CONNECTICUT RIVER BRIDGE 013 LYME-THETFORD

CARRYING: East Thetford Road, VT 113 **PRESENT NAME:** East Thetford Bridge

DATE BUILT: 1937

LAT/LONG: 43.812172,-72.182901

CROSSING CHRONOLOGY

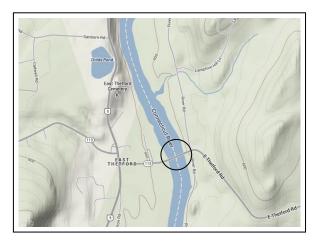
c.1780 Ferry established.

1840 Covered bridge of Long truss design1896 Three span steel Pratt truss replaces

covered bridge destroyed by flood

1936 Pratt truss bridge destroyed by flood

1937 Two-span Parker truss (existing today)



NH Bridge ID: Lyme 053/112



FIGURE 1: East Thetford Bridge, downstream side (Historic Documentation Company Inc. 2012).

CROSSING HISTORY

Ferry crossing: The original towns of Lyme and Thetford, located on opposite sides of the Connecticut, received their town charters from the provincial legislature of New Hampshire in 1761. A ferry, located at the approximate location of the present bridge, was established by the 1780s, operated by the Gilbert family. Colonel Thomas Gilbert was the earliest known proprietor. The Gilberts owned the ferry rights, but apparently other individuals usually ran the operation; the 1805 town map of Lyme referred to it as "the ferry that Blanshard keeps."

First bridge: In 1838, ferry proprietor Thomas Lathrop Gilbert joined with partners Beza Lantham, David Churchill, Asa Shaw, and Thomas Perkins formed the Gilbert's Bridge Company, which was incorporated by the state legislature. Later that year, the partners enlisted noted bridgewright Horace Childs of Henniker to construct a covered bridge of Long truss design. Childs was a cousin to Stephen Long, a US Army colonel and developer of this truss form. The bridge was completed in 1840, at a cost of \$7,637. Around 1850, the Connecticut & Passumpsic Railroad opened its line through East Thetford; the availability of the rail service on the west bank led to a desire on the part of neighboring New Hampshire residents for the bridge to be made free of toll. A petition to the town of Lyme in 1863, for the town to acquire the bridge and free the crossing, was not approved, however. By 1894 the condition of the bridge had deteriorated severely, and the town of Lyme determined on acquisition of the crossing right, authorizing a committee to consider design-and construction of a new structure on the existing abutments. The committee moved slowly in its deliberations, submitting a report on February 15, 1896, recommending a contract with the Canton Bridge Company of Canton, Ohio, to build an iron bridge. Just sixteen days later, on March 2, high water and ice carried the covered bridge away.

Second bridge: A three span steel truss bridge was completed in 1896 to replace the covered bridge. It was built by the Canton Bridge Company of and consisted of three pin-connected Pratt truss spans, resting on stone abutments and piers. The central span was 134 feet in length, flanked by end spans each measuring 131 feet long. The total cost for the construction was \$13,457. In the Great Flood of 1936 the center span was carried away, and in the aftermath of the disaster the decision was made to utilize the federal Works Progress Administration's Flood Relief funding to replace the entire structure with one capable of carrying modern traffic.

Third bridge: The third and present bridge at this location, erected in 1937, is a two-span high Parker truss designed by Clifford Broker and Gordon R. Whittum of the New Hampshire State Highway Department. Both Broker and Whittum were graduates of the Worcester Polytechnic Institute. Broker was the main designer for this bridge, which was one of at least 25 bridges for which he was the primary designer for the department during 1933-1945. The two 232'-long spans were fabricated by the American Bridge Company and erected by the O.W. Miller Company for a total contract price of \$98,805.46. The new concrete piers and abutments were set on steel pilings and protected with stone rip rap to protect against undermining by future floods. The bridge is New Hampshire's longest Parker Truss bridge still in service, one of many constructed by the state as replacements to bridges lost in the 1936 flood.

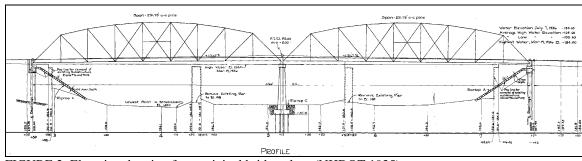


FIGURE 2: Elevation drawing from original bridge plans (NHDOT 1935).

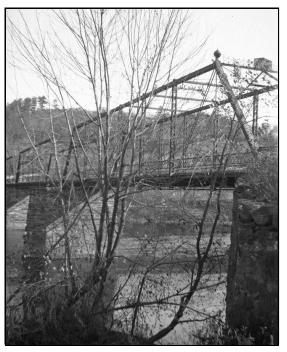


FIGURE 3: East Thetford Bridge, 3-span, pinconnected Pratt truss built 1896. View of upstream side from Vermont in 1922 (Storrs 1922).



FIGURE 4: East Thetford Bridge, built 1896 by Canton Bridge Co. Vermont portal and deck view to New Hampshire in 1922 (Storrs 1922).



FIGURE 5: East Thetford Bridge, Vermont approach, New Hampshire Highway Department inspection in 1942 (NHDOT 1942).



FIGURE 6: East Thetford Bridge, downstream side from Vermont (Historic Documentation Co., Inc. 2012).

BIBLIOGRAPHY

Bacon, Edwin Monroe. *The Connecticut River and the Valley of the Connecticut: Three Hundred and Fifty Miles from Mountain to Sea.* New York: G.P. Putnam's Sons, 1906.

Hooper, Carol, and Lynne Monroe. NHDHR Inventory Form: *Lyme-East Thetford Bridge* (053/112), LME0001, April 2014. On file at New Hampshire Division of Historical Resources, Concord.

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

NHDOT Bridge Card, Lyme-Thetford 053/112, 1942. On file at NHDOT, Concord.

NHDOT Bridge Drawings, Lyme-Thetford 053/112, 1936. File Location No. 1-14-2-5. On file at NHDOT, Concord.

Report of the Bridge Commissioners of the State of New Hampshire. Manchester: State of New Hampshire, 1906.