

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-900

USDI/NPS NRHP Registration Form (Rev. 8-86)

OMB No. 1024-0018

HUMPBACK BRIDGE

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United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

1. NAME OF PROPERTY

NHL Designation: 10/16/2012

Historic Name: Humpback Bridge

Other Name/Site Number: Lower Bridge; Lower Dunlap Creek Bridge; Humpback East, VDHR 003-0002

2. LOCATION

Street & Number: Spanning Dunlap Creek at bypassed section of former James River & Kanawha Turnpike (later, Midland Trail)

Not for publication:

City/Town: Covington

Vicinity: X

State: Virginia County: Alleghany Code: 005

Zip Code: 24426

3. CLASSIFICATION

Ownership of Property

Private: ___
Public-Local: ___
Public-State: X
Public-Federal: ___
Object: ___

Category of Property

Building(s): ___
District: ___
Site: ___
Structure: X

Number of Resources within Property

Contributing

1

1

Noncontributing

___ buildings
___ sites
___ structures
___ objects
___ Total

Number of Contributing Resources Previously Listed in the National Register: 1

Name of Related Multiple Property Listing:

Designated a National Historic Landmark

OCT 16 2012

by the Secretary of the Interior

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4. STATE/FEDERAL AGENCY CERTIFICATION

As the designated authority under the National Historic Preservation Act of 1966, 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.

Signature of Certifying Official

Date

State or Federal Agency and Bureau

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

Signature of Commenting or Other Official

Date

State or Federal Agency and Bureau

5. 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 Keeper

Date of Action

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6. FUNCTION OR USE

Historic: Transportation

Sub: road-related (vehicular)

Current: Transportation

Sub: road-related (pedestrian)

7. DESCRIPTION

ARCHITECTURAL CLASSIFICATION: Other: Multiple kingpost through truss

MATERIALS:

Foundation: stone

Walls: wood

Roof: wood

Other:

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Describe Present and Historic Physical Appearance.**Summary**

Humpback Bridge is an exceptionally fine example of nineteenth-century covered bridge construction, and an outstanding example of a timber multiple kingpost truss, of which approximately 90 historic (pre-1955) examples survive in the United States. It is nationally significant under NHL Criterion 4. The bridge is the older of two surviving covered bridges with radically-cambered chords in the United States, the other being the Geer's Mill Bridge (1874) in Vinton County, Ohio. Humpback Bridge has been well maintained and it retains an uncommonly high degree of historic and structural integrity. It was inventoried by the Historic American Buildings Survey (HABS) in 1958, and recorded by the Historic American Engineering Record (HAER) in 1970 and 2002. It was listed in the National Register of Historic Places in 1969. Of the approximately 690 historic (pre-1955) covered bridges surviving in the United States, Humpback Bridge is an outstanding example of covered bridge construction and preservation.¹

General Setting

Humpback Bridge is located at its original site, approximately four miles west of Covington, in western Virginia.² The bridge spans Dunlap Creek³, at a bypassed section of the former James River & Kanawha Turnpike (later, Midland Trail).⁴ Part of the James River watershed, Dunlap Creek forms at the confluence of Back Water Creek and Sweet Springs Creek in Alleghany County, Virginia, and flows 26 miles in a circuitous, but generally northeasterly, course to Covington, where it empties into the Jackson River. The James River & Kanawha Turnpike followed the route of a former Indian Trail, known as the Buffalo Trail, from the James River, through a narrow pass in the Allegheny Mountains, to the Kanawha River. This was one of the few east-west transportation corridors in the region, as the extensive mountain ridges to the west formed a barrier to overland travel. The suitability of this corridor is illustrated by the fact that it has been used continuously since pre-colonial times as a thoroughfare for travelers. A railroad bridge and a US 60 highway bridge cross the creek 140 feet north of the covered bridge. Humpback Bridge was bypassed in 1929 and fell into a state of disrepair. But public sentiment for preservation prevailed, and twenty four years later the bridge was restored as a local landmark. Since 1954, it has served as a pedestrian bridge and is the focal point of a wayside park maintained by the Virginia Department of Transportation. The picturesque five-acre park features a parking lot, picnic tables, restrooms, and a historical marker that tells about the turnpike and the bridge.⁵ The park is landscaped in a naturalistic manner with native specimens of trees and shrubs.

¹ Approximately half of the 690 extant historic (pre-1955) covered bridges in the United States have been significantly altered, with much loss of historic fabric and character; many others have suffered a moderate loss of integrity.

² "Humpback Bridge" is a local name that presumably dates to the late nineteenth or early twentieth century, although its origins are not well documented. Hemphill (1951) refers to the structure as "East Humpback Bridge," which suggests that the name came about when at least one of the other Dunlap Creek bridges was in existence (prior to 1913).

³ This waterway is also sometimes called Dunlap's Creek, or Dunlop's Creek.

⁴ This corridor was commonly referred to as the Kanawha Turnpike, or Kanawha Road.

⁵ The historical marker, which was placed here in 1954, states that this bridge was built in 1835. In 1985, Chesapeake & Ohio Historical Society President Thomas W. Dixon, Jr. researched the history of Humpback Bridge and uncovered significant evidence that it was built in 1857—not 1835, as previously believed. Thomas W. Dixon, Jr., *Humpback Bridge, Last Remnant of the James River and Kanawha Turnpike* (Parsons, WV: McClain, 1985).

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Description⁶

Humpback Bridge is a timber multiple kingpost truss covered bridge on stone masonry abutments. The single-span bridge has an arc length of 109'9" and a clear span of 85'. The superstructure is approximately 13' deep and 15' wide overall, with a 13' wide roadway. The top and bottom chords are radically-cambered, rising 4'1" from the abutments to mid-span, giving the bridge its "humped" appearance.⁷

The trusses are framed as traditional multiple kingpost trusses, with four braced panels on each side of the central kingpost. There are non-braced shelter panels at each end of the bridge. The trusses are composed of top and bottom chords made of parallel 8" x 8" timbers, connected by 7" x 10" posts, spaced approximately 9' apart and arranged radially. Within each panel is an 8" x 10" diagonal member, which angles up from the bottom chords towards the mid-span of the bridge. The posts pass through the space between the paired chord members, and are fastened with bolts that pass through the chords and posts at each panel point.

The floor system follows the camber of the bottom chord. Timber 6" x 7½" floor beams are placed transversely at each panel point and rest on the bottom chords. The floor beams are reinforced by 5" x 10" steel I-beams installed as sisters. Lower lateral bracing, made of 4" x 4" sticks, is fastened diagonally between the floor beams. Stringers are laid on top of the floor beams to support the deck. The roadway surface is plank flooring laid transversely on the stringers. A timber brace at each end of the bridge assists in carrying loads back to the abutments. The braces bear on the abutments approximately 5' below the bottom chord seat and meet the superstructure behind the third bottom chord panel point.

Upper lateral bracing consists of transverse tie beams seated on top of the top chord, diagonal cross bracing between the tie beams, and sway braces between the posts and tie beams. The gable roof has slightly overhanging eaves and is covered with wood shingles fastened to strapping on top of the rafters. The curvature of the top chords and roof ridge are concentric with the bottom chords.

The exterior of the bridge superstructure is covered with clapboard siding nearly to the eaves. The sheathing is fastened to vertical wood nailers on the outer faces of the trusses. The portals have projecting pediments and squared openings. The framing of the portals is set radially, creating an overhanging effect. A wood sign inscribed "HUMPBACK BRIDGE" hangs over each portal.

The abutments are squared stone with mortared joints. A small section of the west abutment has been replaced with concrete, but the abutments are otherwise intact. The bottom chords of the bridge rest on bedding timbers on top of the abutment facewall. The backwalls above the abutments and behind the bedding timbers serve as retainers for the roadbed. Stone masonry retaining walls extend approximately 40 feet on each side of the inclined approaches to the bridge. The gravel road is flanked by 3-foot-high board fences, which replaced earlier post-and-cable fences at an unknown date between 1975 and 2002.⁸

⁶ General dimensions (e.g. span length, truss depth, etc.) were taken directly from, or scaled off of, the 1971 HAER measured drawings. Additional measurements were obtained during a 2002 site visit.

⁷ This measurement, taken in 1995 by Virginia Department of Transportation engineer James W. White, was made at the request of Leola B. Pierce, also an engineer, who was doing research for her book, *Covered Bridges of Virginia*, and was the first to question the inaccurate, but often misquoted figure of 8'. In 1951, W. Edwin Hemphill noted in his article, "An Album for Nostalgia: Covered Bridges in Virginia," that the center of the bridge is four feet higher than the ends, but many writers of the period used the 8-foot figure.

⁸ Post-and-cable fences appear in some of the 1970 HAER photographs, while the 2002 HAER photographs show board fences. According to historian Joseph Conwill, the post-and-cable fences were still in place when he visited the site in 1975.

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Integrity

The bridge structure clearly illustrates the character-defining features of the resource type. It has undergone few alterations or modifications during its lifetime, and retains an uncommonly high level of integrity, in location, setting, design, materials, workmanship, feeling and association, as discussed below.

Humpback Bridge was built on-site using local materials and traditional nineteenth-century construction methods. The hand-hewn timber trusses are constructed with traditional timber-framing techniques, such as mortise-and-tenon joints. All the essential load-bearing components of the structure are still intact and the bridge has been minimally altered since its construction. Steel sister beams were added under the deck at an unknown date prior to 1970, where they are noted in HAER drawings, but the original floor beams remain intact. The stone masonry abutments and approaches are intact, except for a small section of the west abutment that has been replaced with concrete. Sometime after 1975, the then-existing metal roof was replaced with wood shingles, in keeping with the structure's original appearance. The early twentieth-century post-and-cable fences along the approaches were replaced sometime between 1975 and 2002 with sturdier board fences for improved safety. All of the siding, roof covering, and flooring have been replaced over the years, but this is part of routine maintenance, and—as long as materials are replaced in-kind—does not diminish the integrity of the structure.

