VIRGINIA DEPARTMENT OF TRANSPORTATION BRIDGE No. 6051 HAER No. VA-110
Spanning Catoctin Creek at State Route 673 (Featherbottom Road)
Waterford Vicinity
Loudon County
Virginia

HAER
VA
54-WATFO.V,
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
Northeast Region
U.S. Custom House
200 Chestnut Street
Philadelphia, PA 19106

HAER
VA
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HISTORIC AMERICAN ENGINEERING RECORD

VIRGINIA DEPARTMENT OF TRANSPORTATION BRIDGE NO. 6051 HAER NO. VA-110

Location:	State Route 673 (Featherbottom Road) over Catoctin Creek, in the vicinity of Waterford, Loudoun County, Virginia UTM: 18.277700.4345515 Quad: Waterford, Virginia
Date of Construction:	circa 1889
Engineer:	Variety Iron Works, Cleveland, Ohio
Builder:	Variety Iron Works, Cleveland, Ohio
Present Owner:	Virginia Department of Transportation, Richmond, Virginia
Present Use:	Vehicular bridge
Significance:	Virginia Department of Transportation Bridge No. 6051 is a nine-panel Pratt through truss bridge 159'-0" in length. Manufactured by the Variety Iron Works of Cleveland, Ohio, and most likely erected in 1889, the structure is a representative surviving example of a popular truss type built to specifications by county authorities and bridge companies during the 1875-1925 period in Virginia. Relatively inexpensive and easy to manufacture, ship, and erect on site, Pratt metal truss bridges found widespread application in rural areas throughout the last quarter of the nineteenth century and well into the twentieth century.
Project Information:	This documentation was undertaken from December 1993 through June 1994, by P.A.C. Spero & Company for the Virginia Department of Transportation as a mitigation measure prior to potential removal of the bridge.

P.A.C. Spero and Company
Historic Structures Consultants
Baltimore, Maryland
for the Virginia Department of Transportation (VDOT)

Located in Loudoun County, Virginia, northeast of the town of Waterford, Virginia Department of Transportation Bridge No. 6051 carries State Route 673 over Catoctin Creek. The bridge was most likely constructed in 1889 to carry the Leesburg and Alexandria Turnpike (a precursor of U.S. Route 7) over Goose Creek three miles east of Leesburg, Virginia, in Loudoun County. In 1932, Bridge No. 6051 was removed from its original location and reerected at its present site, carrying Featherbottom Road (State Route 673) across Catoctin Creek.

Spanning Catoctin Creek in Loudoun County, Virginia, Virginia Department of Transportation Bridge No. 6051 is a single-span Pratt truss bridge 159'-0" in length. Spaced 13'-10" on centers, the trusses consist of nine panels, measuring 17'-5½" in length and 22'-2" in height, top to bottom chord. The panels are connected by pins with hexagonal nuts. The three central panels (U_3-L_3 through U_6-L_6) feature counters with turnbuckles. The top chords and inclined endposts are built-up members consisting of riveted channels, cover plates, and stay plates; the verticals consist of riveted channels and lacing bars; and eyebars form the diagonals. Each portal strut consists of two riveted angles connected by lattice bars and portal knee braces, also connected by lattice bars. Knee braces connect the verticals and the upper lateral struts. Diagonal lateral rod bracing connects the top chords. Located on the U_1-L_0 inclined endpost of the south truss and the U_8-L_9 endpost of the north truss are rectangular bridge plates listing the members of the Loudoun County Bridge Committee. The remnants of a circular fabricator's plate is riveted above the rectangular plate on the U_8-L_9 endpost, reading "...Y IRON WORKS...EVELAND O., ...RIDGE ...ILDERS." Similarly located on the U_1-L_0 endpost is the rivet which once held a presumably identical builder's bridge plate; the non-extant plate's circular shape is evidenced by a circular corrosion pattern of the same diameter as that of the extant plate on the other inclined endpost.

