

# City of Dubuque Architectural Guidelines



February 3, 2014

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Thank you to all the community members who participated in developing the City of Dubuque Architectural Guidelines. We would also like to acknowledge the support and assistance of the Architectural Guidelines Steering Committee and Technical Committee who were instrumental in developing the document.

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Portions of this document include adapted materials from the following manuals:

- Architectural Guidelines for Historic Structures in the Historic Districts of the City of Dubuque, Iowa and Streetscape and Landscape Guidelines for the Historic Districts of the City of Dubuque, Iowa, 2002; both adopted by the Dubuque City Council on May 8, 2002 and funded in part by the National Park Service, the State Historical Society of Iowa, and the National Trust for Historic Preservation Charles Evans Hughes Preservation Fund.
- Downtown Design Guidelines, adopted by the Dubuque City Council on February 20, 2009 and funded in part by the U.S. Economic Development Administration and the State Historical Society of Iowa.

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# Introduction

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## Overview

This document provides guidance for improving properties within downtown and the historic districts of the community. The guidelines are for property owners planning exterior alterations and additions to, or the rehabilitation of existing buildings. They also apply to the design of new structures. They do not dictate solutions; instead, they define a range of appropriate responses to a variety of specific design issues.

The guidelines will help residents and property owners in understanding the historic character of community and assist owners when planning repair, maintenance, rehabilitation and new construction. In addition, they serve as educational and planning tools for property owners and their design professionals who seek to make improvements.

The City of Dubuque created this document through an interactive process between the residents and a steering committee. This dialogue resulted in the classification of values and setting goals for the community.

The core of Dubuque serves as the cultural center of the region and conveys a high quality of design and construction in its historic and contemporary buildings. Many structures have historic significance and have been rehabilitated to enhance the quality of life as well as the community's economy.

Citizens and property owners recognize that the character of development in downtown and the historic districts are of community interest. It is their goal that the community continues to develop in a coordinated manner so the character of the traditional built environment is maintained.



## Assistance

Please see City of Dubuque Planning Services Staff to assist in identifying potential financial incentives and other resources that might be available to assist a project.

## Where the Design Guidelines Apply

The City of Dubuque Architectural Guidelines relate to the architectural styles and urban design patterns found throughout Dubuque's historic residential neighborhoods and downtown. The design principles in the manual are intended to serve as a guide for all historic properties and neighborhoods regardless of location. In some instances, adherence with the guidelines may be a requirement. City of Dubuque Planning Services Staff can assist in determining when and where the guidelines might apply.

## WHY HAVE DESIGN GUIDELINES

Through these guidelines the city seeks to promote high quality construction, support economic development, and maintain an active pedestrian-oriented environment. It also seeks to promote preservation of the historic, cultural and architectural heritage of Dubuque. An essential idea is to protect historic resources in the community from alteration or demolition that might damage the unique fabric created by buildings and sites that make up core areas of the community.

The design guidelines also provide a basis for making consistent decisions about the treatment of historic resources.

While the design guidelines are written for use by the layperson to plan improvements, property owners are strongly encouraged to enlist the assistance of qualified design and planning professionals, including architects and preservation consultants.

*These before, in-progress and after sets of rehabilitation images reflect the following design goals: promote high quality construction, support economic development, maintain an active pedestrian-oriented environment, promote preservation of the historic, cultural and architectural heritage of Dubuque.*



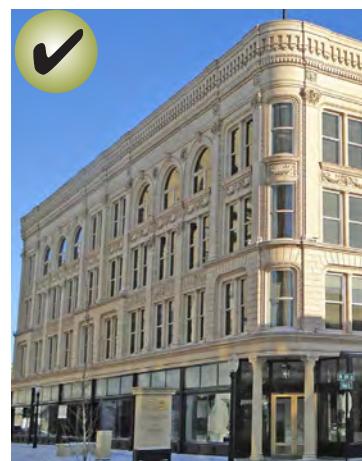
Before



After



In-progress



After



After

# DESIGN GUIDELINES FORMAT

The guidelines are presented in a standardized format as illustrated below. Each of the components is used by the city in determining appropriateness. Additional features that appear on a typical page of the guidelines are summarized at right.

## Design Topic Heading

**Policy Statement:** This explains the desired for the specific design element and provides a basis for the design guidelines that follow. If a guideline does not specifically address a particular design issue, then the city will use the intent statement to determine appropriateness.

**Design Guideline:** This describes a desired outcome related to the policy statement.

**Additional Information:** This provides a bullet list of examples of how, or how not to comply with the guideline.

**Illustration(s):** These provide photos and/or diagrams to illustrate related conditions or possible approaches. They may illustrate appropriate or inappropriate solutions as described below.

## Windows

Original windows help convey the significance of historic structures, and should be preserved. They can be repaired by re-glazing and patching and splicing elements such as muntins, the frame, sill and casing. Repair and weatherization also is more energy efficient, and less expensive than replacement. If an original window cannot be repaired, new replacement windows should be in character with the historic building.

### #. Maintain and repair historic windows.

- Preserve historic window features including the frame, sash, muntins, mullions, glazing, sills, heads, jambs, moldings, operation and groupings of windows.
- Repair and maintain windows regularly, including trim, glazing putty and glass panes.
- Repair, rather than replace, frames and sashes, when possible.
- Restore altered window openings to their original configuration, when possible.



## Sidebars

These provide additional information that will be helpful in understanding the guideline. In some cases a sidebar includes links that direct the user to additional material; this may be technical information about a rehabilitation procedure or other helpful information.

## Appropriate and Inappropriate Solutions

In many cases, images and diagrams in the guidelines are marked to indicate whether they represent appropriate or inappropriate solutions



A check mark in a green circle indicates appropriate solutions.

A question mark in a yellow circle indicates an alternative solution may be appropriate.

An X mark in a red circle indicates solutions that are not appropriate.

## Steps to Consider for a Successful Preservation Project

A successful preservation project shall consider the significance of the historic resource, its key features, and the project's program requirements. When altering a historic building, it is also important to consider preservation and repair prior to contemplating any replacement. The tables and diagrams below and on the following pages provide overall guidance for planning a preservation project. Follow the steps below when planning a preservation project.

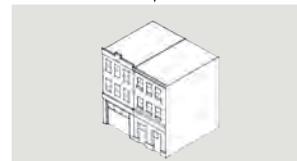
**Step 1. Review reasons for significance:** The reasons for significance will influence the degree of rigor with which the guidelines are applied, because it affects which features will be determined to be key to preserve. Identifying the building's period of significance is an important first step.



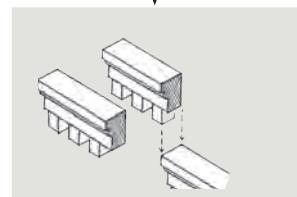
**Step 2. Identify key features:** A historic property has integrity. It has a sufficient percentage of key character-defining features and characteristics from its period of significance which remain intact.



**Step 3. Identify program requirements for the desired project:** The functional requirements for the property drive the work to be considered. If the existing use will be maintained, then preservation will be the focus. If changes in use are planned, then some degree of compatible alterations may be needed.



**Step 4. Implement a treatment strategy:** An appropriate treatment strategy will emerge once historic significance, integrity and program requirements have been determined. A preservation project may include a range of activities, such as maintenance of existing historic elements, repair of deteriorated materials, the replacement of missing features and construction of a new addition.



# Planning A Preservation Project

Preservation projects may include a range of activities, such as maintenance of existing historic elements, repair of deteriorated materials, replacement of missing features and construction of new additions.

When planning a preservation project, it is important to determine historic significance, assess integrity and determine program requirements prior to outlining an appropriate treatment strategy that will inform the overall project scope.

## DETERMINE HISTORIC SIGNIFICANCE

What makes a property historically significant? In general, properties must be at least 50 years old before they can be evaluated for potential historic significance, although exceptions do exist when a more recent property clearly has historical value. A property may be significant for one or more of the following reasons:

- Association with events that have made a significant contribution to the broad patterns of our history or,
- Association with the lives of significant persons in our past,
- Distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction or,
- A structure that yields or may be likely to yield, information important in history or prehistory,
- A structure, property, object, site, or area with sufficient integrity of location, design, materials and workmanship to make it worthy of preservation or restoration, or
- An established and familiar natural setting or visual feature of the community.

## ASSESS INTEGRITY

In addition to being historically significant, a property also must have integrity in that a sufficient percentage of the structure must date from the period of significance. The majority of the building's structural system and materials should date from the period of significance and its character-defining features also should remain intact. These may include architectural details such as storefronts, cornices, moldings and upper-story windows on commercial buildings and dormers, porches, ornamental brackets, and moldings on residential buildings. The overall building form and materials should also be intact. These elements allow a building to be recognized as a product of its own time.



