

TOWN OF BROOKHAVEN
HISTORIC DISTRICT ADVISORY COMMITTEE
Guidelines Handbook



LESTER DAVIS HOUSE
SITE OF TOWN GOVERNMENT 1790-1884

TOWN OF BROOKHAVEN HISTORIC LANDMARK



Town of
Brookhaven
New York

HISTORIC DISTRICT ADVISORY COMMITTEE

Guidelines Handbook

- for project review in Historic Districts
- for project review on Historic Landmarks
- for renovation projects on historic structures

Guidelines Handbook Project

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The work of the Historic District Advisory Committee through the first decade of the Town of Brookhaven's Historic District Ordinance has been gratifying. We have encouraged and supported historic preservation on a Townwide basis and our presence has significantly helped to preserve the flavor of historic neighborhoods during the recent upsurge in building activity.

Nonetheless, we remain aware that we owe much of our success to the citizens of Brookhaven. The ordinance and the districts were a result of resident petition. Citizens serve without compensation on the Historic District Advisory Committee. The individual and collective contributions of time, effort, money and concern hold together our Town's rich heritage. Without this basis, the legal ordinance and the committee it empowers would be reduced to empty rhetoric. We take this opportunity to acknowledge that the primary contribution and the guiding force has been the people of the Town of Brookhaven.

It should also be noted that Brookhaven's Town Board has unfailingly supported us and our agenda. They have provided the means for projects such as this book to assist the community in achieving preservation goals. For this we are deeply appreciative. We want to pay a special debt to one individual whose consistent efforts on behalf of historic preservation speak to his profound caring for our Town. It is with respect and gratitude that we dedicate this handbook to the Founding President of the Yaphank Historical Society and former member of the Town Board, Eugene Dooley.

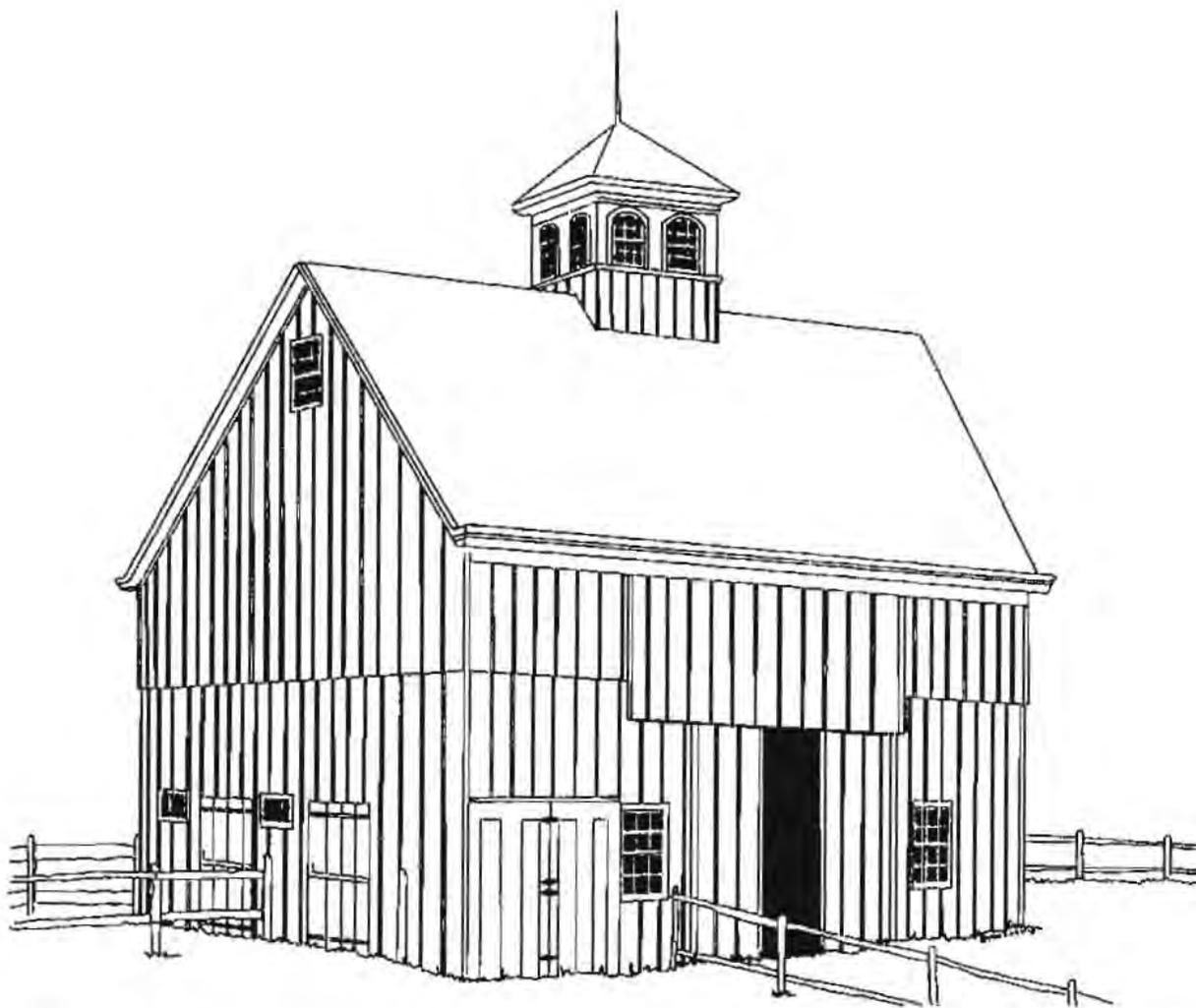
Mary Ann Spencer, Chairman
Historic District Advisory Committee
17 October 1988

INTRODUCTION

The Town of Brookhaven is one of the oldest settled areas of the United States. In recent decades it has also been one of the fastest growing, causing the historic character of many parts of the Town to be threatened.

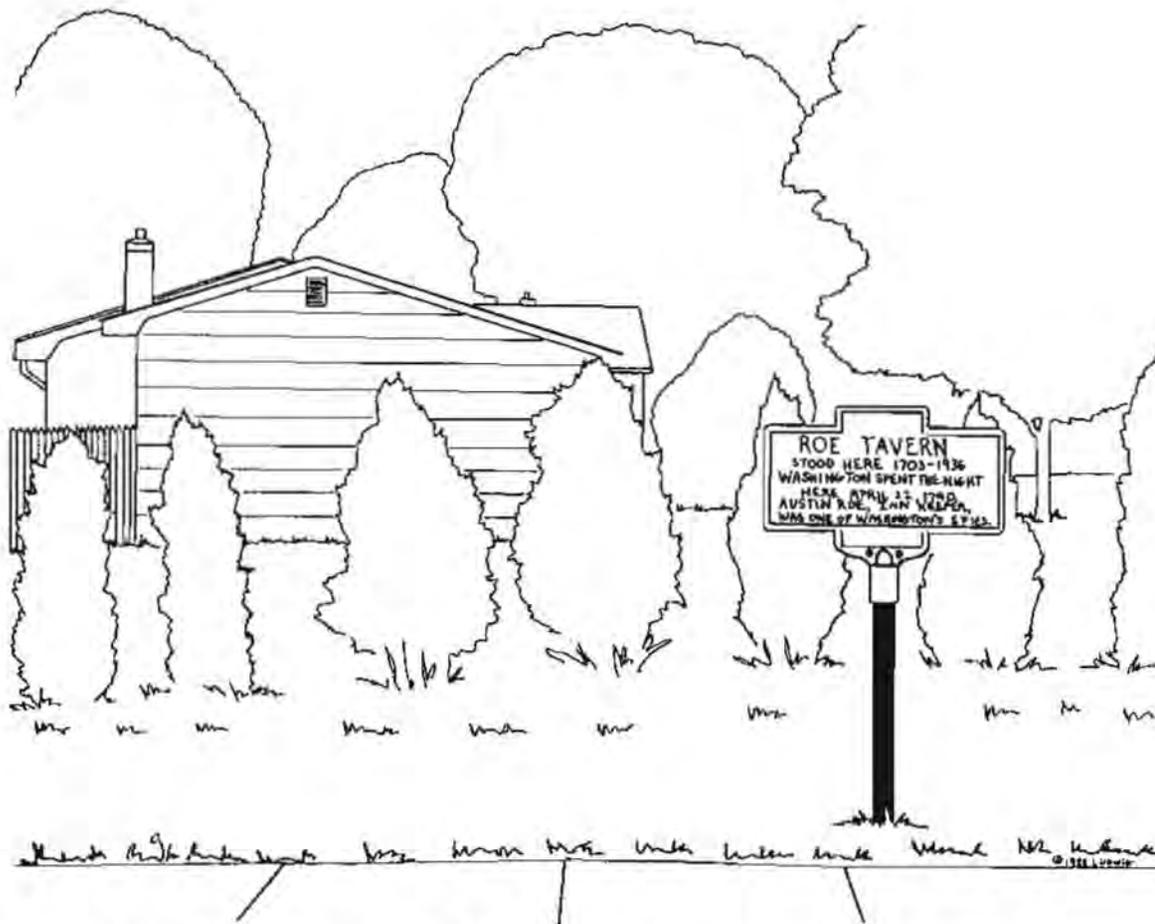
Recognizing the need to safeguard areas rich in historic buildings, the Town Board enacted an historic district classification within the zoning code in 1976. The Historic District classification designated specific areas in which changes in the outward appearance of any building would be reviewed by a Historic District Advisory Committee. This group of citizens is appointed by the Town Board to advise the Planning Board on proposed changes in the districts. Brookhaven joins over 1200 other communities across the country with preservation ordinances.

Over many generations, villages grew up along the major thoroughfares of the Town. While their buildings reflected changing tastes and needs, the changes were subtle and a consistency of scale and building



EAST SETAUKET HISTORIC DISTRICT

The historic character of many parts of the Town is threatened. Our buildings, which lend tangible ties to our past, are particularly fragile.



The automobile and population growth has shown that our traditional landscape is fragile and much good building has been lost already.

materials was maintained. But the automobile and recent population growth has shown that the character of our traditional landscape is fragile and much of the original quality has been lost already. The purpose of the special zoning within historic districts is not to restrict change or thwart growth, but to insure that change in these sensitive areas will be harmonious with what already exists. Further, we encourage the preservation and reuse of older buildings and the maintenance of natural vegetation and land forms as the needs of landowners change.

For these reasons, the Town has instituted a review process for proposed exterior modification of any building within district boundaries. Specifically, any contemplated change in design, material, or outward appearance must be brought before the Historic District Advisory Committee. In addition, new construction, moving, demolition of a structure, or any variance from the provisions of the zoning code must also be reviewed. The erection of signs is also covered. Ordinary maintenance and repair which does not involve a change

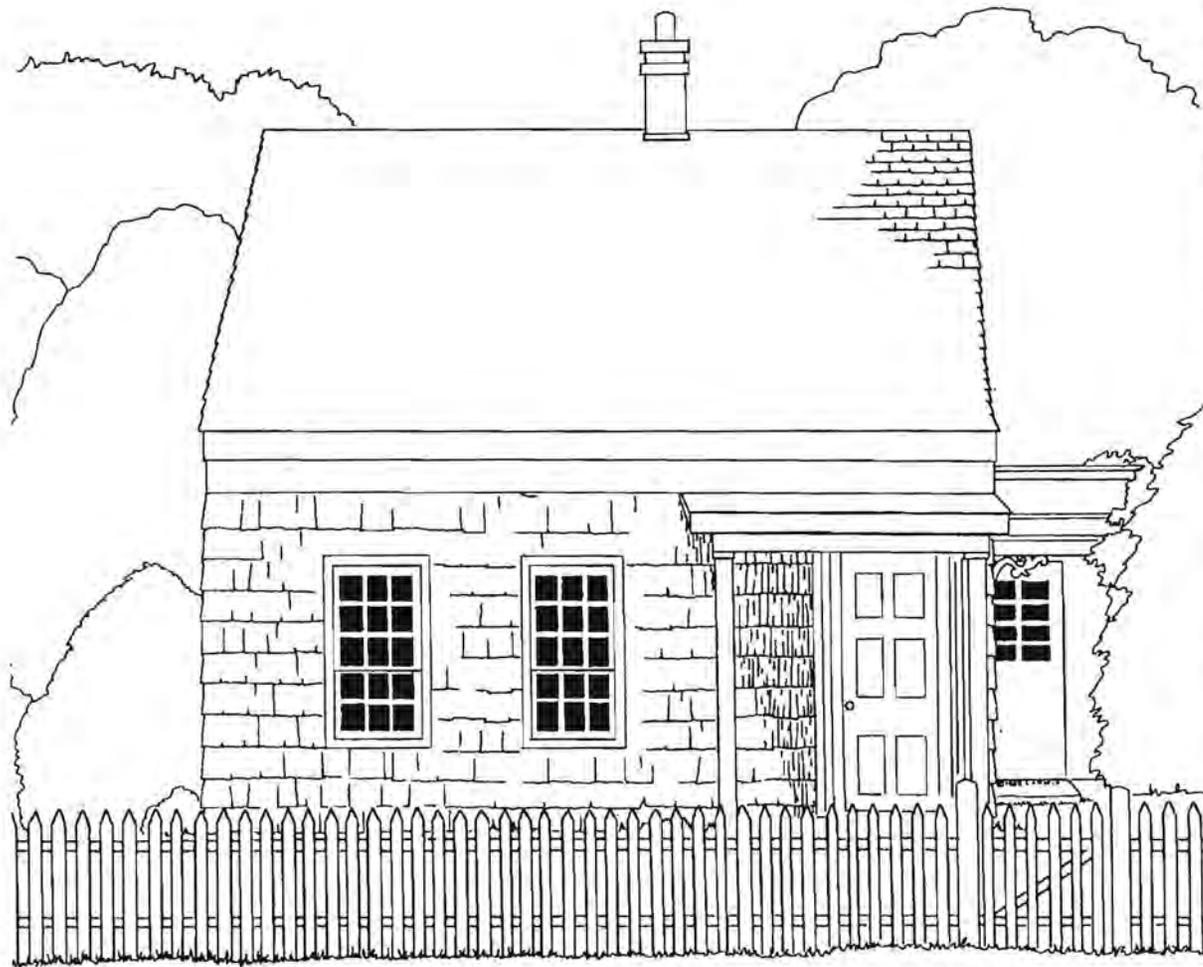
in design or material does not require review.

To assist the property owner within a historic district or the owner of a designated historic landmark, the Committee has formulated these guidelines. The guidelines strive to clarify the principles of harmonious design, to identify appropriate construction materials *based upon traditional practice on Long Island*, and to adhere to the best contemporary preservation techniques.

There is, however, no one "right way." Every building is different in age, uniqueness, location and condition. The owner's needs and desires also require individual decisions in every case. This booklet does not give answers, but suggests appropriate solutions designed to help owners, architects and builders when presenting building and site proposals to the Committee.



Architectural features of older structures, such as this Greek Revival door, impart character and are worthy of preservation efforts.



The booklet is divided into three parts. The first describes settlement patterns in Brookhaven which have influenced the location and style of early buildings. The second section deals with new construction within the districts, and includes suggestions for insuring compatibility with the historic flavor of the area. The third part treats the most important architectural features of older structures, identifying elements that impart character and merit careful preservation.

These guidelines have been specifically written for and about Brookhaven's unique history, architectural characteristics and settlement patterns. We strive to preserve what is good and encourage new work that respects but does not copy the past.

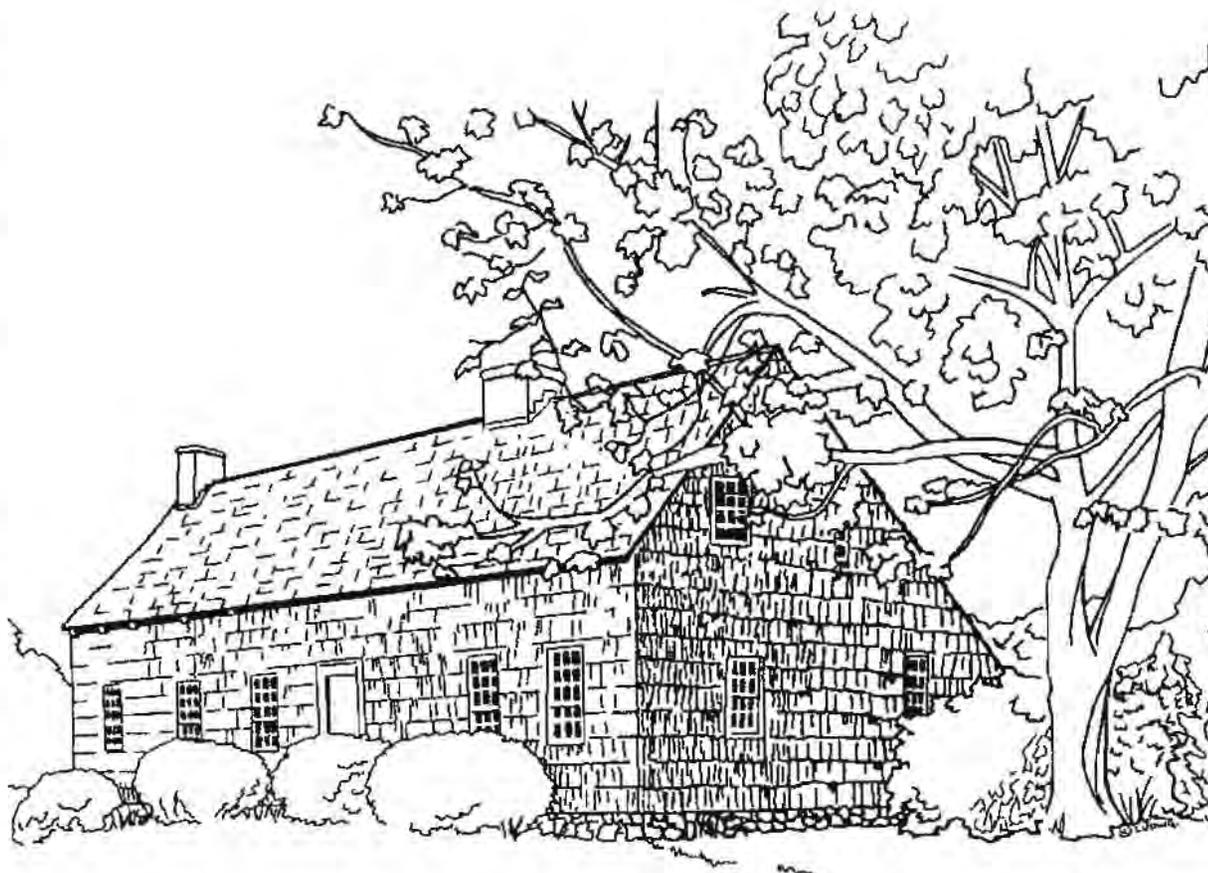
This is neither a history text nor a restoration manual. It is simply a guide to assist residents with the basic concepts of neighborhood preservation.

YAPHANK HISTORIC DISTRICT

PERTINENT QUESTIONS ABOUT HISTORIC DISTRICTS

When the history of a place is valued, its exterior appearance should be preserved in order to maintain a continuity with the past. Our understanding of our heritage is enhanced when tangible reminders of the past remain undisturbed. In addition, much of what was built (or laid out as landscape) is not only appealing – it is irreplaceable. Unsympathetic alteration or demolition permanently removes something of value from the entire community.

The historic district serves to protect areas of historic character from unsympathetic change. It does not prohibit all change. Every area has undergone alteration since it began and it is intended that those areas which are designated as historic districts should continue to evolve while the presence of the past is retained.



BREWSTER HOUSE

OLD SETAUKET DISTRICT

Our understanding of our heritage is enhanced when tangible reminders of the past remain undisturbed. Much of what has been built is not only appealing—it is irreplaceable.



The Committee is not pre-disposed to any particular architectural style. New construction should contribute to the district, respecting elements of scale, mass and design. It must also relate to the setting and the visual texture of the surrounding environment.

A district is not an enclave of one accepted style. Repetition of white houses with green shutters is conformity, not the result of historic change, and it is not good design.

A district does not prohibit modern design. Sympathetic additions to older homes and well conceived new construction in historic areas are encouraged. New construction, discussed in the next chapter, should reinforce the continuity of the district by maintaining the scale, mass, design elements and texture of the surrounding. Often new work can contribute more to a district than a standardized "colonial" imitation.

A district is not a prestige neighborhood. An area qualifies as historic by virtue of its age, the quality of the historic structures that it contains, and the extent to which these structures retain their integrity, unaltered by inappropriate changes in exterior form and materials. An area also qualifies if its character is unique and important in the telling of the history of Brookhaven. Historic districts include business communities, towns, suburbs, estates, and rural and environmentally important areas.

A district is not a museum. District designation does not arrest change in a community or fix it at a point in time. Historic districts contain residences with contemporary needs, businesses of all types and non-profit activities. The aim of the ordinance is to see that change is accommodated in a manner that is compatible with what has been built in the district. Compatible new work need not "look old", but ought to fit with its older neighbors in size, mass and placement on the site.



