NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES
State of New Hampshire, Department of Cultural Affairs 603-271-3483
19 Pillsbury Street, Box 2043, Concord, NH 03302-2043 603-271-3558

FAX 603-271-2361 Voice/TDD RELAY ACCESS 1-800-735-2964

# REPORT TO THE TRUSTEES
# JAMES E. NICHOLS MEMORIAL LIBRARY
## Center Harbor, New Hampshire

**James L. Garvin**
**Architectural Historian**
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This report is based on an inspection of the Nichols Memorial Library made on September 27, 1993, at the invitation of the library trustees. The meeting included Barbara Benoit, chair of the trustees, other members of the board, and Michael Sullivan, librarian. The purpose of the inspection was to consider some preliminary ideas for the provision of access to the library by people with disabilities, and to assess the general condition of the building.

**Summary:** The James E. Nichols Memorial Library is one of the finest small libraries in New Hampshire. It was built in 1910 from plans by the prominent Boston architect Charles Brigham. The library embodies a sensitive classical exterior executed in granite, Roman bricks, and limestone, and a dramatic interior with superb detailing and finish. The library was built to the highest standards of an age in which the building trades in the United States reached their pinnacle, and its sound construction has enabled the structure to serve for over eighty years without major repairs. The building was listed in the National Register of Historic Places on September 8, 1983.

Now, however, the library trustees must consider alterations to broaden opportunities for access to the building under provisions of the Americans With Disabilities Act of 1990. Because the configuration of the building does not offer easy access, and because any casual change to the structure could seriously damage the sensitive original design, the New Hampshire Division of Historical Resources strongly urges the town of Center Harbor to employ an architect to consider a wide range of issues before making any commitment to alter the structure.

Moreover, our inspection of the library has revealed that prior repairs have compromised the original function of the drainage system of the building. This, in turn, has introduced water problems that threaten the building and limit the full use of the basement as a possible means of providing both access to the structure and expanded library space. Correction of these newly-created water problems is an even more urgent need than provision of full access to the structure. This work should also be supervised by an architect.

**Access:** The Nichols Memorial Library, like other public buildings of its era, was not designed to offer access to those who use wheelchairs or have difficulty climbing stairs. Current state and federal regulations require that public facilities offer either physical access or equivalent services. The Americans With Disabilities Act (ADA), a civil rights law that was passed in 1990 and became effective in January, 1992, requires that the owner of any building that is opened to the public must strive to make the building fully accessible to people with disabilities even if no renovations to the building are planned. If it is not possible to make a public building, or part of such a building, physically accessible, alternative means of providing access to programs or benefits must be found.

As an interim means of complying with the ADA, the trustees of the Nichols Memorial Library have adopted a policy that offers equivalent library services through delivery of library materials to people with disabilities or to neighboring libraries that meet accessibility requirements.

In time, the town of Center Harbor will want to provide full or partial physical access to the library, which is one of the town's architectural treasures. The ADA requires that if a public building is renovated (except for routine maintenance, such a re-roofing or painting), the owner must ensure that ADA requirements for physical accessibility are met.

Because the library has been designated a historic structure by being listed in the National Register of Historic Places, the Americans With Disabilities Act would permit certain alternate requirements for access to be applied to the structure. The ADA recognizes that certain changes to historic buildings can compromise the very features that make such structures important, and therefore provides for the preservation of architectural integrity while ensuring access. The ADA's alternate standards for historic buildings could be invoked if other solutions threatened to damage the architectural integrity of the library.

In a complex and sophisticated building like the Nichols Memorial Library, however, even these alternate standards require professional thought and insight. The town of Center Harbor has been fortunate in receiving architectural advice as a contribution from the Meredith architectural firm of Christopher P. Williams, AIA. Development of a full plan for access, and for the correction of other architectural problems that relate to access and to expanded use of the building, is a complex undertaking that cannot be addressed within the limits of contributed architectural services. The Division of Historical Resources strongly recommends that the town of Center Harbor appropriate sufficient funds to employ an architect to develop a full study of both physical access to the library and expanded user services, especially in the currently under-utilized basement. A list of architects who specialize in work on historic buildings is appended to this report.