The floor system consists of eight built-up floor beams with 15"-deep webs, six 10"-deep I-beam stringers with varied spacing, and a timber deck connected by nailers to the stringers. Lateral bracing below the deck consists of rods. The metal railings, which are not original to the bridge, consist of W-rails attached by timber posts and braces to the deck. The east end of the bridge superstructure is supported by roller expansion bearings resting on a shallow concrete abutment; the fixed bearings of the west end rest on a deeper squared stone masonry abutment. The roadway is 11'-2" in width and carries a single lane of vehicular traffic. Deck to portal clearance is 21'-6".

Historical research indicates that Bridge No. 6051 was most likely built in 1889 to carry the Leesburg and Alexandria Turnpike (old Route 7) over Goose Creek in Loudoun County, Virginia. The bridge was fabricated by Variety Iron Works of Cleveland, Ohio, under Loudoun County authority; it was erected to replace a bridge which was washed out during the flood of 1889, caused by the same storm that occasioned the Johnstown Flood. In 1932, the bridge was moved from its original location to its current site, carrying Featherbottom Road (State Route 673) across Catoctin Creek in Loudoun County.

Originally a part of Fairfax County, the county of Loudoun was formed in 1757 and named to honor the Earl of Loudoun, British colonial commander during the latter part of the French and Indian wars. Including both Piedmont and mountainous terrain, the county is bounded on the west by the Blue Ridge range, with heights from 1000 to 1400' above sea level, and on the north by the Potomac River. East of the Blue Ridge run two other, somewhat smaller ranges, the Short Hills, beginning on the Potomac about four miles below Harper's Ferry, and the Catoctin range, the first range of Appalachian mountains west of the Piedmont. The latter region is characterized by hills varying from 200 to 350' above sea level, with the landscape and drainage generally sloping northeastward. Approximately fifty miles long from its source in Fauquier County to its mouth on the Potomac, Goose Creek drains nearly one-half of Loudoun County, has a fall of 100' in its last 22 miles, and is about 60 yards wide. By contrast, Catoctin Creek occupies a basin approximately twelve miles in length, although the total length of the stream, including meanders, exceeds 35 miles. Catoctin Creek has a fall of 180' in the last 18 miles of its course.

European colonial settlement in Loudoun County began during the seventeenth century, as settlers occupied portions of Lord Fairfax's extensive grant east of the Blue Ridge. Located in the midst of Loudoun's main farming district, Leesburg, the major market town in the county, was established as the county seat in 1758. The area surrounding Leesburg, including the Goose Creek valley, remained largely agrarian from the eighteenth century through much of the twentieth century, though the primary productive crops changed over time from tobacco and hemp to cereal crops (primarily wheat and corn). The creek, with its reliable flow and favorable fall, offered many desirable sites for grist mills and saw mills. Helen Hirst Marsh, historian of milling in Loudoun County, noted that waterpowered mills were operating along branches of Goose Creek by the 1750s. By 1850, at least 77 grist and saw mills operated in Loudoun County. During the 1830s, in the Middleburg area near the Loudoun-Fauquier county line, eighteen flourmills operated. Major merchant mills, at Evergreen Mills and Oatlands Mills, were founded along Goose Creek during the early nineteenth century and became the nuclei for small mill villages. Other farm-related businesses established in Loudoun County included woolen factories (three in 1855) and tanneries (nine as of 1855).

As recently as 1926, the authors of the University of Virginia's economic and social survey of Loudoun County concluded that Loudoun was "a typical rural county with very few industries," a county where the medium-sized farm of less than 175 acres predominated. Historically, the development of a reliable transportation network, including passable roads and permanent bridges, was key to Loudoun's farm-based prosperity, despite the devastating interruption of the Civil War. The county during the eighteenth century was traversed by three important roads: the Carolina Road (precursor to today's U.S. 15) running through Leesburg just east of the Catoctin range; the east-west route linking Alexandria, Leesburg, and points west (precursor to U.S. 7, or Leesburg Pike, and variously known as Sugarland Path, Eastern Ridge Road, New Church Road, Vestal Gap Road, Alexandria Road, and Old Leesburg Road); and the Colchester Road (following portions of today's State Route

734 and U.S. 50), linking the port of Colchester (near modern Woodbridge) in tidewater Virginia to the Shenandoah Valley via Williams Gap. All three roads were heavily utilized by emigrants as well as area farmers; the Carolina Road, much like the more famous Valley Road, particularly was used as an early eighteenth century route into the Shenandoah Valley and points south by families traveling from southeastern Pennsylvania.

