

Award of Excellence



EDGERTON CITY HALL RESTORATION PROJECT

Recognized for **Excellence** in the **Repair of Masonry Structures** – December 3, 2009
International Concrete Repair Institute – Great Plains Chapter



Structure characteristics:

The Edgerton City Hall Building is a two-story structure with a crawl-space level below the first floor. No existing plans were available at the time of the project however the date on the front of the structure states that the building was constructed around 1904. The area of structural concern was the foundation and exterior veneer in the South West corner of the building. Construction in this area consisted of cast-in-place concrete grade beams at the foundation level, multi-wythe load-bearing exterior brick walls and interior wood floor and roof framing. The project began in the middle of 2008 and was completed in January 2009 at a construction cost of \$87,000.

Problems that prompted repair:

Progressed separation of the exterior brick wall was occurring at the area of concern. This location had a visible crack that went completely thru the load-bearing wall. In addition, the foundation was in need of structural strengthening to prevent further movement of the wall system.

Repair system selected:

The repair system included removing the exterior sidewalk system to install seven 3 ½” diameter push piers to stabilize the existing concrete foundation system. These piers were installed approximately 7 ft to refusal. No lifting of the existing structure was required, only stabilization.

After the foundation was stabilized, the multi-wythe brick wall system was repaired at the location where the wall movement was occurring. One location required the use of a threaded rod tie-back system. Once the wall area was repaired, a carbon fiber fabric (MBrace 160) was installed on the interior face of the wall to provide additional structural strength to the wall system.



Special features of the Project:

The project was a comprehensive restoration project that included foundation stabilization as well as the use of a carbon fiber structural strengthening system. The significance of the repairs to preserve the historical structure, one that is listed on the National Historic Register, from further deterioration is a key element of the importance of this project.