



Oakwood Design Guidelines

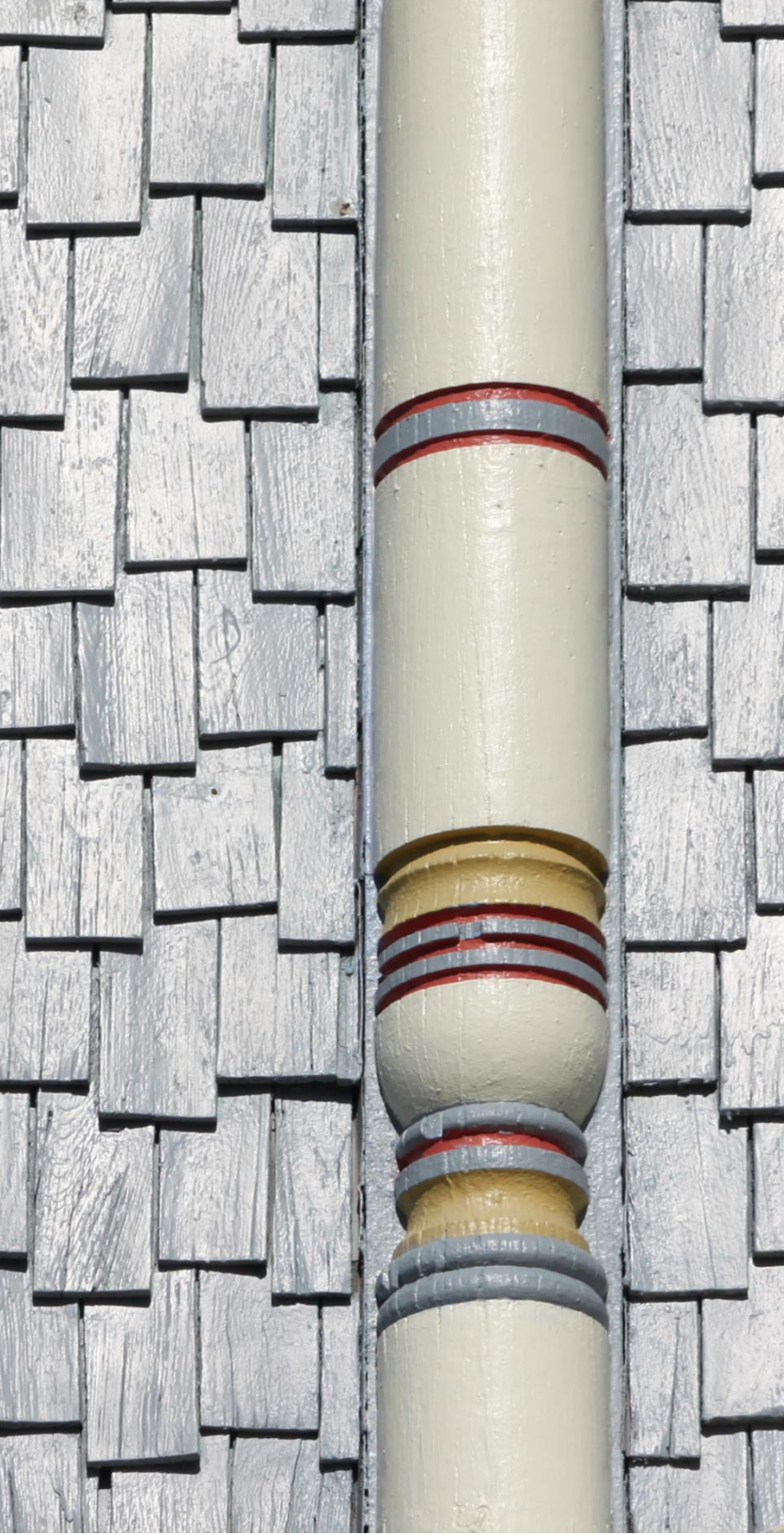
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Knoxville-Knox County Planning

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## INTRODUCTION

# Local Designation as a Historic Preservation Strategy

The City of Knoxville recognizes the power of historic structures to define our unique community identity and encourages their preservation so that they remain an important part of the city's building blocks. To this end, the City, through Knoxville-Knox County Planning, works with organizations and private property owners to preserve, protect, and celebrate our historic places.

While various means exist for recognizing and celebrating the importance of historic structures, protection is best accomplished at the local level. It is here that the value of preservation is defined directly by the community, which drives the direction of the design guidelines to protect their valued historic context. It is through discussion with the community that the scope and extent of these guidelines, which ultimately reflect the vision and priorities chosen by neighborhood property owners, are defined.

## HISTORIC OVERLAY DISTRICTS (H) DEFINED

Among the most effective and proven of local preservation tools is the historic zoning overlay, also referred to as H zoning overlay. Established in Knoxville under Tennessee

Code Annotated, Section 13-7-401, and the City of Knoxville Zoning Ordinance (as amended) No. 3369, a historic zoning overlay may be established for a “geographically-definable area which possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects which are united by past events or aesthetically by plan or physical development.”

## **HISTORIC OVERLAY DISTRICT (H) PURPOSE**

The historic overlay broadly seeks to define and protect historic neighborhoods. This zoning strategy provides oversight for ensuring that its historic buildings and streetscapes are protected from inappropriate changes. This protection is accomplished through the review of proposals for changes to buildings exteriors, and approval or denial of the changes based on the design guidelines and the specific characteristics of the neighborhood. This design review is conducted monthly by the Knoxville Historic Zoning Commission (HZC), whose members are appointed by the Mayor and confirmed by City Council.

The goal of establishing a historic overlay district and reviewing proposed projects within it is not to freeze time, stall improvements, or prevent improvements to the community. When preservation is provided for in a meaningful way through a historic overlay, it promotes a vibrant, culturally-rich community that supports appropriate changes and allows for the contemporary use of historic buildings, but in a responsible and sensitive way that respects the larger community’s agreed-upon goals and priorities.

## **DESIGN GUIDELINES: Purpose and Need**

Each designated historic zoning overlay (H) is accompanied by a set of design guidelines that provides a framework for achieving the design goals and objectives of the community. Drafted with input from property owners, these guidelines represent the vision of the community in maintaining its historic character and provide the standards that help to achieve the goals of that vision.

Property owners play a primary role in ensuring that the historic fabric of the district is appropriately preserved. As stewards of historic properties within the overlay, those caring for our historic building stock must make daily decisions on how best to accommodate modern-day needs while

preserving the character-defining features of the places we call home. Such decisions should be made with the historic value of the building in mind, and these decisions must also be grounded in sound and practical guidance. The design guidelines serve this role.

Rooted in accepted preservation standards for exterior maintenance and rehabilitation, the guidelines provide a common language and consistent direction for all parties that work with historic buildings in the overlay.

Specifically, the design guidelines:

- Clarify preservation standards for property owners to enable them to make informed decisions
- Provide an agreed-upon community values approach to the appropriate treatment of historic properties
- Help coordination among architects, engineers, contractors, and others that work on historic buildings in the community
- Provide a consistent basis for Planning and HZC to make well-informed and defensible decisions regarding the appropriateness of proposed work

## PRESERVATION PRINCIPLES

Design guidelines for historic zoning overlays are developed based on the Secretary of the Interior's Standards for the Treatment of Historic Properties. Developed by the

## DESIGN GUIDELINES DO:

- Provide a framework for the community to achieve their specific vision for retaining an area's historic character
- Provide flexible, goal-oriented approaches to addressing the particular needs of an individual property
- Provide guidance for contemporary use of a historic building while maintaining its historic character
- Reduce the potential for adverse impacts resulting from inappropriate treatments to individual buildings and the district as a whole
- Promote consistent, defensible decision-making by Planning and the HZC



## DESIGN GUIDELINES DO NOT:

- Require maintenance on a property
- Require museum-quality restoration
- Regulate the use of a property
- Review changes for a building's interior



National Park Service (NPS), this document provides a broad framework intended to promote responsible preservation practices that respect and protect our historic places. The NPS' Standards for Rehabilitation and accompanying Guidelines for Rehabilitating Historic Buildings outline standards that allow for adaptation of historic buildings for modern-day use while also preserving their character. Generally, the principles promoted by the National Park Service and incorporated into these guidelines include:

- Preserving significant historic features and materials through regular, appropriate maintenance
- Repairing and retaining historic materials instead of replacing them
- Replacing deteriorated or missing historic components and features with in-kind materials
- Designing alterations and additions so that they do not cover over or destroy significant features
- More specifically, the preservation principles included in these design guidelines are also supported by the Technical Preservation Services developed by the NPS, which provide specific guidance related to particular rehabilitation and repair projects. A list of currently available Preservation Briefs may be found at <http://www.nps.gov/tps/how-to-preserve/briefs.htm>.

## USING THE DESIGN GUIDELINES

As the criteria used by the HZC in determining the appropriateness of proposed work within the historic overlay district (H), the design guidelines are an important resource that can be consulted by any property owner considering a project that will affect any exterior element of a building within the overlay. Of primary importance, the guidelines should be referred to at the beginning of the project planning process – and in consultation with any chosen architects or contractors – in order to avoid getting too far along with a project that is otherwise considered to be inappropriate. Early review of the guidelines can help save time and money in receiving approval for a proposed project. It is also important to note that while the guidelines provide a general framework for the care and maintenance of historic buildings, they do not provide case-specific advice or address rare and unusual situations.

Use of the guidelines will help to ensure that design review is conducted according to fair and consistent standards.



## **FLEXIBILITY OF DESIGN GUIDELINES**

It is the intent of the Knoxville Historic Zoning Commission (HZC) and Planning staff to work together with applicants toward design solutions that are both feasible for the owner and do not unnecessarily destroy existing historic materials. The design guidelines are developed and written with this goal in mind. They offer opportunities to utilize a wide variety of materials and design options at differing price points.

In their review of the Certificate of Appropriateness (COA) application, the HZC will consider certain factors such as the degree of deterioration, presence of intact historic materials, visibility of features, and siting/orientation of the building.

## Supplemental to the Historic District Design Guidelines

### **SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION**

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new features shall match the old design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials, shall not be used. The cleaning of surfaces, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archaeological resources affected by a project shall be protected and preserved. If such resources are proposed to be disturbed, mitigation measures should be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

## DID YOU KNOW...

Your historic structure may already be a green building?

By their design most historic buildings already feature numerous 'green' features that promote energy efficiency but may be overlooked. In considering the sustainable features of your historic building, look for the following:

- Substantial tree canopy that provides natural shade and cooling
- Operable, double-hung windows that allow cool air to flow in and warm air to pass out
- Windows arranged so as to take advantage of natural lighting, as well as passive heating in the winter
- Deep-set porches that moderate temperature fluctuations between interior and exterior spaces
- Deep eaves that provide for seasonal shading
- Steeply-pitched roofs that allow for heat to pass upward away from the living space, while also collecting rainwater
- Operable shutters or awnings that can be used to block solar heat gain
- Window and door arrangements, including transoms, that allow for cross-ventilation
- Heavy masonry materials with natural insulating properties
- Chimneys that allow non-mechanical heating
- High ceilings that facilitate movement of air

In considering these factors, the HZC may find that the application of particular design guidelines would not be feasible due to the unavailability of historic materials and/or trades craftsmen, or disproportionate cost relative to the value of the property. Alternative materials and designs can be considered under conditions further described in these guidelines.

## ECONOMIC FEASIBILITY

Economic feasibility considers whether the application of particular guidelines would require a disproportionate cost relative to the value of the property. Disproportionate cost will be considered on a case-by-case basis, but a typical threshold is 20 percent of the appraised value of the property as determined by the Knox County property assessor. Consideration and determination of economic feasibility shall not take into account the financial circumstances of the property owner. In the instance of a notice of violation of the property maintenance code as adopted by the City of Knoxville, economic feasibility can be considered.

## HISTORIC PRESERVATION AND SUSTAINABILITY

The preservation of historic buildings is a sustainable practice because it promotes continued use and maintenance of our historic building stock over unnecessary replacement. Recognizing the connection between historic preservation and

sustainability and the desire of property owners to have energy-efficient dwellings, the design guidelines are intended to balance flexibility for alternative materials and designs while also preserving the historic character of individual buildings and the community as a whole. Guidelines for sustainable measures are incorporated throughout this document in an effort to promote both goals.

## **SUSTAINABLE MATERIALS**

Historic building construction embraces durable traditional materials such as old growth lumber, brick, and stone, which last for decades if properly maintained, whereas many contemporary manufactured materials are not only unsustainable in their production but have a comparatively shorter lifespan. Some contemporary materials need to be replaced more often, causing the use of more energy.

## **EMBODIED ENERGY**

Historic preservation as a sustainable practice works because it retains the “embodied” or “already present” energy within existing building stock. From the manufacture of goods, to the transportation of those goods to the project site, to the physical labor needed for construction, buildings represent large expenditures of energy. Preserving a building and appropriately maintaining its features retains this embodied energy and minimizes the need for the use of additional energy to produce new materials.

Even when designed to be as sustainable as possible, new construction can take decades of incremental savings to simply recover the embodied energy represented in a demolished building. In addition, it takes years for new construction to offset the substantial material waste associated with demolition and disposal of the materials of the former building. Based on this reasoning, replacement of historic buildings, even when with sustainable architecture, not only makes little financial sense but also destroys irreplaceable architectural heritage.

## **SUSTAINABLE CONSIDERATIONS IN THE PROJECT PLANNING PROCESS**

Considering goals for energy savings at the beginning of a project is particularly important in making sure that the project balances efficiency with limiting any ill-effects on the historic character of a building. In other words, energy-efficient approaches should not be an afterthought in planning

the project. It is useful to have an expert conduct an energy audit, which is a comprehensive and systematic overview of how energy is used and distributed in the building. This can be a tremendously useful tool in assessing which upgrades will provide the most benefit.

## **EMBRACE REPAIR AND REUSE OF HISTORIC MATERIALS AS A PRIORITY**

Preserving existing building fabric in sound condition should be a priority not only to retain historic character, but also to limit the need to expend energy in the production of new materials. Continued use of building fabric begins with routine maintenance and timely repair of materials to minimize significant deterioration.

During a repair or renovation project, historic building material should be protected to avoid accidental damage that may cause a need for replacement. Temporary removal of historic materials to make repairs or renovate should be avoided, but if it becomes necessary, materials should be removed with enough care to allow reinstallation. In rare instances where historic building materials in good condition will not be reused as part of a project, they should be retained by the owner for future reuse or donated to another project or non-profit organization that may be able to use them.

## **TAKE ADVANTAGE OF THE GREEN FEATURES OF A HISTORIC BUILDING**

As previously noted, many historic buildings used design features that promote energy efficiency but are sometimes overlooked. When developing a project and incorporating 'green' design features, a property owner should first gain an understanding of the existing sustainable qualities of their building. Doing so will help to ensure that the effectiveness of these features will not be reduced. Of particular importance is to avoid making inoperable features such as windows, shutters, chimneys, and transoms so as to retain their ability to offer energy efficiency.

## **INCORPORATE SUSTAINABLE MEASURES IN CONSIDERATION OF THE BUILDING'S CHARACTER**

While the design guidelines are flexible in allowing for sustainable measures such as solar panels, storm windows, and rainwater collection systems, it is important that any added features do not detract from the historic character of the building or the district. Locate new features out of view

or screen them from the public street right-of-way. In addition, as with all modifications to a historic building, a more recently added feature should be removable without harm to the building's historic fabric.

## **CONSIDERING ALTERNATIVE MATERIALS**

While traditional materials are the most appropriate, the HZC recognizes the increasing need to consider alternative materials due to the limited availability of traditional materials and tradespersons, as well as the need to consider sustainable initiatives. As such, the HZC will consider the proposed use of alternative materials in order to determine if they are compatible with the historic character of the building. When determining if use of an alternative material is appropriate, the HZC will consider the following:

- **Availability and Technology:** Are traditional materials of a high-quality available, or is the availability of traditional materials limited?
- **Vanishing trades:** Are there local tradespersons available that can work with the traditional material or is the local building industry only trained in the use of new materials?
- **Durability:** Based on available information, does the proposed material perform as well as the traditional material over time?
- **Appearance:** Does the proposed material match the original in terms of color, texture, finish, reflectivity, and profile?
- **Compatibility:** Does the new material appear seamless with the surrounding historic fabric? Will installation affect the way that adjacent materials appear or react (for example, expansion and contraction of masonry materials)?
- **Design Guidelines:** Does the proposed material align with the neighborhood's design guidelines?

## DESIGN REVIEW BASICS

The historic zoning overlay provides the opportunity for design review of proposed exterior changes to historic buildings before work is begun. The design review process is intended to be completed through a team effort which preserves the architectural character and meets the needs of the property owner.

### APPLICABILITY

The design review process is applicable to all properties within the historic overlay, regardless of whether the property is considered a contributing historic resource or non-contributing resource. Design review is required for exterior alterations and repairs that require a building permit or any other type of City approval. Exterior changes such as landscaping and painting non-masonry items do not require review and approval. Interior changes are also not reviewed, although building permits may still need to be obtained from the city building inspections department.

### RESPONSIBILITY OF PROPERTY OWNERS

Responsibility for complying with the design review process ultimately lies with the property owner or applicant, who should submit their application to staff at Knoxville-Knox County Planning. The design review process begins when the property owner decides to undertake an exterior project on a building within the historic overlay. The overlay itself does not require the property to otherwise undertake any rehabilitation or restoration activity.

## THINGS TO CONSIDER...

A sensible approach to sustainable design solutions.

While embracing sustainable design solutions is important in realizing energy savings as an end product, it is equally important that the solution is carried out with sustainability in mind.

Where replacement or new materials are necessary, they should be produced locally and without use of harmful chemicals or other treatments. Ideally, they should also be matched to the local climate, as was often the case with original building materials. Replacement and new materials should also be chosen for their durability and their ability to be repaired. Using high-quality durable materials will reduce future replacement.

Project activities should be carried out in a way that minimizes waste, particularly of sound materials. Materials should only be removed as necessary. If a historic component is damaged, only the damaged section should be removed. Where possible, removed materials should be recycled or made available for reuse on another project.

## **CERTIFICATE OF APPROPRIATENESS**

The Certificate of Appropriateness (COA) serves as the record of written approval for a proposed project and provides the documentation necessary to obtain building permits for projects within the historic overlay. The HZC or its staff issues the COA after reviewing and approving plans for the proposed work. Once issued, a COA is valid for 36-months.

There are four levels of work associated with COA applications, depending on the complexity of the proposed project. Minor work (Level I) such as routine repair of existing features using in-kind materials or installation of storm windows and doors is typically reviewed by Planning staff for administrative approval. Any project higher than a Level 1 requires review by the HZC for compatibility with the design guidelines.

## **WORKING TOGETHER TO GAIN COMPLIANCE**

Within the historic overlay, an exterior project that is begun without a valid COA or is continued after a COA has expired is a violation of the City's zoning ordinance and building code. It is most helpful when the applicant works with Planning staff in advance of work on any project. Should a property owner begin work without a COA, a stop work order could be placed on the project until it can be reviewed and approved by the HZC or its staff, as well as the building inspections department. Work completed that is not compatible with the design guidelines or building codes will be required to be altered or removed.

# **DESIGN REVIEW SPECIFICS**

## **APPLICATION COMPLETENESS**

Application submittals must be complete and include fee payment before they will be accepted.

## **HZC MEETING**

### **FREQUENCY/LOCATION**

Monthly in the Small Assembly Room,  
Main Level, City County Building,  
400 Main Street

## **COA VALIDITY**

An authorized COA is valid for  
36 months from its approval date.



## DOES YOUR PROJECT REQUIRE A CERTIFICATE OF APPROPRIATENESS?

### IF YOUR PROJECT INCLUDES:

- Exterior work that requires a building permit
- Repair, replacement, or removal of exterior features
- Addition of exterior features
- Painting of unpainted masonry
- Construction of a main building or accessory structure if forward of rear wall of main house
- Installation of driveways and walkways
- Demolition or relocation of a building

**YES** — Your project will require a COA before you apply for a building permit and begin work.

### IF YOUR PROJECT IS LIMITED TO:

- Changes that are not visible from the public right-of-way including decks 2nd accessory structures
- Changes to the interior of the building
- Painting wooden features or siding
- Landscaping, including establishing gardens and pruning of trees

**NO** — Your project will not require a COA; however, be sure to obtain relevant building permits before beginning work.

## CONTRIBUTING vs. NON CONTRIBUTING RESOURCES

A **CONTRIBUTING RESOURCE** is a structure within the historic zoning overlay that is of an early age and retains sufficient integrity to lend historic character to the district. Even if a historic structure has been altered, it can be considered contributing as long as it retains the important character-defining features that support its association with the district. A **NON-CONTRIBUTING RESOURCE** is a structure that does not enhance the historic significance of the district due to its construction after 1945, or due to less than 50 percent of its original building envelope or materials and features remaining.

## CERTIFICATE OF APPROPRIATENESS LEVELS OF WORK

### LEVEL I (STAFF REVIEW)

- Routine repair of building features using materials, design, and dimensions that match original or early features
- Installation of storm windows/doors, screen doors, or satellite dishes
- Removal of additions less than 50 years old
- Construction of accessory structure of not more than 120 square feet in area
- Installation of signage
- Renewal of an expired Certificate of Appropriateness

### LEVEL II (HZA REVIEW)

- Major repair, removal or replacement of architectural elements or materials
- Addition of an architectural element where no documentation exists
- Installation of skylights or solar panels
- Construction of an accessory dwelling unit
- Construction of an addition
- Demolition or relocation of a non-contributing structure

### Level III (HZA Review)

- Construction of a primary building
- Subdivision of an individual H landmark property

### Level IV (HZA Review)

- Demolition or relocation of a contributing structure

## **DESIGN REVIEW PROCESS**

The design review process outlined by the overlay zoning ordinance is intended to provide an efficient framework by which proposed projects can be submitted to and reviewed by the HZC. This framework also is intended to promote consistent and fair decision-making by Planning staff and the HZC in the review of proposed projects. For projects subject to design review, design approval in the form of a COA shall be obtained before other permits can be issued by the relevant City department and before work can begin.