During the early nineteenth century, as Loudoun County developed an economy greatly dependent on cereal (wheat and corn) crop production and animal husbandry, turnpikes were built throughout Loudoun County. As historian Charles Preston Poland, Jr. has asserted, "turnpikes in northern Virginia resulted from the establishment of trade during the latter part of the colonial period between towns on the Potomac River and the Shenandoah Valley." Between 1802 and 1806, the first successful hard-surfaced pike in the county, the Little River Turnpike, was constructed between Alexandria to the ford of the Little River at a location later occupied by the small village of Aldie. Two other companies, the Ashby's Gap Turnpike Company and the Snicker's Gap Turnpike Company, connected other points in the Shenandoah with the Little River Turnpike. Prompted by the latter's success, merchants and farmers in the Leesburg area founded the Leesburg Turnpike prior to 1813, with the aim of linking the productive farming area surrounding Leesburg with the Little River Turnpike to Alexandria. Business leaders in Georgetown on the Potomac, however, secured an amendment to the Leesburg Turnpike charter, which resulted in diversion of the course of the pike toward Georgetown.

By 1822, the Leesburg Turnpike was opened; the course of the road ran from Leesburg east to Dranesville, crossing Goose Creek about 3-4 miles east of Leesburg. At Dranesville, the road branched, with the Leesburg and Georgetown portion leading to Georgetown along the approximate course of today's Route 123 (Chain Bridge Road), while the main turnpike continued to Alexandria approximately along the route of modern-day U.S. 7. The Leesburg Pike was never directly linked to the Little River Turnpike, but nonetheless served throughout the nineteenth century and into the early twentieth century as a major thoroughfare for the conveyance of farm products to Georgetown and Alexandria. In 1896, the Leesburg pike by county authority ceased to be a toll road; in 1910, under state charter, a new corporation, the Washington and Leesburg Turnpike, was authorized to take possession of and improve roads from Leesburg to Alexandria and Georgetown. In 1928, the Virginia Department of Highways took over the ownership and maintenance of the Leesburg Turnpike from the privately run company. Little evidence concerning the construction of early bridges along the Leesburg Turnpike has been found, although it is likely that at major crossings, and perhaps specifically at Goose Creek, the turnpike was carried on stone or timber bridges. During the latter part of the nineteenth century, a stone arch bridge carried the turnpike over the Washington and Old Dominion Railroad in the Dranesville vicinity.

Reflecting the importance of maintaining a reliable road network in Loudoun County during the decades following the Civil War, Bridge No. 6051 was most likely built in 1889 to

replace a bridge that had washed out during the flood of June of that year. Though records are scanty, county documents and the bridge's surviving date plates reveal that the bridge was built by Variety Iron Works of Cleveland, Ohio, under authority of a Bridge Committee appointed by the Loudoun County Board of Supervisors. The bridge was built as the culmination of a lengthy effort to secure a permanent, durable structure to carry the Leesburg and Alexandria Turnpike (precursor to today's Route 7) over Goose Creek east of Leesburg.

