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REPORT ON WATTANNICK GRANGE BUILDING (OLD HUDSON TOWN HOUSE) HUDSON, NEW HAMPSHIRE

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SEPTEMBER 26, 1999

This report is based on a brief inspection of the Wattannick Grange building (the old Hudson Town House) on the afternoon of September 9, 1999, with Abbott E. Rice, master of Wattannick Grange, No. 327. The purpose of the inspection was to evaluate the general condition and significance of the building and to develop recommendations for its maintenance and future uses.

Summary: The old Hudson Town Hall (Wattannick Grange building) was built in 1857. The structure displays the highest level of materials and workmanship to be found in a wooden building of the mid-nineteenth century. The building has been well maintained by the Town of Hudson and by Wattannick Grange, and remains in good structural condition. With appropriate maintenance, the building should serve the needs of the Grange and other groups into the indefinite future while contributing to the identity of the old Hudson Center village area.

Description of the building: The old Hudson Town House was built in 1857 to supplant a former meeting house as a place for town meetings in Hudson. The building reflects the general form of the town houses that began to replace eighteenth-century meeting houses throughout New Hampshire in the 1830s and 1840s. It is a high, one-story structure lighted by windows ranged along its two sides. Its front doorway enters into a vestibule with antechambers (now converted to a kitchen and toilets) on each side. The building is somewhat larger than town houses in many smaller New Hampshire communities, and has an open balcony above the front rooms instead of the selectmen's office that is sometimes found in this area of such buildings.

The building stands on a slightly sloping site. Its foundation is composed of carefully-laid fieldstone lying below grade at the front of the building, and exposed above grade

toward the rear. A deep course of split granite underpinning topping the fieldstone walls and supporting the building's sills. The sloping site affords a deep cellar beneath the rear of the building, but the natural gradient of the soil rises evenly toward the front of the structure so that there is only a shallow crawl space under the front of the building. The deep rear portion of the cellar provides space for a large, oil-fired, forced hot air furnace and oil tank. This furnace is vented through the southernmost of two brick chimneys that rise along the inside face of the rear wall of the building; this chimney has been fitted with a clean-out door in the cellar. A second chimney, rising in a symmetrical location north of the central axis of the building, is no longer in use and has been dismantled to a point below the roof. The building is heated only when in use.

The building is staunchly framed. Most of its framing members were sawn on a reciprocating (up-and-down) sawmill, but some of the longer timbers, too long for most sawmill carriages, were hewn. The floor of the auditorium is supported by a series of hewn cross girders that span the structure from side to side. These, in turn, support longitudinal girders that run in three parallel lines from front to rear, parallel with the side sills. Split granite posts support each hewn cross girder at the three points where the cross girders receive the ends of the longitudinal girders. The longitudinal girders, in turn, support regular framing of sawn joists. Running across the building, these joists support a floor membrane of subflooring and finish flooring that runs parallel to the main axis of the structure. The finish floor boards are mostly plain-sawn.

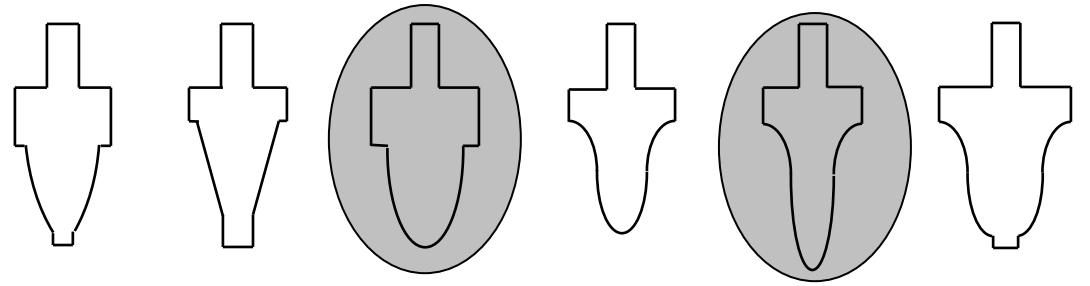
The roof of the building is heavily framed. The roof frame is composed of a series of four wood-and-iron Howe queenpost trusses that span the building from side to side at equal intervals. These trusses are framed of heavy sawn timbers, and their slanted end members support sawn purlins that run the length of the roof. The purlins, in turn, support heavy, sawn common rafters. The roof is boarded horizontally, and a few of the boards, especially on the south slope near the front of the building, show damage from the falling of a large elm tree that once stood near the southern corner of the building. To repair this damage and support modern asphalt shingles, the roof is sheathed with plywood.

The bottom chords of the queenpost trusses apparently carry longitudinal girders which, in turn, support ceiling joists that run across the width of the building. The ceiling of the auditorium is plastered over individual sawn laths that run parallel to the main axis of the structure. The ceiling plaster shows some damage and has been covered with modern acoustical tiles above the auditorium.

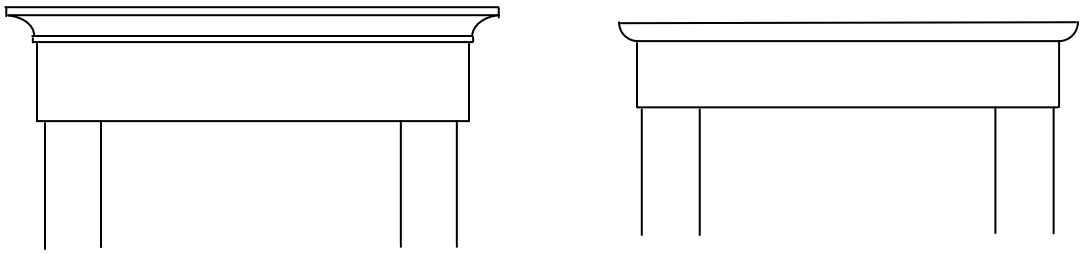
The finish woodwork of the building is characteristic of the late Greek Revival style. Most of the woodwork appears to be largely unaltered from the date of construction.

