

# DESIGNING TO PRESERVE A LEGACY

Historic preservation and adaptive reuse projects breathe new life not only into old buildings, but the communities they serve.

If a community is a wheel, the hub is usually a place, a built structure. For many towns in the northeastern U.S., factories and mills provided a centerpiece for hundreds of employees, their families, and communities going back decades—sometimes centuries. Mill owners and employers would often provide space for meetings and celebrations in the same way that schools and churches do. And, of course, the work floor itself was a regular (if informal) meeting place at least five days a week.

Then, when the mills closed and the jobs disappeared bitterly, workers and their families lost these crucial hubs. The factory no longer served this secondary, yet hugely important, purpose.

The same is true for churches, schools, or any building serving a community in this way. A shuttered structure palpably impacts those who had for so long organized their lives around it. An iconic building that has gone quite literally dark, standing derelict and looming over the community it once served, only reminds the public of its deficit.

This loss often feels like a crime, as these historic landmarks represent our history, culture, and significant past events, evoking memories of some of our most fundamental cultural touchstones: the industrial revolution, the labor movement, and mass immigration. Because of the legacy it carries, a mill, factory, school, or church is not so easily replaced. Preserving the architectural heritage of exemplary structures and adapting them to new uses can be a powerful, meaningful expression of a community's ties to its past and an important catalyst for the future.

This work engages designers in the task of restoring lost civic pride by preserving, restoring, and readapting the hub of the "wheel." What follows is a portion of the construction techniques and design strategies The Architectural Team has applied to over 250 historic adaptive reuse developments over the past 43 years, with several ongoing projects serving as illustrations of how to put these principles into practice.

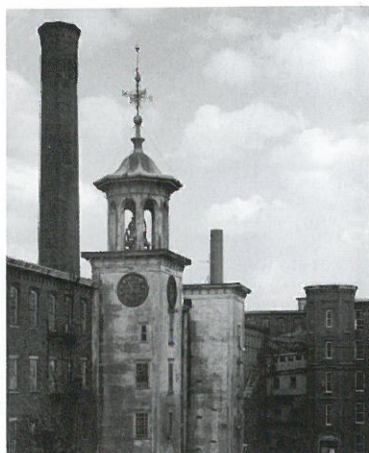


Photo courtesy Lowell Historical Society



Photo courtesy Bruce T. Martin/The Architectural Team

**ABOVE** Historic photo showing the deteriorating iconic clock tower and smokestack at Boot Mills, Lowell, Mass. After the renovation, Boot Mills' clock tower and smokestack are fully restored with careful attention to masonry and detailing that preserves the historic feel of the campus and its facilities.

## FIRST THINGS FIRST: THE HISTORIC TAX CREDIT

The first and most important step in the historic preservation/adaptive reuse process is to acquire designation of the proposed structure on the National Register of Historic Landmarks, a registry curated by the National Parks Service (NPS). As the most crucial requirement for the Federal Historic Tax Credit (HTC) eligibility, landmark status makes adaptive reuse economically competitive, even advantageous, when compared to new construction. The Architectural Team has successfully adapted more than 250 iconic buildings to new uses to date, thanks to the HTC, which covers 20 percent of qualifying rehabilitation expenses and makes our track record possible. (Visit [www.nps.gov/tps/tax-incentives.htm](http://www.nps.gov/tps/tax-incentives.htm) for more information.)

As such, we're often shocked to find that the HTC is the least bit politically controversial. Having worked on so many preservation projects, we know that adaptive reuse housing projects create jobs across 20 different trades and sub-trades, and inject economic vitality into the surrounding communities. Slashing the HTC for deficit reduction makes little sense, since the program actually generates return on investment for federal dollars spent.

Further, consider the fact that it requires roughly a million bricks and 700 trees to build 60 to 70 new residential units—precious materials (and dollars) which could almost all be spared by adapting an existing structure. This makes adaptive reuse one of the most sustainable design solutions in the building sector.



**CLOCKWISE FROM LEFT** This residential lounge, one of Boot Mills West's shared spaces, features exposed timbers, supports, and other industrial details, in harmony with new furnishings and finishes; exercise room at Boot Mills West, with exposed masonry and restored historical windows; a corridor in Boot Mills West, with a window looking into a billiard room, one of the featured shared spaces of the new apartments.



Photos by Gregg Shupe

## IDENTIFY THE OPPORTUNITY

Investigating the proposed site and its structural condition is crucial, naturally. Rot, decay, and aging foundations can create significant challenges for a design team.

But perhaps more importantly, the proposed reuse must fit the building. The structure is like a glove, and it needs the proper "hand" to wear it. A landmark's existing components will determine what uses are possible. For instance, the number of windows will rigidly define the number of units a residential reuse may include. Mills and factories—being many-windowed by design—are frequently ripe for reuse as multi-family, senior, commercial, or artist live/work residential projects.

