

Brush Architect representative projects



First Presbyterian Church-Champaign, Illinois

(1867) National and Local Landmark Building envelope and Art glass restoration 2013-present **Benefit:** Mary Brush led a team including art glass specialists to present overall building priorities phased per the church budget for roof, wall, window frame, protective covering, and art glass repairs integrating a combined methodologies of American, British, and French restoration techniques.



Astronomical Observatory University of Illinois Urbana-Champaign

(1896) National and Local Landmark. Feasibility and Modernization study. 2015 **Benefit:** Both the building and users were surveyed for historic, current, and future needs with an understanding of the technical dynamics of historic buildings. Mary's understanding of the real implications of working with historic buildings allowed for future budgeting to emphasize restoration and building diagnostics first while phasing in future technical upgrades.



Allerton Mansion, Monticello Illinois, University of Illinois

Urbana-Champaign (1900) National and Local Landmark. Restoration of the slate roof and exterior masonry. 2012-present. **Benefit:** Mary Brush's extensive knowledge of American and French slating practices as well as modern roofing techniques provides budgetary and quality control. Her weekly site visits on the scaffold went beyond expectations for detail management.



Joliet Central High School, Joliet, Illinois (1901, 1915, 1926)

Envelope and Preservation consultant to Wight Co Masonry investigation and restoration. National Register and Local Landmark. 2013-14 **Benefit:** Brush's focus on the historic facade restoration allowed the design architects to focus on the new addition. Where others might observe work from a distance, Brush regularly walked all of the scaffolding to observe the condition of the stone, the joints, design the repair scope, understand the cause of the deterioration, and observe restoration techniques.



Memorial Stadium, University of Illinois Urbana-Champaign

(1923) National and Local Landmark, Restoration of the exterior brick and stone masonry including the monumental colonnade. 2013-2015. **Benefit:** The building is constructed with techniques of vintage skyscrapers. Mary Brush's knowledge anticipated otherwise unforeseen conditions. Where the University thought tuckpointing was necessary, Mary knew from experience that the problem lay behind the brick at the anchorage of the structural clay tile. Her design is the long term solution, not just a short term maintenance repair.



Freer University of Illinois Urbana-Champaign

(1930) National and Local Landmark Universal Access Design 2015.

Benefit: The multilevel 1920s gymnasium requires full universal access kinesiology including a new entry on the prominent south elevation. Mary Brush's intricate knowledge of historic building construction and modern codes provided numerous solutions for the client.



Hegeler Carus Mansion, LaSalle, Illinois

(1860) National and Local Landmark, facade easement

Benefit: The original porch deteriorated and was removed by 1880, rebuilt 3 more times over a century. The current porch was created in 1997 faithful to the original and failed. Brush Architects was retained to modify the existing porch within preservation standards to current code and for longevity. The interior finishes are original and are being restored to conservation standards as annual budgets allow.



Newberry Library, Chicago Illinois

(1860) National and Local Landmark

Benefit: Brush Architects was retained by the library and Beha Architects to create the existing conditions drawings of the interior and exterior. We will also perform the 100% facade examination of the granite exterior including the elaborate stone cornice.



The buildings of Edgar Miller Andrew Ribori and Sol Kogan, 151, 155, 161 W Burton Place Carl Street Studios Building, Chicago

Illinois 2011-Present. Local and National Landmark District. The buildings were designed and constructed by artists throughout the 1920s and beyond. **Benefit:** Mary Brush was sought out by the architect owners to solve building behaviors where others thought only reconstruction was an option. Brush applied French restoration techniques to preserve exceptional masonry character, and was also instrumental in protecting the buildings from demolition. See Exhibits



1029 N. Dearborn Chicago Illinois

(1885) Local Landmark

Benefit: Brush Architects was retained to develop a preservation plan for the building interior and exterior. The facade is a soft brownstone with extensive delamination of both the sculpted and flat panels. Conservation standards will be applied to the restoration of the facade and windows.



Winnetka Village Hall, Winnetka, Illinois (1925) National and Local Landmark 2013-2015 **Benefit:** Mary Brush designed the full building restoration while at Holabird & Root including the exterior masonry and restoration of the clay tile roof. The client continued with Brush Architects for the exterior door and window restoration. Mary Brush's knowledge of building envelope dynamics has enhanced the wood restoration with techniques learned in France.



