



PROJECT PROFILE

Court Street Bridge

Post-Hurricane Evaluation and Recovery Efforts | Hackensack, NJ



CLIENT

Bergen County

BACKGROUND

Opened in 1908, Court Street Bridge—also known as the Harold J. Dillard Memorial Bridge—was constructed by R.F. Long and Company, a New York firm and prominent bridge contractor in Bergen County, New Jersey. The center-bearing swing span highway bridge crosses the Hackensack River between Hackensack and Bogota in Bergen County, New Jersey.

Hurricane Sandy did extensive damage to Court Street Bridge's electrical systems. WJE was called in by Bergen County to lead the recovery efforts for the bridge. WJE engineers were tasked with surveying and testing the electrical systems to determine the condition of the existing system, evaluate what damage had been caused, and determine what equipment could be salvaged for reuse.



SOLUTION

WJE determined that a proportion of the damaged equipment could be salvaged and prepared specifications and procedures for refurbishments. WJE engineers also tested the salvaged equipment and developed specifications for necessary replacement equipment. The refurbishment of the salvaged electrical equipment consisted of refurbishing motors—including rewinding and rebaking of the motor insulation—as well as the motor control equipment—including the replacement of motor starters; rewiring and replacement of control system relays and contactor coils; and the replacement of damaged enclosures, junction, and pull boxes.



In addition to the refurbishments and replacement of equipment, new cabling and raceways were reinstalled, equipment relocated, and the installation hardened to ensure system integrity and protection from similar future storm damage. The redesign work included relocation of equipment to increase their elevation and ensure they would remain above the revised one-hundred-year storm elevation under future catastrophic events.

