



INDOT Blast Drops 74-Year-Old Bridge

(Posted Nov. 24, 2015) INDOT blew it. We really did.

We blew up a truss bridge, via a controlled implosion, in Greene County on Oct. 15. To watch a video of the demolition, click [here](#).

The State Road 57 bridge, over the White River in Newberry, had been in service since 1941 along with a nearby overflow bridge. However, those bridges had been restricted to one lane with a 14-ton weight limit since 2009, when engineers became concerned about the aging bridge structures.

To replace those bridges, INDOT contractors built a steel-beam, seven-span bridge that was opened in late September just a few dozen feet downstream from the old one. The new bridge is 600 feet longer than its predecessor.



The old truss bridge (background) is about to be collapsed from a controlled implosion. The new bridge (foreground) stands dozens of feet away.

Two weeks after the new bridge opened, it was time to demolish the obsolete 74-year-old structure.

“All the vantage points near the old bridge were jammed with dozens of residents and out-of-towners to watch the event,” said Vincennes District Media Relations Director Jason Tiller. “It’s not every day that an old bridge with a rich history is blown up. After months of preparation, the demolition went off

without a hitch. It was definitely an event that everyone will remember for the rest of their lives.”

This was no ordinary demolition, though.

“I believe this was the first of its kind for INDOT,” said Vincennes District Project Supervisor Tom Brummett. “There was no true explosion. The structure dropped straight down and sat perfectly, whereas in the past, the bridges have been blown over on their sides and off the piers.”

This method was achieved by using copper tubes – cut at lengths of 10, 18 and 22 feet – which were

bent like corner molding. Each length was packed with RDX powder, and when the implosion charge was detonated, the copper fused to the structural steel and made a pure, clean-cut line.

“The ending was so perfect,” said Brummett. “I took great satisfaction in knowing that the daily coordination, cooperation and communication helped lead to that conclusion.”

Brummett, along with a demolition contractor, inspected the old bridge just before the implosion.

“I have been with INDOT for nearly 31 years, and all of the bridges that I have built are done with a passion that is rooted in my love for the history of bridge design and construction,” said Brummett. “So, while walking the old structure one last time, it reminded me of all the men who poured their blood, sweat and lives into making a structure that would change a community, leave a lasting monument, and provide for the state for 74 years.”

After the demolition of the truss bridge, Brummett helped inspect the span of the nearby new bridge as a precaution against possible debris or damage caused by the implosion. Within 15 minutes, traffic on the new bridge resumed.

“The new 35-foot-wide bridge has been a big hit,” said Tiller. “Motorists had to go in and out of town on a one-lane bridge with stoplights for more than six years. Now the stoplights are a thing of the past, and traffic is flowing smoothly. This is a positive change for them.”

The north support of the old truss bridge was left intact to serve as a habitat for the endangered Indiana bat. Monitors were set up to measure noise and vibration to guarantee protection of the bat habitat.

The old overflow bridge is closed and eventually will be taken apart.



Charge placements (left photo) are attached to the structural steel of the old bridge.

The new bridge (below photo) towers over its predecessor. To watch a video of the demolition, click [here](#).

