



BRIGHT IDEAS

TECHNOLOGY &
TRANSFORMATION
IN PRESERVATION

2026 Annual Meeting & Symposium

March 6, 2026

Morristown, NJ



APTNE 2026
Annual Meeting
& Symposium

APTNE
www.aptnet.org
f aptne
@ apt_northeast
linkedin.com/company/aptnet-northeast/

BRIGHT IDEAS: TECHNOLOGY & TRANSFORMATION IN PRESERVATION

The Association of Preservation Technology Northeast Chapter (APTNE) is proud to present the **2026 APTNE Annual Meeting & Symposium**, held on **Friday March 6, 2026** with an in-person event in Morristown, NJ, as well as a virtual program. The overarching theme of the 2026 APTNE Annual Meeting & Symposium is the technological advancements in preservation. The day features presentations from professionals, emerging professionals, and local students.

The Northeast has long been a hub of technological advancement, with New Jersey's contribution spanning from Edison's incandescent light bulb to Bell Labs' early advancements in laser research. This spirit of innovation has extended into the field of architectural preservation, where advanced technologies are being used to document and restore historic structures and used to interpret and protect cultural resources, ensuring that both positive and difficult memories are preserved. Based on a solid understanding of traditional techniques, preservationists and design professionals are leveraging modern tools, materials, and practices to best facilitate the continued preservation of these historical sites.

PRESENTATIONS ARE TIED TO ONE OF THE FOLLOWING TRACKS:

- 1** Impact of evolving technologies on documentation and construction practices: using technology to better understand structures and improving documentation for future generations.
- 2** Preserving sites of technological innovation: challenges of preserving once-innovative facilities or systems that are now considered antiquated and how these spaces are adapted for modern use.
- 3** Evolution of technology that influenced building codes and safety regulations: from evolving fire safety standards to construction site, material safety and quality control measures, how do we update buildings while maintaining their historic integrity?
- 4** Historic technology and advances in repair materials: repair and substrate degradation, material resiliency, material longevity, maintenance, failure, balancing tradition/innovation in preservation

FRONT COVER
Powerhouse Arts, Lobby looking at the featured graffiti wall.
Photo Credit: PBDW Architects, Mike Neglia, 2023

BACK COVER
View of Powerhouse Arts from across the Gowanus Canal.
Photo Credit: PBDW Architects, Mike Neglia, 2023.

PROGRAM DESIGN
Amanda Morante Wolin
www.amandamorante.com

SCHEDULE OF EVENTS

THURSDAY, MARCH 5

4:00PM - 5:00PM TOUR 1

Historic Speedwell: Birthplace of the Telegraph
Katie Humphreys and Karl Wietzel

4:00PM - 5:30PM TOUR 2

Layers of Preservation: Tour and Discussion at the Schuyler-Hamilton House
Nina Hoban and Margaret Hickey

5:30PM - 8:00PM THURSDAY NIGHT RECEPTION

FRIDAY, MARCH 6

8:00AM - 9:00AM REGISTRATION AND BREAKFAST

9:00AM - 9:10AM APTNE WELCOME ADDRESS

APTNE President, Jennifer Kearney

9:10AM - 10:00AM KEYNOTE PRESENTATION

Science and Durability: A Personal Look Backwards
Keynote Speaker: Norman Weiss

10:00AM - 10:10AM

Welcome to Historic Morris County
Janet Foster

10:10AM - 10:35AM

(Not So) Good Vibrations?: Diagnosing Mechanism of Failure through Continuous Monitoring
Jacqui Hogans

10:35AM - 10:45AM Q&A Marcie Clifford

10:45AM - 11:10AM COFFEE BREAK

11:10AM - 11:35AM

Restoration of Acoustic Simulated Limestone: Balancing Tradition/Innovation in Preservation
David Riccio & Preston Hull

11:35AM - 12:00PM

Bridging the Gap: Comparing the Performance of Traditional and Modern Sealant Materials
Gabriela Genao

12:00PM - 12:25PM

Revitalizing a Lost Technology: The Realkalization of the Alamo Cenotaph: An Update on Concrete Preservation Methodologies
Gina Crevello

12:25PM - 12:35PM Q&A Marcie Clifford

12:35PM - 12:45PM CHAPTER HIGHLIGHTS

APTNE President, Jennifer Kearney and Treasurer, Kevin Daly

12:45PM - 2:00PM LUNCH & APTNE BOARD MEETING

2:00PM - 2:25PM

Beyond Chernobyl, Nuclear Artifacts as Cultural Heritage
Ken Follett

2:25PM - 2:50PM

The Powerhouse: From Power to Possibility
Eytan Solomon & Brigitte Cook

2:50PM - 3:05PM

Open the Old Urban Fortress: Assessing Community Perception of Value in New York City's Historic Armories
Charlotte Crum

3:05PM - 3:15PM Q&A Pamela Clemens

3:15PM - 3:40PM COFFEE BREAK

3:40PM - 4:05PM

Digital Preservation and Fabrication for Historic Stone Ornament: A Case Study at the Victorian Mansion
Michael Fritz & Christopher Dabek

4:05PM - 4:30PM

Light Touch, Lasting Impact: Digital Scanning and Laser Cleaning Innovations for the Preservation of Central Park's Historic Collection
Nicholas Fandaros

4:30PM - 4:55PM

Future Generations of Building Envelope Assessments: Leveraging Drone Surveying, Photogrammetry, and AI Assistance
Laura Palacios & Tessa Flanagan

4:55PM - 5:05PM Q&A Pamela Clemens

5:05PM - 5:15PM CLOSING REMARKS

APTNE President, Jennifer Kearney

5:30PM - 7:30PM RECEPTION

Madison Hotel Garden Room

SATURDAY, MARCH 7

9:00AM - 11:30AM TOUR 3

Legacy of the Delaware, Lackawanna and Western Railroad: Historic NJ Transit Stations
Richard Wisniewski and Jacquelyn Lipson

9:00AM - 10:30AM TOUR 4

Adaptive Histories: Exploring a Century of Construction at the Morris Museum
Amarantha Quintana-Morales and Thomas J. Loughman

10:30AM - 12:00PM TOUR 5

Acorn Hall, Headquarters of the Morris County Historical Society
Amy Currey and Anne Motto

1:00PM - 2:00PM TOUR 6

Craftsman Farms - Gustav Stickley in New Jersey
Jonathan Clancy



2025-2026 BOARD MEMBERS

Jennifer Kearney
President

Alafia Akhtar
Vice President

Brigitte Cook
Secretary

Kevin Daly
Treasurer

Corey Spitzer
Immediate Past President

Sloane Bullough

Patrick Capruso

Preme Chaiyatham

Pamela Clemens

Marcie Clifford

Michelle Dallhoff

Derek Dandurand

Erin Dunne

Art Femenella, Jr.

Ken Follett

Heather Hartshorn

Benjamin Lueck

Maggie Murray

James Norberg

Jess Ouwerkerk

Amanda Sanders

WHO WE ARE

Originally founded as the APT New York Chapter in the mid-1980s, the organization was restructured in 2003 as the **Association for Preservation Technology Northeast Chapter (APTNE)** encompassing New England, New York State, and northern New Jersey. At present, we have over 300 active members.

APTNE is committed to serving this geographic community with regional and local preservation events and outreach. We conduct workshops, co-sponsor events with local and statewide preservation organizations, and sponsor symposia, including our annual meeting in early March. We support students interested in preservation by offering free student membership and discounted young preservation membership and event admission, as well as annual scholarship opportunities.

THANK YOU!

As of March 6, 2026, 6 of our Directors are stepping off of the **Board of Directors**.

We'd like to take the time to thank each of them for their time and dedication to making APTNE excellent during their terms.



