Architectural Design Guidelines

Manchester Historic District

November 2001
Guidelines by Tai Soo Kim Associates and Roger Clarke, AIA
Compiled by the Manchester Planning Department
# TABLE OF CONTENTS

Map of Historic Districts

Introduction 1

Design Guidelines for Rehabilitating Existing Property 2
- Porch Renovation 2
- Siding 4
- Windows 6
- Shutters 8
- Exterior Colors 10
- Additions 12

Appendix A: Architectural Styles
DESIGN GUIDELINES

Introduction

Manchester's Historic District is an outstanding example of an early 20th century industrial community. Large homes on small lots with sidewalks and intersecting grid streets make the neighborhood safe and convenient to live in, get to work, and raise a family. In many places around the country today this kind of development pattern is championed as an example of the best way for people to live in a genuine community.

The Manchester Historic District has a collection of several types of Victorian architecture. These styles emphasize an interesting combination of geometric shapes on the buildings, pitched roofs, ornamental details such as carved wooden brackets under the eaves or moldings around the windows, and expansive porches. This collection of buildings, made of durable, quality materials, is unique in Manchester. If preserved, they become a great asset to the neighborhood and the entire community.

When considering building or site alterations or improvements please review the proposed work against the following design guidelines. These guidelines were developed by the architectural firm of Tai Soo Kim in association with Roger Clarke, AIA, Historical Architect and Landscape Architectural Design Associates, P.C. under contract to the Manchester Lead Abatement program. Manchester's lead abatement program has been at the forefront of efforts to rehabilitate older historic homes in a way that preserves their architectural character.
Design Guidelines for Rehabilitating Existing Property

A. Porch Renovation

In many cases the porch is the most prominent feature of a house. It is also usually one of the most detailed elements on the front of a building. It is these details that give older buildings their defining characteristics that distinguish them from newer construction. Details also identify individual historical styles and periods. Whenever possible it is important to preserve or rebuild the existing detailed elements.

1. Materials: In the best cases the original porch remains intact, possibly needing some minor repairs. If more major repairs are necessary, then make them using like materials. It is preferable to fabricate replacement spindles, balusters, and profiles to match the existing condition, rather than removing the entire system and replacing it with off the shelf parts. There are also many wood preservative products that are helpful in repairing and protecting these older wooden structures. It is worth the investment to repair these historical elements, and preserve the unique nature of the details and building. Where the original systems have been removed, look to similar houses in Manchester that have their original porches intact, for a guide on how to make replacements.

2. Columns: Avoid removing original posts. Epoxy systems are readily available for the repair of wood components. There is opportunity for considerable pride in the repair and restoration of appropriate historical, one of a kind architectural elements. If replacement is necessary it is preferable to match the original dimensions and materials.

3. Steps: Repair or replicate steps using wooden components. Avoid the use of precast or poured in place concrete steps set against siding. This will lead to moisture build up behind the concrete with the eventual decay of any wooden framing and siding covered by the concrete. If concrete steps are built against foundation walls, then finish them with bluestone treads.

4. Handrails: Handrails, like columns, should be repaired if at all possible. Have replicate profiles fabricated to match the existing for replacement. If wooden rails are not available, use simple iron pipe rails. When using iron pipe, the intermediate spindles should be of the smallest profile possible. Where modern codes require additional rails, add them above the older rails, rather than removing the existing. The new rails should be smaller in profile, round, set with metal brackets, and finished with paint to match the existing rails.
5. **Latticework**: When replacing latticework, set the lath in the same direction as the original. Repair all of the framing and trim with components that match the existing. Maintain the lattice by providing a rodent screen backing to enclose the cavity below the porch.
B. Siding

Siding is another element that helps the historical house stand out from newer construction. Whenever possible, always repair original wood siding. It is not necessary to produce a seamless match on the exterior of a building. If it is practical splice in new siding to match the existing in areas that have deteriorated. Wooden siding will last for decades, and no substitutes have yet to be found with the same durability when properly maintained.

1. **Synthetic Replacements**: If replacement becomes necessary, then match the existing profile and weather exposures. Vapor barrier-type insulation behind the metal or vinyl siding should not be installed because it will trap moisture, which will then lead to decay. Any vapor barrier should be installed on the internal, warm surface of the structure.

2. **Texture**: Avoid artificially textured products, as these textures would not exist naturally in wood, and will eventually collect dirt. Raised wood grain is not a good weathering surface, made either from synthetic materials or wood.