The majority of window sashes appear to have been renewed in the late 1800s. The sidelights and the transom sash of the front doorway, and a pair of sashes from the front attic window, have the muntin profile shown on the following page. These are presumably survivors of the original sashes used on the building. The windows that now fill all other openings are of a somewhat later muntin pattern, as shown. These sashes

appear to have replaced the originals within thirty or forty years of the construction of the building, unless the structure had two patterns of sashes when it was built in 1857.



Elsewhere in the building, most woodwork appears date from the original 1857 construction date. The interior door and window casings are fashioned from flat stock, but each opening has a top casing with a crown moulding, as follows:



The upper sashes of the side and rear windows of the building are presently covered with clapboards, which appear to be nailed to thin sheathing boards that are, in turn, nailed to the side stiles of the upper sashes. A ceramic souvenir plate hung on the front wall of the auditorium bears a photograph that reveals that the two front windows, flanking the front door, were similarly covered some years ago. A still older photograph of the building, published in Kimball Webster's 1913 *History of Hudson, New Hampshire*, shows that the upper sashes of both the front and side windows of the building were originally protected

by louvered window blinds. These were probably fixed blinds, covering the sashes at all times. The lower sashes of the front and side windows, by contrast, were fitted with hinged blinds hung on iron pintles. This arrangement, which admitted diffused light through the upper sashes and allowed the lower halves of the windows to be shuttered or uncovered at will, was commonplace for churches and town halls throughout the nineteenth and early twentieth centuries.

It seems likely that the upper window blinds eventually deteriorated and were removed sometime in the mid-twentieth century. For some reason, those responsible for the building at the time did not wish to utilize the upper window sashes. Possibly the upper sashes were found to be in deteriorated condition, although their protection by fixed blinds from the date of construction makes this seem unlikely. In any case, the upper sashes were covered with clapboards from the time that the blinds were taken off the building. As noted above, the clapboards were later removed from the top halves of the front windows in order to provide natural light to the gallery.

The floors of the auditorium are composed of boards of random but fairly uniform width. As noted above, the finish floor boards are plain sawn rather than quarter sawn. This exposes the grain of the boards in such a way that it may become raised and rough with traffic over time. These boards appear generally in good, smooth condition, but abrasion has created a few areas of raised grain. The floor has a number of "beaking joints," where the ends of a group of boards are aligned over a single joist. These joints give the appearance of former openings in the floor, but many or all of these aligned joints may simply represent the method of laying flooring that was chosen by the original carpenters.

The floor has a rather dark finish. Local tradition states that this finish was obtained by applying used automotive oil. It is possible that the floor has, instead, a linseed oil finish, which was common in the nineteenth and early twentieth centuries. Linseed oil is a drying oil well suited to finishing woodwork.

The walls of the auditorium are wainscoted to a point above the level of the window sills. The wainscoting is composed of beaded boards, laid horizontally and painted. This was a common form of wainscoting in the mid-1800s. Above the wainscoting, the walls are plastered. The plaster is probably applied over individual sawn laths, as is the case with the hall ceiling.

The surface of the wall plaster is slightly irregular. Its irregularities probably result from several innate characteristics. First, the plaster may have been applied in a single coat rather than in the two or three coats that became standard by the end of the nineteenth century. Second, wooden lath always shrinks and swells somewhat with changing humidity. Over time, this expansion and contraction of the lathing creates narrow fissures in the surface of the plaster, especially in one-coat plastering. Despite being filled during repainting, these irregularities remain a permanent characteristic of old plaster. They do not represent structural defects in the material. Third, there are a few patches in the plaster, and some of these patches were not done in the most skillful manner.

Statement of Current Concerns and Recommendations for Treatment: The Wattannick Grange Building is in well-maintained condition. The Grange is dedicated to keeping the building in good condition, and to carrying out maintenance and repairs that will enhance its historical and architectural integrity. The following topics include questions that have been raised with regard to specific conditions or elements of the building.

1. Windows. As noted above, the Wattannick Grange building retains old window sashes. Except for those in the doorway sidelights and transom, and a pair of sashes from the front attic window (stored in the attic), the present sashes in the building are of a uniform muntin profile. As shown on page 3, these windows appear to be late-nineteenth-century replacements of original sashes of a different muntin pattern—unless, for some reason, the building originally had window sashes made in two different patterns. The muntin profile of the present sashes suggests that these units are about a century old.

It is presently impossible to know why the original windows of the building would have been changed after only about forty years of use. A quick check of the published Hudson town report from the 1850s to the early 1900s has failed to document the replacement of the main window sashes.

In any case, the sashes presently in the building are important, character-defining features of the structure and deserve conservation and preservation. Included with this report is a more extended discussion of the importance of historical sashes and window glass, and a description of methods of window preservation.

