolf Creek is a tributary of the New River, entering the New at the town of Narrows, Virginia, some 21 miles northeast of the Bridge, which is located at Rocky Gap. The little community of Rocky Gap is completely surrounded by the Jefferson National Forest, and was home to only 75 individuals in 2009. Its location is 2 ½ miles south of the West Virginia line, 46 miles north of the North Carolina line, and only 52 miles from the Tennessee border. Rocky Gap is about 12 miles north of the Town of Bland, along old Highway 52 or Interstate 77, and lies at an elevation of 2,887 feet above sea level, between Rick Mountain on the west side of the gap, and Wolf Creek Mountain on the east side. To the north is East River Mountain, and the town of Bluefield West Virginia, just beyond. U.S. Interstate 77 exit 64 is just .32 miles southwest of the bridge. U.S. 52, the old highway, is only 650 feet (.12 miles) west of the bridge at its closest point. U.S. Highway 61 is 330 feet north of the bridge at its closest point. The Wolf Creek channel reaches a maximum width of about 90 feet near the bridge.

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 old or achieving significance within the past 50 years.

Areas of Significance

(Enter categories from instructions)

Engineering

Period of Significance

c.1912

Significant Dates

c.1912

Significant Person

(Complete only if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

Phoenix Bridge Company

Wolf Creek Bridge
Name of Property

BlandCounty, Virginia
County and State

Period of Significance (justification)

The Wolf Creek Bridge period of significance consists of the bridge construction date, 1912.

Statement of Significance Summary Paragraph (provide a summary paragraph that includes level of significance and applicable criteria)

See continuation sheet.

Narrative Statement of Significance (provide at least **one** paragraph for each area of significance)

See continuation sheet.

Developmental history/additional historic context information

See continuation sheet.

Wolf Creek Bridge
Name of Property

Bland County, Virginia
County and State

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: **Virginia Department of Historic Resources**

Historic Resources Survey Number (if assigned): 010-0072

10. Geographical Data

Acreeage of Property less than one acre
(Do not include previously listed resource acreage)

UTM References

(Place additional UTM references on a continuation sheet)

1	<u>17</u> Zone	<u>490915</u> Easting	<u>4121676</u> Northing	3	<u>17</u> Zone	<u> </u> Easting	<u> </u> Northing
2	<u>17</u> Zone	<u> </u> Easting	<u> </u> Northing	4	<u>17</u> Zone	<u> </u> Easting	<u> </u> Northing

Verbal Boundary Description

The boundaries for the Wolf Creek Bridge are defined by the dimensions of the bridge itself, (206 feet by 16 feet); spanning between the north and south banks of Wolf Creek, 304 feet east of Highway 61 (at its closest point).

Boundary Justification

The boundaries for the Wolf Creek Bridge are defined by the overall footprint of the bridge itself, as the significance of the structure is embodied in its design and construction. The boundaries do not include any portions of the surrounding land.

11. Form Prepared By

name/title Michael J. Pulice, architectural historian
organization Virginia Dept. of Historic Resources, Roanoke Office date July, 2010
street & number 1030 Penmar Ave. telephone 540-857-7585
city or town Roanoke state VA zip code 24013
e-mail michael.pulice@dhr.virginia.gov

Additional Documentation

Submit the following items with the completed form:

- **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. Key all photographs to this map.
- **Continuation Sheets**
- **Additional items:** (Check with the SHPO or FPO for any additional items)

Photographs:

Submit clear and descriptive black and white photographs. The size of each image must be 1600x1200 pixels at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map.

Name of Property: Wolf Creek Bridge

City or Vicinity: Rocky Gap

County, State: Bland County, Virginia

Photographer: Michael J. Pulice

Date Photographed: March, 2010

Description of Photograph(s) and number (keyed to sketch map):

- 1 of 6. Wolf Creek Bridge, facing east-southeast from new bridge.
- 2 of 6. Wolf Creek Bridge, facing south-southeast.
- 3 of 6. Wolf Creek Bridge, facing south.
- 4 of 6. Wolf Creek Bridge, side view.
- 5 of 6. Wolf Creek Bridge, under side.
- 6 of 6. Wolf Creek Bridge, Phoenix column closeup.