*Inappropriate treatment on a historic resource.*



*Proposed improvements on the building shown above.*



*Appropriate new porch features are installed per drawing above.*

## ACCEPTED TREATMENTS FOR HISTORIC RESOURCES

The first step in planning a preservation project is to identify any character-defining features and materials of the structure. Retaining such details will greatly enhance the overall quality of the project. If they are in good condition, then selecting an appropriate treatment will provide for proper preservation. In essence, the least level of intervention is preferred. By following this tenet, the highest degree of integrity will be maintained for the property.

The following list describes appropriate treatments for historic resources that may be considered when planning a preservation project. Much of the language addresses buildings; however, sites and structures are also relevant.

### Preservation

“Preservation” is the act of applying measures to sustain the existing form, integrity and material of a building. Work focuses on keeping a property in good working condition with proactive maintenance. While the term “preservation” is used broadly to mean keeping a historic property’s significant features, it is also used in this more specific, technical form in this document.

### Restoration

“Restoration” is the act or process of accurately depicting the form, features and character of a property as it appeared in a particular time period. It may require the removal of features from outside the restoration period. This may apply to an entire building front, or to restoring a particular missing feature.

### Reconstruction

Reconstruction is the act or process of depicting, by means of new construction, the form, features and detailing of a non-surviving site, landscape, building, structure or object for the purpose of replicating its appearance at a specific time and in its historic location. This has limited application, in terms of an entire building, but may apply to a missing feature on a building.

## **Rehabilitation**

“Rehabilitation” is the process of returning a property to a state that makes a contemporary use possible while still preserving those portions or features of the property which are significant to its historical, architectural and cultural values. Rehabilitation may include a change in use of the building or additions. This term is the broadest of the appropriate treatments and applies to most work on historic properties.

## **Combining Treatments**

For many projects a “rehabilitation” approach will be the overall strategy, because this term reflects the broadest, most flexible of the approaches. Within that, however, there may be a combination of treatments used as they relate to specific building components. For example, a surviving cornice may be preserved, a storefront base that has been altered may be restored, and a missing kickplate may be reconstructed.

## **Inappropriate Treatments**

The following approaches are not appropriate for historically significant properties.

## **Remodeling**

This is the process of changing the historic design of a building. The appearance is altered by removing original details and by adding new features that are out of character with the original. Remodeling of a historic structure is inappropriate.

## **Deconstruction**

Deconstruction is a process of dismantling a building such that the individual material components and architectural details remain intact. This may be proposed when a building is to be relocated or when the materials are to be reused in other building projects. Deconstruction may be a more environmentally responsible alternative to conventional demolition. However, it is still an inappropriate treatment for a building of historic significance.

## **Demolition**

Any act or process that destroys, in part or whole, a structure, building or site is considered “demolition.” This is inappropriate for any historic building.

## Preferred Sequence of Actions

Selecting an appropriate treatment for a character-defining feature is important. The method that requires the least intervention is always preferred. By following this tenet, the highest degree of integrity will be maintained. The following treatment options appear in order of preference. When making a selection, follow this sequence:

**Step 1. Preserve:** If a feature is intact and in good condition, maintain it as such.



**Step 2. Repair:** If the feature is deteriorated or damaged, repair it to its original condition.



**Step 3. Replace:** If it is not feasible to repair the feature, then replace it in kind, (e.g., materials, detail, finish). Replace only that portion which is beyond repair.



**Step 4. Reconstruct:** If the feature is missing entirely, reconstruct it from appropriate evidence. If a portion of a feature is missing, it can also be reconstructed.



**Step 5. Compatible Alterations:** If a new feature (one that did not exist previously) or an addition is necessary, design it in such a way as to minimize the impact on original features. It is also important to distinguish a new feature on a historic building from original historic elements, even if in subtle ways.



*This before and after image shows an appropriate preservation action. The before image shows where the windows were removed and the after image shows the wood windows reinstalled after their repair.*



Historic image

These historic, rehabilitation in-progress and after images show appropriate preservation techniques. The historic image shows the original details of the building. The in-progress images show protective measures that have been put in place. The after images show state-of-the-art preservation action, note the installation of the projecting canopies at the entry, rehabilitation of the cornice, installation of plate glass elements and the restoration of masonry features.



In-progress



In-progress



After



After

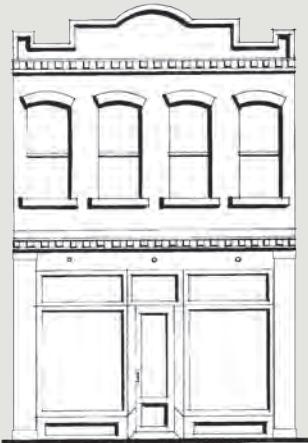
# DEVELOPING AN IMPROVEMENT STRATEGY

The guidelines discuss a range of improvement options, including reconstruction and replacement of features in various ways. When applied to a building that is already altered, which would be the best approach? This diagram outlines the approaches to consider in making that decision.

## Altered Historic Commercial Facade



### Approach 1: Accurate Reconstruction



#### When should I use this treatment?

- The building is highly significant.
- There is good historical information about the design.
- The needed materials and craftsmen are available.
- The context has many intact historic buildings.

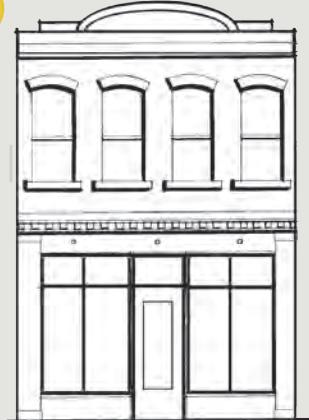
### Approach 2: Simplified Historic Interpretation



#### When should I use this treatment?

- The building is part of the fabric of the district.
- There is less historical information available about the original design.
- A phased project is planned.

### Approach 3: Contemporary Interpretation

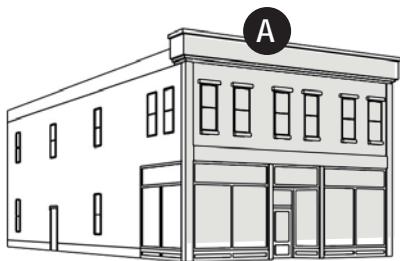


#### When should I use this treatment?

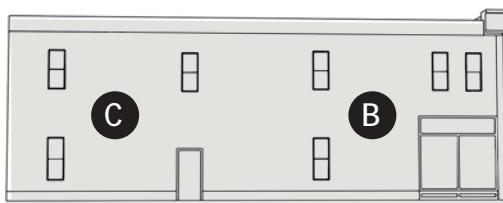
- There is substantial alteration, making other options difficult.
- There is less historic information about the original design.
- The context has more variety.

## Which Areas are the Most Sensitive to Preserve?

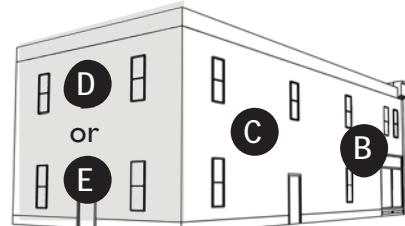
For most historic resources, the front wall is the most important to preserve intact. Alterations are rarely appropriate. Many side walls are also important to preserve where they are highly visible from the street. By contrast, portions of a side wall not as visible may be less sensitive to change. The rear wall is usually the least important (excepting free-standing, individual landmarks or certain civic and industrial buildings), and alterations can occur more easily without causing negative effects to the historic significance of the property.



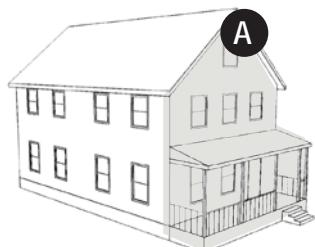
Primary Façade



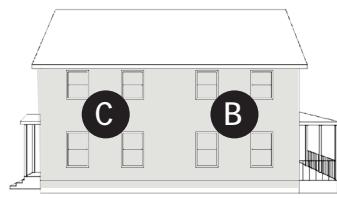
Secondary Wall



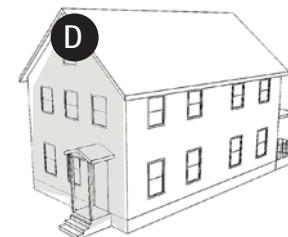
Rear Wall



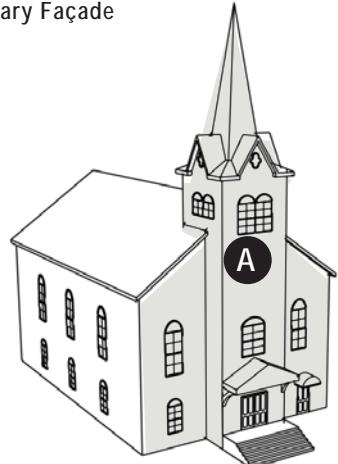
Primary Façade



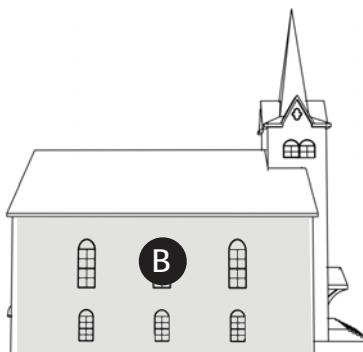
Secondary Wall



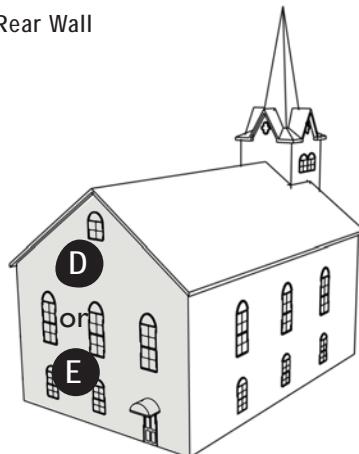
Rear Wall



Primary Façade



Secondary Wall



Rear Wall

**Location A.**  
**Primary Façade:** Preservation and repair of features in place is the priority. This is especially important at the street level and in locations where the feature is highly visible.