In dealing with the window sashes of the Grange building, one important task will be to decide whether or not to uncover and open up the upper sash areas in the hall. This will entail careful removal of some or all of the clapboard covers to inspect the condition of the long-hidden upper sashes. As noted above, the fact that these sashes were once protected by fixed blinds, and more recently by their clapboarded panels, suggests that the sashes will be in good condition unless they were damaged when the clapboarding was attached to them. The likelihood that the upper sashes in the hall will be found to be in good condition is increased by the fact that the upper sashes of the two front windows were once also covered with clapboarded panels. These sashes have subsequently been uncovered to light the gallery, and are in good condition.

Even if the upper sashes are left covered, there will be some need to do conservation work on the lower sashes. Due to weathering, the joints between the stiles and rails of the lower sashes have begun to open up in some areas, putty has fallen out, some panes of glass are loose or cracked, and the sashes are generally in need of maintenance. The following people specialize in the rehabilitation of old window sashes:

John Butler
P.O. Box 593
Hollis, NH 03049
(603) 465-3249

Stephen Decatur
P.O. Box 262
Alton, NH 03809
(603) 875-5621

William A. Starck
Pinnacle Hill Road
New Hampton, NH 03256
(603) 744-5609

To reduce heat loss, it would be worthwhile to consider covering the exteriors of the windows with storm sashes as a substitute for the plastic film that has been attached to the inside of some of the windows. If funds permit, the exteriors of the windows might be protected by triple-track aluminum storm window units. Such units could be glazed with Lexan rather than glass. Lexan is lighter in weight than glass, making it easier to lift the lower storm window units if summertime ventilation is desired. Lexan is also vandal-resistant (even bullet-proof in thick sheets), and its chemical formulation filters out most of the harmful ultraviolet portion of the spectrum, reducing fading and deterioration of the contents of the building from the effects of sunlight.

2. Roof leaks. There is a stain on the crown moulding of the exterior cornice of the building on the south side, above the easternmost side window of the hall. The Celotex tiles of the hall ceiling above this point show peeling paint, suggesting water leakage or dampness in this location.

An inspection of the attic revealed old damage to the roof sheathing above this general location, caused by the fall of the tree that once stood off the southern corner of the building. There was, however, no apparent leak in the present roof covering, although the same zone should be examined again during hard rains.

It is possible that dampness in this area results from condensation. The attic is presently unventilated (see below, “Attic Ventilation”), and undoubtedly holds a high concentration of water vapor during the winter months. There is also a gap in the exterior cornice in this area, in the location where the stain appears on the exterior crown moulding. Experience has shown that a jet of cold winter air entering such a gap and encountering moist air can create condensation in the area that is chilled by the infiltrating air. This can produce enough liquid water to result in staining, mildew, or even decay. Similarly, warm, moist air entering such a gap during a winter thaw can encounter chilled surfaces in the attic, causing condensation on those surfaces. Such condensation could create the signs of dampness seen on the ceiling of the hall adjacent to the easternmost side window.

If the roof membrane is found to be without a leak in this vicinity, the proper ventilation of the attic should carry off enough of the collected water vapor so that

condensation will not occur in areas where air may infiltrate the attic during the wintertime.

3. Attic ventilation. The attic of the Wattannick Grange building was designed to be ventilated by windows in its front and rear gable walls. Both windows have been sealed up. There are no sashes for the rear window. The sashes for the front window are stored in the attic. Both openings are filled with sheets of plywood.

The air in all buildings tends to be laden with moisture. In the wintertime, the sun warms unheated buildings to the point that their interior air can absorb more water vapor than can the cold outside air. This warmer air absorbs moisture from any available source, most commonly from dampness in the unfrozen earth beneath the structure. Much of this moisture migrates to the attic of the building, where the air is warmest during the daytime. At night, this water vapor tends to condense either as standing water or as frost. As noted above, areas of concentrated cold, such as points where jets of outside air penetrate the building, can experience concentrated condensation. On cold days or nights, however, all surfaces in an attic may be covered with frost. When this frost melts during the next warm period, conditions of wetness, unhealthy for the building, often result.

The threat of condensation can be greatly reduced by two means: reducing the amount of water vapor in the building, and ventilating the attic.

Reduction of water vapor in a building that is not occupied or even heated on a regular basis is usually accomplished most effectively by covering the exposed earth of the basement or crawl space. Remaining unfrozen during much of the winter, this earth acts as a wick, drawing dampness from the ground below the building and diffusing that dampness into the air of the crawl space. From there, the water vapor, being a gas that can penetrate most building materials, easily migrates upward into the upper stories and the attic of the structure.

The most effective means of preventing the evaporation of water into the air in a building is to install a vapor barrier or retarder on the surface of the earth. The simplest and least expensive means of doing this is to cover all exposed earth under the building with a layer of 6 mil black polyethylene, with all adjacent sheets overlapped carefully and, preferably, taped together. Such a membrane effectively seals moisture in the earth, preventing most water vapor from finding its way into the air within the structure.

Even if this process seems too expensive or burdensome to Wattannick Grange, some means should still be found to ventilate the building's attic in order to carry off the moisture that will collect beneath the roof. Since this moisture cannot escape through the plywood and asphalt shingles of the roof membrane itself, the front and rear window openings offer the most effective means of discharging moisture from the space. These means were provided when the building was designed and built in

1857, and it would be logical to take advantage of what was provided by the original builders.