## **APPLICATION AND APPROVAL PROCESS**

### **STEP 1. PLAN YOUR PROJECT**

The design review process should begin with carefully planning a project that is appropriate by considering the design guideline recommendations. As the first step, this will make the design review process go more smoothly and can help save time and money. Project planning should also include developing an understanding of the property, its integrity, and its character-defining features. This research will help in evaluating how a potential project such as removal, replacement, or addition of a feature may affect the character of the building. Appropriate project planning at the outset of the process will also help the applicant in preparing proper documentation for HZC review. This documentation will let the HZC know that the applicant has considered and respects the significant features of the building.

### **STEP 2. MEET WITH KNOXVILLE-KNOX COUNTY PLANNING STAFF**

The planner will serve as the applicant's contact during the design review process and is available to assist in properly preparing the application. The planner can provide preliminary insight into what is appropriate according to the design guidelines. The planner can also confirm whether the application requires a Level I or Level II review.

For a Level I project, if appropriate documentation has been submitted and the proposed project meets the design guidelines, staff can approve a COA for a simple application without the requirement for a formal review by the HZC. Issuance of the COA enables the applicant to obtain any

other required permits before beginning the project. For Level II-IV projects, the applicant must submit a more detailed application under the guidance of staff or the HZC to review.

### **STEP 3. COMPLETE THE COA APPLICATION AND SUBMIT RELEVANT SUPPORTING MATERIALS**

A copy of the COA application form is available at the Planning office or online ([www.knoxplanning.org](http://www.knoxplanning.org)). The applicant may also request a copy by e-mail attachment or fax. The application is to be used for all levels of work and is intended to provide Planning staff and the HZC with a thorough understanding of the proposed project. Specific submittal requirements depend on the nature of the proposed project but generally include sketches, photographs, and written descriptions of proposed work. Product samples and specifications on proposed materials and products may also be needed. Depending on the complexity of the proposed project, professional drawings or renderings may also be recommended to effectively inform the HZC about the project.

The applicant must submit the completed and signed form, fee, and all supporting materials to Planning staff in advance of the HZC meeting. The COA application deadlines are available from Planning staff or on the Planning website.

***Please Note:** Pre-application review by the HZC is required for new construction of a primary building and some accessory buildings (see Appendix B).*

### **STEP 4. PLANNING STAFF REVIEW OF COMPLETED COA APPLICATION**

Once the applicant submits the completed application, Planning staff will review it and consider the proposed project with regard to the guidance provided in the design guidelines. Planning staff may need to visit the property in association with the review in order to view existing conditions firsthand. Staff will then prepare a summary report on the proposed project and provide a recommendation to the HZC regarding its appropriateness.

## **STEP 5. HZC DESIGN REVIEW MEETING**

All completed applications referred to the HZC will be reviewed in a public hearing during the next available monthly meeting.

Planning staff will inform the applicant when the project has been added to the agenda. While attendance at the meeting is not required for review or approval, it is strongly encouraged for all applications as it provides the opportunity for the applicant to present the project to the HZC and address any questions or concerns, or agree to any conditions for approval

Following discussion, the HZC will vote on the proposed project to issue a determination. One of five actions can be taken by the HZC:

### **Approval**

The project is approved as proposed. No changes are required, and a COA will be issued. COAs are valid for three years.

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### **Conditional Approval**

The HZC may propose minor changes to the proposed project in order to bring it into alignment with the design guidelines, and choose to approve the project only if that condition is fulfilled. A COA will be issued for the project in compliance with the condition.

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### **Postponement**

If the HZC determines that it has not received enough information about a project to either approve or deny it, the HZC may postpone the application for future consideration. Planning staff will notify the applicant of this decision and request the necessary information so that consideration of the application can be rescheduled.

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### **Denial**

If the HZC determines that a project does not meet the intent of the historic zoning overlay (H) or the design guidelines, the HZC will deny

the application and will not issue a COA. In this case a new application for the same proposal cannot be submitted for a period of one (1) year from the date of the denial.

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### **Denial Without Prejudice**

Another type of denial is called “denial without prejudice,” in which the applicant may resubmit the application with minor changes at any time. The HZC can choose this action when the overall concept of the project meets the guidelines but more illustration, design work, or research is needed to convey the proposal or bring it into full compliance.

## **STEP 6. APPLY FOR REQUIRED PERMITS**

Once a COA has been issued for a project, the applicant can apply for any required building permits necessary to carry out the project. The COA should be presented to the respective city department, typically the Building Inspections Office, when applying for permits.

## **STEP 7. PROCEED WITH THE PROJECT**

Following issuance of the COA and appropriate building permits, the applicant may proceed with the project as outlined in the COA application, which is valid for twenty-four (24) months from the approval date. Should the applicant determine that a change in the scope of the project is necessary or that the project will extend past the COA’s date of validity, it is the responsibility of the applicant to notify Planning staff of any proposed changes as soon as possible in order to determine if re-review will be required.

## **OPTIONS IF A COA IS DENIED**

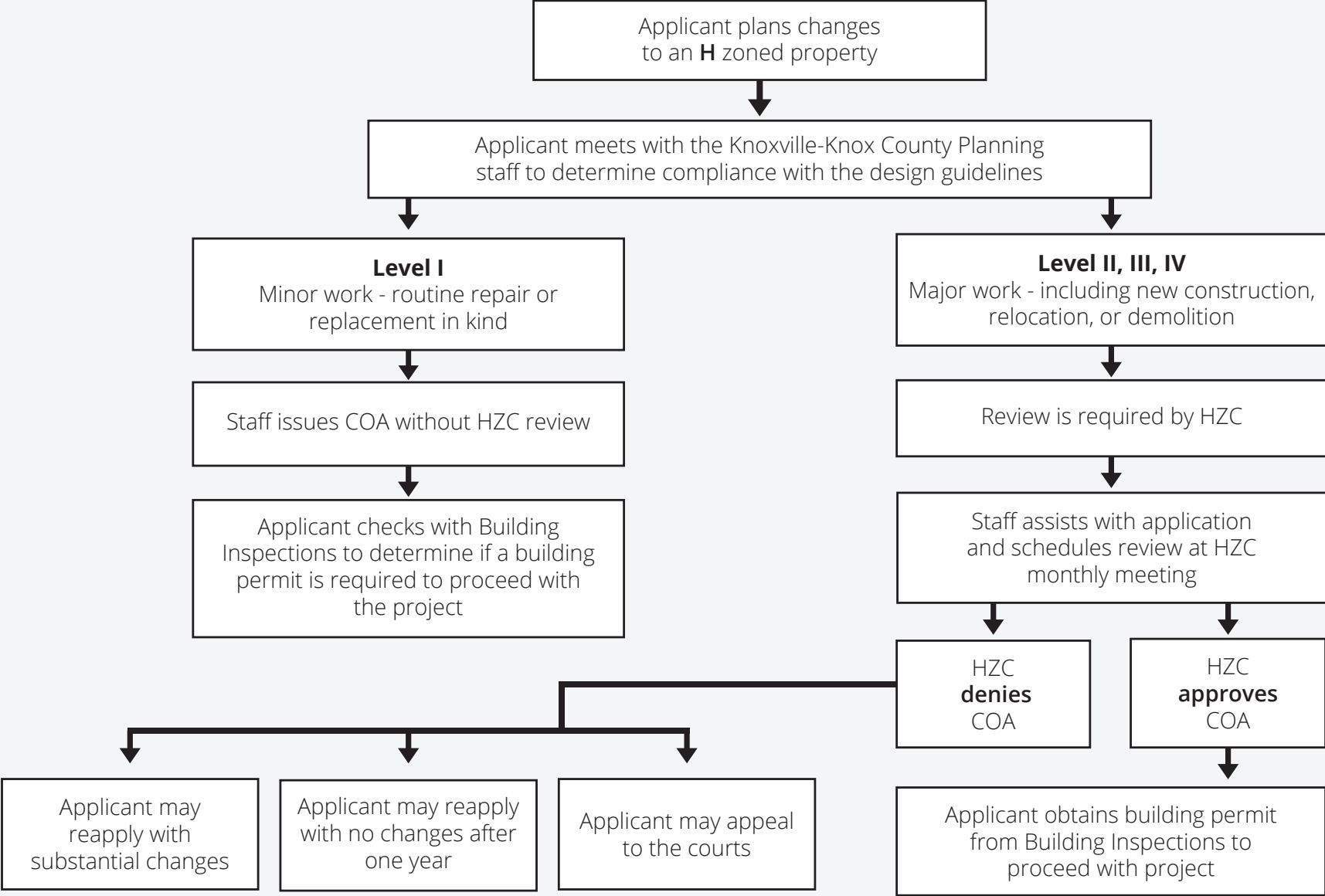
If the HZC does not issue a “denied-without-prejudice” decision, the applicant has options for proceeding after an outright denial:

- The applicant may choose not to move forward with the project.

- The applicant may modify the proposed project and application to bring it into alignment with the design guidelines. Following submission of the modified application, Planning staff will schedule the project for another HZC review.
- The applicant may appeal the finding of the HZC to the courts if they feel that rules and procedures were not properly followed or a fair decision was not made in consideration of the design guidelines

# KNOXVILLE-KNOX COUNTY HISTORIC ZONING COMMISSION

## CERTIFICATE OF APPROPRIATENESS PROCESS





# History of Oakwood

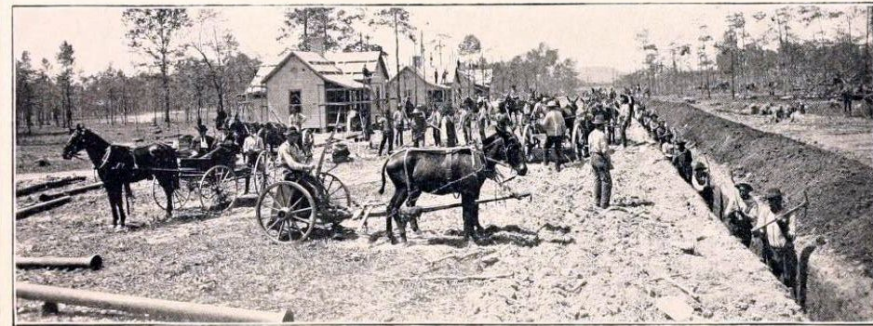
In 1902 the area's largest employer, C.B. Atkin, purchased the land known as "Flatwoods" from the Churchwell family and transformed this wooded area just north of Knoxville into the Oakwood neighborhood. Oakwood had, and has, a casual front porch atmosphere that many neighborhoods in the South still hold dear.

Mr. Atkin developed Oakwood as a planned community with amenities and improvements completed before a single lot was sold. His concept was to create a neighborhood suited to the area's skilled workers. He also wanted simple restrictions so property rights were ensured. These included one dwelling per lot, views protected by 25-foot setbacks, and no shacks. Lots were sold on easy terms without interest or mortgages. Deeds were issued when the first payment was made and a Warranty Deed provided at final payment.

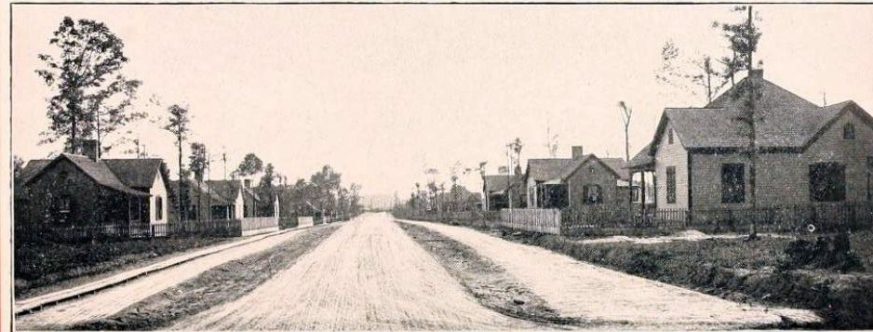
Oakwood became known as the "Magic Suburb" made up of well-set back homes fronted by wooden sidewalks, macadam streets, and utilities that included water, electric and gas. Sewers were added in 1923. Easy access to local industry and the trolley system, ease of purchase, and modern amenities made Oakwood a desirable neighborhood for many skilled workers. The town of Oakwood was



OAKWOOD A FOREST. JANUARY, 1902.



MORELIA AVENUE, OAKWOOD, MAY, 1902.  
Showing the grading of the street and laying of the eight-inch water main.



MORELIA AVENUE, OAKWOOD, MAY, 1903.  
View made from same location as ones above.  
OAKWOOD, C. B. ATKIN'S ADDITION TO KNOXVILLE.  
A forest in 1902. A thriving village, with 535 lots, five miles of macadamized streets, with water mains laid in them, electric lights and street cars, and over 100 homes in 1903.

chartered in 1913 and was later annexed by the City of Knoxville in 1917.

Boundaries of this district include the original C.B. Atkin Oakwood neighborhood, as well as portions of the Churchwell neighborhood. The C.B. Atkin Oakwood neighborhood contains the residential area from North Central Avenue to Harvey Avenue as east and west boundaries and Morelia Avenue to Columbia Avenue as north and south boundaries. The Churchwell addition incorporates the area from Churchwell Avenue to Woodland Avenue as an expansion to the southern boundary.

## **Architectural History**

Oakwood contains distinctive architectural styles that date from the early 1900s to mid-1900s. The majority of the homes were built between 1910 and 1950 as small clapboard cottages with many of the architectural plans repeated throughout the neighborhood. Morelia and Springdale Avenues were the first streets to be developed.

As is true for most historic architecture in Knoxville, there are very few “pure” styles. Instead, the houses in Oakwood were inspired by these styles and form an eclectic mix. Folk Victorian and Craftsman homes are the most prominent throughout the neighborhood, with larger versions of these styles found primarily on the ridge. Large front porches were a regular feature on all the homes. Shotgun Houses and Post War Cottages can also be found throughout. Many of these homes are now over 100 years old and have retained much of their original design.

### **FOLK VICTORIAN COTTAGE**

Folk Victorian refers to a style of American home that is relatively plain in its construction but embellished with decorative trim. Folk Victorians were built from “plan books,” provided by architectural companies and in circulation from the mid-1800s into the early 1900s. The homes were usually square or L-shaped, and often sported gables and porches. However, they did not have turrets, bay windows, or other complicated construction. What gave these plain homes their “Victorian” nomenclature was the decorative wood trim which was hand sawn or machine produced. From 1870 to 1910, the Victorian style ruled the day. Next to the Craftsman Bungalow, this is the style most often associated today with being a “historic home.”

Common architectural design features:

- Steeply pitched hip roof with low cross gable or front gable plan
- Open front porches with spindle work or flat columns
- Accents and decorative trims on facade and corners
- 2 over 2 double-hung windows

## **CRAFTSMAN BUNGALOW**

The American Craftsman style is the quintessential home style of America. More popular and more replicated than most others, it is the sum of all that America is. The principles of this style are simplicity in design, excellence in craftsmanship, and utility in functionality. The tremendous popularity of the Craftsman bungalow during the 1920s is indicative of the economic boom following World War I. A Craftsman built with smaller dimensions was the entrée into the middle class for many.

Common architectural design features:

- Low-pitched roof lines, gabled or hipped roof
- Deeply overhanging eaves
- Exposed rafters or decorative brackets under eaves
- Front porch beneath extension of the main roof
- Tapered, square columns supporting the roof
- 3-over-1 or 6-over-1 double-hung windows
- Hand-crafted woodwork

## **SHOTGUN HOUSE**

A “shotgun house” is a narrow rectangular residence, usually no more than about 12 feet wide, with rooms arranged one behind the other and doors at each end of the house. It was the most popular style of house in the Southern United States through the 1920s. The rooms of a shotgun house are lined up one behind the other, typically a living room is first, then one or two bedrooms, and finally a kitchen in back. Early shotgun houses were not built with bathrooms. In later years, a bathroom with a small hall was built before the last room of the house or incorporated as a side addition built off the kitchen. Chimneys tended to be built in the interior, allowing the front and middle rooms to share a chimney with a fireplace opening in each room.

Common architectural design features:

- Simple roof line with eaves at front and rear
- Front overhang supported by decorative wooden brackets or columns
- Front stoop ending in narrow porch and offset front door

## **POST WAR COTTAGE**

Homes built during and immediately following World War II have been dubbed “Post War” cottages as they were constructed in response to the pent-up housing demand during the 1940s and 1950s. The houses were built using cost effective methods in trending styles such as L-shaped Ranches or Cape Cods. Most are simple single-story houses with floor plans designed around a “box” shape and have a plain facade.

Common architectural design features:

- Low, simple roof line on a generic house plan
- Front stoop ending at central front door
- Varied window styles and sizes, frequently with window shutters

## EXAMPLES OF NOTABLE ARCHITECTURE

### **Knoxville Fire Station No 8**

336 E. Caldwell Avenue (1917)

Currently the home of the Knoxville Arson Task Force, the historic fire station was built in 1917. The accent structure in the gables is typical of a stick cottage style in which structural framing is often exposed as decorative elements.

### **Examples of Neighborhood Folk Victorian and Craftsman Homes**

301 E. Burwell Avenue, built in 1910, is an example of Folk Victorian styling with saw work decorative trim.

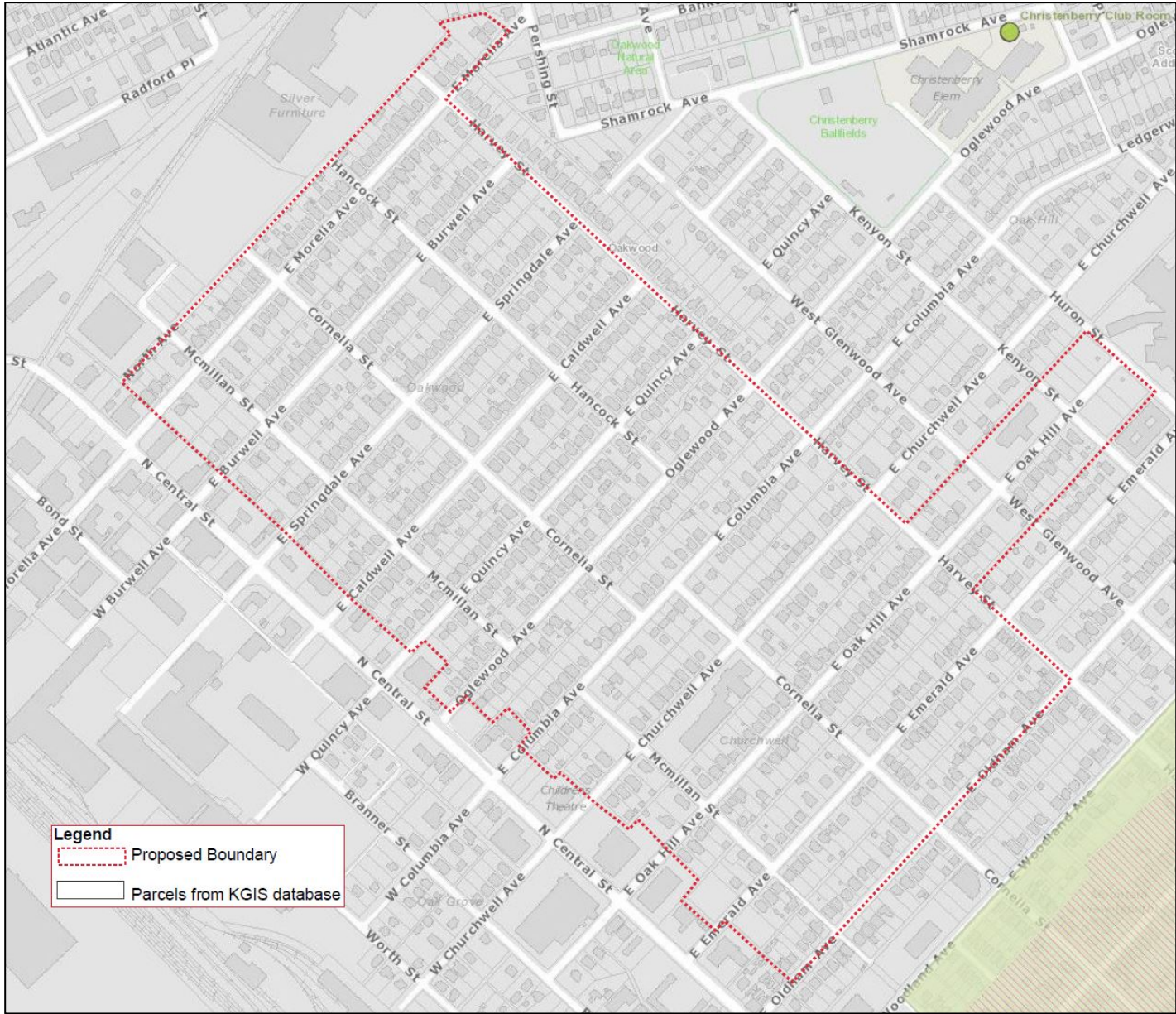
206 E. Oldham Avenue, built in 1920, is a Sears Kit house displaying classic Craftsman styling.

### **Oakwood School**

239 E. Churchwell Avenue

Currently Oakwood Senior Living, the school was built in 1903. It began as a one room school house, though just three years later, a two-room structure was erected and additions were made. The present building was completed in 1917.





# **HISTORIC DISTRICT DESIGN GUIDELINES**



# OVERALL APPROACH FOR PRESERVING HISTORIC BUILDING MATERIALS

## RETAIN

RETAIN AND PRESERVE HISTORIC BUILDING MATERIALS.

- Protect historic building materials and features from deterioration.
- Maintain protective coatings on historic materials.
- Provide adequate drainage to limit standing water on horizontal surfaces.
- It is not appropriate to remove historic materials that are intact or repairable.
- Clean historic materials only when necessary to stop deterioration or remove graffiti, heavy soiling, or biological growth. General cleaning should otherwise be avoided so as not to unnecessarily introduce moisture into materials.
- Start with a low pressure water washing and a soft, natural bristle brush when cleaning is necessary.
- It is not appropriate to use abrasive cleaning methods such as high pressure water washing or sandblasting, which can easily damage historic materials and lead to additional deterioration.

## REPAIR

REPAIR DETERIORATED BUT REPAIRABLE HISTORIC MATERIALS BEFORE CONSIDERING REPLACEMENT.

