

Project profile Pillsbury A-Mill Complex

Facade Condition Assessment | Minneapolis, MN



CLIENT BKV Group

BACKGROUND

The A-Mill North was completed in 1882 and features seven floors above grade with a basement level and water tailrace tunnels below. Its foundations and exterior walls are constructed of Platteville limestone. The South Mill and Cleaning House, constructed between 1914 and 1918, are nine-story adjoining structures consisting of cast-inplace reinforced concrete frames with non-load-bearing brick masonry infill panels. The Red Tile Elevator, constructed in 1910, rises to a height of 190 feet above grade and consists of a five-story rectangular head house that caps a block of twenty-five 100-foot-tall storage silos. Topping the roof of the head house is the distinctive 23-foot-tall neon and red lettering sign advertising "Pillsbury's Best Flour." All three structures have heen decignated as National

WJE | ENGINEERS ARCHITECTS MATERIALS SCIENTISTS BKV Group retained WJE to perform a limited evaluation of the exterior facades of the historic Pillsbury A-Mill North, South Mill and Cleaning House, and Red Tile Elevators located at Main Street and 3rd Avenue SE. Symptoms of deterioration included the effects of 130 years of weathering and industrial wear, prolonged vacancy and neglect, and cladding materials, including Platteville limestone and terra cotta tile that presented complex and unique preservation challenges.



SOLUTION

WJE's scope of services included a review of the original building documents, close-up visual inspections of the exterior facades of the three historic buildings using industrial rope access systems and climbing techniques (rappelling), specifying and conducting vibration monitoring and controls during site excavation and demolition, and consultation during repair detailing and building envelope retrofit design. WJE provided architectural, structural and material science analysis and recommendations, allowing BKV to pinpoint repairs at specific areas of advanced facade deterioration while preserving significantly more of the historic material than would have been possible following a more general condition survey.