COREY SPITZER
7 years of service



SLOANE BULLOUGH
6 years of service



KEN FOLLETT
6 years of service



JAMES NORBERG
6 years of service



BRIGITTE COOK
6 years of service

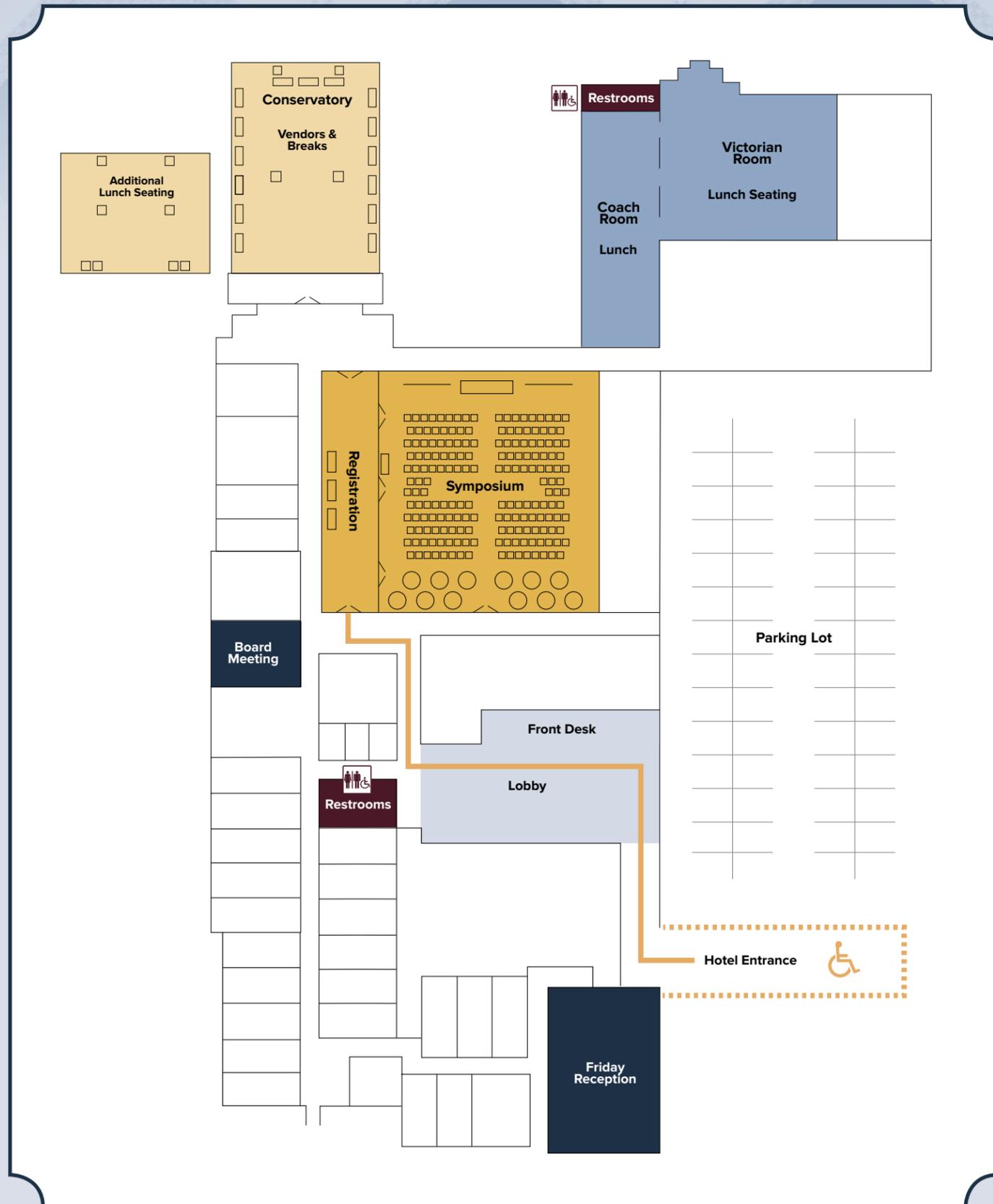


MAGGIE MURRAY
1 year of service

PLEASE WELCOME OUR 6 NEW BOARD MEMBERS!

To Be Announced During the Symposium

SYMPOSIUM MAP



A SPECIAL THANK YOU TO OUR SPONSORS

Not a sponsor yet? You can still get sponsor recognition at unique events throughout 2026! See our website for more details on all sponsorship benefits <https://www.aptnet.org/aptnet-sponsors>

FOUNDATION SPONSOR



MARBLE SPONSORS



GRANITE SPONSORS



LIMESTONE SPONSORS



BROWNSTONE SPONSORS



BLUESTONE SPONSORS



FIELDSTONE SPONSORS



KEYNOTE

SCIENCE AND DURABILITY: A PERSONAL LOOK BACKWARDS

Presented By **Norman Weiss**

BUILDING PERFORMANCE is all about in-service behavior; durability can then be defined as the long-term consistency of performance. It is the central focus of much of what we do in architectural conservation, but isn't the quest for this permanence essentially a hopeless task? Answers to the eternal questions of our own permanence have been sought by some in religious faith. The durability of our ideas has been addressed by the wide-spread availability of printed books, starting in the middle of the 15th century. Within a hundred years, illustrated treatises on technology—practical, applied science and engineering—appeared in considerable numbers.

“Who are the individuals who came before us, and how did they bring technology into the broader field of cultural heritage?”

This presentation is an opportunity to consider how our community, with its often-optimistic thinking on permanence, got to where it is today. In other words, who put the T in APT? Who are the individuals who came before us, and how did they bring technology into the broader field of cultural heritage? To answer some of these questions, the speaker is offering a reminiscence of his own curious career path, from the 1960's onward. It cannot, of course, be a comprehensive history, nor is it intended to be boastful in any way. Mistakes were certainly made, as the field erratically evolved. Ultimately, this is a personal way to document the people, places, and events that have brought us all together. •



Hampton Court Palace, Richmond upon Thames, UK. Photo Credit: I. Slavid



Winchester Palace site, London, UK. Photo Credit: I. Slavid



Carter Tombs, Lancaster County, Virginia. Photo Credit: I. Slavid



NORMAN R. WEISS FAIC, FAPT, FSA is a specialist in the characterization of traditional building materials. He is recognized for his decades of activity in the field of architectural conservation, creating innovative treatment-oriented materials for the care of large-scale cultural artifacts. His most current scientific research is on the consolidation of limestone and marble, and the development of novel lime-based mortars, grouts, and paints.

Weiss has taught at Columbia University since 1977, and is a member of the Preservation Technology and Training Board of the National Park Service. He is Consultant Editor of the UK-based Journal of Architectural Conservation, an overseas Fellow of the Society of Antiquaries of London, and Director of Scientific Research of Integrated Conservation Resources, a New York City-based consulting firm. He is a past recipient of APT's Harley J. McKee Award (in 1989), and of AIC's Sheldon and Caroline Keck Award for distinguished teaching (in 2018).

WELCOME TO HISTORIC MORRIS COUNTY

Presented By **Janet Foster**

MORRISTOWN, NJ has long promoted its history from the 18th and 19th centuries, but it has an important place in the history of historic preservation as well. This short, fast look at Morristown, New Jersey, focuses on efforts to preserve the past through preserving buildings. As early as the 1876 Centennial, a group of Morristown citizens worked together to restore the Ford Mansion, a “Washington Slept Here” site, as a way of valorizing the Revolutionary War and its war heroes. In the 20th century, buildings were moved to save them from demolition during construction of Interstate 287. Today, Morris County benefits from having a public fund to support capital work on publicly accessible historic buildings, but nearly every privately-owned building is threatened by development pressures. •

Jacob Ford Mansion, 1775-1776, Morristown, NJ. Photo credit: Janet W. Foster, November 2025



Acorn Hall, 1853, Morristown, NJ. Photo Credit: Janet W. Foster, November 2025.



JANET W. FOSTER is the former Associate Director of Urban Planning and Historic Preservation at Columbia GSAPP. She has been nominally retired for over a decade, but she remains very active in preservation through lecturing, consulting with municipalities on preservation issues, and serving on the Board of the NJ Historic Trust, which offers grants for capital improvements on historic buildings

across the state. She also reviews National Register nominations for the NJ Historic Review Board, and she continues to delight in the variety of interesting places, buildings, and landscapes, from the 17th century to the 21st, that mark New Jersey.

Janet has lived in Morris County since 1981, when she entered Columbia University's Graduate Program in Historic Preservation, and commuted back and forth to class. She was a founding partner in a preservation consulting firm, Acroterion based in Morristown, and prepared many National Register nominations, Historic Structures Reports, and did paint analysis for properties in the northern New Jersey region during her career there. She is delighted to share a bit of local history with this audience, and invites everyone to learn more about Morris County.



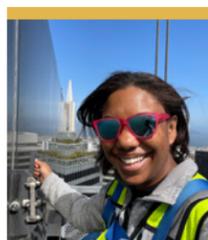
(NOT SO) GOOD VIBRATIONS?: DIAGNOSING MECHANISM OF FAILURE THROUGH CONTINUOUS MONITORING

Presented By **Jacqui Hogans**

IN 2021, A 1920S-ERA EDUCATIONAL BUILDING EXPERIENCED FAILURE of the original handmade *cuernca seca* and *Cuenca seca* tiles at its loggia. The usual suspects for masonry failure—water infiltration, freeze-thaw action, and deferred maintenance—were quickly eliminated. Detailed analysis, including laboratory testing and archival research, also turned up nothing. This left the Project Team scratching their heads and looking for answers.

An answer—or at least, a potential answer—came from just across the street. A streetcar had run in front of the building, stopping just in front of the building every fifteen minutes in both directions, since before the building’s construction. Could the shaking from the streetcar be the culprit? Through vibration monitoring, the Project Team was able to determine whether the vibrations from the streetcars were strong enough to cause the tile to separate from the concrete substrate.

This presentation will describe the process of documenting the tile failures and the various testing methods used in diagnosing the mechanism of failure at the tiles, in order to design a successful repair program that included (a) conservation, repair, and replacement of the historic tiles and (b) addressed the cause of the failures in the first place. •



With nearly 20 years of experience in historic restoration and building envelope space, **JACQUI HOGANS** knows facades. She cut her teeth working in New York City, on projects ranging from the Guggenheim Museum and the American Museum of

Natural History to inspection and repair of numerous office buildings and high-rise residential buildings.

A decade ago, Jacqui headed West to San Francisco, where she now serves as a Project Manager at McGinnis Chen Associates (MCA). She managed the mosaic restoration of Oakland’s storied Paramount Theatre, which won several awards, including the Governor’s Historic Preservation Award and the California Preservation Design Award. Jacqui manages and designs historic preservation projects, leading a team of architects and engineers she has affectionately deemed the “Façade Squad.” She also directs the inspection of historic buildings as part of San Francisco’s new Façade Inspection and Maintenance Ordinance, AND...if that wasn’t enough, she heads up MCA’s East Coast presence from her new home base in the New York City area. She has a special interest in historic brick and stone, and shares her love of masonry each Monday on LinkedIn.

View of Loggia, ca. 1928
Photo Credit: San Francisco History Center,
San Francisco Public Library



Detail of Tile Damage, 2021. Photo Credit: McGinnis Chen Associates, Inc.



Area where tile had debonded from concrete substrate, 2022. Photo Credit: McGinnis Chen Associates, Inc.



Vibration Monitor Installed, 2022. Photo Credit: McGinnis Chen Associates, Inc.



Detail of vibration monitor installed at location of tile failure, 2022. Photo Credit: McGinnis Chen Associates, Inc.

150
YEARS OF HERITAGE
1875 **GMB** 2025
PIPE • TERRA COTTA • ROOF & FLOOR TILE • POTTERY
GLADDINGMCBEAN.COM



RESTORATION OF ACOUSTIC SIMULATED LIMESTONE: BALANCING TRADITION/ INNOVATION IN PRESERVATION

Presented By **David Riccio & Preston Hull**

THE MELLON AUDITORIUM, BUILT IN 1934, BOASTS A NEOCLASSICAL INTERIOR THAT APPEARS TO BE MADE OF LIMESTONE. However, closer inspection reveals that the massive stone columns and walls are made of an acoustic, pre-cast simulated stone called Sphinxstone, designed to mimic limestone's appearance while providing enhanced acoustical performance. Similar to other early acoustical materials such as Akoustolith, Sphinxstone is unique for its use of mollusk shell fragments as aggregate, which provides the material's distinctive appearance. John Canning & Co. was hired to restore the Sphinxstone. During the process, our team utilized a combination of innovative and classic restoration techniques to bring the stone back to its original appearance.