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8. Statement of Significance

Summary

The Wolf Creek Bridge in Bland County, Virginia, a steel Pratt through-truss structure, is historically significant for its engineering and construction. Constructed about 1912 by the Phoenix Bridge Company of Phoenixville, Pennsylvania, it is an unusually old example to have survived with substantial integrity of design and materials. Today, the manufacturer is sparsely represented among Virginia bridges, with no more than five Phoenix bridges in the state known to have survived to the present.² The Wolf Creek Bridge is significant mainly for its engineering, primarily the use of Phoenix columns – the company's best known, patented innovation; but also for its historic contributions to the growth of the area by serving as a key link in the local and regional transportation network. Its construction was a milestone event in improving transportation flow to and from the nearby shipping centers. The bridge's remarkable construction remained sound enough for it to be repurposed for highway vehicular use in 1946; and it continued to function in that capacity until 1987. The bridge is therefore nominated under National Register Criterion C in the area of Engineering. The period of significance consists of the bridge's construction date, c.1912. The old truss bridge has become well known landmark and a local tourist attraction in Bland County, known for its interesting structural features and antique character.

Historic Background

Metal Truss Bridges

The use of metal truss bridges for carrying vehicular traffic did not appear in many parts of Virginia until the 1870s, though metal truss bridges had been used for railroad bridges before the Civil War. Historic metal truss bridges are becoming increasingly rare in the U.S., however, as a number of them are lost or replaced every year. There were once many types and subtypes of truss bridges constructed by various manufacturers across the country. Each surviving structure is, in itself, a record of engineering and transportation from its respective time period. The advent of massive steel I-beams and other new technologies made the use of trusses obsolete for most bridges by the 1950s, and has provided for the construction of new replacement bridges, many of which are nearly alike.

Railroads were the first to pioneer the use of metal truss bridges in the 1850s and 1860s, and would rely on them heavily during the following decades, after their ability to sustain tremendous loads and withstand floods was proven. In addition to their strength, versatility, and durability, metal trusses were known for their simplicity, which made them easy to erect. Small spans were fabricated, put together, and shipped to customers for easy and quick installation; while larger spans were shipped with only the individual truss members assembled.

The Pratt truss was one of the first truss designs, patented in 1844 by Caleb and Thomas Pratt; and from around 1860 through the early 20th century, it was the most common truss bridge design in America. Virginia was no exception to the rule. Use of the design reached its apex during the last quarter of the nineteenth century, when numerous variations of the Pratt design became common.

The Phoenix Bridge Company

The Phoenix Bridge Company of Phoenixville, Pennsylvania, was founded in 1869 as Clarke, Reeves and Company. It reorganized in 1885 and the name was changed to Phoenix Bridge Company. They published albums of their designs, probably on an annual basis. Copies exist from 1870, 1873, 1884, 1885, and 1888. They designed and built bridges, and even smelted their own ore. They patented the "Phoenix column," a vertical compression member made up of several pieces forming a cylindrical shaft with riveted ribs. The columns became the main identifying feature of their bridges. They primarily built railroad bridges, but also solicited commissions for building vehicular bridges, as well as "viaducts,

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turntables, elevated railroads, ocean piers, and all structures of iron and steel." Their bridges could be delivered with greater haste than anyone had previously imagined possible. Each bridge was reassembled at the plant to ensure good fit, and then disassembled and shipped to the erection site. Every bridge, to some degree, was a custom order. The 1873 Phoenix catalog directed potential customers to provide information such as the style of bridge desired, span length, width of piers, height of bottom rail above stream bed, and depth of water, in order to quote prices. In 1888, they listed 17 bridges in Virginia, most of them built for railroads such as the Petersburg Railroad Company; but their precise locations were not identified.³