After the Civil War, the county Board of Supervisors faced the challenge of reconstructing or rebuilding the many important bridges destroyed during the War by Union and Confederate troops. Prime among these was the crossing of Goose Creek by the turnpike linking Leesburg and Alexandria; the board made repeated efforts to provide for a bridge at the site, where pre-Civil war maps indicated a bridge at one time existed. On January 26, 1870, the board ordered a levy of $1000 for repairs to a bridge over Goose Creek; it is unclear whether this bridge crossed the creek at the turnpike. The levy was to match private subscriptions and would be paid "when the two, together, shall be sufficient to put the said bridge in good order." No more than half the cost of the repairs, however, could be paid out of the $1000 county levy. Later in the year, on December 5, 1870, the board mandated a $1200 levy specifically for "the erection of a bridge over Goose Creek on the Turnpike from Leesburg to Dranesville"; the latter community, with a well-known inn, was on the Leesburg-Alexandria Pike, at its junction with the Georgetown Turnpike leading to the port of Georgetown on the Potomac. The $1200 levy was conditioned on county court acceptance and a subscription of $800 raised by the "citizens of the county."

The following day, December 6, 1870, John Orr, Attorney for the Commonwealth, was requested by the Loudoun County Board of Supervisors to bring the matter of the Goose Creek turnpike bridge before the county court, along with the questions of two other bridges (crossing Catoctin Creek and Little River). Apparently, no Leesburg Pike bridge over Goose Creek resulted from the proceedings of 1870; at a special meeting in September 1873, the Board of Supervisors pointedly noted that such a bridge was "a public necessity" in which "the greater portion of the county is interested." The board thereupon ordered a levy of $1600 for the bridge, provided that the county court agreed and a subscription "by the Township" and by private citizens of at least $1400, "or as much as will build a good bridge", could be raised. This time, the levy succeeded in securing a bridge; on May 5, 1874, $1600 was ordered disbursed from county funds to Henry Saunders, Jr., for the "bridge over Goose Creek" on the turnpike; Saunders was paid the same day.

Further official records are scanty concerning this bridge, which may have been the immediate precursor to the first metal truss bridge (now Bridge No. 6051) at the site. On April 5, 1875, the Board of Supervisors ordered establishment of a tollgate, with a small tollkeeper's house, at the Goose Creek Bridge on the Leesburg-Alexandria Turnpike. The toll structures were to be built by the Committee of Roads for the township at county court approval; a tollkeeper was to be appointed and tolls applied "to the preservation of the

bridge" and the upkeep of the turnpike, provided that "all persons who subscribed to the building of said bridge shall not be charged tolls." On April 17, 1876, $75 was levied for Henry Saunders, Jr., to be spent by him "on the approaches to the bridge" on the turnpike over Goose Creek.

Though records have not survived, the Goose Creek bridge built and maintained by Henry Saunders at the county's behest may have stood without replacement until the extraordinary flash flood of early June 1889. This rainstorm, which destroyed numerous bridges throughout northern Virginia, was the same which occasioned the infamous Johnstown Flood. In Loudoun County, the unexpected freshet wrought havoc along the upper Potomac, Little River, Catoctin Creek, and Goose Creek. The destructive toll included the complete washout of the bridge carrying the Leesburg and Alexandria Turnpike; a Leesburg Mirror article entitled "Unprecedented! The Freshet of 1889; Bridges Washed Away..." detailed the bridge's dramatic demise:

> Lent's Mill, a moderately sized frame structure, was swept away bodily and floated downstream until it came into contact with the bridge on the Leesburg and Alexandria turnpike, about four miles east of this town [Leesburg]. The bridge resisted for awhile, but the weight of the mill, the accumulation of floating timbers, and the rush of water was too much for it, and Saturday morning it was lifted from its piers and floated several miles below until it finally rested on Lowe's Island [in the Potomac].

