



**Mission:** to save the century-old, architecturally-rare, and historically-significant Schell Memorial Bridge across the beautiful Connecticut River in the storied town of Northfield, Massachusetts, and to restore the bridge as a critical trail link in the evolving biking, hiking, and recreational activity scene in the Massachusetts/New Hampshire/Vermont area.

Scientific assessments have now been made of the steel structure and the piers of Schell Bridge.

### The Steel

The Smith College Picker Engineering Program conducted, in consultation with two professional bridge engineers, a detailed study of the bridge.



While some of the steel of the bridge is badly rusted, especially below the deck, the Smith study concluded that repairs were quite feasible. Of the approximately 250 steel members, about 1/5 would need to be augmented or replaced, at a cost of about \$700,000, to restore a single lane (12') of the bridge. To restore the full 18' width of the bridge, about 1/3 of the members would need to be augmented or replaced, at a cost of about \$1,000,000. These costs do not include bearing replacement, old paint removal, and new paint, which would entail significant additional costs.

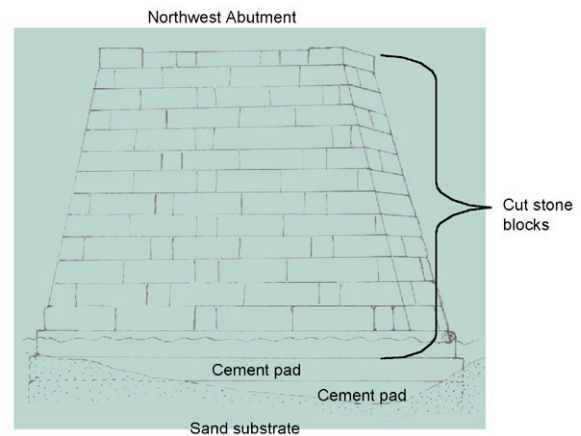
**Conclusion:** Based on information available to date, \$3-4 million could complete renovation of the bridge structure and bring it up to current code.

The Friends of Schell Bridge would like the opportunity to raise the necessary funds for such a rehabilitation, and subsequent ongoing maintenance, from private, state, and federal sources (no Northfield public funds). If you would like to support this effort by becoming a member, or to obtain more information, call 413-498-5539 or 413-498-4599, or write to Box 27, Northfield, MA 01360.

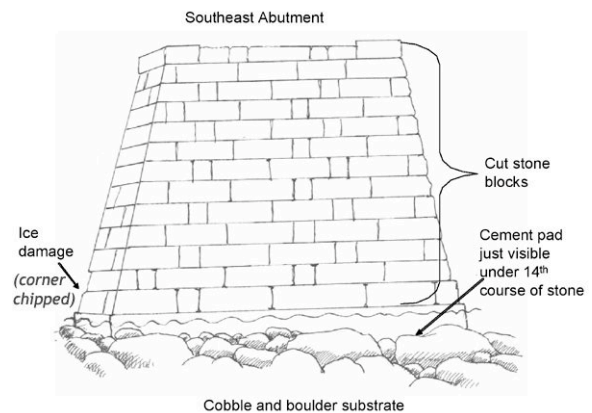
### The Piers

Another important link in the condition of the bridge is the basic support structure - the abutments on the two sides of the river. Each pier has 14 layers of large cut stones. The bottom layers rest on concrete pads. The west pier has a second concrete pad that extends into the sand bottom; the east pier concrete pad sits on a solid mountain of large boulders.

Divers Ed Klekowski and Steve Johnson of UMass, with extensive experience in CT River research studies, have video-recorded the underwater pier conditions. Below are sketches, and corresponding [comments](#), from their report:



"The concrete pads and stone block courses appear to be in very good condition. We detected no excessive wear or damage to this abutment."



"This abutment also appears to be in reasonably good condition. The only visual damage we found was on the upstream edge of the 12<sup>th</sup> and 13<sup>th</sup> courses ... probably caused by ice during spring freshets, and probably does not compromise the structural integrity of the abutment."

**Conclusion:** The piers are in great shape, and probably don't need any rehabilitation.