The restoration of the Sphinxstone faced a unique challenge: balancing the need for durable, long-term repairs with the imperative to maintain the material's authentic historical properties. Traditional restoration methods, while respectful of the past, can sometimes lack the precision or longevity offered by modern technology. Conversely, an over-reliance on modern solutions risks compromising the very character that makes a historic building significant.

“This analysis informed every subsequent decision, allowing us to select the most appropriate materials and techniques for repair and stabilization.”

Our approach was a synthesis of the two. We began with a thorough material analysis, employing cutting-edge technology to understand the composition of the original Sphinxstone. Building Conservation Associates, Inc., in collaboration with Highbridge Materials Consulting, Inc., performed an analysis of the Sphinxstone material to aid in the restoration process. Using a variety of analysis technologies, the composition of the stone was determined. The Sphinxstone is composed of narrowly graded mollusk shell aggregate bound together with white portland cement. It also contains large amounts of interconnected voids (approximately 35-45%), a quality responsible for its sound-absorbing properties. This analysis informed every subsequent decision, allowing us to select the most appropriate materials and techniques for repair and stabilization.

Header: Mellon Auditorium after restoration. The restoration included the historic masonry/Sphinxstone restoration, restoration of decorative finishes, architectural gilding, stone cleaning, and repair. Photo Credit: Felix Ian Paden Photographer

Many restoration projects rely solely on modern solutions, neglecting the tried-and-true techniques used in constructing historic buildings like Mellon Auditorium. Canning, however, prides itself on being preservation problem solvers, using our collective expertise to develop solutions for complex restoration challenges, often integrating old and new to achieve the desired result. In this case, after extensive testing of various aggregates and adhesives, we determined that the best way to replicate the seashell acoustic composition of Sphinxstone was to use the historical material – seashells. Specifically, ground and sifted oyster shells were used as an aggregate, resulting in a mixture that matched the original simulated stone's aesthetic appearance and acoustic qualities.

The final challenge was to find a binder that would seamlessly replicate the appearance of the cast stone when combined with the oyster shells. Despite testing a variety of binders, we discovered that most options fell short of meeting our needs. Our team ultimately turned to Beva adhesive, a commonly used conservation adhesive for artwork, which, when heated and applied in a traditional method similar to that of cast stone, resulted in a seamlessly integrated repair that matched the original Sphinxstone.

Our innovative approach to using both modern materials and traditional techniques allowed for a sensitive restoration that maintained the historical character and properties of the original simulated limestone. By utilizing our extensive knowledge and experience, we were able to provide a solution that met the unique challenges presented by this restoration project.

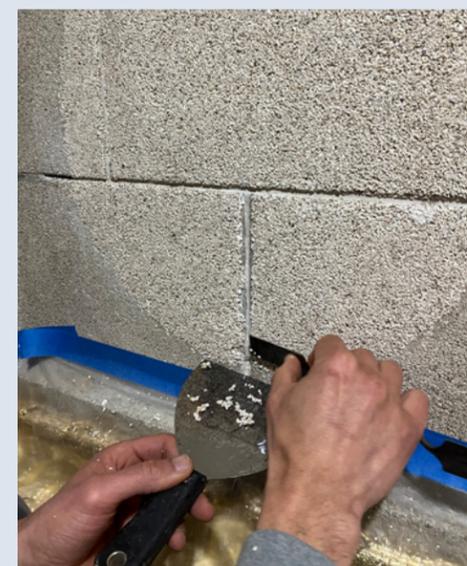
This case study highlights the importance of combining modern technology with traditional restoration techniques to preserve historic buildings. It also emphasizes the significance of testing and experimentation in finding the best solution for complex restoration challenges. These principles are relevant to the conference's focus on the future of technology in historic preservation, as they demonstrate the potential for innovative approaches to coexist with time-honored techniques to achieve successful restoration outcomes.



North light holes in the wall that need patching with Sphinxstone. Photo Credit: John Canning & Co., Ltd.



Mockup of Sphinxstone (color & texture). Photo Credit: John Canning & Co., Ltd.



Close up of Sphinxstone being applied. Photo Credit: John Canning & Co., Ltd.



DAVID RICCIO, a Principal and President of John Canning & Co., is a nationally recognized leader in architectural conservation and restoration, bringing over 30 years of experience honing his craft at Canning. His journey began as an apprentice, rigorously trained under the tutelage of John Canning himself, and required immersing

himself in the meticulous techniques of 19th-century English and French decorators. This rigorous training encompassed a wide array of skills, including: Ornamental Painting and Decorating, Traditional Materials and Techniques, Conservation and Preservation, and Period Decoration Design.

David has worked on some of the company's most ambitious restoration and conservation projects across the US. David is a distinguished expert in the preservation field, known for his ability to assess existing conditions, understand traditional installation methods and craftsmanship, and manage complex projects. He is a recognized professional by the Association for Preservation Technology (APT) and a Professional Associate of the American Institute for Conservation of Historic and Artistic Works (AIC). An industry expert on historic flat and ornamental plaster, decorative painting techniques, and gilding, David has developed multiple innovative solutions for complex restoration challenges. He is dedicated to using the highest quality, least invasive methods in applied conservation and restoration techniques.



PRESTON HULL is a Senior Conservator at the Philadelphia office of Building Conservation Associates, Inc. He specializes in research in all forms—particularly in synthesizing field investigations and “building archaeology”; with archival research and has prepared multiple Historic Structure Reports.

A native of Gettysburg, Mr. Hull has a strong interest in preserving the built history of the Mid-Atlantic, with a particular emphasis on vernacular architecture and industrial sites, particularly history of technology related to building and domestic life. He spent six years on the Board of Directors of the Association for Preservation Technology's Delaware Valley Chapter (APT-DVC) and is currently an instructor in the Historic Preservation program at Bucks County Community College.

BRIDGING THE GAP: COMPARING THE PERFORMANCE OF TRADITIONAL AND MODERN SEALANT MATERIALS

Presented By **Gabriela Genao**

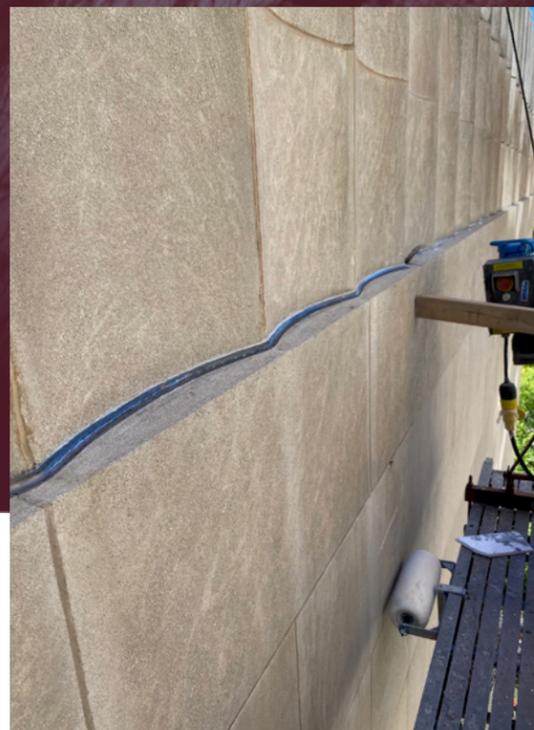
Jute Ropes. Photo Credit: Pixabay.com

FILLING OPEN JOINTS AND VOIDS IS A COMMON REPAIR IN historic buildings which can be approached using a wide variety of methods and materials. The last century of product development has resulted in many proprietary sealant products. These products are often composed of complicated chemical formulations, usually some sort of epoxy, silicone, or plastic. It can be difficult to trace the exact composition of these modern sealant materials, which can make future treatment challenging. In contrast, traditional sealant materials have stood the test of time, often outperforming modern materials in historic building applications, and sometimes they're only made of one ingredient. Two such examples are oakum and lead.

Oakum is composed of jute fibers, historically sourced from recycled rope. It is usually used to fill voids in wood. In traditional shipbuilding, oakum was used as a caulk and sealed with tar or pitch. Oakum was also similarly applied in log cabins to fill the large spaces between logs. In the "chinking and daubing" method, the oakum is a soft filler used to pack into the joints and is then sealed over with a clay or lime-based stucco. Unlike wood putty or other plasticized wood filler materials, oakum is water permeable and will shrink and swell along with the wood so the joint is less likely to crack when stressed through mechanical loads or freeze thaw cycles.

Lead is another traditional joint filling material used in a variety of ways. Lead wool is composed of thin coiled strands of lead metal. The material is tightly packed into a joint and requires no heat, curing or other material to provide a seal. Lead wool is commonly used in plumbing due to its effectiveness as a waterproof sealant that does not shrink or expand over time. Flat sheets of lead are malleable enough to be cut and folded into shims. Lead can also be extruded into T caps for use in skyward facing joints of parapets to effectively shed water.

This presentation will explore case studies of several projects where these traditional methods of joint filling have been used to evaluate their performance and durability in comparison to modern sealant materials. •



*Lead T in Skyward Facing Joint.
Photo Credit: Jablonski Building Conservation*



Traditional Oakum Chinking. Photo Credit: Sage Restoration



GABRIELA GENAO has worked as an architectural conservator at Jablonski Building Conservation Inc. since 2019. Gabriela is a graduate of Columbia University's Master's program in Historic Preservation ('19). Her thesis research involved petrographic analysis on mortars from two archaeological excavations in Lower Manhattan. Before graduating from Columbia, Gabriela interned at the materials testing laboratory of Highbridge Materials Consulting, Inc. As an undergraduate, she attended a preservation field school in San Gemini, Italy, where she worked on the conservation of a 13th century church façade. Gabriela's interests are in materials analysis, investigative techniques, and the history of technological development of historic building materials.