The floating of the Goose Creek bridge down Goose Creek may indicate that it was a timber structure and possibly a covered bridge. On June 10, 1889, within days of the flood, the Loudoun County Board of Supervisors expeditiously moved to restore the Goose Creek bridge and six other lost or damaged spans throughout the county (the bridges included one at Waterford across the "Katoctin", one at Hillsboro (Gavin Factory) across a Catoctin Creek branch, one over the Catoctin in the Lovettsville District on the road from Lovettsville to Point of Rocks in Maryland, one at Circleville on the road from Lincoln to Philomont across the south branch of Beaver Creek, one at Guinea on the road from Lincoln across the same stream, and the repair of a bridge over Goose Creek on the Snickersville Pike near Moundville). The Board resolved that "proper steps should be taken in the County Court" for "the proper erection of bridges" at each place where a span was destroyed by the floodwaters. The June 13, 1889, issue of the Leesburg Mirror reported that the Board also appointed a Bridge Committee, consisting of George F. Eamich, Chairman (also chair of the Board of Supervisors), F.W. Smith, E.G. Caufman, F.M. Carter, Thomas B. Smith, N.B. Peacock, and P.W. Carper; the committee was to "receive proposals for rebuilding all of said bridges."

Unfortunately, no county records have survived to detail the 1889 proposal or bidding process for construction of the bridge carrying the Leesburg-Alexandria Turnpike over Goose Creek. Loudoun County historian John G. Lewis, however, found through oral histories and contact with Virginia Department of Transportation staff that the current Bridge No. 6051,

presently carrying State Route 673 over Catoctin Creek, was originally erected to carry the Leesburg Turnpike over Goose Creek east of Leesburg. Lewis's conclusion is buttressed by the two surviving date plates of Bridge No. 6051, which list the 1889 Bridge Committee as well as Alfred Stanton, appointed during the late 1880s to serve as Loudoun County's first professional county surveyor. Other references from official records also strongly indicate that prior to 1900 a metal truss bridge carried the turnpike across Goose Creek. On May 19, 1899, the county Board of Supervisors ordered that all "iron bridges" in the county be painted; on July 24 of the same year, the board specifically appointed P.W. Carper (a member of the 1889 Bridge Committee) and E.F. Burch to "examine and view" the bridge over Goose Creek on the Leesburg Turnpike to determine if the bridge required repairs.

The Loudoun County Board of Supervisors' decision to make Bridge No. 6051 a Pratt through truss bridge was an action characteristic of county and municipal engineering practice during the late nineteenth century. Hundreds of metal truss bridges had been erected in the nation by the 1880s, and many more hundreds would be built in subsequent decades. In his 1908 handbook, The Design of Highway Bridges and the Calculation of Stresses in Bridge Trusses, the well-known consulting engineer and civil engineering professor Milo S. Ketchum offered a succinct definition of the truss:

> A truss is a framework composed of individual members so fastened together that loads applied at the joints produce only direct tension or compression. The triangle is the only geometric figure in which the form is changed only by changing the lengths of the sides. In its simplest form every truss is a triangle or combination of triangles.

The basic components of a simple metal truss include top and bottom chords, web members characterized as verticals or diagonals and connected to the chords at joints, the portals, stringers, floor beams and deck. The top and bottom chords, the verticals, and the diagonals are the structural members that carry the loads exerted on the superstructure and transmit them to the sub-structure. The particular arrangement of the chords and the web members determines the specific truss type. The portal is the space of a truss which forms the entrance to the bridge, while the stringers consist of the longitudinal members, placed parallel to the direction of traffic, which transmit the highway deck loads to the floorbeams. These are placed transverse to the direction of traffic in order to convey the deck loads to the bridge trusses. The floor system provides direct structural support for the loads caused by vehicular traffic. The truss generally rests on piers or abutments at points designated as bearing seats.

Truss bridge design was greatly advanced by the sixteenth century Italian architect, Andrea Palladio. Although Palladio built a number of bridges using the truss, and included his designs in his architectural treatise, his discovery received little attention until American engineers began to use the form in the first half of the nineteenth century. Truss bridges were initially constructed of wood; cast iron truss bridges were first erected during the 1840s

along the route of the Erie Canal. Though timber was generally in plentiful supply, the limited longevity of untreated wood necessitated frequent replacement. At first deterred by the higher cost of iron, early bridge builders gradually made the shift from wood to iron, with many transitional structures featuring iron rods solely for tension members and wood for the remainder of the truss.