- Repair deteriorated materials by using accepted preservation treatments.
- Match repairs to original materials in appearance, profile, texture, and finish.
- If disassembly of a historic building feature is necessary in order to complete a repair or avoid inadvertent damage to surrounding features, document the configuration of the feature and reassemble accordingly once finished.
- If removing paint, stain, stucco, or other claddings, select a localized area to test the removal process to ensure that materials will not be damaged.
- It is not appropriate to cover historic materials instead of appropriately repairing them.

## REPLACE

REPLACE HISTORIC MATERIALS IN KIND.

- Replace only the portions of a feature that are deteriorated beyond repair. Avoid wholesale replacement of otherwise intact features or materials.
- Replace deteriorated or damaged materials with replacement materials that match the original in dimension, detail, profile, texture, and finish.
- Use replacement materials and a design based on historical, photographic, and/or physical evidence.
- In the absence of appropriate documentation, utilize a simple design that is compatible with the building in scale, profile, material, and finish.
- Alternative materials will be considered on a case-by-case basis depending on the building feature and compatibility of the proposed material.
- Alternatives to traditional materials may be utilized on new construction, additions, and contributing historic structures if the HZC determines that the alternative material adequately simulates the traditional or original material. Faux wood-grained materials do not adequately simulate wood.

# Checklist for Appropriateness for the Removal or Addition of Features/Materials

## DETERMINING WHETHER TO REMOVE A FEATURE/MATERIAL:

- Is the feature/material a significant character-defining element that helps convey the style and period of construction for the structure?
- Is the feature/material unique, or is it rather common and utilitarian?
- Will the character of the structure be altered significantly if the feature/material is removed?
- Is the feature/material original or at least 50 years old?
- Has the original or early feature material been altered?
- Is the feature/material prominently visible from the public street right-of-way?
- Is the feature/material of low quality or does it exhibit poor craftsmanship?

## DETERMINING WHETHER TO ADD A FEATURE/MATERIAL:

- Does the proposed feature/material cause the structure to look earlier or later than its time?
- Does the proposed feature/material confuse or alter the primary style of the structure?
- Is the proposed feature/material overly decorative or prominent so as to detract from the original or early façade?
- Is the proposed feature/material typical of others found on other structures of the period in the district?
- Is the proposed feature/material appropriate for the style as indicated in architectural history guidebooks?

**PLEASE NOTE:** An original or early character-defining exterior element may not be removed solely for the purpose of accommodating interior renovation plans for the structure.

# Masonry

1. **Protect and retain original masonry surfaces and features.**
  - a. Retain the original color and texture of masonry materials.
  - b. Provide positive drainage away from foundations to move water away from the foundation wall.
  - c. Retain protective coatings and decorative glazes where historically present.
  - d. It is not appropriate to paint or stucco masonry surfaces that are in their original state.
  - e. It is not appropriate to remove protective patinas that evolve over time and are part of the structure's character.
  - f. It is not appropriate to sandblast or use abrasive methods to clean masonry materials.
2. **Repoint deteriorated mortar joints.**

## THINGS TO CONSIDER: MASONRY SEALANTS

Applying waterproof or water repellent coatings to masonry is generally not appropriate. Not only can they alter the appearance of masonry, but sealing a foundation can also prohibit the natural movement of moisture through masonry, ultimately trapping it and causing additional deterioration. Sealants are not to be used as a substitute for appropriately repairing deteriorated materials. Sealants are only to be applied in rare circumstances where moisture can be demonstrated to be uncontrollably infiltrating masonry and when the method of infiltration is understood.

In instances where use of a sealant is determined appropriate, coat only the masonry that is affected. It is not appropriate to unnecessarily seal masonry that has no demonstrated infiltration. Apply sealants only on dry masonry. Treating masonry while damp can unintentionally trap damaging moisture inside the masonry.

Maintain clear distances between plantings and the foundation wall in order to limit the potential for moisture to be trapped against the wall by vines or vegetation.

- a. Repoint mortar joints only where there is evidence of moisture problems, material breakdown, or sufficient erosion to allow standing water in the joint.
- b. Prepare joints by using hand tools, removing ½" to 1" of old mortar to provide sufficient space to bond new mortar.
- c. Repoint mortar with materials matching the original in composition, color, and texture. High lime mortars and hydraulic cements are the most appropriate for repointing historic masonry.
- d. Match the size and profile of the repointed joint to the original joint.
- e. Using inflexible mortars with high amounts of Portland cement, which are incompatible with historic soft mortars that accounted for expansion and contraction of masonry materials, is not appropriate.

3. **Replace deteriorated or missing masonry units or features in kind.**

- a. Replace only the sections of historic masonry that are missing or deteriorated.
- b. Use new or recycled masonry materials that match the original as closely as possible in size, shape, color, and texture.
- c. If a historic masonry feature is missing, replace it with a new feature that, based on photographic documentation or comparable features elsewhere on the building, matches the original in size, material, texture, and scale.
- d. Replacing large sections of intact masonry materials is not appropriate.
- e. It is not appropriate to use materials such as artificial stone, brick veneer, or ceramic tile as a substitute for replacement of deteriorated masonry.

## Features and Siding

1. **Repair deteriorated wood elements as character-defining features.**
  - a. Repair deteriorated wood surfaces by patching, consolidating, splicing, or otherwise reinforcing deteriorated sections.
  - b. Match repairs to original materials in appearance, profile, texture, and finish.
  - c. When repairing deteriorated components, retain unique details such as beaded edges, bevels, or fish scale patterns.
2. **Maintain compatibility when replacing wood features that are deteriorated beyond repair.**
  - a. Repair or replace, only as needed, materials and features with components that match the original in material, dimension, detail, profile, and texture.
  - b. Smooth-finished fiber cement board may be utilized as a replacement for wood siding only when it has deteriorated beyond repair, and for any other type of

## TIP: HOW TO PRESERVE WOOD FEATURES

- Protect wood surfaces and features from deterioration by providing a protective, weather-resistant coat of paint or stain. Paint all six sides of new siding in order to provide a consistent protective coating.
- Identify, evaluate and treat the causes of wood deterioration, including faulty flashing, leaking gutters, cracks and holes in siding, deteriorated caulking at seams, plant material or insect or fungus infestation.
- Apply chemical preservatives to historically exposed wood features such as ends of beams or rafters.
- Remove deteriorated protective coatings to the next sound layer by hand scraping and then repaint. It is not appropriate to use damaging methods such as a propane torch to remove paint.
- When patching or splicing deteriorated wood components, use timber that matches the grain and density of existing materials.

## PAINTING POINTERS

Paint colors are not regulated in the historic district. The explanation given here is to assist owners of historic properties who wish to enhance the appearance of their buildings through the use of appropriate paint colors.

The original color of a house may be determined through paint analysis. Look for samples of the original color behind shutters or trim, or in a protected corner. These areas usually show the original colors because they have not been exposed to weather and have not been scraped to bare wood. Three or four colors may have been used in the original paint scheme of the earlier Victorian-era house. Later revival styles may have used only a two-color scheme, and white was very common with the revival styles. Darker earth tones were used on Craftsman styles. The paint color of trim, window sashes, porch columns, doors, shutters, and wood brackets typically contrasts with the house siding. Window sashes were often painted the darkest color.

Many paint companies now offer colors that replicate historic colors. Before selecting paint colors, take a look at these historic color selections for ideas. Most importantly, if the original color is to be painted over, leave an unscraped patch in a protected place so a record of the original paint layers remains on the house.

Historic houses were usually painted with a lead base, and later alkyd, paint. This paint is generally glossier than latex paint. If a latex paint is used on the house, first apply a good coat of primer to mask the old oil paint so that the new coat of latex paint will adhere properly. Use a glossy finish latex paint to more closely match the original look of the siding. Make sure that all six sides of each piece of new siding is painted to seal out moisture and prevent warping. With this practice, the paint will last longer.

- siding, as long as the profile and exposure (visible width) is historically appropriate. Existing vinyl or aluminum siding may be replaced in-kind as long as no further architectural detailing is covered or removed.
- c. Existing vinyl or aluminum siding may be replaced in-kind as long as no further architectural detailing is covered or removed.
  - d. Utilize a replacement siding that matches the profile and exposure of any original existing siding or matches what is documented to be the original. In the absence of appropriate documentation, install the exposure to match that of similar buildings in the district.
  - e. Replace missing wood features with elements based on historical, photographic, or physical evidence of the original feature. In the absence of such evidence, use a design that is compatible with the building in style, scale, and size.
  - f. Dutch lap siding is not an appropriate replacement for siding. It is also not appropriate to cover the façade of the house in shingles. However, shingles may be used as a siding material for post-war cottages.
  - g. When installing vinyl siding, retain trim, porch elements, corner boards, fascia, soffits or any other wood components. Siding may only depict horizontal weatherboards.

## Roofs, Roof Features, and Chimneys

The roof shape and pitch help distinguish the architectural character of a building. Whether gabled, hipped, or a complex arrangement of multiple forms, roofs directly influence our perception of a building and play a role in defining a building's massing, volume, and presence along the streetscape.

A roof can be further distinguished by any number of features, including chimney, dormers, cornices, turrets, finials, and eaves, which further contribute to the character of a building. Roofing materials can also be a distinguishing feature of a roof, but most roofs have been re-clad with modern asphalt shingles. Retaining the original roof shape and pitch, as well as associated features, is important since changes to the roof can significantly alter the appearance of a building.

**1. Retain original roof shapes, materials, and associated characteristics.**

- a. Retain and preserve functional features of the roof such as dormers, and decorative subtle trim such as finials and sawnwork.
- b. It is not appropriate to remove or cover original eaves or cornices or roof dormers.
- c. Metal roofing is not appropriate on the roof of the main building or on front porches.

**2. Retain original chimneys.**

- a. Retain original or reconstructed original chimneys.
- b. Install a chimney cap so that it does not diminish the original design of the chimney, require removal of decorative features, or damage historic materials.
- c. If rebuilding a chimney is necessary, use historically appropriate materials. It is not appropriate to use simulated masonry materials.

- d. Altering the character of a chimney by painting, parging, or otherwise covering historically-exposed masonry materials is not appropriate.
- e. Reducing the height of chimney stacks, while retaining the appearance that a stack exists, can be considered based on a professional contractor's assessment of their condition. If a chimney stack is destroyed or the height reduced by an act of nature, then retain any remainder of the stack and cap the chimney. Retain and store loose bricks for possible future reconstruction.
- f. Small chimneys that originally served as enclosures for stove pipes can be removed if determined to be of no architectural or historical significance.

**3. Repair original roofing materials and features unless substantial deterioration warrants replacement.**

- a. Repair original specialty materials such as tile, slate, and metal by replacing only the deteriorated sections with in-kind materials. Unless more than 35% of the total surface is deteriorated.

- b. Use in-kind materials when repairing localized areas of deteriorated roofing.
- c. Repair deteriorated flashing by installing new to match the existing. Unfinished metal flashing is not appropriate.
- d. It is not appropriate to remove or replace original features that are deteriorated but repairable.

**4. Replace deteriorated roofing materials with compatible counterparts.**

- a. Preserve the original roof shape and configuration when installing new cladding materials.
- b. Replace deteriorated sections of roofing with in-kind materials, matching materials in appearance, pattern, color, and composition.
- c. It is not appropriate to install tar paper, roll roofing, or sheet metal as a finished roof or patch roofing.
- d. While replacement with in-kind materials is most appropriate, allowances can be made for substitute materials in consideration of the continual changes to



roofing within the district overtime. In general, the following options will be considered:

- i. In-kind replacement: Existing slate, tile, and other specialty roofing materials should be maintained as necessary in order to maximize their useful life. When deteriorated, consider selective repair or replacement over wholesale replacement.
- ii. Imitation slate or tile: In many instances, replacement of an existing roof with a new slate or tile roof may prove infeasible. In such instances, replacement of the roof with a modern substitute material that replicates the appearance of the original material will be considered. When reviewing such materials, the HZC will consider the texture, pattern, durability, and dimension of the replacement material.
- iii. Asphalt or fiberglass shingles: If replacement with an in-kind or imitation roof material is not feasible or appropriate, replacement with a dimensional fiberglass or asphalt shingle can be considered.

Metal is not an appropriate roof replacement material in the district.

- e. Consider salvaging intact units of specialty cladding materials when replacing roofs in order to reduce landfill waste and promote reuse of historic fabric.

#### 5. **Minimize the impact of roof additions or changes.**

- a. Retain the original roof configuration when making additions or changes to the building.
- b. When reconstructing an original feature that is missing, such as a chimney or dormer, base the reconstruction on historical, photographic, and/or physical documentation.
- c. New dormers must be compatible with the architecture and scale of the house.
- d. New dormers are to be scaled to the massing of the building and other dormers present on the building or similar structures in the district.

- e. Skylights are to be flat. Bubble-profile skylights are not appropriate. It is not appropriate for skylights to be located on the front roof pitch.
- f. It is not appropriate to enclose originally exposed rafters.
- g. It is not appropriate to install new roof features in a manner that damages or obscures significant architectural features.

**6. Minimize the impact of rooftop solar collectors on the historic character of the building.**

- a. Ensure that the roof structure can support the weight of added collectors.
- b. Install solar collectors on roof slopes that are inconspicuous from the public street right-of-way.
- c. If a building's orientation limits the utility of solar collectors on a rear roof slope, a slightly visible location on a secondary elevation may be considered.

Appropriateness will be considered regarding the size of the installation, panel arrangement, and material finish.

- d. Position solar collectors behind features such as dormers or chimneys in order to minimize their visibility from the public street right-of-way.
- e. Install solar collectors on accessory buildings at the rear of the lot rather than on the primary structure.
- f. Install solar collectors so that they lay parallel to the roof surface.
- g. Install solar collectors to be, at maximum, within 6" of the roof surface.
- h. Install solar collectors in a manner that they do not cause irreversible damage to the roof structure or require the alteration or removal of character defining-features such as chimneys, dormers, or cornices.
- i. Select solar collectors and frames that are similar in color to roofing materials in order to minimize their appearance.

# Porches

Porches are both a historically significant aesthetic and functional component of a house, and many neighborhoods are defined by the rhythm of porches along the streetscape.

Front porches distinguish the street presence of a house and define its architectural character, whether featuring simple brick columns or intricate scrollwork. Historically, porches were a form of air conditioning and provided a buffer between interior and exterior temperature fluctuations. Porches also performed a social function, often serving as the location for the gathering of neighbors.

**1. Retain and preserve original or early porches, including their individual components.**

- a. Retain porches that contribute to the historic character of the building, including decorative or functional components.
- b. Retain the location and character of front porch steps.
- c. Retain open porches on the facade. Porches at the rear of secondary elevations or on the rear elevation may be enclosed with glass or screening and minimal framing in order to retain a sense of transparency.
- d. It is not appropriate to remove or alter a historically character-defining porch.

- e. It is not appropriate to enclose a front porch in any manner, including with screening or glass. Opening enclosed porches that were originally unenclosed is appropriate.

**2. Repair deteriorated or replace missing historic porch components.**

- a. Repair or replace only the deteriorated or missing section of a historic porch component. Wholesale replacement of intact historic components is not appropriate when less than 35% of a section is deteriorated.

- b. Repair deteriorated porch components, such as those listed in 1.A., with materials finished to match original or early components.
- c. Where historic components are determined to be deteriorated beyond repair, use them as the basis for selecting replacement components in order to match the early or original in design, profile, and material texture.
- d. Where historic components are missing, use historical, photographic or any remaining physical evidence as the basis for replacement components. In the absence of such evidence, reference historic porches on nearby structures of similar style and vintage.
- e. Pressure-treated lumber is not appropriate on front porches except where it comes into contact with the ground or is concealed from view. However, pressure-treated tongue-and-groove porch flooring is appropriate.
- f. It is not appropriate to replace tongue-and-groove flooring with other types of flooring including board

## DID YOU KNOW...

### BALUSTRADES & BUILDING CODE REQUIREMENTS

The City of Knoxville building code provides specific regulations for the installation of balustrades on residential porches. When working on a balustrade, remember the following regulatory guidance:

- A balustrade may be reinstalled at its existing height if it is removed only temporarily for repairs of the porch flooring or other porch elements.
- If an existing balustrade is to be replaced, the new balustrade must meet the required building code height of 36 inches from the porch floor when a landing is 30 inches or more above ground. This requirement also applies to step railings.
- When a landing is less than 30 inches above the ground, a new balustrade is not required to meet building code height of 36 inches from the porch floor, but is still required to meet the design guidelines.
- The balusters (sometimes called spindles or pickets) may not be spaced more than 4 inches apart according to the required building code.
- The bottom rail may not be higher than 4 inches from the porch floor.

decking. If less than 35% of tongue-and-groove flooring is existing, then board decking can be installed.

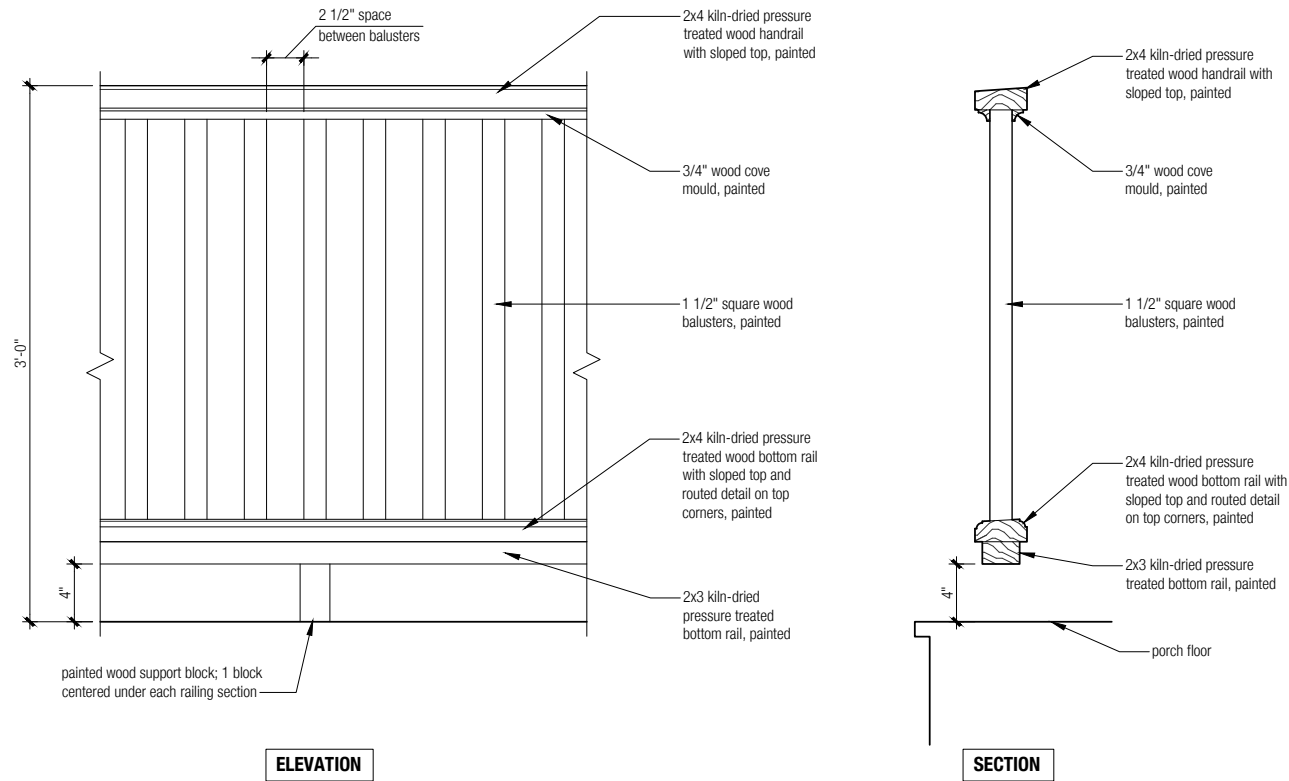
- g. It is not appropriate to replace a wood porch floor with a concrete one. It is also not appropriate to cover a concrete porch with tile or other inappropriate materials.
- h. Install new balusters to be set into the top and bottom rails instead of overlapping the rails.

**3. Design new porches to be compatible with the character of the historic structure.**

- a. Add a front porch only when there is documentary or physical evidence that one historically existed, or when

there is precedent in the district for porches on buildings of similar style and vintage.

- b. Select a design for reconstructed porches based on physical or pictorial evidence. In the absence of sufficient documentation, select a simplified design that is compatible with the building in terms overall design and scale as well as material and detail.
- c. Design porches to be added to side elevations to be compatible with the building in terms of overall design and scale as well as material and detail.
- d. Alternative material may be approved on a case-by-case basis in consideration of design, profile, and material texture.



**RAILING DETAIL FOR PORCHES WHERE THE FLOOR IS  
GREATER THAN 30" ABOVE THE GROUND (CODE COMPLIANT)**

## HANDRAILS

Historically, few porch steps had handrails. However, handrails are necessary in some instances in order to accommodate safety or ease of access. Design handrails to be as unobtrusive as possible to the original design of the porch. Handrail designs will be reviewed on a case-by-case basis, but the following criteria will be used:

- If the porch and steps are wood, new handrails are also to be wood and mounted on wood posts. Select a handrail with a simple profile and paint to match existing trim.
- If the porch and steps are masonry, metal handrails are most appropriate, but wood may be appropriate in certain cases. Select a hand rail with a simple profile. Paint metal a dark color and paint wood to match existing trim.

## Entrances and Doors

Entrances are one of the most distinctive features of a historic building, and may include sidelights, a transom and ornate hardware. The front door is character-defining and can help convey a building's architectural style. Service entries at the rear of the building were typically simple in detail.

### 1. Retain original door openings.

- a. Retain the location, size, and shape of original door openings.
- b. It is not appropriate to reduce or enlarge original door openings.
- c. It is not appropriate to close in original door openings.
- d. It is not appropriate to alter primary entrances by adding details not historically present.
- e. It is not appropriate to alter secondary or service entries to make them appear more formal by adding elaborate doors, transoms, sidelights, or other elements.