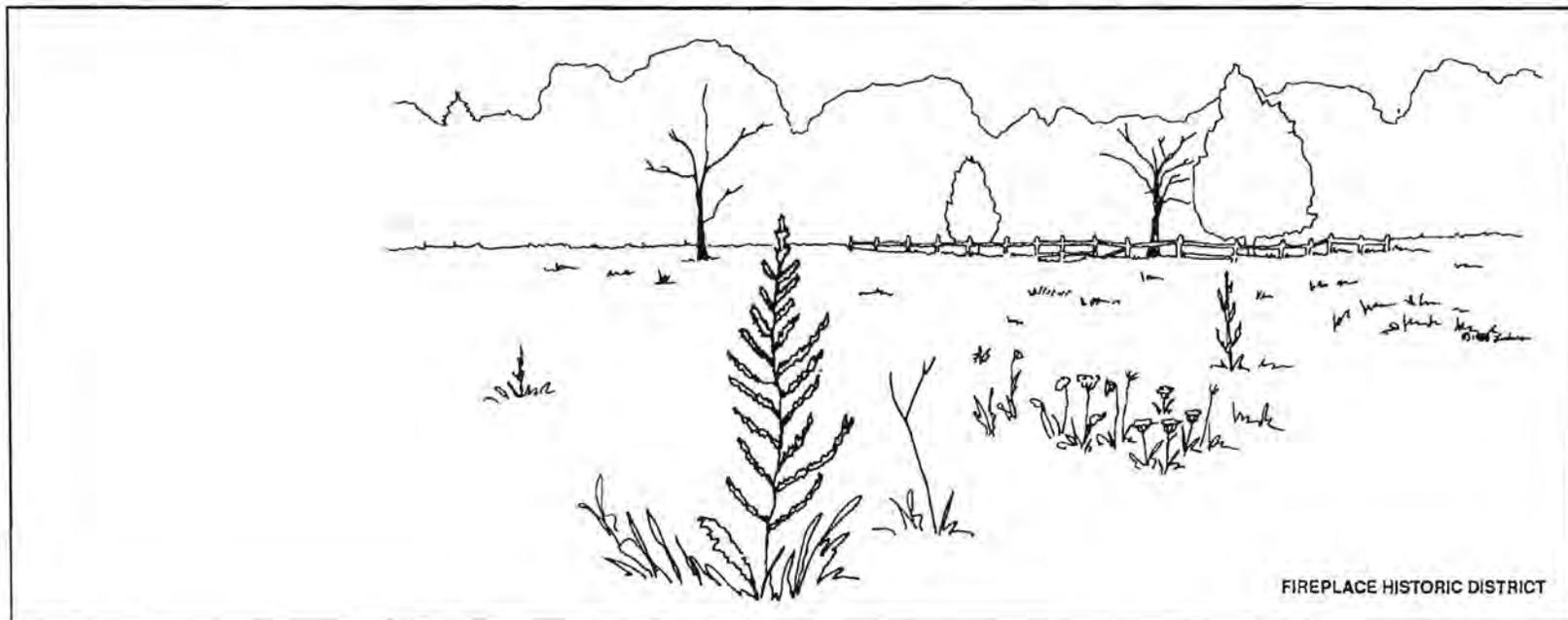
EAST SETAUKET HISTORIC DISTRICT

An area qualifies as historic by virtue of the age of its buildings and their integrity (remaining substantially as built). This row of worker housing in Setauket is an important part of Brookhaven's history. It is the last vestige of Setauket's rubber manufacturing days.

In Brookhaven's districts, open space is an important part of the character of the area. When green space is lost, something of value is sacrificed.

A district is not a land bank. In Brookhaven's districts the open space surrounding older buildings is an important part of the overall character and density of the areas. When it is lost, some part of the district's integrity is undeniably sacrificed. Be that as it may, the ordinance cannot prohibit the sale and development of private land. The intent is the protection of the local architec-

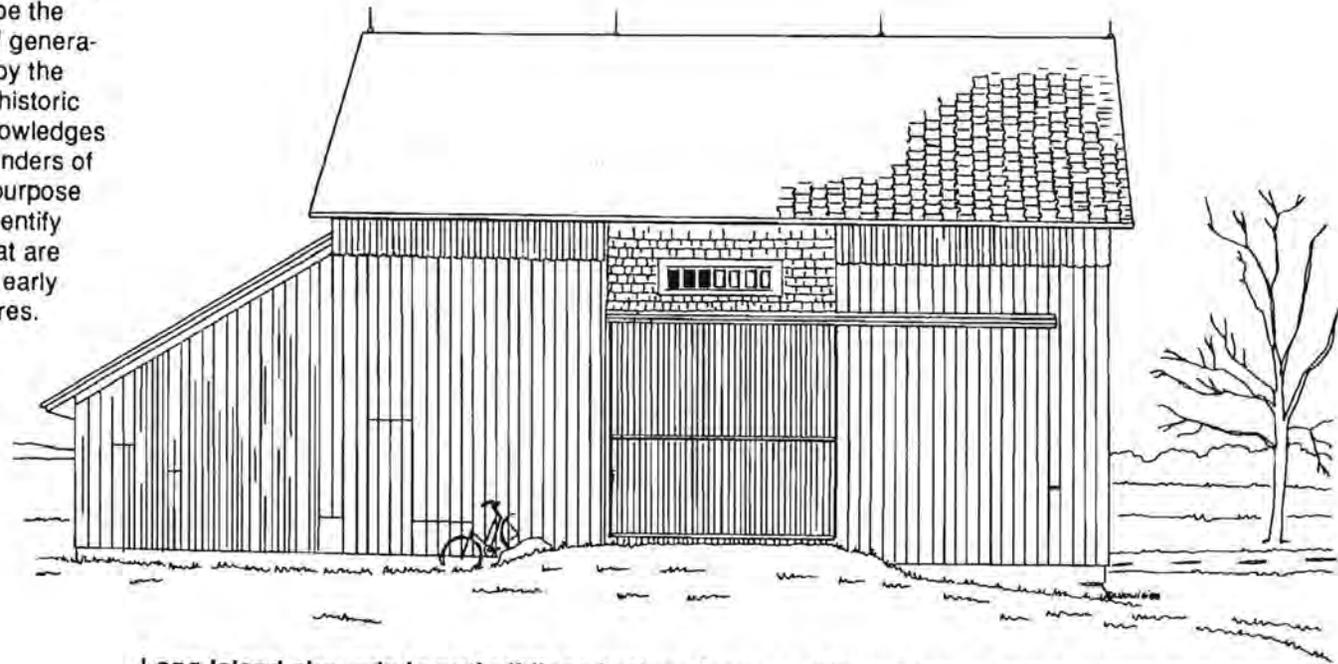
tural heritage and to that end the ordinance stipulates that all buildings within the district and the transition zones pass through the Historic District Advisory Committee for review. This is not to say that a land bank wouldn't be useful in order to preserve historic areas. It would. But that is a separate issue not addressed by this ordinance.



FIREPLACE HISTORIC DISTRICT

CHARACTERISTICS OF BROOKHAVEN'S ARCHITECTURAL DEVELOPMENT

The central purpose of historic district legislation is to preserve and enhance the architectural settings that have evolved throughout our history. Boundaries are drawn carefully to include sites, buildings, objects and environments that are recognized as important historically, either because they are associated with events in the past or because they preserve in architecture or landscape the accurate appearance of generations ago. Designation by the Town Board, under the historic district legislation, acknowledges and protects these reminders of our heritage. With this purpose in mind, it is useful to identify those characteristics that are typical of Brookhaven's early settlements and structures.



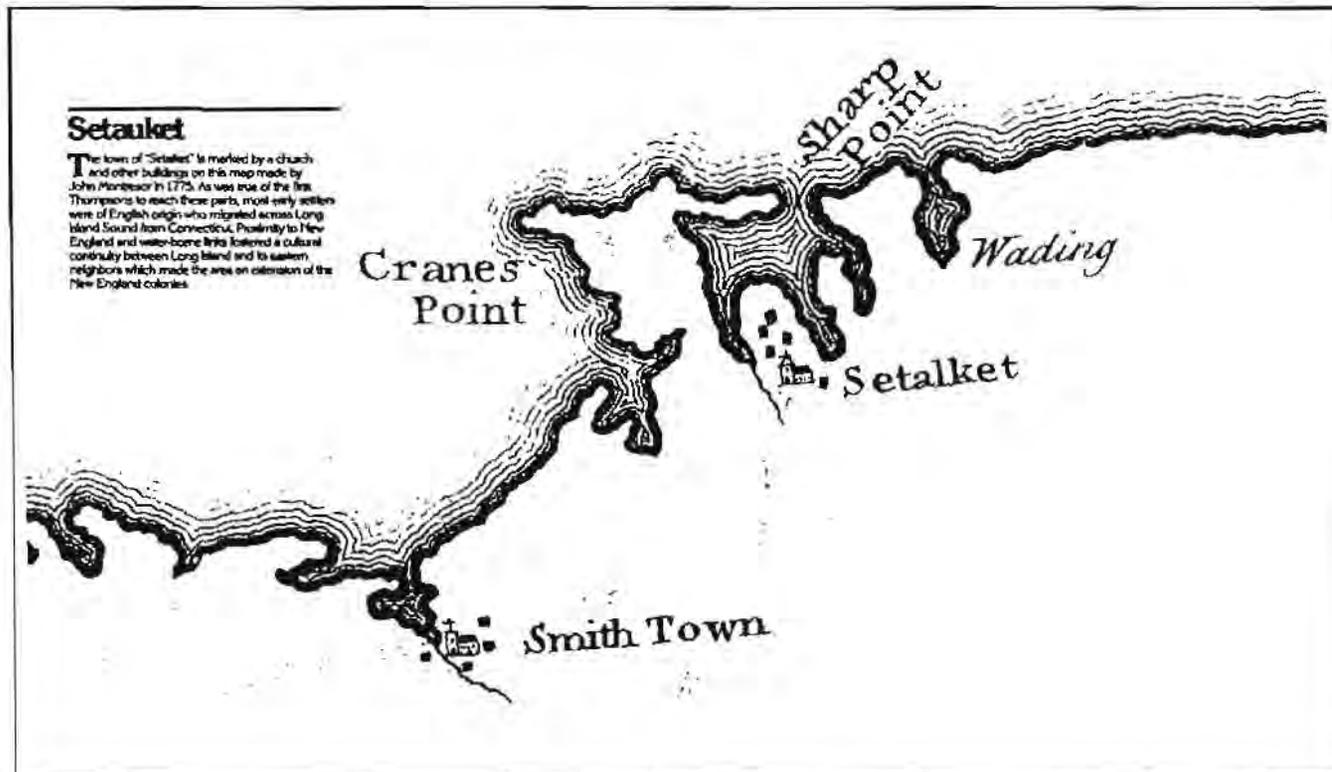
Long Island abounds in outbuildings both on farms and in residential areas. These important structures are found in every size and use.

Settlement Patterns. Because eastern Long Island was initially settled by New Englanders in the mid-seventeenth century the Town's earliest hamlets were small concentrations of houses located near a river at a mill—Yaphank and Setauket are

examples of this development pattern—or situated at important crossroads, as in Coram.

The earliest homes were usually built in a row on the north side of the road to maximize sunlight and warmth in the principal

rooms. The Miller Place Historic District provides good examples of this placement. Later in the eighteenth century, the cluster of houses might be augmented by a meetinghouse. After the Revolutionary War the first one-room schoolhouse appeared.



MAP COURTESY OF
SOCIETY FOR THE
PRESERVATION OF LONG
ISLAND ANTIQUITIES

Areas where concentrations of eighteenth and nineteenth century buildings remain should be recognized as districts and preserved.

Individual sites of architectural or historical importance also warrant designation as landmarks and should be preserved either because they survive in significantly changed circumstances (the Lester Davis House in Coram or the Congregational Church at New Village in Centereach) or because they were built as self-sufficient properties (Longwood near Yaphank or the William Floyd Estate in Mastic).

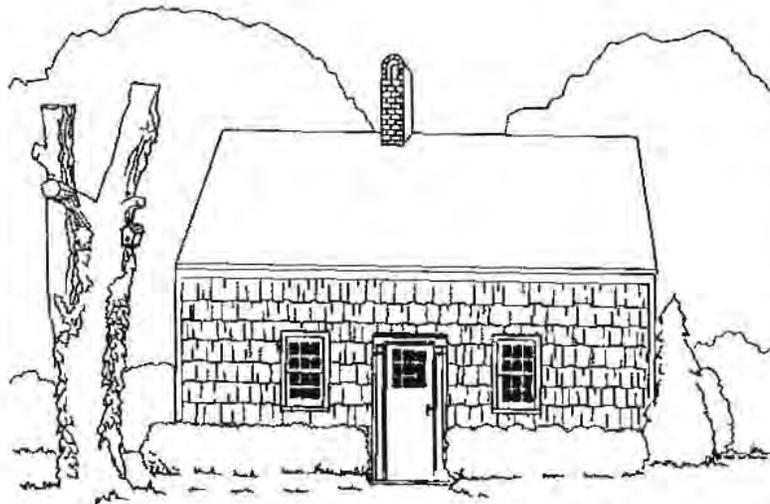


STRONG FAMILY CEMETERY, STRONG'S NECK

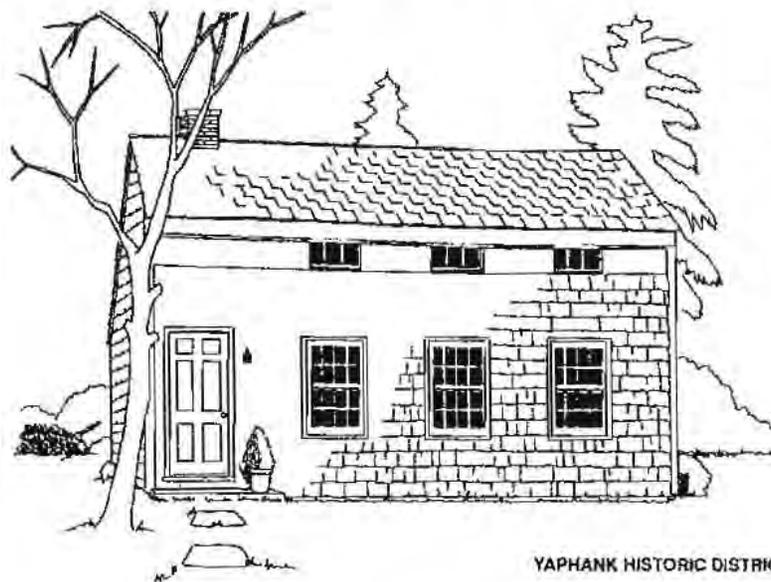
TOWN OF BROOKHAVEN HISTORIC LANDMARK

Individual sites of architectural or historical importance warrant protection under historic district legislation and may be designated 'Landmarks.'

Until the mid-nineteenth century, Long Islanders built with what was at hand: local hand-cut wood, a small amount of stone, brick, glass and lime for plaster.



Long Island's rural character perpetuated a small and simple form of domestic design for many generations. This house was built c. 1840, but it could be 100 years earlier.



YAPHANK HISTORIC DISTRICT

Characteristics of Early Buildings. To generalize about 250 years of building in Brookhaven is to risk oversimplification. However, there are several important points to be made. Until the mid-nineteenth century, when the railroad enabled the importation of nearly any desired building material, Long Islanders built with what was at hand: local hand cut wood; a small amount of stone and brick; and for those of means, glass for windows and lime for plaster. Economic circumstances did not permit carved decoration, formal design or extensive landscaping.

Exterior paint was apparently used sparingly and was made on the farm. The resultant dark red house color was not supplanted by white until after the Revolution.

Lack of variety in building materials, the functional nature of what was built and the relatively unso-

phisticated simplicity of the small rural settlements established an early pattern of building style that continued for many generations in central Long Island. It was unaffected by the cultural influences of the growing cities such as New York, Brooklyn and even Sag Harbor, which was stimulated by the whaling industry.

One hundred years ago, Stanford White (1853-1906), the best known architect of his day, lived in nearby St. James. Noting the small, plain and utilitarian shingled houses easily found in every village of Long Island, he praised their simplicity. His local designs reflect his reverence for this heritage, as is evident in his design of All Souls Church.



ALL SOULS CHURCH, 1888

STONY BROOK DISTRICT

One hundred years ago, Stanford White (1853-1906), the best known architect of his day, lived in nearby St. James. Noting the small, plain and utilitarian shingled houses easily found in every village of Long Island, he praised their simplicity. His local designs reflect his reverence for this heritage, as is evident in his design of All Souls Church.



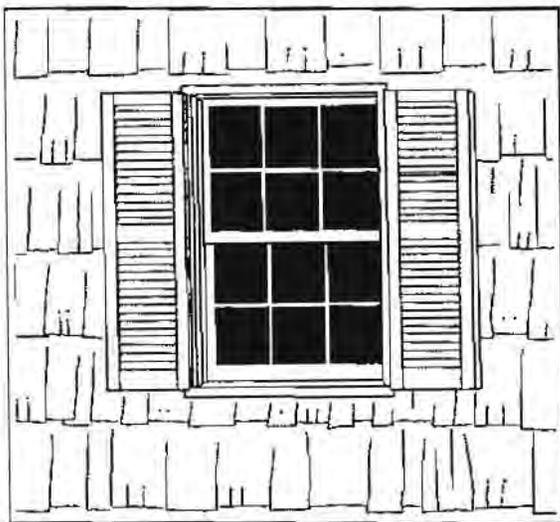
An exception to the rule regarding Brookhaven's nearly universal use of wood for buildings before this century is this fine brick house c. 1845.

MT. SINAI HISTORIC DISTRICT

The repetition of well established building patterns and styles that survived for many years lends a certain identifiable character to a region such as Brookhaven. Elements of local building patterns include:

WOOD FRAME CONSTRUCTION. Houses and other structures were universally built of wood because stone was so scarce and the clay necessary for brick-making was found only in small areas. Wood frame construction was also well known to those who settled here from New England.

THE SHINGLED WALL. Exterior wall shingling was a common way to protect the walls in seventeenth century New England and it was brought at an early date to Long Island. Shingles (not to be confused with cedar shakes) have been a favorite wall covering in Brookhaven and are still very popular.



Exterior wall shingles have been a favorite wall covering in Brookhaven from the earliest times, and are still very popular.

SMALL SCALE OF BUILDINGS.
By and large, eastern Long Island homes have always been relatively small. Brookhaven did have some great estates, principally on the south shore, but the villages and hamlets are characterized by small scale houses that blend well with the landscape.



YAPHANK HISTORIC DISTRICT

The villages and hamlets of eastern Long Island are characterized by small scale houses that blend well with the landscape.

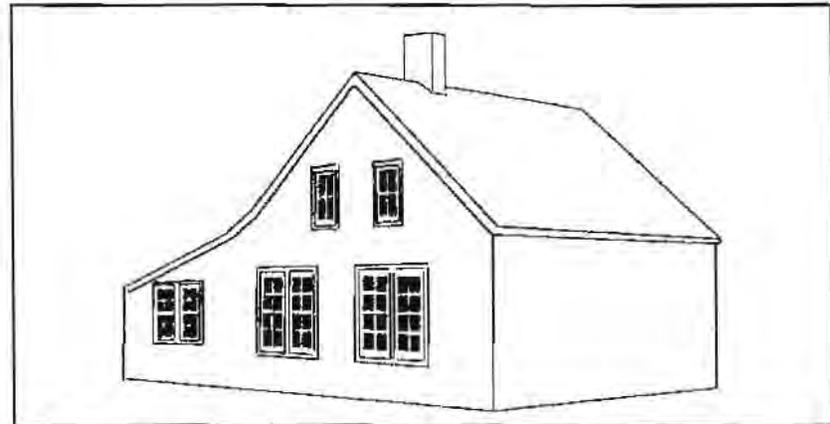


Victorian designs are similar to those seen elsewhere in the country, but the houses are often smaller.

INFORMAL DESIGN. Aside from some well-known exceptions, Brookhaven's buildings were not designed by architects until the twentieth century. Even our master builders seem not to have consulted the carpenter guides very often. The result is a pleasing informality of design, irregular fenestration (design and placement of windows and doors), picturesque rooflines, off-center entrances and individual floorplans. In more urban areas such as New York and New England, (where builder's guides were followed), the Georgian formality of the eighteenth century

preceded Federal and Greek Revival designs of the early part of the nineteenth century. High style examples of this type of architecture are all but absent in Brookhaven. In their stead we have modified Cape Cod houses, two story, three bay houses, and variations on generally Georgian themes.

Victorian forms are much more similar to those which were being built elsewhere, but still the houses are seldom large. Port Jefferson Village is a fine example of a late nineteenth century community in Suffolk County.



Many of Brookhaven's buildings are pleasingly irregular with picturesque rooflines, off-center entrances and individual floorplans.

BUILDING GROWTH BY ADDITION. Long Islanders have a long tradition of adding on. Frequently the old farmhouse is expanded by addition even when it is over one hundred years old. Often, a substantial house will have smaller wings at the ends (more frequently than at the rear) which reflect, but do not copy, the earlier portion. It is not rare to find that the major portion of a house is the newer part, added harmoniously to an older, smaller wing.

A consequence of addition is that buildings here in Brookhaven have an irregular roofline. Often there is a pattern to this irregularity: large house (two story, three or five bays), smaller wing (one story, three bays with a chimney at the end), and a shed beyond (a one story lean-to against the smaller wing, sharing the chimney).

Roof ridges run parallel to the road. If needs demand, other additions are added to the rear of the structure.



MILLER HOUSE, WADING RIVER

Long Islanders have a long tradition of adding on. It is not rare to find the major portion of a house is the newer part, added harmoniously to an older structure.