Phoenix Bridge functioned as a wholly owned subsidiary of the Phoenix Iron and Steel Company and each year purchased roughly 20 to 40 percent of the parent firm's output. Both companies maintained offices in center city Philadelphia and production facilities 28 miles to the northwest in the small community of Phoenixville. Phoenix Bridge found a market niche fabricating readily available products. During the first decade of the twentieth century, the company was involved in high-profile projects such as the Quebec and Manhattan bridges. Phoenix Bridge managed to reach a global market by shipping its wares to Canada, Mexico and Brazil and as far as Russia and China. Approximately 4,200 bridges were designed and fabricated in Phoenixville, a very substantial portion of which were wrought iron truss railway spans.⁴

The company's insurance records from the 19th century reveal common incidents of death and injury to workers at erection sites; but major calamities in the late 19th and early 20th centuries considerably damaged the company's reputation. In 1893, for example, a Phoenix bridge under construction at Louisville collapsed, taking many lives. In 1898, a nearly completed Phoenix bridge in Rockbridge County, Virginia, failed, again with loss of life. One of the most famous bridge disasters in history threatened to destroy the company in 1907, when a Phoenix bridge under construction in Quebec collapsed into the St. Lawrence River, killing 75 workmen. The company survived however, and production continued steadily through World War I. By the 1920s, competition from newer and larger bridge companies increased, however, and by the late 1940s unsuccessful efforts were made to sell the firm. Nevertheless, the Phoenix Bridge Company remained in business until 1962.⁵

Bland County and Rocky Gap, Virginia

The County of Bland, named Bland in honor of Richard Bland of Revolutionary War fame, was formed from portions of Giles, Wythe and Tazewell counties by an act of the General Assembly on March 31, 1861. The little community of Rocky Gap on Wolf Creek then consisted of a few families engaged primarily in farming. On May 10, 1864, however, Rocky Gap was the site of relatively small-scale, but not insignificant Civil War hostilities. Union Brigadier General William W. Averell, raiding the railroad and key strategic sites in West Virginia and western Virginia under the command of Major General George C. Crook, learned that Saltville, Virginia had been fortified by Confederate generals John Morgan and W.E. "Grumble" Jones. Seeking a more vulnerable opponent and protection of Crook's greater forces, Averell targeted the lead works at Wytheville, Virginia, but Morgan and Jones arrived there before him and assumed strong positions at nearby Rocky Gap. Averell was fought to a standstill in a four-hour engagement, which resulted in 114 casualties among his troops.⁶

By 1880, the population of Bland County reached 5,004 (4,750 White, 254 black). *Chataigne's Virginia Gazetteer and Classified Business Directory of 1888-1889* described the county as follows:

It is one of the mountain counties, bordering on West Virginia, and if it has any internal improvements they have not been reported. There seems, however, to be some hopes of

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a narrow gauge road being built here at no distant period. This county is very mountainous, and but thinly settled, it being in point of population the fourth smallest in the State...The Valley lands are very rich, and where cultivated readily produce good crops of corn, rye, oats, wheat and the grasses. The county is watered by Walkers and Wolf creeks, and branches which are tributaries of the New River...The minerals found in this county are coal, iron, lead, zinc and silver. The timbers are pine, walnut, oak, poplar, and ash. There are a large number of saw mills, and much lumber is shipped. Bland Courthouse, situated in the valley formed by the Brushy and Walkers Mountains is a busy little place of about 325 inhabitants, distant twenty miles from Wytheville, the nearest railroad station on the Norfolk and Western Railroad.

In the little community of Rocky Gap, Buckhorn Mine extracted iron ore; J. D. Honaker owned and operated the Virginia Hotel; W. M Bishop and A. J. Keeling operated corn and flour mills; A. J. Keeling and J. T. Willis ran sawmills; W. W. Ashworth and H. P. Pruett made and sold saddles and harnesses; physicians J. H Hare and J. L. Miller practiced medicine; and the principal farmers were: J. D. Honaker, J. R. Honaker, S. K. Lambert, R. M. Ashworth, J. G. French, James Kirby, N. N. Coldwell, J. C. Carpenter, S. E. Stimpson, J. M. Tuggle, James Thompson, J. H. Byrd, James Wiley, W. H. Gibson, A. J. Stowers, and S. P. Terry.⁷

