

Investigation.
Restoration.
Preservation.



architecture



Brush Architects offers a variety of services to architects, engineers, building owners and facility managers. Based on industry and architectural standards for investigative procedures, Brush Architects uses the principles of historic preservation to diagnose material failures and façade deterioration in order to design and implement traditional or innovative repairs. Whether a building is two or two hundred years old, the solution ideally is compatible with the original intent of the architecture, complimentary to the current uses, and respectful of the owner's financial planning for the maintenance of the building.

Investigation

Investigation is crucial to understand what is happening with existing building. We design solutions by first diagnosing the cause of the problem. Whether it is a leak, a crack or any other damage to the building, our challenge is to design the repair within the context of the original building. We have performed facade examinations for buildings clad with contemporary curtain wall with insulated metal panels and structural glazing as well as historic buildings clad with brick, terra cotta, granite and concrete. Our methodology varies and is custom designed for the building materials and design concerns.

Restoration

Restoration is the renewal of historic and vintage - or not yet historic properties. The building components are prioritized for conservation measures and opportunities for modernization. Restoration is the re-discovery of original finishes, re-creation of missing elements - and the design strategy to bring the building into its next generation of use. Brush Architects can perform the perfect restoration of finishes as demonstrated at the Chicago Cultural Center Tiffany Dome and the slate roof and chimneys of Allerton Mansion and Carriage house for the University of Illinois Urbana-Champaign.

Preservation

Historic Preservation is the management of change; what was, is or could be important to future generations. The architect's role includes assisting the owner toward a cost effective plan to "do no harm", be reversible, restore early glory and, if necessary, dismantle for future reuse. Brush Architects has extensive experience with the challenges associated with cost effective and well-reasoned preservation design solutions. Brush Architects' system of architect-led preservation establishes options for how to treat a building as a potential museum piece as well as a practical art component with client funded real estate improvements.



company



Brush Architects, LLC is an architecture firm dedicated to the investigation, restoration, modernization, design and repair of existing buildings.

Brush Architects' principal, Mary Brush, has 15+ years of experience with building envelope investigative and historic preservation/restoration design. The firm's design methodology values an architect-led solution to existing buildings challenges. The firm's design philosophy has an emphasis on building modernization and historic preservation.

As a woman owned business (WBE CERTIFIED), Brush Architects is positioned to provide incentive set aside qualifications for owners and design teams throughout the world. Mary Brush was the 2012 President of AIA Illinois and is a member and leader in numerous affiliated professional organizations.



Technical Expertise

Mary has over 15 years of experience with building envelope investigation and restoration as well as interior/exterior historic preservation, research, design and construction services. Her talents include critical and on-going facade reports, drawings development, bidding and construction management, technical specifications and architectural construction services. Her hands-on approach from investigation through construction observation is integral to the success of her projects.

Exceptional Effort

Mary Brush has been a pioneer in the inspection, design and restoration of the facades of buildings accessed by swing stage and industrial rope systems. When Mary began rappelling down buildings in 1998, an architect would rarely be considered for such tasks that were typically within the realm of engineers and contractors. Her hands-on investigation enables the discovery of material behavior patterns in order to build sympathetic design solutions. Whether it is rappelling down towers to investigate clock face welds, assessing statue anchorages on tower offsets or walking theater coves to diagnose falling plaster, Mary goes where architects are needed to discern building dynamics to provide architectural solutions that are complimented by engineering and material expertise.

International Recognition

Mary's accomplishments in the field of historic preservation have been recognized by the international juries of the American Architecture Foundation and the French Heritage Society (Societe des Vieilles Maisons Francaises). She was awarded the Richard Morris Hunt (RMH) Fellowship in 2005. The RMH Fellowship recognizes one American architect every two years and provides the opportunity to spend six months working with elite preservation architects throughout France. She has published several articles based on the innovative techniques she learned and has applied them to projects with unqualified success.

Certifications

Illinois Design Firm

Women/Female Business Enterprise (W/FBE) Certified

Small Business Certified



portfolio



The principles at Brush Architects have been involved in dozens of examination, restoration and preservation projects over the past twenty years. The following is a sample of the types of projects and the buildings that comprise their portfolio.