ABSENCE OF NINETEENTH CENTURY STYLES. The major nineteenth century styles are not often seen in Brookhaven, especially in rural areas away from the north and south shorelines. Lack of population growth, viability of the farming lifestyle, economic constriction and a satisfaction with traditional forms put Brookhaven out of the stylistic mainstream. Often the only

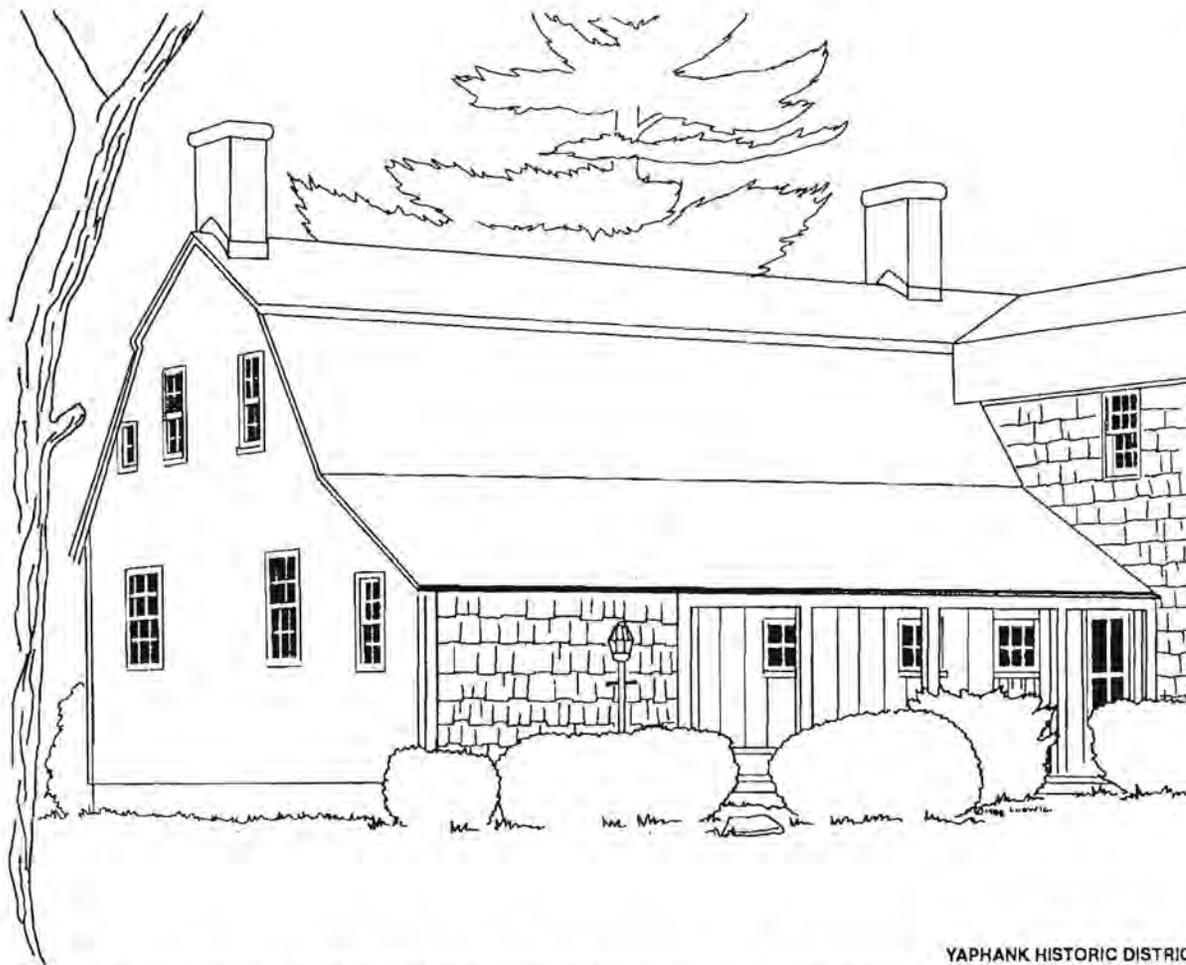
In Brookhaven, often the only clue a house gives to its Greek Revival (circa 1830) origins will be found in sidelights at the front door and a wide cornice at the eaves.

clue a house gives to its Greek Revival (circa 1830) origins will be found in sidelights at the front door and a wide cornice at the eaves. Sometimes brackets at the eaves will suggest the Italianate period (circa 1865), while all the rest looks earlier.

Because small details are important indicators, great care should be invested in their preservation.



Satisfaction with traditional forms put Brookhaven out of the stylistic mainstream. Sometimes brackets at the eaves will suggest the Italianate period (c. 1865) while the rest of the house design looks earlier.



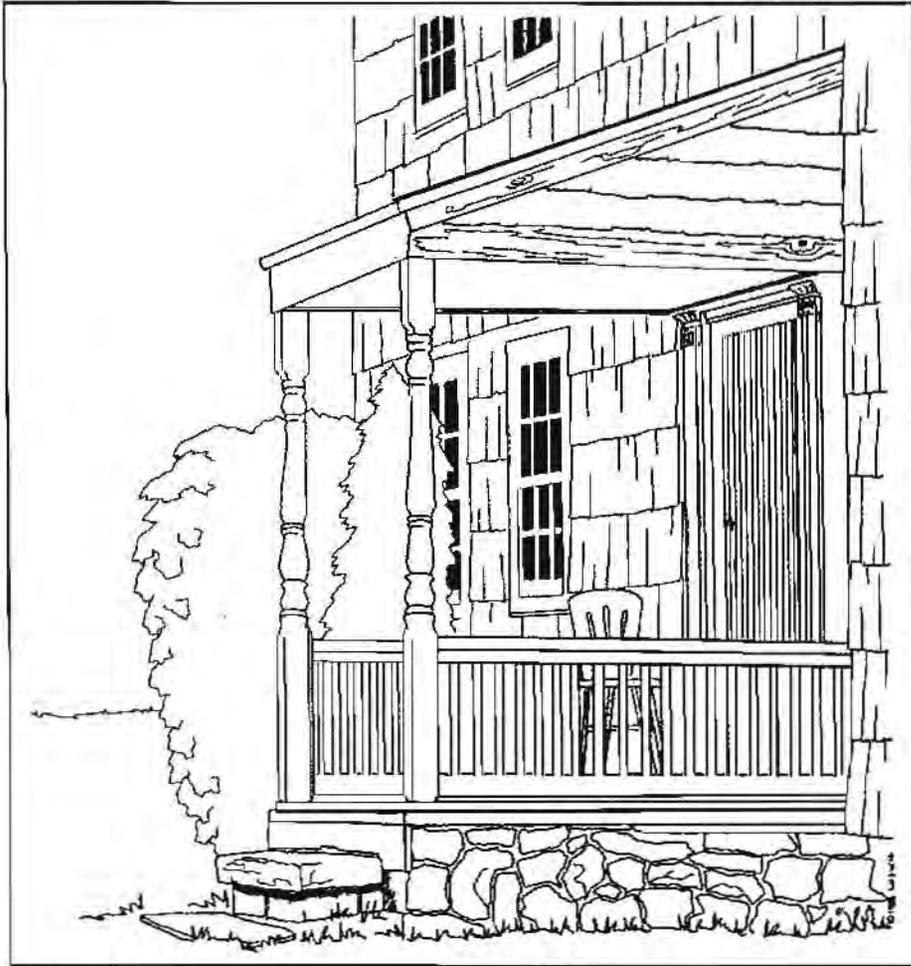
YAPHANK HISTORIC DISTRICT

Chimneys were always built inside the walls to conserve heat. Early Long Island houses often had center chimneys, but the end chimney was widely used as well.

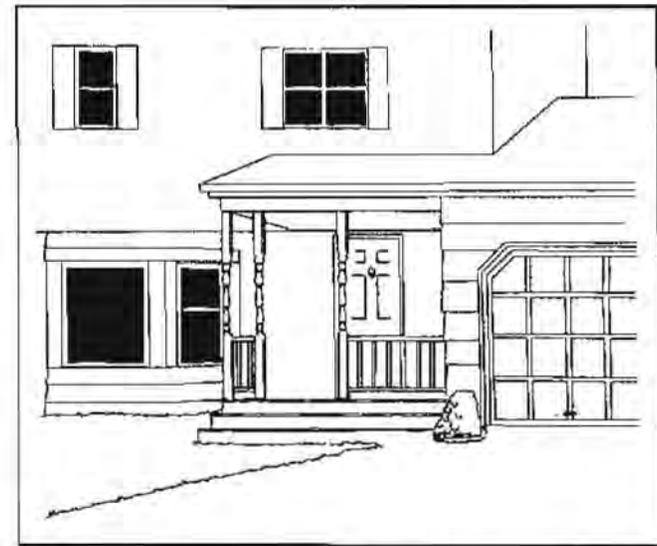
CHIMNEYS INSIDE THE WALLS. Chimneys in the northern states stand inside the walls in order to conserve heat and they should be restored in that manner. On Long Island, cultural and stylistic preferences favored a central chimney in some cases and in others, end chimneys. Sometimes both are seen in the same house.

TYPICAL LONG ISLAND ENTRY. The terminology for 'entry,' 'porch,' 'stoop,' etc., is as endless as the object described. For houses built before circa 1860 there was a favored local front entry consisting of a small roof over the front door supported by two or four porch posts. Usually these are slender, octagonal posts set upon a wood stoop or porch floor, finished with a handrail at each side and a bench or two. One or two steps lead to the entry.

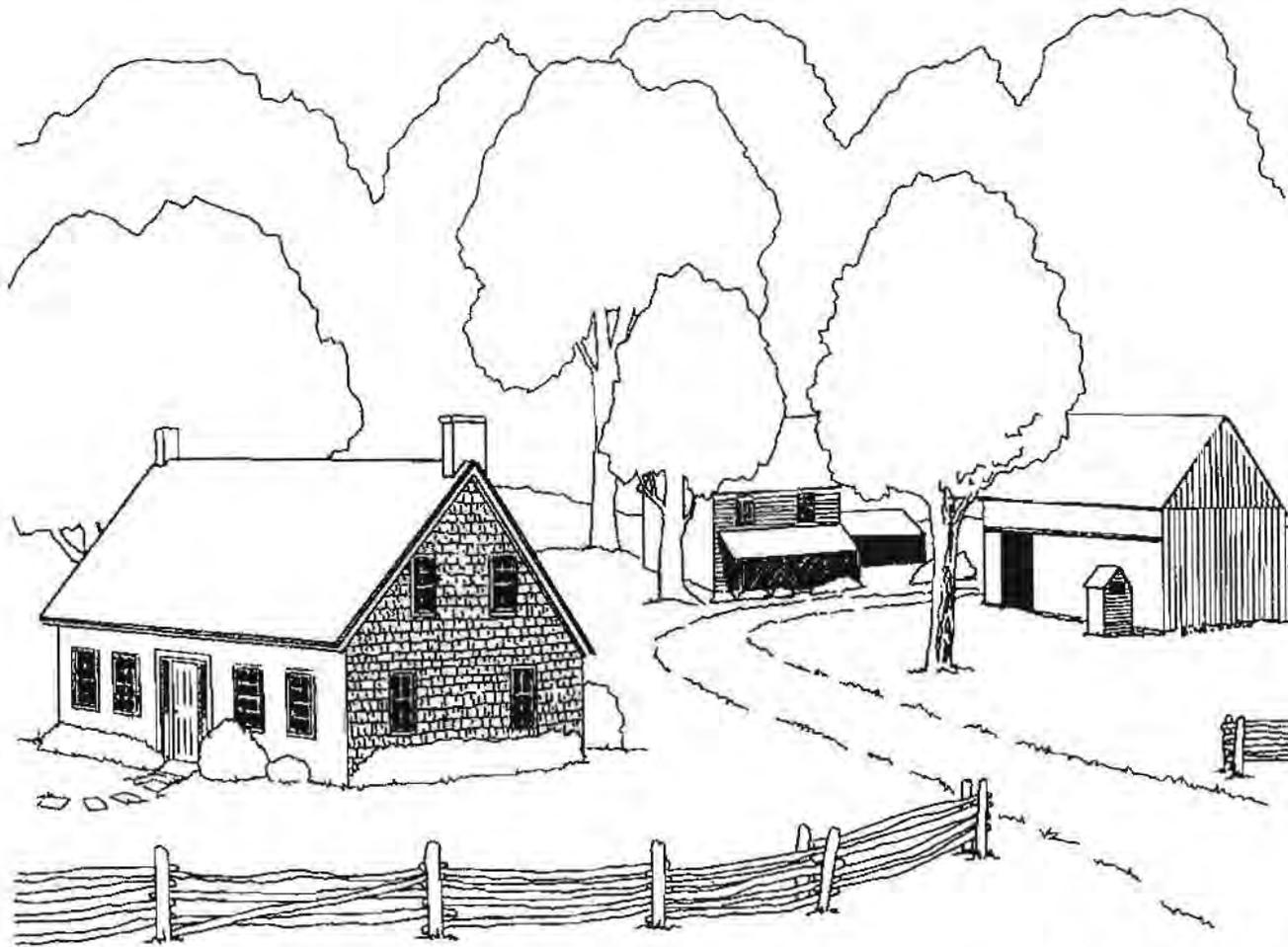
This porch type was noted by local architects in the early twentieth century and revived on many Colonial Revival homes built on Long Island.



The typical Long Island entry, consisting of a small roof over the front door supported by slender posts set upon a wood porch floor, finished with a handrail at each side,...



... first seen in the mid-1700s, is still popular on new houses.



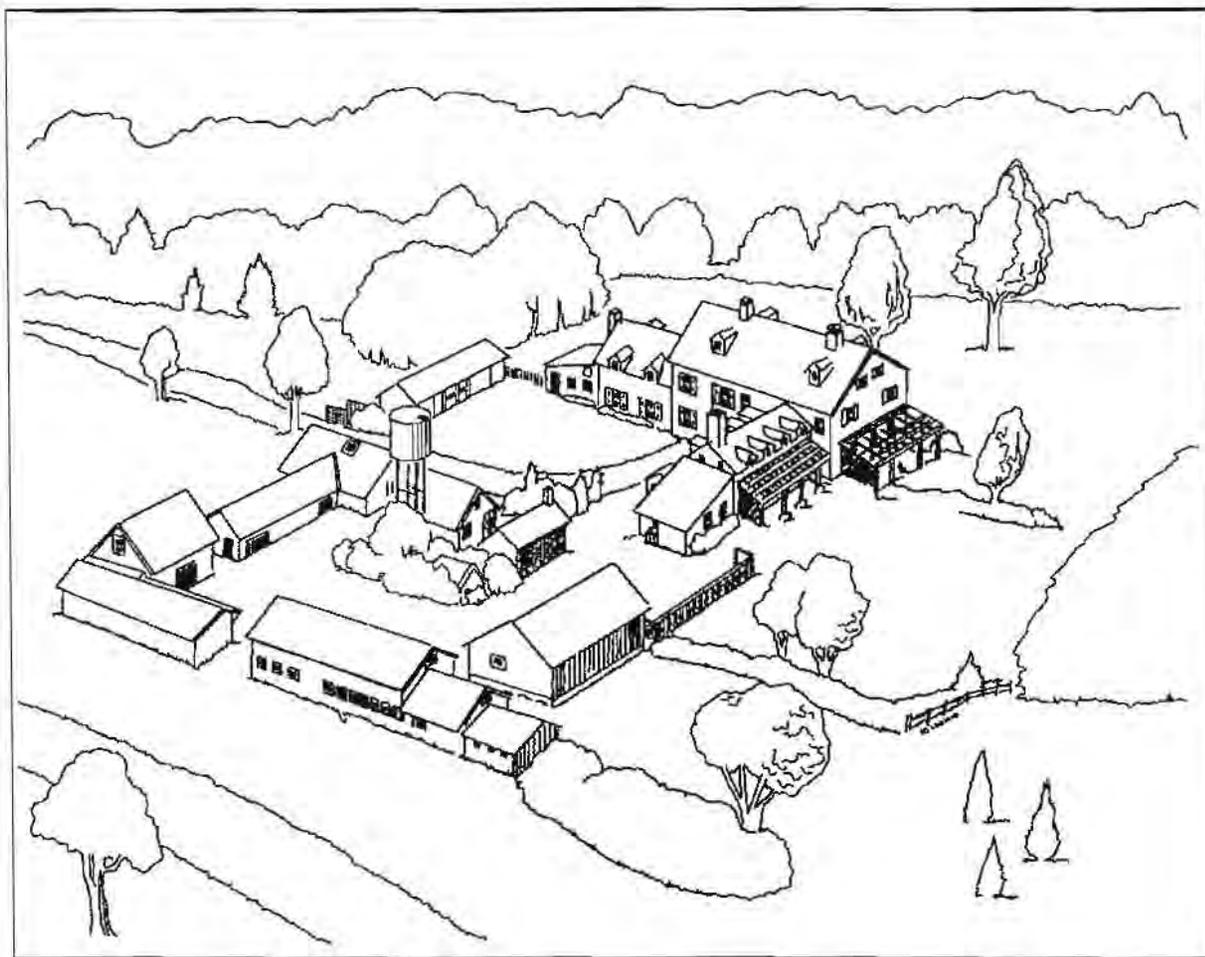
EAST SETAUKET HISTORIC DISTRICT

Long Island abounds in outbuildings. Many survive on what are now residential parcels. These structures are an important historical element that also lends visual interest to the districts.

OUTBUILDINGS ARE AN IMPORTANT FEATURE. Long Island abounds in small outbuildings on farms and in residential areas. Unfortunately they are now hard to find in developed areas.

These important structures are found in every size and use. Most frequently they are one story, gable-roofed buildings with a door and a window or two in the side wall. They may have begun as a shop, carriage shed, outside kitchen, ice house or laundry, but their uses have evolved.

A typical farm had up to a dozen outbuildings ranging from small sheds to barns and including a wellhouse, stable, corncrib, smokehouse, and washhouse. The preservation of these small buildings is often not seen as important in the preservation of a site, but the loss of these small buildings diminishes the integrity of the historic area. They reveal a great deal about how a property was used in the past.



OLD MASTIC HISTORIC DISTRICT

The survival of small outbuildings is important to the preservation of historic landscapes. A typical farm had up to a dozen small sheds and barns.

GUIDELINES FOR NEW BUILDINGS AND ADDITIONS

This section delineates three types of new construction:

- the addition to an existing structure within a historic district
- new construction on a site which is surrounded by pre-existing structures
- self-contained subdivision plans for open land within a district.

The guidelines for renovation listed elsewhere in this handbook (see "Guidelines for Renovation of Existing Buildings") can, in large measure, be applied here. The following general guidelines also apply to all three circumstances.



MOUNT SINAI HISTORIC DISTRICT

Burial grounds, on open sites within a district, need to be preserved and buffered with natural vegetation.

Review of an Historic Landmark or Project Within a District. The goal of the ordinance and of the review committee it established is to facilitate a harmony between what is proposed and that which exists, without stifling the architectural evolution of the community. The HDAC has consistently encouraged compatible modern design within the historic district.

Reproduction of previous designs needs no encouragement. In fact, the Committee strongly advises against grossly incompatible plans, colonial clichés, or standardized designs that bear no relation to the site in question. In other words, there is no design or style of building that is automatically acceptable or unacceptable. Each district is distinct, each setting individual. And it is out of respect for this that the Committee avoids hard and fast rules, preferring to consider each case in its unique context.

Therefore, these guidelines serve as a groundwork for direction and discussion. It is advisable to bring projects in for preliminary review as early in the building process as possible.

Construction On Open Sites.

The visual unity of the district after the site plan or subdivision has been completed is of utmost importance and it can be maintained by the retention of natural features and architectural continuity. Particular attention will be paid to spatial relationships—that is: size, siting, scale, and mass in relation to usually adjacent elements, details and construction materials. Efforts to preserve existing features such as slopes, tree canopy, and natural drainage patterns, as well as existing road treatment, will be important.

Particular attention should be given to the existence of old family burying grounds on open sites within the districts. These should be avoided as building sites. Most were used between about 1780 and 1850 and are perhaps now overgrown and forgotten, but they should be protected by some planting buffer when construction is contemplated in the area.

If a project is separate and not visible from the existing buildings or the public right of way,

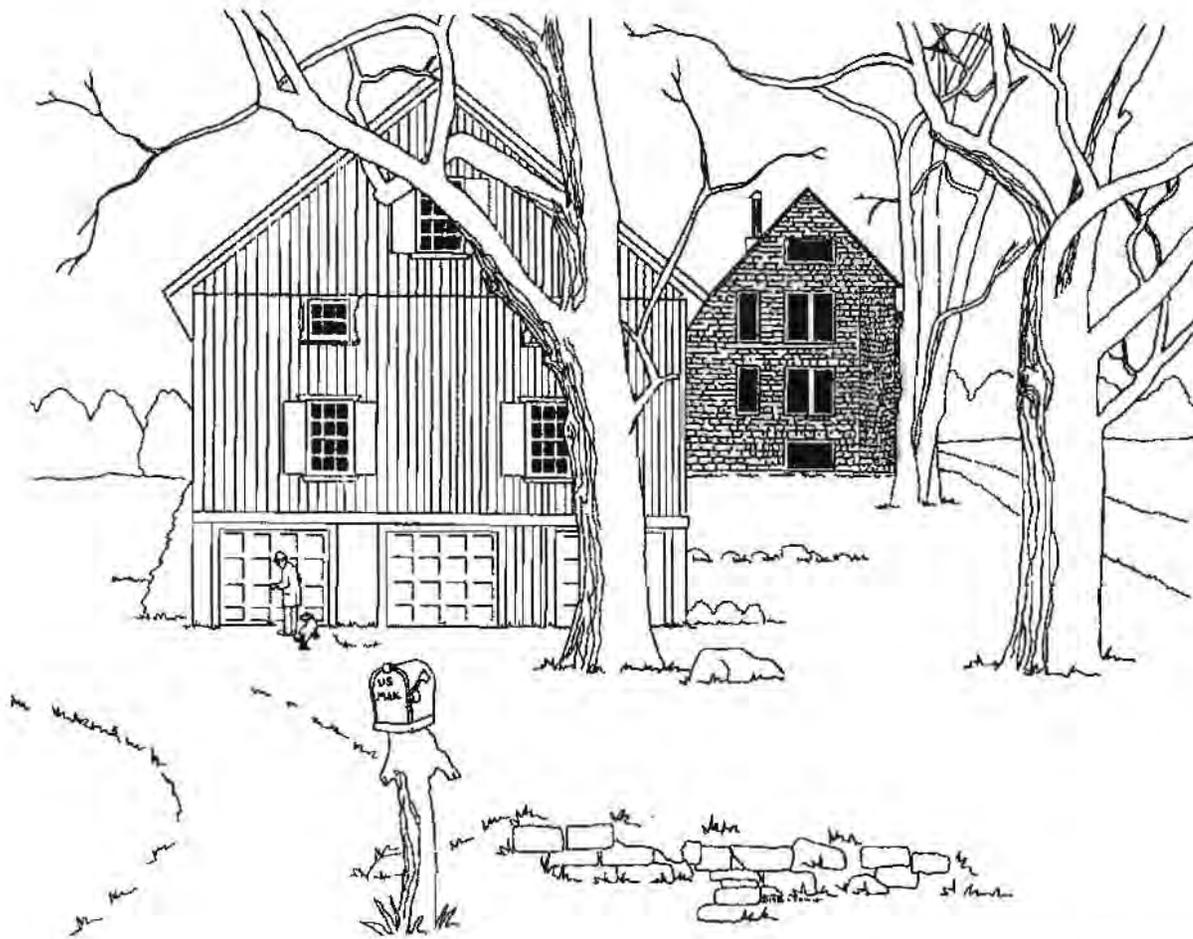
then this separation should be maintained by means of vegetation as a buffer. Landscaping plans may be required. Large scale projects (subdivisions, shopping malls) may take on a character of their own and in such cases it is important that the new development achieve a coherence or consistency of scale, materials, mass and design treatment in relation to the visually adjacent area. Large scale projects need not, however, be bound by standards as specific as may be required for new work that is proposed within an existing historic streetscape.