Rocky Gap and the New River, Holston and Western Railroad

The New River, Holston and Western Railroad line that ran through Rocky Gap in Bland County followed the course of Wolf Creek or its tributaries for its entire length, from Narrows on the New River in Giles County, to the village of Suiter in Bland County, about 14 miles beyond Rocky Gap. The total distance between Narrows and Suiter is approximately 43 miles. Construction started in 1903 from Narrows, but only three miles of track was laid. In 1912, the line was extended to Rocky Gap when W.M. Ritter purchased a local lumber company called Buck Horn Timber, and by 1914 had finally reached Suiter. The Wolf Creek Bridge was presumably erected the year the railroad reached Rocky Gap, in 1912. A major proponent of the rail line was W.E. Mingea, Jr., of Abingdon, Virginia, a major Bland County land owner, who was involved in the lumber and bark industry. There were twelve stations between Narrows and Suiter: Beginning from Narrows, they were: Talmash, Penvir, Bridge No. 2, First Ford, Chappel, Nidey, Round Bottom, Rocky Gap, Novis (South Gap), Hicksville, Bastian, and Suiter. In 1919, the line was sold to the Norfolk and Western Railway.⁸

The railroad served the residents and companies in rural Bland County for more than 30 years. Passengers often boarded at Rocky Gap. Families received all sorts of goods from mail order catalogs, shipped by the railroad. Agricultural produce and lumber from the surrounding area was taken to Rocky Gap by road and shipped out on the railroad, as well as manganese from local mines. The train ran five days a week during the early years, but after the area's timber was depleted, its run was reduced to three days a week. Rocky Gap had lumber and sawmill camps much like the coal camps, in which the men were paid with script to be used at the company store. One big sawmill built a "dinky line" or small-gauge railroad track that connected to the main line at Rocky Gap. Railroad operations along Wolf Creek came to a halt in 1946, and the Virginia Highway Commission pulled up the tracks and paved the railbed, creating part of Highway 61.⁹

Notes

1. VDOT Bridge Inventory Form, July 26, 1976.
2. Miller and Clark, Survey of Metal Truss Bridges in Virginia, 1997:10.
3. Diebler, 41; Winpenny.

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4. Winpenny.
5. Winpenny.
6. Heidler, Heidler, and Coles, *Encyclopedia of the American Civil War*, 154.
7. *Chataigne's Virginia Gazetteer and Classified Business Directory*, 1888-1889.
8. "The Tillers Talk About the Gap"; Servinghistory.com.
9. "The Tillers Talk About the Gap."

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Name of multiple property listing (if applicable)
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9. Bibliographical References

History of Bland County, Bland County Centennial Corp., 1961.

"The Tillers Talk About the Gap," and "Dry Fork." *Bland County History Archives Oral History Project*, Rocky Gap, Virginia: Rocky Gap Highschool, 2000. Accessed online, July, 2010.

Bland County Genealogy Project, Bland, Virginia. Accessed online, July, 2010.

Chataigne's Virginia Gazetteer and Classified Business Directory 1888-1889.

Diebler, Dan, *Metal Truss Bridges in Virginia: 1865- 1932*. Charlottesville: Virginia Highway and Transportation Research Council, May, 1975.

Heidler, David and Jeanne, and David J. Coles, *Encyclopedia of the American Civil War: A Political, Social, and Military*. 2002: 154.

Miller, Ann B., and Kenneth M. Clark. *Survey of Metal Truss Bridges in Virginia*. Charlottesville: Virginia Transportation Research Council, 1997.

Railway Age Gazette, September 17, 1915: 547.