Chicago Cultural Center

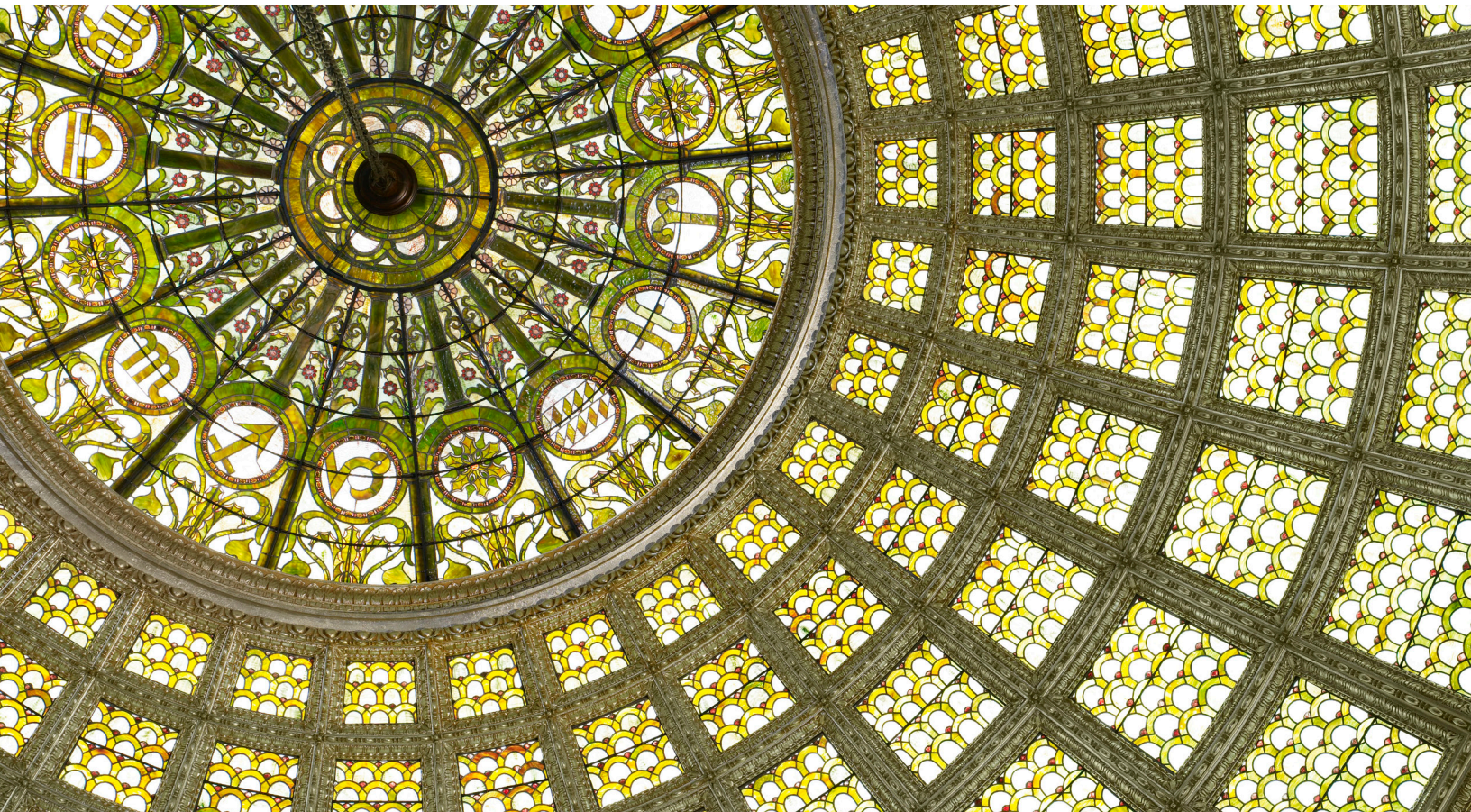
Designed as Chicago's primary public library in 1893, the building was converted to the Chicago Cultural Center in 1984 by Holabird & Root after a dramatic preservation battle. Preston Bradley Hall is a highly decorative events space that is used daily. Surmounting the hall is an art glass dome designed by J. L. Holzer of Tiffany Studios. While working for Holabird & Root, Ms. Brush lead the preservation team for the conservation of the art glass, historic finishes, and the replication of the original curved glass dome outside of the art glass. The publicly funded project had strict financial constraints and a tight deadline for completion. The project was completed on budget and on time.