American Museum of Natural History
Slate Roof Replacement
Copper Finial Reconstruction

NICHOLSON & GALLOWAY

*The Oldest Restoration Company in the United States
Founded 1849, Incorporated 1932*

HISTORIC PRESERVATION | ROOFING | MASONRY | COPPERSMITHING | WATERPROOFING
Phone: 516-671-3900 • Fax: 516-759-3569 • 261 Glen Head, NY 11545 • info@nicholsonandgalloway.com

Follow us on Instagram @nicholsonandgalloway

REVITALIZING A LOST TECHNOLOGY: THE REALKALIZATION OF THE ALAMO CENOTAPH: AN UPDATE ON CONCRETE PRESERVATION METHODOLOGIES

Presented By **Gina Crevello**

THE ALAMO CENOTAPH OR “THE SPIRIT OF SACRIFICE” IS A revered monument dedicated to the Battle of the Alamo and is a significant contributing structure of the Alamo Historic District. Representing the soldiers who fought on the Texas side, the monument “incorporates images of the Alamo garrison leaders and 187 names of known Alamo defenders.” The 60-foot high marble- and granite-clad monument was dedicated in 1940, having been funded by the state of Texas during the 1936 Texas Centennial celebration. The sculpture was commissioned by local artist Pompeo Coppini and dedicated by the San Antonio mayor on November 11, 1940.

As part of the current redesign of Alamo Plaza, the aged and at-risk Cenotaph played a central role. Much loved by generations of Texans, any plan to move or reconstruct the monument brought about lively public debate, with the public largely wanting the Cenotaph to remain in its current location with minimal intervention. Working within these parameters, the design team (Architexas, AEC, Echem Consultants, and Fran Gale Consulting) performed an in-depth investigation to develop repair concepts and a preservation approach addressing deterioration, preservation, and minimal interventions. All work was required to satisfy the Alamo Trust’s preservation guidelines and comply with best practices in conservation.

“The monument had never been entered, so internal conditions were completely unknown prior to the start of work.”

The exquisite sculptures and marble carvings of the Cenotaph are by far the most attractive and defining features of the monument. While they are of national significance, their stability and ability to remain safely erect are dependent upon the reinforced concrete structural frame to which the masonry cladding is adhered. To safely preserve the Cenotaph, the structure beneath the cladding needed to be accessed and assessed. The monument had never been entered, so internal conditions were completely unknown prior to the start of work.



The Alamo Cenotaph. Photo Credit: TexasEscapes.com

To access the structure, the ‘roof’ of the Cenotaph was opened under the guidance of Architexas and Clark Guido Construction. Upon initial team observations, corrosion of the reinforcing steel of the beams and interior walls was evident, as were signs of long-term water infiltration resulting in humidity and condensation effects, and efflorescence of salts—later identified as gypsum—emanating from the brick wall infill and mortar.

During the investigation, the Cenotaph was lovingly dubbed the “Boot” of the Alamo based on its shape. Echem embarked on an investigation to assess the as-built structure, concrete durability, and long-term performance of materials such as the brick and mortar, and the harsh internal environment, on the material integrity of the RC frame. The investigation was two-fold—determining concrete conditions and root causes, and understanding internal microclimates throughout the shaft, toe, and heel, and how these may change over time.

The in-depth material investigation identified significant carbonation beyond the depth of the reinforcing steel, which was the main corrosion driver. To combat this condition and preserve the most significant marble statuary in place, concrete realkalization was proposed and designed to mitigate corrosion activity in the concrete frame.

Realkalization is a technique that reverses the effects of concrete carbonation by electrochemically restoring the high alkalinity of carbonated concrete. The process re-passivates embedded steel reinforcement, preventing carbonation-induced corrosion. An electric current is applied through an alkaline electrolyte on the concrete surface, transporting alkaline ions into the concrete and increasing its pH to protect the steel. As this process had not been used on a historic structure in the U.S. for over 17 years, significant advancements in the technology have since occurred. This presentation will discuss the lost science of realkalization and updates on technological advancement by sharing the steps taken at the Alamo Cenotaph. •



Post Realkalization Treatment with Coating. Photo Credit: Echem Consultants LLC



GINA CREVELLO, founding Principal of Echem Consultants, is an architectural materials conservator with a primary focus on diagnosing and sensitively repairing material degradation in historic reinforced concrete structures, masonry clad steel frame buildings and atmospherically exposed metals. She trained in electrochemistry and associated non-destructive testing to expand her knowledge in the application of innovative technologies for use in material conservation. Her firm has been a leader in applying these technologies to historic structures for 16 years, having been active in preservation for 28 years.

Professionally, Gina was trained at Columbia University’s GSAPP, where she received an MSC in Historic Preservation, with an emphasis on Architectural Materials Conservation (1998) and an Advanced Certificate in the Conservation of Historic Buildings and Sites (2000). Her work incorporates material durability, assessments and non-destructive testing to address corrosion and deterioration in historic and existing structures.

Gina is the first US/UK trained architectural conservator to specialize in electrochemical conservation and treatment methods for historic buildings. Gina is recognized for this expertise internationally and leads all historic or sensitive architectural / arts based projects in her office, where she participates or directs the work. As a thought leader in the industry, she often shares this knowledge with others within the industry.

She is active in numerous industry organizations, having served on the board of the APTI for 12 years, leading the organization as President during the pandemic. Ms. Crevello has authored over 25 articles and spoken at dozens of symposia and conference events pertaining to her expertise.

SHAWMUT

We recognize the significance of history and identity, that’s why our team of experts is committed to preserving and honoring your spaces while embracing innovation—seamlessly merging technical proficiency with a heartfelt commitment to preserving the past while building the future.

shawmut.com

TYLin

Restoring and reviving historic buildings with thoughtful innovation

TYLin.com

BEYOND CHERNOBYL, NUCLEAR ARTIFACTS AS CULTURAL HERITAGE

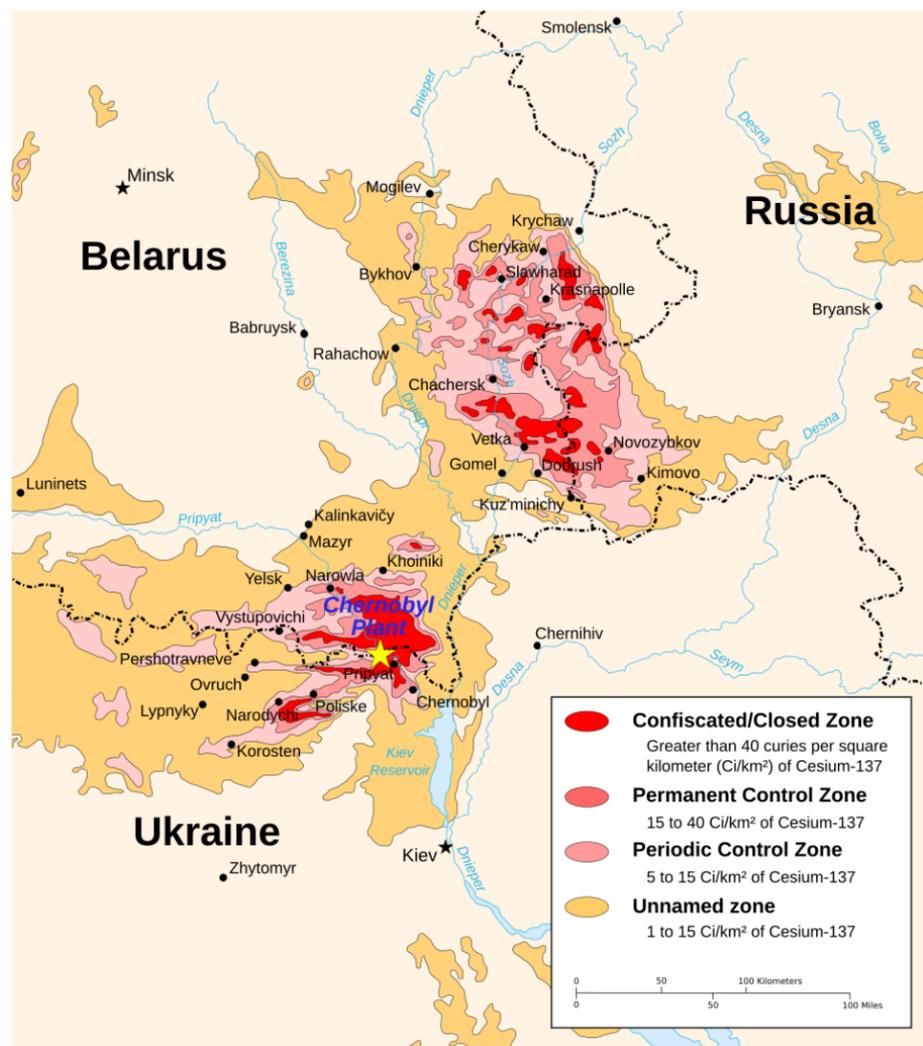
Presented By **Ken Follett**

Chernobyl Skyline, 2018. Photo Credit: Gáspár Ferenc via Pexels.com

IN 2003, I PARTICIPATED IN A WORKSHOP IN THE PODLASKIE (Northeast) region of Poland in relation to the desire of the Polish Association of Conservators to recreate a 17th century log and timber synagogue. There was a contingent of participants from Belarus.

One participant was Alyosha, who did not speak English. I do not speak Belarusian. During one afternoon of the workshop Alyosha and I sat at a table across from each other and communicated. We were both interpreted by two women, one from Israel and another from East Germany. Through interpretation and body language Alyosha told me the story of his work in the contamination zone of Chernobyl to survey sacred sites. Grandmothers of the families, in a strongly matrilineal culture, were returning to Chernobyl and living in the contamination zone in order to return to their sacred sites. Alyosha was tasked to document these sites, wearing radioactive protection suits, to determine if the structures could be reproduced in a non-contaminated area, or if there was a means by which to decontaminate and then relocate the structures. The conversation went on for several hours.

