



Project: Piano Bridge

Project Completed: 2012

Overview: Full in-kind repair and restoration of this historic metal truss bridge for continued vehicular use. Bach Steel was responsible for repair of existing steel, including heat straightening, hot riveting as needed for fasteners, pack rust removal as needed. Heat straightening work included the heavily impact-damaged portal bracing, bent bottom chord eyebars (a fracture critical member), and impact damaged lattice railing.



Bridge before restoration.



Bridge after restoration.



Reassembling the bridge.



Reassembling the bridge.



Reassembling the bridge.



Severely bent eyebar prior to being straightened.



Straightening an eyebar.



Riveting a cover plate.



Removing rivets from cover plate.



The portal bracing had extensive damage which was repaired.



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The portal bracing had extensive damage which was repaired.



Restored portal bracing.



A replicated section of a beam is welded on to an original section of beam.



A replicated section of a beam is welded on to an original section of beam.



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This detail shows a top chord section at the splice point. As originally built, this section was bolted to an adjacent section of top chord. Damage, clearly visible here, was what caused this bridge to be closed to traffic, initiating the restoration effort.



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Restored floor beam.



Using a cutting torch to remove rivets from a cover plate. Many contractors would have damaged the cover plate removing rivets in this manner, but Bach Steel knows how to do it without causing damage.



Cover plate after rivets were removed. Many contractors would have damaged the cover plate removing rivets in this manner, but Bach Steel knows how to do it without causing damage.



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Cover plate after a rivet was removed. Many contractors would have damaged the cover plate removing rivets in this manner, but Bach Steel knows how to do it without causing damage.



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