Among the possibilities for access to the building would be the provision of a level entry pathway leading from Main Street to the existing basement entrance at the southeast corner of the library. The basement could be adapted to include accessible rest rooms, expanded space for patrons (perhaps children) and collections, and other needs. Use of the basement entry as a means of providing access under ADA would, of course, require the design of a lift system to connect the two floors. This, in turn, would pose design challenges that call for the experience and insight of an architect.

Included with this report is information on a variety of manufacturers of passenger lifts and elevators.

While the Americans With Disabilities Act, as a civil rights law, generally discourages the provision of a secondary entrance for people with disabilities, the rules are softened for a historic building like the Nichols Memorial Library. For such buildings, as mentioned earlier, certain minimum standards may constitute compliance with ADA if, in the opinion of the State Historic Preservation Office (the Division of Historical Resources), compliance with more stringent accessibility standards would "threaten or destroy" the significance of the building. In general, however, historic properties should be made as accessible as non-historic properties to the greatest extent possible.

The minimum requirements for historic buildings are:

1. Only one accessible route must be provided from a designated access point on the site (usually, a parking lot or designated handicapped parking space) to an accessible entrance to the building. If necessary, a ramp with a 1:6 slope (much steeper than the normally specified slope) may be permissible for a short run of up to two feet.

2. One accessible entrance to the building must be provided. If it is not possible to make the main entrance or the normal public entrance accessible, then an alternative entrance, unlocked when the building is opened to the public, is acceptable. Signs must be provided to direct people from the main entrance to the accessible entrance, and a notification system (usually, a bell) must be provided at the designated accessible entrance.

3. If public toilets are provided, only one need be handicapped accessible, and this may be unisex.

4. Public spaces on the level of the accessible entrance (normally, the first floor) must be handicapped accessible. Other public levels of the building should be made accessible whenever practical.

5. Displays or written information should be located where they can be seen by a seated person. Horizontal signage should be no higher than 44 inches above the floor.

Even these minimum requirements for accessibility may be negotiable, under close consultation with the State Historic Preservation Office (the Division of Historical Resources), if they conflict with a set of preservation standards known as the **Secretary for the Interior's Standards for Rehabilitation**. A copy of the **Secretary's Standards** is appended to this report.

**Water Problems:** Assuming that access through the basement of the library building is ultimately found advantageous, or that such facilities as accessible toilet rooms or a children's area could take advantage of a refurbished lower level, certain problems must be overcome. Chief among these is moisture in the basement, which is now causing some deterioration of plastered wall surfaces and a general condition of mustiness in the room.

The greater part of the moisture that now affects the basement appears to be roof water. Penetration of roof water into the cellar appears, in turn, to be a result of changes that were made some years ago to the original roof drainage system of the building.

As originally designed, the building had integral rainwater gutters that were set into the top of the limestone cornice that surrounds the structure. These integral gutters would have taken the form of soldered copper troughs set unto channels in the top of the projecting cornice stones. The copper troughs were drained through downspouts that penetrated the cornice at intervals and conducted the collected roof water to elaborate copper leaders which are mounted on the walls of the building and form a part of the overall design of the structure. The leaders, in turn, are connected at grade level to cast iron storm sewer pipes that carried the rainwater underground to discharge points, probably dry wells placed some distance from the structure.

Evidence suggests that some years ago the copper troughs set within the stone cornice deteriorated and began to leak. Heavy-gauge roof copper such as was used in 1910 has proven to have a useful life of from forty to eighty years, and the gutters of the library had undoubtedly developed pinhole leaks at the points where water flow was greatest. Evidence of these leaks is seen in the green stains at each joint of the cornice stones. Some of this leakage may have penetrated the building's walls as well; there is iron oxide staining below the window of the former selectmen's room at the southeast corner of the building, and this appears to have come from water that found its way into the walls of the building and then leached out onto the surface.

The method that was chosen to overcome the deterioration of the copper troughs was to install a new, standing-seam copper eaves belt over the gutters, thereby allowing all roof water to fall from the eaves of the building to the ground. In some areas, where roof valleys gather a large quantity of rain, this discharge is extremely heavy and concentrated. The result is saturation of the soil around the building, especially beneath the valleys that flank the front entrance pavilion and the rear semicircular bay.