Although Humpback Bridge has been bypassed, a portion of the original transportation corridor is still used by pedestrians, and the bridge is well-maintained as a historic landmark and tourist attraction. The bridge and its picturesque setting possess a high level of aesthetic and historic integrity that conveys the sense of a nineteenth-century transportation corridor.

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State Significance of Property, and Justify Criteria, Criteria Considerations, and Areas and Periods of Significance Noted Above.

Humpback Bridge is nationally significant under NHL Criterion 4, as an exceptionally fine example of nineteenth-century covered bridge construction, and an outstanding example of a timber multiple kingpost truss, of which approximately 90 historic (pre-1955) examples survive in the United States. It is the older of two surviving covered bridges with radically-cambered chords in the United States, the other being the Geer's Mill Bridge (1874) in Vinton County, Ohio. Unlike Geer's Mill Bridge, Humpback Bridge exhibits craftsmanship characteristic of the period prior to the introduction of standardized circular sawn framing members. As such, Humpback Bridge, with its dramatic camber configuration, is nationally significant as a rare early surviving example that exhibits early nineteenth-century bridge technology. Humpback Bridge has been well maintained and retains an uncommonly high degree of historic and structural integrity. It was inventoried by the Historic American Buildings Survey (HABS) in 1958, and recorded by the Historic American Engineering Record (HAER) in 1970 and 2002. It was listed in the National Register of Historic Places in 1969.

A full discussion of the national significance of Humpback Bridge is provided in the associated document, "Covered Bridges NHL Context Study." The study establishes the history and evolution of the property type, and provides a preliminary assessment of the National Historic Landmark (NHL) eligibility of 20 covered bridges that are considered by experts in the field to be the best representative examples of the surviving 690 historic (pre-1955) covered timber bridges in the United States. These properties were selected from the National Covered Bridges Recording Project (NCBRP), undertaken between 2002 and 2005 by the Historic American Engineering Record (HAER), which is administered by the Heritage Documentation Programs Division of the National Park Service, United States Department of the Interior. The project was funded by the Federal Highway Administration's (FHWA) National Historic Covered Bridge Preservation Program (NHCBPP), established in 2000 by Section 1224 of the Transportation Equity Act for the 21st Century (TEA21). Over the course of a multi-year project, HAER recorded 75 covered bridges throughout the United States. In 2010, each of these bridges was individually evaluated against National Historic Landmark criteria and a list was compiled of 20 covered bridges that have high integrity and are significant as outstanding representative examples of their type, period, and method of construction. Secondary considerations for inclusion in this list were: historical significance, significance of the designer or builder, and aesthetics of the bridge and site.

Covered Bridges in the United States

Covered bridges are a pre-eminently American phenomenon. Nowhere else in the world were such impressive timber structures attempted, and nowhere else were they built in such vast numbers.⁹ Over the course of two centuries, covered bridges have played a significant role in American life by facilitating settlement, transportation, and commerce. They also represent a period of remarkable achievement in civil engineering, during which bridge building evolved from an empirical craft to a science. At the height of covered bridge building, around 1870, there were well over 10,000 covered bridges in the United States.¹⁰

⁹ According to the 7th edition of the *World Guide to Covered Bridges* (2009), there are approximately 1,500 extant historic (pre-1955) covered bridges in the world. More than half of these structures are located in North America. American scholars have recently become aware of large numbers of ancient covered bridges in China, but most were built for pedestrian traffic, and their construction techniques and reason for covering differ from the Western tradition.

¹⁰ This is only a rough estimate of known covered bridges that existed ca. 1870. Initial data compiled by the "Covered Spans of Yesteryear Project," <http://www.lostbridges.org>, suggests that this figure may be too low.

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Timber bridges have been built in forested regions of the world for centuries.¹¹ Wood is an excellent material for building; it is strong, relatively lightweight, and easy to work with. Since most species of wood suitable for structural applications deteriorate rapidly when exposed to the weather, European bridge builders quickly learned the value of covering wood bridges with roofs and siding to protect the underlying framework.¹²

Bridges were rare in Colonial America. Small streams were spanned with simple wood beams or stone slabs, and occasionally with stone arches, but with few exceptions, larger waterways had to be crossed by ford or ferry. Travel was hazardous and uncertain; delays and accidents were common. A few ambitious crossings were made with pontoons or a series of simple beam spans supported on timber piles, but long-span bridges were generally not built in America until the volume of transportation justified the expenditure of material and labor.¹³ Following the American Revolutionary War, the demand for roads and bridges, coupled with access to abundant forests, spurred the development of timber bridge design in the United States.

Internal improvements were a priority of the new nation. Roads, canals, and bridges were desperately needed to expand commerce and unite the country. The Louisiana Purchase of 1803 doubled the land area of the United States and over the next half-century, settlement expanded west to the Pacific Ocean. Timber bridges were an ideal solution to America's many transportation hurdles and settlers built hundreds of them as they moved westward across the continent. They provided for safe, efficient, and economical overland transportation that was essential to the new nation's growth.

In 1804-05, Timothy Palmer (1751-1821) built America's first covered bridge across the Schuylkill River at Philadelphia. By 1810, covered bridges were common in southern New England, southeastern New York, Pennsylvania, and New Jersey. From this core area, covered bridges spread northward, southward, and westward. In the 1820s, town and county governments began to specify covered bridges for construction on local roads. By 1830, covered bridges were commonplace at major river crossings in the Eastern United States. The builders of timber bridges utilized readily available materials and common hand tools. Making use of patented truss designs, carpenters with basic woodworking ability could erect an average-sized covered bridge in a short time, usually within a few weeks.

Covered bridges were adapted to the needs of every type of transportation corridor, including turnpikes, canals, and railroads. They have facilitated the settlement of the United States for over a century. The rapid growth of the railroads in the mid-1800s—in particular, the increasing weight of locomotives and rolling stock—encouraged innovations and technical advancements in the design of timber truss bridges and was an important factor in the rise of civil engineering as a profession. All the major technological improvements in American truss bridge design occurred when wood was the building material of choice.

By 1850, there were covered bridges in most settled regions of the United States.¹⁴ Thereafter, the number of covered bridges continued to multiply until about 1870, by which time there were well over 10,000 covered bridges in the United States.¹⁵ The golden era of covered bridge building lasted for about a century in most areas of United States, and even longer in areas where timber was plentiful.¹⁶

¹¹ In 55 BC, Julius Caesar (100 BC-44 BC) built the earliest known timber bridge across the Rhine River.

¹² Several European covered bridges have survived for more than three centuries, while a few in the United States are nearing the two-century mark.

¹³ The Great Bridge (1660) across the Charles River at Boston and the York River Bridge (1761) at York, Maine, were notable exceptions. The Great Bridge consisted of "*cribs of logs filled with stone and sunk in the river—hewn timber being laid across it.*" The York River Bridge was a timber pile bridge, which uses tree trunks or piles driven vertically into the river bed to provide a foundation for a series of simple beam spans.

¹⁴ Fred Kniffen, "The American Covered Bridge," *The Geographic Review* 41 (1951): 119.

¹⁵ Covered bridges once existed in 40 of the 50 states. No records have been found concerning covered bridges in Colorado,

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History of Humpback Bridge

Humpback Bridge was erected during the mid-nineteenth century, a period when covered bridges were being built in extensive numbers throughout the United States. Virginia once had at least 100 covered bridges. The majority of them were built in the western part of the state where there were numerous waterways to be crossed, the geology was adequate for bridge foundations, and builders had access to abundant wood and stone.¹⁷

In the years following the American Revolution, westward settlement began in earnest. In 1784, Gen. George Washington (1732-1799) toured the Allegheny Mountains region and reported to the Virginia General Assembly that a system of canals and turnpikes was politically and commercially necessary to open trade and communication to the west.¹⁸ Thomas Pope eloquently reiterated this concept in his 1811 *A Treatise on Bridge Architecture*:

It is a notorious fact that there is no country of the world which is more in need of good and permanent Bridges than the United States of America. Extended along an immense line of coast on which abound rivers, creeks and swamps, it is impossible that any physical union of the country can really take place until the labours of the architect and mechanic shall have more perfectly done away the inconvenience arising from the intervention of the waters. Nature, ever provident for Man, has, however, afforded us ample means of remedy. Our forests team with the choicest timber; and our floods can bear it on their capacious bosoms to the requisite points. Public spirit is alone wanting to make us the greatest nation on earth; and there is nothing more essential to the establishment of that greatness than the building of Bridges, the digging of canals, and the making of sound turnpike-roads.¹⁹

One of the first canal projects, the James River & Kanawha Canal, was proposed by George Washington. The James River Company was incorporated in 1785, but construction progressed very slowly. In 1816, the Virginia General Assembly passed an act allocating funds for the purpose of "rendering navigable, and uniting by canals, the principal rivers, and of more intimately connecting, by public highways, the different parts of this commonwealth."²⁰ The act further provided for the establishment of the Virginia Board of Public Works to oversee the projected work. In 1820, the James River Company became a state-operated venture and the Virginia General Assembly authorized the construction of a 208-mile road from the mouth of Dunlap Creek to the Kanawha River.

Construction of the turnpike required the erection of forty-eight timber bridges. The turnpike was planned to cross Dunlap Creek three times within about a mile and a half as it began its ascent of the Allegheny Mountains. The contract for this section of road between Covington and Gauley was awarded to John Carruthers. The contract specified that the bridges on Dunlap Creek were to be composed of "three frames quite across the stream, as when erected will form a double bridge twenty-five feet wide with members of good sound oak or

Florida, Hawaii, Idaho, Louisiana, New Mexico, North Dakota, Oklahoma, South Dakota, and Utah. The reasons for this presumably vary from region to region, but probably include: absence of readily-available timber, absence of major river crossings, topography more suited to other types of bridges, late-period settlements, and low population density.

