

Neshanic Station Lenticular Truss Bridge
State Route 567 spanning South Branch
of Raritan River

Neshanic Station,
Somerset County,
New Jersey

HAER No. NJ-31

HAER
NJ,
18-NESTA,
1-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Washington, DC20240

HAER
NJ.
18-NESTA,
1-

HISTORIC AMERICAN ENGINEERING RECORD
NESHANIC STATION LENTICULAR TRUSS BRIDGE
HAER No. NJ-31

Location: Spanning South Branch of Raritan River, Neshanic Station, Somerset County, New Jersey

USGS 7.5 Minute Series - Raritan, NJ
UTM Coordinates: 18.523170.4484050

Dates of Construction: 1896

Engineer/Builder: William O. Douglas, patentee (1878); Berlin Iron Bridge Company of East Berlin, Connecticut, builder.

Present Owner: Somerset County Board of Freeholders
County Office Building
Somerville, New Jersey 08876

Present Use: Bridge to be rehabilitated to vehicular use (H-15 loadings).

Significance: Neshanic Station Lenticular Truss Bridge is significant because it was built by a prominent 19th century bridge building company; the lenticular truss, of which it is an example, is an unusual truss type compared with other more common trusses such as the single intersection Pratt; and it is the only bridge of its type left in the State of New Jersey. Berlin Iron Bridge Company was the exclusive builder of the elliptical or parabolic truss. Though the design was patented in 1878 by an American, William O. Douglas, the truss form was used as early as 1857 in Germany and 1854 in England. Douglas may have developed this design without knowledge of the German or English bridges. Nonetheless, it was his patent and the Berlin Iron Bridge Company that introduced this type of bridge to the United States. In 1889, the company claimed to have built over 90% of the iron highway bridges in New York and New England during the ten previous years. In the same illustrated catalog, it lists 664 bridges that were erected in twelve states.

Neshanic Station Lenticular Truss consists of two 140'-7-1/2" spans. Plans for stiffening the bridge

Significance, cont'd.

were proposed by the Board of Freeholders in 1932. This altered the appearance of the portals and added new steel sections to other structural members, but did not significantly change the bridge's appearance. The present proposed rehabilitation will not alter the appearance either.

Transmitted by:

Eric DeLony, Principal Architect, HAER, 1983

ADDENDUM TO
NESHANIC STATION MENTICULAR TRUSS BRIDGE
(NESHANIC STATION BRIDCE)
(BRIDGE C 0601)
State Route 567, Spanning South Branch of Raritan River
Neshanic Station
Somerset County
New Jersey

HAER No. NJ-31

HAER
NS,
18-NESTA
/-

XEROGRAPHIC COPIES OF COLOR TRANSPARENCIES

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
U.S. Department of the Interior
Washington, D.C. 20013