New Construction or Building Additions Within Historic Areas. A new house or building has its own internal integrity, but in an historic district its exterior must also be integrated into the setting and the history that surrounds it. The HDAC, while committed to maintaining the character of the districts, recognizes that time and architectural design continue. New buildings (and additions to existing structures) need not copy the details of the old style. They may be of modern design as long as they harmonize—that is, fit in by conforming to the spacing, massing



DYER'S NECK HISTORIC DISTRICT

A district does not prohibit modern design. New construction should maintain the scale, mass, design elements and texture of the surroundings. Here a new house (on the left) reinforces the form and mass, though not the details, of the house on the right.



OLD SETAUKET HISTORIC DISTRICT

New construction in older neighborhoods should be relatively similar in size. Here, the effect of a higher new house (on the right) is mitigated by a deeper front yard.

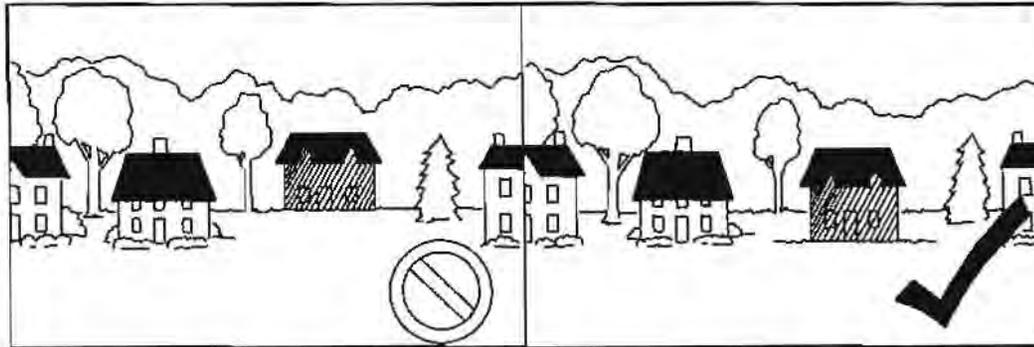
and proportions of that which precedes them. What follows are suggestions for planning a harmonious addition to an older building or designing a new building so that it blends with its neighbors.

SPACING. The siting of buildings along the street should not be disrupted by new construction. The rhythm that has been established by previous structures needs to be maintained.

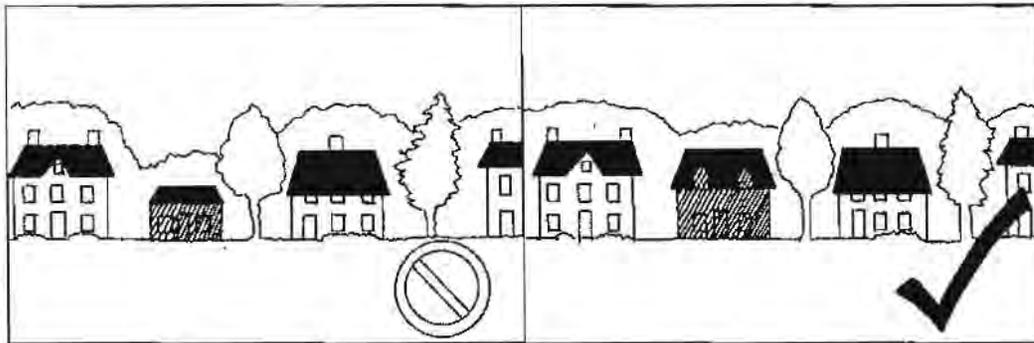
MASSING. The relative size of a proposed building should conform to that of its older neighbors. Height similarity is especially critical, as is width. These factors interrelate and can mitigate one another. For example, if proposed height is too great, a deeper front yard setback may solve the problem, providing it does not seriously disrupt the siting rhythm on the street.

SPACING

The siting of buildings along the street should not be disrupted by new construction.

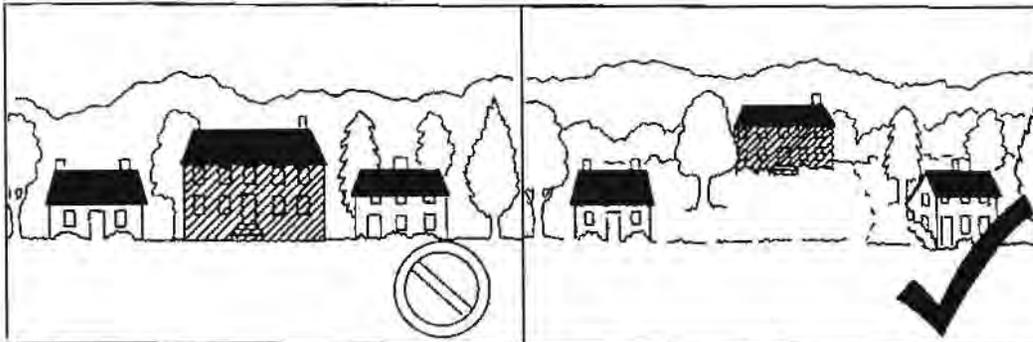


The rhythm that has been established by previous structures needs to be maintained.



MASSING

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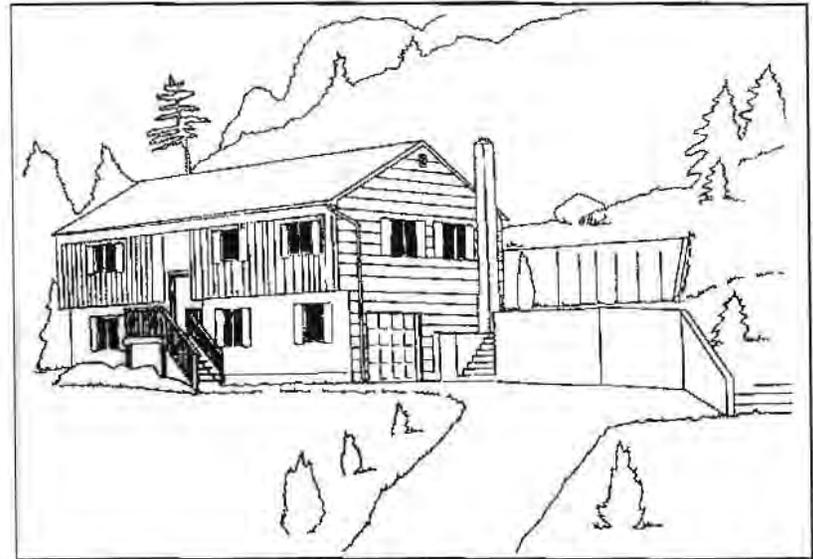
If proposed height is too great, a deeper front yard setback may solve the problem providing it does not seriously disrupt street siting rhythm.



Most older buildings have complex shapes resulting from the initial small scale of the design and the series of modest additions over the years which lend a complex and picturesque appearance .

SETBACKS. Consideration should be given to the location of a new building on its site relative to the position of the usually adjacent dwellings. Its position on the lot should be similar to that of its older neighbors. A variance may be needed to insure proper siting. In all cases, the placement of the building

should respect existing topography and vegetation. This often requires the preparation of specific building plans. Generic building designs cannot usually be made to accommodate the requirements of a specific historic district site, especially with regard to topography, vegetation, and surrounding buildings.



Standardized building designs cannot usually be made to accommodate a specific historic district site.

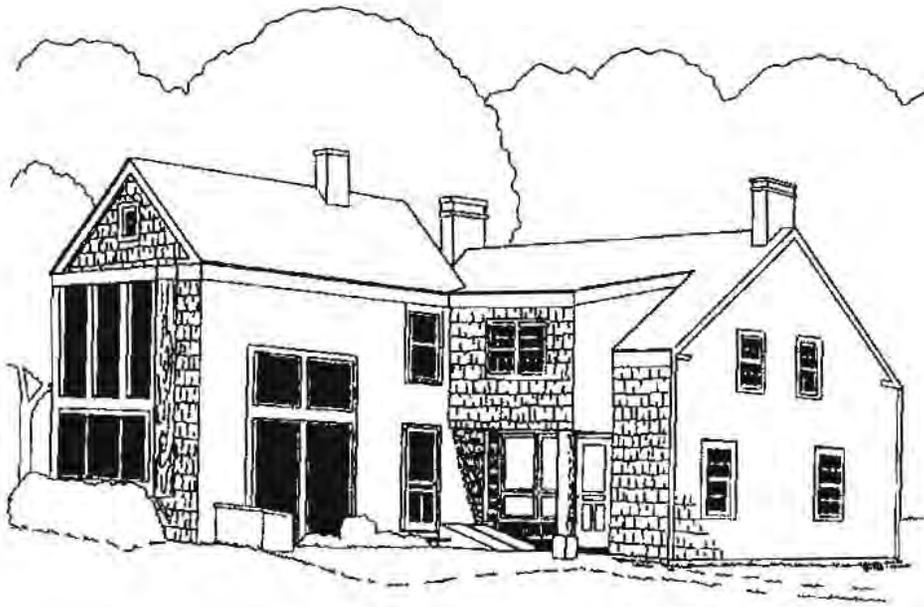
PROPORTION AND FORM.

Most older buildings have complex shapes resulting from the initial small scale of the design and the series of modest additions over the years which lend a complex and picturesque appearance to traditional Long Island buildings. But the organizing guideline is good proportion; the regular repetition of certain units of measure on a building's facade. (For example the pitch of the roof of a well-designed Greek Revival building is less than 30°, and the height of the gable is related to the height of the whole building.)



FIREPLACE HISTORIC DISTRICT

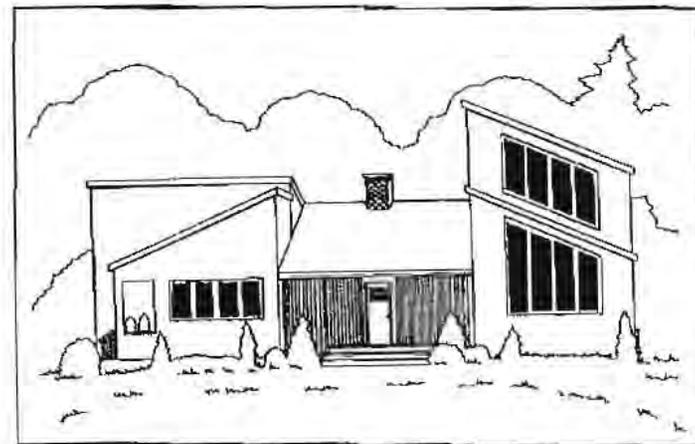
Repetition of geometric shapes in larger and smaller sizes creates a composition that is visually satisfying.



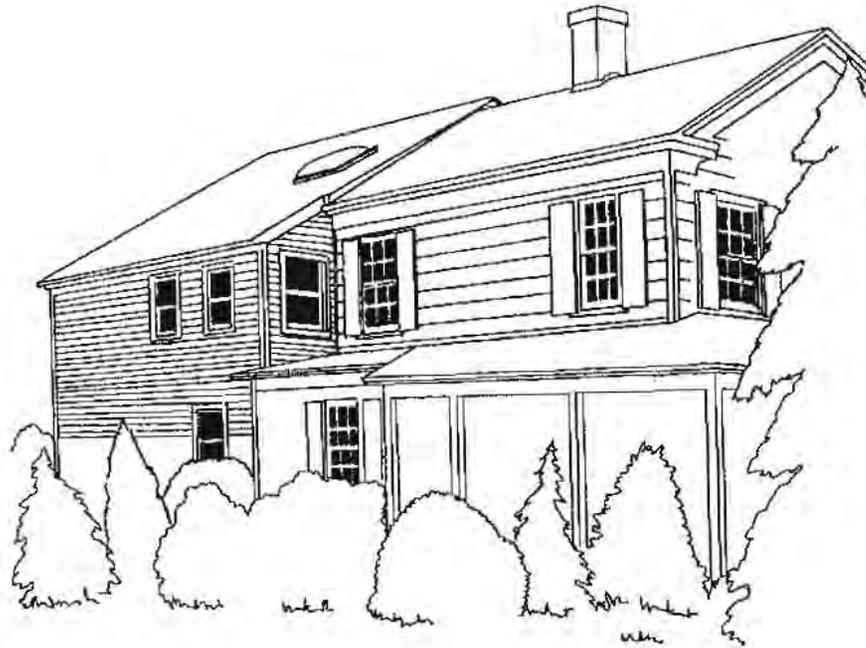
FIREPLACE HISTORIC DISTRICT

A large new [contemporary addition] wing (on left) is distinctly modern. It does not distract from the older house because it is not visible from the primary facade, and it does not alter the original work. Similar siding gives continuity.

Proportion also includes repetition of geometric shapes, usually rectangular, in larger and smaller sizes. (For example, the width and height of one window pane is proportionally similar to the width and height of the whole window.) Many buildings repeat certain measures and shapes many times over, and these interrelationships create a composition that is visually satisfying. New construction should avoid large, flat expanses of wall or roof surface.



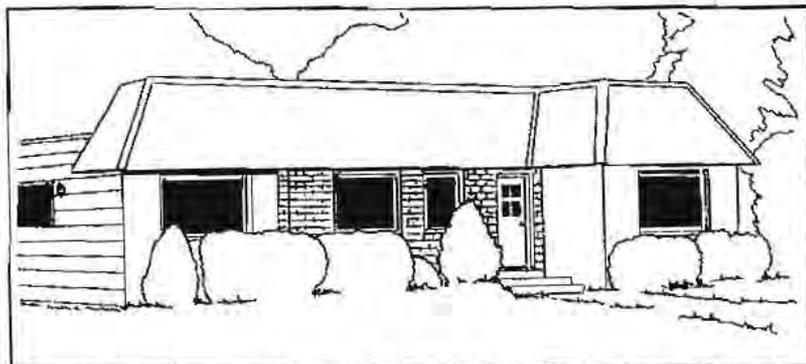
New construction should avoid large, flat expanses of wall or roof surface.



This addition (on left side of the illustration) is not successfully integrated with the older building. Window shapes, roof angle, siding width and building materials are all at variance with the original, and the result is not pleasing to the eye.



This contemporary addition (on right side of the illustration) blends harmoniously with the earlier structure. Note the continuation of the unusual siding, replication of the wide cornice, and similar windows. By setting the roofline at right angles to the main house, its lower pitch is unnoticed.



New work should avoid flat rooflines, false mansards (as here) and other exotic shapes.

ROOFS. While roofs in Brookhaven are usually gabled (two roof surfaces meeting at a ridge), pitch (steepness) varies greatly depending upon the size and age of the building. New work should avoid flat rooflines, false mansards (steep roofs applied to building walls; they are non-functional), domes, etc. The amount of roof visible on the elevation generally should not exceed half the height.

Roofing materials should be consistent over an entire surface and texture should be subtle. Skylights and solar collector panels can detract from the appearance and should be handled with care, particularly on front elevations.

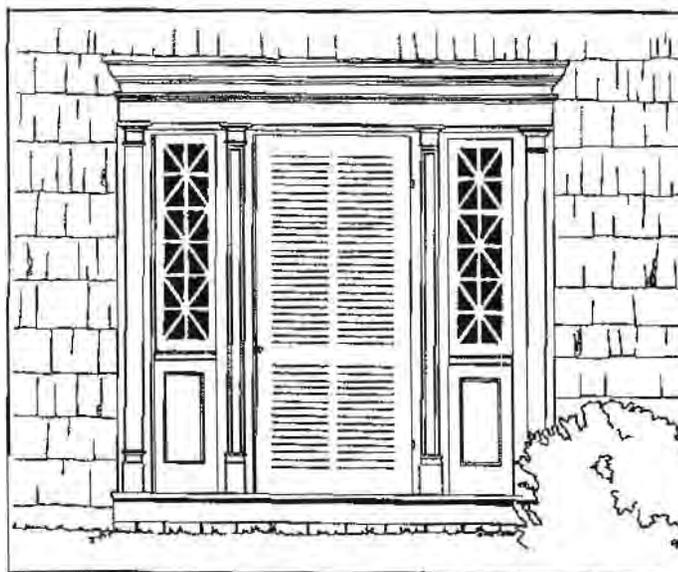
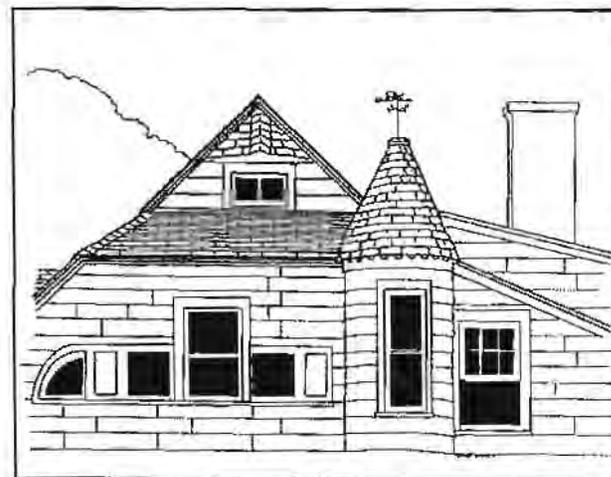


This mid-nineteenth century Cape Cod style house has been given a subordinate wing. The mass and set back location are satisfactory, but the large deck, over-scale windows and doors, and incompatible roof treatment with skylight make the addition inharmonious and awkward.

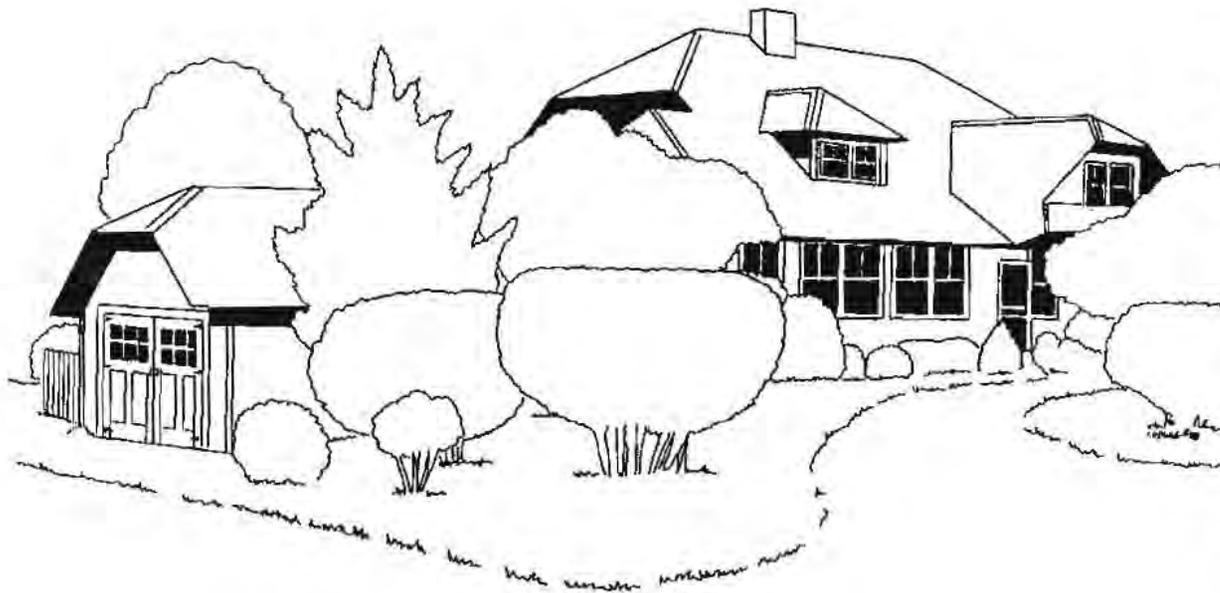
WINDOWS AND DOORS. A preponderance of a particular window style, such as the early double hung sash, six light (panes of glass) over six, one width to one-and-a-half in height, can give visual continuity to a district. However, window design has evolved and different examples of this evolution appear throughout each district. The number of panes per window decreased through time as technology allowed for the creation of larger panes. A recent desire to imitate early styles has created a proliferation of even smaller-paned, modern windows. All of this gives each district character. But within a given building, there is an identifiable sense of proportion and this is what is most important.

Doors have a way of becoming the primary feature and as such deserve attention and emphasis, which often takes the form of side lights, overhang or porch, or attractive panelling. Flat surfaced doors do not add to an older home. It is helpful if the storm and screen doors do not obscure the main door.

Some houses have unusual window patterns, but because balance and proportion are achieved, symmetry is not necessary.

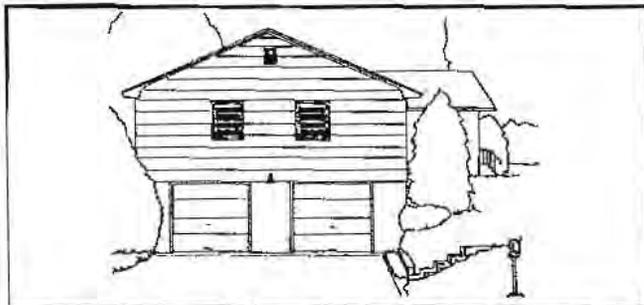


Doors are often the primary feature of attention and are emphasized by side lights, overhang, porch, or attractive panelling.



GARAGE DOORS. Because of the size of garage doors in relation to the overall design of the house, they are worthy of separate note. In older homes in the districts, garages are usually separate structures – either converted outbuildings or garages built separately on the lot. But in new construction the trend is for attached garages facing the street, which cause the scale of elements on the front facade to be significantly altered and results in a jarring visual impact. Therefore, it is recommended that garage doors be set on the side or rear of the structure or mitigated in some way.

In older homes, garages are usually separate structures, either converted outbuildings or built detached in a similar style.



In new construction, the trend is for attached garages facing the street. When they are the dominant element, the result is a jarring visual impact.