**Location B.**  
**A Secondary Wall, Which Is Highly Visible:** A compatible replacement or alteration is acceptable. Some flexibility in treatment may be considered.

**Location C.**  
**A Secondary Wall, Which Is Not Highly Visible:** Preservation is still preferred; however, a compatible replacement or alteration may be acceptable when it is not visible to the public. More flexibility in treatment may be considered.

**Location D.**  
**A Rear Wall That Is Not Highly Visible:** A compatible replacement or alteration may be acceptable when it is not visible to the public. A higher level of flexibility in treatment may be considered.

**Location E.**  
**A Highly Visible Rear Wall:** Preservation and repair of features in place is the priority. Some flexibility may be considered.



*Original building remodel with stucco covering.*



*Interim improvements to the building included removing the canopy, providing a new sign and painting the stucco covering.*



*The rehabilitation effort included removing the stucco, reconstructing the cornice and installing a new storefront system.*

## PHASING A PRESERVATION PROJECT

In some cases, a property owner may wish to make interim improvements, rather than execute a complete rehabilitation of a historic property. This work should be planned such that it establishes a foundation for future improvements that will further assure continued use of the property and retain its historic significance. For example, a simplified cornice element may be installed on a commercial storefront, in lieu of reconstructing the original design, with the intent that an accurate reconstruction would occur later.

**Plan interim improvements to retain opportunities for future rehabilitation work that will enhance the integrity of a historic property.**

- Preserve key character-defining features while making interim improvements.
- Avoid interim improvements that would foreclose opportunities for more extensive rehabilitation in the future.

# Chapter 1

# Rehabilitation Guidelines for

# Historic Properties

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## Historic Architectural Styles

Many distinctly different architectural features are found in individual historical styles.

Information about Dubuque's historic architectural styles is available online from the city's planning department:

## Sustainability and Preservation

As discussed in the previous chapter, sustainable development and the conservation of resources is an inherent central principle of the preservation and rehabilitation of our historic resources. Stewardship of the existing building stock rather than its replacement can significantly reduce our environmental impact. In basic terms, re-using the building preserves the energy and resources invested in its construction, and removes the need for producing new construction materials. All of the guidelines that follow recognize these benefits.

This chapter focuses on rehabilitation guidelines for historic buildings. The first section provides guidance that applies to all types of historic buildings. The subsequent sections address historic residential, commercial and warehouse building types, as well as additions.

# General Rehabilitation

## ARCHITECTURAL DETAILS AND FEATURES

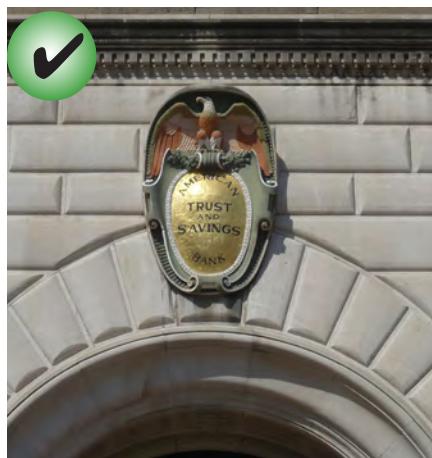
Architectural details and features are often closely associated with specific building styles. Reference the Architectural Styles Booklet when determining key features of a historic property.

### Preserve

#### Policy:

Architectural details and features help establish the significance of historic structures, and should be preserved. The method of preservation that requires the least intervention is preferred.

#### Guidelines:



*Preserve significant architectural details and features.*

#### 1.1 Preserve significant architectural details and features.

- Retain and treat exterior architectural details and features, and other examples of skilled craftsmanship with sensitivity.
- Do not remove or alter architectural details that are in good condition or that can be repaired.

#### 1.2 Avoid adding elements or details that were not part of the original building.

- For example, decorative millwork should not be added to a building if it was not an original feature. Doing so would convey a false history.

#### Historic Architectural features

Historic architectural details and features to consider include:

- Cornices and eaves
- Moldings and brackets
- Storefronts
- Porches
- Loading docks
- Historic awnings
- Columns
- Balustrades
- Modillions and other surface ornamentation
- Windows, doors and surrounds
- Copper and slate roof materials

#### Maintaining Historic Architectural Details and Features

- Protect architectural details and features from moisture accumulation that may cause damage.
- Check features that can hold moisture for long periods of time to make sure they are draining appropriately.
- Employ preventive maintenance measures such as rust removal, caulking and repainting.

## Repair

### Policy:

In some cases, original architectural details may have deteriorated. Horizontal surfaces such as cornices, chimney caps and window sills are likely to show the most deterioration because they are more exposed to weather. When deterioration occurs, repair the material and any other related problems. It is also important to recognize that all details weather over time and that a scarred finish does not represent an inferior material, but simply reflects the age of the building. Therefore, preserving original materials and features that show signs of wear is preferred to replacing them.

### Guidelines:

#### 1.3 Repair only those features that are deteriorated.

- Patch, piece-in, splice, consolidate or otherwise upgrade existing materials, using recognized preservation methods
- Isolated areas of damage may be stabilized or fixed using consolidants. Epoxy and resins may be considered for wood repair.
- Removing damaged features that can be repaired is not appropriate.
- Protect features that are adjacent to the area being worked on.



*Before: A deteriorated railing should be repaired rather than replaced.*

#### 1.4 When disassembly of a historic element is necessary for its rehabilitation, use methods that minimize damage to the original materials.

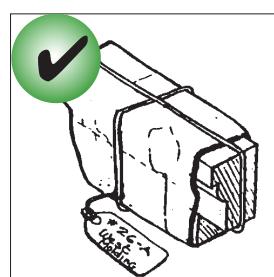
- When disassembly of a historic feature is required during rehabilitation, document its location so it may be repositioned accurately. Always devise methods of replacing disassembled details in their original configuration.



*After: A successful preservation effort will result in a product shown in the example above.*

#### 1.5 Use technical procedures for cleaning, refinishing and repairing architectural details that will maintain the original finish.

- Consult with the City of Dubuque for techniques that are generally considered appropriate.
- When choosing preservation treatments, use the gentlest means possible that will achieve the desired results.
- Employ treatments such as rust removal, caulking, limited paint removal and reapplication of paint or stain where appropriate.



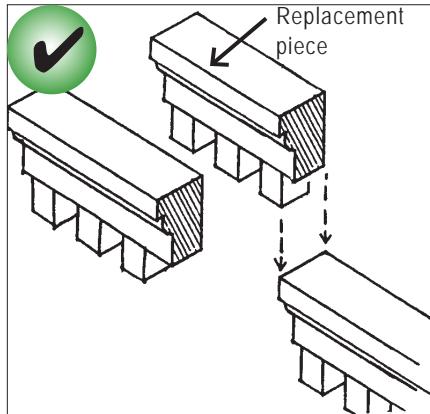
*When disassembly of a historic feature is required in a rehabilitation procedure, document its location so that it may be repositioned accurately.*

## Replace

### Policy:

While the preservation of the original feature is the preferred alternative, in-kind replacement is also an option. In the event replacement is necessary, the new material should match that being replaced in design, color, texture and other visual qualities. Replacement should occur only if the existing historic material is beyond repair.

### Guidelines:



*Where replacement of an element is required, remove only those portions that are deteriorated beyond repair.*

#### 1.6 Replacement of missing or deteriorated architectural elements should be accurate.

- The design should be substantiated by physical or pictorial evidence to avoid creating a misrepresentation of the building's history.
- Use the same kind of material as the original when feasible. However, a substitute material may be acceptable if the size, shape, texture and finish conveys the visual appearance of the original.