1010 W 35th St, Chicago Illinois Spiegel Catalogue warehouse (1936) Local Landmark. Masonry investigation and restoration, Chicago Illinois. 2013-2015. Hands on scaffold access defined work scope and detail development. **Benefit:** Mary Brush designed the facade stabilization maintaining the integrity of the historic fabric by developing a cataloging procedure for removal and future reinstallation for facade restoration.



642 S Clark Dwight Lofts, Chicago Illinois (1910, 2008) National Register and Local Landmark. Masonry Envelope Restoration+ Curtainwall Rehabilitation. 2012-2014 **Benefit:** The 2008 conversion and substantial addition to the historic masonry clad building did not fully account for long term dynamics between a steel structure on a historic concrete building. Brush diagnosed the building pathology dynamics to design repairs the rehabilitation of the curtain wall system as well as the multi wythe historic masonry.



United States Navy NAVFAC design build roofing restoration within 450 mile radius of Great Lakes Naval Station. Brush Architects is Prime for Design. 2013-2015 **Benefit:** Mary Brush adds extensive roofing and existing building based technical knowledge for cost efficiency of historic buildings to work in concert with the construction team. She also provides a preservation and energy efficiency approach to a regulated and fiscally structured owner.



Cook County Forest Preserve IDIQ. Brush Architects is consultant to Kuklinski _ Rappe for Design. 2013-2018 **Benefit:** Brush Architects provides existing conditions investigation and survey, preservation and construction observation services.



GSA Midwest Region Chicago + Northern Illinois -2016-2019 Associate Architect to the Urbanworks Team. **Benefit:** Brush Architects provides existing conditions investigation and survey, preservation and construction observation services.

Representative projects while employed at other firms: Holabird & Root, Klein and Hoffman engineers

The Rookery Building, Chicago IL. (1888) Forensic Facade analysis and restoration design Performed at Klein and Hoffman 2002-2005. National Register and Local Landmark. Hands-on access restored terra cotta masonry including repairing in place terra cotta originally installed with steel rail road rails as lateral support. The ornate masonry cornice had been damaged by previous restorations that installed exterior foam board on the interior face of the parapet wall, requiring substantial reconstruction with strategic brick and mortar matching. **Benefit:** Mary's ability to think beyond the deteriorating masonry to the cause of the deterioration: the foam board, created the long term solution for the building facade.

Local and State Awards, and numerous presentations



Chicago Cultural Center, Chicago IL (1893) Restoration of the Tiffany Dome and skylight replacement. Performed at Holabird & Root 2008. National Register and Local Landmark. Mary Brush was brought to Holabird & Root to manage the project during Construction services. Local and State Awards, and numerous presentations on the complexity of restoring intricate art glass over a continuously occupied performance space. **Benefit:** Mary's comprehension of technical preservation provided the client and construction team with advanced processes for historic finish restoration as well as management of the integrity of the original materials during the installation of the exterior skylight dome. **Local and State Awards, and numerous presentations**



The Keith and Gage Building, Chicago Illinois (1898, 1906) Forensic Facade analysis and rehabilitation design. National Register and Local Landmark. Performed at Klein and Hoffman 2001-2008. The initial challenge was to complete the 100% hands-on Chicago facade examination. The north bay of the historic building settled after the additional 4 stories were constructed in 1906. Previous efforts stabilized the foundation but did not address the movement of the facade which caused the terra cotta to crack. **Benefit:** Mary Brush designed an architectural solution for the facade restoration after determining that the rivets of the original construction were serviceable. Terra cotta was replaced in kind and phased repairs including future window restorations were designed. **Numerous presentations**



37 S Wabash Champlain Building, Chicago IL. (1902) Roof and Facade Restoration. School of the Art Institute, Chicago Illinois National Register and Local Landmark. Performed at Holabird & Root, 2010-2011. Survey performed by Mast Climber Access. Mary Brush led the roof and facade restoration that began with a roof replacement and expanded work scope to full facade restoration and GFRC belt course restoration. **Benefit:** Mary's understanding of building pathology provided the client with a life cycle cost assessment of logical construction groupings over one year rather than long cycle of repeated mobilizations.