It is recommended that garage doors be set on the side or rear of the house.

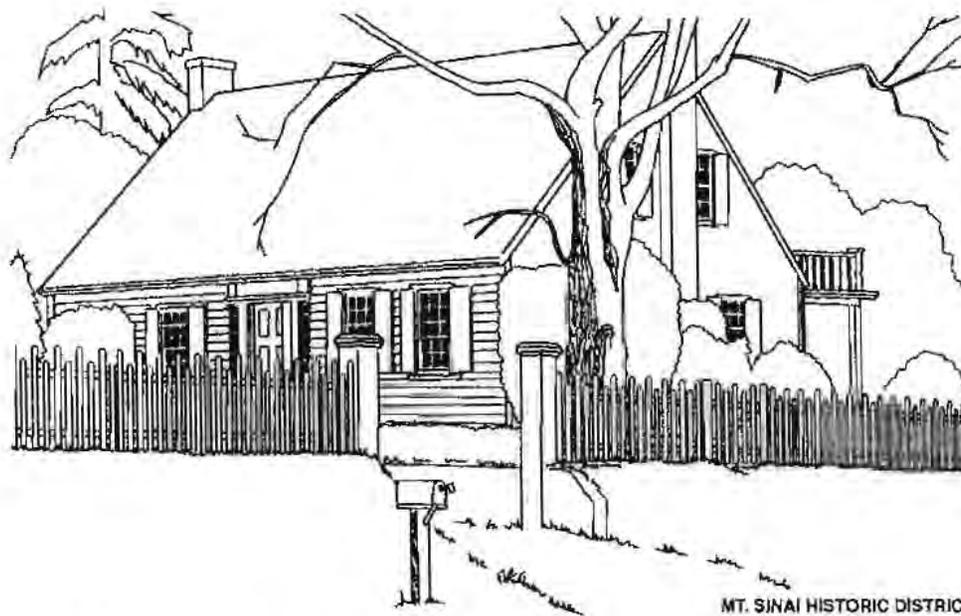
GUIDELINES FOR RESPECTING THE LANDSCAPE

Older residential areas are characterized by an abundance of shade trees, and this element lends coherence and reflects a pride of place. Because new development necessarily disturbs natural planting patterns, special care must be taken when siting an addition or new construction. When the new construction appears to have always been a part of the environment, the landscaping plan is successful.

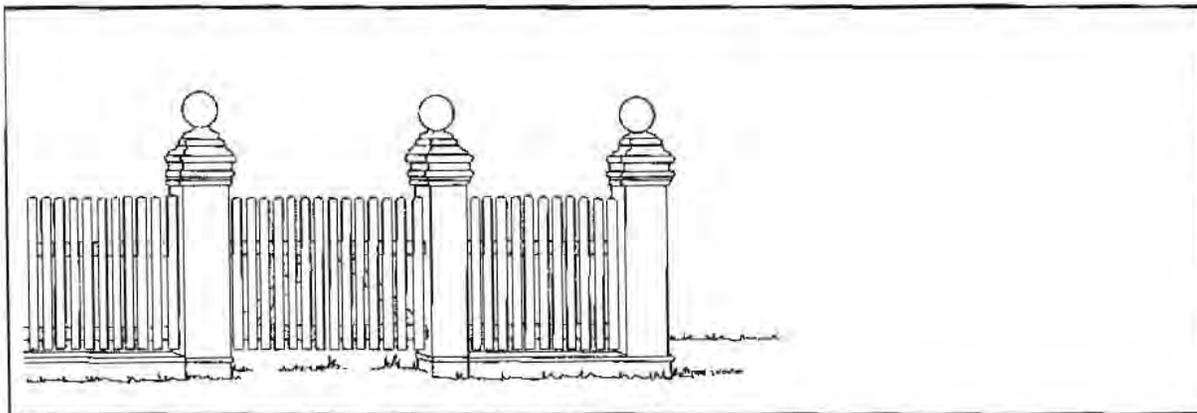


OLD SETAUKET HISTORIC DISTRICT

Older residential areas are characterized by an abundance of shade trees, which lends coherence and reflects a pride of place.



Long settled properties frequently have well-defined borders. The preferred fencing in 19th century landscaping was the picket fence. Gates and posts reflected the style of the house and the taste of the owners.



TREE CANOPY. The cover provided by trees planted years ago warrants preservation and can do more than any other landscape element to help new work fit into an established environment.

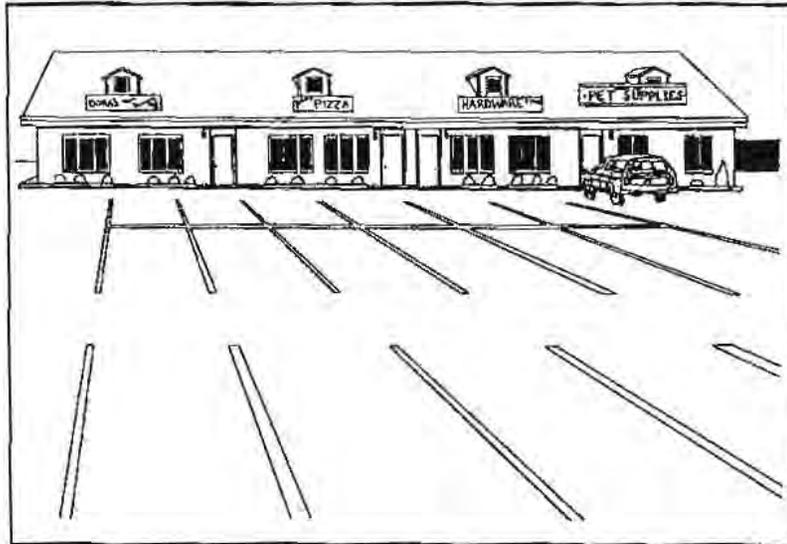
BORDERS. Fences, curbs, and sidewalks are elements that create visual borders. Long settled properties frequently have well defined borders and in Brookhaven's districts these are mostly seen in fencing. The preferred fencing in 19th century landscaping, especially along the front border, was the picket fence with a horizontal rail along the bottom. Gates and posts reflected the style of the house and the taste of the owners.

Where early fences survive, we encourage their preservation. The restoration of fencing improves an older streetscape. In areas of low building density, curbs and concrete sidewalks do not contribute in a positive way to the traditional appearance of an area.

Front entrance walks of crushed oyster shells or bricks set without mortar are preferred to the usual concrete walk.

PARKING AREAS. Off-street parking spaces can be arranged in such a way as to reduce the impact of automobiles on the appearance of historic areas.

In order to accomplish this, private parking areas need to be blocked from view by plantings or set in the rear yard. Small, separate garages located behind the main structure are not only the best visual solution, they are in keeping with the pattern of outbuildings in the districts.

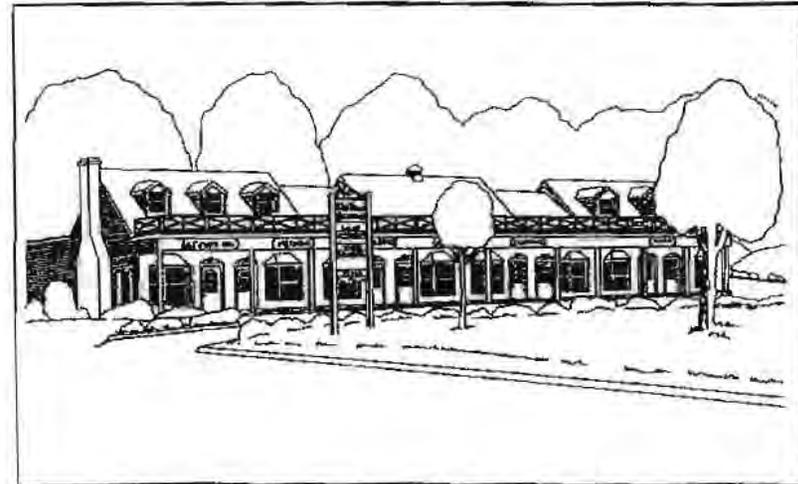


Parking areas for business should not be one large open space.

Public parking areas for business use can be composed of several smaller units as opposed to one large, open area. Plantings between areas preserve the tree canopy and minimize the large scale interruptions that parking fields pose. Further attention to plantings, low walls or other visual buffers mitigate the disruption of parking lots.

Pedestrian walkways can be of brick, stone, gravel, crushed shell, or asphalt but must blend in a way that they do not become the visual focus. Appropriate landscaping can further ease the impact.

SIGNAGE. Signs need to be unobtrusive, simple and easily read. They are best when constructed from natural materials such as wood. Internal illumination is strongly discouraged. Signs must conform to the Town sign ordinance and require a permit. Placement, design, proportion and scale will be considered in making recommendations on signs in the districts.

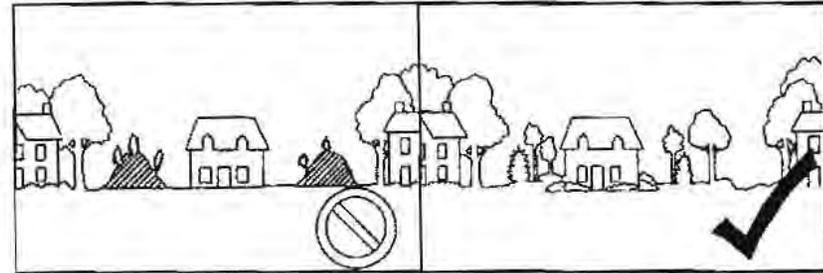


Parking areas should be blocked from view by plantings, low walls, or other visual buffers. Good design, characterized by a sense of proportion and reflection of design elements common to the district, adds dimension. Finally, the use of natural materials and less intrusive signs completes the setting.

LANDSCAPE

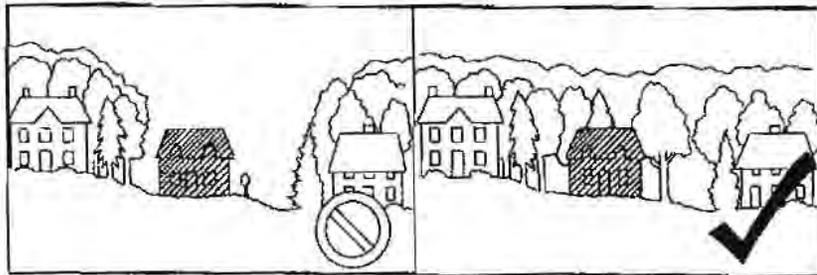
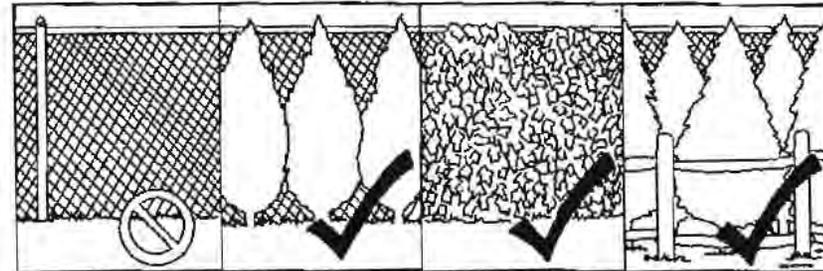
Berms are unnatural and lend an artificial visual appearance to an area.

When the new construction appears to have always been a part of the environment, the landscaping plan is successful.



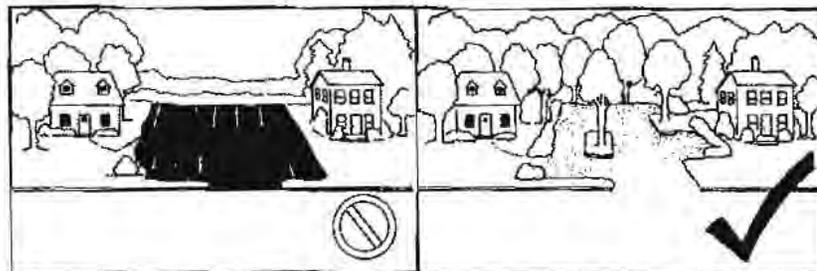
BORDERS

Fencing, required by Town code around pools, is greatly enhanced in appearance with the addition of vegetation.



TREE CANOPY

The cover provided by trees planted years ago warrants preservation and can do more than any other landscape element in helping new work fit into an established environment.

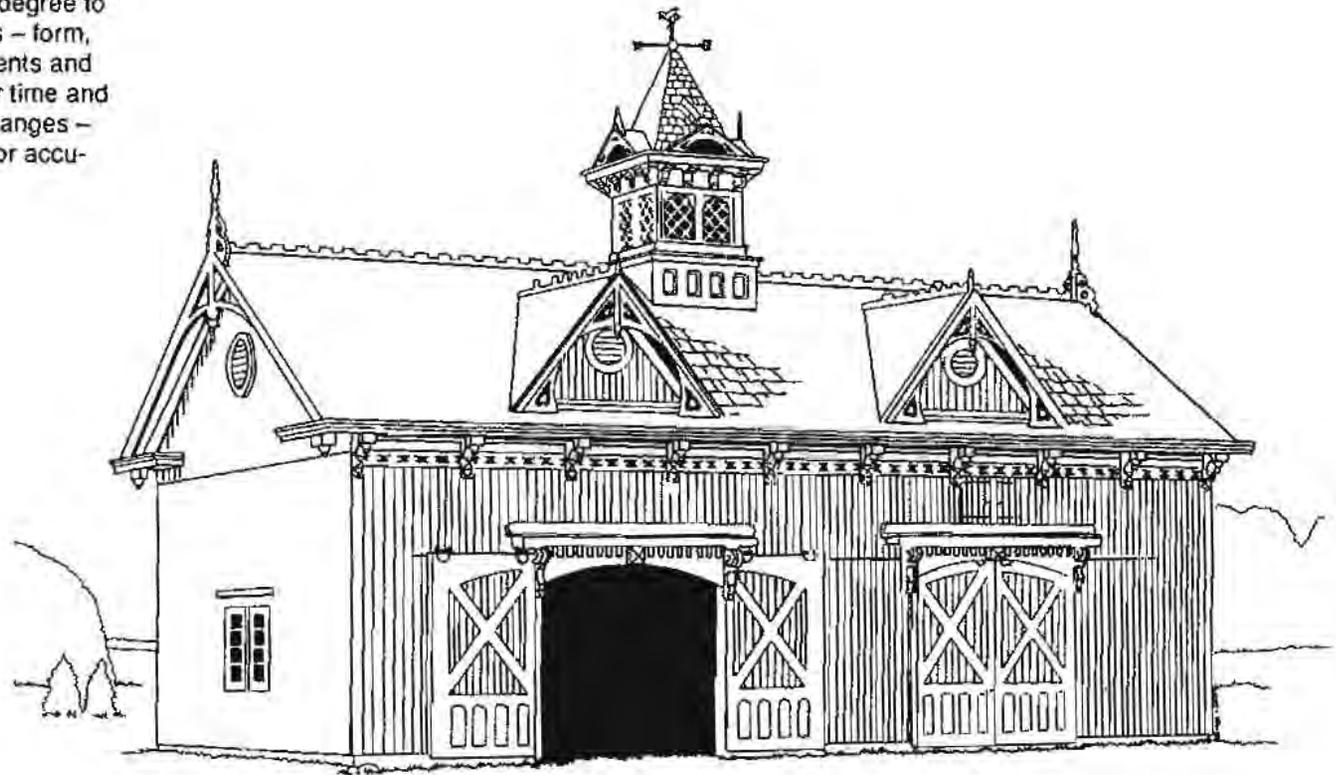


PARKING AREAS

Plantings between areas preserve the tree canopy and minimize the large scale interruptions that parking fields pose.

GUIDELINES FOR RENOVATION OF EXISTING BUILDINGS

The degree to which an historic building retains its early appearance is described in terms of 'integrity.' This is not the same as 'condition'; often places are "fixed up" so that they look better now than they ever did, but their integrity is lost. Integrity is measured only by the degree to which exterior features – form, style, decorative elements and building materials over time and through successive changes – have been preserved or accurately restored.



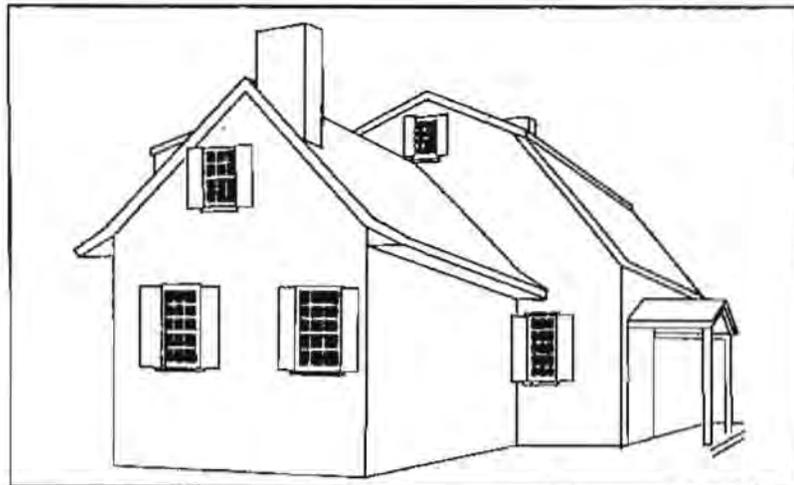
Integrity is measured by the degree to which architectural features and building materials have been preserved or accurately restored.



With slow population growth, structures were altered (for functional or stylistic reasons) whereas in a period of rapid growth they might have been replaced. Therefore we find the typical house has been remodeled many times. Today the thoughtful owner will take the time to unravel the intrinsic and fascinating testimony of the structure before deciding on a remodeling plan or restoration date. It's seldom advisable for a house to be restored to its earliest date. Later additions can be of historical or architectural value. In fact, they might be more interesting than the original design. At the very least, all previous changes to a home tell a tale and thus enrich it. Efforts should be made to retain them.

Most houses have been remodeled and added to. It is wise to understand this evolution before attempting restoration.

The goal of *restoration with integrity* means preserving as much as possible of what is already there. Building modification will occasionally be called for but changes of detail, mass, roof line, windows, porch, and so forth, should be harmonious. This is no easy task and requires time and effort in understanding the building and its progress through time. Many aids exist. The review committee serves as one of the resources available, and welcomes anyone interested in a restoration project.



When an historic building is enlarged, changes of mass, roofline, windows, porches, and details should be harmonious.



As a house is expanded through the years, later additions add historic interest and historical value. Each part has a story to tell.



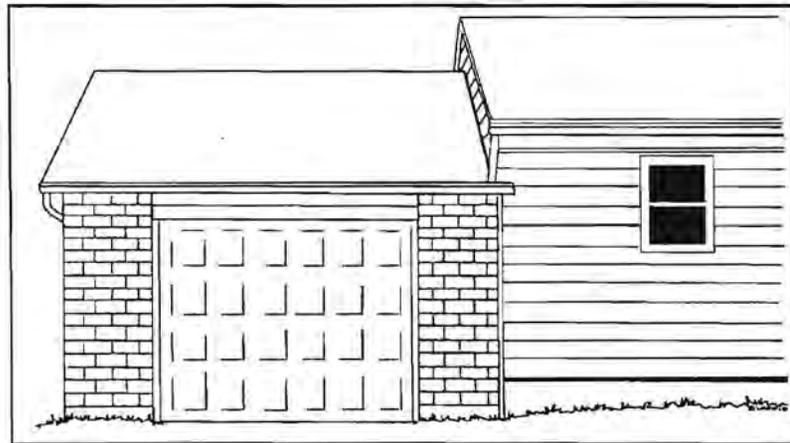
It is usually an error to attempt to change the style of a building while renovating or enlarging it. The most common mistake is the effort to make nineteenth or twentieth century buildings appear colonial. The result will be disappointing. Successful restoration depends on how well the style, age, evolution and integrity of the structure is understood. While the removal of an obviously modern element (a picture window, for example) may be appropriate, caution should be exercised if the feature is more than fifty years old because it has become a part of the evolution of the building.

MT. SINAI HISTORIC DISTRICT

Successful restoration depends on how well the style, age, evolution and integrity of the structure is understood and respected.

MATERIALS. With regard to appropriate treatments of foundations, wall surfaces, entries, roofs, windows and decorative details, as well as the site, an overriding principle prevails: do not introduce construction materials that were not available when the building achieved its present appearance. There are two major exceptions. First, modern materials and construc-

tion techniques are acceptable in structural work and in areas not visible (e.g. steel supports, modern 2 by 4 framing) and second, the use of current materials to preserve original work (e.g. paints, water-resistant epoxy, plastic restoration treatments) are encouraged.



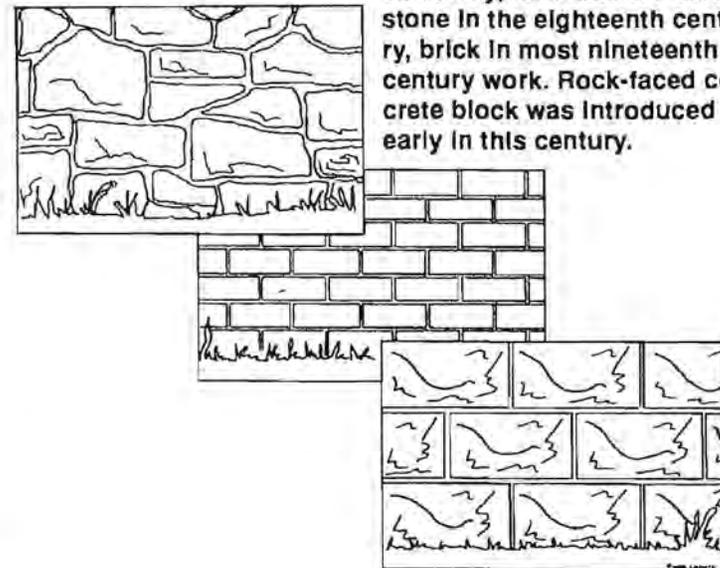
Do not introduce construction materials that were not available when the building achieved its present appearance. In this example, the subordinate part, the garage, is faced with brick, which draws attention to its plainness and away from the house.

