

Champaign County Old Courthouse Renovation

Urbana, Illinois

Client: Champaign County
Architect: Isaksen Glerum Architects, Urbana, IL
Construction Manager: P.K. Demars., Champaign, IL



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Range of Services

- Feasibility study; preliminary design; design development,
- Construction documents; construction administration; observation and coordination

Project Overview

The existing three story courthouse renovation consisted of the conversion of the 100 year old building into office spaces and exhibit spaces.

Interior Renovation

The existing floor framing system in the old 38,000 GSF courthouse consisted of flat tile arches spanning between steel beams with lightweight concrete topping, image 1. Existing floor depths varied from 12-inches to 20-inches. The structural portion of the INTERIOR renovation included designing new lintels for new openings in the massive masonry walls to accommodate the revised architectural floor plan. The new wall opening sizes varied from 4-feet to 8-feet. Large floor openings at an existing open stair well at the second and third floors as well as a large mechanical opening at the third floor were infilled with new steel framing and concrete slabs. A structural planning exercise permitted the architect's idea of a new concrete block enclosed stair well from the first floor to the attic by removing a section of the old floor framing at the second and third floors. A new double level mechanical platform was created in the attic by the design of two new steel trusses spanning 35-feet. Three years preceding the major masonry renovation, a section of badly deteriorated 30-foot long upper west exterior brick bearing wall (image 2) was removed and replaced and the sagging steel roof framing at this location was plumbed and leveled. Image 3 shows the exterior side re-alignment of stone cornice and new steel back-up. Our office engineered and coordinated that effort. Continued on page 2.

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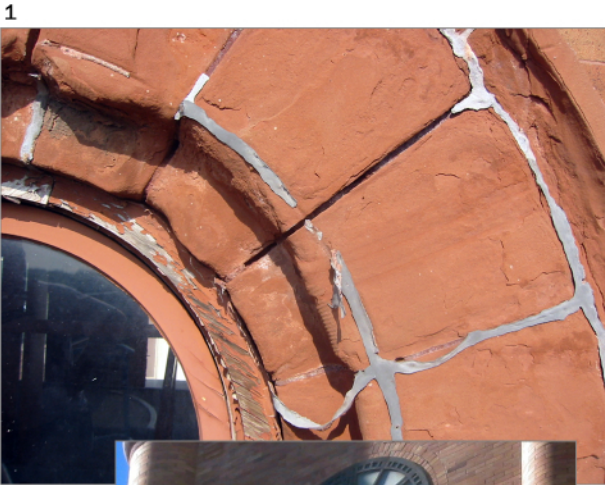
Exterior Renovation

Renovation was limited due to the project budget. The exterior historic masonry renovation focused on the upper tower window area where sandstone units were severely eroded (image 1) and some units had fallen out leaving large, open gaps in the wall.

Less eroded units were patched with a masonry mortar patch and strengthened with a spray consolidant application (image 2).

New curved cast stone units were added to replace severely eroded or missing units and window sills and lintels were replaced. See image 3.

Image 4 was taken during the punch list review after all items were cleaned, glazed, patched and re-pointed. Fractured turret pieces were replaced on the tower by crane. See images 5 and 6.



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