Chautauqua Auditorium, Shelbyville, Illinois (1903) Roof analysis and Historic Structure Report. Local and National Landmark. Performed at Klein and Hoffman. Mary Brush met CJ Pell at an **AIA Illinois** event when he asked for recommendations on who to team with for a historic building with twisted wood structure. **Benefit:** This multi year project has involved hands on assessment, research into the patented wood and cast iron clear span trusses, and analysis of the dynamics for restoring or replacing the radial 'bike spoke' truss plan of the roof.

AIA National Presentation



Lorado Taft's Midway Studio, University of Chicago, (1906) National Register and Local Landmark. Performed at Holabird & Root. The client challenged Mary Brush with balancing the Period of Significance requirements for restoring a landmark with the functional and accessibility requirements of the client. **Benefit:** Mary Brush determined the character and remaining integrity of the building during Taft's sculpture studio and restored the roofs walls and 34 individually sized skylights to their original configuration.



Holy Innocents Church, Chicago IL, (1906) Forensic Facade & Roof analysis and restoration design. Performed at Klein and Hoffman. Mary Brush performed the hands on investigation of the two bell towers and seven copper clad domes of the church. **Benefit:** Her knowledge of ornate historic roofing facilitated the design and project efficiency by maintaining a high quality attention to design and construction detail.



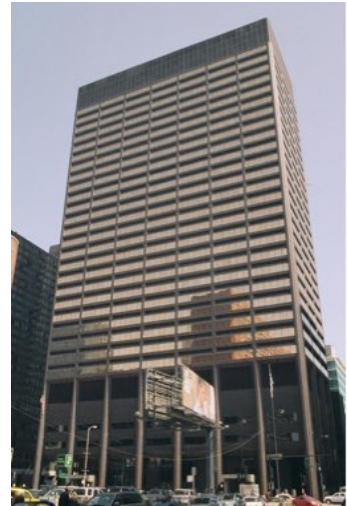
Montgomery Ward Catalogue Building, 658 N Larrabee, One River Place, Chicago Illinois (1908) Concrete Investigation and rehabilitation. National Register and Local Landmark. Performed at Klein and Hoffman. Rope access required for Corner tower Rope access to rappel down tower discovered that extensive non breathable paints had been previously exacerbated concrete. Mary Brush also inspected the 'Progress Lighting the Way for Commerce' bronze statue on the tower. She led the design team for sustainable coating and concrete repairs.



Chicago Housing Authority 1633 W Madison, Chicago Illinois (1965)
Forensic Facade analysis and rehabilitation design. Performed at Holabird & Root. **Benefit:** The client assumed that a water infiltration issue required extensive masonry repairs to the social housing high rises. Mary Brush utilized non-destructive testing via swing stage access to determine that the moisture infiltration was due to an imbalanced mechanical system which created a vacuum effect forcing water through the otherwise intact masonry. The result was a long term improved quality of life for the occupants. This project is used in many of Brush's presentations as an example of how to look beyond the client's request to find the solution.



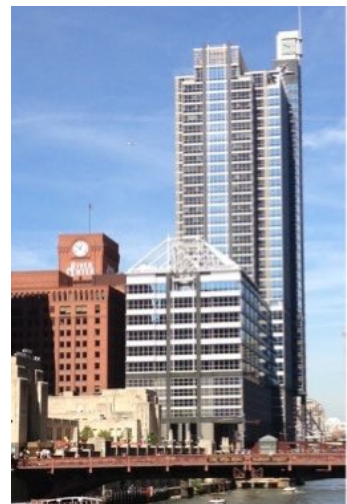
Time Life Building 542 N Fairbanks, Chicago Illinois (1969)
Forensic Facade analysis and technical cleaning design. Performed at Klein and Hoffman. Mary Brush was contacted by the property manager after an adjacent construction team spray paint elevation notations on the weathering steel wall of the Time Life building. **Benefit:** Mary researched techniques used on public sculptures and buildings and found room for improvement. Her research and solutions were shared in presentations and published in the international peer reviewed Association for Preservation Technology Journal.