In 1847, the renowned bridge builder, Squire Whipple, noted that cast iron, which fractures on impact and is less than ideal for carrying tensile loads, was desirable for use in compression members, while wrought iron, being ductile and not brittle, was better suited for tensile members. By 1850, rolled wrought iron shapes were becoming more widely available, and increasing numbers of bridges were being built of iron. After the Civil War, larger bridge companies proliferated, and between 1890 and 1910, the greater tensile strength of structural steel led to its ascendancy over wrought iron, despite the latter's superior resistance to corrosion.

A wide variety of truss types was eventually developed by the early twentieth century. One of the most important and popular was the Pratt truss, patented by Thomas and Caleb Pratt in 1844, and built from the middle of the nineteenth century and well into the twentieth century. The Pratt truss has its vertical members in compression while its diagonal members resist the tensile force. By 1910, Pratt through trusses (where the top chords are connected with lateral bracing and the deck is located slightly above the bottom chord) were available in a number of variants, including the Parker truss (having a polygonal top chord), the Camelback truss (a Parker truss with a polygonal top chord of exactly five slopes), and the Pennsylvania (or Petit) truss, a Pratt or Parker truss with subdivision of the panels by an auxiliary framework of sub-struts. Bridge engineer and historian J.A.L. Waddell observed in 1916 that the Pratt truss was the most commonly used truss type for spans under 250' in length, noting that "nearly all trusses of ordinary span lengths are being designed of the Pratt or Petit type."

Like other metal truss bridge types, the Pratt truss could be fabricated at a shop to specifications provided by a customer, then shipped to the site and erected on abutments with the aid of markings on the members. During the late nineteenth and early twentieth centuries, numerous bridge companies published catalogs of their structures, along with order forms and detailed instructions on how to determine which bridge type was suitable for a given site. Although built-up members fabricated at the shop were riveted, the initial difficulty of riveting in the field led to the widespread use of pin connections assembled at the site. Resembling large metal bolts with threads on both ends, pins were inserted through holes drilled through, or welded to, the members and capped on both ends with hand-tightened nuts. Although pins allowed for speedy erection and easier analysis of stresses in a truss, they were also susceptible to loosening, especially when the vehicular traffic was heavy and fast-moving. The development of portable pneumatic riveting systems in the last decade of the nineteenth century led to the gradual abandonment of pin connections, especially on larger bridges.

Though no records have survived concerning the decision-making process for Bridge No. 6051, a circular metal plate affixed to one inclined endpost of the bridge indicates that the Bridge Committee appointed in 1889 by the Loudoun County Board of Supervisors chose the Variety Iron Works of Cleveland, Ohio, to fabricate and build the truss. The Variety Iron Works Company was incorporated in 1866 with a capital stock of $60,000 and increased its capitalization to $200,000 in 1886. The 1888 directory The Industries of Cleveland noted that Variety Iron Works fully lived up to its name, manufacturing "steam boilers of all kinds (marine, locomotive, stationary and portable)" as "a specialty in which the works have achieved deserved fame", but also making "a general line of plate, sheet, wrought and cast iron work" including tanks, stills, smokestacks, breeching, forgings, machinery, shafts, pulleys, hangers, light and heavy castings, shaking grates, Butman fire fronts and automatic doors, railroad crossings, frogs, switches, switch stands, track supplies, and tie-bars. Variety's main plant, at Scranton Avenue and Carter Street in Cleveland, burned during the city's great fire of 1884, but was rebuilt "on a much more extended scale" making the firm "one of the largest, completest and most comprehensive boiler works, machine shops, and foundries in the country."

In 1888, the company was led by L.M. Pitkin, President, and F.L. Chamberlin, Secretary; Pitkin "had personal supervision of the works." The firm also owned the Cleveland facing mills and was ready to fill orders for seacoal, charcoal, stove plate facings, foundry supplies, crucibles, shovels, steel and brass riddles, molders' tools, fire brick, and clay. A work force of 220 labored at Variety in 1888; by 1893, the total number of workers was 350. Research indicates that the company expanded into fabrication of metal truss bridges after the main plant was rebuilt in the wake of the fire of 1884.