FOUNDATIONS. It is best to duplicate existing materials where visible. In Brookhaven, the rule of thumb is that stone was used in the eighteenth century, brick in most nineteenth century foundations. Rock-faced concrete block was introduced in the twentieth century. One good source of material is other parts of the masonry—that which is to be removed or obscured by new construction—providing it is no longer bearing weight.

A four inch brick veneer surface over block is preferable to the

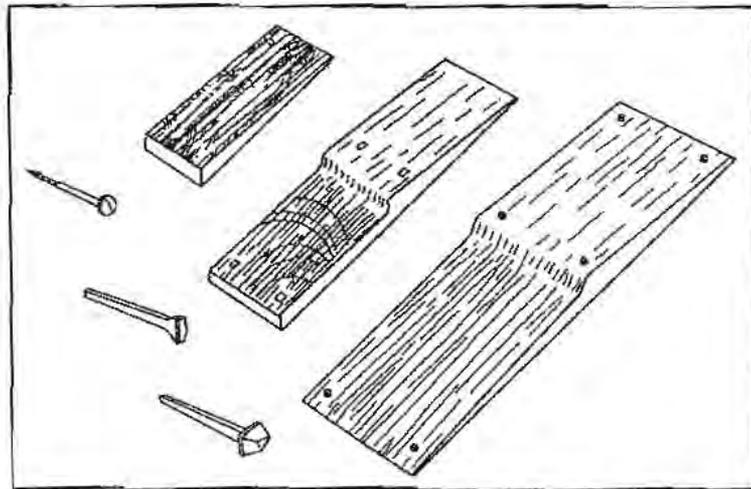
exposure of new materials. Do not lay stone or old brick in modern concretes for its strength will destroy them. A suitable mortar mix can be made and can be tinted to match the original.

Avoid plantings along the foundation because they hold water and insects close to the house and prevent adequate drainage and drying. Climbing vines loosen mortar and cement, thereby allowing water penetration.



Generally, foundations were of stone in the eighteenth century, brick in most nineteenth century work. Rock-faced concrete block was introduced early in this century.

EXTERIOR WALL SURFACES. The most common wall surface on Long Island, the wooden shingle, is usually a native red or white cedar with its length varied through time. The rule of thumb is that in the eighteenth century they were hand cut and smoothed with a draw-knife, about 15" to 13" exposed to the weather and secured with rose-



The common wall shingle on Long Island has changed through the centuries. In the eighteenth century (right), they were hand-cut and smoothed with a draw-knife, about 13" to 15" exposed to the weather and secured with handmade nails. Nineteenth century shingles (center) were of similar size, secured with machine-made nails, and about 11" was exposed. Late nineteenth and twentieth century shingles (left) have no face nailing and have a sawn surface, with about 6" exposure.

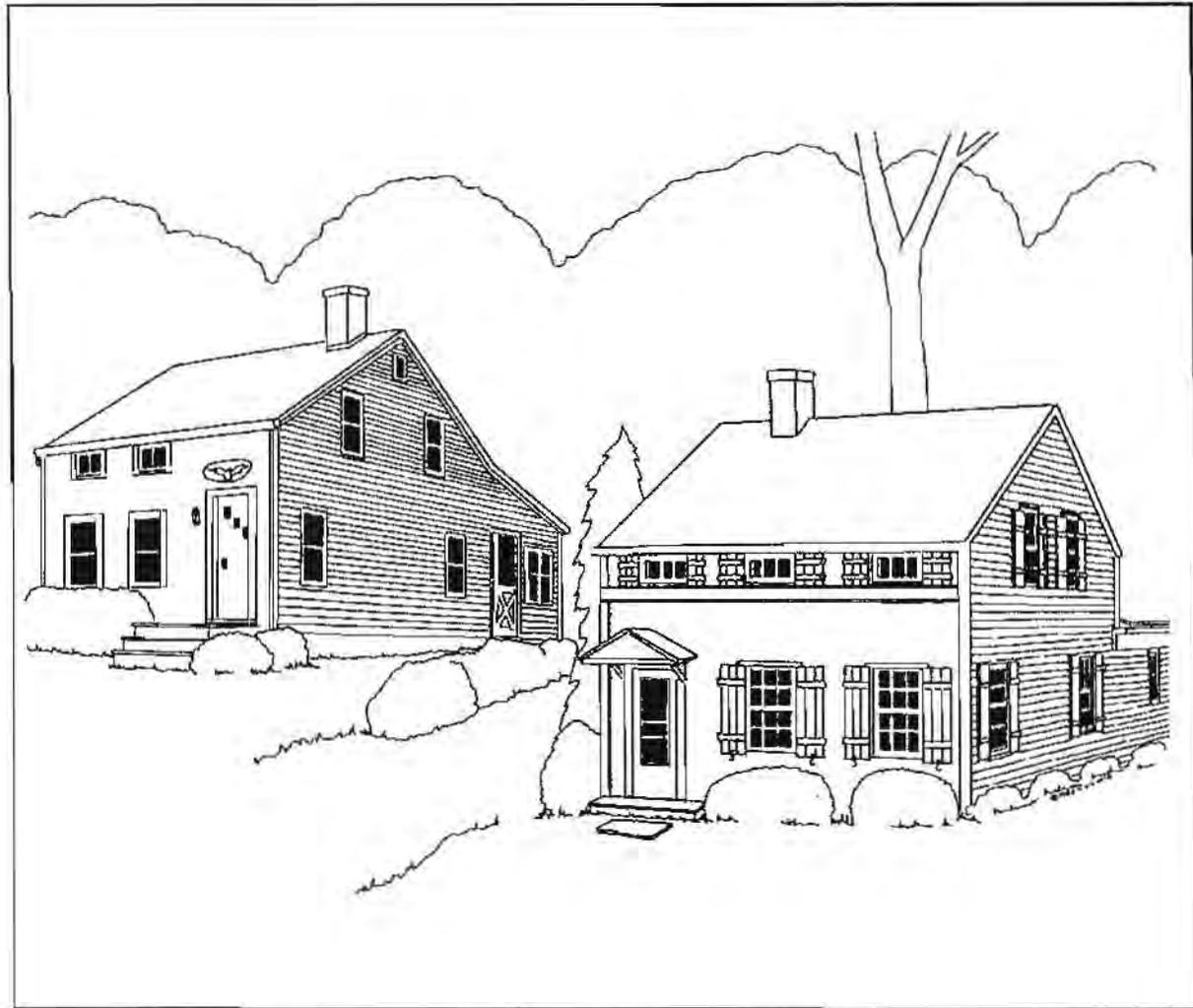
headed (handmade) nails 1" above the lower edge. Nineteenth century shingles were of similar size, secured with square nails (machine made), about 11" exposed. Late nineteenth and twentieth century shingles have no face nailing and have a sawn surface. The exposure may be as little as 6". Try to reuse as many of the original shingles as possible, espe-

cially in visible areas. Keep a consistent weather exposure. Shakes, which are thicker than shingles, and have a rough split-wood surface, are not a suitable substitute for the look of weathered shingles. Do not stagger the bottom edge (butts) of shingles because the resulting coarse texture does not look good on smaller-scaled buildings.

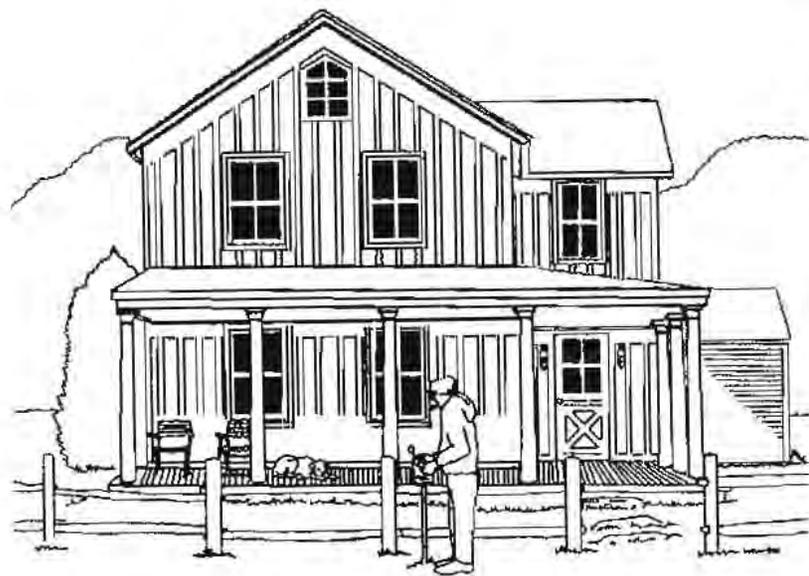


Clapboard siding became popular in the mid-nineteenth century and was used for larger homes.

Clapboards (horizontal strip siding with approximately 4-1/2" exposure) became commonly used on Long Island in the mid-nineteenth century and were used on more prominent structures, although the shingle retained its popularity. Early siding is rabbeted on its top edge to make a secure lap and is nailed with square nails. Later clapboards are tapered (thinner at the top) and held with wire (round) nails. Clapboards are to be painted, not left natural. They may or may not be treated with a vertical corner board. Aluminum or vinyl siding presents a synthetic appearance and is not a satisfactory substitute for wood. Its use almost always necessitates the removal or covering of original decorative features, especially around windows and doors and at rooflines. It may well cause deterioration and rot in the underlying wood structure. For these reasons, we recommend the maintenance and restoration of original wood on exterior walls.



Aluminum or vinyl siding (on the building on the left) alters a building's appearance: the synthetic texture never looks like the original wood and original decorative features are obscured. It is discouraged as a preservation technique.



FIREPLACE HISTORIC DISTRICT

Siding composed of vertical planking alternating with thin molding strips covering the seams is known as board and batten siding. It was popular between c. 1860 and 1900.



DYER'S NECK HISTORIC DISTRICT

Siding composed of vertical planking alternating with thin molding strips covering the seams is known as board and batten siding. It was popular between c. 1860 and 1900.

original appearance and decoration, the owner should be aware that the underlying material may need repair, scraping and painting.

Frequently, exterior walls are found to be covered with asbestos shingles nailed over the original siding or wood shingling. This treatment was popular especially in the 1950's. While its removal may reveal

The use of any blasting technique for surface cleaning removes the surface of wood, masonry or stone and promotes water penetration. The best way to remove excess paint build-up is with hand scraping or a gentle water wash.

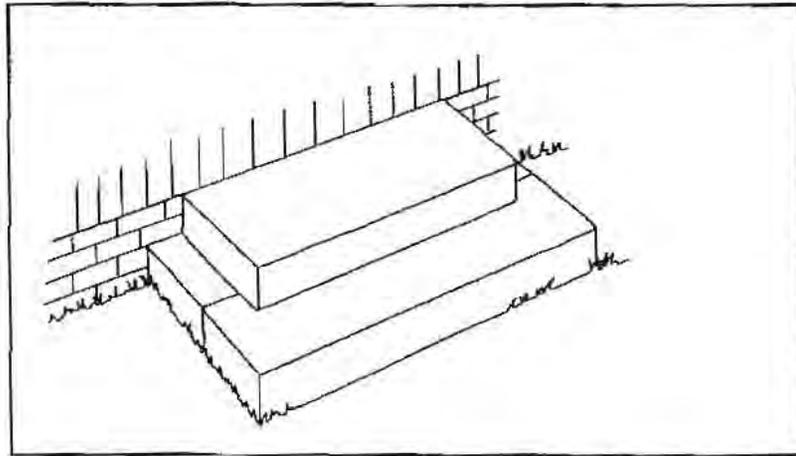
It is usually a mistake to introduce another exterior material when planning an addition. For example, it is inappropriate to add a brick wing on a clapboard house, or a vinyl sided garage on a shingle house.

The HDAC will be happy to discuss with a homeowner appropriate treatments for covered siding. The decision to preserve or remove an existing covering is an individual one, governed by its condition and appearance and by the resources and desires of the owner.

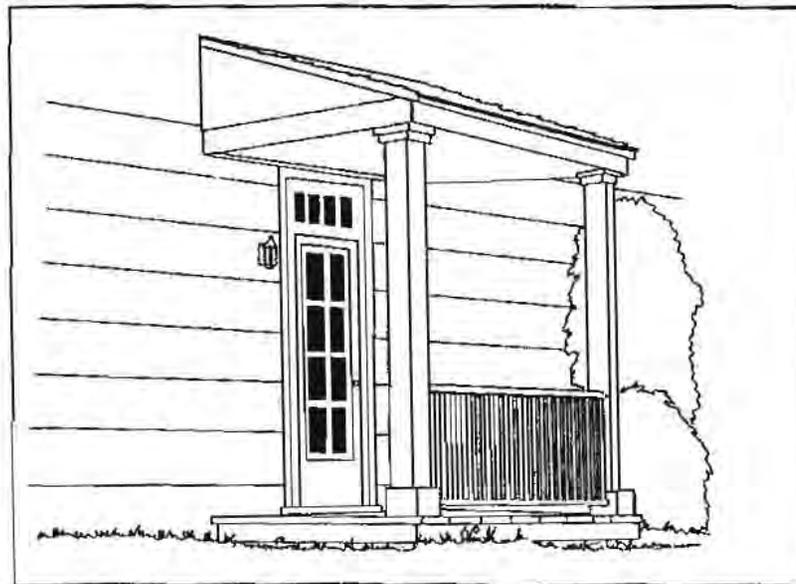


Some houses are covered with asbestos shingles. While the original shingles or clapboard is beneath, removal can be hazardous, and can reveal a surface in need of repair.

DYER'S NECK HISTORIC DISTRICT



On the older homes on Long Island, front steps were made of wood or occasionally heavy stone. They are still frequently seen.



WM. SIDNEY MOUNT HOUSE

STONY BROOK DISTRICT

ENTRIES. The most frequently changed part of buildings is and has been the entrance, front steps, door and porch. On older homes on Long Island, front steps were made of wood or occasionally heavy stones. Replacement in brick or flagstone is appropriate only on twentieth century buildings. Thin wrought iron handrails should be rejected in favor of wood. Because porches require continued maintenance, they are seldom wholly original, particularly the floors and supports. The typical Long Island entry is still frequently seen because of its initial popularity and its revival in the early 20th century.

The verandah, a porch running the full width of the house, was introduced in the Victorian era (c. 1850) and continued into the 1920's. It was wood, set on masonry or locust supports, having six to eight (or more) turned posts and a nearly flat roof. These porches were frequently

added to earlier buildings and some have been removed or enclosed in the last forty years. Porches of any type should be maintained. Enclosure, which substantially alters the appearance of the house, particularly on the front elevation, should be avoided.



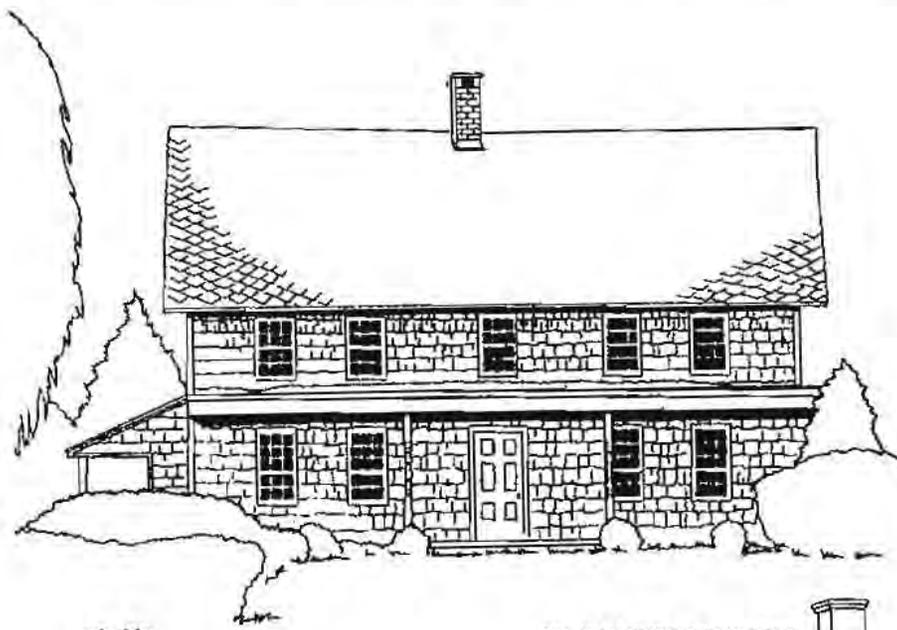
AVERY HOUSE

YAPHANK HISTORIC DISTRICT

The verandah, a porch running the full width of the house, was introduced in the Victorian era and continued into the 1920's. Often these were added to earlier buildings.



This porch enclosure has removed interesting original decoration, and introduced brick in an incompatible way. The porch window pattern and proportion bears no relationship to that of the house.



MT. SINAI HISTORIC DISTRICT

Roof shapes change in subtle ways. On this farmhouse of the mid-1700s, the roof has been widened. The asphalt shingles date from the early 20th century.

ROOFS. Roof shapes are good indicators of early appearance because changing them is such a major undertaking that it is seldom found. The extension of eave width was sometimes done to 18th century structures in the 19th century. In the 20th century, dormers were often added. In the course of general maintenance, roof materials must be renewed. Eighteenth and early nineteenth century buildings were given wood shingle roofs. After the Civil War, slat shingles for roofs or squares of metal with folded seams were intro-



An early nineteenth century house with a Victorian porch and early twentieth century dormers added.

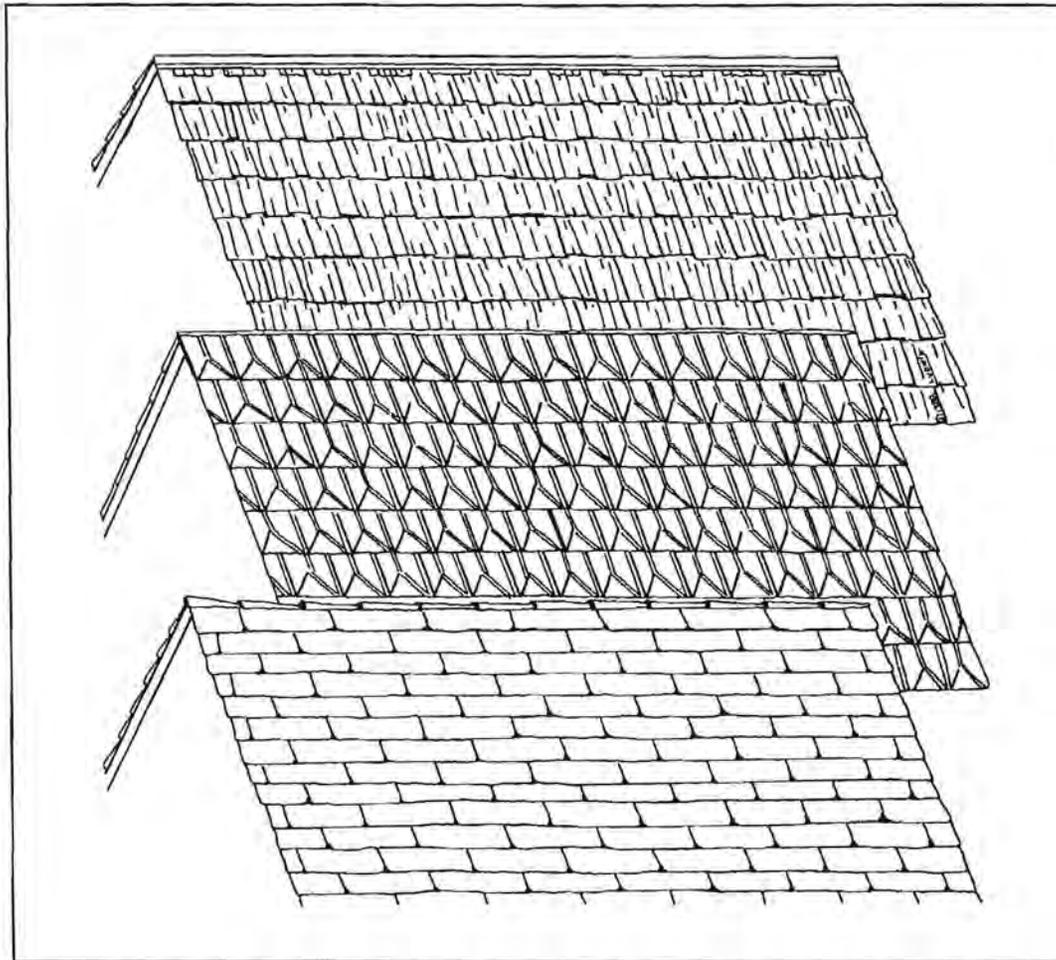
YAPHANK HISTORIC DISTRICT

duced. However, more humble houses and most barns and out-buildings still have wood shingle roofs. In the twentieth century, asphalt shingles were universally used for new and replacement roofing. Homeowners have a wide choice of roofing materials available today. However, we suggest that the color of new roofing resemble as closely as possible the original and that bright colors and patterns be avoided. Metal or slate roofs should be repaired rather than replaced with contemporary material.



FIREPLACE HISTORIC DISTRICT

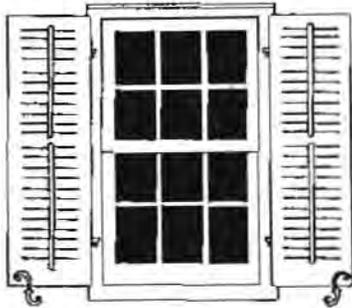
A bungalow style house c. 1920 with an unusually patterned asphalt shingle roof.



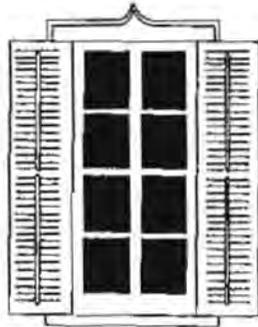
Examples of nineteenth century roofing materials: top, a typical wood shingle roof; middle, a roof covered with stamped metal shingles with interlocking edges, factory-made in the late nineteenth and early twentieth centuries; and, bottom, an example of slate roofing with alternating bonds of colored slate, fashionable in the 1870s and 1880s.

WINDOWS. Preservation of a structure's windows is perhaps the most important factor in maintaining its integrity. With regular attention, an original wood sash will last indefinitely.