#### 1.7 When reconstruction of an element is impossible, develop a new design that is a simplified interpretation of it.

- This is appropriate when inadequate information exists to allow for an accurate reconstruction.
- The new element should be similar to comparable features in general size, shape, texture, material and finish.



*Adding Victorian style trim to a Craftsman Bungalow is an example of adding a detail that is not a part of a building's history, and is inappropriate.*



*Carved bargeboard and spandrel panels on the gable end of a Stick style house are key architectural details that should be preserved.*

#### For More Information

See web link to *Preservation Brief 27: The Maintenance and Repair of Architectural Cast Iron*

<http://www.nps.gov/tps/how-to-preserve/briefs/27-cast-iron.htm>

See web link to *Preservation Brief 47: Maintaining the Exterior of Small and Medium Size Historic Buildings*

<http://www.nps.gov/tps/how-to-preserve/briefs/47-maintaining-externals.htm>



*When reconstruction of an element is impossible, develop a new design that is a simplified interpretation of it.*



*Replace only the amount required. If a few boards are damaged beyond repair, then only they should be replaced, not the entire wall.*



*Use technical procedures for repairing architectural details that will maintain the original finish.*

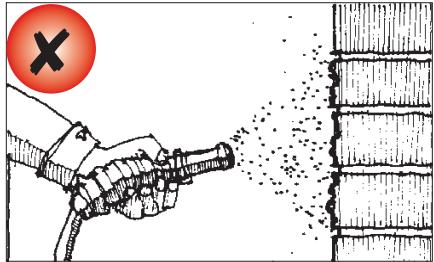


*Replacing missing details in-kind.*

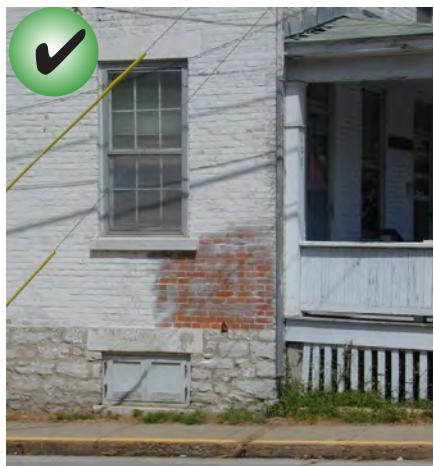
# HISTORIC BUILDING MATERIALS

## Policy:

Original building materials are key features of historic buildings and should be preserved in place whenever feasible. If the material is damaged, limited replacement to match the original should be considered. Preserving original building materials and limiting replacement to only pieces which are deteriorated beyond repair reduces the demand for, and environmental impacts for the production of new materials.



*Harsh cleaning methods such as sandblasting can damage the historic materials and change their appearance.*



*Perform a test patch to determine that the cleaning method will cause no damage to the material surface. Many procedures can actually have an unanticipated negative effect upon building materials and result in accelerated deterioration or a loss of character.*

## Guidelines:

### 1.8 Preserve original building materials.

- Do not remove original materials that are in good condition.
- Repair deteriorated primary building materials by patching, piecing-in, consolidating or otherwise reinforcing the material.

### 1.9 Protect wood features from deterioration.

- Provide proper drainage and ventilation to minimize rot.
- Maintain protective coatings to retard drying and ultraviolet damage. If the building was painted originally, it should remain painted.

### 1.10 Use the gentlest means possible to clean the surface of a structure before repairs or improvements are made.

- Perform a test patch to determine that the cleaning method will cause no damage to the material surface. Many procedures can actually have an unanticipated negative effect upon building materials and result in accelerated deterioration or a loss of character.
- Harsh cleaning methods, such as sandblasting, can damage the historic materials, changing their appearance. Such procedures are inappropriate.
- If cleaning is appropriate, a low pressure water wash is preferred. Chemical cleaning may be considered if a test patch is first reviewed and negative effects are not found.

## Maintaining Historic Materials

The primary historic building materials used in Dubuque include masonry (brick, mortar, stone, terra cotta, stucco, concrete), wood and metal. Such materials should be preserved and rehabilitated whenever possible. Appropriate treatments to protect specific materials from deterioration include:

### Masonry

- Maintain the natural uncovered water-protective layer (patina).
- Do not paint (this can seal in moisture, which may cause extensive damage over time).
- Repoint deteriorated masonry mortar joints with mortar that matches the strength, composition, color and texture of the original. Also, duplicate the mortar joints in width and profile.
- Maintain masonry caps to insure proper drainage.

### Wood

- Maintain paint and other protective coatings to retard deterioration and ultraviolet damage.
- Provide proper drainage and ventilation.
- Use compatible paints. Some latex paints will not bond well to earlier oil-based paints without a primer coat.

### Metal

- Maintain protective coatings, such as paint, on exposed metals.
- Provide proper drainage.

### All Materials

- Epoxies and resins may be considered for wood repair and special masonry repair components also may be used.
- Use a low pressure water wash if cleaning is appropriate. Chemical cleaning may be considered if a test patch is first reviewed and negative effects are not found.
- Do not use harsh cleaning methods, such as sandblasting, which can damage historic materials, changing their appearance.

### Tip:

Some older siding materials may contain hazardous substances, such as asbestos or lead paint. Consult a professional before initiating work where such materials are thought to exist. Also see City of Dubuque Planning Services Staff for more information.

### For More Information

See web link to *Preservation Brief 17: Architectural Character - Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Character.*

<http://www.nps.gov/tps/how-to-preserve/briefs/17-architectural-character.htm>

### For More Information

See web link to *Preservation Brief 16: The Use of Substitute Materials on Historic Building Exteriors.*

<http://www.nps.gov/tps/how-to-preserve/briefs/16-substitute-materials.htm>

### For More Information

See web link to *Preservation Brief 1: Assessing Cleaning and Water-Repellent Treatments for Historic Masonry Buildings*

<http://www.nps.gov/tps/how-to-preserve/briefs/1-cleaning-water-repellent.htm>

See web link to *Preservation Brief 2: Repointing Mortar Joints in Historic Masonry Buildings*

<http://www.nps.gov/tps/how-to-preserve/briefs/2-repoint-mortar-joints.htm>

## Using Alternative Materials on a Historic Structure

The design guidelines sometimes refer to the use of alternative materials when describing the appropriate treatment of historic building features and components such as moldings, windows, siding and other architectural details.

An alternative material is one which is different from that used originally for a specific application. Such materials may also be called "substitute", "replacement", "synthetic" or "imitation" materials, and can include:

- Vinyl siding or fencing
- PVC decking or fencing
- Aluminum siding
- HardiePlank siding
- Cementitious fiber siding
- Spray-on coatings
- Synthetic stucco
- Panelized brick
- Other non-original materials



Substitute materials may also include materials used to replace historic architectural features such as a resin-cast cornice used in place of a stamped metal cornice. In other cases, an alternative material may be traditional when used for other applications, but new for the particular detail being considered. Using wood to replace an original stamped-metal cornice is an example.

Alternative materials may be considered by the city on a case-by-case basis as replacement materials or for use on a new addition or new building in a historic district. The city will consider factors including:

**Potential Impact on Historic Significance.** Removing original material diminishes the integrity of a historic property by reducing the percentage of building fabric that remains from the period of historic significance. Retaining the original material is always preferred. If this is not feasible, alternative materials may be considered. When used, an alternative material should convey the character, including detail and finish, of the original to the greatest extent feasible.

**Appearance.** An alternative material should have a similar profile, texture and finish as the original material. Some synthetic siding has an exaggerated, rusticated finish that is an inaccurate representation of original clapboard, and many vinyl products have a sheen that is out of character with that of painted wood and metal.

**Durability.** An alternative material should have proven durability in similar applications. While some new materials are very sturdy, others may degrade quickly and can be difficult to repair.

**Location.** Up close, it is easier to identify some alternative materials due to differences in texture, finish and feel. Tapping on a hollow plastic column or fence does not convey the same experience as the original. For this reason, locations that are more remote are better. Similarly, use of alternative materials is more appropriate on non-primary façades. See "Locating Façade Improvements" on page 19 for more information.

**Cost.** Some alternative materials are promoted because their initial costs appear to be less than repairing or replacing the original. When the other qualities of appearance and durability are proven, then the less expensive option may be appropriate. However, long-term, "life cycle" costs should also be weighed. Sometimes, the up-front saving is deceptive.

**Environmental Impacts.** The potential environmental impacts of alternative materials should also be considered including impacts associated with manufacture, transport, installation and ability to recycle.

**Interaction with Historic Building Materials.** Some alternative materials may interact negatively with historic materials. For example, some metals may corrode and stain original materials and some window and siding materials may expand and contract with temperature changes in ways that degrade weather-protection properties.