The 1888 industrial directory observed that "the company has recently purchased the Buckeye Bridge and Boiler Works, at Hamilton street near Case Avenue, and are already engaged in building bridges." Reflecting the firm's foray into bridge building, a third key company officer in 1893 was Charles F. Lewis, the firm's chief engineer and superintendent. An 1898 Engineering News advertisement noted that Variety Iron Works then worked in the "three B's: bridges, buildings, and boilers." Iron and steel directories of the period indicate that the Variety Iron Works was active in the manufacture of bridges from 1888 through at least 1901; no records have been found indicating the date when the company ceased operations.

No records have been located concerning the design and construction of Bridge No. 6051 by the Variety Iron Works; a search of all likely archives and official repositories was conducted to locate surviving construction plans and drawings, but no such items were found. Loudoun County Board of Supervisors records indicate periodic interest in maintenance of the bridge prior to 1932, when upkeep and repair of all roads in the county was taken over by the Virginia State Department of Highways (predecessor to the Virginia Department of Transportation). On February 13, 1906, C.A. Ellsmore, Commissioner of Roads for the county, reported to the Board of Supervisors that the Goose Creek Bridge "on

the Leesburg and Georgetown Pike" was in need of repairs. The board appointed A. Lynn, J.W. Virts, W.H. Clemens, E.L. Norman, and W.C. Russell to view the bridge and determine if repairs were justified. The viewers examined the span on March 6, 1906; on May 29, 1906, commissioners were appointed to contract for repair of the bridge. On July 24, 1916, the counsel for the Washington and Leesburg (a successor to the Leesburg and Alexandria, or Leesburg and Georgetown, turnpikes), alerted the Board of Supervisors to the fact that the "iron bridge spanning Goose Creek" was "in need of repairs." The board, however, was advised by the county's counsel that it had "no control over said road or bridge" and hence was under no obligation to repair the bridge. This derived from the formal takeover of the road, several years before 1916, by the turnpike company, which hoped to revive the flagging toll collection on the pike.

At 159 feet in length, Bridge No. 6051 is one of the longest surviving late nineteenth century metal truss bridges in the state. Virginia Department of Transportation files consulted by Loudoun County historian John G. Lewis during the late 1970s (but no longer in existence) indicated that the bridge carried the Leesburg Turnpike over Goose Creek until 1932, when it was replaced by a two-span, steel Warren pony truss (old Bridge No. 1002) built by the Virginia Bridge and Iron Company of Roanoke (this 1932 bridge still stands on old Route 7 in a small county-administered park, where it is bypassed by the present Route 7). Reflecting its versatility as a pin-connected metal truss, Bridge No. 6051 was dismantled and later reerected at its present site, carrying State Route 673 (Featherbottom Road) over Catoctin Creek. Though historic maps indicate that State Route 673 was in existence as early as the 1850s (the road first appears on Yardley Taylor's 1853 county map), a search of maps, county records, and other sources did not clearly reveal whether bridges may have carried the road across Catoctin Creek prior to the erection of Bridge No. 6051 at the site. Though Loudoun County Board of Supervisors records referenced bridges over the Catoctin on several occasions during the late nineteenth and early twentieth centuries (Dec 5-6, 1870, a bridge near the creek's mouth; June 10, 1889, replacement of three bridges washed out in the great 1889 flood, May 7, 1896, May 19, 1899, and May 25, 1900, various other bridges on the creek), no reference has been found to any bridge carrying state Route 673 over the creek.

Since 1932, Bridge No. 6051 has successfully performed that function and continues to stand as one of only two known bridges constructed by Variety Iron Works in Virginia. Bridge No. 6051 was listed on the National Register of Historic Places in December 1973.

