

**CONNECTICUT RIVER BRIDGE  
027 STRATFORD [NORTH]-BLOOMFIELD**

**NH Bridge ID: Stratford 029/206**

**CARRYING:** VT 105, Bridge Street  
**PRESENT NAME:** North Stratford –  
Bloomfield Bridge  
**DATE BUILT:** 1947  
**LAT/LONG:** 44.752737,-71.630731

**CROSSING CHRONOLOGY**

1852 Baldwin Bridge, wood cover bridge  
1893 Two-span lenticular truss bridge  
1947 Present bridge, deck plate girder  
2000 Present bridge rehabilitated

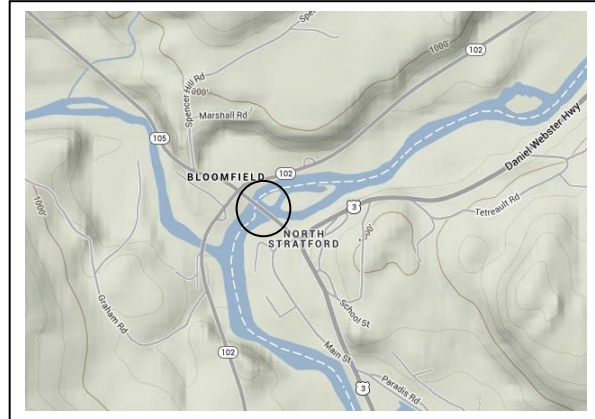


FIGURE 1: North Stratford – Bloomfield Bridge, built 1947. Downstream side from Vermont shore (Historic Documentation Company Inc. 2012).

**CROSSING HISTORY**

**First bridge:** In 1850, E.A. Baldwin and W.L. Baldwin obtained a charter from the New Hampshire state legislature to form the Baldwin Bridge Company, with the intention of opening a toll bridge linking North Stratford, New Hampshire to Bloomfield, Vermont. The first bridge, constructed by the Baldwin Company in 1852, was a wooden covered bridge.

**Second bridge:** In 1893, Fred N. Day, Stratford’s delegate to the state House of Representatives, committed himself to an intensive campaign to win state support for the construction of two bridges located within Stratford and spanning the Connecticut River. One of these, the downriver one of the pair, was to be an entirely new crossing positioned at the village of Stratford Hollow; the other one (the subject of this account) was to be a replacement for the existing Baldwin Bridge.

On March 9, 1893, Day won the passage of a bill authorizing the construction of two bridges over the Connecticut conferring free passage. The legislation empowered the town of Stratford “to take the franchise and so much of the property of the Baldwin Company, chartered in 1850, as may be necessary.” Day also ushered through the House and Senate a joint resolution which granted state funding for one-third the cost of the two bridges, not to exceed \$4,000, provided the remaining two-thirds be paid by the town through the normal assessment of taxes. In addition to the \$4,000 provided by the state, the town of Stratford approved by vote the obtaining of a loan of \$9,500 to be hired at four percent. The Vermont towns of Maidstone and Brunswick each contributed \$500, and Bloomfield contributed \$2,860. The Baldwin Company was paid \$750 “in damages” for its bridge, which was demolished.

The Berlin Iron Bridge Company of East Berlin, Connecticut, won the contract for the construction of the two Stratford bridges for the total amount of \$16,065.30. Work began in November 1893, and both bridges were opened to traffic without ceremony on or about May 1, 1894. The northerly or upstream bridge comprised two lenticular through trusses, also called parabolic trusses. The company’s promotional literature for 1898 described this bridge as a “Parabolic Truss Bridge consisting of two spans 130 feet long each with a roadway 18 ft. wide and one 6 ft. walk.”

The North Stratford bridge became obsolete during the 1930's as bigger and heavier trucks carrying logs and pulp exceeded its structural limits. The ever increasing flow of both cars and trucks through the center of town was creating traffic congestion and hazards to pedestrians. By 1941 plans were made by the New Hampshire Highway Department to erect a new bridge and approach roadways on a new alignment bypassing Main Street. However, the war effort during World War II and the need for recovery in the post-war period exerted economic pressure on the highway program, with the result that the design work for this bridge was evidently picked up and put down several times. Things came to a pass when, during the winter of 1946-1947, the New Hampshire Highway Department declared the old bridge unsafe for heavy traffic and closed it to all trucks. This action, which may have saved lives, presented a hardship for Vermont pulp and log haulers who regularly used the bridge. The Vermont Highway Department obtained a surplus WWII portable Bailey Bridge and erected it inside of the lenticular trusses to provide one lane of traffic. The spans of the Bailey bridge were built to essentially bear on the existing substructure, thereby eliminating nearly all the loading on the old bridge. Following completion of a new bridge, the Bailey bridge would be disassembled and removed.