*Alternative materials may be considered for replacements on secondary elevations where key features are not affected. This cementitious composite siding, which is located on a rear wall, is an example.*

### 1.11 Plan repainting carefully.

- Always prepare a good substrate. Remove damaged or deteriorated paint only to the next intact layer, using the gentlest means possible, prior to painting.
- Use compatible paints. Some latex paints will not bond well to earlier oil-based paints without a primer coat.



### 1.12 Brick or stone that was not painted historically should not be painted.

- Masonry naturally has a water-protective layer, or patina, to protect it from the elements. Painting masonry walls can seal in moisture already in the masonry, thereby not allowing it to breathe and causing extensive damage over the years.



*Commence with building cleaning again after any repointing has completely cured.*

### 1.13 Repair deteriorated primary building materials by patching, piecing-in, consolidating or otherwise reinforcing the material.

- Avoid the removal of damaged materials that can be repaired.
- Isolated areas of damage may be stabilized or fixed, using consolidants. Epoxies and resins may be considered for wood repair and special masonry repair components also may be used.



### 1.14 Repoint mortar joints where there is evidence of deterioration.

- Duplicate the old mortar in strength, composition, color and texture.
- Avoid using mortar with a high portland cement content, which will be substantially harder than the original.
- Duplicate the mortar joints in width and profile.

*Do not remove damaged materials that can be repaired. In this case, loose shingles may be re-secured while missing ones may be replaced.*



Before tuckpoint



After tuckpoint

#### Masonry

Many of Dubuque's commercial and residential buildings are constructed with brick or stone bearing walls. They were typically sourced from local brick yards and quarries. Preserving these materials is a key component of the city's sustainability policies.



*Before rehabilitation. Inappropriate materials should be removed.*



*After rehabilitation, see image to left. Property appropriately restored.*



*Match the original material in composition, scale and finish when replacing materials on primary surfaces.*

**1.15 Match the original material in composition, scale and finish when replacing materials on primary surfaces.**

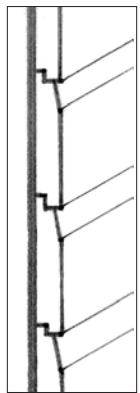
- If the original material is wood clapboard, for example, then the replacement material should be wood as well. It should match the original in size, the amount of exposed lap and in finish.
- Replace only the amount required. If a few boards are damaged beyond repair, then only they should be replaced, not the entire wall.

**1.16 Do not use synthetic materials, such as aluminum or vinyl siding or panelized brick, as replacements for primary building materials.**

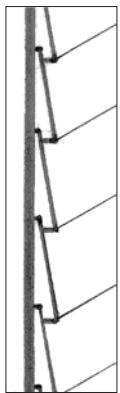
- Primary building materials, such as original wood siding and masonry, should not be replaced with synthetic materials on key, character-defining walls.
- In some instances, substitute materials may be used for replacing architectural details, but doing so is not encouraged. If it is necessary to use a new material, such as a fiberglass molding, the style and detail should match the historic model.
- The Commission may consider alternative materials located on a residential accessory building, or on an addition or rear wall of a primary structure.

## Building Materials Details

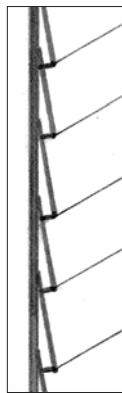
### Wood Siding



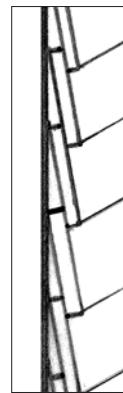
*Shiplap*



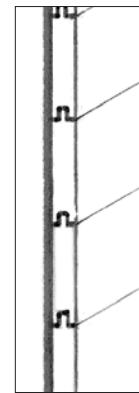
*Rabbeted*



*Beveled*

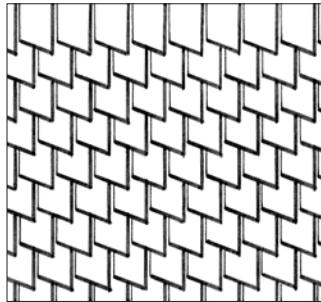


*Clapboard*

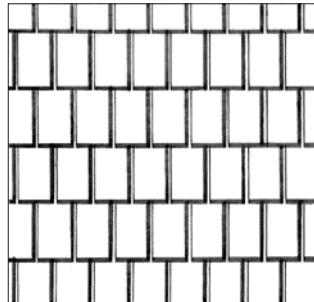


*Tongue and Groove*

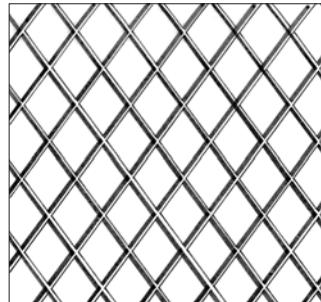
### Shingles



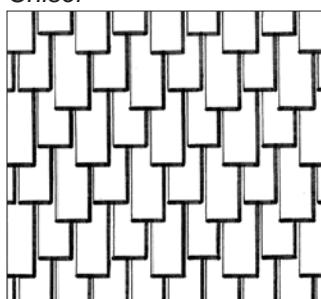
*Chisel*



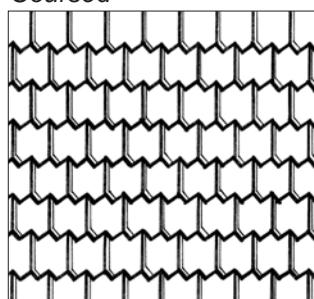
*Coursed*



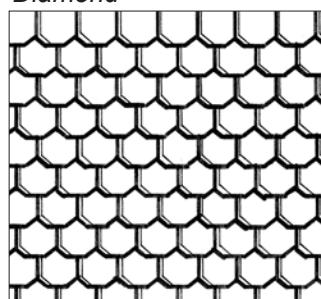
*Diamond*



*Staggered*

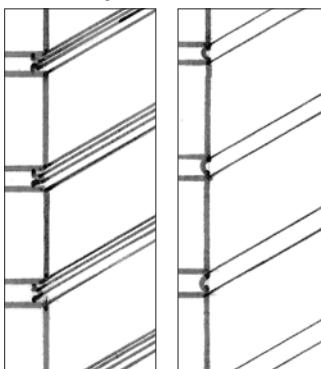


*Sawtooth*

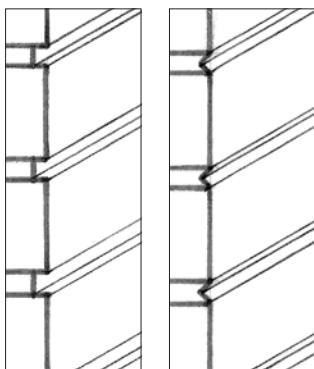


*Fishscale*

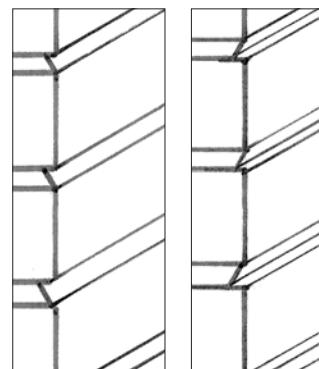
### Masonry Joints



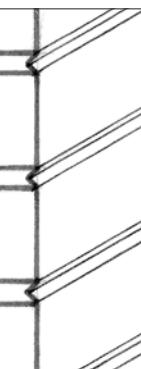
*Beaded*



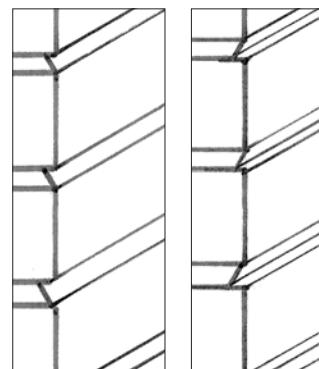
*Concave*



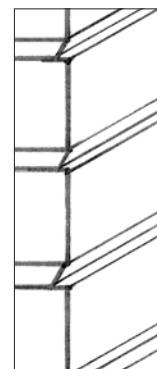
*Stripped*



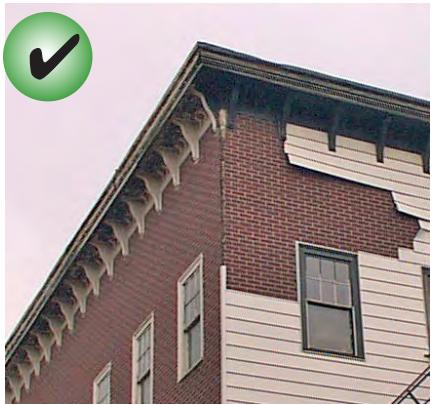
*V-shaped*



*Weathered*



*Struck*



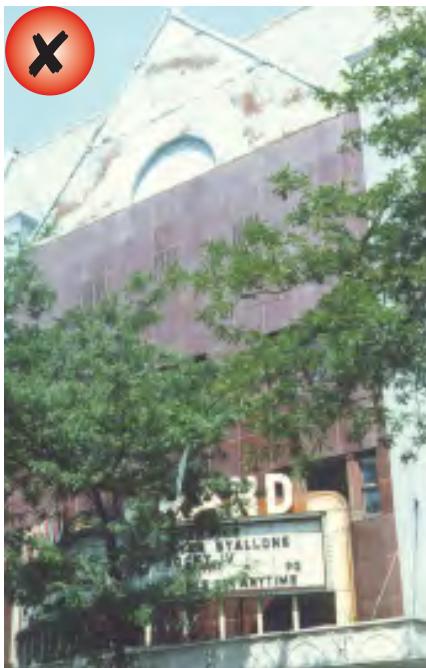
*Consider removing later covering materials that have not achieved historic significance.*