The photograph of the building published in Webster's 1913 town history shows that the front window was then covered by louvered blinds or shutters. Pintles still in place on the rear of the building show that the rear attic window was shuttered in the same way. It is likely that the looseness of the attic window sashes allowed dampness to be carried off through the louvers of these window blinds, or even that the lower sashes were left open behind the protective shutters.

Replacement of louvered blinds in the attic window openings would improve the appearance of the Grange building while offering a means of ventilating the attic. If desired, manufactured metal or wooden louvers could be installed in the existing plywood window covers, and blinds could be hung outside the plywood on the original pintles. Such an arrangement would permit air circulation and the discharge of water vapor while providing security against snow infiltration. There would be no need to fabricate new sashes to fit the attic window openings.

4. Americans With Disabilities Act: Front Door and Toilet Rooms. The Wattannick Grange building is presently not accessible to people with handicaps. In 1990, the Americans With Disabilities Act (ADA) was signed into law. It became effective in January, 1992. This is a civil rights law that applies to most public accommodations, whether owned privately (as are most inns, restaurants, theaters, stores, and office buildings) or publicly by federal, state, or local governments. The law is triggered by the public nature of these buildings.

The Americans With Disabilities Act exempted places of worship, private clubs, and private residences. Wattannick Grange may be classified as a private club, and therefore not subject to the Americans With Disabilities Act. However, the Grange may wish to ensure its members full access to the building regardless of their disabilities, and may wish to open the building to other groups of a public nature. For these reasons, it would be prudent to understand the implications of the Americans With Disabilities Act as that law applies to historic buildings.

The Wattannick Grange building was determined to be individually eligible for the National Register of Historic Places in January, 1993. For the purposes of the Americans With Disabilities Act, determination of the building's eligibility for the National Register is equivalent to the building's actual listing in the Register.

Under the ADA, a building that has been determined historic may comply with the following minimum requirements for access if, in the opinion of the State Historic Preservation Office, compliance with more stringent accessibility rules would "threaten or destroy" the significance of the building:

1. One accessible route must be provided from a designated access point on the site to an accessible entrance to the building. A ramp with a 1:6 slope (steeper than the slope usually required) may be permissible for a 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 accessible, then an alternative entrance, unlocked when the building is open 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 toilets are provided, only one need be handicapped accessible, and this may be unisex.

4. Public spaces on the level of the accessible entrance must be handicapped accessible. Other public levels of the building should be made accessible whenever it is practical to do so. In the case of Wattannick Grange, the hall should be made accessible, but the balcony, being little used by anyone, need not be accessible.

5. Displays and 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 may be negotiable under close consultation with the State Historic Preservation Office.

The front door of the Grange building has always been reached by a flight of three granite steps. The three steps are flanked by two heavy granite curbs or plinths whose top surfaces are level with the top of the uppermost step. From this level, there is an additional riser of seven or eight inches to the threshold of the double doors.

One means by which the front door could be made accessible would be to move the granite steps forward at least 36 inches (the ramp width required under ADA) from the building. A ramp could then be constructed of appropriate materials from a parking area to the front door, running parallel to the façade of the Grange building. To meet ADA requirements, such a ramp would have to adhere to the least possible slope, preferably less than 1 in 12. For every 30 inches of rise, the ramp would need a level landing, and it would need to be equipped with handrails. Since the Grange building stands on a slight elevation above the surrounding yard, it might be necessary to raise the grade of part of the parking area north or south of the building (whichever were designated as handicapped parking) in order to minimize the length of the ramp.

To make such a ramp as attractive as possible, it would be ideal to be able to raise the level of the granite steps to bring the elevation of the two plinths and the top step

even with the first floor level of the building. This would allow the granite steps to screen the top of the ramp, rather than having the ramp and its top platform rise seven or eight inches above the granite. Unfortunately, the finished surface of the granite steps and plinths may not extend far enough into the ground to permit the steps to be raised to the height of the first floor without raising the grade under the steps.

Given the complexity of this design change and the potential for aesthetic damage to the building, Wattannick Grange would do well to engage the services of an architect who has had experience in designing ramps for historic buildings.

The same is true of the toilet rooms for the building. The present men's and women's water closet rooms are small, but have a large outer room with a common lavatory. The total space available within the area now given over to the two water closets and the lavatory is ample for the installation of a handicapped accessible unisex toilet room, or possibly for two separate accessible toilet rooms. Design of such facilities, however, needs close study by an architect.

5. Exterior painting. The exterior of the Grange building is beginning to show paint failure. A historic building is best painted with traditional methods and materials. Model specifications for exterior painting are appended to this report.

Although these specifications call for the use of oil-based (alkyd) paints, recent federally-mandated changes in paint formulations have diminished the efficacy of many alkyd paints. Meanwhile, continued experimentation with water-based (latex) paints has improved the quality of the latter. Thus, the use of oil-based paints for historic buildings no longer shows a clear advantage over the use of high-quality latex paints, although most latex paints still require an oil-based priming coat. The enclosed specifications may therefore be modified to call for the use of high-quality latex paint if desired by Wattannick Grange.

One procedure to avoid at all costs is the now-popular "pressure washing" or "water-blasting" of the building as a method of preparation for painting. Washing under even moderate pressure drives a great deal of water into the fabric of the building. A washed building requires weeks and often months to dry to a condition fit for painting, yet most painters who employ this method attempt to paint the structure a short time after washing it. The easy availability of pressure-washing machinery has tempted many painters to employ this means of preparing buildings for painting, always to the detriment of the paint job.