**Third bridge:** The site selected for the new bridge was located approximately 200 feet upstream of the 1894 bridge, and a new street—“Bridge Street”—was laid out and built for this purpose. The design for the new span, a continuous deck plate girder bridge, with variable-section girders, was by engineer John H. Wells of the New Hampshire Highway Department. American Bridge Company of Ambridge, PA, fabricated the superstructure and erected the bridge, with its Elmira Heights, NY, plant fabricating the plate girders. The Gil Wyner Construction Company served as general contractor and built the substructure. Completed in 1947, the bridge project included 4,000 feet of approach roadway. In addition to replacing a bridge deemed unsafe for present day loads, the project was designed to eliminate two railroad crossings for the through traffic in North Stratford, bypass the main street of North Stratford to relieve congestion, and eliminate a dangerous railroad underpass at the Vermont end.

The present bridge comprises three spans. The center and primary span of 168' is flanked by two 126' spans for an overall length of 420' between the bearings. The bridge employs three riveted plate girders of varying depth spaced 12'-6" apart on centers to carry a 9" thick reinforced concrete deck. The superstructure is carried on concrete abutments and piers.



FIGURE 2: North Stratford Lenticular Truss Bridge, built 1893. Photo dated October 3, 1922, showing upstream side from Vermont shore (Storrs).



FIGURE 3: North Stratford Lenticular Truss Bridge, built 1893. Photo dated October 3, 1922, Vermont end, looking to New Hampshire (Storrs).



FIGURE 4: North Stratford Lenticular Truss Bridge, built 1893. Photo dated September 13, 1941, showing New Hampshire end, looking to Vermont (NHDOT 1941).



FIGURE 5: North Stratford-Bloomfield Bridge, showing construction of continuous steel girders in 1947 (NHDOT 1948).

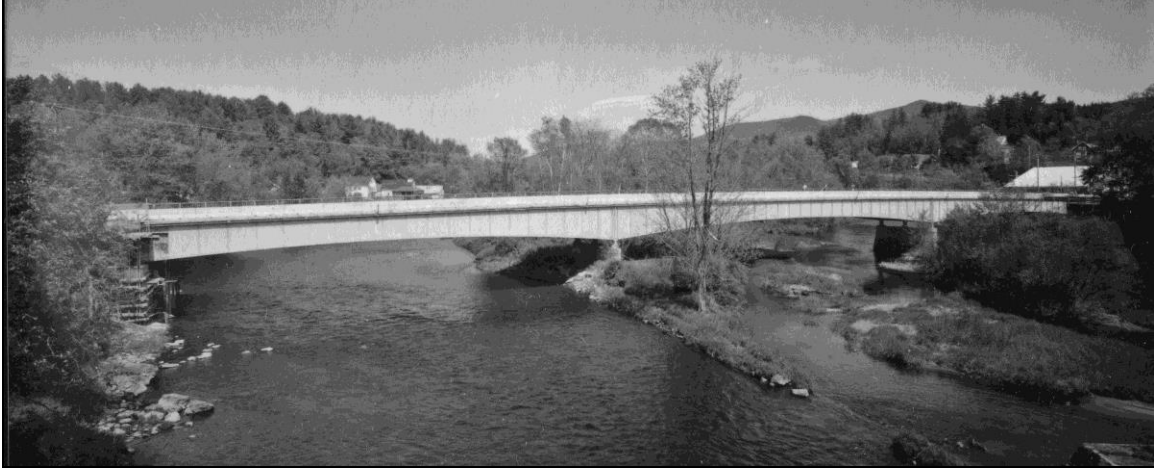


FIGURE 6: North Stratford-Bloomfield Bridge. Downstream side from Vermont shore (Casella 2000).

## **BIBLIOGRAPHY**

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John Storrs Photograph Collection. Located at New Hampshire Division of Historical Resources, Concord.

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