Due to the relatively slight projection of the cornice beyond the plane of the walls below, a second result of bypassing the gutters has been the washing of large amounts of roof water over the wall surfaces, especially below the roof valleys. Many of the wall areas most affected by this water are constructed of limestone. Limestone is adversely affected by acid, and rain today is acidic. Like any other sedimentary stone, limestone is also subject to spalling from frost action. The result of the passage of water over the walls is predictable. As may readily be seen around the building, and especially on the southwest juncture of the main wall and the semicircular bay, there has been severe staining of the limestone, spalling of the stone surfaces, loss of mortar in the stone and brick joints, and a general deterioration of the walls. This and similar areas are also the zones of greatest water penetration into the basement. In addition, the falling of large quantities of ice and snow in the wintertime has crushed and damaged the copper leaders near the ground.

In a letter of August 20, 1993, to Barbara Benoit, Richard G. Holt of the firm of Christopher P. Williams, Architects, has outlined four options for moisture control in the library:

1. Remove the copper roofing at the eaves and restore the original integral gutter system to full operation;

2. install new suspended gutters (like the one over the back door/basement door) outside the stone cornice and connect them to the existing copper leaders;

3. excavate around the building and install an underground drain system that will connect to and discharge into underground drain pipes around the building; or

4. change the grade of the site to carry surface water away from the building, to a leading it to a drainage swale that will conduct the water to a catch basin or storm sewer.

From the perspective of historic preservation, the first of these options would be the best. It is always preferable to maintain the original systems of an old building in working order unless they have proven to be faulty in design. In the case of integral roof gutters, the main potential problems might be the formation of ice dams in the winter. The generally good condition of the building until a few years ago (as evidenced by photographs) suggests, however, that the original roof drainage system worked satisfactorily until the copper gutter troughs reached the end of their expected life.

Because the town has recently invested a large sum in the installation of the copper eaves roofing across the tops of the original gutters, there will probably be little sentiment in favor or removing this work until it deteriorates. Perhaps in another half century or so, when the new copper has corroded, the town will wish to consider the restoration of the original system.

In the meantime, the second option suggested by Mr. Holt has the advantage of gathering the roof water at the eaves, before it can wash over the building's walls or saturate the soil around the structure. From the standpoint of conservation of the building, this would be the second most desirable approach to solving the water problem. Its disadvantages would be a change in the building's architectural character and the need to repair all the copper leaders and clear out all the underground storm sewers and dry wells. These disadvantages would be more than offset by the benefit of intercepting the water at the roof level and thereby keeping the walls and surrounding soil dry. In planning for the maintenance of a building that was designed to last virtually forever, one may also take the long view. Suspended gutters installed now can be seen as a temporary measure, to be replaced in another half century or so when the deterioration of the present copperwork will require a re-thinking of the problem and will allow the trustees of that future time to consider restoring the original system.

By overcoming the moisture problems now apparent in the library, the town will reduce the need for costly repointing of the walls, will preserve the fragile limestone trim of the building, and will secure a dry basement for future uses.

If the town must choose between curing the present water problems of the building and the provision of immediate access by people with disabilities, I would strongly recommend the curing of the water problems first. The primary duty of any agency that is responsible for a building, especially a historic building, is the preservation of the physical fabric of the structure. At present, the Nichols Memorial Library is in danger of serious deterioration from the uncontrolled discharge of roof water, and this problem must be addressed and corrected quickly.

In any case, however, I would reiterate that the town would be prudent to employ an architect to develop a fuller plan for the future of the library than has been possible under the generous but necessarily limited pro bono work of the Christopher P. Williams firm. The Nichols Memorial Library is a highly sophisticated building, and future work on the structure, whether for routine maintenance or for adaptation to changing needs, should be guided by a professional architect.

In addition, the New Hampshire Division of Historical Resources stands ready to offer any advice or technical assistance within the competency of its staff. The Division recognizes that the Nichols Memorial Library is one of the architectural monuments of New Hampshire, and earnestly wishes to further the preservation and future usefulness of the structure.