There is no substitute for the traditional method of dry scraping and sanding of a paint surface. All exterior house paints are perfectly adapted to cover a building that has been scraped, sanded, and brushed with a dust brush; no paint requires a washed surface for good adhesion. On the contrary, paint adheres best to a roughened surface like that created by traditional scraping, sanding, and dusting. Water is the great enemy of a long-lasting paint job. The drying of a damp, washed building invariably causes paint failure in both oil-based and water-based paints.

6. Interior painting. The plastered auditorium walls are presently painted with a rather high-gloss paint. High-gloss paint always emphasizes irregularities in any surface. If it is thought desirable to mute the appearance of the irregularities in the wall surfaces, described above on page 4, a matte wall paint can be chosen when the walls are repainted at a future time. Generic specifications for interior painting are appended to this report.

7. Auditorium floor. The auditorium or Grange hall floor is in good condition. As noted above, however, most of the floor boards are plain-sawn rather than quarter-sawn. The cross-sections below illustrate the difference between the two methods of sawing, and reveal how the grain of plain-sawn boards may tend to raise under wear and impact, causing some roughness.

Quarter-sawn board Plain-sawn board

There is no way to prevent some raising of the grain of plain-sawn flooring, especially with coarse-grained or brittle woods like eastern hemlock. If the texture of the hall floors creates a potential problem, as in dancing with ballet slippers or in contra-dancing with bare feet, then the floors could be sealed with a tough, modern covering like polyurethane.

It should be noted, however, that wear over many decades has given the hall floor a slightly rippled or undulating surface. This surface is characteristic of old, hand-planed, worn floors and contributes to the feeling of age and authenticity in the historic Grange hall. Any refinishing technique that would erase this surface texture, such as sanding with a drum sander, would detract from the character of the floor. If it is felt necessary to seal the floor, preparation ought to be by the gentlest means possible, preserving the aged character of the surface.

8. Fund-raising possibilities. Wattannick Grange is interested in identifying potential sources of financial help for rehabilitation of the building. While some local corporations and businesses may be disposed to contribute to this work, there is interest on the part of the Grange in potential support from preservation organizations and foundations. The following information is offered as a beginning in identifying such support.

The State of New Hampshire itself does not yet have funding to help underwrite preservation projects. While most other states have grant programs or tax-based incentives to help qualified private individuals, municipalities, and non-profit groups to acquire or maintain historic properties, such programs have never been funded in New Hampshire.

Recently-passed state legislation will authorize the New Hampshire Division of Historical Resources to receive a share of revenues to be generated from sales of a new conservation license plate. These funds will be passed on to preservation projects in New Hampshire. The legislation restricts such aid to *publicly-owned* structures. Regrettably, the revenues will be of little or no help to sites owned by private, non-profit entities. The first revenues from this source may begin to be available in the year 2000.

The National Trust for Historic Preservation does have a "Preservation Services Fund," which provides small grants to Trust member organizations for technical studies, assistance in fundraising, architectural and engineering plans, and other *non*construction activities. These grants are offered only to non-profit organizations that are engaged in preservation efforts. The Trust's Northeast Field Representative can explain the program requirements and the application procedures, and may also be able to suggest other sources of encouragement and assistance. For more information, contact the Northeast Regional Office, National Trust for Historic Preservation, 7 Faneuil Hall Marketplace, 5th Floor, Boston, MA 02109 [Tel.: (617) 523-0885]. Jeffrey Harris in the Boston office is specifically responsible for Maine, New Hampshire, and Vermont projects, so you should try to speak directly with him.

The National Trust also administers the Cynthia Woods Mitchell Fund for Historic Interiors, established to assist in the preservation, restoration, and interpretation of historic interiors. Competitive grants range from $5,000 to $25,000; nonprofit organizations, government agencies, for-profit businesses, and individuals are invited to apply. Grant awards may help to fund the hiring of consultants; the design, production, and marketing of print and video communications materials; the sponsorship of preservation conferences and workshops; and the design and offering of innovative programs in preservation education. Acquisition of properties and actual construction, repair, and rehabilitation are *not* funded. The annual application deadline is February 1. Applications for the New England area should be mailed to the Northeast Regional Office, National Trust for Historic Preservation, 7 Faneuil Hall Marketplace, 5th Floor, Boston, MA 02109 [Tel.: (617) 523-0085].

The Washington office of the National Trust administers the Johanna Favrot Fund for Historic Preservation. The fund offers grants, ranging from $2,500 to $25,000, to non-profit organizations, government agencies, for-profit businesses, and individuals. Eligible programs include the preservation of historic environments in order to foster appreciation of the nation's diverse cultural heritage and to preserve and revitalize the nation's communities. Program activities may include the hiring of consultants for a range of preservation services, sponsorship of conferences and workshops, development of preservation education programs, and the strengthening of organizations' management capabilities. Construction, repair, and rehabilitation work are *not* eligible for funding. The annual application deadline is February 1, and awards for any one year will total about $50,000. For more information, contact the

National Trust for Historic Preservation, 1785 Massachusetts Avenue, N.W., Washington, D.C., 20036 [Tel.: (202) 673-4296].

