

The Award-Winning Prowse Memorial Bridge is Available for Re-location

The NH Department of Transportation is offering¹ the Ash Street Bridge for re-location and re-use to any interested party, pending they move, re-install and preserve the bridge.

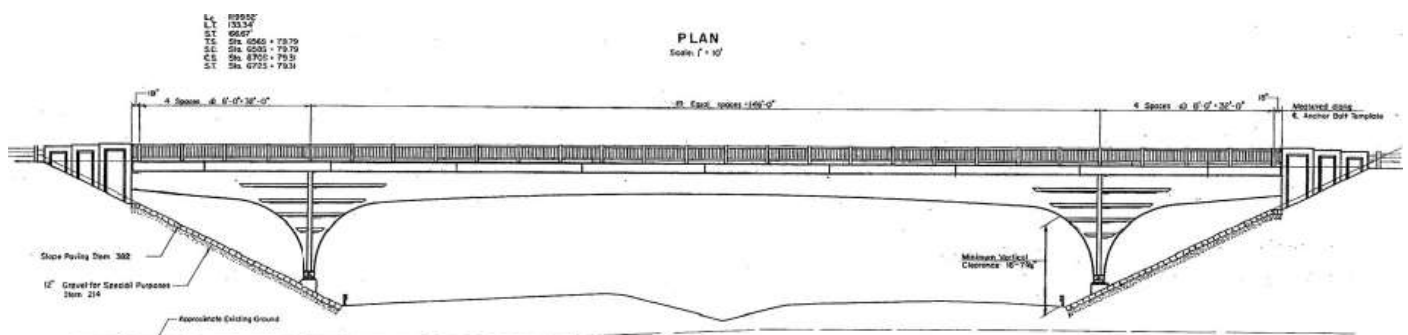
History and Significance of the Bridge: The 1962 Ash Street Bridge used innovative technology to span Interstate 93 in a single span, with no pier in the median. Its steel rigid frame is composed of five frames or bents designed to function as a series of parallel two-hinged rigid frames. Its design utilizes steel cutting and innovative welding technology to create each frame as a sculptural shape reflecting its internal stresses and to bring together a few large structural elements. The bridge reflects the post-World War II initiative for highway bridge designers to produce connections through welding rather than riveting technology. This technology was rapidly adopted for the production of long bridge stringers, permitting the construction on continuous stringer bridges rather than utilizing built-up plate girders. A prototype design for the bridge won nationally recognized NHDOT designer Robert Prowse a national prize in 1959, and the completed span received a design award from the American Institute of Steel Construction in 1964.



(Credit: Prowse Family Papers, Private Collection, Concord, NH).

FACT

This bridge was the first known example of all-welded steel rigid frame technology used along the interstate Highway System or on primary road systems in the United States.



¹ 23 U.S. Code Section 144 requires any state that “proposes to demolish a historic bridge for a replacement project...shall first make the historic bridge available for donation...”

Bridge Description: The bridge is a steel rigid frame structure composed of five parallel and nearly identical frames or bents. The total length of the bridge is 216'-0" and has an opening of 146'-0". The frames are connected laterally to one another through a series of welded steel X-shaped cross frames. These are affixed to the webs of each frame at varying intervals, increasing from about sixteen feet at the ends of the bridge to twenty feet near the center. The two outer frames on each side of the bridge are further joined by welded horizontal lateral braces. The web of each frame is further reinforced by a series of vertical 6" x 3/8" stiffener plates welded at right angles to the webs at varying intervals (except on the exterior faces of the outer frames). There is no lead paint on the bridge



(Credit: NH Historic Property Documentation, Charley Freiburg)

What you need to know: For those interested in re-using the bridge, for legal reasons you will need to purchase it for \$1.00 minimum. You will be responsible for moving, re-erecting, rehabilitating and maintaining the bridge. The bridge will be carefully dismantled and stored at a pit in Derry. While it is encouraged that the new bridge location use all five bents, it is not required. The sale of the bridge will include preservation covenants for a minimum of 10 years.

Still interested in buying the bridge! Please submit your letter of interest to the NHDOT (contact information below) and include the following:

1. Proposed plan for the use of the bridge
2. Location map, site plan, and photos of the proposed location
3. Specific plans for hauling and re-erecting the bridge
4. Specific information pertaining to how the rehabilitation and maintenance of the bridge will adhere to the *Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*. Read more about those Standards here: <https://www.nps.gov/tps/standards/rehabilitation.htm>.

NHDOT Contact Information:

Wendy Johnson, Project Manager, wendy.johnson@dot.nh.gov, 603-271-2171

Jill Edelmann, Cultural Resources Manager, Jillian.Edelmann@dot.nh.gov, 603-271-7968

Save a piece of New Hampshire's engineering history!