



MAHONING COUNTY COURTHOUSE RESTORATION

CHALLENGE

DRIVEN BY THE NEED TO MAINTAIN THE PUBLIC'S SAFETY, SECURE THE BUILDING'S ENVELOPE AND PRESERVE THIS HISTORIC STRUCTURE, THE COMMISSIONERS NEEDED A SPECIALIZED TEAM TO COMPLETE THIS RESTORATION.

SERVICES

- Architectural Design
- Bidding Assistance
- Construction Documents
- Construction Administration

AWARDS



COMMUNITY REVITALIZATION
AWARD
Mahoning Valley Historical Society

COMMUNITY REVITALIZATION
AWARD - STATUES
Mahoning Valley Historical Society

2019 PRESERVATION MERIT
AWARD - MAHONING COUNTY
COURTHOUSE STATUES
Ohio State Historic Preservation
Office

MAHONING COUNTY COURTHOUSE RESTORATION

The architectural team of ms consultants, inc., Chamber, Murphy & Burge, Barber & Hoffman, and Incorporated (TAI) Roofing Consultants were commissioned by the Mahoning County Commissioners

to complete an assessment and restoration of the Mahoning County Upper Court House.

MAHONING COUNTY COURTHOUSE RESTORATION

Built in the early 1900s and listed on the National Register of Historic Places, the Mahoning County Courthouse is a grand example of Renaissance Revival style architecture. At 28,825 square feet in size, the courthouse was constructed to be the most prestigious courthouse between New York and Chicago.

Notable features include:

- Granite and terra cotta facades
- Four-story rotunda
- Elegant marble columns
- Opulent glass dome
- Impressive rooftop copper sculpture

During its more than 100 years, the terra cotta cornice, upper facades, and rooftop balustrades had never been restored and had fallen into disrepair. Pieces of terra cotta had fallen or were at risk of falling and water leaks were persistent within the building.

Driven by the need to maintain the public's safety, secure the building's envelope, and preserve this historic structure, the Mahoning County Commissioners hired ms consultants, inc. and subconsultants to assess and restore the courthouse.

This team's expertise combined the specialized architectural, historical, structural, and public contracting knowledge needed to guide the county through the design, bidding, and construction of this complex project.

Because the 108-year-old building is listed on the National Register, the team followed the Secretary of the Interior's Standards for the Treatment of Historic Properties guidelines. These guidelines encourage quality and appropriate rehabilitation. To meet the stringent standards, the team used materials and methods to match and preserve the historic integrity of the building.

ASSESSING THE HISTORIC COURTHOUSE

The team observed the building's existing conditions and documented their findings. It was determined that the building damage included:

- Progressive failure of terra cotta cornice and rooftop balustrades
- Rusting and failure of the structural steel brackets, rods, and channels supporting the terra cotta
- Missing terra cotta units
- Deterioration of steel beams supporting the granite statue pediment
- Shifting of the granite roof slabs capping the statue pedestal
- Age failure of the roof system and flashings
- Age failure of the copper gutter liner along the building cornice
- Age failure of the copper statue skin and supporting frame

RESTORATION RECOMMENDATIONS

The team advised the commissioners to restore the building's most critical elements. The parapet and balustrade were restored by deconstructing the terra cotta components and either repairing and reinstalling or replacing with new custom units to match the original. This included replacing all steel supports embedded in the masonry walls below with new stainless steel components.

While the cornice is granite on three sides of the building, the west cornice is constructed of terra cotta and was completely reconstructed with new units. The structural steel channels embedded in the masonry walls, supporting the cornice and the associated rods and hangers, were completely replaced with stainless steel components. The granite was patched in places of need on the building's exterior.

The roof system was completely removed and replaced with the exception of the light wells and skylights. The wide gutters built into the cornices were re-lined with new custom copper gutters and flashings.

The copper statue was restored and reinstalled on the repaired granite pediment. This included lifting and straightening the partially-collapsed copper skin, installing a new interior supporting umbrella frame and

mounting structure, stripping and repairing the surface and seams, and applying a chemical patina to replicate the aged condition before restoration.

Additional work included reconstruction of the front granite stairs and installation of new handrails, cleaning the entire exterior, and updating exterior lighting to LED.

A RESTORED PIECE OF HISTORY IN MAHONING COUNTY

Upon completion, Mahoning County reclaimed an impressive and beautiful piece of historic architecture. The commissioner successfully maintained public

safety while preserving a historic structure the public can enjoy for generations to come.