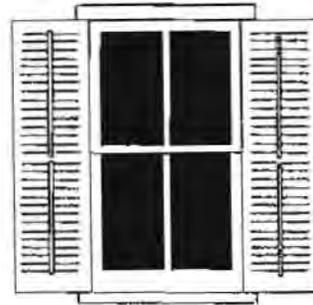
Double-hung sashes with six lights (glass panes) over six is seen in buildings built from the early years to the 18th century. Generally, glass sizes become larger during the nineteenth century: four lights over four are seen in some houses built in the 1860's. By the 1970's and 1980's, two lights over two were the rule in frames measuring up to 60" in height. One over one sashes appeared toward the end of the century as did the use of colored 'stained' glass. In the twentieth century, under the influence of the colonial revival style, domestic windows became smaller and the six over six was reintroduced.



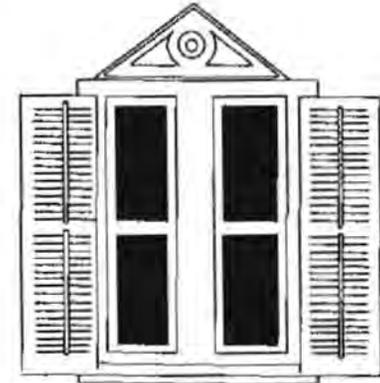
a. Double-hung sash with six lights (glass panes) over six is seen in buildings built from the early years to the 18th century.



b. Four lights over four are seen in some houses built in the 1860's.



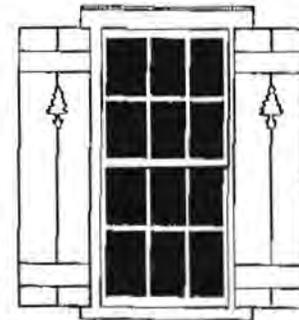
c. By the 1870's and 1880's, two lights over two were the rule in frames measuring up to 60" in height.



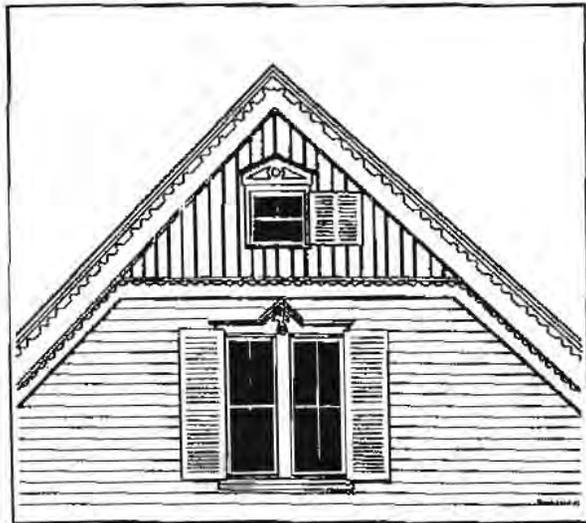
d. One over one sashes appeared toward the end of the century...



e. ...as did the use of colored 'stained glass'.



f. In the twentieth century, under the influence of the colonial revival style, domestic windows became smaller and the six over six sash was reintroduced.



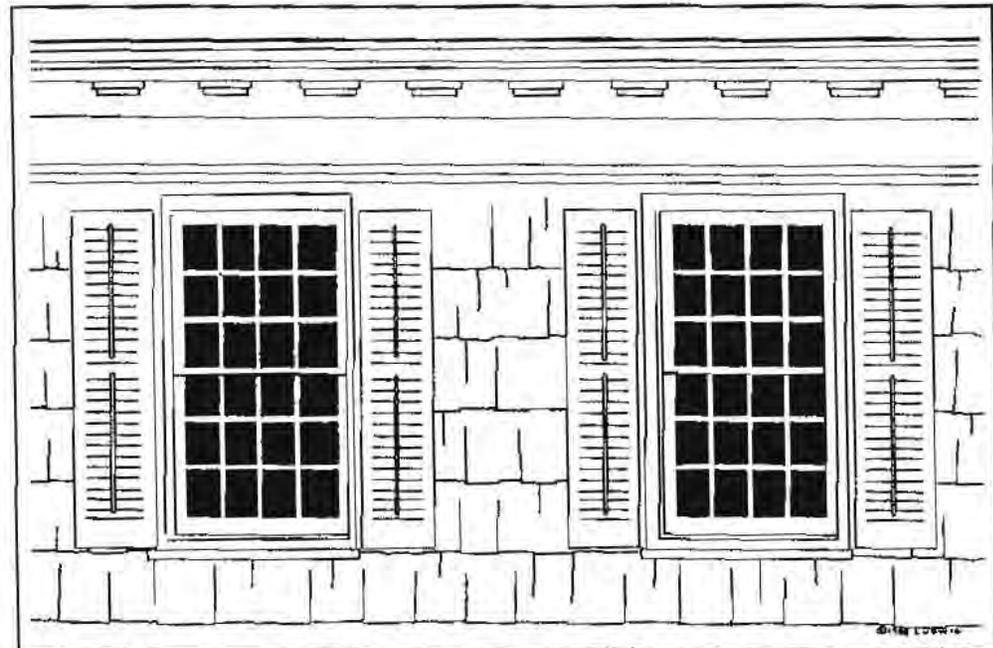
STONY BROOK HISTORIC DISTRICT

After about 1860, windows were often set side-by-side.

Older homes were sometimes refitted with newer windows in the nineteenth century to 'keep up appearances'. It is not advisable to replace these for they are important in the evolution of the structure.

It is important to retain the original spacing of windows.

Proportion is central to design. Spacing, the wall space between windows, was equal to or greater than the width of the windows until the mid-nineteenth century. After about 1860, windows may be doubled-up (set side by side). Symmetry was not necessarily observed in the Victorian period.



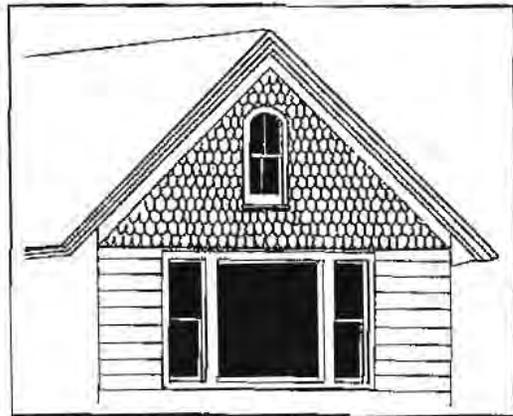
Before the Civil War, windows were placed apart by a distance at least equal to their width. It is important to retain the original spacing of windows.

The replacement of windows, all the rage in the 19th century, is no longer in vogue and is strongly discouraged. It is recommended that additional windows be of the same size and proportion as those existing, (including the width and coloring of the frame). Modern replacement windows with 'snap-in' muntins (the bars between the panes) do not look like wood sash and the plastic removable inserts have too often been removed permanently, rendering the window different in design than intended.

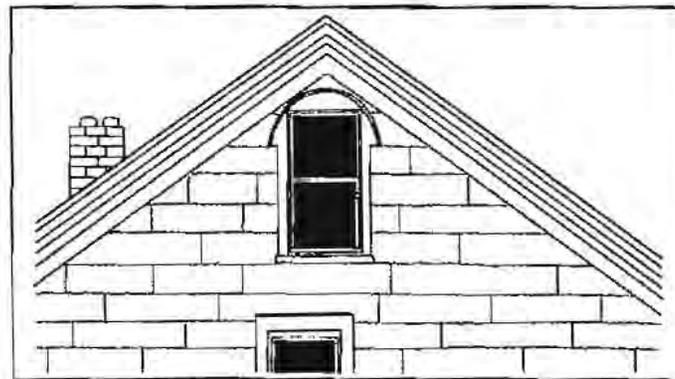


MILLER PLACE HISTORIC DISTRICT

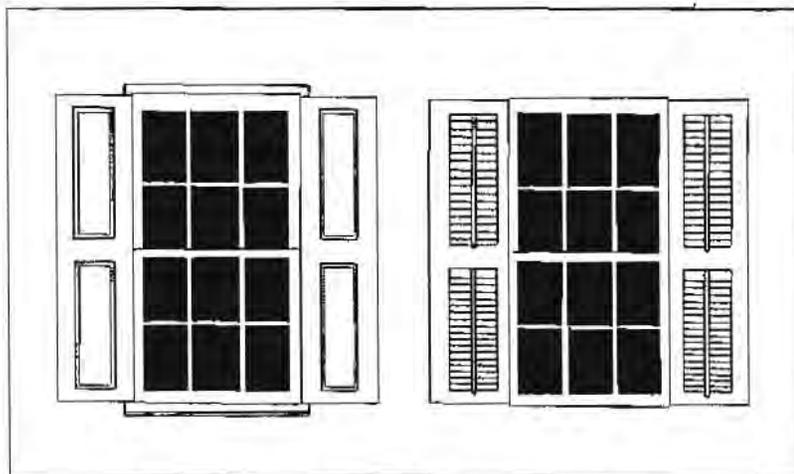
When snap-in muntins are removed, the intended design is significantly altered. We've changed the windows in this structure to illustrate the point.



This picture window is a replacement that is inappropriate: It is disproportionately large for this Victorian gable.

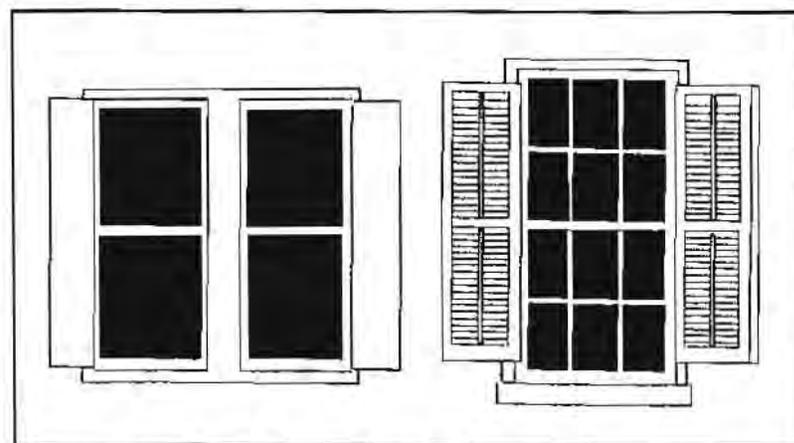


Replacement windows should be of the same size and proportion as the originals. This modern in-fill disfigures its surroundings.



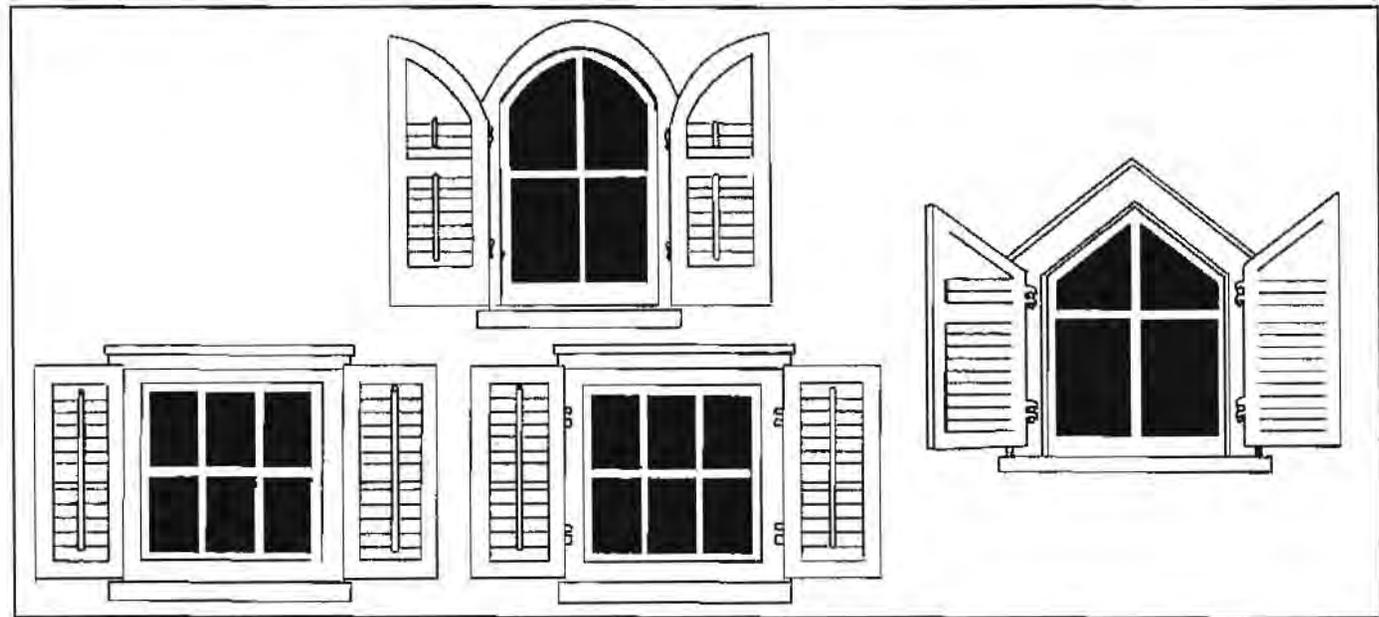
The panel and louver shutters illustrated here are properly proportioned and "functional" – each panel could cover half of the window.

Shutters were first used in the eighteenth century. Both the panel type and those with louvers have been found on buildings of every age. But not all homes had them, and they are not essential to a restoration. Better, in fact, to have none than to install ones of improper size.



These illustrations show shutters that cannot function. The shutters on the left are too narrow, the shutters on the right are too short.

Shutters were functional and therefore the size is important. The height should equal the distance measured from the top of the frame (inside the frame) to the top of the sill. The width of each shutter is equal to half the inside measurement of the frame. Shutters are hinged over the vertical jamb, not nailed on outside of it



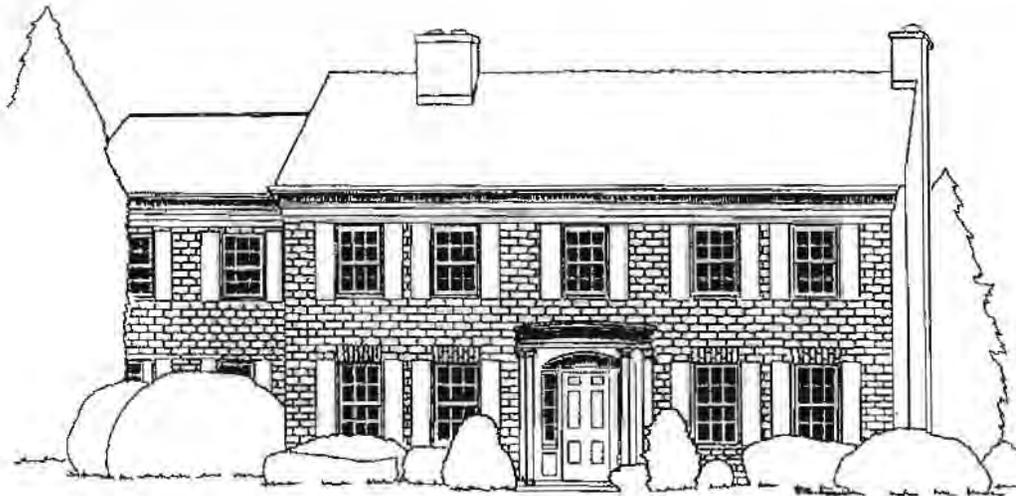
Examples of correctly fitted shutters: The height equals the distance from the top inside of the frame to the top side of the sill. The width of each shutter is equal to half the inside measurement of the frame. Shutters are hinged over the vertical jamb, not nailed on the wall beside the window.



DECORATIVE DETAILS. The degree of decorative detail varies greatly from building to building—early and modern buildings tend to have less, while those of the Victorian period almost always have more. Entrances and cornices on the primary facades received the most decoration. Care to the preservation of these details, wherever they exist, is important, as is replacement of missing elements whenever possible. However, it is not recommended to add detail where it never existed.

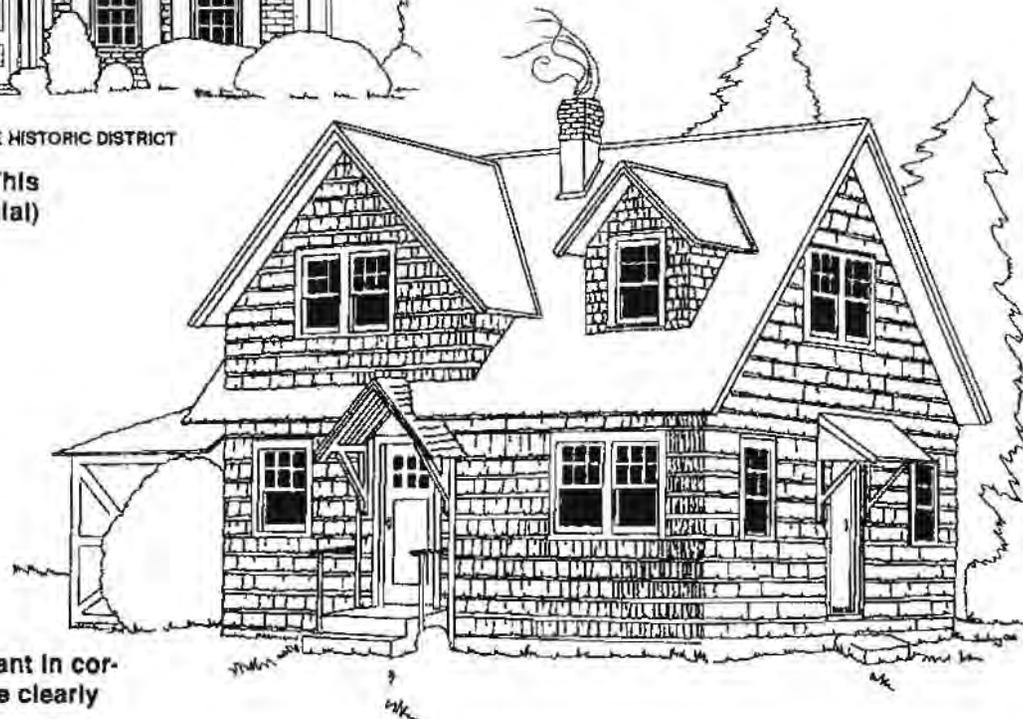
OLD MASTIC HISTORIC DISTRICT

In this structure from the late nineteenth century, decorative elements are essential to the design.



FIREPLACE HISTORIC DISTRICT

Modern design rejects much decorative detail. This twentieth century house copies Georgian (colonial) design.



Decorative elements are most prominent in cornices and entrances. Here, the roofline clearly defines the house shape.



Decoration was often used to establish a continuity among various buildings occupying one site. So, for example, details that appear on the main house may be repeated in a simpler or smaller way on the barn, carriage house or even on the

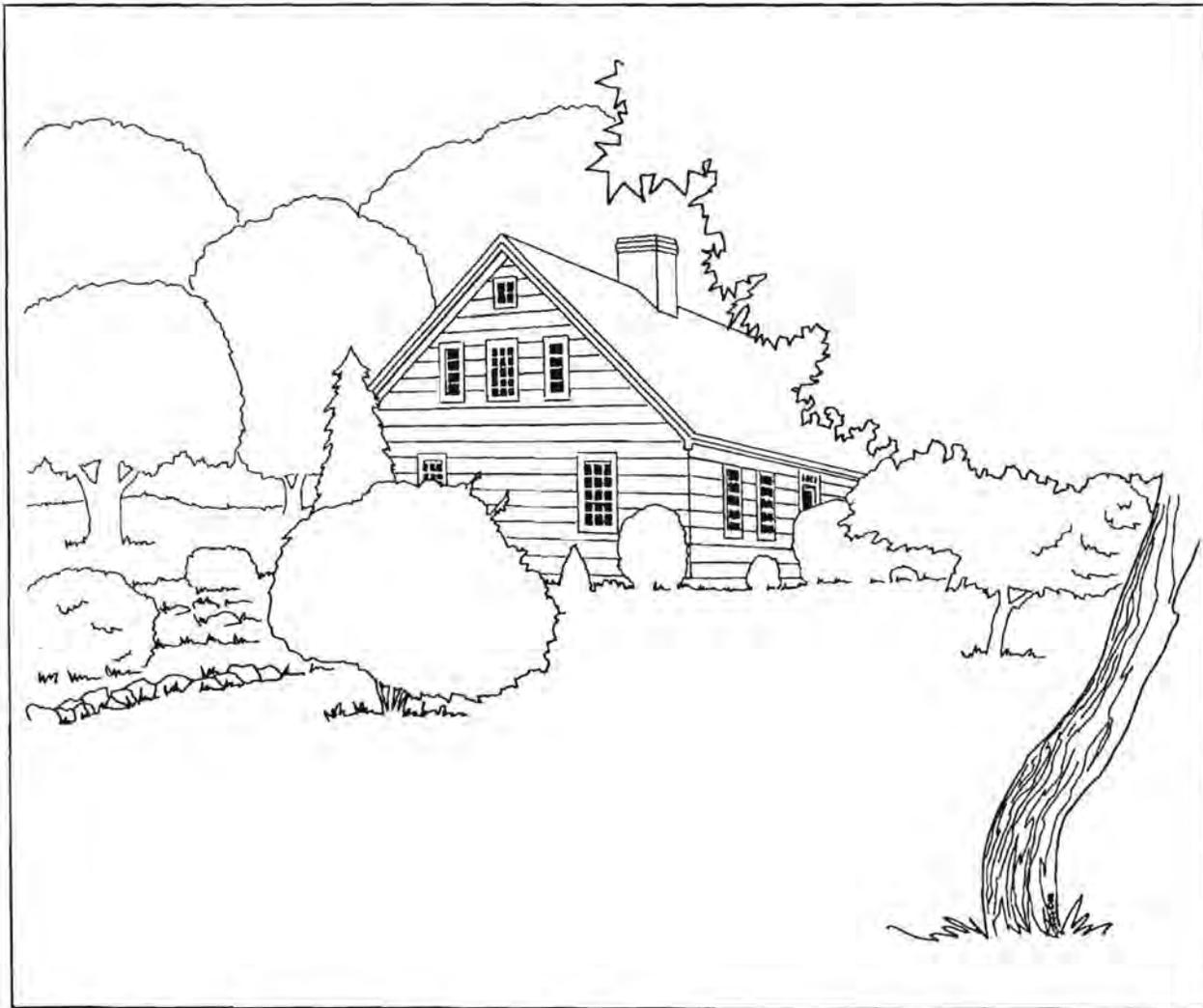
FIREPLACE HISTORIC DISTRICT

This house style, found all over Long Island, was popular in the early 1800s. The decoration of the entrance, however, enhances the whole.

fence posts. These visual embellishments lend continuity and harmony and should be preserved. They may now span more than one property, but this is also an important part of the history and provides all the more reason for their continuation.