In 1997, the National Historical Society, a division of Cowles Enthusiast Media, Inc., announced a grants program that includes historic preservation grants, educational grants that use historic sites or artifacts to enhance an understanding of history, and grants to advance knowledge and appreciation of state and local history. The preservation grants give priority to projects that protect, preserve, conserve, and rehabilitate historic sites and structures, especially if such work will enhance heritage tourism. These grants are available only to private, non-profit [501(c)(3)] organizations. The program favors projects that provide permanent or sustainable benefit, especially to under-served populations, and that give evidence of collaboration or cooperation among several cultural or educational institutions. The annual deadline for grants is April 1 of each year. We understand that the grants program has temporarily been suspended as Cowles Enthusiast Media is being absorbed by another organization, but it might be worthwhile to inquire directly. For more information and application guidelines, contact the Grants Administrator, National Historical Society, 741 Miller Drive, SE, Suite D-2, Leesburg, Virginia, 20175 [Tel.: (703) 779-8338; FAX: (703) 779-8342].

The New Hampshire Charitable Foundation may be a source of information about foundation and non-profit funding sources. The Charitable Foundation is an umbrella agency for many specialized funds and foundations, some of which may have been created with guidelines that would allow them to support your project. For details, contact the New Hampshire Charitable Foundation, Box 1335, Concord, NH 03302-1335 [Tel.: (603) 225-6641].

The Charitable Foundation also maintains a “Foundation Center Library” collection. Users may make an appointment to use the library and to search a computerized data base of still other possible funding sources.

The Kresge Foundation is the only major national foundation we know of that makes capital grants for acquisition of real estate and for construction work both for new buildings and for preservation or rehabilitation work. Kresge accepts proposals at any time throughout the year, but only once in a twelve-month period for any single project. For more information, you may request a copy of the brochure, “Policies and Application Procedures” from the Program Office, Kresge Foundation, 3215 Big Beaver Road, P.O. Box 3151, Troy, MI 48007-3151 [Tel.: (248) 643-9630].

The Ellis L. Phillips Foundation, formerly of Lyme, New Hampshire, and now in Boston, has sometimes shown an interest in historic preservation efforts in New Hampshire. For more information, contact the Ellis L. Phillips Foundation, 29 Commonwealth Avenue, Boston, MA 02116 [Tel.: (617) 424-7607].

The American Association for State and Local History (AASLH) has a variety of programs and services (including consultant grants) for member organizations. For

more information, contact AASLH, 530 Church Street, Suite 600, Nashville, TN 37219 [Tel.: (615) 225-2971].

The New Hampshire State Council on the Arts administers the "Cultural Facilities Grant" program, which provides matching grants for planning and capital projects to New Hampshire non-profit organizations that maintain cultural facilities. Historic preservation projects are eligible for consideration under this program *only* if the purpose of the project is to make a building suitable for arts programming, but the Council has awarded several grants to historic cultural facilities when those projects met the guidelines of the program. For more information, contact Rebecca L. Lawrence, Director, New Hampshire State Council on the Arts, 40 North Main Street, Concord, NH 03302-4974 [Tel.: (603) 271-2789].

The State Council on the Arts also has available (for reference at the Council office, but not for loan) a copy of the *Directory of Building Equipment and Grants*, with over 5,000 funding entries indexed three ways, and a copy of the *Handicapped Funding Directory*, which lists more than 1,200 entities that grant funds to nonprofit organizations, indexed four ways.

Rehabilitation of some buildings may be eligible for a USDA Farmer's Home Administration "Community Facilities" loan or grant. For more information, call the Concord District Office at 505 South Street, Bow, NH 03304 [Tel.: (603) 225-1661].

The New Hampshire Preservation Alliance, a statewide non-profit historic preservation advocacy organization, has a broad network of information sources and preservation resources. The Alliance can be contacted at: Jennifer Goodman, Executive Director, New Hampshire Preservation Alliance, Inc., P.O. Box 268, Concord, NH 03302-0268 [Tel.: (603) 224-2281]. The phone has an answering machine.

The Preservation Institute for the Building Crafts is a non-profit organization that is helping contractors, architects, building tradespeople, and property managers in New Hampshire and Vermont to develop specialized preservation expertise through courses, workshops, tours, and lectures. The Institute also maintains a list of consultants, contractors, and craftspeople with preservation skills, and for a minimal fee will provide names of qualified specialists. The Institute also occasionally "adopts" a building to use in training its students in some specialized preservation activity; for example, the Institute has been using buildings at Canterbury Shaker Village as laboratories in which to teach plaster preservation and restoration. PIBC's address is P.O. Box 1777, Windsor, VT 05089-0021 [Tel.: (802) 674-6752].

In addition to traditional sources of assistance like these, many other local sources of help may be available. Many fund-seekers focus on foundations or on large business firms with facilities in the area, but smaller local businesses can sometimes take an interest in preservation projects. It may also be worthwhile to speak to bank trust officers about local or individual trusts, bequests, and foundations that they may

administer which have guidelines that may coincide with your needs. There may be a municipal trust fund that could help.

The Wattannick Grange building is an important treasure in the architectural legacy of Hudson. The town has been transformed since World War II by dramatic growth and increases in traffic. The Grange building serves as a landmark and a reminder of the town's early civic center and of a period when the town possessed a prosperous but rural character.

In light of the important architectural and symbolic character of the Grange building, the New Hampshire Division of Historical Resources would suggest that any future treatment of the building be governed by consideration for the building's integrity of design and materials. All changes to the floor plan or design of the structure ought, if possible, to be studied and planned with the help of an architect who is knowledgeable about historic structures.