3. **Trim**: Avoid removing, covering, or altering corner, base, window, or eave trim. These are the defining features of older buildings, and if altered negate their historical and visual appeal. When installing a synthetic siding system, it is important to replicate these details as best as possible. Avoid the use of "J" molding around windows and doors. Provide wooden trim pieces, and allow the siding to slide behind the trim into a rabbet. Corner trim boards could be installed in the same manner.
Corner and Edge Details

WINDOW TRIM TO EQUAL WIDTH OF CORNER TRIM

DO NOT USE 'J' MOLDING

REPAIR WOODWORK

M A I N T A I N C R O S S W A L L S P A C I N G

EQUAL

RAEBBET FOR VINYL SIDING

EQUAL

YES

VINYL 'J' MOLDING

NO
C. Windows

Windows establish the character and style of a building. The proportions of window area to wall surface are important too, and vary from style to style. Surrounds and head and sill details all contribute to these identifying characteristics.

1. **Repair**: It is always best if the original wood windows are in place, and can be repaired to a level where they will function effectively. Storm sash are readily available for energy conservation and retrofitting. This is usually the most cost-effective method.

2. **Replacements**: Replace windows in kind where old sash are beyond repair. Many woodworking shops will produce custom sash to the homeowner’s specification. Alternative materials may be approved as well. When replacing windows, always try to match the existing window types.

3. **Window Unit Dimensions**: It is preferable not to remove windows that are sized or shaped according to a particular style, and replace them with standard sizes or modern picture windows. Have custom windows built if necessary, to avoid creating gaps that will require filling above or to the side of the sash. Changing the proportional relationship between window area and wall surface will be detrimental to the overall appearance of the building.

4. **Intrusions**: If installing a new ceiling in the building, do not drop it below the window head height. This will create a visible line across the window, with the space above the ceiling visible to the exterior. If there are any window mounted air conditioner units, place them on the sides or back of the house, rather than in the front. If possible build in sleeves rather than inserting the unit into the lower part of a sash window.
Window Configurations

DO NOT CHANGE THE SIZES OF SASH FRAMES OR ALTER THE PROPORTION OF GLASS PANELS.

NO
DO NOT USE FLAT PROFILE WINDOW SASH.

YES
WOOD SASH MATCHING ORIGINAL SIZES.

NO
PICTURE WINDOW TO REPLACE DOUBLE HUNG SASH.

YES
SNAP IN' HUNTING

NO
HUNTING WITH PROFILE AND SHADOWS

YES
SINGLE SASH MATCHING ORIGINAL
D. Shutters

Shutters should only be used in those houses where they were originally intended. If there are currently no shutters in place and no visible evidence of shutters having been used in the past, then it may require some research to determine if shutters are a viable option for your home. Shutters were not usually found on Greek Revival, Italianate, or Queen Anne style homes. A general rule of thumb to follow is, if they were never there, then do not install them.

1. **Location:** Research old photographs to determine whether shutters are appropriate at certain locations. If the shutters will not lie flat between windows, do not use them in those locations. Shutters were often used inside the house, especially where there were side by side sash or multiple window arrangements.

2. **Proportions:** It is preferable to use shutters that will work as they would have been originally intended to. Size the shutters to fit the window openings. Each shutter in a set of two would be equal in height, and one half the width of the window. Following this guideline will keep the shutters in proportion with the window.

3. **Type:** Horizontal slat shutters were the most common types used during the last century and the early part of this century. Ranch, or solid panel shutters are generally not appropriate for the time periods represented by the buildings in Manchester.

4. **Materials:** Shutters should always be built of wood. If they make use of slats, then the slats should be operable, as originally intended. Avoid the use of thin profile, prefinished plastic replicas that are permanently fastened to the wall. If the correct type of shutter cannot be installed, then do not install any.
Appropriate Shutter Configurations

Operable slats
Shutter width equal to 1/2 window sash size - slats to the weather

Shutter height equal to sash size

Yes

Fixed shutters less than window width

No

Shutters should appear to fold over window and not be spaced apart

Frame of shutter should be same size as original and frame parts similar to sash frame

Original

No

Fixed decorative wood shutters
E. Exterior Colors

The Commission does not regulate the choice of colors on buildings. These guidelines are offered as a service to property owners for their consideration when choosing colors for a property in the district.

There is no one set of guidelines to follow when painting older houses. The use of historically correct color can greatly improve upon the character of the home. Using inappropriate colors or combinations of colors can make a house appear out of scale, "chopped up", or can mask the intended visual effect of some types of detailing.

1. Historical Styles: The first step when painting a historical building should be to research the color schemes intended the particular style. Within those schemes different colors will be available to choose from. There are many houses in Manchester built in specific historical styles, such as the Greek Revival, Italianate, French Second Empire, Queen Anne, Colonial Revival, Bungalow/Craftsman, and Victorian Vernacular.