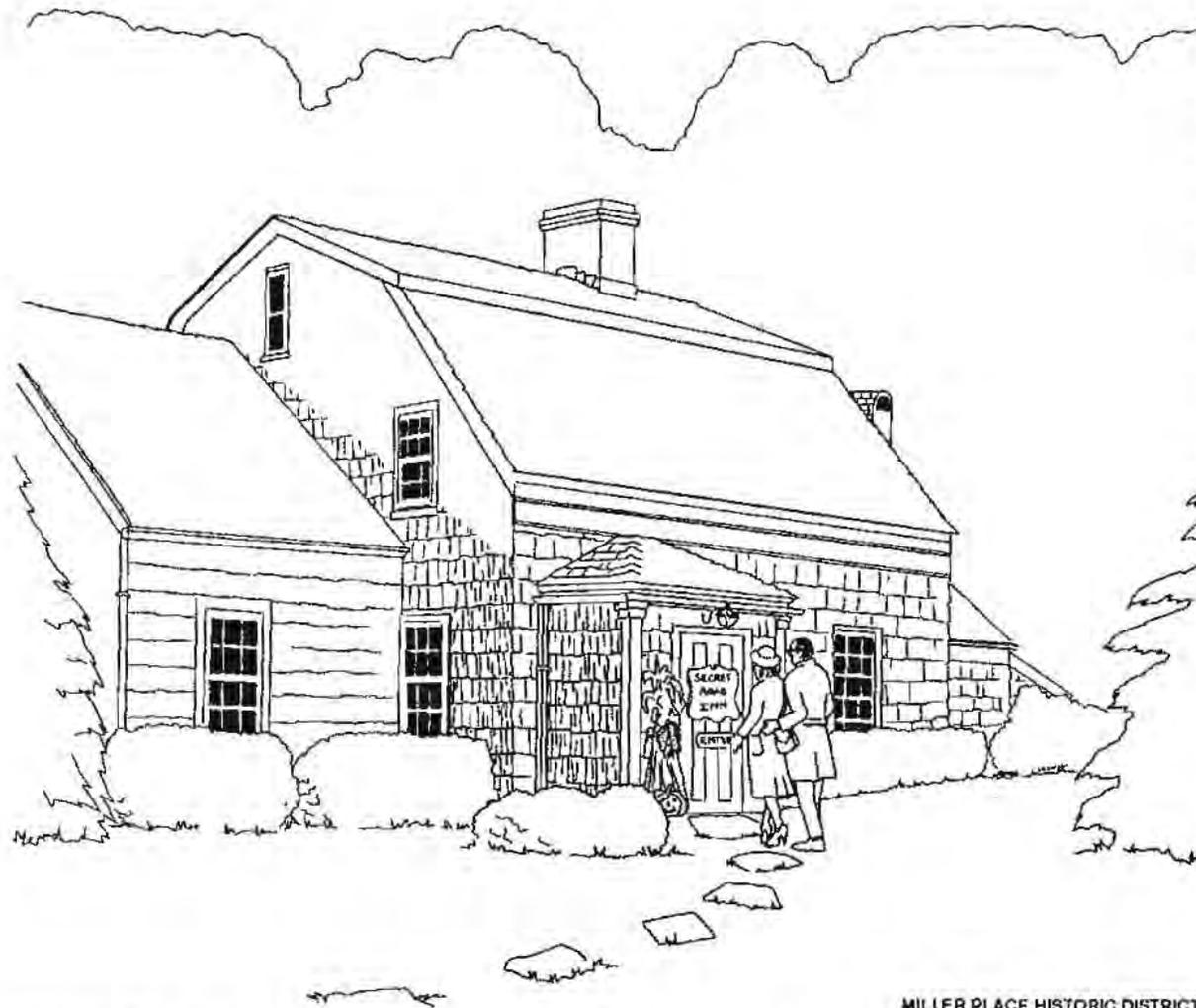


Decorative elements are often used to establish a continuity among various buildings on one site. Details of the house, here, are repeated on the garage. Preservation of these intentional linkages is important.



MILLER PLACE HISTORIC DISTRICT

This pleasant, informal landscape shows the house to best advantage.



MILLER PLACE HISTORIC DISTRICT

Older buildings, now on busy roads, can be modified to accommodate new commercial or professional uses without compromising their integrity.

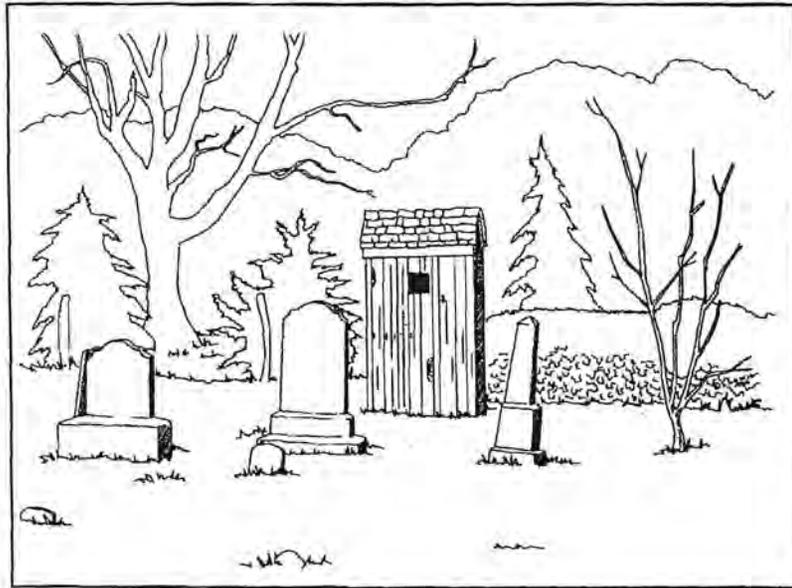
ADAPTIVE REUSE. Important older buildings that were at one time part of a thriving village crossroads can become isolated in the midst of modern commercial strips and therefore are more suitable for professional or commercial use than as the residences they once were. Changes in use over time lead to changes in local zoning. Historic houses in commercial areas can be modified to accommodate new uses without compromising their integrity. This is called adaptive reuse.

The HDAC encourages sympathetic proposals that preserve historic integrity in modifying a building to suit its current circumstances. Exterior changes should be minimal, with care given to increased parking needs, landscaping, buffers, unobtrusive exterior lighting and appropriate signage. Successful examples can be found throughout the Town and serve as models for future projects.



LONGWOOD ESTATE, TOWN OF BROOKHAVEN

LONGWOOD HISTORIC DISTRICT



LIMITATIONS ON DEMOLITION. The Building Department will not issue a permit for demolition of all or part of a building or structure within a historic district or landmark area until the Planning Board has reviewed the application and its potential effect upon the district or landmark area.

If the Planning Board finds that preservation is physically or economically infeasible, it may permit demolition. But the Planning Board is charged to take (or encourage others to take) whatever steps appear most likely to lead to a building's preservation either on the original site, or on another site to which it might be moved.

Unless the owner of the property agrees to an extension, the Planning Board will decide upon an application for demolition within six months, rather than the usual 45 days, to allow time for alternative solutions to be found. An appeal from the Planning Board's decision may be filed with the Board of Appeals.

In order to prevent property owners from allowing structures to deteriorate to the point where they have to be demolished because of unsafe or dangerous conditions, the building inspector, after conferring with the Planning Board, may require that the defects be corrected at the earliest possible time.

These provisions of the Town Code do not supersede the obligations of the building inspector, with the Planning Board, to order the modification of any physical condition determined to be dangerous to the life, health or property of any person.

THE EIGHT MOST COMMON MISTAKES IN RESTORING HISTORIC HOUSES (...AND HOW TO AVOID THEM)

by Morgan W. Phillips

As more and more people turn to restoring old houses, it is becoming apparent that certain serious mistakes are being made over and over again. This article outlines these most common mistakes and tells you, at least in general terms, how to avoid them.

1 DON'T DESTROY THE EVIDENCE. MAKE TRACKS.

Old buildings almost invariably consist of material from a number of periods. When a decision is made to remove some recent material and reproduce what had existed at some earlier time, the problem arises of how to find out exactly what the earlier material looked like. Very often a detailed answer can be found in evidence actually on the site. Telltale fragments of missing woodwork may have been reused as a part of later woodwork, or may have fallen into some crevice during the remodeling. A ridge in the paint

layers, when illuminated with a light held at an angle, may give the profile of a key piece of woodwork which has been removed.

A common mistake is to proceed with restoration work before gathering all such evidence. The evidence is then lost—removed by carpenters, obliterated by sanding, or thrown away during overambitious cleanup.

For the same reason that architectural evidence is valuable to use, we should leave a record of our work for the future. New wood should be marked, and a thorough record kept, with text, photos, and drawings or sketches. Measured drawings of the building are the ideal place on which to note all the evidence discovered.

2 DON'T OVERRESTORE.

Over-restoration usually takes two forms. First, there is the replacement of old material just because it shows the signs of age and thus looks a little too rough to suit the tastes of a perfectionist. Old bumpy plaster is replaced with a perfect new job; old fireplace bricks showing some minor heat damage are replaced. A building thus restored loses the patina of age which made it appealing in the first place, and loses the actual materials which make it genuinely old.

A second form of over-restoration is to return the building to its original appearance by stripping away later additions of historical or architectural value. Virtually every old building is a collection of material of different dates. This is true not only of American houses but also of the famous ancient buildings of Europe and elsewhere. Sometimes the additions are of more interest than the original parts. A typical example of a valuable later addition is a fine Federal period mantel built in front of an earlier, larger fireplace. All too often such fine work is destroyed to expose what remains of the original fireplace.

Clearly there is usually a lot

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of material of no value, which can be removed. But the decision about what goes and what stays should be made very carefully, on the basis of a study of the building, and after consultation with others who are familiar with American architectural history.

In general, the best policy is to retain later material: as a real part of the building's past it has more value than "fake" material put in now. If you don't have time to carry out a study of the building, then the safest policy is certainly to keep later features in place.

3 DON'T MAKE A BUILDING THAT NEVER WAS.

This is a very common mistake, and a subtle one. It most often happens in one of two ways.

First, it is quite common to see one part of a building restored to one date and another part to another date. As an example, suppose a house of 1810 was heavily remodeled in 1860—roof raised, new front doorway, new window sash. If today we tear out the 1860 sash and put in 1810-type sash, while retaining the other 1860 features, we have created an appearance which the building never had at any time. Usually this mistake occurs through lack of study of the building, or through the owner's selective dislike for some part of the later remodeling.

A second example of restoring to a condition which never existed is to restore a building to an appearance which is earlier in character than the building itself—and more primitive. Many old buildings were better-finished than we realize. For example, the best 18th-century floorboards were not 18" wide and knotting, but 6" to 10" wide, free of knots, and cut across the growth rings so as not to splinter or warp. The use of typically wide, poor-quality attic floor-

boards in the restoration of formal rooms is a classic mistake.

Probably the most common example of "earlying it up" is the removal of plaster from ceilings so as to expose bare beams, when these beams were never meant to be exposed. Only the earliest or most primitive houses had exposed beams: in most areas, from the early 18th century onwards, plaster, paneling, and moldings—not beams—were considered beautiful.

In order to avoid making a building look earlier than it ever possibly could have, it is important to have in mind the actual date of the building. Quite often one sees a fine formal house of, say, the Greek Revival period (c. 1825-1860) marked with a date of perhaps 1750, and sometimes "restored" accordingly. This is apt to happen when the owner has searched the deeds and discovered that a house was built on the site in 1750, but has failed to consider what might have happened to that house in 1750. Did it burn in 1790? Was it taken down or moved across the

street? Or was the land divided in 1839 so that the 1750 house is really the one next door? The construction of the present house may not be recorded in any documents.

The importance of researching and analyzing a building as a guide for restoration and repair cannot be overemphasized. Documents and the building itself must be studied together. If one trusts only the documents, one can make the kind of mistake just described. If one examines only the building, much information contained in deeds, wills, inventories, old maps, old drawings, and many other sources will never be found. Such information is invaluable in piecing together the whole story of the building and in making the decisions required during the restoration process.

4 DON'T SCRAPE.

The most common procedure in reproducing old paint colors is to scrape clean a sample of the old paint and then match its color with new paint. In many cases the color thus achieved is incorrect, since the old sample has discolored with time. Many unstable pigments were used in early paints, and have faded. The oil in many old paints has yellowed, often after the paint was covered by later layers, since oil yellows fastest in the dark. Thus many old colors were brighter than we realize.

The analysis of old paints to determine their original colors is very difficult. Short of hiring a professional, the best that a homeowner can do is just to avoid unnecessary stripping of old paint, since this destroys the old samples and means that the research can never be done. And it's not good enough to strip a whole room and leave just one area as a sample: a future researcher will want to look all around the room with a microscope to find one or two well-preserved samples. These are very apt to be little thick lumps of paint near hardware or in crevices, and there may be only a few good ones in a whole room.

Thus paint-stripping should

be undertaken only when absolutely necessary, and as much of the old paint left on as possible. Since most old woodwork was painted from the start, the bare knotty-pine look is apt to be incorrect, anyway. An exception is some types of Victorian houses where interior woodwork was varnished.

Old wallpapers should be preserved when possible for the same reasons as old paints: they are evidence of changing taste in the building through the years. Many old papers date back as far as the late 18th century and have real value. If the paper has to be removed, you should keep samples at least large enough to show a full repeat of the pattern. Some wallpapers are important enough to deserve being kept intact on the wall at all costs.

5 DON'T SANDBLAST: AVOID DESTRUCTIVE REPOINTING.

The cleaning and repointing of old brickwork is seldom done properly.

Old brickwork is often sandblasted to remove paint. Unfortunately, in most cases this also removes the hard skin of the bricks, exposing the much more porous and weaker interior, which often cannot stand up to the weather. Since the skin was formed in the brick kiln, it can never be reformed once it is removed. After being sandblasted, old bricks absorb much more rain water and, with freezing temperatures, often start to spall and crumble in a few years or even months.

Having removed the bricks' natural barrier to excessive water penetration, building owners are apt to be sold a silicone treatment to help keep water out. This treatment has something of a bad reputation: it is said that it can trap in water which has got into the bricks in any of a variety of ways, such as through small cracks in mortar joints, from normal interior humidity, or by rising through capillary action from damp soil beneath the building. If this should occur, such trapped water can cause doubly accelerated decay of old brickwork.

Silicones are no substitute for the bricks' own skin.

Where old paint is to be removed, one question to ask is whether the paint should be removed at all. Many early brick buildings were originally painted, and the record of the original color is the old paint itself. Once this is removed, the story is lost.

If it is decided to remove the paint, a variety of chemical removers are available. If the right remover is chosen to suit the individual buildings the method, although slow, is usually the least damaging to the bricks.

Repointing with Portland cement mortar is perhaps the most common and most damaging error in masonry restoration. Portland cement mortars are made with Portland cement, some lime, and with sand as a filler. If the proportion of cement versus lime is high, the mortar is extremely strong, thus being well-suited to the best modern bricks, which are also very strong. Together they produce the high-strength masonry needed for modern construction. But old bricks (and many kinds of stone) are much weaker and can be damaged by very strong, hard mortar used in repointing. A basic principle is that mortar should always be weaker than the bricks or stones which are

bedded in it: thus the old lime mortars—made with only lime and sand—worked well with soft bricks and stones. A soft mortar can cushion various movements which occur in masonry: thermal expansion and contraction, expansion and contraction caused by humidity changes, foundation settlements, and so on. Small cracks of no importance may form in the mortar. But where the mortar is stronger than the bricks or stones, the latter give way before the mortar, by serious cracking or spalling.

The formulation of mortar for old buildings requires experience and judgment. Many old limes contained certain impurities which actually made them stronger than today's pure lime. When using modern lime a relatively small amount of Portland cement is often needed to provide the same durability and strength that the old mortar had. The proportion of cement should be chosen on the basis of the strength of the bricks or stones, the severity of weathering action, and other factors.

New mortar should be color-matched to the old. This requires sand of the right color, and usually some masonry pigments. A great many buildings have been defaced by dark gray Portland cement mortar, when originally the mortar joints were the light warm white of lime. Some manu-

facturers offer a perfectly white Portland cement which is extremely useful in mixing new mortar to match the color of lime.

Perhaps the worst aspect of Portland cement mortar in old masonry is that its strength makes it almost impossible to remove without damaging soft bricks or stones. As for removing old mortar prior to repointing, few people realize the damage usually done even in removing a soft, deteriorated lime mortar. Electric-powered cutting wheels are often used, which almost always damage the corners of fine, closely laid old bricks, thus sometimes noticeably enlarging narrow mortar joints. Only hand tools should be used for removing old mortar, unless in a particular situation a contractor can show that some type of power tool is not damaging in any way.

Old mortar in good condition should not be disturbed. It is normal for old mortar to be weathered back a short way from the face of the bricks; this does not mean that repointing is needed, since having eroded back a little the old mortar may be sheltered by the bricks and may not erode any further.

6 DON'T ASSUME IT CAN'T BE FIXED.

With the advent of all kinds of modern products it has become possible to recondition partly deteriorated woodwork, plasterwork, and other architectural material which, 20 years ago, would have had to be replaced. Thus an old building can retain more of its authentic material, and more of its value. Quite often one sees old features which could be saved being carted off to the dump.

This suggestion that modern products are useful in restoration should not be seen as a contradiction of the preceding part of this article where we pointed out that lime mortar (a traditional material) is generally better than Portland cement mortar (a more modern material) for repointing soft brickwork and stonework. Portland cement IS extremely useful in restoration—for foundation work, for strengthening lime mortars moderately, and for many other purposes. The point is that both modern and traditional materials are useful, and that any material can be used incorrectly.

Some of the most remarkable progress in conservation of old buildings is being made in the area of wood preservation by means of epoxies, polyesters, and other modern synthetic

resins. Such resins are the basis of modern waterproof glues, and of many products sold in marine hardware stores for impregnating partially rotted wood or filling holes in wood.

The things that can be done with waterproof glue would have amazed an old-timer accustomed to animal glue, which is water-soluble. For example, a roof balustrade of 1806 can have new wood fitted into each baluster wherever the wood is rotted away—and there need be no fear of the patches coming loose because of rain or dampness. Such a balustrade would have had to be replaced completely prior to the introduction of waterproof glue. Waterproof glue opens the door for the extensive repair of damaged woodwork by skillful piecing-in of new wood.

In the same way, modern resins allow old, partly rotted wood to have permanent strength restored. In some methods, holes are drilled into the wood to expose the end grain, and the resin soaked into the wood through the holes. It then hardens. Not only are such wood-consolidating methods popular in the marine field, but similar methods are used in the conservation of antique wooden art objects. Resin-impregnation is sometimes the only way to conserve a valuable piece of

woodwork in an old house: the capital of a column, the bottom of an original door.

Other modern materials can be used for consolidating weakened plaster, readhering peeling paint in wall painting, and many other purposes. Steel, the modern architectural material, which because of its great strength, can be used to permit an old beam to be reinforced, rather than having to be replaced. Very small amounts of steel can form the backbone of an inconspicuous repair which must carry a heavy load.

7 GET THE DESIGN RIGHT.

Sometimes there is no alternative but to replace something—or a portion of something—which is missing or decayed beyond repair. A basic objective in such work should be to avoid making the new piece a poor parody of the original. Much restoration work stands out like a sore thumb.

The elements of old buildings usually exhibit very specific design characteristics. Although the designs are usually similar to material on other buildings of the same date, there are important regional differences and individual differences which must be respected.

Old moldings—which includes large items such as cornices—were usually designed according to a geometric system, which varied from one period to the next according to whether the designers of the period were looking toward Greece or Rome or the Gothic era for their architectural details. When an old molding must be reproduced, the paint should be removed from a well-preserved section of the old piece, and the design observed and comprehended. Then, if the work of reproduction is given to a shop or mill, very specific instructions (a precise drawing, model, template, etc.) must be provided.

8 GET HELP: DON'T BARGE AHEAD.

How many times have we seen an owner, eager to "restore" a newly acquired house, rush in and tear out large portions of the interior and exterior surfaces, only to discover that the original finishes are long gone and cannot be accurately reconstructed. A professional is then brought in to make sense of a confused jumble of architectural remnants, and the owner sadly discovers, too late, that he has stripped and thrown away valuable portions of his house—the perfectly sensible and aesthetically pleasing Federal remodeling, for example.

All the points we have discussed should make it clear that a restoration or a repair going much beyond ordinary maintenance involves many technical and historical questions. Although elaborate research cannot be done on every old building, old buildings of any quality deserve the best study and care that their owners can give them. In the long run it pays off.

Two simple rules can be followed to improve the quality of repair work at little or no cost. The first is to seek professional advice. At the most basic level this means a visit by someone professionally qualified in the field, and it may save a lot of

money from being spent on something which will be damaging or destructive. Even professional people in architectural history and restoration have to consult with each other constantly according to the specialties which each person has, and there is certainly no way to get the proper information just by reading the books or articles which are available. A tremendous amount of study and experience goes into the training of professional people in the field.

A second basic rule is to take the maximum time possible to make decisions. Getting the technical or architectural history information needed is always a slow process. More disconcerting is the fact that different people supposedly qualified in the field will give different opinions and answers. What do you do when the "experts" disagree? To begin with, by taking enough time to talk to different people, you can slowly sort out people who are more expert from people who are less so.

Even then, knowledgeable people may disagree about difficult problems. But usually, if you take enough time to gather information and opinions, you can learn enough about a problem to determine the best course of action.