### 2. Preserve original doors and associated features.

- a. Retain original doors, including screen doors, and components such as hardware, trim, casings, transoms, and sidelights.
- b. It is not appropriate to remove historic leaded, stained, or prismatic glass in doors, sidelights, and transoms.
- c. It is not appropriate to cover original transoms or sidelights.
- d. Repair and retain original hardware if present.

### 3. Install appropriate energy efficiency enhancements.

- a. Low-e or other light-absorbing coatings are only appropriate on door glazing when it can be

demonstrated that there will be no significant change in the original appearance of the glass.

- b. Full-light, wood doors are the most appropriate option. Doors with excessive ornamentation or framing members that obscure the primary door are not appropriate.
- c. Select storm doors with fully-transparent glass. Frosted, tinted, reflective, opaque, or patterned glass is not appropriate.

4. **Select a replacement door compatible with the character of the building.**

- a. Replace early or original doors only when they are determined to be deteriorated beyond repair. Replace these doors in kind.
- b. Select replacement hardware that is compatible with the style of the building.
- c. Vinyl and vinyl-clad wood doors are not appropriate.

- d. Replace inappropriate doors with a new door that matches the early or original in style, size, profile, and glazing configuration.
  - i. Select the door based on photographic or physical evidence of the original or early, if available.
  - ii. In the absence of documentation, select a door type that is simple in design and compatible with the style and period of the building and others in the district.
- e. Replace deteriorated or inappropriate doors on secondary elevations with a new door that matches the early or original. Alternative door types compatible with the character of the building can be considered on secondary elevations.
- f. Undistinguished, flat-surface doors and six-panel colonial doors are not appropriate on pre-1940s houses.



## TIP: ENERGY CONSERVATION DOORS

Historic solid-core wood doors are great insulators. If the homeowner wishes to further minimize heat loss and improve energy efficiency, the most important step is to reduce air leakage around the door. This can be accomplished by installing weather-stripping along the frame and at the base of the door, ensuring that the door is properly fitted to the jamb and threshold, and securing glazing putty around any glazing in the door. Energy efficiency can be further addressed by installing a properly fitted, full-light storm door.

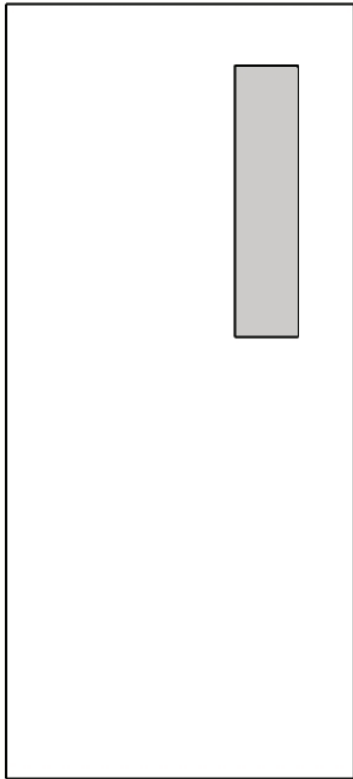
## WINDOWS

- Maintain and preserve existing old-growth wood windows to the extent possible, which also limits the necessity to harvest new timber and eliminates landfill waste.
- Locking the windows not only provides increased security but also helps create a tight seal between sashes and reduces air infiltration.
- Maintain glazing putty and sealants in good condition in order to minimize air and moisture penetration. Adding weather-stripping can reduce infiltration by as much as 50%.
- The combination of a historic wood window and a properly sealed storm window can, in many instances, provide better insulation value than a new double-pane window insulated sash.

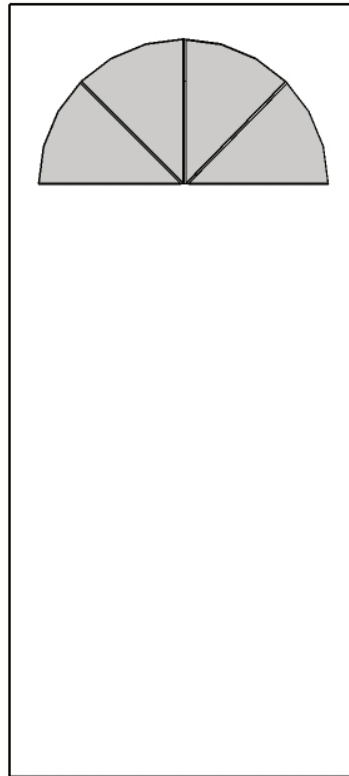
- g. Muntins within glass door panels are most appropriate as true divisions or simulated divisions with muntins on each side of the glass.
  - h. Frosted, tinted, reflective, opaque, or patterned replacement glass is not appropriate unless historically present.
  - i. Storm doors and screen doors may be full-panel with wood or metal frames, or may be of a period-appropriate style in wood.
5. **Design new door openings to be as inconspicuous as possible.**
  - a. Where creation of a new door opening is considered, locate it to the rear quarter of a side elevation or on the rear elevation so that its visibility from the public street right-of-way is limited.
  - b. Design new door openings to be compatible with those existing on the building in size and proportion.
  - c. Locate new door openings so that significant historic materials and features are not destroyed.

# INAPPROPRIATE DOORS IN THE HISTORIC DISTRICT

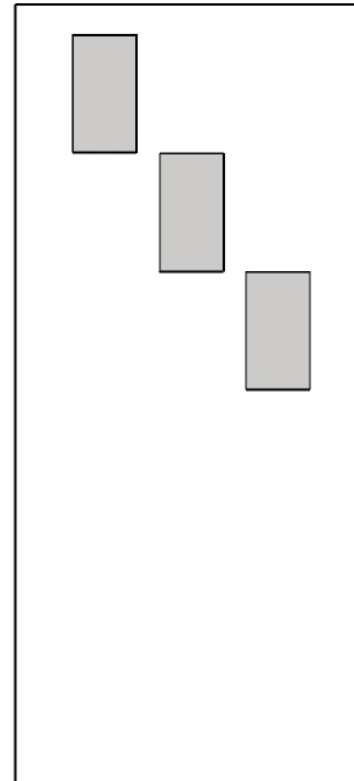
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SINGLE-LITE  
VERTICAL



FANLIGHT



THREE-LITE  
DIAGONAL

# Windows

Inappropriate changes to windows can severely detract from the overall character of a historic building. As important character-defining features, their preservation should be a priority of any rehabilitation project.

While the most common argument against historic windows is that they are not energy efficient, it is proven that an appropriately weather-sealed historic wood window with a storm window is just as energy efficient, if not more so, than a new insulated window. In addition, historic windows of old growth wood are more stable and resistant to deterioration and, if properly maintained, can be easily repaired and last for hundreds of years. Carefully scrape, prime, and repaint deteriorated coatings to provide a weather-resistant coating. Maintain caulk and glazing putty in good condition, providing a weather-resistant coating.

**1. Retain the original window openings.**

- a. Retain the location, pattern, and size of original window openings.
- b. It is not appropriate to reduce or enlarge original window openings.
- c. It is not appropriate to close in original window openings.

**2. Preserve original windows and associated features.**

- a. Retain early or original windows, including all functional and decorative elements such as the sash, hardware, and casing, as well as any decorative moldings or hoods.
- b. It is not appropriate to remove historic leaded, stained, or prismatic glass.
- c. Burglar bars, security grilles, and other visually-intrusive elements are not appropriate.

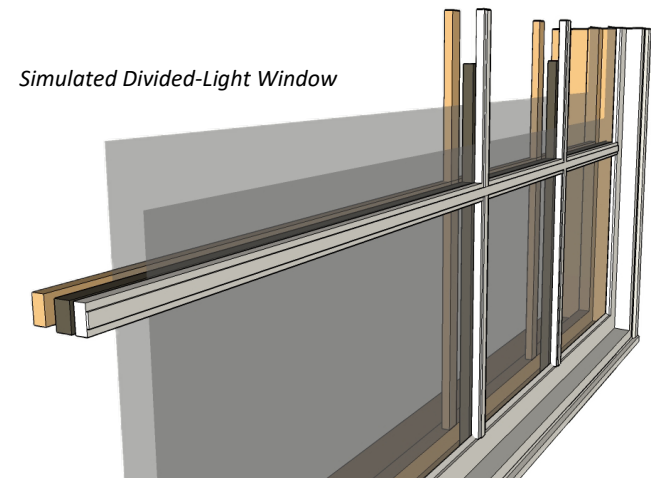
**3. Improve the energy efficiency of intact original windows rather than replacing them.**

- a. Low-e or other light-absorbing coatings are only appropriate on the primary facade when it can be demonstrated that there will be no significant change in the original appearance of the glass.
- b. Enhance energy efficiency by installing storm windows.
  - i. Align storm windows within the original opening. Altering an opening to accommodate a storm window is not appropriate.
  - ii. Wood-framed storm windows are most appropriate, but baked-on enamel-finished or anodized aluminum is also acceptable if the finish color matches that of the building's trim. Bare aluminum sashes are not appropriate.
  - iii. Storm windows that do not allow for a full-view of the primary window or do not have a meeting rail that aligns with that of the primary window are not appropriate.
  - iv. Interior storm windows are encouraged but should be installed in a manner that limits the potential for damaging condensation to form on the primary

window. Incorporate air-tight gaskets, ventilating holes, and/or removal clips.

**4. If replacement is necessary, replace historic materials in kind.**

- a. Replace historic window sashes only when they are determined to be deteriorated beyond repair.
- b. Replace only the deteriorated component of a historic window (such as the sash) rather than replace the entire assembly.
- c. Properly recess replacement window sashes within the opening to protect the window, allow water runoff, and preserve historic profiles.



## STEPS FOR APPLYING FOR WINDOW REPLACEMENT

Replacing historic windows with inappropriate ones can significantly detract from the historic character of a building. A property owner will need to develop a preservation-minded plan for the replacement of historic windows and their components.

### **Prepare an inventory of windows and their condition:**

The first step in developing a window replacement project is completing an inventory of the windows and their existing condition, which can be used to determine appropriate treatment strategies. Such an inventory must be included in your Certificate of Appropriateness application.

### **Consider what needs to be replaced:**

When evaluating windows and treatment options, determine exactly what needs to be replaced and why. In some instances, you may find that the window simply needs to be re-glazed while in others you find replacement of only the sash is necessary. Rarely does the entire window assembly need to be replaced.

### **Gather physical and/or photographic**

evidence for your project:

Once you have evaluated the windows, photograph the condition of each window to be replaced in order to illustrate your proposal.

### **Find a suitable replacement:**

The final step in preparing your materials for a window replacement application is finding the appropriate replacement component, whether just the sash or an entire assembly. Replacement components may be found at salvage stores or fabricated to match.

- d. It is not appropriate to enlarge or reduce the size of the original opening to accommodate the installation of a replacement window.
- e. Replace windows with those that have the operational function (e.g., double-hung) of the original window.
- f. Replacement of non-original windows can be made of any material as long as the size, style, and muntin configuration are appropriate for the style and era of the building.
- g. When replacing with divided-light sashes, the use of either true-divided-light or simulated divided-light sashes with dimensional muntins permanently affixed to the exterior of the glass is most appropriate. However, internal muntins sandwiched between panes of glass may also be used. Snap-in grids are not appropriate.
- h. Maintain the original profiles, trim dimensions, and depth of reveal when installing replacement sashes.

- i. In the absence of intact windows on the building, reference window designs on similar properties within the district.
- j. Treatments to reduce transparency of window glass for privacy purposes will be reviewed on a case-by-case basis.

5. **Design new window openings to be as inconspicuous as possible.**

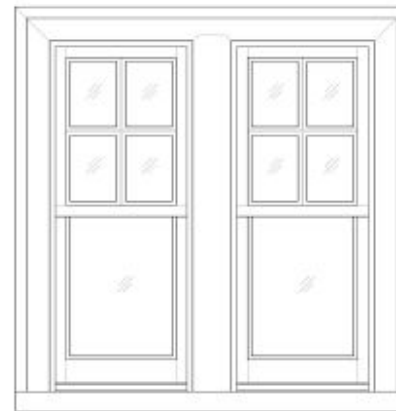
- a. Where creation of a new window opening is considered necessary, locate it to the rear quarter of a side elevation or on the rear elevation so its visibility from the public street right-of-way is limited.

- b. Design new window openings to be compatible with the original in size, proportion, materials, and detail.
- c. Factory-joined window sets are not appropriate.
- d. If new egress window openings for converted attic spaces are required, install them so that their visibility from the public street right-of-way is limited. Size these windows to be appropriate to the scale of the wall elevation to which they are being added.
- e. Locate new window openings so that significant historic materials and features are not destroyed.
- f. Design and locate new window openings so that they are compatible with the pattern and rhythm of the original openings.

*Example of inappropriate factory-joined window*



*Example of framed-out window set*



## Mechanical and Utility Equipment and Energy Retrofit

Making allowances for modern systems in historic buildings helps to preserve them. Such systems include heating, ventilation, air conditioning, and plumbing systems, satellite dishes and antennas, as well as energy conservation and green technologies.

It is important, though, to make sure that the installation of modern systems does not compromise the architectural character of a historic building or detract from the appearance of the streetscape or district.

1. **Locate modern systems and equipment to minimize aesthetic impacts.**
  - a. Place ground-mounted equipment, such as air-conditioning units, so it is not visible from the public street right-of-way or screen it from view with appropriate landscaping, fencing, or masonry wall.
  - b. Locate new utility systems, such as water, gas, and electric meters, so they are not visible from the public

## TIP: ENERGY EFFICIENCY

Enhance rather than replace or remove original materials and features of historic buildings and their sites to maximize energy conservation.

- Retain mature shade trees, porches, awnings, operable windows, transoms, breezeways and other such historic features that help to regulate air flow and temperatures.
- Retain and preserve existing energy efficient features such as porches, breezeways, transoms, and operable windows.
- Enhance the energy efficiency of existing features by installing weather stripping and maintaining tight seals by caulking.
- Add storm windows and doors in accordance with the guidelines.
- Insulate attic spaces.
- Install draft plate sealers to electrical outlets and switches.
- Seal around holes in foundations and walls used for service lines.
- Fill electrical, plumbing, and ventilation chases with insulation.

street right-of-way or screen them from view with appropriate landscaping, fencing, or masonry wall.

- c. Locate antennae and satellite dishes toward the back of secondary roof slopes or on the rear roof slope.
- d. Screen antennae and satellite dishes from view as much as practicable by placing behind chimneys, dormers, or in roof valleys.
- e. Paint mechanical and utility equipment to blend with the building or landscape, if the existing color stands out.
- f. Installing runs of ducts, pipes, or cables on the exterior of a building is not appropriate.
- g. The installation of communication towers within the boundaries of the historic district is not appropriate.

**2. Install modern systems and equipment in a manner that avoids damage to historic materials and features.**

- a. When installing roof-mounted systems, use methods that do not damage historic fabric or require removal of character-defining features.
- b. Install equipment in such a way that it can be easily removed in the future without damaging historic fabric.
- c. It is not appropriate to cut holes in features such as decorative cornices or rake boards to accommodate cables or modern systems or equipment.

**3. Install passive energy collection systems in a manner that does not diminish the character of the building.**

- a. Install freestanding or detached solar collectors in areas that are inconspicuous from the public street right-of-way.
- b. Select a finish for exposed hardware, frames, and piping that blends with that of the primary building.
- c. It is not appropriate to install framing systems with reflective surfaces. Matte finishes of black, brown, and gray may be appropriate.



## Accessibility and Safety

First and foremost, make sure all work meets the requisite building and zoning code requirements. Then ensure that work minimizes the impact on the historic character and materials of a building while still accommodating accessibility and safety needs.

**1. Minimize the impact of accessibility and safety features on the visual character of the building and the district.**

- a. Locate ramps and other means of access along secondary elevations whenever possible.
- b. Scale the access feature to the historic building to which it is being added, within building code requirements.
- c. Design ramps to have simple, non-detracting detailing.
- d. Design accessibility elements such as handrails and balusters to be simple in character and finish.
- e. Select finishes that blend with the building or landscape.

**2. Minimize the impact of accessibility and safety features on the historic fabric of a building.**

- a. Design and install ramps or other means of access so that they do not require removal or alteration of character-defining features of the original front porch, façade, or entry.
- b. Design and install ramps so that they can be removed in the future without damaging historic materials.
- c. If a wider entry is necessary to meet the accessibility code, alter an opening on a secondary elevation rather than on the front elevation.

## Accessory Structures

Accessory structures may include carriage houses, garages, sheds, or gazebos. These structures impact the relationship of open to occupied space on a property. They should be preserved, repaired, or rehabilitated as necessary in order to promote their continued use as significant features of a site.

It is important that new accessory structures be designed to be compatible with the character, massing, and scale of the primary building on a lot.

### 1. **Preserve historic accessory structures.**

- a. Retain and repair historic accessory structures in their original locations.
- b. Retain historic materials and configuration, including massing, scale, roof shape and pitch, and placement of doors and windows.
- c. Retain and repair historic sidings, doors, and windows, using in-kind materials where repair is necessary.
- d. Retain historic doors (particularly garage or carriage doors) and windows on accessory structures.

- e. Replace elements that are deteriorated beyond repair with new units that are compatible in design and vintage.
- f. Altering the design of historic accessory structures to be inconsistent with their original character is not appropriate.
- g. Demolition of historic accessory structures is not appropriate.

### 2. **Adapt historic accessory structures for current needs with an addition, rather than demolishing and reconstructing.**

- a. Design additions that are subordinate to the mass of the original accessory structure.
  - b. Design additions that are simple in character.
  - c. Locate additions below the roof ridge of the original structure and use a roof shape compatible with the original structure.
  - d. Offset or recess additions from existing wall panes.
  - e. Additions that are larger than the original structure are not appropriate.
3. **Design new accessory structures to be compatible with the primary building on the lot as well as historic accessory structures.**
- a. Design new accessory structures to be visually compatible with the property and the district in terms of scale, size, and materials. Simplified designs are the most appropriate.
  - b. Utilize a roof shape and pitch that is consistent with accessory structures historically found in the district or

## THINGS TO CONSIDER...

### DETERMINING THE APPROPRIATENESS OF NEW ACCESSORY STRUCTURES

In evaluating the appropriateness and compatibility of proposed new accessory structures within the district, the HZC will review the application to determine if the proposed building conforms to the general characteristics of the neighborhood and can be constructed without diminishing the character-defining qualities of the particular lot and neighborhood:

**LOCATION:** Does the location of the proposed accessory structure respect the character of the site and the relationship of existing buildings to open space?

**DEMOLITION:** Does the proposed accessory structure require demolition of historic buildings or removal of significant site features such as mature landscaping or historic fencing?

**SIZE:** Is the size, including the height, of the proposed accessory structure compatible with the surrounding area?

**ORIENTATION:** Is the proposed accessory structure oriented square to the lot line?

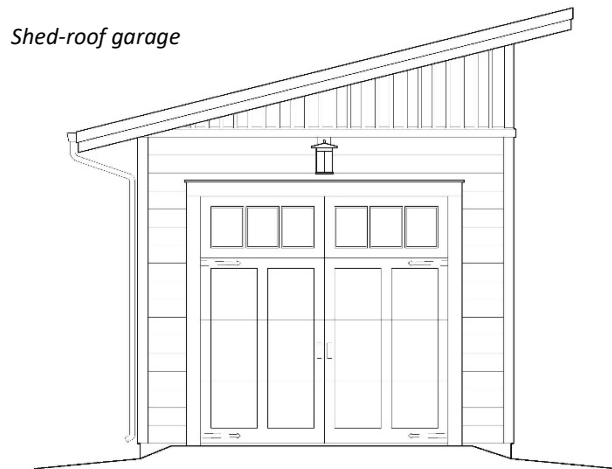
**CHARACTER:** Does the proposed accessory structure utilize a simple, unobtrusive design that is neither overtly modern nor falsely historic?

**MATERIALS:** Are traditional materials or compatible alternative materials proposed?

**NOTE:** At its discretion, the HZC may also request samples of garage door or other material in order to verify their appropriateness.

with that of the primary building. Gambrel (barn type) roofs are not appropriate.

- c. Select exterior wall and roof materials that are visually compatible with historic materials found in the district.
- d. Select windows and doors that are proportionate to the size of the accessory structure.
- e. Accessory structures that are greater than one-third of the footprint of the primary building on the site are not appropriate.



*Shed-roof garage*

4. **Respect the character of the site when designing a new accessory structure.**

- a. Retain the historic relationship between the primary building, open space, and landscape features when siting a new accessory structure.
- b. Locate new accessory structures in rear yards unless documented precedent exists within the district for other locations.