¹⁶ Covered bridge building ended in New England and the Midwest around 1925, and in the South around 1935. Covered bridges continued to be built in Oregon into the 1950s.

¹⁷ Leola B. Pierce, *Covered Bridges in Virginia* (Glen Rose, TX: Upstream, 2002), 9-10.

¹⁸ Washington Chauncy Ford, ed., *The Writings of George Washington*, vol. 10, 1782-1785 (New York: G. P. Putnam's Sons, 1891), 404-414.

¹⁹ Thomas Pope, *A Treatise on Bridge Architecture* (New York: Alexander Niven, 1811), 127.

²⁰ Virginia General Assembly, *Acts of the State of Virginia, 1816*.

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pine."²¹ The three bridges were constructed in 1823-24, but almost immediately exhibited structural problems. When one of them collapsed in 1825, Board of Public Works principal engineer Claudius Crozet stated in his annual report:

In sight of Covington the road ascends a considerable hill, to avoid some difficulties in the valley of Dunlap's Creek; it soon descends again into the valley, and crosses the creek three times on bridges of considerable length. One of these bridges gave way during last summer, and had to be rebuilt; another showed symptoms of a similar fall, but was propped up in time. This accident was owing to the too considerable bearing given to the longitudinal beams stretched across the stream, which were each compressed to two very long beams touching each other at their ends, without any scarfing, and wholly united by the framing above: the whole being only composed of narrow split pieces, without any horizontal cross-braces, was not capable of resisting any lateral pressure (a circumstance too often neglected in bridges), and the bridge bulged laterally. The new bridge has been better framed, and the string pieces made of stronger dimensions, and overlapped at their junction in the middle of the bridge. Still the span is, I think, too great for a flat bridge.²²

Subsequently, stone piers were erected under all three bridges, and the superstructures were repaired or rebuilt over the next five years. Then, in 1837, a flood destroyed eleven bridges along the turnpike, including the three on Dunlap Creek. Both the abutments and superstructures were rebuilt in a more substantial manner, and the annual report of 1838 stated: "They are finished in a solid and durable style in every respect, and especially in point of masonry, are a great improvement upon the structures which they are destined to replace."²³ Just four years later, however, another massive flood destroyed all the bridges on the turnpike between Covington and Lewisburg. The company's annual report for 1842 stated:

The road was substantially and handsomely repaired, and the three bridges over Howard's Creek rebuilt; and thereafter the bridges over Dunlap's Creek were also rebuilt. Of six bridges rebuilt or restored, three were of materials recovered; the superstructures as well as the abutments of the other three being entirely new.²⁴

While the Upper Bridge and Middle Bridge were rebuilt in 1849 and 1850 respectively, the Lower Bridge (this site) stood for fourteen years, until being swept away by still another flood in the spring of 1856. The 1856 annual report of the James River & Kanawha Turnpike Company stated:

During the year one of the bridges over Dunlap's Creek gave way, but the preparations are making to have it rebuilt; the place in the meantime fortunately admits the substitution of a ford. ...The bridges on the road from Covington to the mouth of Big Sandy are in good order, with the exception of one over Dunlap's Creek which has been built about 14 years and was swept off last spring. This bridge can be rebuilt at a cost of about \$1,500.²⁵

Based upon this documentation, it appears that the present bridge was erected over Dunlap Creek in 1856-57.

²¹ Claudius Crozet, "Report of the Principal Engineer—The Kanawha Road," *Ninth and Tenth Annual Report of the Virginia Board of Public Works*, vol. 4, 1826.

²² *Ibid.*

²³ James River & Kanawha Company, *Fourth Annual Report*, 1838.

²⁴ James River & Kanawha Company, *Eighth Annual Report*, 1842.

²⁵ James River & Kanawha Company, *Twenty-second Annual Report*, 1856.

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The James River & Kanawha Turnpike was dissolved in the 1860s and the road and bridges were turned over to the jurisdiction of local counties. Completion of the Chesapeake & Ohio Railroad to Huntington in 1873 ushered in a period of decline for the road that lasted into the early twentieth century. The advent of the automobile in the early 1900s brought increased traffic to the former Kanawha turnpike. By World War I, the corridor experienced a rebirth as part of the Midland Trail, an arterial, transcontinental highway that became US 60 in 1926.

Humpback Bridge carried wagon and automobile traffic for almost three-quarters of a century. It survived the Civil War, as well as major floods in 1877 and 1913, during which time the other turnpike bridges on Dunlap Creek were lost. In 1929, the Midland Trail was realigned, bypassing the old covered bridge with a modern steel truss span.²⁶ While local residents still used the covered bridge for a time, the structure soon fell into a state of disrepair. The land around it became overgrown, and the bridge was all but forgotten, save for a local farmer, who reportedly leased it to store hay.²⁷ When the first historical book about covered bridges in the United States was published in 1931, there was no mention of Humpback Bridge in the chapter on Virginia.²⁸

The prospects for the bridge's future improved in 1937 when local historian Gay Arritt wrote a history of Humpback Bridge, drawing public attention to the venerable structure.²⁹ Backed by the Covington Chamber of Commerce, a group of local residents began to lobby for preservation of the bridge, and by the late 1940s, there was talk of restoring the aging span as the centerpiece of a small wayside park. In 1953, the Covington Business & Professional Women's Club organized a fund drive to purchase land and restore the bridge, with a matching \$5,000 grant from the Virginia Department of Highways (now the Virginia Department of Transportation).³⁰ Donations came in from across the country and the necessary funds were raised within a few months. The bridge was restored in 1953-54, and the Humpback Bridge Wayside was dedicated on May 26, 1954.³¹ The 1954 travel guidebook, *What to See in Virginia*, reportedly featured a photo and description of the newly restored bridge.³² The Humpback Bridge Wayside was also featured on the cover of the Virginia Department of Highways' 1955 official state highway map.³³ In 1957, the Covington Business & Professional Women's Club raised funds for a historical marker, which was erected at the site in 1958.³⁴

The Multiple Kingpost Truss

The first half of the nineteenth century saw a great technological advancement in the design and construction of timber bridges in America. Between 1790 and 1840, timber bridge forms evolved from rudimentary pile-and-beam spans to scientifically designed, long-span trusses capable of carrying railroad loadings. The demand for roads and bridges, which grew rapidly after the American Revolution, coupled with access to abundant forests,

²⁶ That bridge was subsequently replaced with the present reinforced concrete bridge.

²⁷ Richard Sanders Allen, *Covered Bridges of the Middle Atlantic States* (Brattleboro, VT: Stephen Greene Press, 1959), 84.

²⁸ Rosalie Wells, *Covered Bridges in America* (New York: William Edwin Rudge, 1931), 59-62.

²⁹ The 1937 account has not been located, but the information was republished in Gay Arritt, "Humpback Bridge," in *Historical Sketches of the Allegheny Highlands* (Covington, VA: Allegheny Historical Society, 1982), 85.

³⁰ Allen, *Covered Bridges of the Middle Atlantic States*, 84.

³¹ Dana Ford Thomas, "Humpback Bridge Wayside Park Dedicated Yesterday," *Covington Virginian*, May 27, 1954, 1.

³² Ralph Stanley, ed., *What to See in Virginia: The Travel Index Guide Book of Virginia* (Williamsburg, VA: Colonial Williamsburg, 1954); Helen V. Childs, "The History of Humpback Bridge," 1957, accessed May 17, 2011, <http://freepages.history.rootsweb.ancestry.com/~alleghanyhighlands/humphist.html>.

³³ "Virginia Official State Highway Map, 1955," (Richmond: Virginia Department of Highways, 1955), cover. Waysides originated in the 1930s as picnicking and rest areas for motorists. The Humpback Bridge Wayside is one of 74 waysides established by the Virginia Department of Highways in the mid-twentieth century; approximately thirty waysides are still posted and maintained for public use. "Virginia Highways Projects, Virginia Waysides," Virginia Department of Highways, accessed May 19, 2011, <http://vahighways.com/waysides/waysides.htm>.

³⁴ Gay Arritt, "History of Humpback Bridge, Scene of Bridge Festival, Given," *Covington Virginian*, June 11, 1971, 2.

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spurred the development of timber bridge design.³⁵ These advancements were evolutionary in nature, each responding to a particular aspect of the challenge confronting bridge builders: to create economical and efficient structures that could span long distances, that were easy to erect and maintain, and that were strong enough to carry heavy moving loads.

The first era of American bridge building began in 1785, when Col. Enoch Hale (1733-1813) of Rowley, Massachusetts erected the nation's first long-span framed timber bridge across the Connecticut River between Walpole, New Hampshire, and Bellows Falls, Vermont. Heralded as a great engineering achievement, Hale's 360-foot braced beam span was supported on rubble stone abutments and a timber pier rising from a small island in the middle of the river. Although Colonel Hale's bridge successfully carried traffic for a decade, its design was uniquely suited to this site and could not be easily replicated elsewhere.³⁶

Creating spans greater than a length of a single log or beam was one of the initial challenges facing timber bridge builders, requiring construction of a frame structure known as a truss. The truss, which utilizes the stable geometry of the triangle to carry a load, has been used for centuries for centering masonry arches and for roof construction. European bridge builders began using trusses in the Middle Ages, and Italian architect Andrea Palladio (1518-1580) popularized the concept when he published *The Four Books of Architecture* in 1570.³⁷ In 1792, Massachusetts architect Timothy Palmer erected America's first long-span timber truss bridge across the Merrimac River in Massachusetts.³⁸ The 1,030-foot "Essex-Merrimac Bridge" had pile-and-beam approaches and two innovative "trussed arch" spans, measuring 113 and 160 feet long. The use of trusses was a quantum leap forward in American bridge construction.

