

## **Executive Summary**

The Roundhouse at Hazelwood Green  
Category C

Whitney, Bailey, Cox & Magnani, LLC designed the structural systems that transformed the 19th-century 10-bay roundhouse on the former J & L Steel Mill campus into a modern technology incubator.

The existing structure sat on the 178-acre campus along the Monongahela River. When Whitney, Bailey, Cox & Magnani, LLC first assessed the structural integrity of the Roundhouse in 2014, it was dilapidated, damaged, and, in many ways, dying a slow death after over 15 years of vacancy.

The 12-million-dollar adaptive reuse included extensive repairs to existing roof decking and framing, exterior brick walls, and steel columns. Existing roof decking and framing were closely examined with aerial lifts to determine where repairs were needed. Weather-damaged exterior brick walls and mortar joints were repaired/rebuilt as necessary. Many of the existing structural steel columns were corroding from the base up and had to be reinforced by cutting out the weakened sections and replacing or supplementing with new steel plates and/or rolled shapes. In many instances, the existing steel was not found to have deteriorated and need repair until the brick walls that encapsulated them were removed, requiring an on-call approach to rehabilitation.

Whitney, Bailey, Cox & Magnani, LLC also provided structural design for the addition of a new reinforced concrete second floor supported by concrete columns and micropyle foundations. The large volume of space within the building allowed for the expansion when additional square footage was required. The elevated structure provides an intriguing balance between the old and the new.

The new Roundhouse at Hazelwood Green is on track for LEED Gold Certification.