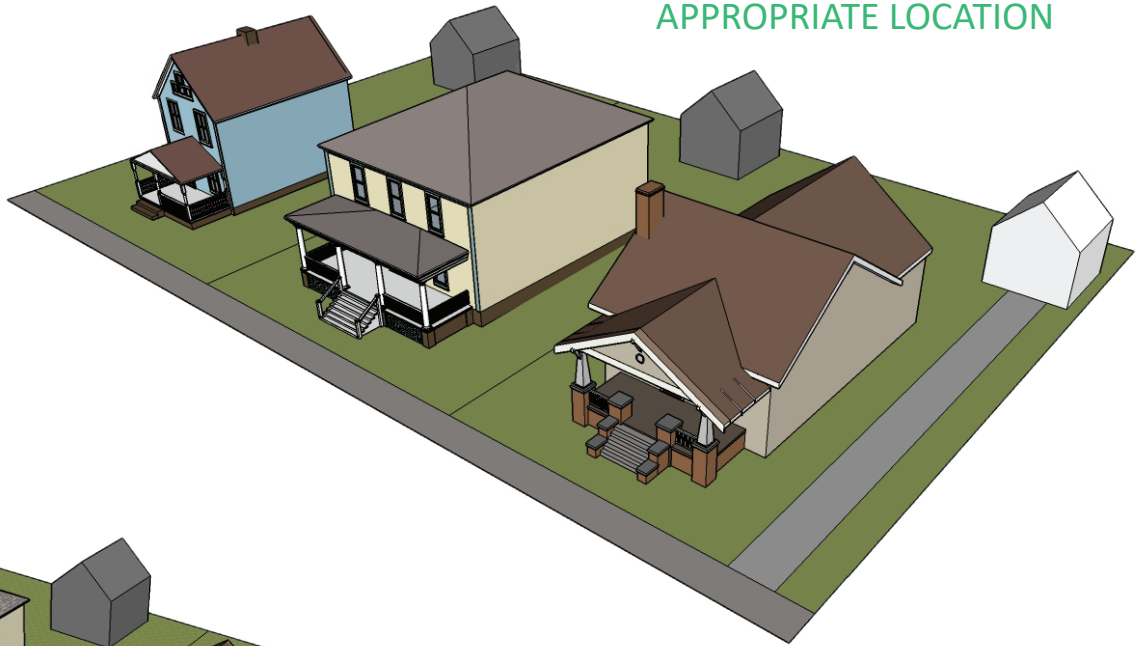


*Hipped roof garage  
with lower cross-gables*

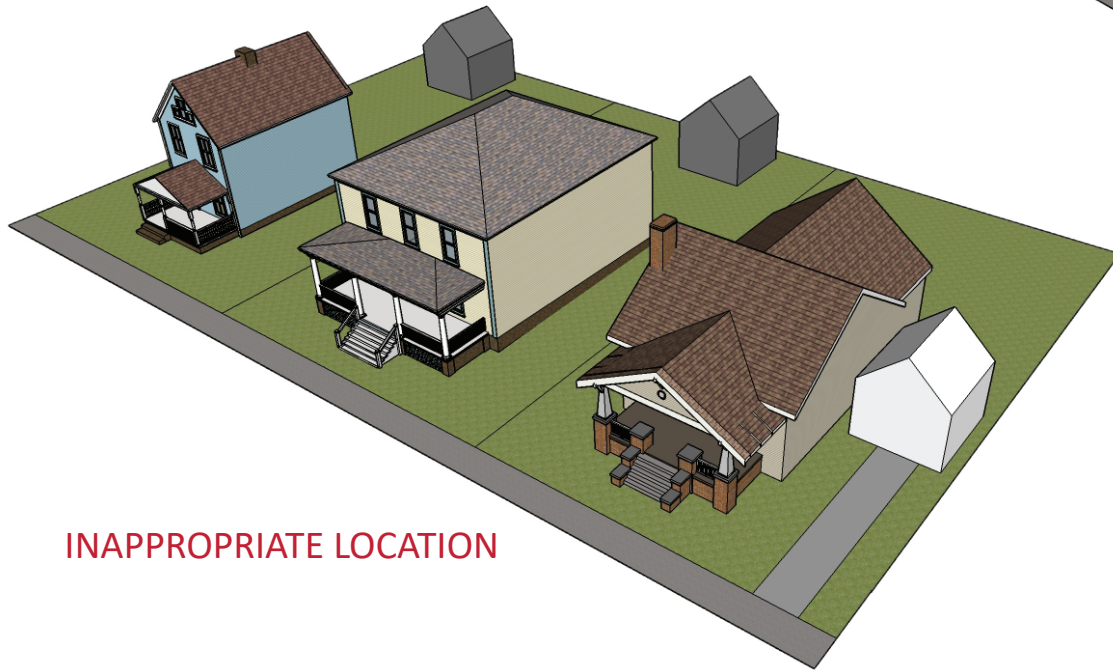
# ACCESSORY STRUCTURE LOCATIONS

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APPROPRIATE LOCATION



INAPPROPRIATE LOCATION



## Additions

During the continued life of a building, there is often a need to adapt it to provide additional space. While many historic buildings can readily accommodate a new addition, careful consideration must be given to the design and location of a proposed addition. With proper planning and consideration of the historic qualities of the primary building, an addition can both provide needed space and be compatible with the building and the district. On the other hand, an inappropriate design can result in an irrecoverable loss of historic character.

**1. Locate additions to minimize visual impact on the original building and the district.**

- a. Place new additions on the rear elevation or at the rear quarter of a side elevation.
- b. Locate new additions so that they do not conceal, destroy, or cause removal of character-defining features of the original building.

- c. Locate a new addition so that significant landscape features (such as mature trees) and historic accessory structures are not damaged or removed.
- d. Locate additions so that they can be removed in the future, if so desired, without causing damage to the character-defining features of the original building.
- e. Design an addition so that it does not dramatically alter the relationship of open to occupied space on a property.

- f. It is not appropriate to construct an addition that requires removal of a character-defining feature.
  - g. It is not appropriate to construct an addition that significantly alters the original structural system of the original building.
  - h. It is not appropriate to construct an addition that changes the orientation of the primary entry on the original building.
2. **Design an addition that respects the massing and scale of the primary building and surrounding structures.**
- a. Design an addition so that it is compatible with the size, scale, setback, and massing of the primary building. It is not appropriate for the addition to be taller than the main building.
  - b. Limit the size of an addition so that it does not diminish or visually detract from the primary building or district.
  - c. Additions that exceed one-third of the primary building's original footprint are not appropriate. Design

## CONSIDER REUSING HISTORIC MATERIALS

Make every effort to limit the amount of historic materials and features removed when constructing an addition. If necessarily removed materials are sound or repairable, retain them for future projects or consider donating them to someone else who might be able to use them on another project. Doing so continues to make use of the embodied energy captured in existing materials and limits landfill waste resulting from the project.

an addition with walls that are offset from those of the primary building in order to differentiate the two.

- d. Consider separating a large addition from the primary building by a small linking corridor (called a “hyphen”) that distinguishes the two forms from one another.
  - e. Design an addition with reference to the roof shape and pitch of the primary building. The roof of an addition should not result in changes to the shape and pitch of the primary roof.
3. **Select a design that is compatible with the character and materials of the original building and surrounding structures.**
- a. Design an addition so that it is compatible with the general character of the original building but so that it stands as a product of its own time and it is clear what is historic and what is new. Subtle changes in setback, material, and architectural motif are appropriate methods to employ.
  - b. Simplified details that reference the character of the original building are appropriate.

## CONSIDERATIONS WHEN PLANNING AN ADDITION

When planning to construct an addition, it is important to be aware of the factors that the HZC will consider in its review of the appropriateness of the proposed addition. Questions that the HZC will ask include:

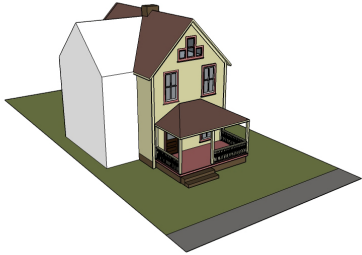
- Is the addition visible from the public street right-of-way?
- Does the addition diminish the ability to interpret the character and vintage of the original building?
- Does the addition detract from adjacent properties?
- Does the addition require significant alterations or removal of character-defining features?
- Does the addition require structural changes to the original building?
- Is the massing of the addition subordinate to the original building mass?
- Is the addition offset from the original building to provide differentiation?
- Is the design simple and compatible with the character of the original building and surrounding properties?
- Could the addition be removed in the future without causing irreversible damage to the historic building?



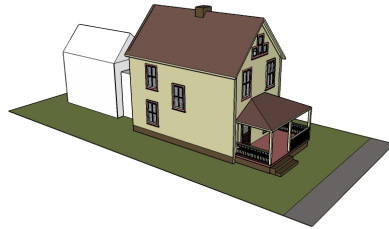
- c. Design door and window openings that conform to the proportion, size, and rhythm of those on the original building.
- d. Visible foundation walls are to be offset at least 6 inches from those of the original building.
- e. Use materials historically found on the original building or compatible alternative materials that are consistent in color, texture, and scale.
- f. Duplicate only the most basic details from the original building, such as trim. Minimize replication of highly decorative or distinguishing details found on the original building.
- g. Designs that starkly contrast with the original building and call undue attention to the addition are not appropriate.

- 4. **Carefully consider the location and character of rooftop additions to minimize visual impacts.**
  - a. Appropriate rooftop additions are generally limited to dormers.
  - b. Limit dormers and rooftop additions to places where they do not detract from a character-defining facade. It is not appropriate to add such features to the front facade.
  - c. Scale rooftop additions to the primary building mass so that they are proportionately consistent.
  - d. Large rooftop additions that dramatically alter perception of the original building mass are not appropriate.
  - e. It is not appropriate to remove or conceal character-defining features of the roof, such as finials, chimneys, or cresting, when adding a rooftop addition.

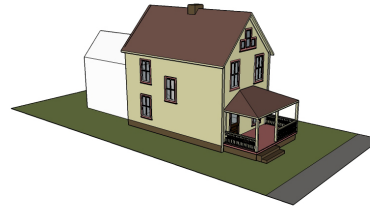
INAPPROPRIATE  
ADDITION



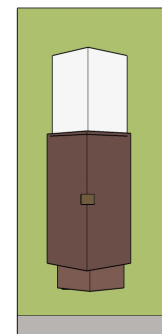
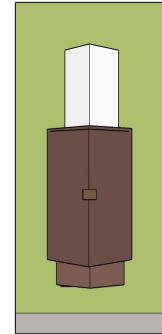
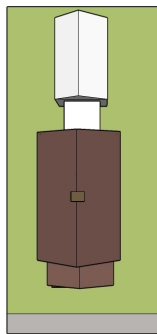
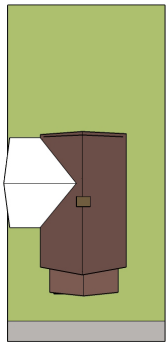
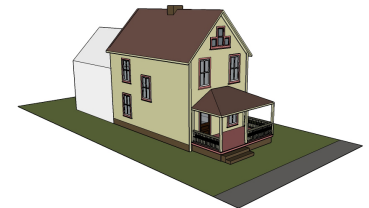
APPROPRIATE  
ADDITION



APPROPRIATE  
ADDITION



APPROPRIATE  
ADDITION



Large Side Addition

Rear Recessed with  
Connector Addition



Rear Recessed Addition

Large Rear Addition

## Construction of Primary Buildings

Designing a new building to fit within a historic neighborhood requires careful planning and an inherent understanding of the area's architectural history in order to determine the basic features that reinforce the district's character. Replication of historic house designs is not required, although it is acceptable to use them as a basis for new construction. The guidelines allow for contemporary designs that allude to the historic styles. In this way, the new building design is differentiated from its historic counterparts and avoids creating a false sense of history.

The following elements are particularly critical in considering the design of a new construction within the district: location, setback, form, scale, massing, height, and roof shape.

1. **Design new buildings to be compatible with the existing site.**
  - a. Significantly altering the existing topography of a site to accommodate a new structure is not appropriate.
  - b. Consolidating lots in to a larger property in order to accommodate a larger structure disrupts the pattern of properties within the district and is not appropriate.
2. **Locate new buildings in a manner that is compatible with established precedents of building patterns within the district.**
  - a. Retain the historic relationship among buildings within the district by basing the location of a new building on patterns of existing setbacks, orientation, and spacing between buildings.

- b. Maintain the existing spacing of front and side yard setbacks along a block.
- c. Orient the front entrance toward the main street.
- d. Site a building so that it is parallel to existing lot lines.
- e. Design new porches to be consistent with the rhythm of those existing in the district.
- f. Locate related new accessory buildings at the rear of the lot consistent with those existing in the surrounding district.

3. **Design new buildings so their size is compatible with existing buildings in the district.**

- a. Maintain the established height and scale of the street by designing new buildings to be within the typical range of heights and forms.
- b. Design new buildings to have massing similar to those traditionally found within the district.
- c. Use floor-to-ceiling heights that are consistent with those of existing structures within the district.

- d. Choose a building form that has a similar complexity to those elsewhere in the surrounding area.
- e. Break up large massing through vertical and horizontal articulation.

4. **Design new buildings with features that reflect those existing in the district.**

- a. Include substantial front porches that are at least 8 feet in depth.
- b. Balance facade proportions with those historically found in the district. The composition and scale of facade elements, such as porches, significantly affect the aesthetic of the district.
- c. Use materials with traditional dimensions.
- d. Maintain traditional ratios of solid wall spaces to openings.
- e. Utilize window and door openings that are compatible with those on surrounding buildings in placement, spacing, scale, proportion, and size. Windows are to have a vertical orientation. It is inappropriate to mull

together without installing facing and trim-work between them.

**5. Select a roof form and pitch that is compatible with established precedents within the district.**

- a. Use roof forms similar to those traditionally present in the streetscape and the district, relating roof pitch and shape to the scale of the building.
- b. Use contemporary interpretations of traditional features such as cornices and rake boards to add visual interest.

**6. Design a new building to be compatible in character with existing structures but also to be a product of its own time.**

- a. It is appropriate to employ contemporary interpretations of historic designs or use a simple contemporary design that conforms to general characteristics such as massing, scale, and proportions.
- b. Include architectural details or building articulation such as cornices, lintels, brackets, and chimneys. Contemporary interpretations of traditional details are

encouraged, but avoid oversimplified, bland buildings that stand in stark contrast to the rich architectural variety within the district.

**7. Utilize traditional materials or alternative materials that are comparable to those found on nearby buildings within the district.**

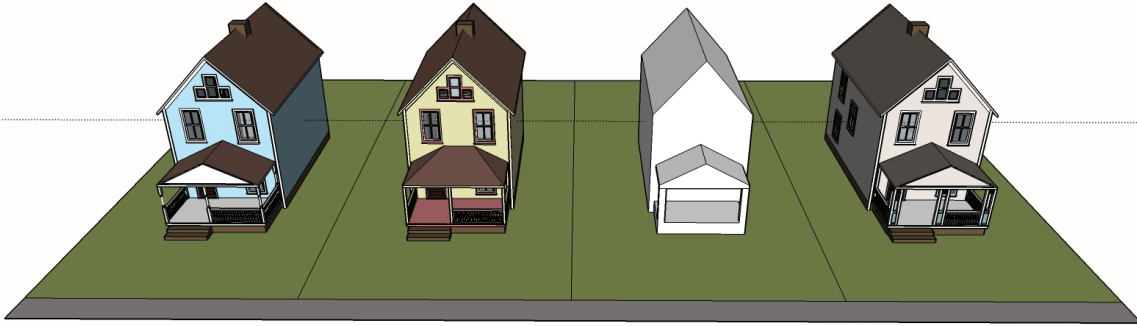
- a. Select materials with textures and finishes that are compatible with those of the surrounding area, promote a sense of human scale, and have proven durability.
- b. Where wood siding is installed, utilize trim boards, which show depth and have a more finished appearance.
- c. Use masonry materials that are compatible with the character of traditional masonry materials in size and texture.
- d. Alternative materials to wood are appropriate for new construction. Materials that simulate wood siding such as vinyl siding and fiber cement board may be utilized. Dutch siding is not appropriate.

- e. Where fiber cement board or other wood alternative materials are selected, use a smooth-finish and maintain a 4 to 5-inch reveal compatible with historic details.
  
- f. It is not appropriate to use fiber cement board or other material that has a faux wood grain.

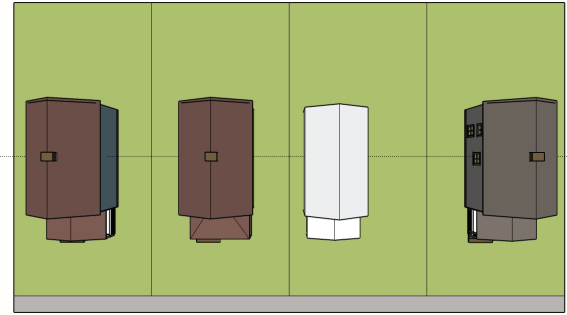


***Faux wood grain is an inappropriate finish in the historic district because it does not present an authentic appearance.***

## NEW CONSTRUCTION SPACING

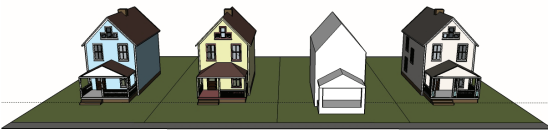


APPROPRIATE

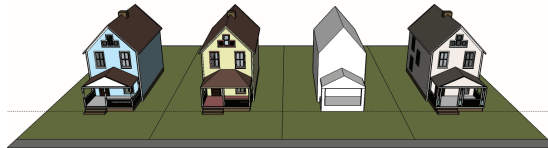


INAPPROPRIATE

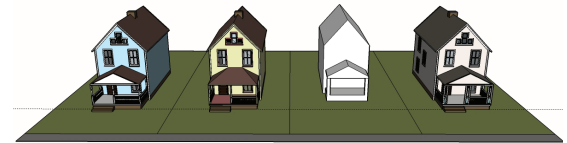
## NEW CONSTRUCTION SETBACK



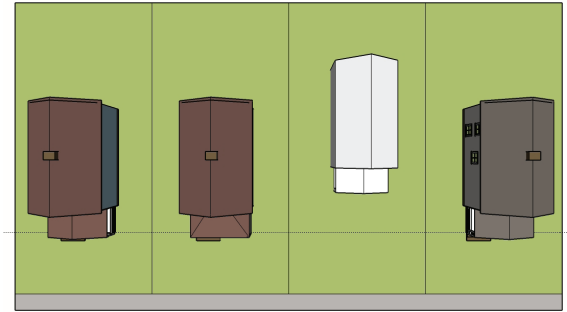
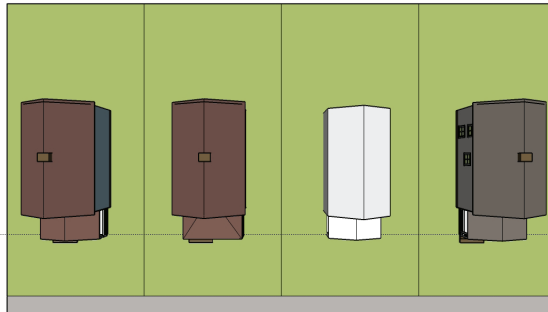
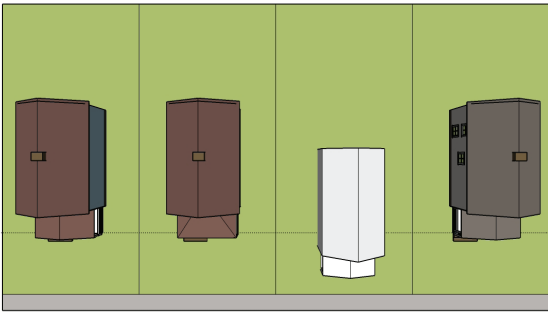
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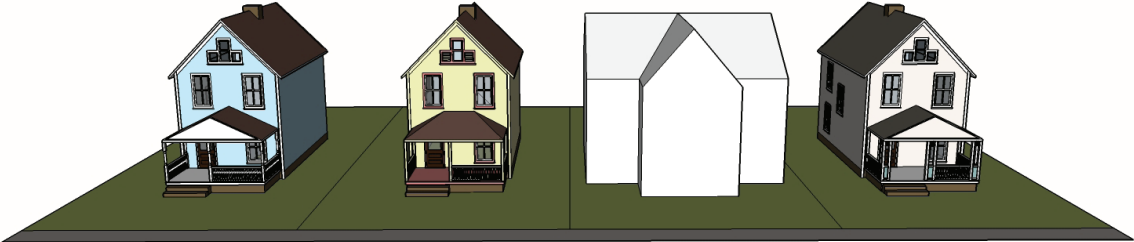
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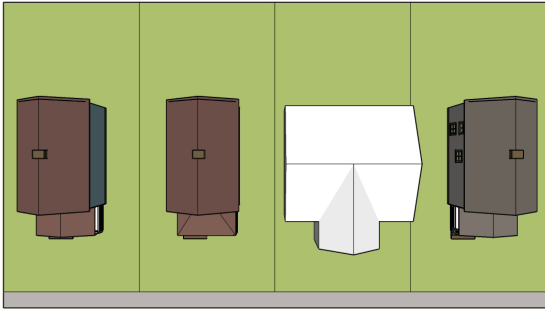
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### NEW CONSTRUCTION MASSING

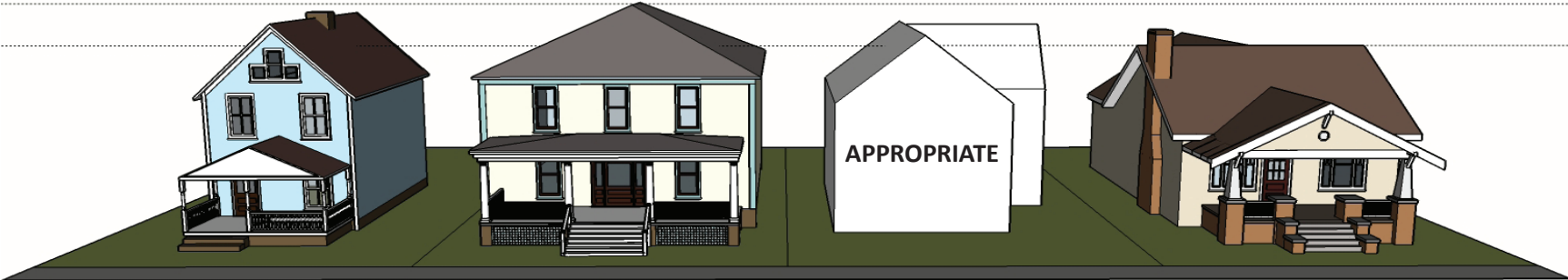


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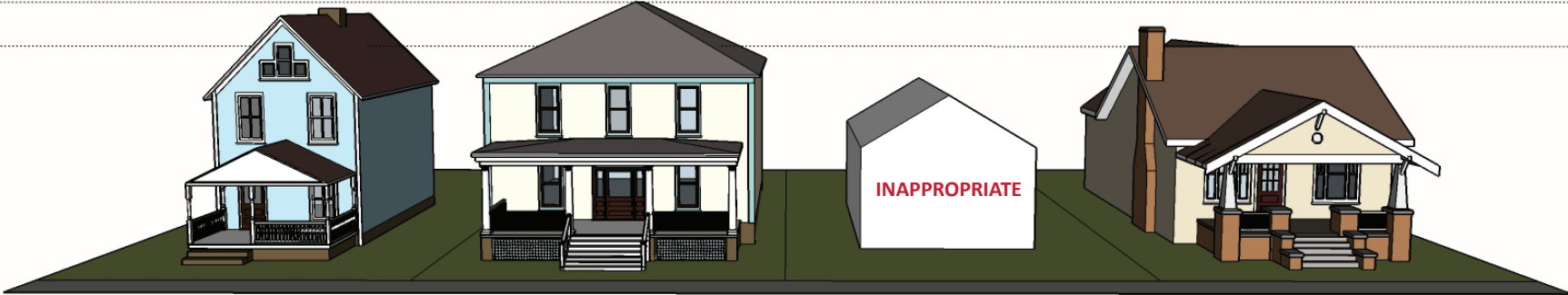


INAPPROPRIATE

### NEW CONSTRUCTION HEIGHT



APPROPRIATE



INAPPROPRIATE



# FURTHER GUIDANCE FOR NEW CONSTRUCTION

## APPLYING THE GUIDELINES

The HZC will utilize the guidelines to answer the following questions to determine compatibility:

- Does the building maintain the street character?
- Does the building fall within the established rhythm along the street?
- Is the building orientation and setback consistent with the streetscape?
- Is the front entrance oriented to the street?
- Does building massing and form fall within the established range of the streetscape?
- Does the front facade incorporate human-scale elements?
- Is the ratio of solid to openings (windows and doors), particularly on the facade, consistent?
- Is the complexity of the building form appropriate within the context of the streetscape?
- Does the roof shape and pitch conform to those within the district?
- Are materials scaled to the building and appropriate traditional materials or modern substitute counterparts with proven durability?
- Is the building appropriately articulated by architectural details that recall historic forms but stand as a product of their own time?