Shuttered schools, typically vacated because they are no longer large enough to serve expanding student populations, also typically have plenty of windows. In Worcester, Mass., The Architectural Team and WinnDevelopment are currently converting The Voke (short for Worcester Vocational High School) into residential lofts. Dating back to 1909, The Voke occupied a "gateway" site at a prominent entryway to the city, making it iconic to visitors as well as residents.

In 1955, the U-shaped Voke building was infilled with a gymnasium addition, crowding the small campus and leaving the site footprint with limited expansion possibilities. Once closed, it began to lay fallow, and the site became known for squatters, vandalism, and other signs of urban decay. Instead of providing a gateway into the city, The Voke became a

visual barrier to Worcester—both symbolic of decay and literally decadent. The design team demolished the infill addition and restored the original U-shaped plan so conducive to its new residential reuse.

Another example of successful adaptive reuse strategies at work is Boot Mills East and West, a textile mill campus at the heart of Lowell, Mass., centrally located and set on the Merrimack River—a site ideal for mixed-use redevelopment. Though in need of major structural work, Boot had already been designated with landmark status. In fact, the NPS already occupied the site, dedicating some small square footage to a museum depicting the city's various contributions to both the labor movement and women's rights. (Look up the "Lowell Mill Girls" for some background on this fascinating history.)

Over the span of several project phases at Boot, The Architectural Team found solutions for masonry damaged by lightning strikes, timbers infested with wood-eating microorganisms, and first-floor levels built 11 inches below the 100-year flood plain, while carefully restoring the iconic windows, clock tower, and smokestack. The campus will ultimately yield 271 total residential units and 40,000 square feet of commercial and/or artist space, entirely in harmony with the existing museum and bringing new life to a downtown that was badly hurt by the mill closing decades ago.

## HONOR THE LEGACY

The joy and aim of projects like these is to combine new purpose with historic meaning. Saving as much as possible of the structure's historic

**CLOCKWISE FROM RIGHT** The interiors in The Voke (Worcester Vocational High School) were adapted into apartments that feature preserved historic windows and ceiling details; a view of the exterior shows the building prior to its adaptive reuse as residential lofts.



Photo by Josh Falk



Photo courtesy The Architectural Team

appearance is the most important part of salvaging its purpose and restoring its meaning to the community as the building

itself is restored. An untrained eye can detect subtle modernizations and alterations to lines and forms, especially if the viewer attaches special significance to the building.

Windows are a good example: residential reuse will require energy-efficient fenestration, but vinyl frames or reflective coatings will be jarring. Likewise, the design team must be careful when specifying rooftop HVAC equipment that does not noticeably alter the roof lines.

Boott Mills presented both of these challenges. The team met these by restoring existing wood window frames or replacing them with historically appropriate products, and by specifying low-profile equipment that could be positioned strategically on the rooftop to have minimal impact on the familiar roofline.

Then there are the less subtle aspects, which require significant attention. At Boott Mills, this meant restoring the brick masonry, especially that of the iconic smokestack. Though it will never again issue smoke (thank goodness), it is a focal point for the community—perhaps the defining feature of the skyline—visible from every direction. No less significant is the campus's clock tower, which had to be entirely removed during major structural repairs to its walls and afterward craned back into place.

Project teams should also consider possible restoration of the space for use by the community at large, as well as by new occupants. In Albany, N.Y., The Architectural Team is working with WinnDevelopment on adapting the former Philips Livingston Magnet Academy into a mixed-income senior living community with a total of 103 one- and two-bedroom studio apartments. The landmark school features a two-story library converted into multi-purpose meeting spaces, and an auditorium currently mothballed, but scheduled for similar adaptation during a future phase. These spaces will be publicly available to the surrounding residential community, as well as to the senior residents of the preserved building, restoring that aspect of the structure's legacy.

### ATTENTION TO DETAIL

The NPS takes an active role even when they are not located onsite, offering a number of important resources. In addition to providing a portfolio

of requirements for HTC compliance, the NPS typically keeps comprehensive archives on its listed landmarks, including images, which are invaluable for successful historic preservation.

But the designer on a historic/adaptive reuse project should not be satisfied even with NPS's thorough set of requirements. To preserve the legacy as fully as possible should be the overarching goal, and that means no detail is too small to be dismissed. Rather, each detail should be seen as an opportunity.

This is particularly true of interiors, for which there are fewer requirements. Residents of a loft in a historic mill may not need to feel connected to the history while at home, but offering this connection deepens the ties to the structure for new generations.

While the focus here has been on adapting to residential use, many opportunities abound for commercial spaces and other uses. The Architectural Team's portfolio includes derelict landmarks that have been adapted for hotels (from a former Boston police headquarters), a research laboratory, a drug-treatment center, artist live/work spaces, retail, mixed-use, and more. In each case, our firm sought to embrace the architectural heritage and preserve the historic legacy while successfully adapting the structure to meet the client's vision. We can say proudly that in many cases, our efforts assisted a struggling community to retain an important piece of its collective identity.

Preserving a legacy in this way does more than merely safeguard the past. It can strengthen the promise of the future. **RS**

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Photo by Josh Falk