ODOT’s Historic Bridge Riveting Guidance

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In order to retain integrity of design, materials, workmanship, and original construction methods on National Register bridge projects, replacing the original rivets in kind may be preferable for historic accuracy.
ODOT Historic Bridge Riveting Guidance

Goals:

- Ensure that important design elements are preserved
- Expedite planning process
- Simplify contract bidding for a specialized item
ODOT Historic Bridge Riveting Guidance

Public and agency review: FHWA, OSE, SHPO, OHBA

Available online Posted on Historic Bridges website

Used as a reference when planning and bidding on the restoration of riveted iron and early steel historic bridges.
In 1996, rivets were reinstalled throughout the entire structure in the restoration of the Zoarville Station Bridge. It’s an extremely rare example of a Fink thru truss, located at Camp Tuscazoar in Tuscarawas County.
Currently, rivets are being reinstalled at the end connections of the 1872 Lisbon Bowstring Arch pony truss. The Massillon Bridge Co. bridge had been in storage for 50 years and is now getting a new life as a pedestrian bridge at the Columbiana County Fairgrounds, crossing the Middle Fork of Beaver Creek.
RIVETED CONNECTIONS:
The connecting bracket between the existing floorbeams and the diagonal ties on the existing truss verticals was connected to the floorbeams with three rivets. These rivets are removed, new rivets of the same diameter and length shall be provided when re-attaching the connecting bracket to the floorbeam.

The contractor shall provide a riveting procedure to the engineer prior re-assembly.

It is estimated that 30 rivets will be required.

Payment for the riveted connections, including all labor and materials shall be included in Item 530—Special—Structure, Misc.: Truss Bridge Superstructure Rehabilitation.
Recommended Procedures:

- Removal
- Quality Control
- New Rivet Holes
- Preparation
- Installation
- Workmanship

And provides a sample list of contractors
ODOT Historic Bridge
Riveting Guidance
ODOT Reusable Bridges Webpage