Most of America's early bridge builders based their designs on simple trusses that have been used for roof framing and bridges since the Middle Ages, primarily the kingpost, queenpost, and multiple kingpost truss. Some bridge builders used these trusses directly and others took them as a point of departure in developing more complex timber bridge designs. The kingpost truss is the oldest and most basic truss form. It is essentially a triangle, consisting of a bottom chord and two diagonal braces. The diagonal braces, by working in compression, act to support the upper end of the kingpost, which, in turn, works in tension to support the structure at mid-span. The multiple kingpost truss which is used for longer spans of about 50'-100', has a central kingpost truss flanked by multiple braced panels. According to the National Society for the Preservation of Covered Bridges' *World Guide to Covered Bridges*, there are approximately 90 historic (pre-1955) multiple kingpost truss covered bridges remaining in the United States (the majority are located in Ohio), with dates ranging from 1832 to 1947.

Humpback Bridge is an outstanding example of this truss type. Prior to the mid-nineteenth century, sawmill technology did not allow for the machine fabrication of large timbers of the dimensions employed in the Humpback Bridge. The exaggerated camber that gives the Humpback Bridge its name reflects the earliest forms of bridge construction and makes this example extremely rare. The unknown craftsman created structural

³⁵ Between 1791 and 1860, more than fifty bridge patents were granted, but only a few bridge designs gained widespread acceptance.

³⁶ Timothy Dwight's *Travels in New England and New York* (1803) states that "the bridge erected by Colonel Hale...had been taken down, and a new one built."

³⁷ Andrea Palladio, *The Four Books of Architecture* (London: Isaac Ware, 1842), 3rd bk., plates III-V. *I Quattro Libri dell'Architettura* (*The Four Books of Architecture*) was first published in Italian in 1570; a complete English version was published in London in 1716-1720.

³⁸ John Bliss's Leffingwell Bridge (1764) at Norwich, Connecticut, described as being "*supported by Geometry work above*," may have been the first use of the truss principle in American bridge design, but the Essex Merrimac River Bridge was the first *long-span* truss bridge in the United States. In 1810, the larger (south) span of the Essex Merrimac River Bridge was replaced with an iron chain suspension bridge. The smaller (north) span was later replaced with an iron swing bridge.

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members with uniform dimensions that reflected the early nineteenth-century traditions of joinery found in timber frame houses. These shaped timbers, with precise mortise and tenon connections, demonstrate superior skills in hand-hewn craftsmanship.

Conclusion

Humpback Bridge is among the most historically significant and intact examples of a nineteenth-century covered bridge surviving in the United States. Built in 1857, the bridge is the last major surviving remnant of the James River & Kanawha Turnpike, the first major overland route through the Allegheny Mountains region. It is the fifth bridge to span Dunlap Creek at this site. Humpback Bridge carried traffic until 1929, when it was bypassed and closed to vehicles. Twenty-four years later, the bridge was restored as a local landmark and tourist attraction. Since 1954, it has served as a pedestrian bridge and is the focal point of a picturesque wayside park maintained by the Virginia Department of Transportation. The bridge has been very well maintained and retains much of its historic integrity.

Humpback Bridge is of engineering significance as an outstanding example of nineteenth-century covered bridge construction. It is one of the best surviving examples of a timber multiple kingpost truss, the timber truss type used for some of the first covered bridges in America. Because of its heavily-cambered design, Humpback Bridge is visually similar to the "trussed arch" bridges built by early covered bridge builders like Timothy Palmer and Lewis Wernwag (1769-1843), but it is structurally dissimilar in that the trusses do not exert significant outward thrust at the abutments. For this reason, the design of Humpback Bridge is best described as an "arched truss," or "radically-cambered truss." Presumably, the camber was introduced to give the bridge greater clearance above potential flooding, which seems to have been a regular occurrence on Dunlap Creek. It is the older of two surviving covered bridges with radially-cambered chords in the United States, the other being the Geer's Mill Bridge (1874) in Vinton County, Ohio.

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Chronology

- 1784 George Washington reports the need for canals and turnpikes to the Virginia General Assembly
- 1785 James River Company incorporated to build canals between the James River and Kanawha River
- 1786 “Old State Road” completed through the Allegheny Mountains region
- 1788 State of Virginia admitted to the Union
- 1805 America’s first covered bridge completed at Philadelphia
- 1820 James River Company charter transferred to Commonwealth of Virginia
Virginia General Assembly authorizes construction of a turnpike from Dunlap Creek to Kanawha River
- 1824 First bridge erected at this site
- 1825 Dunlap Creek crossings appear on Herman Boye’s “Map of Alleghany County”
- 1833 Second bridge erected at this site
- 1837 Flood destroys bridges on Dunlap Creek (12 May 1837)
- 1838 Third bridge erected at this site
- 1842 Flood destroys bridges on Dunlap Creek (13 July 1842)
Fourth bridge erected at this site
- 1856 Lower Dunlap Creek Bridge collapses in freshet
- 1857 Fifth (present) bridge erected at this site
- 1860s Humpback Bridge survives the Civil War
James River & Kanawha Turnpike dissolved and turned over to local counties
- 1873 Chesapeake & Ohio Railroad completed to Huntington, West Virginia
- 1877 Humpback Bridge survives major flood
- 1913 Humpback Bridge survives major flood
- 1926 Midland Trail becomes US Highway 60
- 1929 Midland Trail realigned, bypassing Humpback Bridge
- 1930s Humpback Bridge used by a local farmer for storing hay
- 1937 Local historian Gay Arritt writes a history of Humpback Bridge
- 1948 Covington Chamber of Commerce begins efforts to preserve Humpback Bridge
- 1953 Virginia Department of Highways purchases five acres of land surrounding the bridge for \$500
Covington Business & Professional Women’s Club raises \$5,000 for restoration of Humpback Bridge
- 1954 Humpback Bridge restored and surrounding land developed as a wayside park
- 1955 Humpback Bridge featured on the cover of the “Virginia Official State Highway Map”
- 1958 Historical marker erected at Humpback Bridge Wayside

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Humpback Bridge inventoried by the Historic American Buildings Survey (HABS)

- 1968 Humpback Bridge designated a Virginia Historic Landmark
- 1969 Humpback Bridge listed in the National Register of Historic Places
- 1970 Humpback Bridge recorded by the Historic American Engineering Record (HAER)
- 1985 Thomas W. Dixon, Jr. discovers Humpback Bridge was built in 1857, not 1835, as previously believed
- 1988 Interstate 64 completed; US 60 becomes a secondary route for local traffic
- 2002 Humpback Bridge recorded as part of HAER's National Covered Bridges Recording Project
- 2011 Humpback Bridge proposed for consideration as a National Historic Landmark

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9. MAJOR BIBLIOGRAPHICAL REFERENCES

- Allen, Richard Sanders. *Covered Bridges of the Middle Atlantic States*. Brattleboro, VT: Stephen Greene Press, 1959.
- Arritt, Gay. "Drive to Raise Funds to Restore Humpback Bridge Starts Tomorrow." *Covington Virginian*, June 25, 1953, 7, 14.
- _____. "Humpback Bridge," in *Historical Sketches of the Alleghany Highlands*. Covington, VA: Alleghany Historical Society, 1982, 83-86.
- Baldwin, Loammi. "Plan and Profile of a Survey and Level of Jackson's and James Rivers...with a Plan of a Survey for a Road from the Mouth of Dunlap Creek to the Falls of the Great Kanawha, November 1817." Virginia Board of Public Works Manuscript Collection, Library of Virginia, Richmond.
- Beirne, Horton. "Historic Humpback Bridge is Not 151 Years Old." *Covington Virginian*, March 29, 1986, 1, 6.
- Boye, Herman. "[Map of] Alleghany County, 1825."
- Condit, Carl W. *American Building Art: the Nineteenth Century*. New York: Oxford University Press, 1960.
- Conwill, Joseph D. *Covered Bridges Across North America*. St. Paul, MN: MBI, 2004.
- Crozet, Claudius. *Outline of the Improvements in the State of Virginia*. Philadelphia: C. Sherman, printer, 1848.
- _____. "Report of the Principal Engineer—The Kanawha Road." *Ninth and Tenth Annual Report of the Virginia Board of Public Works*, Vol. 4, 1826.
- Dixon, Thomas W., Jr. *Humpback Bridge, Last Remnant of the James River and Kanawha Turnpike*. Parsons, WV: McClain Printing, 1985.
- Dunaway, Wayland Fuller. *History of the James River and Kanawha Company*. New York: Longman's Green, 1922.
- Ford, Worthington Chauncy, ed. *The Writings of George Washington*, Vol. 10, 1782-1785. New York: G. P. Putnam's Sons, 1891.
- Hemphill, W. Edwin. "An Album for the Nostalgic: Covered Bridges in Virginia." *Virginia Cavalcade* 1, no. 2 (Autumn 1951): 17-19.
- Hunter, Robert Fleming. "The Turnpike Movement in Virginia, 1816-1860," PhD diss., Columbia University, 1957.
- Jackson, Donald C. "Humpback Covered Bridge," *Historic American Engineering Record*, No. VA-1. Washington, DC: US Department of the Interior, National Park Service, 1970.
- James River & Kanawha Company. *Annual Reports*, 1835-1860.