#### 1.17 Covering original building materials with new materials is inappropriate.

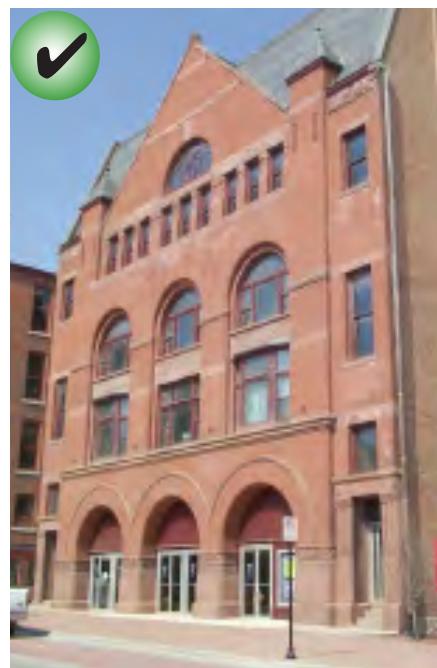
- Vinyl siding, aluminum siding and new stucco are inappropriate on historic buildings. Other imitation materials that are designed to look like wood or masonry siding, fabricated from other materials, are also inappropriate.
- If a property already has a non-historic building material covering the original, it is not appropriate to add another layer of new material, which would further obscure the original.

#### 1.18 Consider removing later covering materials that have not achieved historic significance.

- Once the non-historic siding is removed, repair the original, underlying material.
- If a building has a stucco finish, removing the covering may be difficult, and may not be desirable. Test it first to assure that the original material underneath will not be damaged.



*Before: More recent material covers original details. (Compare with the image to the right.)*



*After: Original features revealed and restored. (Compare with the image to the left.)*

# INDIVIDUAL BUILDING COMPONENTS

Proper treatment of individual historic building components supports goals for sustainability and preservation. Original components should be retained whenever possible.

## Roofs

### Policy:

Roof form, material and detail are important features that contribute to the significance of a historic structure. The character of a historic roof should be preserved, including its form and materials, whenever feasible.

### Guidelines:

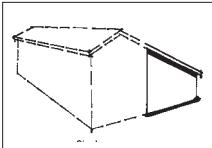
#### 1.19 Preserve the original roof form of a historic structure.

- Avoid altering the angle of a historic roof. Instead, maintain the perceived line and orientation of the roof as seen from the street.
- Retain and repair roof detailing.

#### 1.20 Preserve the original eave depth on sloped roofs of a historic structure.

- The shadows created by traditional overhangs contribute to one's perception of the building's historic scale and therefore, these overhangs should be preserved.
- Cutting back roof rafters and soffits or in other ways altering the traditional roof overhang is inappropriate.
- Avoid damaging eaves and soffits when installing a new downspout.

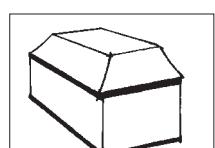
### Typical Residential Roof Types



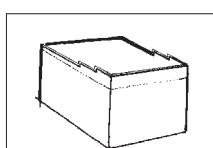
Shed roof



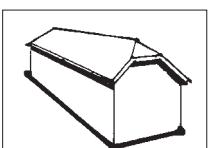
Gambrel roof



Mansard roof



Commercial Flat roof

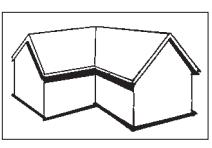


Clipped Gable roof

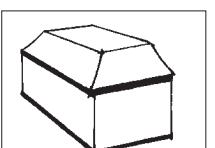


Hipped roof

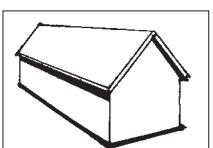
### Roof Types found on both Residential and Commercial Buildings



Cross-Gabled roof



Mansard roof



Gabled roof



*Flat roofed buildings are commonly found in the downtown district.*



*Preserve distinctive roofing materials and designs; replace only those shingles that are deteriorated beyond repair.*



*This monitor, at the top of the roof, is a distinctive feature that should be preserved. It also offers opportunities for natural ventilation.*

#### Typical roof features to preserve include:

- Basic form
- Eaves overhang
- Exposed rafter tails
- Moldings
- Cresting
- Finials
- Monitors
- Cupolas
- Widow's walks

### 1.21 Preserve distinctive roof features.

- Ornamental cresting, a cupola or widows walk are examples of distinctive features that should be preserved.

### 1.22 Preserve original roof materials

- Avoid removing historic roofing material that is in good condition. When replacement is necessary, use materials similar to the original in both style as well as physical qualities and use a color that is similar to that seen historically.
- Specialty materials such as tile and/or slate should be replaced with a matching material.

### 1.23 Preserve historically significant downspouts and gutters.

- Repair historic gutters and downspouts when needed. This is especially important on key, character-defining building faces.
- Patch and splice in portions that are beyond repair, rather than replacing them entirely, when feasible.

### 1.24 New or replacement roof materials should convey a scale and texture similar to those used traditionally.

- Composite shingles work best for many types of buildings that have sloped roofs. Fiberglass may also be considered.
- Roof materials should generally be earth tones and have a matte, non-reflective finish.
- The new material should be consistent with the history style of the property.
- When using a new asphalt, fiberglass or similar composition roof material, match the original in color and finish to the extent feasible. (Some alternative colors may be considered, however, when doing so is part of a coordinated energy conservation scheme.)

**1.25 If metal roof materials are to be used, they should be applied and detailed in a manner compatible with the historic character and not distract from the historic appearance of the building.**

- Metal roof materials should be earth tones and have a matte, non-reflective finish.
- Seams should be of a low profile.
- The edges of the roofing material should be finished similar to those seen historically. The edges of standing seam metal roof were historically bent downward at the edges of the roof with a very slight overhang. In most cases the gutters hide this detail.
- Stamped metal panels should appear similar to those seen historically.
- Some modern metal roofing materials do not have proportions that are appropriate to the historic character of many older buildings and should be avoided.

**Tip:**

When replacing a slate or tile roof, the support system should be evaluated to determine that it will meet current code requirements for bearing such loads. Some reinforcing may be needed.

**1.26 When installing new gutters and downspouts, select a design that is compatible with the architectural style.**

- When an ornamental design was used historically, but it is not feasible to replicate it, then use a simple design that does not detract from the property or convey a false history.

**1.27 Avoid using conjectural materials or features on a roof.**

- Adding a widow's walk (an ornate railing around the roof ridge) on a house where there is no evidence one existed creates a false impression of the home's original appearance, and is inappropriate.

**1.28 Minimize the visual impacts of skylights and other rooftop devices.**

- The addition of features such as skylights or solar panels should not be installed in a manner such that they will interrupt the plane of the historic roof. They should be lower than the ridgeline.
- Flat skylights that are flush with the roof plane may be considered on the rear and sides of the roof. Locating a skylight or a solar panel on a front roof plane should be avoided.

# Chimneys

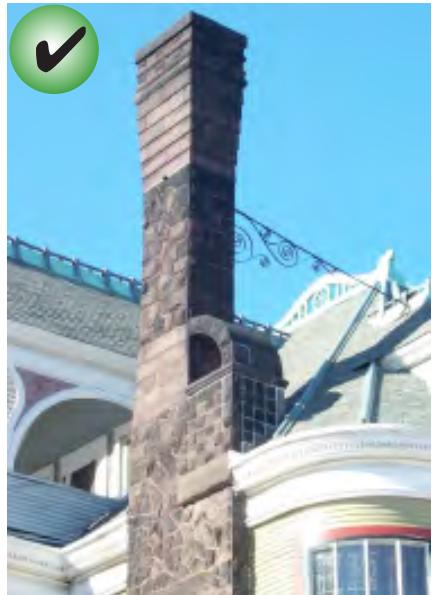
## Policy:

Original chimneys are often distinctive features on historic buildings in Dubuque. Many are constructed of brick and have decorative details. These features should be preserved. In some cases, they may no longer be functional, but preserving them is still preferred.