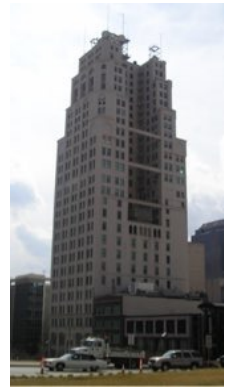
Chicago Juvenile Temporary Detention Center, Chicago IL, (1973)
Forensic Facade analysis and rehabilitation design. Performed at Holabird & Root. Swing stage investigation allowed discovery of conditions prior to construction for bid document accuracy. **Benefit:** Mary Brush's research on cleaning metal facades influenced the approach for cleaning and re-coating the occupied detention facility and court house.



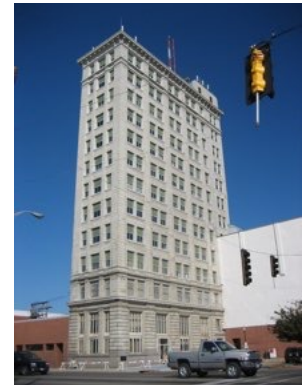
100 N Riverside, Chicago Illinois (1990) Curtainwall Investigation and repair; Rope access was required for Clock tower. Performed at Klein and Hoffman. **Benefit:** Mary Brush provided hands on examination of the clock tower via rope access and the remaining building via swing stage. Mary's attention to detail identified early building pathology patterns of deficiencies of the aluminum cover pressure plates system as well as concerns for the affect of sealant discoloring the thin stone granite panels. Early detection resulted in phased repairs for the building.



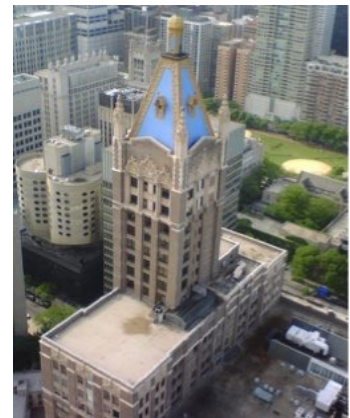
Oak Tower, Kansas City, Mo, (1913) Envelope Inspection and Stabilization design of stucco clad Terra Cotta. Performed at Klein and Hoffman. National Register and Local Landmark. The Owner read about Mary's work on investigating facades and called with the question of 'How do you restore a stucco clad terra cotta high rise from the 1910s.' This started a multi year investigation of the building. **Benefit:** Mary Brush led the investigation of how in the 1970s panelized stucco was attached through the terra cotta facade, and what remained to be worthy or restoration or if re-skinning with a modern facade on the concrete structure would be the more appropriate solution.



Bresee Tower, Danville Illinois (1917) Envelope Inspection and Stabilization. National Register and Local Landmark. Performed at Klein and Hoffman. Mary Brush performed the hands-on swing stage access which resulted in extensive emergency stabilization. Danville is a mid-size midwestern town without a clear need for the tower. **Benefit:** Brush has been working with the City and owners to develop ideas for packaging the building for its new use. Local talents have been focused on the narrow footprint and challenging egress. Brush has thought bigger and found cost effective design solutions adding onto to the building which will provide modern amenities and code compliance while maintaining the historic building facades, structure and bank interiors for restoration.



680 N Lake Shore Drive, Chicago Illinois (1926) Forensic Facade analysis by rope access. Local Landmark. Performed at Klein and Hoffman. **Benefit:** The Chicago facade ordinance requires 100% access inspection of the exterior walls. Scaffolding the tower for an inspection was not cost effective if work would not be necessary. Mary Brush inspected the tower via industrial rope access and determined that the masonry and the blue terra cotta tower was in good condition and other areas of the building were higher priorities for repair.



Uptown Theater, Chicago IL (1926) National Register and Local Landmark. Performed at Klein and Hoffman. This building is of particular importance to Mary Brush as her grandfather led the original architecture team as the managing partner of Rapp & Rapp at the time of construction. **Benefit:** Mary Brush led the long term facade stabilization and condition assessment team. This included a catalogue system for the removal for future reinstallation of at risk terra cotta components of the facade. The entire building system was analyzed and assessed for near and long term restoration and modernization costs.

