



CASE STUDY



HULCHER DEMOLISHES AND CONSTRUCTS BRIDGE IN A DAY

Scope

The railroad needed to have a 168-foot bridge demolished and reconstructed. Hulcher Services recommended a new approach that, if it worked, would see the job completed in a single 12-hour window, returning the stretch of track to full operation in less than half the time normally required for this type of project.

Solution

Meeting this challenge required substantial preparations. Hulcher crews first cleared trees and brush to create a road and large working area. They then laid out a timber mat pad for the crane to work from, pre-staged the bridge girders and crane and mobilized in the equipment for the job.

As the 12-hour window began, crews rigged a series of cables and pulleys on the bridge, attached to two sidebooms and a trackloader. Excavators strategically broke the pilings under the bridge, weakening the old structure so the sidebooms and trackloader could pull the entire bridge over. The excavators, trackloader and a dozer then removed the bridge debris. Demolition was completed in only two hours.

Construction began at one end of the bridge as the clearing continued at the other. As the crane positioned each concrete girder, two sidebooms delivered the next girder to be placed. Overlapping the girders' delivery and placement with sitework dramatically compressed the schedule. After the first girders had been installed, the railroad's crane began installing track panel, further compressing the schedule.

Outcome

Hulcher's part of the bridge construction was complete in less than six hours. This allowed the railroad to complete installation of the final track panels and ballast during the 12-hour window. The railroad was extremely happy with the speed and quality of Hulcher's work and plans to have Hulcher replace several more bridges in this manner.



KEY FACTS

PROJECT SUMMARY: Demolish and construct a 168-foot railroad bridge in 12 hours.

SCHEDULE MET: Substantial planning, advance site work, pre-staging and phase overlapping were critical to meeting this challenging schedule.

RAILROAD EXPERTISE: Hulcher's railroad training and experience allowed its crews to work seamlessly with railroad personnel, which was critical for meeting the deadline.

