CONNECTICUT RIVER BRIDGE 028 COLUMBIA-LEMINGTON

NH Bridge ID: Columbia 077/140

CARRYING: Columbia Bridge Road

PRESENT NAME: Columbia Covered Bridge

DATE BUILT: 1912

LAT/LONG: 44.853007,-71.551638

CROSSING CHRONOLOGY

1799	Ferry begins operation
c.1820	First toll bridge built
1840	Bridge destroyed in freshet; ferry resumes
1844	Second bridge built
1892	Third bridge, covered with toll, built

1911 Bridge destroyed by fire1912 Present covered bridge built

as free crossing

1981 Covered bridge rehabilitated

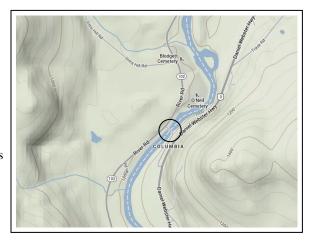




FIGURE 1: Columbia Covered Bridge, built 1912. Upstream side from Vermont (Historic Documentation Company Inc. 2012).

CROSSING HISTORY

Ferry crossing: Elihu DeForest received a charter from the New Hampshire legislature in 1799 to operate a ferry here.

First bridge: The Columbia Union Toll-Bridge Company acquired the crossing right and built a toll bridge around 1820. In 1840, a freshet "swept away" the bridge. The ferry resumed operation.

Second bridge: In 1844 the company constructed a second bridge of unknown type.

Third bridge: In 1892 the Columbia Union Toll-Bridge Company built a single-span covered bridge to replace the older bridge. This third bridge burned in 1911.

Fourth bridge: The towns of Columbia and Lemington erected the present covered bridge as a free crossing in 1912. Bridge engineer Charles Babbitt, who also had experience with ironworks and the fabrication of iron bridges, designed the structure. Babbitt also designed the similar covered bridge at Mount Orne, constructed in 1911. These two spans were the final covered bridges built for public highways in New Hampshire or Vermont. A relatively late built specimen of a covered bridge of substantial length, 146 feet long, the Columbia Bridge is an example of the Howe wood-and-iron truss type. The original structure of 1912 included vertical elements of iron in the trusses, i.e., paired tension rods connecting the top and bottom chords of adjoining wood truss members and serving to increase the overall structure's lateral rigidity. The bridge rests on the stone abutments originally built for the earlier bridge; the abutments were faced with concrete as part of the construction of the 1912 bridge. This covered bridge is said to have been built with its south side completely sheathed in vertical board as typical, and its north side covered for just the lower half of the superstructure, for reasons unknown. It has remained in that configuration throughout its century-plus history.

In 1976, the Columbia Bridge was listed on the National Register of Historic Places. In 1981 the bridge had the benefit of a thoroughgoing rehabilitation by NHDOT. Many members were replaced. Another extensive repair program was undertaken in 2009. Inspections since 2006 had shown steadily advancing deterioration. In this most recent project, the DOT team replaced several structural truss timbers, many of the roof rafters, and all of the wooden bearing blocks in the truss, and also replaced all of the iron tension rods with galvanized steel ones (painted black to resemble the original wrought iron).

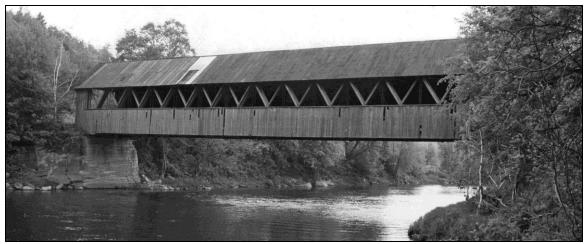


FIGURE 2: Columbia Covered Bridge, built 1912. National Register Nomination photo, 1976 (Henry 1976).

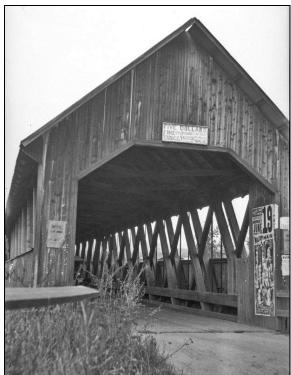


FIGURE 3: Columbia Covered Bridge. New Hampshire end shown October 2, 1922 (Storrs).



FIGURE 4: Columbia Covered Bridge. National Register photo, 1976, of Vermont end (Henry 1976).



FIGURE 5: Columbia Covered Bridge, built 1912. National Register, 1976, showing interior truss framing before rehabilitation in 1981 (Henry 1976).



FIGURE 6: Columbia Covered Bridge, built 1912. Downstream side from Vermont (Photo by Jerry Zoller, NHDOT).

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