## RECOMMENDATIONS FOR SUSTAINABILITY AND ENERGY EFFICIENCY

- Maintain site features such as mature trees that provide natural shade.
- Site a building to take advantage of passive solar gain in the winter and deflection in the summer.
- Incorporate features such as porches to provide outdoor living space
- Use locally-sourced or recycled materials that are compatible with traditional materials in the district.
- Consider roof forms that allow for the installation of solar collectors at the rear of secondary elevations or on the rear elevation.
- Locate windows and doors to allow for indoor cross ventilation.

## CONFLICTS WITH BASE ZONING

At times, appropriate setbacks for buildings may conflict with the base zoning of any particular district. However, the application of the historic zoning overlay (H) provides a mechanism for addressing such conflicts.

The following types of setbacks can be approved by the HZC:

- Front setbacks for new construction
- Side setbacks for construction of accessory structure of not more than 120 square feet in area

It is important that the applicant coordinate early with zoning staff in the City of Knoxville Development Services Department in order to work through applicable zoning issues prior to advancing too far in a project. This coordination will help determine if an adjustment or variance is required for the project.

## Relocation

Moving a building is a last resort to save it from demolition. Although relocation will destroy the original context and compromise its significance, some of the vacant lots in the district may be appropriate receiving areas. Significant buildings in Knoxville have been saved from demolition and successfully moved with benefits to the community.

Because moving a building is expensive and complex, every aspect of the move should be considered early in the process. Is there a threat of demolition other than through neglect? Is relocation the only alternative? Does the building's significance justify the move? Will the structure survive the move and adapt to its new site?

1. **Ensure that the structure to be moved is architecturally compatible with the adjacent buildings within the receiving area.**
2. **Choose a site that corresponds to the size and proportion of the structure to be moved. Orient the building to the**

## THINGS TO CONSIDER...

### PREPARATION FOR RELOCATION OF STRUCTURES

- Choose relocation only as a last resort to demolition.
- Document the building as well as the original site through drawings and photographs before moving it.
- Plan the relocation route thoroughly and contact utility companies and city officials to secure necessary permits.
- Coordinate efforts with affected private property owners to ensure minimum delays.
- Protect the structure from vandalism or weather damage before, during and after the move.

**street and ensure the setback and lot coverage is compatible with the existing structures on the block.**

- 3. Ensure that the shape, mass and scale of the building to be moved conforms to the existing structures on the block.**
- 4. Protect important site features of the original site, the new site and the route of the move during relocation. Ensure**

**the move will not destroy mature trees, vegetation and historic accessory structures.**

- 5. Relocate a building as a single, intact unit or in sections to prevent the unnecessary loss of historic building fabric. Partial or complete disassembly is acceptable only as a last resort as it could result in a substantial loss of historic building material.**

## Preparation for Demolition of Structures

Demolition creates a permanent change in and loss to the district, reducing its historic and architectural significance. Demolition will be considered only when all other alternatives have been explored.

1. **Work with the Historic Zoning Commission (HZC) to identify alternatives to demolition.**
  - a. Redesign the project to avoid any impact to the structure or setting.
  - b. Incorporate the structure into the overall design of the project.
  - c. Convert the structure into another use (adaptive reuse).
  - d. Relocate the structure on the current property.
  - e. Relocate the structure to another property within the same H-1 zoning overlay.
  - f. Relocate the structure to another property within the city of county.
2. **Before demolition is considered, document the condition of the building, including any public health and safety issues, such as asbestos or lead paint.**
3. **Document significant structures through photographs and drawings prior to demolition.**
4. **Describe any impact of demolition of the subject property on the surrounding properties.**
5. **Work with the HZC staff and interested groups to facilitate salvage of usable architectural materials if demolition is approved.**
6. **Approval for demolition may be considered if the HZC determines that the building or structure does not contribute to the historical or architectural character of the district.**

**A building's contribution may include its linkage, historically or architecturally, to other buildings in the district, such that the collection of buildings possesses greater significance than the individual resource.**

## APPENDIX A :

# Frequently Asked Questions About the Design Review Process

### **DOES MY PROJECT REQUIRE DESIGN REVIEW?**

If you are proposing exterior work to your building located within a historic overlay district (H-1), and the work requires a building permit or driveway permit, then a Certificate of Appropriateness (COA) is required. Interior work does not require design review unless it will affect the exterior appearance of the building (such as enclosing a window opening from the inside).

### **WHERE DO I BEGIN THE REVIEW PROCESS?**

You can obtain preliminary information on the design review process, fees, application forms and design guidelines at [www.knoxplanning.org](http://www.knoxplanning.org). The primary contact for the design review process is the historic preservation planner at Knoxville-Knox County Planning, who serves as staff to the Historic Zoning Commission.

### **WHEN IS THE BEST TIME TO BEGIN COORDINATION WITH PLANNING STAFF?**

In order to avoid unnecessary delays and expenses, you should contact staff as early as possible in your design process to verify that you are on the right track with your project.

### **HOW MUCH DOES THE DESIGN REVIEW PROCESS COST?**

The HZC charges a fee for a Certificate of Appropriateness scaled to the nature of the proposed work. The latest information on fees associated with COAs can be found at [www.knoxplanning.org](http://www.knoxplanning.org).

## **HOW CAN I GET THROUGH THE DESIGN REVIEW PROCESS MORE QUICKLY?**

The design review process is guided by a set calendar that allows for consistent meeting dates and submittal deadlines. Providing all the information outlined in the application checklist is important to ensure that projects are reviewed efficiently. The best way to speed up the process is to coordinate early with planning staff to ensure that you submit appropriate, complete materials for your project.

## **DO I NEED TO HIRE A PROFESSIONAL?**

Not all projects necessitate hiring a design professional or contractor to assist with the design review process. For example, replacing a front door will not require the use of a professional. However, for complex projects that require the submission of scaled drawings or renderings, retaining the services of a professional will lessen the chances that the project will be sent back to the drawing board for revisions. You are the one responsible for “selling” the HZC on your project.

## **CAN I BEGIN WORK AFTER RECEIVING A COA?**

Usually, going through the design review process and receiving a COA is just the first step of the process necessary to begin work on a project. Check with the Building Inspector to ensure that you have all necessary permits prior to beginning work. Note that you cannot receive a building permit without first obtaining an approved COA.

## **WHAT IF AN EMERGENCY REPAIR IS NEEDED?**

If a building within a historic district requires an emergency repair due to unforeseen events such as a tree collapse, fire, or weather event, the Building Inspector can choose to issue an emergency work permit without review by the HZC.

## APPENDIX B:

# Historic Zoning Commission Pre-Application Review

## PLANNING YOUR PROJECT

For larger or more complex projects, such as new construction or certain accessory structures, a pre-application review by the Historic Zoning Commission (HZC) is required. The purpose of a pre-application review is to provide helpful feedback to the applicant early in the design process. The focus of the pre-application review is to provide guidance that will ultimately result in consistency of the project with design guidelines for the historic districts and with the Secretary of Interiors (SOI) Standards for Rehabilitation. There is no fee for a pre-application review. Examples of projects that would require a pre-application review include:

- Construction of a new primary structure
- Construction of an accessory structure proposed to have a footprint greater than 30% of that of the main structure
- Construction of an accessory structure proposed to have a height greater than 15 feet compared to the average roof slope
- Applicants are encouraged to take advantage of the pre-application review process for construction of large additions—where the project footprint exceeds 33% of the size of the existing building.

## SCHEDULING A PRE-APPLICATION REVIEW

Pre-application reviews are held after the regularly-scheduled HZC public meetings which begin at 8:30 a.m. and fall on the third Thursday of every month. A completed pre-application form and required materials must be submitted according to the same application submittal deadlines for a Certificate of Appropriateness. Upon receipt of the form and materials, staff will determine the completeness of the submittal. If the submittal is complete, the review will be scheduled for the next available HZC meeting. Pre-application review submittals are advertised along with the regular

HZC agenda in the newspaper at least 12 days prior the meeting. The meeting agenda and application package are posted at least five days prior to the meeting date on the MPC website ([www.knoxmpc.org](http://www.knoxmpc.org)).

## **COMPLETING A PRE-APPLICATION FORM**

A pre-application form must be completed, signed and submitted with the following:

- Scaled, dimensioned drawings or sketches, completed at least to the conceptual level, (preferably printable at 8.5" x 11") which correctly depict the existing and proposed design and include:
  - Main elevations
  - Floor plan and dimensioned site plan
  - Indication of proposed materials on drawings or on specification sheets
- Photographs of existing exterior elevations and/or site conditions
- While not required, a 3-D or modeling study of a streetscape where infill construction is being proposed is helpful in the HZC's review.

## **THE PRE-APPLICATION REVIEW MEETING**

Typically, the HZC allows 20-30 minutes for review of each project. The informal review format is as follows:

1. **Staff will make a brief presentation (5 minutes) identifying aspects of the project that should be addressed by the HZC.**
2. **Applicant will make a brief presentation (5 minutes) describing the project.**
3. **The HZC will discuss the project and consider whether the project is consistent with the applicable design guidelines and the SOI Standards.**



While Commission members may discuss the appropriateness of a design approach and how it is or is not supported by the design guidelines or the SOI Standards, their role is not to re-design the project, but to respond to the pre-application before them. Given the complex nature of some large rehabilitation projects, the HZC may recommend that the applicant retain an architect experienced in restorations or infill construction.

4. **At the end of the review, the HZC Chairperson will summarize the aspects that were identified as not meeting specific design guidelines.**

At least one pre-application review will take place prior to a qualifying project being officially submitted for a HZC public hearing. Depending on the degree of clarity of the presentation or the degree of revisions that are recommended, the HZC may recommend an additional pre-application review.

**PLEASE NOTE:** Although it is the goal of the HZC to provide comments that will result in a project that will be approved, comments provided during the pre-application review are not binding, and neither the staff recommendation nor the final decision of the HZC can be based on these comments.

**A completed pre-application form and accompanying materials should be submitted to:**

Knoxville-Knox County Planning  
Suite 403, City County Building  
400 Main Street  
Knoxville, Tennessee 37902

or

may be emailed to: [historiczoning@knoxplanning.org](mailto:historiczoning@knoxplanning.org)

## QUESTIONS?

All questions regarding the pre-application review process should be directed to Historic Zoning Commission staff at 865-215-3795. Design guidelines can be viewed on the Knoxville-Knox County Planning website (<http://www.knoxplanning.org/historic>).

**NOTE:** Please be advised that a staff member from MPC may take further photographs of your property for the HZC pre-application review meeting.

## APPENDIX C:

# Glossary of Architectural Terms

## A

### **ALUMINUM SIDING:**

Sheets of exterior wall covering fabricated from aluminum to resemble wood siding. Aluminum siding was developed in the 1940s and was popular into the 1950s and 1960s.

### **APPROPRIATE:**

Suitable for, or compatible with, a property, based on accepted standards and techniques for historic preservation.

### **ARCH:**

A curved and sometimes pointed structural member used to span an opening.

A rounded arch represents classical or Romanesque influence whereas a pointed arch generally denotes Gothic influence.

### **ARCHITRAVE:**

The lower part of a classical entablature, resting directly on the capital of a column, the molding around a window or door.

### **ART DECO:**

A style of decorative arts and architecture popular in the 1920s and 1940s, characterized by geometric forms and exotic motifs.

### **ASPHALT SHINGLE:**

A shingle manufactured from saturated roofing felts, rag, asbestos or fiberglass coated with asphalt and finished with mineral granules on the side exposed to weather.

### **AWNING:**

A roof-like cover of canvas or plastic over a window or door to provide protection against sun, wind or rain.

## B

### **BALUSTRADE:**

A series of balusters or uprights connected on top by a handrail and sometimes on the bottom by a bottom rail to provide an ornamental and protective barrier along the edge of a stair, roof, balcony, or porch.

**BARGEBOARD (ALSO VERGE BOARD):**

A sometimes richly ornamented board placed on the verge (incline) of the gable to conceal the ends of rafters; typically seen in the picturesque styles of the nineteenth century such as the Gothic Revival and the Queen Anne.

**BATTERED COLUMN:**

A column that is thicker at the bottom than at the top.

**BAY:**

(1) An opening or division along a face of a building; for example, a wall with a door flanked by two windows is three bays wide. (2) The space between principle structural members, as in a timber frame, the space between posts. (3) A projection from the facade of a building, such as a bay window.

**BEVELED GLASS:**

Glass panels whose edges are ground and polished at a slight angle to form a beveled border; used for entrance doors and ornamental work.

**BRICK BOND:**

The pattern in which masonry, particularly brickwork, is laid to tie together the thickness of the wall.

**BRACKET:**

Projecting support members under eaves or other overhangs; plain or decorated. Often called console brackets, they are characteristic of the Italianate style.

**BULKHEAD:**

The area below the display window on the front facade of a commercial storefront.

**BUNGALOW:**

A house type and architectural style popular in the early 20th century. Typically defined as a relatively modest, one-story dwelling of informal character, the bungalow traced its origins to British colonial India, as well as to the Arts and Crafts movement of the 19th century.

**C****CAPITAL:**

The top member of a column, usually decorated or molded. Each classical order —Doric, Ionic, Corinthian, Composite — has its characteristic capital.

**CASEMENT:**

A window with sash hung vertically, which opens inward or outward.

**CASING:**

The finished visible framework around a door or window.

**CERTIFICATE OF APPROPRIATENESS**

When an owner within a historic or neighborhood conservation district wants to make changes to the exterior of his or her property, a Certificate of Appropriateness (COA) is needed from the Historic Zoning Commission (HZC) in addition to other permits that may apply. The COA grants permission for the proposed work that is compatible with the adopted design guidelines.

**CHAMFER:**

A beveled edge on the corner of a post, wall, etc. May take the form of a flat surface, or a more elaborately molded surface. Edges so beveled are said to be chamfered.

**CHARACTER-DEFINING-FEATURES:**

Individual physical elements of any structure, site, street, or district which contributes to its overall historic or architectural character,

and for which it is recognized as historically or architecturally significant.

**CLAPBOARD:**

Long horizontal boards with one edge thicker than the other, overlapping to cover the outer walls of framed structures; also known as weatherboard.

**CLASSICAL:**

The architecture of ancient Greece and Rome, and architecture using forms derived from ancient Greece and Rome.

**COLONIAL REVIVAL (1870-1950):**

An architectural style that drew freely on motifs associated with the American past, including elements of the Colonial period. Features of the style include a balanced facade; the use of decorative door crowns and pediments, sidelights, fanlights and porticos to emphasize the front entrance; double hung windows with multiple panes in one or both sashes; and the frequent use of string courses or decorative cornices.

**COMPOSITE ORDER:**

A classical order that incorporates the large volutes (spirals) of the Ionic Capital with the lush foliage of the Corinthian Capital.

**COPING:**

The top course of a masonry wall or parapet which projects beyond the wall surface to throw off the rain.

**CORBEL:**

A small projection built out from a wall to support the eaves of a roof or some other feature.

**CORINTHIAN ORDER:**

A classical order distinguished by the capitals, which are ornamented with stylized acanthus leaves.

**CORNICE:**

In classical architecture, the upper projecting section of an entablature; projecting ornamental molding along the top of a building or wall. The term is loosely applied to any horizontal molding forming a main decorative feature such as a molding at the junction of the walls and ceiling.

A raking cornice extends along a slanting (raking) side of a gable or pediment.

A boxed cornice is a simple treatment with a vertical fascia and a horizontal soffit board enclosing the ends of the ceiling joists where they project at the eaves.

**COURSE:**

A horizontal row of bricks, stones, or other masonry units.

**CRAFTSMAN (1905-1930):**

The Craftsman style, which originated in southern California, was inspired primarily by the work of Greene and Greene, two brothers who practiced architecture in Pasadena (the style was also influenced by the English Arts and Crafts movement).

Characteristics include low pitched gable roofs with exposed rafters; recessed porches; tapered columns; heavy stone foundations and windows with multi-pane top sash.

**CRESTING:**

Ornamental ironwork used to embellish the ridge of a gable roof or the upper cornice of a mansard roof.

**CROSS GABLE:**

A gable which is set parallel to the ridge of the roof.

**CUPOLA:**

A small domed structure, usually polygonal, built on top of a roof or tower.

**D****DECK:**

A roofless porch, usually at the rear of a building, popular in contemporary residential architecture.

**DENTILS:**

Small, closely placed blocks set in a horizontal row used as an ornamental element of a classical cornice.

**DORIC ORDER:**

The oldest of the classical Greek orders, characterized by heavy fluted columns with no base, simple unadorned capitals supporting a frieze of vertically grooved tablets or triglyphs set at intervals.

**DORMER:**

A vertical window projecting from the slope of a roof; usually provided with its own roof; used to light rooms in a half story.

**DOUBLE-HUNG WINDOW:**

A window with two sashes, each movable by means of sash cords and weights.

**DOWNSPOUT:**

A pipe that carries water from the gutters to the ground, or to a sewer connection.

**E****EAVES:**

The projecting overhang at the lower edge of a roof.

**ELEVATION:**

A scaled drawing which illustrates the view of any side of a building.

**ELL:**

A wing or extension of a building, often a rear addition, positioned at right angles to the principal mass.

**ENGAGED COLUMN:**

A column that is in direct contact with a wall; at least half of the column projects beyond the surface of the wall to which it is engaged. Sometimes called a pilaster

**ENGLISH BOND:**

A method of laying brick wherein one course is laid with stretchers and the next with headers.

**ENTABLATURE:**

The horizontal part of a classical order, above the columns; consists of architrave, frieze and cornice.

**ETCHED GLASS:**

Glass where the surface has been cut away by a strong acid, creating a decorative pattern.

**F****FACADE:**

An exterior side of a building.

**FANLIGHT:**

A semicircular or fan-shaped window with a radiating glazing bar system usually found over entrance doors.

**FASCIA:**

The flat member of the architrave in classical architecture. A fascia board is a flat board used to cover the ends of roof rafters.

**FENESTRATION:**

The arrangement of windows in other exterior openings of a building.

**FINIAL:**

An ornament at the top of a spire, gable or pinnacle.

**FOLK HOUSES:**

Houses built with local materials to provide basic shelter. More influenced by geography and local tradition than by architectural styles.

**FOUNDATION:**

The supporting portion of a structure below the first-floor construction, or below grade.

**FRIEZE:**

In classical architecture, the member between the architrave and cornice. Also, any plain or decorative band, or board, on the top of a wall immediately below the cornice.



## G

### **GABLE:**

A triangular wall segment at the end of a double pitched or gabled roof.

### **GALVANIZE:**

To coat steel or iron with zinc.

### **GAMBREL ROOF:**

A roof having a double slope on two sides of a building.

### **GAZEBO:**

A small summerhouse or other space with a view; usually found in a garden or yard.

### **GEORGIAN STYLE (1700-1780):**

The prevailing architectural style of the 18th century in Great Britain and the North American colonies; characterized by symmetry of floor plan and facade, heavy classical moldings, raised panels and classically derived ornament.

### **GERMAN SIDING:**

A type of siding characterized by overlapping boards; the upper part of each board has a concave curve.

### **GOTHIC REVIVAL (1840-1880):**

This style, which came from England, is distinguished by the pointed arch which in public buildings and churches could be combined with towers, buttresses and steep gables. The first documented houses in this style were designed by Alexander Jackson Davis and were asymmetrical in plan to allow for flexibility of rooms and create a picturesque silhouette.

### **GREEK REVIVAL (1825-1860):**

The mid-nineteenth century revival of the forms and ornamentation of the architecture of ancient Greece. The style is characterized by a low-pitched gable or sometimes hipped roof, a pedimented gable, a portico, six-over-six double hung windows, and a four-panel door flanked by side lights with a transom window above.

## H I J K

### **HEADERS:**

Bricks laid with their ends toward the face of a wall.

**HIPPED ROOF:**

A roof formed by four pitched roof surfaces.

**IONIC ORDER:**

A classical order characterized by a capital embellished with opposing volutes.

**ITALIANATE (1840-1880):**

An architectural style characterized by the following: two or three stories, low pitched hipped roofs, cross hipped or cross gabled with wide eaves supported by large brackets; a cupola or tower is sometimes featured. There are many sub-types.

**JERKIN HEAD ROOF:**

A roof form in which the top of the gable is cut off by a secondary slope forming a hip.

Keystone: The wedge-shaped stone found at the center of an arch.

**L****LATTICEWORK:**

Openwork produced by interlacing or crossing lath or thin strips of iron or wood; often used at the base of a porch.

**LEAN-TO:**

A small addition to a house with a single pitched roof.

**LIGHT:**

A pane of glass.

**LINTEL:**

A horizontal structural member that supports a load over an opening.

**LOUVER:**

A small lantern or other opening, often with wood slats, used for ventilating attics or other spaces.

**LUNETTE:**

A small round or arched-top window in a vaulted or covered ceiling or roof.