The Rookery

The Rookery Building is internationally acclaimed and a local and national landmark listed on the National Register of Historic Places. The building is acclaimed for its elegant architecture and its famed architects Burnham and Root. Previous restorations had clad the interior face of the parapet walls with EIFS, which trapped water within the masonry, exasperating the natural corrosion processes. Kline and Hoffman, under the direction of Ms. Brush developed a phased multi-year facade restoration plan to address parapet concerns, terra cotta restoration, and masonry repairs on all walls of the building. She also used historic photographs to create new ornaments that had been missing for decades.

Memorial Stadium

Memorial Stadium at the University of Illinois at Urbana-Champaign campus was designed in 1923 by Holabird & Roche and is a similar massing to Soldier Field in Chicago. The building is significant due to its architecture, its original architects, and for the 200 limestone columns that create 2 monumental colonnades. Brush Architects developed a work scope to provide the client with phased repairs to address the recommended work within the capital budgetary expectations for the building. The work scope includes brick and concrete retaining walls, restoration of the colonnade, and veneer wall restoration of the historic structure.





The Monroe Building

Designed in 1910 by Holabird and Roche, the Monroe Building is a Chicago landmark. The primary challenge for the restoration was access to the facades. The terra cotta was in remarkably good condition for its age and perpetual weather damage from an eastward exposure to Grant Park and Lake Michigan. The owners chose to restore the building to an exceptionally high level of historic accuracy and was benefited by extensive historic photographs and original drawings. The original roof required replacement tiles that blended with the natural variation of the original. Skylights that had long ago been covered or removed for mechanical systems were replaced to match historic photos. The building lobby was returned to its original condition including custom recreation of the original lighting fixtures.

The Gage Building

The Gage building was built in 1898 by Holabird & Roche with a façade designed by Louis Sullivan. In 1906 the owner retained the architects to add four floors which required the removal of the ornate cornice, construction of the addition, and re-installation of the cornice with the Sullivan embellishment. In 2001, the owners retained Ms. Brush to perform a city mandated full exterior examination and design the facade restoration. Some terra cotta was damaged beyond repair and previous cleaning applications also damaged the glaze to a matte finish. The tight joints between units required precise setting of the units to maintain joint size as well as to accommodate the slope of the building. The remaining facades of the building received replacement thermally broken industrial windows to match the existing windows.

Joliet Central High School

The 1901 “collegiate gothic” limestone architecture required masonry restoration and a cleaning of the façade components. The diagnosis of the spalling pattern at the limestone tracery required hand on inspection provided by boom lift and pipe scaffold. All stones were surveyed, sounded, and documented for spalls, cracks, or other deficiencies. The building was surveyed, sounded and documented for spalls, cracks and other deficiencies. The facade was found to have spalling caused by the corrosion of the ferrous metals that anchor the exterior stone. In addition, the Joliet Lamont limestone requires special handling for the cleaning process and replacement limestone needed to match the original stone in character, dimension and tooling.



services

We offer condition assessments, from basic visual observation to full hands-on condition analyses. After the condition and deterioration mechanism is identified, Brush Architects works with design teams, material testing specialists, and consultants chosen specifically for the building's needs in order to develop repair programs, design packages including specifications, drawing and full bid documents, and construction administration services.

A sample of the services provided by Brush Architects:

Pre Design Services

Facade Investigation
Historical Research
Field Investigation
Materials Testing
Condition Assessment

Design Development

Historical Materials Priorities
Conceptual Design
Cost Estimates
Sustainable Design Expertise
Construction Documents

Construction Management

Inspection/Observation
Site Visits
Submittals
Shop Drawing Review
As-Built History

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