Unfortunately, radioactivity becomes part of the physical structure, essentially creating nuclear artifacts. This poses a



Chernobyl Radiation Map. Photo Credit: Wikipedia.

“Unfortunately, radioactivity becomes part of the physical structure, essentially creating nuclear artifacts.”



Alyosha at a Workshop in Podlaskie. Photo Credit: Ken Follett.

difficult problem for conservation specialists, who must decide how to preserve these sites for future studies while ensuring public safety.

This conversation has led to an interest in the impact of nuclear technology on heritage structures. Not only when it goes terribly wrong but also as to the conservation of important artifacts that tell the history of this technology. One such example are the papers of Madame Curie and her research on radioactivity. While this type of threat to heritage conservation is not as widely discussed as ocean rise and climate change, and in appearance is limited to a small geographic range, technology that has gone wrong has a very serious impact on our built heritage, cultural heritage, and human survival.



KEN FOLLETT has been active in construction contracting for 50+ years with a focus on masonry restoration. Ken's specialties include project estimating for heritage conservation work, project management and consulting as well as physically undertaking boutique masonry restoration projects. Ken has a passion for sharing his knowledge and expertise with others through his involvement in the APTNE board as well as being a founding member and the first president of the Preservation Trades Network.

THE GOLD STANDARD IN ARCHITECTURAL CONSERVATION FOR OVER 30 YEARS

JBCONSERVATION.COM | 212.532.7775



The Frick Collection, New York, NY
As featured in the APT Bulletin Vol. LV No. 4



THE POWERHOUSE: FROM POWER TO POSSIBILITY

Presented By **Eytan Solomon & Brigitte Cook**

THE ADAPTIVE REUSE OF THE CENTRAL POWER STATION OF the Brooklyn Rapid Transit Company into Powerhouse Arts illustrates how architecture and engineering together can preserve layered histories while enabling new use. Built in 1904, the complex originally consisted of two monumental buildings: the Boiler House and the Turbine Hall. This pairing embodied the technological ambition of its era, powering Brooklyn's transit expansion, and their preservation through new technologies carries that legacy into the present. Over the decades, as power sources and technologies changed, the Boiler House was no longer needed. The site fell into decline, later serving as a cardboard incinerator plant before its abandonment. In the late 20th century, the remaining Turbine Hall took on another life as an informal gathering space for artists, squatters and musicians, known as the Batcave. Its graffiti covered walls and cavernous interiors cemented the site as both an industrial relic and cultural landmark.

The architectural strategy for reuse sought to maintain this layered cultural identity while making the building viable for contemporary use as a fabrication and cultural center. Because the Boiler House had been demolished, the project required designing a new Boiler House in dialogue with the surviving Turbine Hall. Compositional balance and the echo of materials were critical in the design. The new Boiler House was conceived to blend with its industrial counterpart while declaring itself of its own time. Tinted red concrete recalls the depth and tone of the historic brick but marks a clear distinction between new and old. New windows and a new entry create a welcoming threshold, while the surviving

“Tinted red concrete recalls the depth and tone of the historic brick but marks a clear distinction between new and old.”

Grand Hall was preserved as the centerpiece. Here, the decision to retain patina, graffiti, and the exposed steel trusses ensured the building's layered past remains visible as it is reactivated for contemporary production.

The structural engineering of the project applied preservation technologies to achieve specific targeted goals. First, to justify re-use of the existing foundations, an investigation campaign entailed GPR scanning to locate sub-slab voids, exploratory test pits, and advanced geotechnical modeling of the load-sharing interaction between mat slab and piles. The foundation construction work then required ground improvement injection grouting, and physical load testing to prove the system's strength.

Re-use of the existing structure with the new as one combined building meant, per NYC DOB requirements, seismic upgrade. This then required structural analysis modeling, and bespoke connection details to connect new and existing structures. Additionally, the original roof trusses had suffered extensive deterioration. Hands-on surveying and computer analysis informed



Powerhouse Arts, Lobby looking east at the featured graffiti wall. Photo Credit: PBDW Architects, Mike Neglia, 2023.



Powerhouse Arts, View from 3rd Street Bridge over Gowanus Canal, Brooklyn. Photo Credit: PBDW Architects, Mike Neglia, 2023.



Powerhouse Arts, South facade. Photo Credit: PBDW Architects, Mike Neglia, 2023

design of repairs and capacity for hanging loads, including future event installations.

Masonry maintenance also entailed multiple technologies: materials analysis, photogrammetry, local targeted surface penetrating radar, and anchor pull testing. This helped the team design the campaign of stabilization in place and replacements where needed. Replacement brick samples were additionally subjected to accelerated freeze-thaw laboratory testing to verify quality. By employing these tools, the project not only stabilized historic fabric but also created a digital and technical record that will inform future preservation practice.

Vignettes told jointly from the architect's and engineer's perspectives frame the narrative from the careful re-use of the existing Boiler House footprint to the extraordinary effort to preserve the interior Turbine Hall along with the performance-driven testing of the new bespoke brick. The Powerhouse bridges industrial innovation, counterculture history and contemporary reuse. The project proves that preservation can deliver not only technical stabilization but cultural resonance. It stands as a model for how evolving technologies, guided by design and engineering together, can transform a decayed industrial landmark into a cultural institution while preserving its layered legacy. •



EYTAN SOLOMON, PE, LEED AP, joined Silman, now TYLin, in 2004 and has managed projects involving adaptive reuse, new construction, historic preservation, sustainable design, art installations, and structures incorporating unconventional materials such as recycled shipping containers. Eytan also currently serves on the NYC Department of Buildings' Structural Technical Committee, and on the STRUCTURE Magazine editorial board.



BRIGITTE COOK, AIA, LEED, NCARB is a Senior Associate at PBDW Architects in New York City, specializing in adaptive reuse and preservation. Her work includes the New York Historical Society, the transformation of the former Whitney Museum into Sotheby's and the Brooklyn Rapid Transit Power Station into Powerhouse Arts. She serves as Secretary of the Association for Preservation Technology Northeast (APTNE). Brigitte has taught at Columbia University's Historic Preservation program.

OPEN THE OLD URBAN FORTRESS: ASSESSING COMMUNITY PERCEPTION OF VALUE IN NEW YORK CITY'S HISTORIC ARMORIES

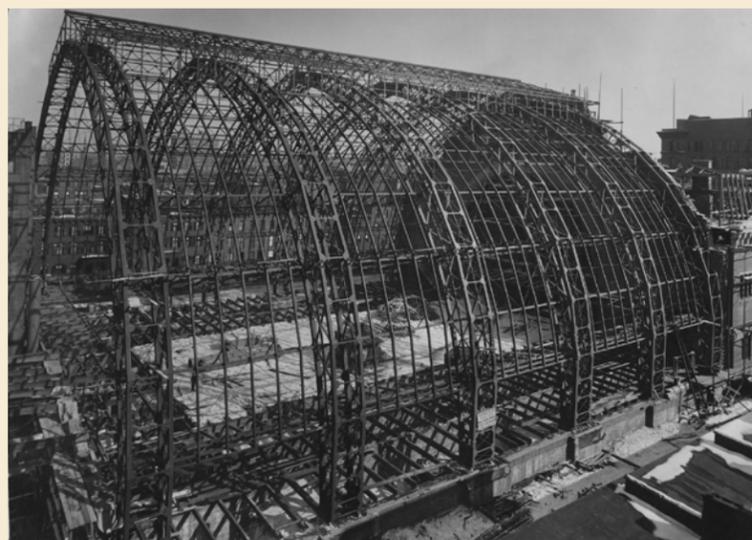
Presented By **Charlotte Crum**

THE ARCHITECTURAL INNOVATION OF NEW YORK CITY'S historic armories was not their iconic medieval fortress-like design or their grand street entrances and ornamented vestibules, but their purpose-built drill halls. The extremely large, uninterrupted halls could adequately support a large, weighted roof load with the development of new engineering technology, reminiscent of the steel trusses used in urban train sheds. This allowed for the indoor practice of drilling, where the entirety of the regiment could be observed and supervised from above at various levels and angles, all within a dense, urban environment. Drill sheds were also historically used as an alternative space for public events, including sporting competitions, art and technology fairs, and musical shows like concerts and operas.

“Ever-advancing technology and societal shifts have greatly changed what people need within their building environment.”

Today, these buildings rarely continue to serve military purposes and have since been adaptively reused or left vacant, risking potential demolition. Since the original use and design of armory buildings sought to keep the public out, the adaptation of these structures into community-facing centers creates an interesting dichotomy of historic design and current use, in addition to unique conservation challenges. As the field of preservation shifts its understanding of successful redevelopment projects from solely brick-and-mortar protection to considering the community impact of such changes, analysis of community derived data is a crucial tool to meeting these new goals. This study analyzes New York City's historic armories to better understand the methodologies through which preservationists can use quantitative and qualitative data to assess how communities value their historic and cultural resources.