**M****MANSARD ROOF:**

A roof that has two slopes on all four sides.

**MASONRY:**

Work constructed by a mason using stone, brick, concrete blocks, tile, or similar materials.

**MOLDING:**

A continuous decorative band; serves as an ornamental device on both the interior and exterior of a building or structure.

**MORTAR:**

A mixture of plaster, cement, or lime with a fine aggregate and water used for pointing and bonding bricks or stones.

**MULLION:**

A large vertical member separating two casements and forming part of the window frame.

**MUNTIN:**

One of the thin strips of wood used for holding panes of glass within a window; also called sash bar or glazing bar.

**N****NEOCLASSICAL REVIVAL (1900-1940):**

Used to define the revival of architecture based on Greek and Roman forms around the turn of the 20th century; characterized by a two-story pedimented portico supported by colossal columns (usually with Ionic, Corinthian or Composite capitals). More modest versions of the style are common.

**NEWEL POST:**

The post supporting the handrail at the top and bottom of a stairway.

**O P****ORDER:**

A style of column and its entablature (i.e., the section resting on the top of the column). In classical architecture, order refers to the specific configuration and proportions of the column including the base, shaft, capital and entablature.

See: Composite order, Corinthian order, Doric order, Ionic order, and Tuscan order.

**PANE:**

A single piece of window glass.

**PANEL:**

A sunken or raised portion of a wall, ceiling, mantel or door with a frame-like border.

**PARAPET:**

A low wall or protective railing often used around a balcony or along the edge of a roof.

**PATIO:**

A usually paved and shaded area adjoining or enclosed by the walls of a house.

**PEDIMENT:**

A wide low-pitched gable surmounting the facade of a classical building; also used over windows, doors and niches.

**PERGOLA:**

An arbor or passageway with a trellis roof on which climbing plants can be trained to grow.

**PILASTER:**

A shallow pier attached to a wall, often decorated to resemble a classical engaged column.

**POINTING:**

The final filling and finishing of mortar joints that have been left raw or raked out.

**PORTE-COCHÈRE:**

A large covered entrance porch through which vehicles can drive.

**PORTICO:**

A major porch, usually with a pedimented roof supported by classical columns.

**PORTLAND CEMENT:**

A hydraulic binder for concrete; made by burning a mixture of clay and limestone.

**PRESERVATION:**

Preservation means the act or process of applying measures necessary to sustain the existing form, integrity and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing

maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.

### **PUBLIC STREET RIGHT-OF-WAY:**

Publicly owned and maintained streets, including sidewalks. For purposes of these design guidelines, this does not include alleys.

## **Q**

### **QUEEN ANNE (1880-1910):**

An eclectic late 19th century architectural style, influenced by the work of English architect Robert Norman Shaw and characterized by irregularity of plan and massing, variety of color, texture and window treatment, multiple steep roofs, porches with decorative gables and the frequent use of bay windows.

### **QUOIN:**

Large stones, or rectangular pieces of wood or brick, used to decorate and accentuate the corners of a building.

## **R**

### **REHABILITATION:**

Rehabilitation means the act or process of making possible an efficient compatible use for a property through repair, alterations and additions while preserving those portions or features that convey its historical, cultural or architectural values.

### **RAKE:**

The slope of a gable, pediment, stair, string, etc.

### **REPOINTING:**

Raking out deteriorated joints and filling them with a surface mortar to repair the joint.

### **RESTORATION:**

Restoration means the act or process of accurately depicting the form, features and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.

**RETAINING WALL:**

A wall that bears against an earthen backing.

**RETURN:**

The continuation of a molding from one surface onto an adjacent surface.

**ROOF RIDGE:**

The horizontal line formed when two roof surfaces meet.

**RUSTICATION:**

Rough-surfaced stonework.

**S****SANDBLASTING:**

An abrasive way of cleaning brick, masonry or wood by directing high powered jets of sand against the surface.

**SASH:**

A frame for glass to close a window opening.

**SEGMENTAL ARCH:**

An arch formed by the segment of a circle.

**SHINGLE:**

A wedge-shaped piece of wood as used in overlapping courses to cover a roof or an outside wall surface.

**SHINGLE STYLE (1880-1915):**

A picturesque style that evolved from the Queen Anne style characterized by uniform wall covering of wood shingles, hip or gable roofs with dormer windows, irregular roof line, small paned windows, and no corner boards. The style is generally associated with New England.

**SHUTTER:**

An extra closure for a window or door, usually of wood, paneled, and of a pair hinged at the outside jambs.

**SIDELIGHT:**

One of a pair of narrow windows flanking a door.

**SILL:**

The framing member that forms the lower side of an opening, such as a door sill. A window sill forms the lower, usually projecting, lip on the outside face of a window.

**SOFFIT:**

The exposed underside of an arch, cornice, balcony, or beam.

**SPALL:**

To split off from the surface, as stone that is bearing undue pressure near its face or is acted on by weathering.

**SPANDREL:**

The triangular space between the shoulder of an arch and the triangular framework that surrounds it; the space between two adjacent arches; the triangular space between the outer string of a stair and the floor.

**STRINGCOURSE:**

A continuous horizontal band of brick, stone, or wood on the exterior wall of a building; used for decorative purposes, or to break up a large expanse of wall surface.

**STOOL:**

A casing or molded piece running along the base of a window and contacting the bottom rail on the inside of a building.

**STUCCO:**

An exterior wall covering consisting of a mixture of Portland cement, sand, lime, and water.

**SURROUND:**

An encircling border or decorative frame.

**T****TERRA COTTA:**

A fine-grained fired clay product used ornamentally on the exterior of buildings, may be glazed or unglazed, molded or carved.

**TONGUE-AND-GROOVE:**

A projecting rib along the edge of a member fit into a corresponding groove in an adjacent member.

**TRANSOM:**

An opening over a door or window, usually for ventilation, and containing a glazed or solid sash.

**TRELLIS:**

A light frame or latticework used as a screen, or as a support for vines.

**TRIM:**

The finish material on a building, such as a molding applied around door and window openings or at the floors and ceilings of rooms.

**TURRET:**

A small tower usually corbelled at the corner of a building.

**TUSCAN ORDER:**

One of the classical orders, resembling the Doric but of greater simplicity. The columns are unfluted, the capitals are unornamented and the frieze lacks the triglyphs that are part of the Doric order.

**U V****UNDERPINNING:**

The system of supports, such as rough walls or piers, beneath the ground floor.

**VALLEY:**

The depressed angle formed at the meeting point of two roof slopes.

**VERANDA OR VERANDAH:**

A roofed space attached to the exterior wall of a house and supported by columns, pillars, or posts; commonly used in Britain to describe an open porch.

**VOLUTE:**

A spiraling scroll-like ornament. In classical architecture, the dominant feature of the Ionic Capital (but also focused on Corinthian and Composite Capitals).

**W X Y Z****WATER TABLE:**

A plain or molded ledge or projection, usually at the first-floor level, that protects the foundation from rain running down the wall of a building.

**WEATHERBOARD:**

Wood siding consisting of overlapping horizontal boards, usually thicker at one edge than the other.



**WEATHERSTRIP:**

A piece of wood, metal, or other material installed around window and door openings to prevent air infiltration and moisture penetration.

**WROUGHT IRON:**

Pig iron that is puddled and rolled or hammered into shape, never melted or cast.

## APPENDIX D:

# New Construction Checklist

The following checklist may be used by applicants or HZC members as a reminder of the features and elements to be considered when proposing new construction.

## SITE

### WALKWAYS AND DRIVEWAYS

- Location
- Dimensions
- Materials/Finish

### FENCES

- Location
- Scale/Height
- Materials/Details
- Meet zoning requirements

### MECHANICAL AND UTILITIES SCREENING

- Location
- Visibility from public street right-of-way

## BUILDINGS

### BUILDING PLACEMENT

- Distance to street (setback)
- Oriented to primary street
- Respects existing pattern of spacing between buildings

### SIZE

- Massing relates to existing buildings
- Complexity of form is compatible with surrounding buildings

- Height is within 10 percent of adjacent buildings
- Width is within 10 percent of surrounding buildings

### ROOF

- Compatible pitch and form
- Materials are compatible with historic precedents
- Chimneys, dormers, and other features are of appropriate scale

### WINDOWS AND DOORS

- Compatible ratio, spacing, and proportions
- Window material and casing compatible with historic precedents
- Door style and finish are compatible with historic precedents
- True-divided- light or simulated- divided-light
- Storm windows and doors painted and conform to openings and window/door divisions
- Shutters (if included) are scaled to the opening and include hinge hardware

### PORCHES

- Compatible to the scale and style of surrounding houses
- Design respects materials, proportions, and placement of surrounding houses














### MATERIALS AND DETAILS

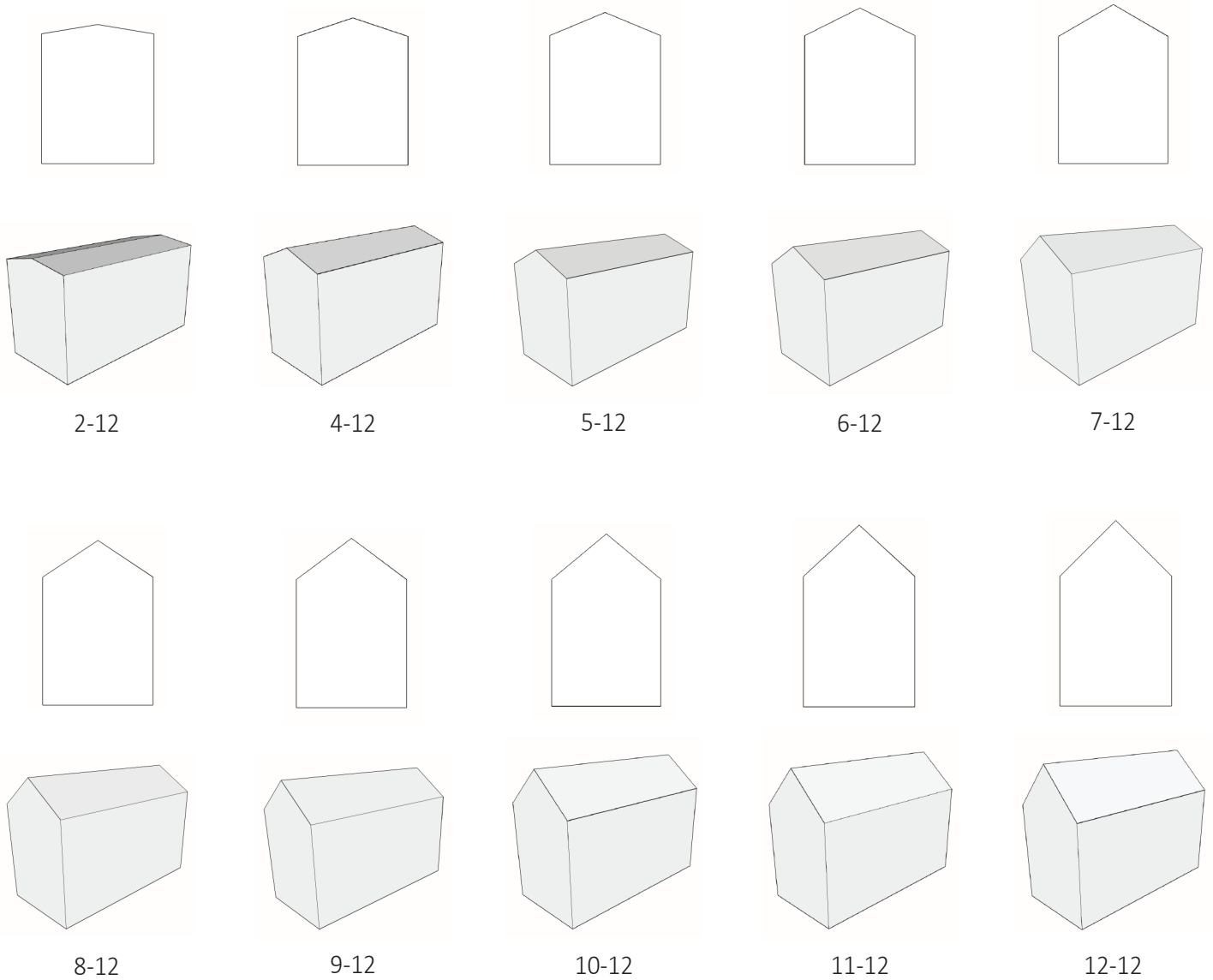
- Traditional materials
- Alternative materials that adequately simulate the authentic material

APPENDIX E:

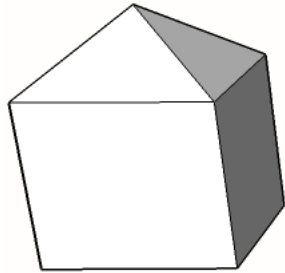
# Roofs

## ROOF PITCHES

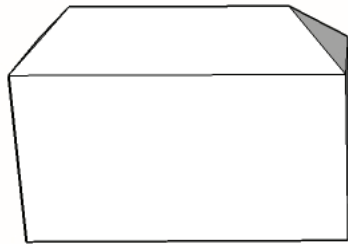
0°	0/12	
1.76°	1/12	
1.46°	2/12	
4.04°	3/12	
8.43°	4/12	
2.62°	5/12	
6.57°	6/12	
0.26°	7/12	
3.69°	8/12	
6.87°	9/12	
9.81°	10/12	
2.51°	11/12	
45°	12/12	



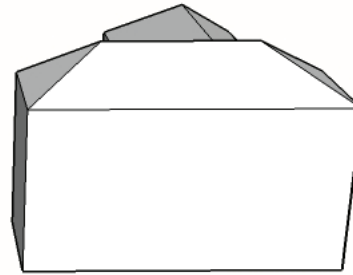
# ROOF STYLES



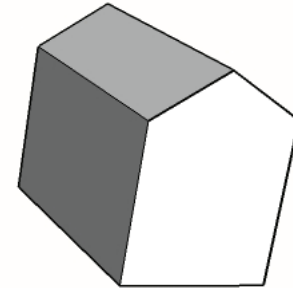
PYRAMIDAL



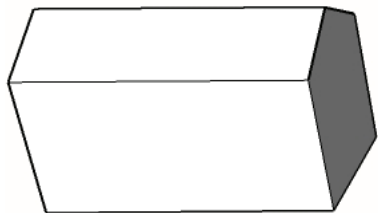
HIPPED



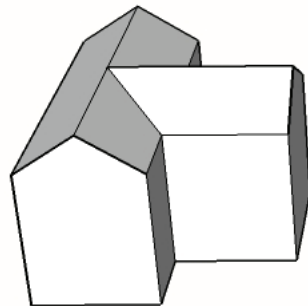
CROSS HIPPED



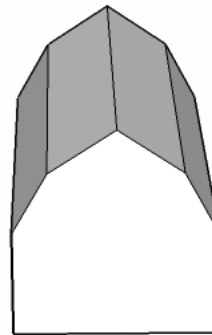
FRONT GABLE



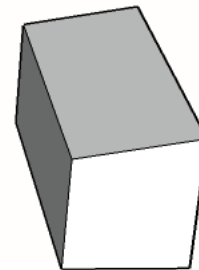
SIDE GABLE



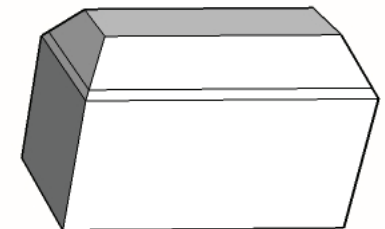
CROSS GABLE



GAMBREL

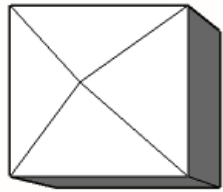


SHED

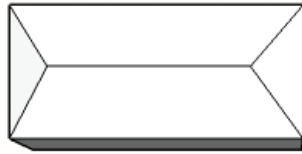


MANSARD

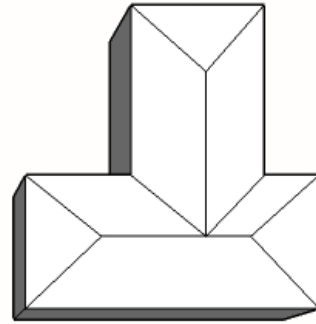
# ROOF STYLES



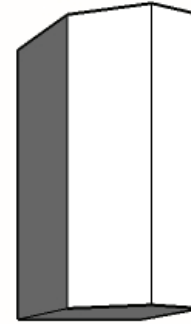
PYRAMIDAL



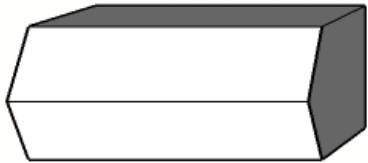
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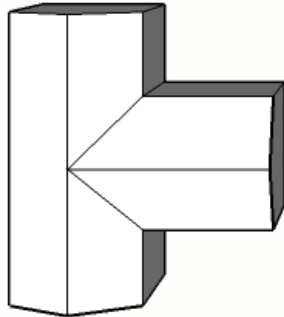
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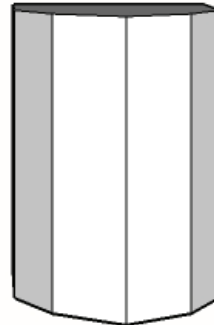
FRONT GABLE



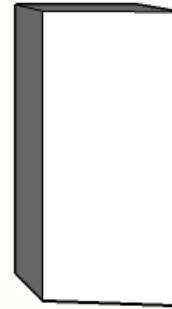
SIDE GABLE



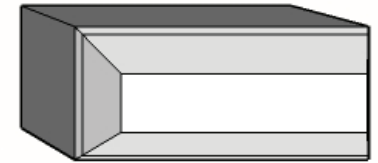
CROSS GABLE



GAMBREL



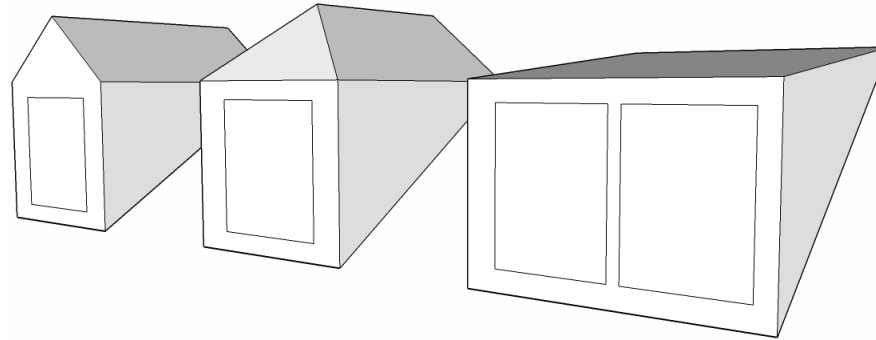
SHED



MANSARD

# DORMERS

## EXAMPLE OF DORMER SHAPES

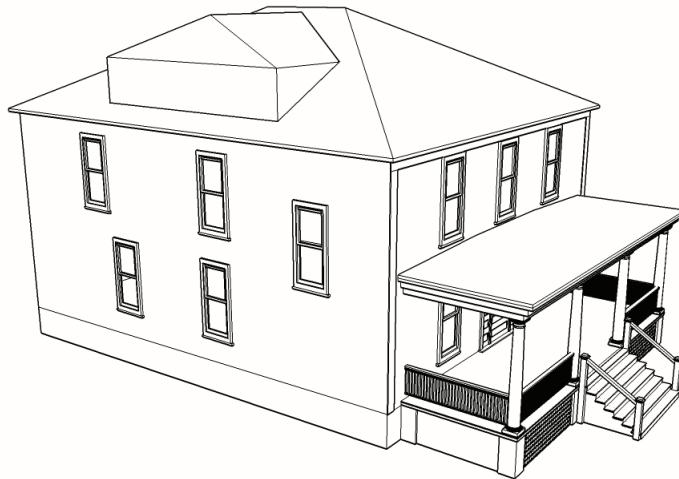


GABLED  
DORMER

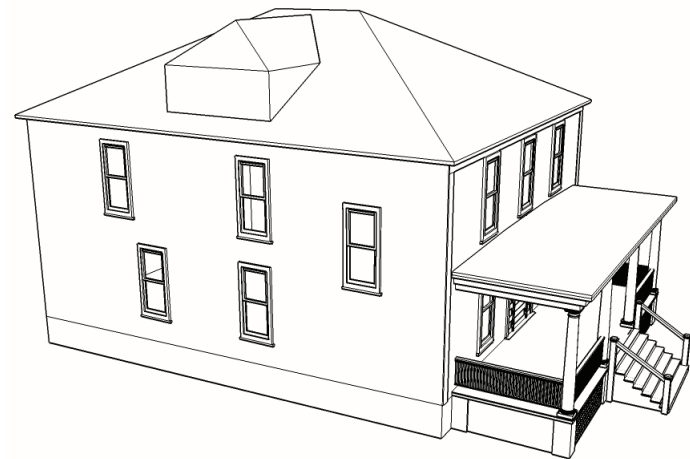
HIPPED  
DORMER

SHED  
DORMER

## EXAMPLE OF A DORMER ADDITION



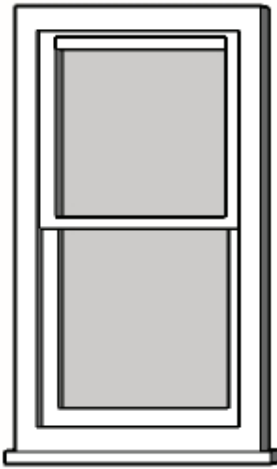
INAPPROPRIATE SCALE



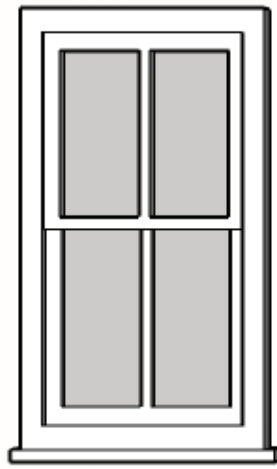
APPROPRIATE SCALE

APPENDIX F:  
**Windows**

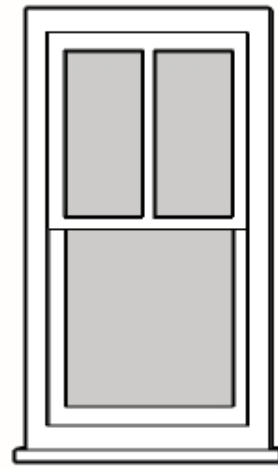
**WINDOW STYLES**



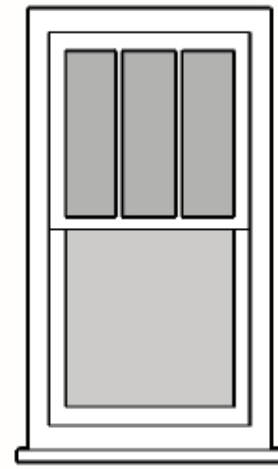
1 - 1



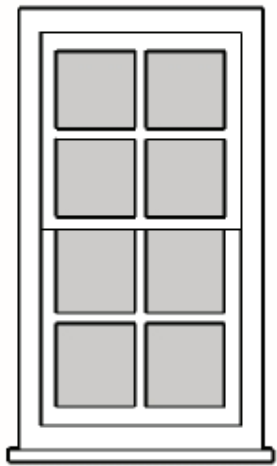
2 - 2



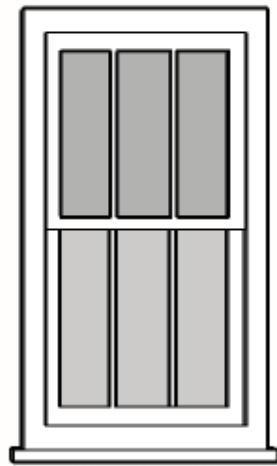
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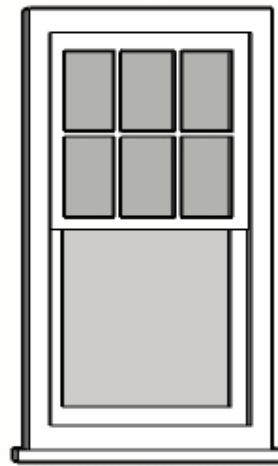
3 - 1