## Guidelines:

### 1.29 Preserve a historic chimney.

- These surfaces are more exposed than others and may require more frequent maintenance.
- See also the preceding guidelines for treatment of masonry as a primary building material.
- Also preserve distinctive flue caps and other decorative features of a chimney.



### 1.30 Repair a historic chimney when it is deteriorated.

- Avoid replacing a chimney when repair is feasible.

### 1.31 If a historic chimney is beyond repair, reconstruct it to match the original.

- If a reconstruction is not feasible, use a simplified interpretation that is compatible with the character of the roof and the building style.



*Preserve a historic chimney.*

# Cornice and Parapets

## Policy:

Original cornices are typically distinctive features on historic buildings in Dubuque. Many are constructed of brick, stone or pressed metals and have decorative details. These should be preserved. Parapet caps are also important in maintaining the integrity of building materials since they are designed to shed moisture away from the building wall.

## Guidelines:

### 1.32 Preserve a historic cornice.

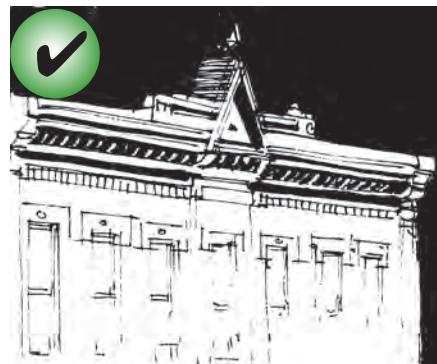
- Most historic commercial buildings have cornices to cap their facades. Their repetition along the street contributes to the visual continuity on the block. These cornices, and the parapets to which they are attached, should be maintained.
- Many cornices are made of sheet metal, which is fairly lightweight and easy to repair. Areas that have rusted through can be patched with pieces of new metal.



*Preserve a historic cornice.*

### 1.33 Reconstruct a missing cornice when historic evidence is available.

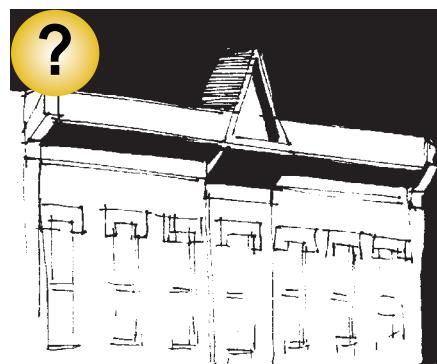
- Use historic photographs to determine design details of the original cornice.
- Replacement elements should match the original in every detail, especially in overall size and profile. Keep sheet metal ornamentation well painted.
- The substitution of another old cornice for the original may be considered, provided the substitute is similar to the original.



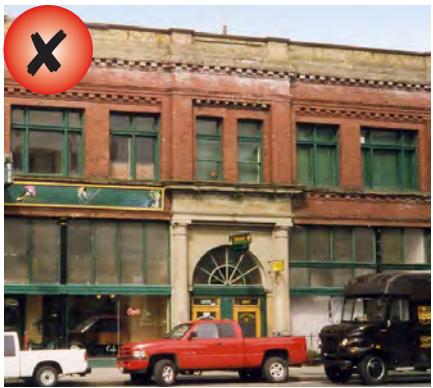
*Reconstruct a missing cornice when historic evidence is available.*

### 1.34 A simplified interpretation is also appropriate for a replacement cornice if evidence of the original is missing.

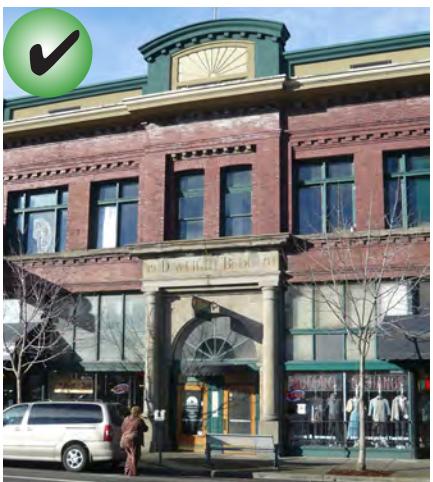
- Appropriate materials include stone, brick and stamped metal.



*A simplified interpretation is also appropriate for a replacement cornice if evidence of the original is missing.*



*Before: Cornice missing*



*After: Cornice reconstructed using material similar to the original.*



*Preserve a parapet wall.*

**1.35 A parapet wall should not be altered, especially those on primary elevations or highly visible facades.**

- When a parapet wall becomes deteriorated, there is sometimes a temptation to lower or remove it. Avoid doing this because the flashing for the roof is often tied into the parapet, and disturbing it can cause moisture problems.
- Inspect parapets on a regular basis. They are exposed to the weather more than other parts of the building, so watch for deterioration such as missing mortar or excessive moisture retention.
- Avoid waterproofing treatments, which can interfere with the parapet's natural ability to dry out quickly when it gets wet.

## Windows - General

### Policy:

A variety of window sizes, shapes and details exist among the historic resources of Dubuque. The character-defining features of a historic window and its distinct materials and placement should be preserved. In addition, a new window should be in character with the historic building.

Also, repairing, weather-stripping and/or insulating (perimeter window cavity) a window is more energy efficient, and less expensive than replacement.

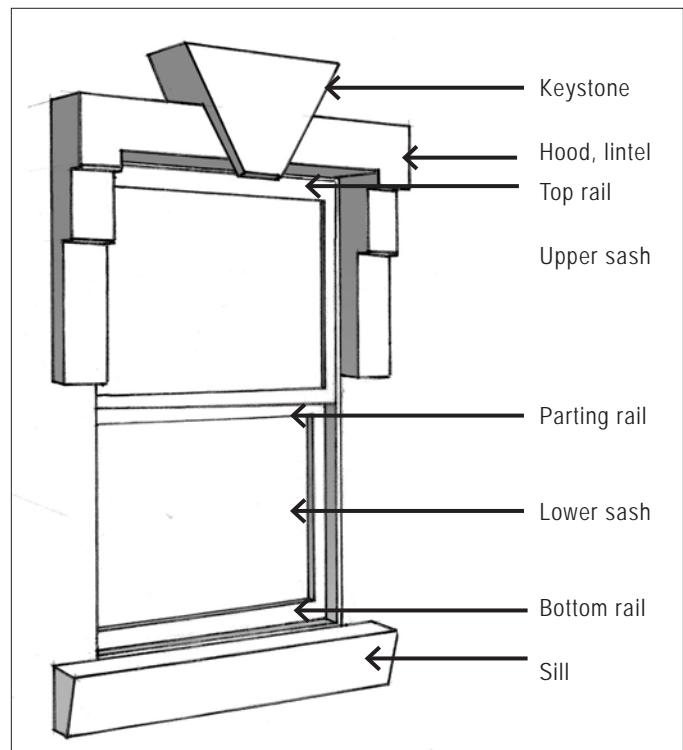
### Guidelines:

#### 1.36 Preserve the functional and decorative features of a historic window.

- Features important to the character of a window include its frame, sash, muntins, mullions, glazing, sills, heads, jambs, moldings, hoods, operation and groupings of windows. Repair frames and sashes rather than replacing them, whenever conditions permit.



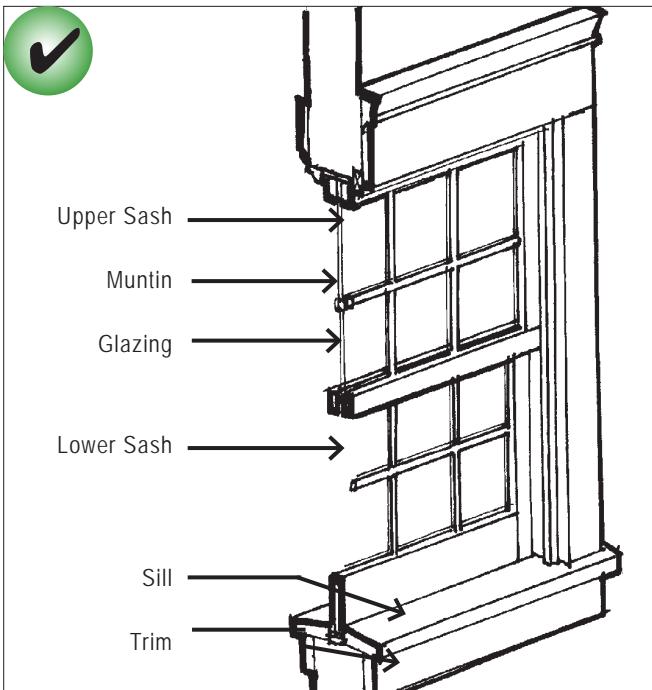
An example of decorative glass.