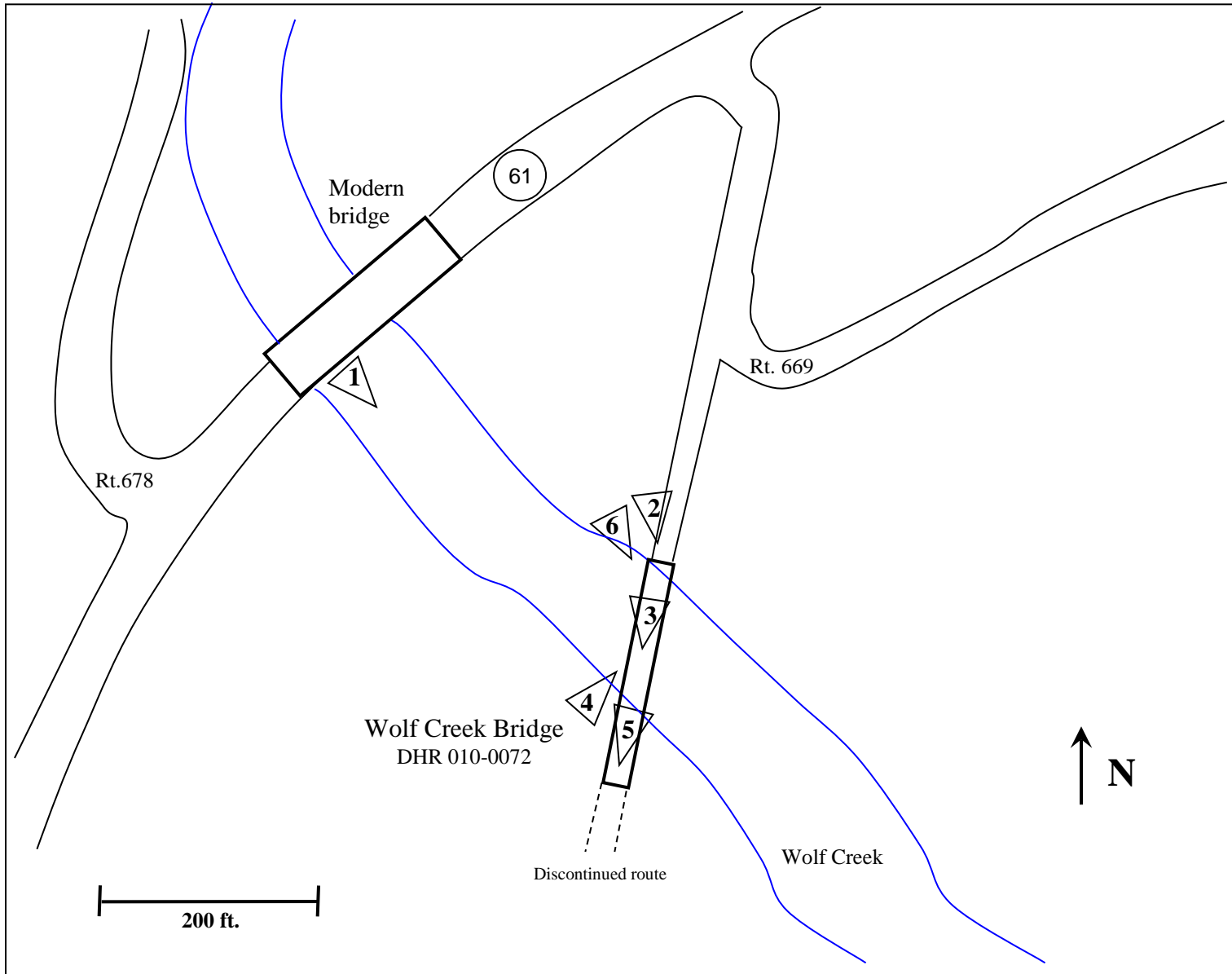
Servinghistory.com "The New River, Holston and Western Railroad." Accessed online, July, 2010.

Virginia Department of Transportation, Wolf Creek Bridge (Bridge No. 9000) Inventory Form, July 26, 1976.

_____. Documentation from 1993 and 1994, located in Virginia Department of Historic Resources, Wolf Creek Bridge (Bridge No. 9000) DHR file 010-0072.

Winpenny, Thomas R. *Without Fitting, Filing or Chipping: An Illustrated History of the Phoenix Bridge Company*. Easton, PA: Canal History and Technology Press, National Canal Museum, 1996. Accessed online, April, 2010.

Phoenix Bridge Company. "Album of designs of the Phoenix Bridge Company : Successors to Clarke, Reeves & Co., Phoenixville Bridge Works." Philadelphia : J.B. Lippincott, 1885.