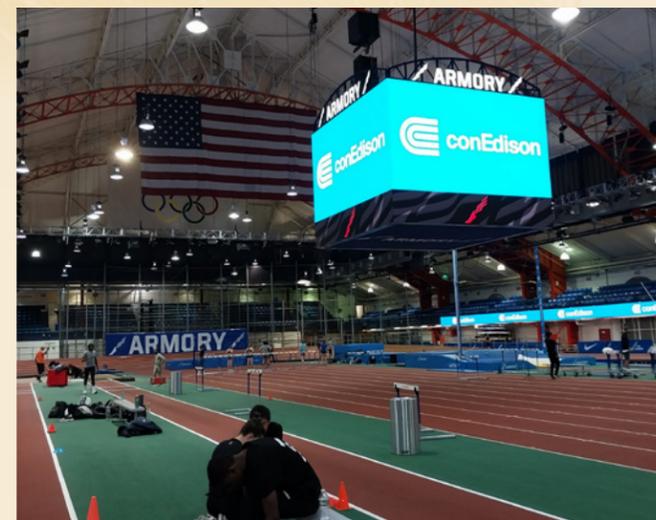
Ever-advancing technology and societal shifts have greatly changed what people need within their building environment. Historic obsolete institutional buildings, like New York City's armories, will continue to be placed at risk when the use they are intended to serve is no longer essential. Traditional preservation tactics are not likely to protect all these structures, specifically those in the outer boroughs. Many are not even listed to the National Register of Historic Places (much less protected by the New York City Landmarks Preservation Commission). However, facilitating contemporary meaningful relationships between people and historic spaces can protect these resources for the future. As the needs of communities change over time, preservationists can work with developers and communities to adapt obsolete/under-utilized historic buildings in such a way that they retain their past significance while creating new layers of place-based history and identity. Thus, when traditional preservation methods fail, community connections can salvage the historic resources of the built environment.



Sixty-Ninth Regiment armory under construction, illustrating the steel trusses required for drill hall design. Photo Credit: Geo. P. Hall & Son (New York Historical Society).



Historic and current photos of selected case studies: Fort Washington Avenue Armory and Bedford Union Armory. Photo Credit: Merrill Hesch (National Register of Historic Places), Geo. P. Hall & Son (New York Historical Society), Charlotte Crum.



The adaptive reuse of the Fort Washington Avenue Armory into a track and field facility. Photo Credit: Charlotte Crum.

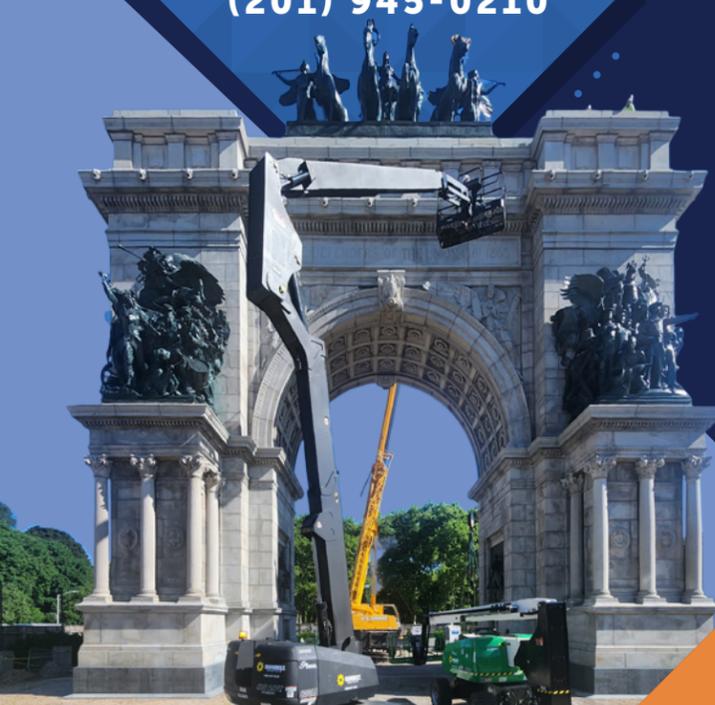


CHARLOTTE CRUM is a recent graduate from Columbia University, earning her M.S. in Historic Preservation in 2025. She is currently serving as Program Coordinator with the Historic Properties Fund at the New York Landmarks Conservancy, she worked with the Sacred Sites team to research and document significant religious properties in the Bronx, concluding a decades-long citywide survey of historic places of worship. Charlotte has also contributed to the Historic American Buildings Survey as an Architectural Historian and worked in Museum Education at the Metropolitan Museum of Art to conduct program evaluation. She has additional technical training in archaeological survey and excavation methods. Coming from an undergraduate background in statistics from the University of Vermont, Charlotte is passionate about finding ways to integrate quantitative and qualitative data into the field of preservation. In her career, she hopes to facilitate community engagement with historic and cultural resources through advocating for underrepresented groups in preservation.



WESTERN
SPECIALTY CONTRACTORS
(201) 945-0210

✉ JamesN@WesternGroup.com | Branch Manager
🌐 WesternSpecialtyContractors.com/NYC





Soldiers & Sailors Memorial Arch | Brooklyn, NY

Preserving and maintaining our history for over a century.

- Historic Restoration & Preservation
- Building Cleaning & Graffiti Removal
- FISP Repairs (Local Law 11)
- Access & Pre-Planning
- Rainscreen & Cladding
- Sealant Replacement
- Concrete Repair
- Wall Coatings

DIGITAL PRESERVATION AND FABRICATION FOR HISTORIC STONE ORNAMENT: A CASE STUDY AT THE VICTORIA MANSION

Presented By **Michael Fritz** and **Christopher Dabek**

THIS PRESENTATION SHOWCASES A NOVEL AND FORWARD THINKING APPROACH to workflow that actively integrates advanced digital design and fabrication with traditional stone carving craftsmanship to conserve severely deteriorated historic architectural elements. Utilizing Victoria Mansion (Portland, ME), a National Historic Landmark, we will demonstrate what can be accomplished when technology meant to save time and improve accuracy, intersects with an essential trade such as stone carving, a skill that offers an irreplaceable connection to the past and artistic value in the present.

Victoria Mansion recently completed an exterior restoration of architectural features that suffered significant degradation over time. The project team initiated the restoration by digitally designing and laying out an entire architectural bay on the front façade of the structure in order to meet a critical conservation need. The resulting 3D digital design was used as the primary reference source and predictive tool, enabling stone fabricators to plan and execute their work, even when severe deterioration required demolition of elements before completing a full building survey.

A comprehensive digital preservation process was developed, beginning with high-resolution 3D scanning of the remaining fragments that was used to capture intricate details. Utilizing this cutting-edge technology, the team, composed of the museum's director, restoration consultants, and the stone fabricator, were able to participate in a highly collaborative and academic effort with the data collected now in hand. This involved digitally reconstructing the missing or damaged ornamentation and strictly adhering to historic accuracy and material specifications. They then used the resulting digital models to produce full-scale 3D-printed references. These physical models provided precise, non-destructive guides for the traditional stone carvers, who used them to craft authentic, accurate, and structurally sound replacement elements.



Carved stone replacement unit for the architectural bay on the front facade of Victoria Mansion (1860). Photo Credit: Vertical Access

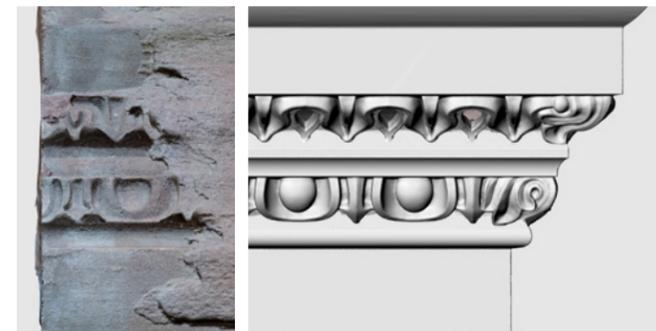


Traditional Stone Carver Sylvain Metivier's with a 3D Printed Model of the Stone Capital. Photo Credit: Vertical Access

This case study presents a scalable methodology for heritage preservation that actively restores complex historic elements while leveraging digital tools. It enables the project team to proactively manage design and construction sequencing when working with irreplaceable, deteriorated, or severely damaged components. This approach offers a powerful model for projects that must seamlessly merge technology with centuries-old craft creating a process that is equal parts art and science. •



New stone, based on digital model. Photo Credit: Vertical Access



The image on the left shows a deteriorated sample of a stone capital, while the right shows a VA4D digital model created using photogrammetry and structured light scanning. Photo Credit: Vertical Access



As VA4D Leader for Vertical Access, **MICHAEL FRITZ** brings nearly twenty years of experience in balancing traditional and digital arts in architectural restoration. His passion for exploring the interplay between art, architecture, and digital workflows has guided an inventive career in 3D-modeling, photogrammetry, digital documentation, site survey, and digital sculpture. Currently, Mike is leading the firm's VA4D initiative, a technology that digitally captures and models heritage structures for designers, contractors, and manufacturers. Mike holds a BFA from the Cleveland Institute of Art, and an MFA from the University at Buffalo.



In his role as Vice President at Stone & Lime, **CHRISTOPHER DABEK** establishes quality control measures and develops creative solutions to unique preservation challenges. He works closely with the owner, design and construction team from pre-construction through project close-out. Chris specializes in managing high-profile, complex preservation projects within both schedule and budget. He graduated from Roger Williams University with a B.S. in Construction Management where he is actively involved in the Construction Management Professional Advisory Board (CMPAB). During his career in preservation he has worked on many of the northeast's most complex restoration projects including: The Bowdoin Chapel Towers Reconstruction, the Harvard Lowell House Danilov Russian Bell Exchange, the Victoria Mansion Tower Reconstruction, the Trinity College Long Walk Restoration, restoration of the Wadsworth Atheneum, the Travelers Tower Rehabilitation and, most recently, work at Fort Jefferson in the Dry Tortugas and the Louisiana State Capitol.

Restoring with Skill.

Protecting with Purpose.



PULLMAN

LIGHT TOUCH, LASTING IMPACT: DIGITAL SCANNING AND LASER CLEANING INNOVATIONS FOR THE PRESERVATION OF CENTRAL PARK'S HISTORIC COLLECTION.

Presented By **Nicholas Fandaros**

Header: Central Park Bow Bridge. Photo Credit: Historic American Engineering Record (Library of Congress)

AS STEWARDS OF ONE OF THE NATION'S MOST ICONIC URBAN LANDSCAPES, the Central Park Conservancy's Preservation and Conservation team continually seeks to balance historic integrity with the opportunities afforded by emerging technologies. Recent projects demonstrate how advancements in digital documentation and material conservation are transforming preservation practice, supporting both long-term stewardship and broader public engagement.