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National Register of Historic Places Registration Form

- Kniffen, Fred. "The American Covered Bridge." *The Geographical Review* 41 (1951): 114-123.
- Newlon, Howard Jr. "The Kanawha Turnpike." *Virginia Highway Bulletin*, October 1974.
- Palladio, Andrea. *The Four Books of Architecture*. London: Isaac Ware, 1842.
- Pease, George B. "Timothy Palmer, Bridge-Builder of the Eighteenth Century." *Essex Institute Historical Collections* 83, no. 2 (April 1947): 97-111.
- Pierce, Leola B. *Covered Bridges of Virginia*. Glen Rose, TX: Upstream, 2002.
- Pope, Thomas. *A Treatise on Bridge Architecture*. New York: Alexander Niven, 1811.
- Rice, Philip Morrison. "The Virginia Board of Public Works, 1816-1842." Master's thesis, University of North Carolina, 1947.
- Roberts, Edward Graham. "The Roads of Virginia, 1607-1840." PhD diss., University of Virginia, 1950.
- Stantley, Ralph, ed. *What to See in Virginia: The Travel Index Guide Book of Virginia*. Williamsburg, VA: Colonial Williamsburg, 1954.
- Virginia Board of Public Works. *Annual Reports*, 1818-1857.
- "Humpback Bridge," National Register of Historic Places Nomination Form (Virginia). Washington, DC: US Department of the Interior, National Park Service, 1969.
- "Virginia Official State Highway Map, 1955." Richmond: Virginia Department of Highways, 1955.
- Wells, Rosalie. *Covered Bridges in America*. New York: William Edwin Rudge, 1931.
- Wright, David W., ed. *World Guide to Covered Bridges*, 7th ed. Concord, NH: National Society for the Preservation of Covered Bridges, 2009.

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Previous documentation on file (NPS):

- Preliminary Determination of Individual Listing (36 CFR 67) has been requested.
 Previously Listed in the National Register: NR# 69000219, Listed 10/01/1969
 Previously Determined Eligible by the National Register.
 Designated a National Historic Landmark.
 Recorded by Historic American Buildings Survey: 1958 HABS Inventory
 Recorded by Historic American Engineering Record: HAER No. VA-1

Primary Location of Additional Data:

- State Historic Preservation Office
 Other State Agency: Virginia Department of Transportation; Library of Virginia
 Federal Agency
 Local Government
 University
 Other (Specify Repository): Charles P. Jones Memorial Library, Covington, Virginia

10. GEOGRAPHICAL DATA

Acreage of Property: Less than an acre

UTM References:	Zone	Easting	Northing
	17	583879	4183900

Verbal Boundary Description: The property consists of the superstructure, abutments, approaches, and retaining walls of Humpback Bridge, which spans Dunlap Creek near Covington, Virginia. The superstructure is 110-foot long with 40 foot approaches at each end, 15-foot wide, and 22-foot high; the abutments are approximately 15-foot high. The structure sits on an east-west axis, approximately three miles west of Covington, Virginia.

Boundary Justification: The boundary includes the essential components of the bridge superstructure, supporting abutments, approaches, and retaining walls, all of which maintain historic integrity.

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DESIGNATED A NATIONAL HISTORIC LANDMARK
October 16, 2012

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HUMPBACK BRIDGE. General view from southwest.
Photograph by Jack Boucher, 1971



HUMPBACK BRIDGE. Southeast elevation.
Photograph by Jet Lowe, 2002

HUMPBACK BRIDGE

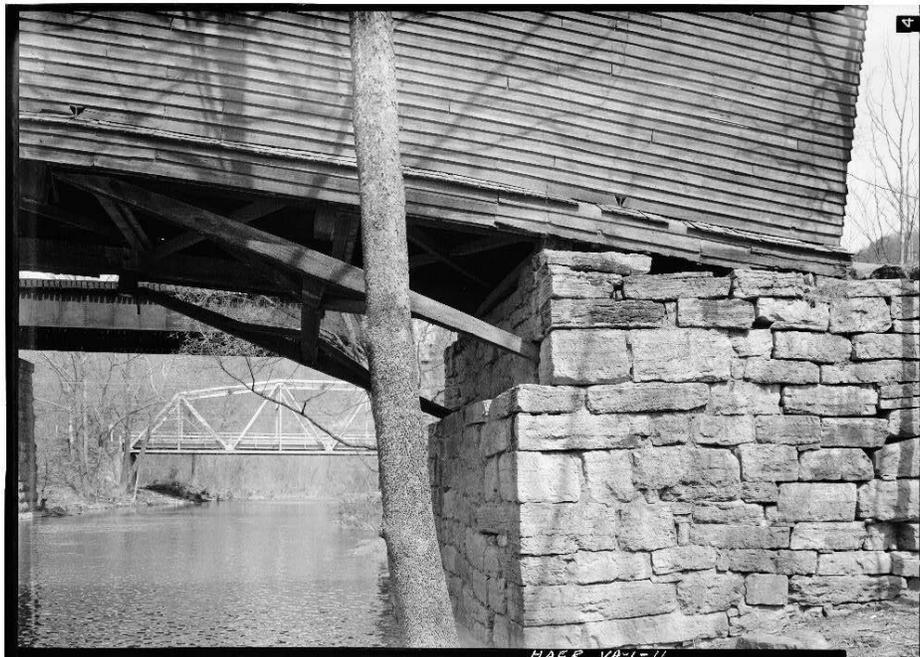
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HUMPBACK BRIDGE. West portal elevation.
Photograph by Jet Lowe, 2002



HUMPBACK BRIDGE. Detail of northeast abutment from east.
Photograph by Jack Boucher, 1971

HUMPBAC BRIDGE

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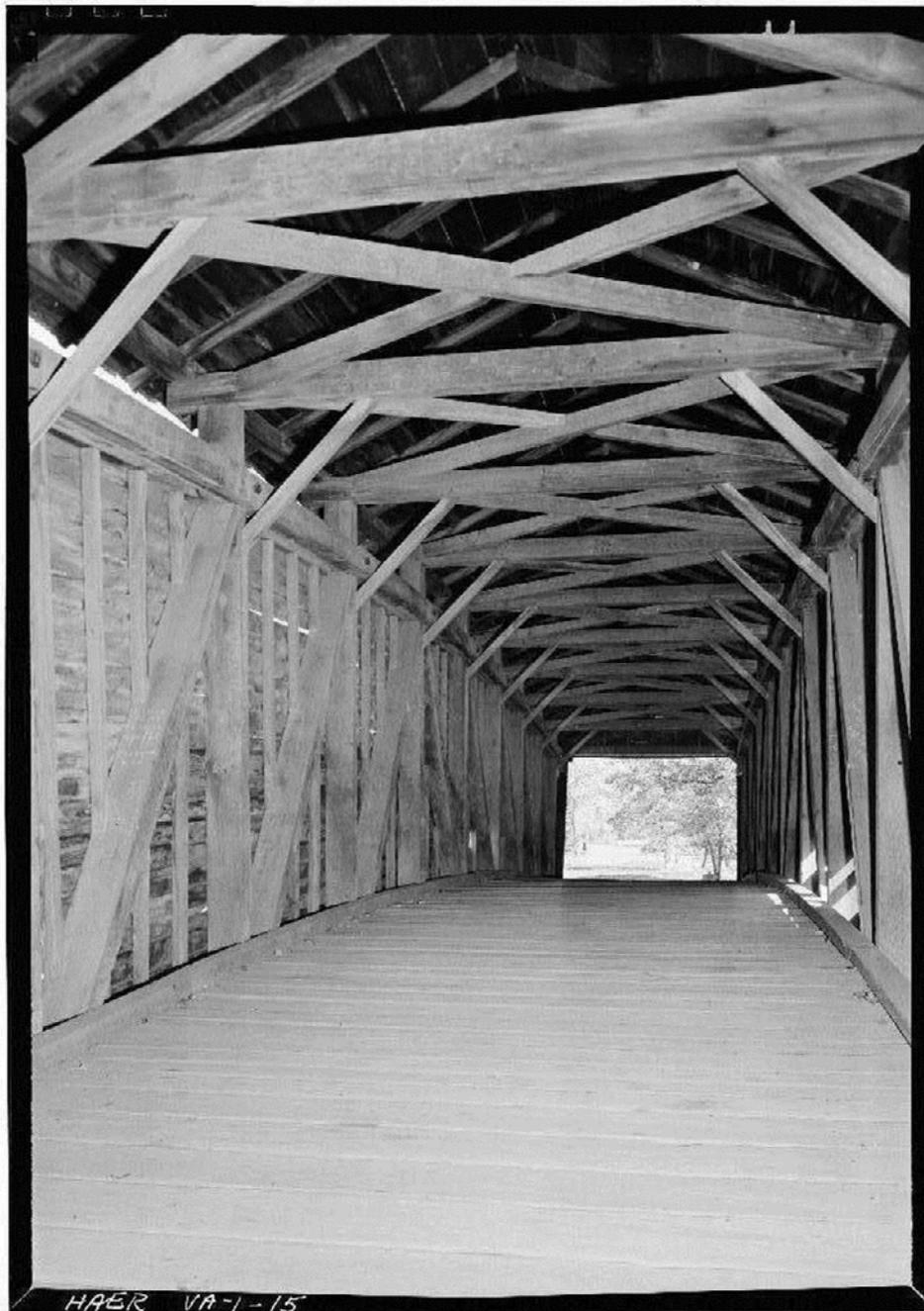
HUMPBAC BRIDGE. Abutments and floor system from southwest.
Photograph by Jack Boucher, 1971

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HUMPBAC BRIDGE. General interior view from east portal.
Photograph by Jack Boucher, 1971

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HUMPBACK BRIDGE. Interior view from east portal.
Photograph by Jet Lowe, 2002