Key: Photo No. & Direction

Wolf Creek Bridge - Bland County, Virginia - 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

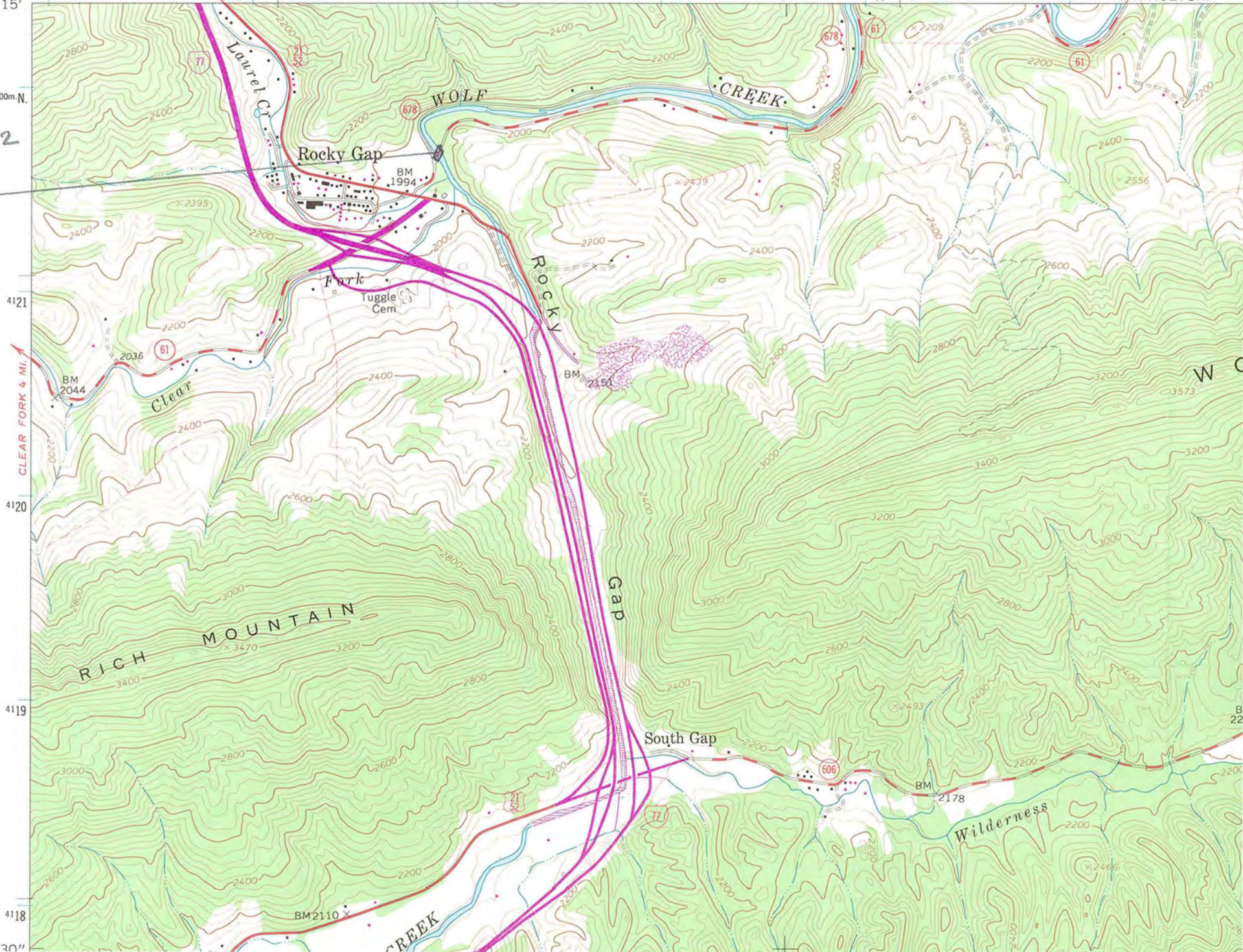
COMMONWEALTH OF VA
DIVISION OF MINERAL RESOURCES
JAMES L. CALVER, STATE COMMISSIONER

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DHR # 010-0072
WOLF CREEK
BRIDGE
BLAND CO. VA
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4122000m.N.

4121

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