As general principles, the Division of Historical Resources would suggest that future work on the building be governed by a set of guidelines called *The Secretary of the Interior's Standards for Rehabilitation.* These *Standards* are mandatory for federally-funded work on historic structures. They are based on common sense and on respect for historic buildings, and so are appropriate for work on any early structure. The *Standards* are not rigid rules, but rather are guidelines that are meant to be applied flexibly in the best overall interest of preserving historic structures.

The ten *Secretary of the Interior's Standards for Rehabilitation* are:

1. A property shall be used for its historical purpose or shall be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

2. The historical character of a property shall be retained and preserved. The removal of historical materials, or the alteration of features, spaces, and spatial relationships that characterize a property, shall be avoided.

3. Each property shall be recognized as a physical record of its time, place, and use. Alterations that create a false sense of historical development, such as adding conjectural features or elements taken from other historical buildings, shall not be undertaken.

4. Most properties change over time. Changes to a property that have acquired historical significance in their own right shall be retained and preserved.

5. Distinctive materials, features, finishes, and construction techniques, or examples of craftsmanship that characterize a property, shall be preserved.

6. Deteriorated historical features shall be repaired rather than replaced. Where the severity of deterioration requires the replacement of a distinctive feature, the new feature

shall match the old in design, scale and proportion, color, texture, and, where possible, in materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

7. Chemical or mechanical treatments, if appropriate, shall be undertaken using the gentlest means possible. Treatments that cause damage to historical materials shall not be used.

8. Archaeological resources shall be protected and preserved in place. If such resources must be disturbed, mitigation measures shall be undertaken.

9. New additions, exterior alterations, or related new construction shall not destroy historical materials, features, and spatial relationships that characterize a property. New work shall be differentiated from the old, and shall be compatible with the massing, size, scale, and architectural features of the historical property so as to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historical property and its environment would be unimpaired.

GENERIC SPECIFICATIONS
EXTERIOR PAINTING OF HISTORIC WOODEN BUILDINGS

The following specifications were prepared in 1990 in the expectation that historic wooden buildings would be painted with oil-based paints that employ either linseed oil or an alkyd as the vehicle. Many latex paints have subsequently improved in durability, while some alkyd paints have declined in durability due to environmental regulations governing paint manufacture.

If these specifications are applied to a project that uses water-based emulsion paints, the clauses that refer to oils, solvents, flammability, and other non-relevant issues may be ignored.

I. GENERAL

A. DESCRIPTION OF WORK

1. It is the intent of these specifications that this job shall be performed to the highest standards of workmanship known to the painter's trade, using products and materials of the best quality.

2. This job includes all preparation and full exterior painting of the main building and outbuildings, as may be agreed upon between the owner and the contractor.

3. The work includes re-puttying of window glass where putty is loose or missing. No window glass shall be replaced without consultation with the owner or owner's representative.

4. The work includes removal of loose or poorly-adhered paint, preparation of surfaces to be painted, application of spot priming wherever bare wood is exposed after preparation, and application of one full coat of priming paint and two coats of finish paint to clapboards, trim, and mouldings, exteriors of window sashes, casings, and exterior window blinds or shutters.

B. QUALITY ASSURANCE

Unless paint is hand mixed and tinted, provide primers or other undercoat paint produced by the same manufacturer as the finish coats. Use only thinners approved by the paint manufacturer, and use thinners only within recommended limits.

C. SUBMITTALS

1. If required, submit samples to owner for review and approval of color and texture. Provide samples of colors and materials on 12" by 12" squares of hardboard or seasoned wood with texture to simulate actual building conditions. Resubmit each sample as requested until the required sheen, color, and texture are achieved.

2. Final acceptance of colors will be from samples applied on the job.

D. DELIVERY AND STORAGE

1. Deliver all materials to the job site in original, new, and unopened packages and containers bearing the manufacturer's name and label.

2. Protect materials from freezing or excessive heat. Keep the storage area neat and orderly. Remove oily rags and waste daily. Take all precautions to ensure that workers and work areas are adequately protected from fire and health hazards resulting from handling, mixing, and applying paint materials. No smoking is permitted indoors or in proximity to areas where paint is being mixed or where solvents are exposed.

E. JOB CONDITIONS

1. Do not apply paint materials when the temperature of surfaces to be painted and the surrounding air temperature are below 50 degrees F., unless otherwise permitted by the paint manufacturer's printed instructions.

2. Do not apply paint materials in snow, rain, fog, or mist, or when the relative humidity exceeds 85%. Do not apply paint materials to damp or wet surfaces, or to wood with a moisture content above 15% as measured by a moisture meter.

II. PRODUCTS

A. ACCEPTABLE MANUFACTURERS

Subject to the requirements and standards provided by these specifications, materials to be used on this job shall be products of the following manufacturers unless other products are expressly approved in advance by the owner:

1. Devoe and Reynolds Company (Devoe)
2. Glidden Coatings and Resins, Division of SCM Corporation (Glidden)

3. Benjamin Moore and Company (Moore)
4. PPG Industries, Pittsburgh Paints (Pittsburgh)
5. Pratt & Lambert (P&L)
6. The Sherwin-Williams Company (S-W)

B. COLORS AND FINISHES

Prior to the beginning of work, the owner will furnish sample color chips for surfaces to be painted in other than pure white. Match the colors of the chips and submit samples, as specified under **I.C.1.**, before proceeding with the work.

C. MATERIALS

1. Provide the best quality grade of the various types of coatings as regularly manufactured by acceptable manufacturers (above). Materials not displaying the manufacturer's identification as a standard, best-grade product will not be acceptable.