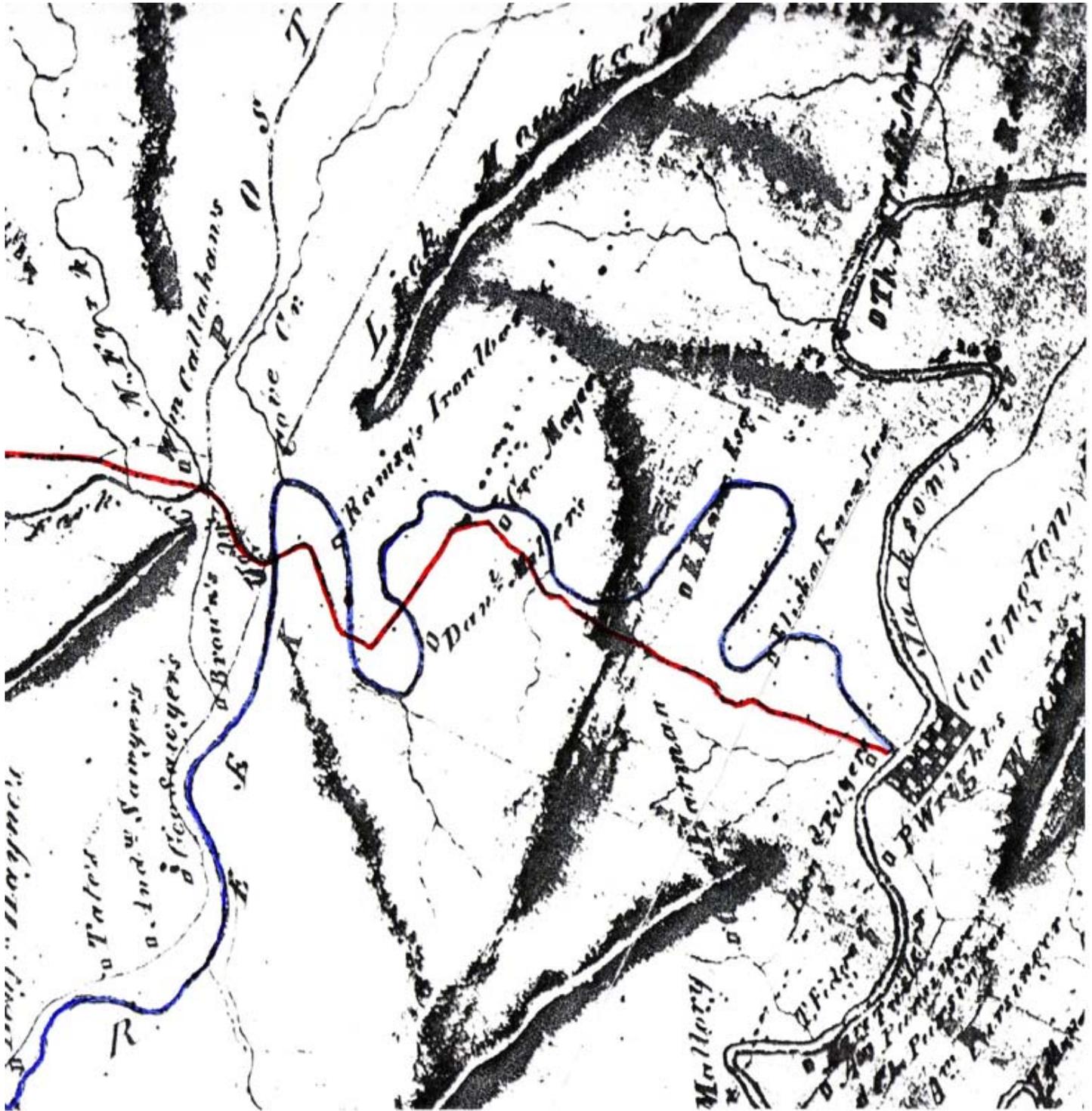
HUMPBACK BRIDGE. Truss detail.
Photograph by Jet Lowe, 2002

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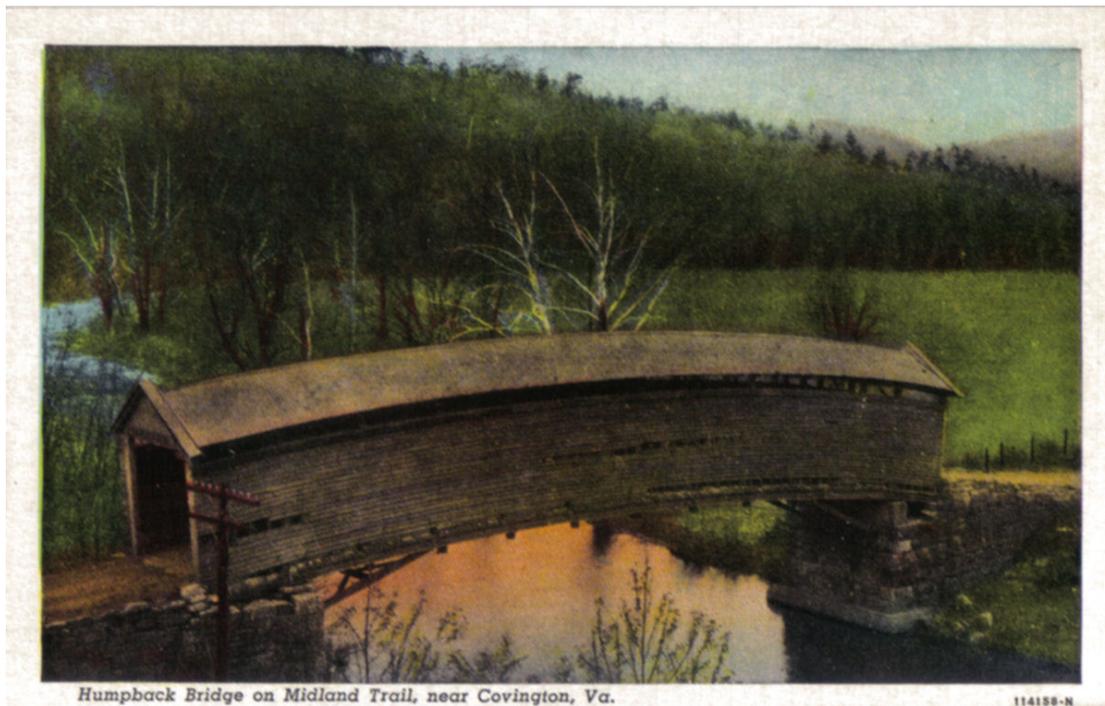
Herman Boye, “[Map of] Alleghany County, 1825,”
 showing Dunlap Creek (in blue) and James River & Kanawha Turnpike alignment (in red).
 First Dunlap Creek crossing northwest of Covington is location of Humpback Bridge.

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Humpback Bridge on Midland Trail, near Covington, Va.

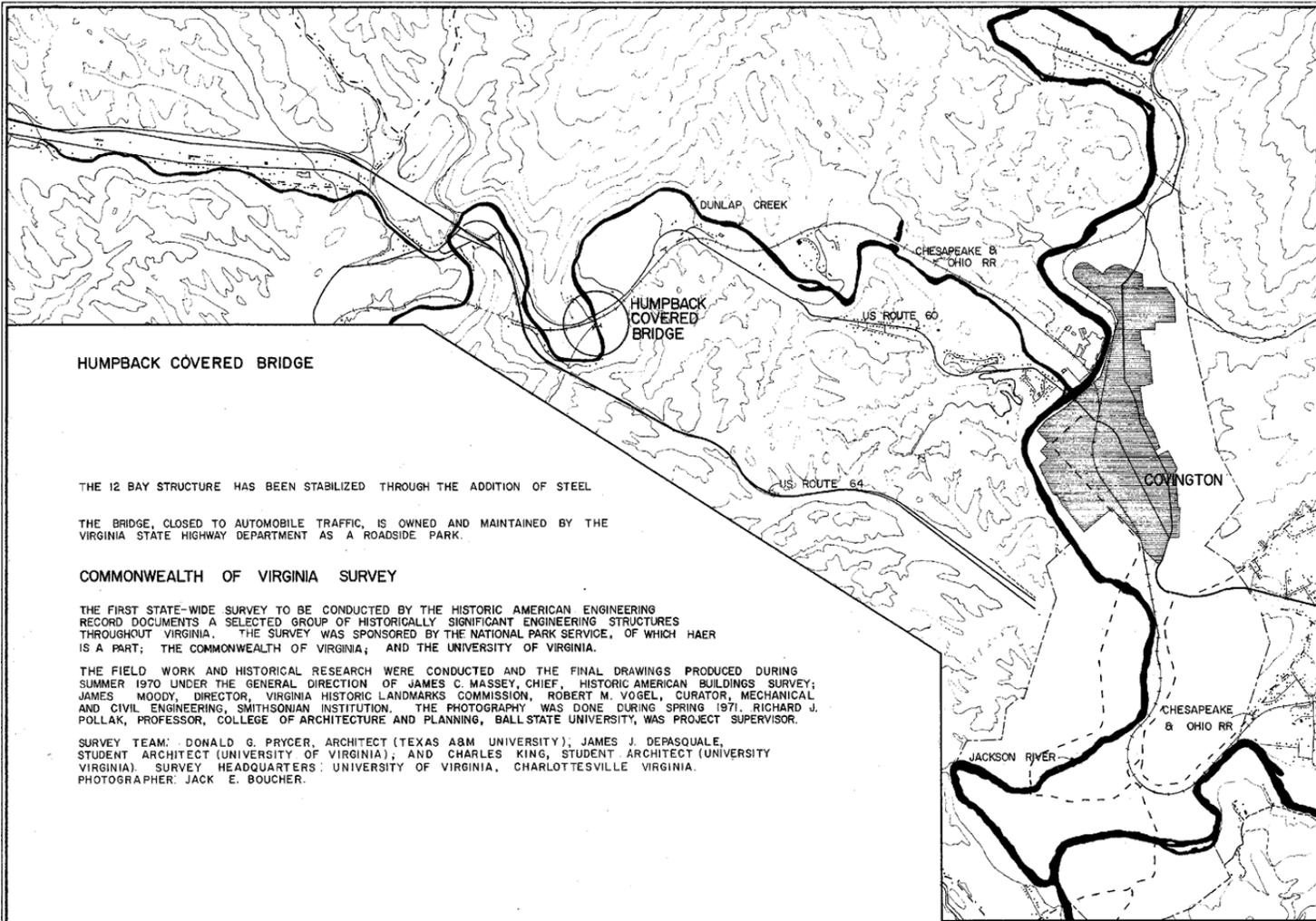
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HUMPBAC BRIDGE. Pre-1954 postcard view, looking southwest.
Courtesy of National Society for the Preservation of Covered Bridges



HUMPBAC BRIDGE. Post-1954 postcard view, looking southwest.
Courtesy of National Society for the Preservation of Covered Bridges

TRIM LINE



HUMPBACK COVERED BRIDGE

THE 12 BAY STRUCTURE HAS BEEN STABILIZED THROUGH THE ADDITION OF STEEL

THE BRIDGE, CLOSED TO AUTOMOBILE TRAFFIC, IS OWNED AND MAINTAINED BY THE VIRGINIA STATE HIGHWAY DEPARTMENT AS A ROADSIDE PARK.