The Conservancy's ongoing work at Bethesda Terrace and Fountain showcases the potential of 3D scanning, digital modeling, and photogrammetry to revolutionize documentation and interpretation. High-resolution digital scans of the Fountain's sculptural elements and terrace ornamentation provide a precise baseline for assessing condition and monitoring deterioration over time. These scans now form part of a comprehensive digital archive, creating a robust foundation for future conservation interventions and enabling accurate comparative analysis as environmental and material changes occur.

Beyond their technical utility, these models have become a powerful interpretive tool. They are being shared with cultural institutions and leveraged to create immersive public experiences through virtual and augmented reality. By offering digital access to sculptural details that are physically inaccessible, this initiative deepens public appreciation for the artistry and complexity of these historic features. The visualizations have also proved effective in fundraising and donor education, providing compelling, data-driven narratives that communicate both the need for and the impact of preservation work.

Complementing these digital initiatives, the Conservancy's 2014 treatment of the Egyptian Obelisk (Cleopatra's Needle) illustrates the transformative potential of laser cleaning technologies in the conservation of fragile historic materials. At the time, this project represented one of the earliest large-scale applications of laser ablation for outdoor sculpture in the United States. Working in collaboration with the company that would later become C.G. Laser, the Conservancy participated in early testing and refinement of laser tunability and scan patterns which contributed to methods that are now considered industry standards. The success of this treatment not only safely cleaned the Obelisk's delicate surface, but also served as a pivotal case study in advancing laser conservation technology.



Bethesda Fountain Angel Hand. Photo Credit: Direct Dimensions.

Building on this foundational experience, the Conservancy has expanded laser cleaning to additional monuments, such as the USS Maine National Monument, while integrating training opportunities for emerging conservators through its annual summer internship program.

“By offering digital access to sculptural details that are physically inaccessible, this initiative deepens public appreciation for the artistry and complexity of these historic features.”

Together, these projects demonstrate how integrating digital tools with traditional conservation expertise enhances both the technical rigor and cultural relevance of preservation practice. By embracing technology as a complement rather than a replacement for artisanal skill and material understanding, the Central Park Conservancy continues to refine methods that safeguard New York City's historic landscape while fostering accessibility, collaboration, and innovation within the broader field of cultural heritage conservation. •



USS Maine National Monument - The Atlantic figure (southeast) during laser treatment, with patch of biofilm left undisturbed to demonstrate the surface contrast of laser cleaning. Photo Credit: MCT Intern Sarah Ellison.



NICHOLAS FANDAROS is a preservation professional and emerging conservator with the Central Park Conservancy in New York City. As part of the Preservation and Conservation team, he works hands-on with the park's historic art, monuments, and built features, helping to maintain and restore some of its most recognizable landmarks. From leading conservation treatments to mentoring summer interns, Nicholas combines fieldwork with a passion for sharing preservation techniques with others.

Nicholas's background is rooted in both art conservation and historic preservation. He earned dual bachelor's degrees in Art Conservation and Art History from the University of Delaware, followed by a master's in Urban Affairs and Public Policy and a graduate certificate in Historic Preservation from the University of Delaware's Joseph R. Biden, Jr. School of Public Policy & Administration. His training bridges the worlds of fine art, material science, and cultural resource management, giving him a holistic perspective on the care of historic places.

Before joining the Conservancy, Nicholas worked with the Winterthur Museum, Garden & Library, where he focused on paintings conservation under Dr. Joyce Hill Stoner, and with the New Castle Historical Society, supporting preventive care and collections management.

Driven by a commitment to the stewardship of historic and artistic resources, Nicholas continues to explore how innovative technologies and traditional conservation practices can work together to sustain and celebrate our shared cultural landscapes.

Transforming today's buildings for tomorrow

At Arup, we partner with owners and public agencies to reduce emissions and elevate building performance, transforming existing structures into vibrant, resilient places that honor their uniqueness and strengthen communities.



www.arup.com

Explore how we transform existing buildings



PROJECT SPOTLIGHTS

VIEW ONLINE AT
www.StoneandLime.com



FUTURE GENERATIONS OF BUILDING ENVELOPE ASSESSMENTS: LEVERAGING DRONE SURVEYING, PHOTOGRAMMETRY, AND AI ASSISTANCE

Presented By **Laura Palacios & Tessa Flanagan**

Header: Drone capture of case study project. Photo Credit: Thornton Tomasetti

BUILDING ENVELOPE ASSESSMENTS HAVE LONG RELIED ON manual methods of inspection and documentation. Not infrequently, roadblocks arise that keep these physical methods from being comprehensive, quantifiable, or easily communicated; Missing original drawings, undocumented additions and modifications, the impracticability of taking comprehensive field measurements, or physical inaccessibility of the project site are amongst some of the limitations we face as preservation specialists

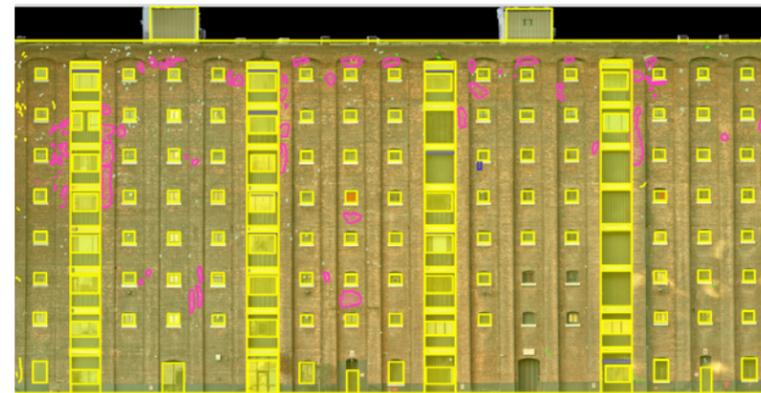
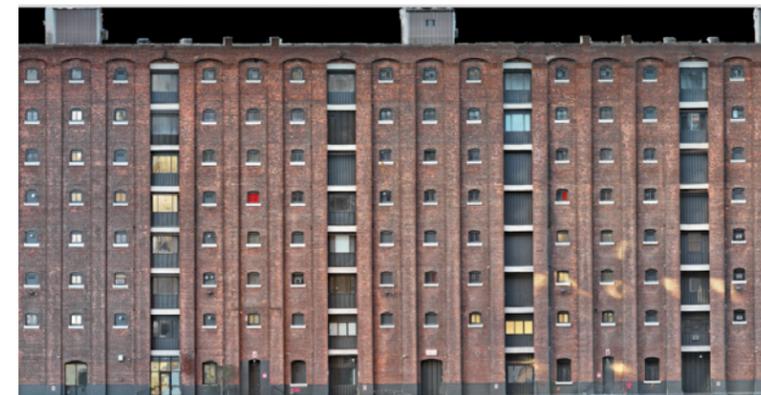
Evolving technologies including drone surveying, photogrammetry, and AI-assisted analysis of building enclosures are changing the way engineering and architectural professionals approach assessments and inspections. The presentation will explore the integration of hands-on assessments, onsite inspections, and drone technology to conduct comprehensive field studies on fully operational buildings, including those undergoing active restoration. The combined approach enhances efficiency without replacing the value of personal expertise, enabling teams to streamline data collection, improve documentation accuracy, and support long-term capital planning.

Among other technologies, Thornton Tomasetti uses T2D2, a self-learning software platform that detects and classifies visible damage to various types of structures and materials. T2D2 uses the latest developments in artificial intelligence to detect and localize damage by analyzing inspection images captured by drone, robotics and/or high-resolution fixed cameras, and converts it to actionable information. The T2D2 platform uses

“The program then geotags the locations on maps, CAD drawings, or 3D photogrammetric and BIM models and creates an automatic report.”

an AI-powered system to autonomously process thousands of images and videos at scale to detect and flag damage conditions on buildings and other infrastructure. It is trained using thousands of Thornton Tomasetti’s own images, data reports, and information from our own database — meaning it learned and absorbed decades of Thornton Tomasetti’s renewal expertise. The program then geotags the locations on maps, CAD drawings, or 3D photogrammetric and BIM models and creates an automatic report. The results appear through an interactive mobile and web-based portal that enables owners and managers to target repairs and stay up to date at the touch of a fingertip.

The presenters will discuss project case studies including facade inspections, due diligence studies, cost benefit analysis, and construction documentation that have not only utilized these evolving technologies, but are informing the workflows and implementation across practices and disciplines. A key focus is also placed on understanding limitations of these technologies and optimizing how findings are communicated to clients. •



Top: Drone capture of case study project. Photo Credit: Thornton Tomasetti. Bottom: Case study project elevation utilizing photogrammetry and drone technology. Photo Credit: Thornton Tomasetti.



LAURA PALACIOS is an Associate at Thornton Tomasetti. She has over 10 years of experience in building envelope restoration and historic preservation. Her primary responsibilities include the review and assessment of existing conditions as well as providing recommendations for repair and rehabilitation. Laura has coordinated various projects including commercial, institutional, educational, and historic landmarks and works directly with clients and consultants to ensure project success.



TESSA FLANAGAN is a senior engineer within Thornton Tomasetti’s building envelope team. She specializes in restoration and renewal with experience in the design of diverse building types and materials, including residential, educational, office, and retail space for new and existing buildings.



We Preserve History and Embrace the Future

Check us out at www.cany.com



JOIN US ON A TOUR

TOUR 1 THURSDAY, MARCH 5, 2026

HISTORIC SPEEDWELL: BIRTHPLACE OF THE TELEGRAPH

- 333 Speedwell Avenue
Morristown, NJ 07960
- 4:00pm-5:00pm



Top: Factory Building. Bottom: Vail Mansion.
Photos courtesy of Mark Sutherland of Morris County Park Commission

Join museum leadership for an on-site exploration of Historic Speedwell's layered construction history. The site is an open-air nineteenth century estate that was designated a National Historic Landmark in 1974.