2. Paint Layout: After a color scheme has been selected it must be determined what is to be painted as trim. The house is generally outlined in the trim color by painting the corner boards, cornice, cornice curves and brackets, water table, and belt courses. The balustrades and columns of porches may be painted in the trim color, while the balusters should be painted in the body color. Shutters should typically be painted in a color darker than the trim color. Complicated trim pieces such as recessed panels and intricate cornice or window trim may be painted with multiple trim colors. In these cases the recessed parts should be painted in the darker trim color, while the elements that extend farther out should be painted in the lighter color. After the trim has been determined different colors may be introduced for the body. A general rule that should be considered is the simpler the house, the fewer colors should be used.

3. Paint Sources: Most major paint companies offer historical lines that are based on colors of the mid-19th through the mid-20th centuries. The historic houses found in Manchester fall into this time period. Sherwin Williams offers their Preservation Palette line, with colors directly associated to specific time periods. This makes color selection quite easy after some research into the period and style in which a building was built. Most paint dealers are also willing to assist their customers in choosing appropriate body and trim color combinations.
Common Exterior Wood Trim

- Cornice
- Sash
- Corner Board
- Face
- Cornice
- Cornice Bracket
- Column
- Balustrade
- Baluster
- Water Table
F. Additions

In the course of a building's lifetime, it may become necessary to make additions to the building as the needs of its occupants change. There are ways in which to make these additions that are sensitive to the building's original design and context. The purpose of this section is to give the homeowner some suggestions on how to accomplish this, while also addressing the specific need.

As no two buildings or sites are the same, the owner may have to be creative to come up with the best possible solution. In some cases, it is advisable that the homeowner acquire the assistance of a design professional. This section will serve to outline the general basics and make suggestions as to when some assistance may be needed.

1. **Handicapped Access:** During the course of time it may become necessary to make some homes accessible to the handicapped. Generally this means providing wheelchair access to the first floor with a ramp. This could also be accomplished by bringing grade up to the floor level, by sloping the yard up to a door. As every house and yard condition are different, there is no one way to best solve this problem. The points made here are general suggestions that should be taken into account.

  *Location* - It is preferred that the ramp be built in the side or backyard. This prevents it from visually dominating the front of the house. The addition of a structure of this size has the potential to make the front yard appear cluttered and disorganized.

  *Screening* - Elements may also be used to help the ramp blend in with the yard. Trellises and shrubbery may be placed in front of the ramp to screen it from the street. Planter boxes may also be added to the rails to add some visual appeal to the structure.

  *Semi-Temporary Structure* - As this need may not be permanent, the owner may be best served by making the ramp a "semi-temporary" structure. This would entail that the ramp be built of wood, and the potential demolition of the structure would not become a costly procedure.

  *Design Approval* - Before building a ramp the homeowner will require a building permit. It is also important that the ramp comply with ANSI (American National Standard Institute, Inc.) regulations on accessibility issues. For these reasons the owner may be best served by hiring a professional to bring the project through the design, approval, and construction process.
RAMP OPTIONS:
1. Alongside of house up to front porch
2. Around corner to back deck
3. Alongside of house to back door

RAMP AROUND CORNER TO BACK DECK

SCREEN PLANTING
2. Second Means of Egress: During the lifetime of a building it may become necessary to provide an entrance to the second floor. This entrance would typically be used to serve a separate apartment or business. These are simple guidelines to consider so that the stair blends in with, and relates to the rest of the house.

*Interior Stair* - One possible solution that could be recommended is that this means of egress be enclosed within the building envelope. An interior stair up to the second floor, with its own separate front door will create no exterior eyesore at all. If there is room to spare inside the house then this option could be considered.

*Exterior Stair* - Another option would be to add the stair onto the outside of the building. In this case it would be preferably built on the side or to the back of the house. If the stair is to be built outside of the building envelope, then it should be considered an addition. It is important that this addition is compatible with the rest of the house, in terms of appearance as well as function.

*Form* - It is important that the addition is compatible with the rest of the house in terms of its form. If the stair is to be added onto the gable end of a building, then give the stair a gable roof. The main point here is that the stair does not appear to have been an afterthought, stuck onto the side of the building.

*Materials/ Elements* - The appearance of the finished structure should also relate to the house in terms of materials and elements. As this structure is to be thought of as an addition, it should have an exterior finish that is like or complementary to that of the house. Structures built of unfinished pressure treated lumber should be avoided. Look to the porch of the house for clues as to what elements to use. When building a stair off of a house with solid porch railings, wood siding, and a shingled roof, the addition should have the same. If the porch has heavy round columns and a balustrade with lighter balusters, then use a similar system for the railings of the stair.

