



PROJECT PROFILE

Ford Motor Company Building

Exterior Facade Evaluation | Indianapolis, IN



CLIENT

TWG Development, LLC (TWG)

BACKGROUND

The Ford Motor Company Building—originally completed in 1915 as an assembly facility—consists of a four-story main building with six one-story additions on the south and west sides. The north facade of the main building consists of a combination of brick with terra cotta accents. It originally consisted of a terra cotta cornice, which had been removed previously. Limestone and granite panels exist at the base of the north facade. The east and west exterior walls consist of exposed concrete framing. The south facade consists of multi-wythe brick masonry walls with exposed concrete floor slab edges on the east and west bays.

TWG acquired the property with plans to develop a multi-use building with commercial space on the first floor and apartments on the upper floors. TWG’s plans included restoring the historic facades of the building and opening the original interior atriums. TWG engaged WJE as the facade consultant for the redevelopment project.

SOLUTION

As the facade restoration consultant, WJE completed an evaluation of the exterior walls from grade, interior floor levels, roof levels, and a personnel lift. Investigative openings were reviewed by WJE to document the as-built configurations of the concealed conditions at the cornice, third-level lintel, second-level lintel, and the terra cotta water table at the second-floor line. Concrete and mortar samples were collected and tested by WJE to identify the causes of deterioration and specify the appropriate repair materials in the restoration design.

WJE’s facade restoration design included detailing of repairs to brick, concrete, and terra cotta masonry as well as a replacement cornice design with glass fiber reinforced concrete systems to replicate the original terra cotta cornice. Due to extensive deterioration of the steel lintels on the south facade gable, WJE designed rebuilding of the entire gable with new precast concrete lintels to span more than thirty feet over the southern window openings. A national team of WJE expert engineers and architects were assembled to expedite WJE’s design services to meet deadlines established by the design team prior to WJE’s engagement.