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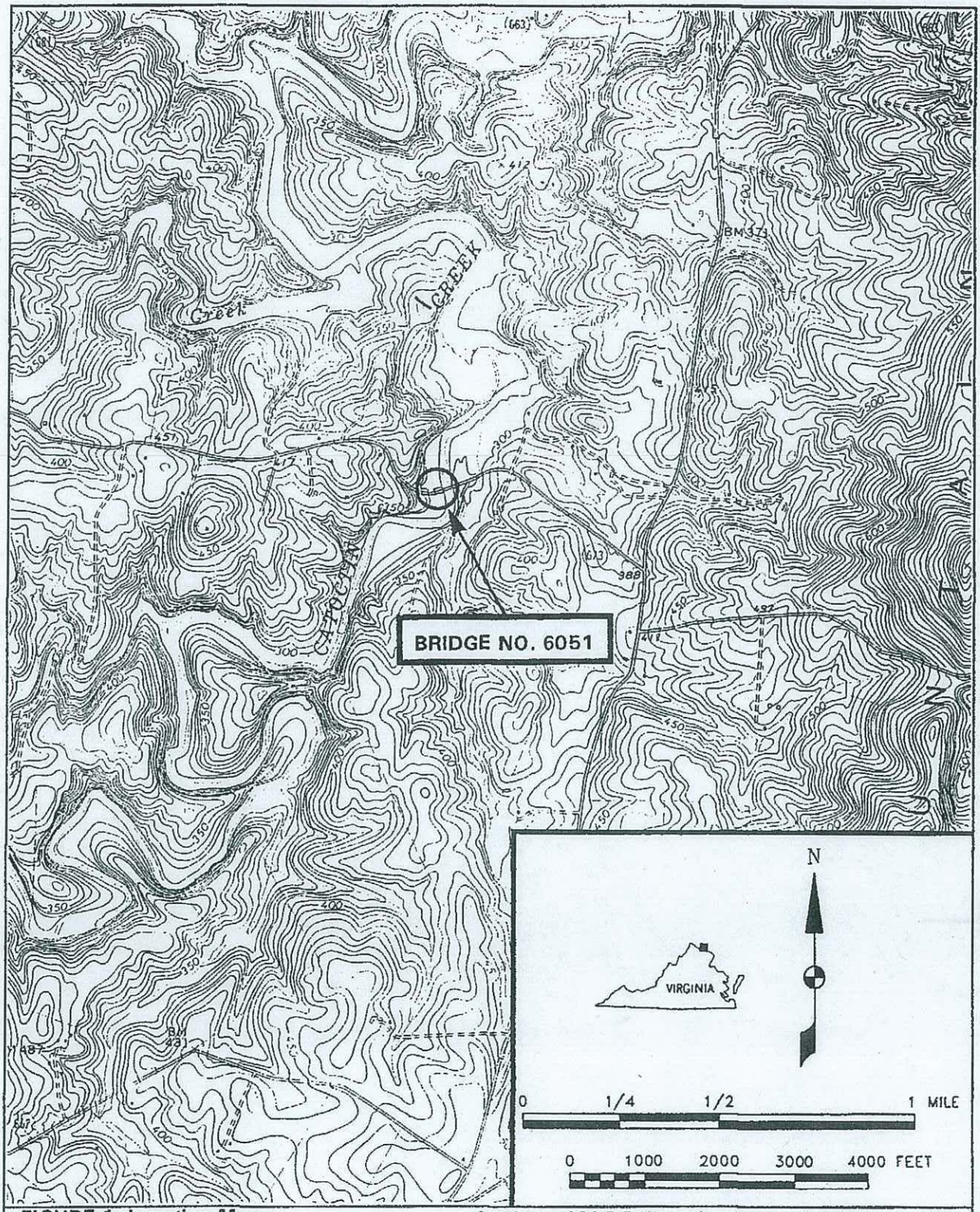

FIGURE 1: Location Map

SOURCE: USGS 7.5 Minute Quadrangle, Waterford, VA, 1970 (Photorevised 1974)