*Design Approval* - This second means of egress would need to be designed specifically for the individual building, as there is no one solution for every situation. It will also require approval from the local Building Official, Fire Marshal, and any design review board that may have jurisdiction over this type of structure. For these reasons the homeowner may be best served by hiring a professional to bring the project through the design, approval, and construction process.
This scheme shows the stair built inside the house, off of the front porch. Typically this stair would only take up about 50 sq. ft. of floor area.

This scheme shows the stair built as an addition onto the rear of the house.
APPENDIX A

ARCHITECTURAL STYLES
**Greek Revival** (1830-1880). Buildings of this period incorporate many elements from the architecture of ancient Greece. Massing is symmetrical or balanced. Buildings are often oriented with their gable ends facing the street suggesting the configuration of a Greek temple. Doorways often have sidelights and transoms, and are frequently framed by pilasters and entablatures. The Greek Revival style is commonly dated until 1860, however, later examples of the style are found in the survey area.

**Italianate** (1850-1880). Italianate buildings are characterized by round-arched windows, flat or shallow-pitched hipped roofs, and overhanging eaves that are supported by heavy paired brackets. Elaborate entry hoods, porches and bay windows, usually with decorative brackets, are also common features. Buildings are square or rectangular with a low-pitched hipped roof, and often a cupola. Other variations employ an L-shaped plan.
**Victorian Vernacular** (1870-1910). Many of the buildings erected during this period have few, if any, specific stylistic references, yet they resemble each other so much as to almost constitute their own identifiable style. These structures are the work of ordinary builders, not architects. They are characterized by simple building plans (usually oriented gable end to the street) and typically have their ornamentation concentrated in porch details, such as turned posts, spindles and jigsawn slates and brackets, or in gable-peak trim such as bargeboards and braces.

**French Second Empire** (1869-1890). This style is characterized by a symmetrical (usually square) main block topped by a mansard roof covered with polychromatic and patterned slates or tinplates. Aside from the mansard roof, the style can resemble Italianate architecture. Classical detailing such as quoining and cornices are frequently employed. Windows may be arched with molded surrounds.
**Queen Anne** (1880-1910). This style is characterized by complexity in building plan and detailing. Massing is typically asymmetrical and irregular, often with a maze of cross gables. A combination of clapboard, wood shingle in a variety of shapes and patterns, and masonry combined with architectural details such as flared base or second story, clipped corner or gable, give the facade a textural quality. Queen Anne style houses have turned and jigsaw ornamentation similar to that found in the Victorian Vernacular buildings, but often it is more elaborate. The rising sun and sunflower are popular motifs employed by the style. A common glazing pattern is a central square surrounded by smaller square panes, often in a double hung sash with a single light below.

**Bungalow/Craftsman** (1910-1930). Bungalows are small, usually one-and-a-half stories high. In some gable-roof bungalows the front roofs slope down and forward to cover an integral porch. Other bungalows are comprised of two broad gables, with the subsidiary one in front, oriented to the street. Other bungalows have low-pitched hipped roofs. Dormers with various roof types are frequently employed. Many examples have picturesque ornament such as exposed carved rafters, plain stick-like brackets along the rakes of the roof. Many have foundations and exterior chimneys of field or cobblestone. These houses first gained popularity in California, but spread throughout the country.
**Colonial Revival** (1890-1930+). The Colonial Revival style marked a shift in architectural tastes away from the “romantic styles” of the Victorian period - the Gothic Revival, Queen Anne, Stick and Shingle styles. It reflected a return to classically derived architecture expressed in the Colonial Revival, Beaux Arts, and Classical Revival styles of the late 19th and early 20th centuries. Colonial Revival architecture borrows from the early American Georgian and Federal styles, and often mixes features from both colonial styles. Colonial Revival buildings usually have symmetrical or balanced massing and prominent doorways, often comprised of a pedimented frontispiece, doorways with fanlights and sidelights, and pilasters. Windows generally have multi-pane glazing in a double-hung sash. Roofs are usually hipped, gable or gambrel and dormers are very popular.

**Foursquare** (1900-1930). More a house form than a distinctive style, the “Foursquare” is exactly as its name implies, a square structure, normally two stories tall, with a hip roof, usually pierced by small dormers. It is designed to yield the greatest amount of floor space per construction dollar. Architectural details are drawn from a wide range of sources, especially the Colonial Revival, Prairie, and Craftsman genres.