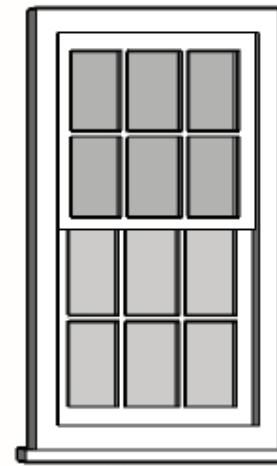
4 - 4



3 - 3



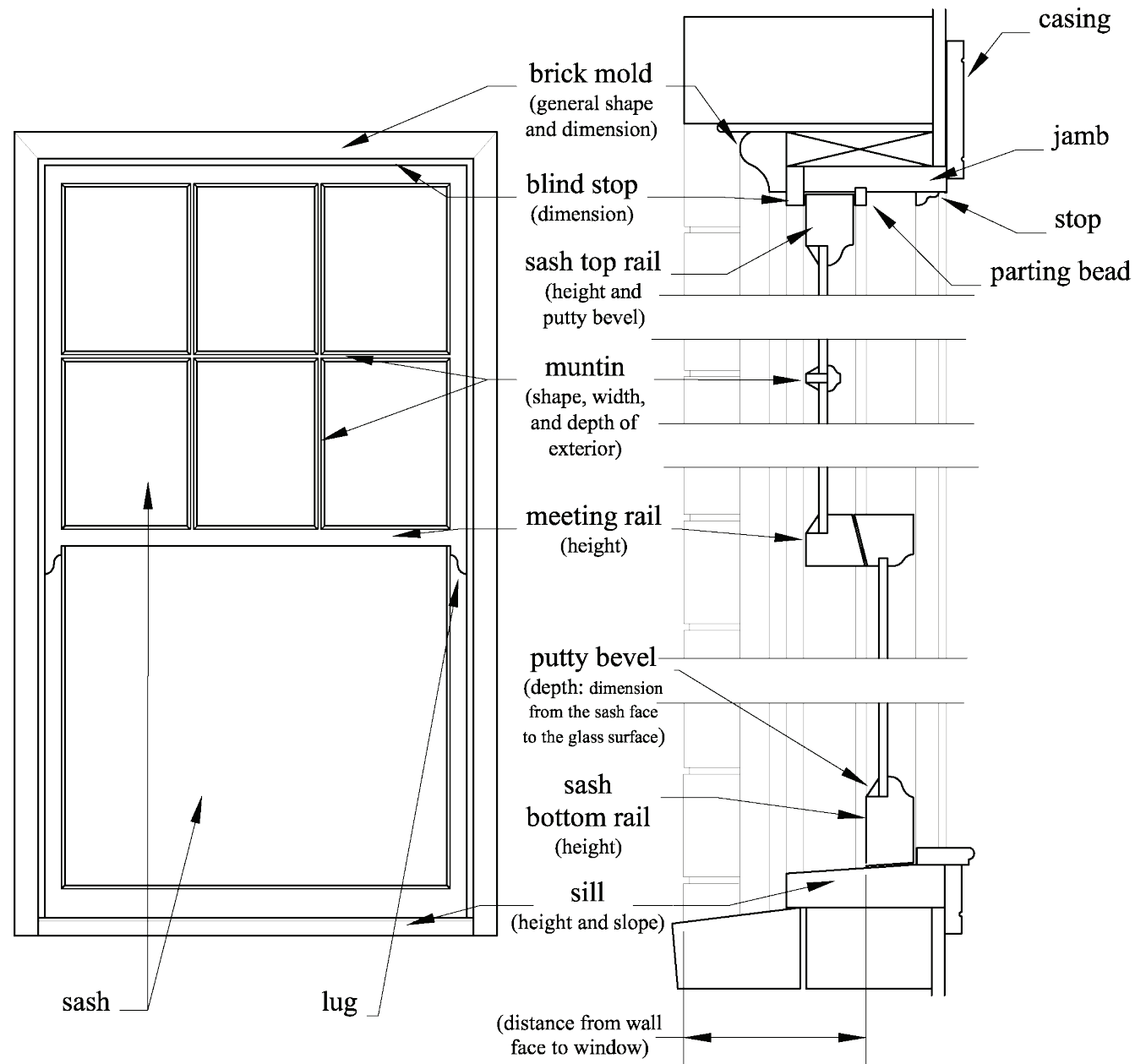
6 - 1



6 - 6

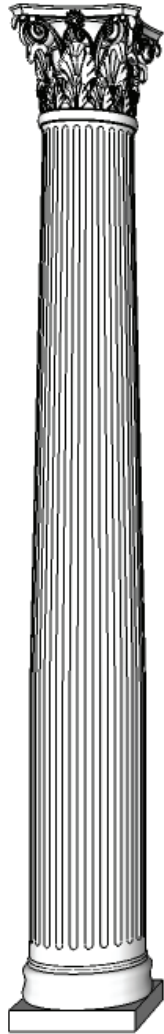
## PARTS OF A WOOD WINDOW

The section drawing on the right shows the relationship of the window sash to the exterior wall plane.

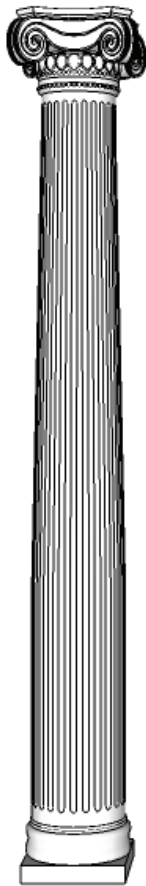




APPENDIX G:  
**Columns and Posts**  
COLUMN ORDERS



CORINTHIAN



IONIC



TUSCAN



ROMAN DORIC

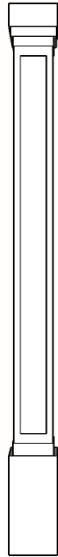


GREEK DORIC

# TYPES OF COLUMNS AND POSTS



SQUARE POST



FULL BOX WITH PANELS



BOX ON PIER WITH PANELS



BOX ON PIER WITH DOUBLE PANEL



TAPERED BOX ON PIER WITH PANEL



TURNED POST



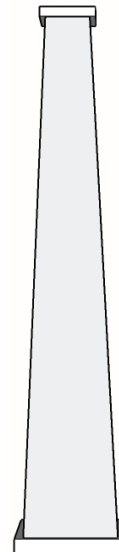
DOUBLE POST



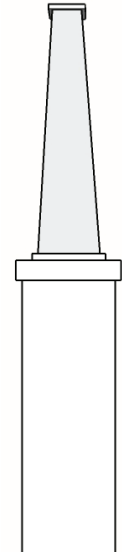
SIMPLE BOX



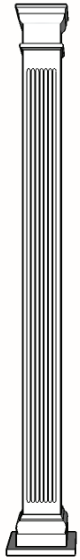
BOX ON PIER



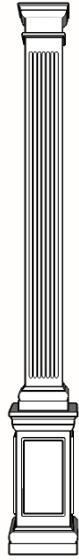
FULL TAPERED



TAPERED COLUMN ON PIER



FLUTED BOX



FLUTED BOX ON  
PIER WITH PANEL



FULL COLUMN



COLUMN ON PIER



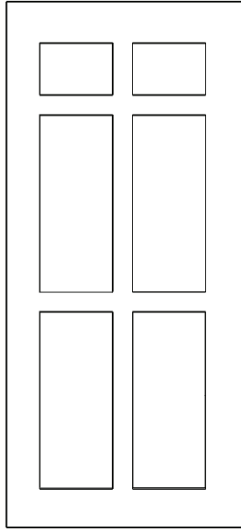
FULL COLUMN  
FLUTED



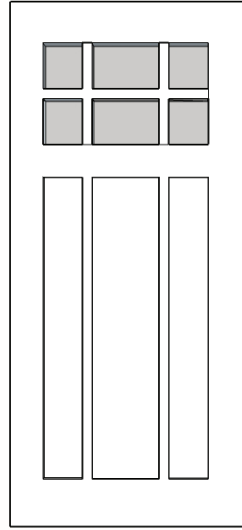
FLUTED COLUMN  
ON PIER

APPENDIX H:

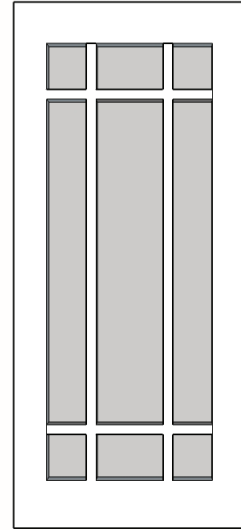
**Doors**



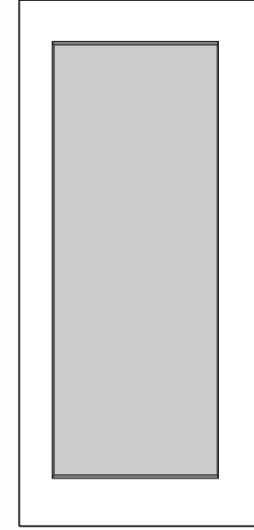
6-PANEL VERTICAL



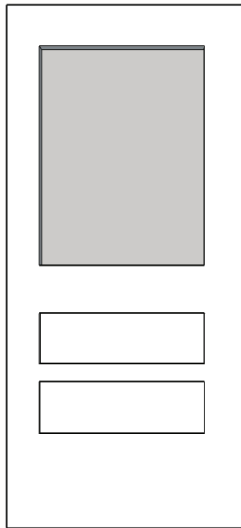
CRAFTSMAN 6-LITE & PANEL



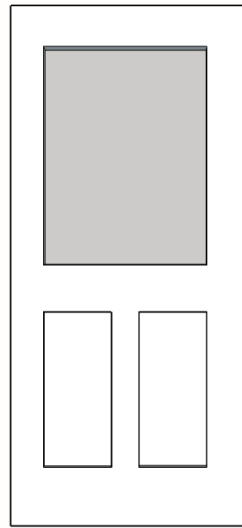
CRAFTSMAN 9-LITE



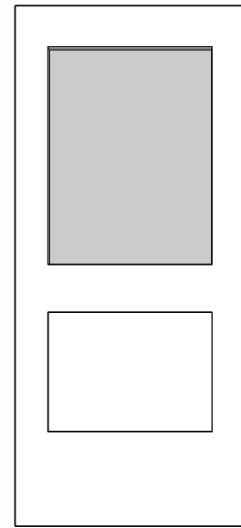
FULL-LITE



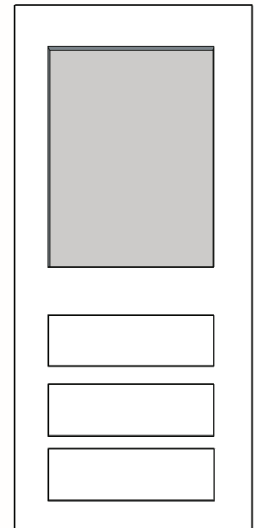
HALF- LITE DOUBLE  
PANEL HORIZONTAL



HALF- LITE DOUBLE PANEL



HALF-LITE SINGLE PANEL



HALF-LITE TRIPLE PANEL

## APPENDIX I:

# Historic Buildings and Lead Paint

Drastic measures to eliminate lead paint from your historic house or building need not be taken. Lead paint is only a hazard if it is unstable, so the mere presence of lead paint is no reason to destroy the historic fabric of your structure. Only a lead paint professional can analyze paint to determine the presence of lead. There are safe and cost-effective ways to remove or work around the lead paint. Procedures to safely remove lead paint down to the bare wood surface should not cost more than 20% above the cost of a hand-scraped paint removal job.

## EDUCATE YOURSELF ABOUT MANAGING LEAD PAINT

If you own or live in a building built before 1978, you should thoroughly educate yourself about smart lead paint management in your home or building. Removing lead paint from siding, window jambs, window sashes and trim can be a safe, quick and easy process if you know how to do it—or if you hire an experienced contractor to do it. The dust generated from unstable lead paint has the most potential to create a lead poisoning hazard. Therefore, efforts to manage lead paint hazards focus on eliminating the dust from lead paint.

## HIRE A CONTRACTOR WITH LEAD-SAFE CERTIFICATION

The Environmental Protection Agency's (EPA) Lead Renovation, Repair and Painting Rule (RRP Rule) requires that firms or contractors performing renovation, repair, and painting projects that disturb lead-based paint in houses built before 1978 be certified by the EPA, use certified renovators who are trained by EPA-approved training providers, and follow lead-safe work practices. Although homeowners themselves are not subject to these regulations, it is highly recommended that anyone removing lead paint follow the EPA regulations for the safety of themselves and those around them.

## MANAGE THE LEAD PAINT IN YOUR HOUSE OR BUILDING

You can manage the lead paint in your historic house or building by using these practices:

- Dust your house weekly to remove lead dust.

- Use an EPA-approved HEPA vacuum to vacuum your house or building. These vacuums take in the dust but do not release a significant amount of dust back into the air.
- Eliminate any painted surfaces that rub together and generate lead dust. For example, you might have a painted door that rubs against a painted door jamb.
- Never dry-scrape old paint. Mist the wood with water first to prevent the spread of lead dust.
- Do not remove old paint with a blower-type heat gun, which heats to a dangerously high temperature. Lead paint becomes a toxic vapor at about 650 degrees Fahrenheit. Instead, use an infrared paint removal tool. Infrared tools will not heat the paint above 600 degrees. They are approved by the Environmental Protection Agency to be safe for removing lead paint.

**NOTE:** The information presented here is not intended to provide comprehensive technical advice or instructions on solving historic preservation issues. Any information contained or referenced is meant to provide a basic understanding of historic preservation practices.

## APPENDIX J:

# Considerations in Using Vinyl Siding

Vinyl siding is not a cure-all, despite what marketing materials often claim. The truth is that “maintenance-free” claddings such as vinyl siding are not actually maintenance-free. Rather, maintenance-free means that the material is not easily repairable, which can be just one of many problems with the material.

### **VINYL SIDING TRAPS MOISTURE.**

Artificial claddings such as vinyl siding are considered a non-permeable material. While this means that moisture cannot penetrate the material, it also means that any moisture that gets behind the cladding will be trapped and unable to dry out to the surface. As water runs along the building materials behind siding, it will look for areas to penetrate into the building.

### **VINYL SIDING CANNOT BE REPAIRED.**

Just like every other material, vinyl siding deteriorates. It can dent, warp, crack, discolor, sag, or fade. While timber and masonry elements can be patched and repaired on a localized basis as needed, vinyl siding cannot be easily repaired. When a piece fails, the entire piece must be replaced.

### **VINYL SIDING MASKS DETERIORATION.**

Installing vinyl siding may hide underlying deterioration of wood or masonry, but it will not make the problem go away. Often, it will actually cause the problem to worsen, and, with the problem out of sight, it has the effect of causing the homeowner to forget about the deterioration while it continues behind the siding. Should the homeowner decide to eventually correct the problem, vinyl siding prohibits easy access to the materials below.

## **VINYL SIDING CHANGES THE CHARACTER OF A BUILDING AND THE DISTRICT.**

Vinyl siding destroys the visual integrity of a historic building. Scale, textures, profile, and colors are all altered when vinyl siding is installed. Furthermore, architectural features and details are often lost, concealed, or removed by the installation of vinyl siding.

## **BUYING INTO THE NOTION THAT VINYL REPLACEMENT WINDOWS WILL NEVER NEED MAINTENANCE DOES A PROPERTY OWNER A DISSERVICE.**

For instance, vinyl is prone to denting, warping, melting, and fading. This type of damage cannot be repaired, nor can most failed insulating glass or plastic parts in replacement windows. Therefore, the entire vinyl window must be replaced.

However, when a component of a wood window fails in some way, there is no need to replace the entire window unit. Although the “maintenance-free” pitch for vinyl can be convincing, property owners need to make informed decisions when it comes to this type of investment. Simple maintenance for single-glazed historic wood windows is all that is needed to keep them operating over the years, and with the installation of storm windows, they are just as energy-efficient as double-paned insulated windows.



## APPENDIX K:

# Resources and Technical Information

## NATIONAL PARK SERVICE PRESERVATION BRIEFS

The National Park Service Technical Preservation Services division provides a set of user-friendly guidance documents on preserving, rehabilitating, and restoring historic buildings and individual components. Preservation briefs include the following, which are available at <http://www.nps.gov/tps/how-to-preserve/briefs.htm>.

- |     |  |     |  |
|-----|--|-----|--|
| 01: | Assessing, Cleaning and Water-Repellent Treatments for Historic Masonry Buildings  | 13: | The Repair, and Thermal Upgrading of Historic Steel Windows  |
| 02: | Repointing Mortar Joints in Historic Masonry Buildings   | 14: | New Exterior Additions to Historic Buildings:  |
| 03: | Conserving Energy in Historic Buildings  | 15: | Preservation Concerns  |
| 04: | Roofing for Historic Buildings   | 16: | Preservation of Historic Concrete  |
| 05: | The Preservation of Historic Adobe Buildings   | 17: | The Use of Substitute Materials on Historic Buildings Exteriors  |
| 06: | Dangers of Abrasive Cleaning to Historic Buildings   | 18: | Architectural Character – Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character |
| 07: | The Preservation of Historic Glazed Architectural Terra-Cotta  | 19: | Rehabilitating Interiors in Historic Buildings – Identifying Character-Defining Elements                               |
| 08: | Aluminum and Vinyl Siding on Historic Buildings: The Appropriateness of Substitute Materials for Resurfacing Historic Wood Frame Buildings | 20: | The Repair and Replacement of Historic Wooden Shingle Roofs  |
| 09: | The Repair of Historic Wooden Windows  | 21: | The Preservation of Barns  |
| 10: | Exterior Paint Problems on Historic Woodwork   | 22: | Repairing Historic Flat Plaster – Walls and Ceilings   |
| 11: | Rehabilitating Historic Storefronts  | 23: | The Preservation and Repair of Historic Stucco   |
| 12: | Preservation of Historic Pigmented Structure Glass (Vitrolite and Carrara Glass)   | 24: | Preserving Historic Ornamental Plaster   |

- 25: Heating, Ventilating, and Cooling Historic Buildings: Problems and Recommended Approaches
- 26: The Preservation of Historic Signs
- 27: The Preservation and Repair of Historic Log Buildings
- 28: The Maintenance and Repair of Architectural Cast Iron
- 29: Painting Historic Interiors
- 30: The Repair, Replacement, and Maintenance of Historic Slate Roofs
- 31: The Preservation and Repair of Historic Clay Tile Roofs
- 32: Mothballing Historic Buildings
- 33: Making Historic Properties Accessible
- 34: The Preservation and Repair of Historic Stained and Leaded Glass
- 35: Applied Decoration for Historic Interiors: Preserving Historic Composition Ornament
- 36: Understanding Old Buildings: The Process of Architectural Investigation
- 37: Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes
- 38: Appropriate Methods of Reducing Lead-Paint Hazards in Historic Housing
- 39: Removing Graffiti from Historic Masonry
- 40: Holding the Line: Controlling Unwanted Moisture in Historic Buildings
- 41: Preserving Historic Ceramic Tile Floors
- 42: The Seismic Retrofit of Historic Buildings: Keeping Preservation in the Forefront
- 43: The Maintenance, Repair and Replacement of Historic Cast Stone
- 44: The Preparation and Use of Historic Structure Reports
- 45: The Use of Awnings on Historic Buildings: Repair, Replacement and New Design
- 46: Preserving Historic Wooden Porches
- 47: The Preservation and Reuse of Historic Gas Stations
- 48: Maintaining the Exterior of Small and Medium Size Historic Buildings

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## ONLINE RESOURCES

National Park Service Technical Preservation Services: <http://www2.cr.nps.gov/tps/index.htm>

Illustrated Guide for Rehabilitating Historic Buildings: <http://www2.cr.nps.gov/tps/tax/rhb/index.htm>

Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings: <http://www.nps.gov/tps/sustainability.htm>

The Secretary of Interior's Standards for Rehabilitation: <http://www2.cr.nps.gov/tps/tax/rehabstandards.htm>

National Park Service Preservation Briefs: <http://www2.cr.nps.gov/tps/briefs/presbhom.htm>

National Register of Historic Places: <http://www.cr.nps.gov/nr/>