2. Undercoat or priming paint shall be made by the same manufacturer as the finish coats. Use only thinners approved by the paint manufacturer, and use them only within recommended limits.

3. Color pigments shall be pure, non-fading types appropriate for the other paint media with which they are mixed and for the substrates and the conditions of the job.

4. Both priming paint and finish paint shall be the best quality oil or alkyd-based exterior house paint from fresh stock.

III. EXECUTION

A. INSPECTION

1. Examine the areas and conditions under which painting materials are to be applied and notify the owner in writing of conditions that are detrimental to the proper and timely execution of the work. Do not proceed with the work until unsatisfactory conditions have been corrected to the satisfaction of all parties.

2. Starting of painting work by the contractor shall be construed as the contractor's acceptance of the surfaces and conditions within any particular area of the job.

B. SURFACE PREPARATION

1. Perform preparation and cleaning procedures in strict accordance with the paint manufacturer's instructions and with these specifications.

2. Carefully scrape and sand all surfaces prior to repainting. Employ metal scrapers, belt sanders, hand sanding, hand wire brushes, or "heat guns" and steel putty knives to remove loose paint and to feather the edges of surrounding paint areas. **Do not use open flames, or power tools other than belt sanders. Do not use disk sanders or power wire brushes. Do not use pressure washing equipment or allow water to touch wooden surfaces that are to be painted.**

3. Before applying paint, clean surfaces that are to be painted. Remove oil and grease prior to mechanical cleaning. Schedule cleaning and painting so that contaminants or debris from the cleaning process will not fall onto wet, newly-painted surfaces.

4. Where knots are exposed during surface preparation, apply a thin coat of white shellac or other recommended knot sealer before applying the priming coat.

5. Lightly set and putty all new nails and all older nails that have lifted above the surface of the wood.

6. In areas where damage has occurred to woodwork, notify the owner so that carpentry repairs may be undertaken before painting continues in those areas.

7. Caulk with DAP vinyl/silicone paintable caulking or approved equal.

8. Remove all hardware, hardware accessories, plates, lighting fixtures, and similar items in place and not to be finish painted, or fully protect such items during preparation and painting. Reinstall such items after painting is completed.

C. MATERIALS PREPARATION

1. Mix and prepare painting materials in accordance with the manufacturer's directions.

2. Store materials not in actual use in tightly covered containers. Maintain containers that are used in the storage, mixing, and application of paint in a clean condition, free of foreign materials and residue.

3. For highly pigmented paints, "box" the individual containers to achieve uniform colors throughout the full batch.

4. Stir materials before application to produce a mixture of uniform density, and stir as required during application. Do not stir surface film into the paint. Remove film and, if necessary, strain the paint before applying it.

D. APPLICATION

1. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or other conditions that are detrimental to the formation of a durable paint film.

2. Do not paint over any code-required labels, such as Underwriter's Laboratories or Factory Mutual, or over any equipment identification, performance rating, name or nomenclature plates.

3. Apply paint in accordance with the manufacturer's directions. Apply paint only by brush, using a brush appropriate for the job and the paint. Do not apply paint by roller, sprayer, or other non-traditional method.

4. Apply paint so as to cover all surfaces completely with an opaque, smooth surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, gaps, laps, brush marks, runs, sags, ropiness or other surface imperfections are not acceptable. Remove, refinish, or repaint work that is not in compliance with these specifications.

5. **Priming coat.** Priming paint shall be the best quality oil or alkyd-based primer from fresh stock. If the finish paint is to be a dark color, priming paint shall be darkened by tinting to the approximate hue of the finish coats. Carefully spot prime all areas where underlying wood has been exposed by paint loss or surface preparation, followed, when dry, by one full coat of primer over all surfaces to be painted.

6. **Finish coats.** Finish coats shall be the best quality oil or alkyd-based exterior house paint from fresh stock. The formulation of finish coats shall be fully compatible with that of the priming coat. The first finish coat shall be applied only when the priming coat has dried in accordance with the manufacturer's recommendations. The second finish coat shall be applied only when the first finish coat has dried in accordance with the manufacturer's recommendations.

E. CLEAN-UP AND PROTECTION

1. During the progress of the work, remove from the project daily all discarded paint materials, rubbish, empty cans, and used rags.

2. Upon completion of painting work, clean window glass and other paint-spattered surfaces. Remove spattered paint by proper methods of washing and scraping, using care not to scratch or otherwise damage finished surfaces.

3. **Protection.** Protect all plants and shrubs growing near the building, and all door steps, porches, and other projecting features, by carefully covering them with drop cloths. Provide propping beneath heavy drop cloths to prevent bending or crushing plants. Temporarily pull ornamental shrubs away from the walls of the building by ropes and stakes to provide necessary working room; do not cut or prune shrubs without the owner's permission. Protect the work of other trades, whether to be painted or not, against damage by the painting work. Correct any damage by cleaning, repairing or replacing, and repainting, as may be acceptable to the owner.

4. Provide "Wet Paint" signs as required to identify newly-painted surfaces.

5. At the completion of the job, carefully remove and fold all drop cloths, emptying all paint chips and debris into tight containers for safe and proper disposal off-site. Leave the building site clean and free of any residue from the paint job.

6. For future touch-up, provide the owner with tightly-sealed containers of the residue of all paints used on the job, properly labeling each container with the type of paint and the areas of its use, and applying a sample of the contents to the cover or label.