The first stop is the Vail Home, restored by Stephen Vail around 1844. Mr. Vail was also the owner of Speedwell Ironworks. The extant Factory Building, dates to the 1820s, and is the location where Alfred Vail and Samuel Morse first publicly demonstrated their electric telegraph.

Now under the care of the Morris County Parks Commission, come learn about this important site in our local and national industrial history.

Event Leaders:

Katie Humphreys, Morris County Parks Commission

Karl Wietzel, Morris County Parks Commission

Photography is permitted

Dress for the weather and wear comfortable walking shoes.

TOUR 2 THURSDAY, MARCH 5, 2026

LAYERS OF PRESERVATION: TOUR AND DISCUSSION AT THE SCHUYLER-HAMILTON HOUSE

- 5 Olyphant Place
Morristown, NJ 07960
- 4:00pm-5:30pm



The Schuyler-Hamilton House, built in Colonial era Morristown, is listed on both the National Historic Register and the New Jersey Historic Register. George Washington and his troops spent two winters camped locally, and the house was used as a medical headquarters during the Revolutionary War as it was owned by Morristown's first doctor, Jabez Campfield.

An on-site tour and focused discussion of recent preservation work, proposed future projects, and long-term stewardship planning will be led by Margaret Hickey of Connolly & Hickey Historical Architects and Nina Hoban, Regent of the Morristown Chapter, NSDAR.

The session will also provide an overview of New Jersey's preservation grant landscape, highlighting how state funding programs operate individually and in coordination to support planning and capital preservation efforts.

Event Leaders:

Nina Hoban, Regent of the Morristown Chapter of the National Society Daughters of the American Revolution

Margaret Hickey, AIA, Principal Historic Preservation Specialist for the architecture firm Connolly & Hickey Historical Architects

Photography is permitted.

Rain or Shine

TOUR 3 SATURDAY, MARCH 7, 2026

LEGACY OF THE DELAWARE, LACKAWANNA AND WESTERN RAILROAD: HISTORIC NJ TRANSIT STATIONS

- Convent Station, 1 Convent Road,
Morris Township, NJ 07960
- 9:00am-11:30am



Photo courtesy of Jablonski Building Conservation

The Delaware, Lackawanna, and Western Railroad (DL&W) once connected Hoboken, NJ to Buffalo, NY. At its height in the late 19th and early 20th century, the railroad was a major economic engine and provided both freight and passenger rail service throughout the northeast.

Many of their architectural features, including massive poured concrete canopies and ornate masonry facades, are typical design elements used by the DL&W's designers which now present unique challenges for modern restoration and accessibility projects. All three are listed on both the NJ Register of Historic Places and the National Register of Historic Places.

This tour will showcase the history of these buildings and the unique challenges that NJ Transit faces in adapting them to modern accessibility requirements.

Event Leaders:

Richard Wisniewski, Director, Inter-Carrier Agreements, NJ Transit Rail Operations

Jacquelyn Lipson, Manager, Environmental Compliance, NJ Transit

Participants will meet at Convent Station for a safety briefing and tour, followed by a short train ride north to Morristown Station. After a tour of Morristown Station, the group will travel south to Madison Station. Following a tour of Madison Station, the group will return to Convent Station via train.

Photography is permitted.

Rain or Shine

TOUR 4 SATURDAY, MARCH 7, 2026

ADAPTIVE HISTORIES: EXPLORING A CENTURY OF CONSTRUCTION AT THE MORRIS MUSEUM

- 6 Normandy Heights Road,
Morristown, NJ 07960
- 9:00am-10:30am

Join APTNE for an on-site exploration of the Morris Museum's layered construction history—from the original 1913 Twin Oaks Mansion to its many expansions through the 21st century.

This tour will highlight how each era's materials, assemblies, and design choices shaped building performance over time, with a focus on how phased growth can affect long-term durability and maintenance needs. It will also discuss strategies used by the museum to adapt, repair, and manage enclosure issues while supporting evolving programming, collections, and visitor experience.

Event Leaders:

Amarantha Quintana-Morales, Senior Project Manager in SGH's Building Technology group in New York City,

Thomas J. Loughman, Ph.D., President and CEO, Morris Museum

Paul Muir, Director of External Affairs, Morris Museum

Photography is permitted without flash

Rain or Shine

TOUR 5 SATURDAY, MARCH 7, 2026

ACORN HALL: CONTINUING A LEGACY OF PRESERVATION THROUGH RESTORATION AND REUSE

- 68 Morris Avenue,
Morristown, NJ 07960
- 10:30am-12:00pm



Photo courtesy of Janet W. Foster

Explore Acorn Hall and its carriage house as two remarkably well-preserved, mid-19th century buildings that embody the country setting of pre-Civil War Morristown.

Given by Morris County Historical Society's Executive Director and Curator of Collections, the tour will focus on the buildings' architecture with discussion of the family's preservation of original interior decorative arts including plasterwork, wallpaper and other architectural decorative elements.

It will also discuss the adaptive reuse approaches of structural resources for archival storage and exhibit space, and the recent restoration efforts undertaken for both buildings to ensure long term use.

Event Leaders:

Amy Curry, Executive Director, Morris County Historical Society

Anne Motto, F.M. Kirby Curator of Collections, Morris County Historical Society

Photography is permitted without flash

Rain or Shine

Ample, free on site parking for visitors on the premises, though it can occasionally feel tight during busy times.

TOUR 6 SATURDAY, MARCH 7, 2026

CRAFTSMAN FARMS: GUSTAV STICKLEY IN NEW JERSEY

- 2352 NJ-10
Morris Plains, NJ 07950
- 1:00pm-2:15pm



Log House - Stickley Museum of Craftsman Farms.
Photo courtesy of SMCF

The Stickley Museum at Craftsman Farms (SMCF) is a National Historic Landmark and historic house museum, located on the campus of Craftsman Farms in Parsippany, New Jersey. Built by Gustav Stickley between 1908 and 1917 as the most complete expression of his "Craftsman" style, the campus of Craftsman Farms provides an unmatched opportunity to experience Stickley's ideas about the impact of architecture, design, and landscape on a meaningful life.

This tour will explore the role of Craftsman Farms and Stickley in the development of the Arts and Crafts movement in America as well as the preservation challenges faced by the museum. Following the tour refreshments will be served in the Education Center.

Event Leaders:

Dr. Jonathan Clancy, Executive Director, The Stickley Museum at Craftsman Farms

Photography is permitted without flash

Rain or Shine

Ample parking is available in parking lots located at the entrance to the Craftsman Farms campus. Visitors must then continue on foot to the Education Center Visitor Entrance, on the ground level at the rear of the building.

STUDENT MEMBERSHIP WITH APTNE

The Northeast Chapter of the Association for Preservation Technology International is committed to serving the arts, science, architecture, conservation, construction and engineering community with regional and local preservation knowledge and events.

WHY JOIN?

- Scholarships
- Professional networking opportunities
- Internships and mentorships at partner and member firms
- Free events and tours—virtual and in-person
- Practical insight into the preservation industry from professionals working in the field
- Recognition and participation at symposiums



JOIN TODAY FOR FREE:
aptne.org/membership

APTNE ANNUAL SCHOLARSHIPS

Scholarships are awarded annually to high school, college or graduate students that are current APTNE members and demonstrate a strong passion for historic preservation and/or related academic fields.

Apply today at aptne.org/scholarships

TWO
\$3000
SCHOLARSHIPS

to provide
financial support



DONATE TO SUPPORT OUR STUDENT SCHOLARSHIPS:
aptne.org/scholarships



CONGRATULATIONS TO APTNE'S 2026 STUDENT SCHOLARSHIP RECIPIENTS!

To Be Announced
During the Symposium

2025 YEAR-END REVIEW

JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER			
	<p>SARATOGA SPRINGS, NY FEBRUARY 28, 2025 9AM-7:30PM APTNE Annual Meeting and Symposium</p> 	<p>BOSTON, MA MARCH 27-28, 2025 8AM-4:30PM Historic Wood Window Restoration: North Bennett Street School Hands-on Class</p> 	<p>VIRTUAL APRIL 9, 2025 12PM-1PM Corrosion Basics and Assessment Techniques for Historic Concrete and Masonry Structures</p> <p>WIRE WEBINAR SERIES April 9, 2025 at 1:00 pm CT</p> 	<p>LONG ISLAND CITY, NY MAY 15, 2025 10:30AM-12PM Tiffany Glass Archive Tour: Archive and Conservation Studios at the Neustadt Gallery</p> 	<p>ALBANY, NY SEPTEMBER 20, 2025 4PM-7PM Closing Reception for the "Skilled" Photography Exhibit</p> 	<p>DUMMERSTON, VT JUNE 29, 2025 10AM-2PM Naulakha Estate and Scott Farm: Half Day Guided Tour</p> 	<p>HASTINGS-ON-HUDSON, NY SEPTEMBER 24, 2025 8AM-5PM APTNE 4th Annual Golf Outing at St. Andrews Golf Club</p> 	<p>NEW YORK CITY, NY SEPTEMBER 8, 2025 5PM-7PM Tenement Museum Tour: History and Preservation Projects</p> 	<p>NEW YORK CITY, NY OCTOBER 11, 2025 11AM-2:30PM NYC Scavenger Hunt: The New York Historical</p> 	<p>NEW HAVEN, CT OCTOBER 17, 2025 3:30PM-5PM Behind the Scenes Tour & Networking Happy Hour: Yale's Sterling Memorial Library</p> 	<p>NEW YORK CITY, NY DECEMBER 9, 2025 6:30PM-9:30PM Winter Holiday Party in New York City</p> 	<p>TROY, NY DECEMBER 11, 2025 5:30PM-8PM Winter Holiday Party in Upstate New York</p> 	<p>BOSTON, MA DECEMBER 11, 2025 6PM-9PM Winter Holiday Party in Boston</p> 	<p>BUFFALO, NY DECEMBER 12, 2025 5:30PM-8PM Window to the Trades: An Evening with the Stained Glass Association of America</p> 



Association for Preservation Technology Northeast
APTNE 2026 Annual Meeting & Symposium