COMMONWEALTH OF VIRGINIA SURVEY

THE FIRST STATE-WIDE SURVEY TO BE CONDUCTED BY THE HISTORIC AMERICAN ENGINEERING RECORD DOCUMENTS A SELECTED GROUP OF HISTORICALLY SIGNIFICANT ENGINEERING STRUCTURES THROUGHOUT VIRGINIA. THE SURVEY WAS SPONSORED BY THE NATIONAL PARK SERVICE, OF WHICH HAER IS A PART; THE COMMONWEALTH OF VIRGINIA; AND THE UNIVERSITY OF VIRGINIA.

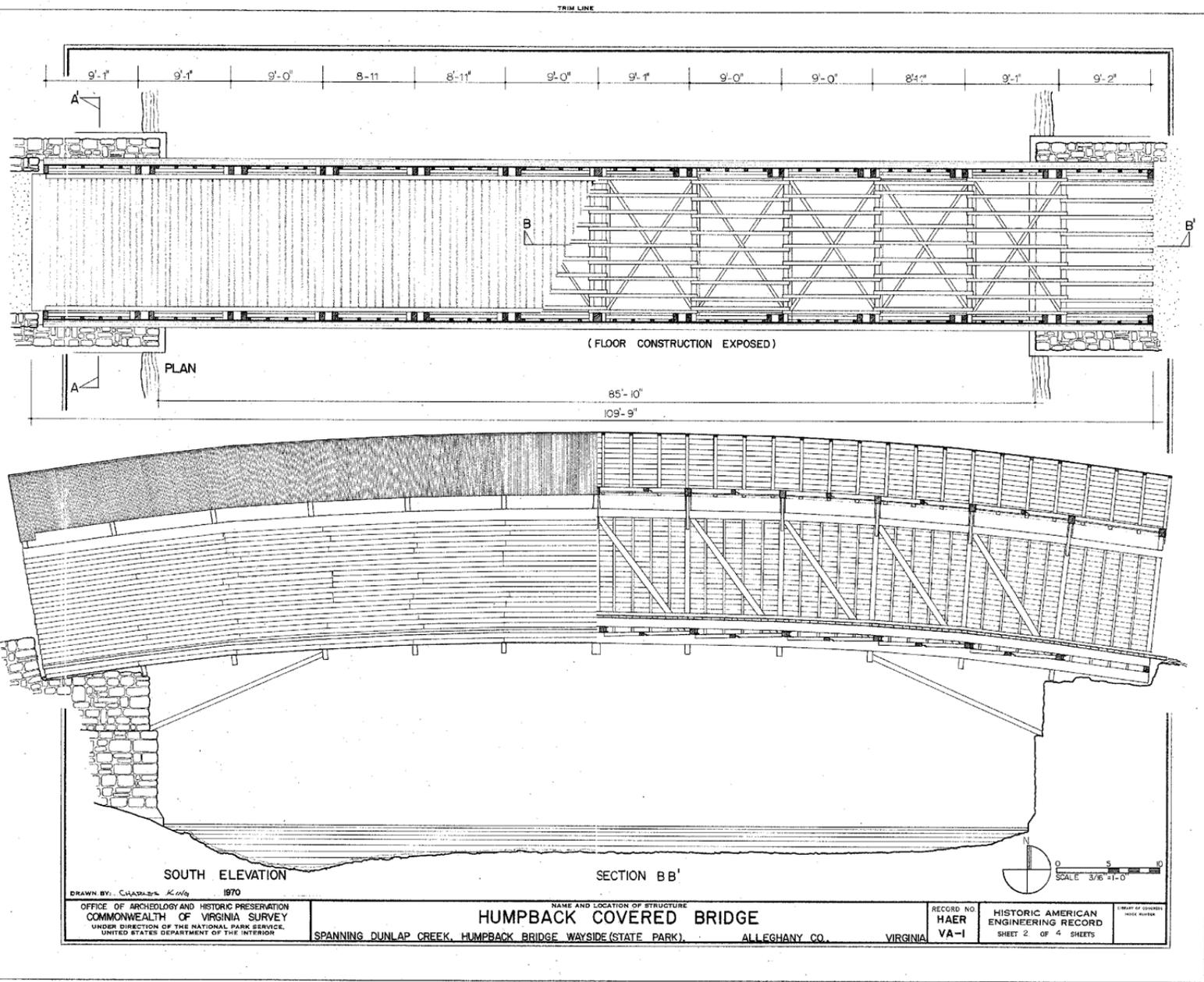
THE FIELD WORK AND HISTORICAL RESEARCH WERE CONDUCTED AND THE FINAL DRAWINGS PRODUCED DURING SUMMER 1970 UNDER THE GENERAL DIRECTION OF JAMES C. MASSEY, CHIEF, HISTORIC AMERICAN BUILDINGS SURVEY; JAMES MOODY, DIRECTOR, VIRGINIA HISTORIC LANDMARKS COMMISSION, ROBERT M. VOGEL, CURATOR, MECHANICAL AND CIVIL ENGINEERING, SMITHSONIAN INSTITUTION. THE PHOTOGRAPHY WAS DONE DURING SPRING 1971. RICHARD J. POLLAK, PROFESSOR, COLLEGE OF ARCHITECTURE AND PLANNING, BALL STATE UNIVERSITY, WAS PROJECT SUPERVISOR.

SURVEY TEAM: DONALD G. PRYCE, ARCHITECT (TEXAS A&M UNIVERSITY); JAMES J. DEPASQUALE, STUDENT ARCHITECT (UNIVERSITY OF VIRGINIA); AND CHARLES KING, STUDENT ARCHITECT (UNIVERSITY VIRGINIA). SURVEY HEADQUARTERS: UNIVERSITY OF VIRGINIA, CHARLOTTESVILLE VIRGINIA. PHOTOGRAPHER: JACK E. BOUCHER.



<p>DRAWN BY: Donald G. Pryce 1970 OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION COMMONWEALTH OF VIRGINIA SURVEY UNDER DIRECTION OF THE NATIONAL PARK SERVICE UNITED STATES DEPARTMENT OF THE INTERIOR</p>	<p>NAME AND LOCATION OF STRUCTURE HUMPBACK COVERED BRIDGE SPANNING DUNLAP CREEK, HUMPBACK BRIDGE WAYSIDE(STATE PARK), ALLEGHANY CO., VIRGINIA</p>	<p>RECORD NO. HAER VA-1</p> <p>HISTORIC AMERICAN ENGINEERING RECORD SHEET 1 OF 4 SHEETS</p>	<p>LIBRARY OF CONGRESS PHOTO DUPLICATION SERVICE</p>
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 UNITED STATES DEPARTMENT OF THE INTERIOR

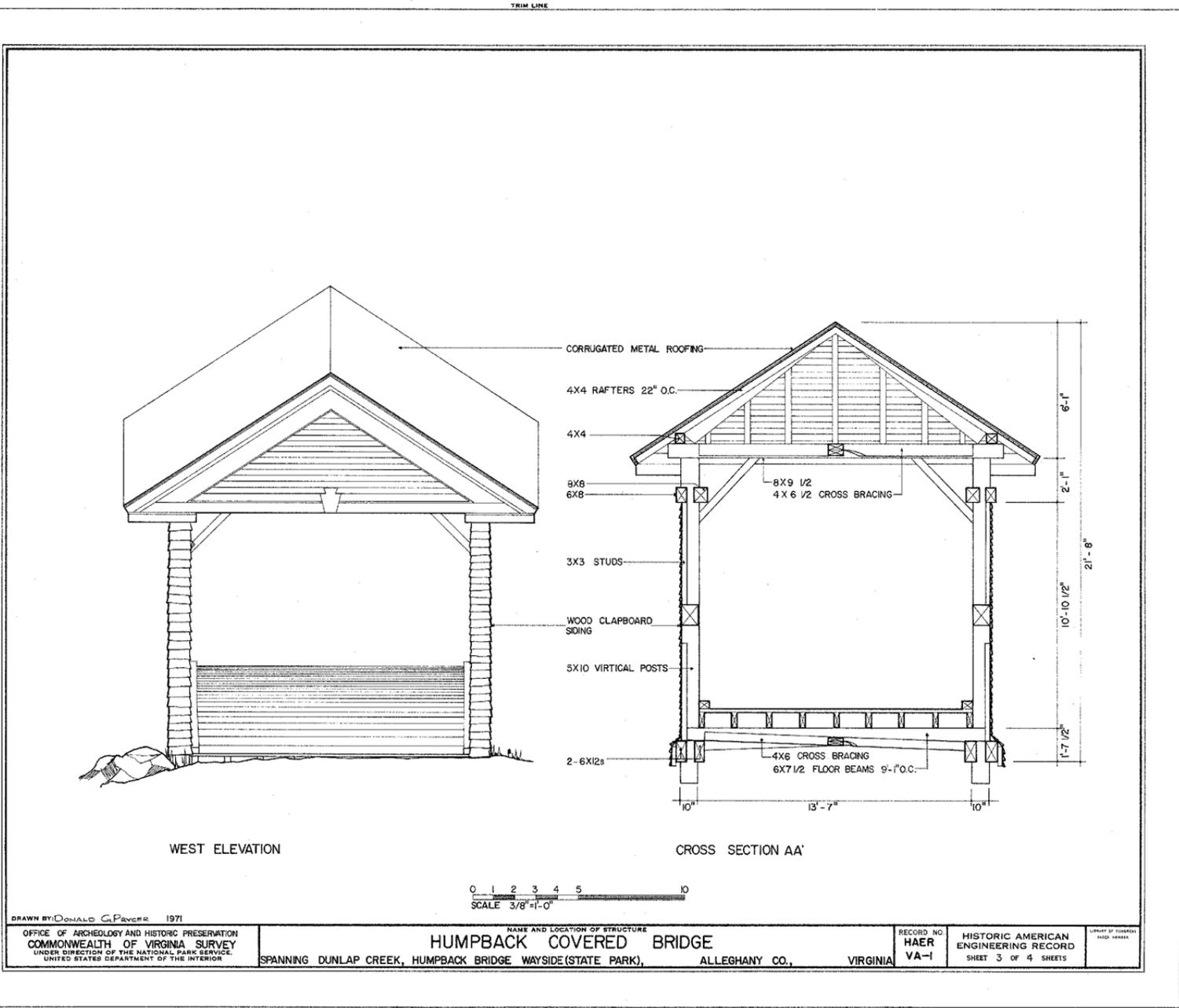
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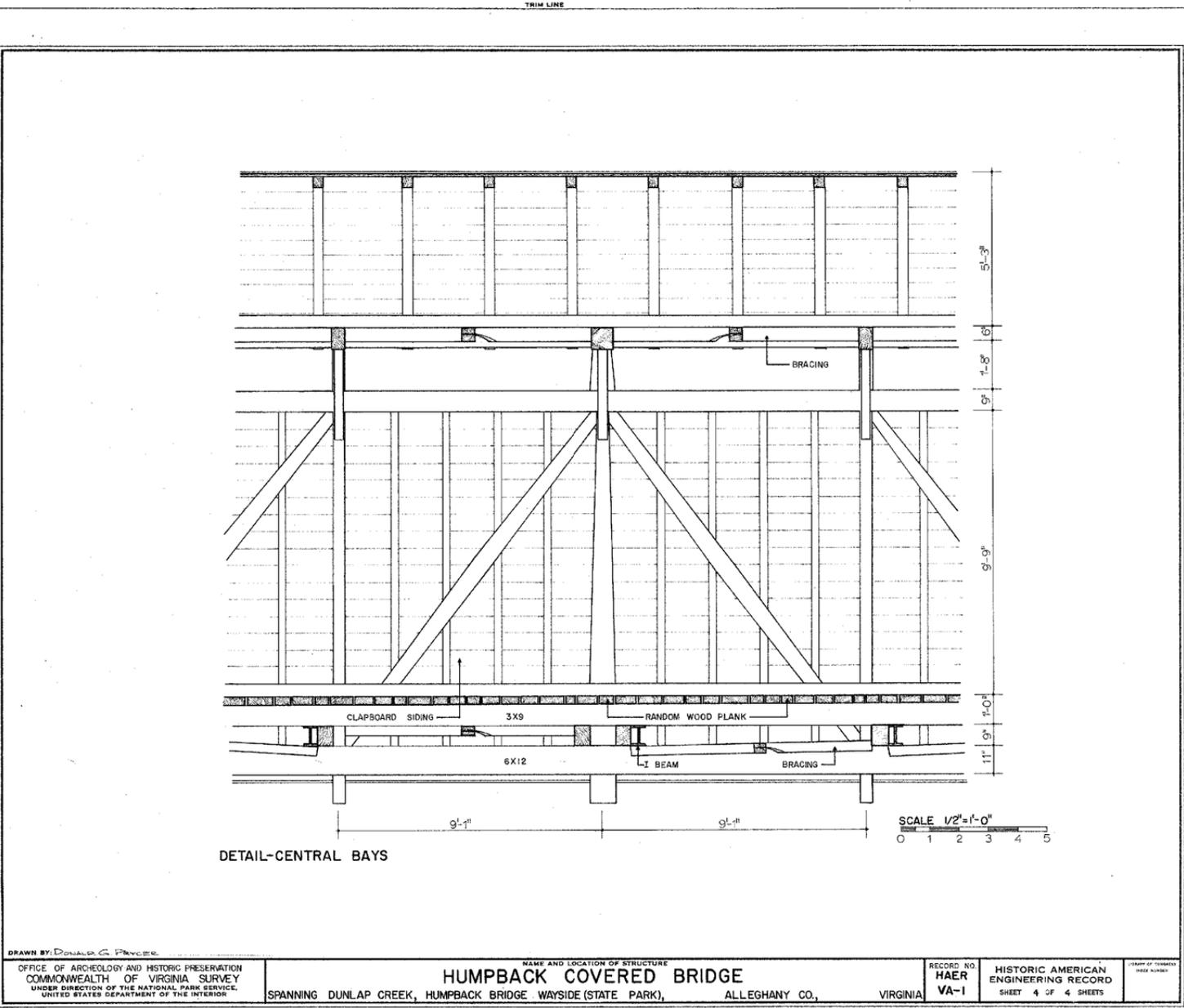
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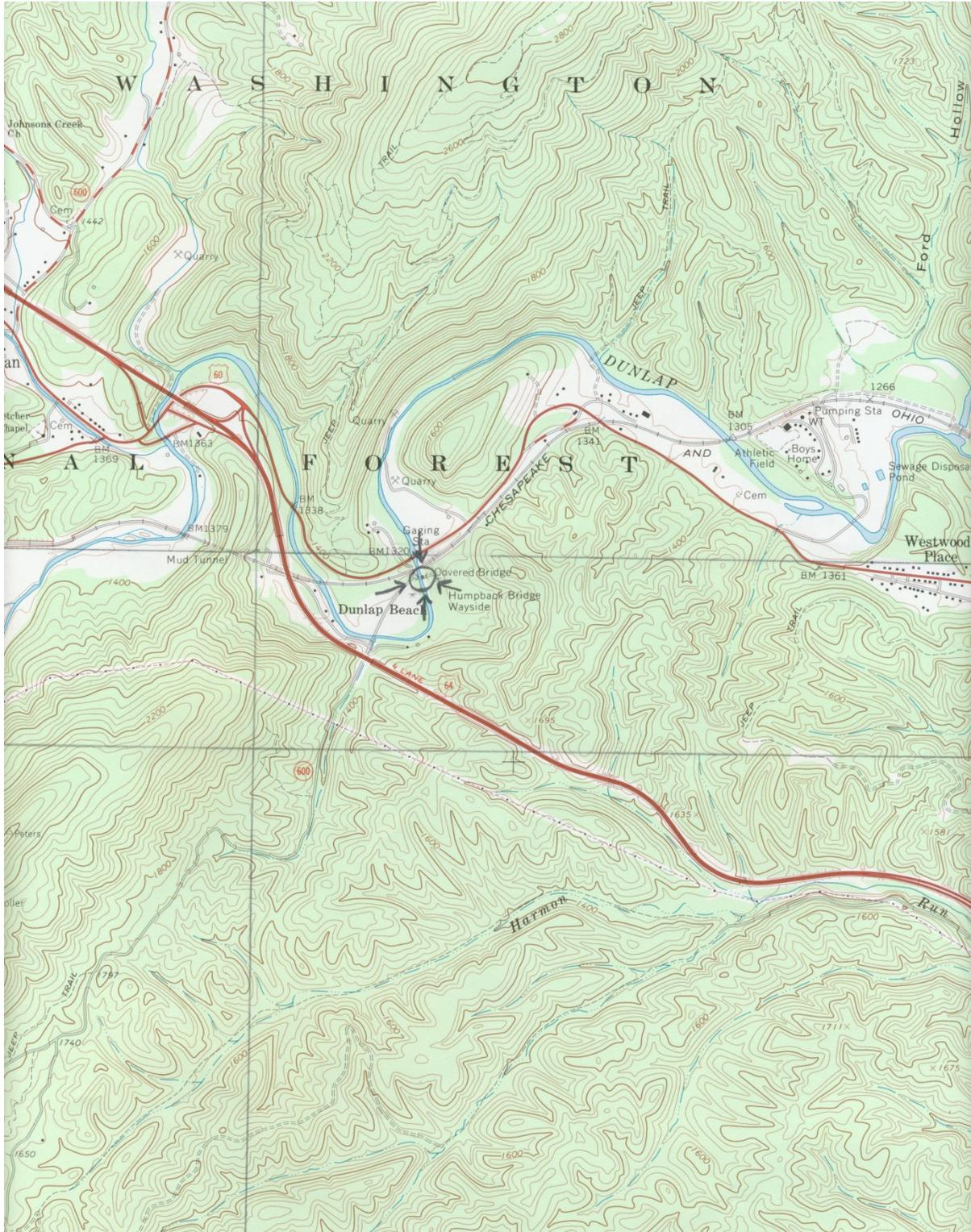


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HUMPBACK BRIDGE

Spanning Dunlap Creek at bypassed section of former James River & Kanawha Turnpike (later, Midland Trail/US 60), Covington vicinity, Allegheny County, Virginia

UTM: 17.583879.4183900, USGS Callaghan, Virginia Quadrangle (1966)