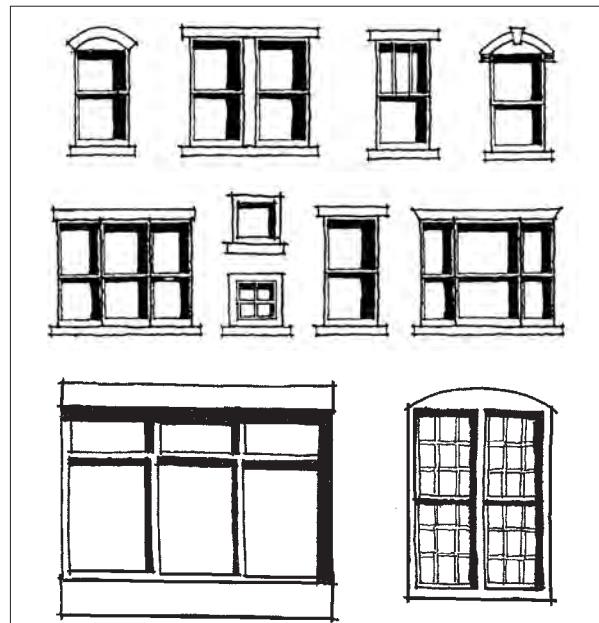
Window and decorative features.

#### Historic Window Components include:

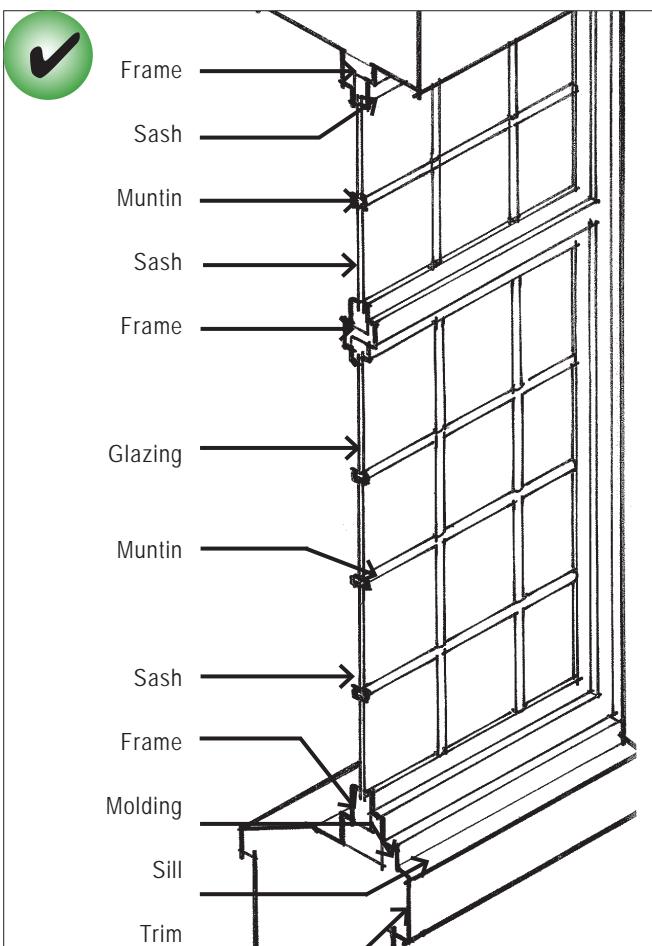
- Sash
- Frame
- Number of lights (panes)
- Shutters
- Security Devices (bars and screens)
- Insect screens
- Storm windows
- Hood/Lintel
- Sill
- Muntin
- Sash



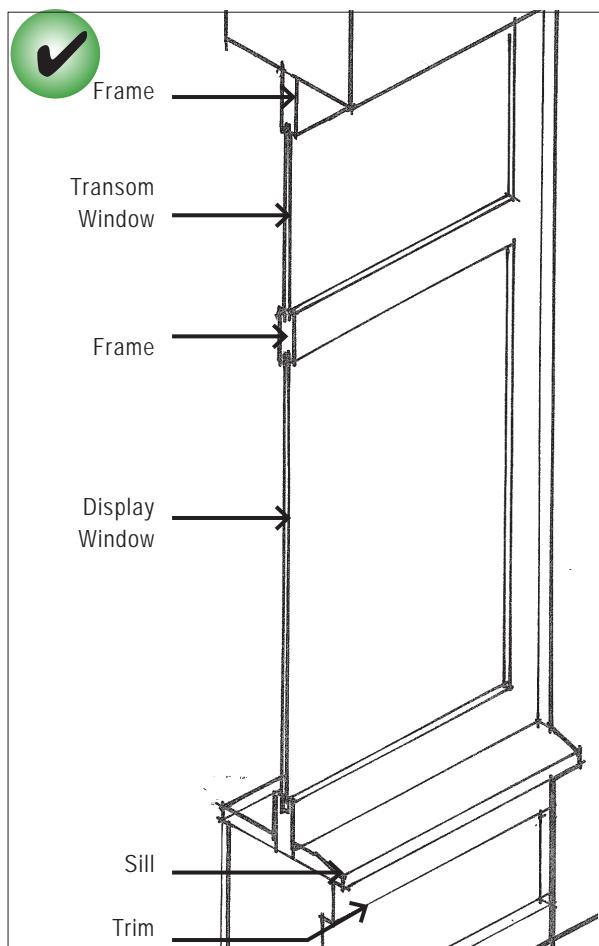
**Double Hung Window.**  
(Residential, Commercial, Warehouses)



*The character-defining features of a historic window and its distinct materials and placement should be preserved. In addition, a new window should be in character with the historic building.*



**Pivot Window.**  
(Warehouses)



**Storefront Window.**  
(Commercial)

### 1.37 Preserve the position, number and arrangement of historic windows in a building wall.

- Enclosing a historic window opening is inappropriate, as is adding a new window opening. This is especially important because the historic ratio of solid-to-void is a character-defining feature.
- Greater flexibility in installing new windows may be considered on rear walls.



*Preserve the position, number and arrangement of historic windows in a building wall.*

### 1.38 Preserve the size and proportion of a historic window opening.

- Reducing an original opening to accommodate a smaller window or increasing it to receive a larger window is inappropriate.
- Preserve a distinctive window opening shape, such as an arched top.

### 1.39 Preserve the historic ratio of window openings to solid wall on a primary facade.

- Significantly increasing the amount of glass on a primary, character-defining wall will negatively affect the integrity of the structure.



*Inappropriate: altering the shape of historic window openings.*

### 1.40 Match a replacement window to the original in its design.

- If the original is double-hung, then the replacement window should also be double-hung or appear to be so. Match the replacement also in the number and position of glass panes.
- Matching the original design is particularly important on key character-defining facades. This includes decorative glass, such as leaded or stained glass.



*Match the appearance of the original window design (i.e., if the original is double-hung, use a double-hung replacement window, or a window that appears to be double-hung).*

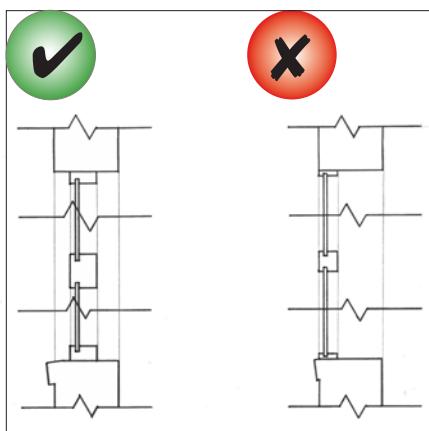
#### Alternative Window Designs

If it is not possible to match the original design and materials of a window, then an alternative design may be considered in the following locations:

- On a non-primary facade, accessory building or addition
- On a primary facade if no other option is available

Alternative window designs should:

- Match the general profile and details of the original window, whenever possible.
- Use materials that match the original appearance in dimension, profile and finish.



Original Sash Profile

Inappropriate replacement

#### 1.41 In a replacement window, use materials that appear similar to the original.

- Using the same material as the original is preferred, especially on character-defining facades. However, a substitute material may be considered if the appearance of the window components will match those of the original in dimension, profile and finish.
- New glazing should convey the visual appearance of historic glazing. It should be clear. Metallic and reflective finishes are inappropriate. In some instances colored or tinted glass may be appropriate in commercial storefront transoms or residential windows.
- Vinyl and unfinished metals are inappropriate window materials.

#### For More Information

See web link to *Preservation Brief 9: The Repair of Historic Wooden Windows*

<http://www.nps.gov/tps/how-to-preserve/briefs/9-wooden-windows.htm>

See web link to window retrofit article from the National Trust for Historic Preservation web site:

<http://www.preservationnation.org/who-we-are/press-center/press-releases/2012/new-windows-study.html#.UdshXFsiKL>

Web link to window treatments National Park Service Tech Notes. Scroll down page to window to find the links:

<http://www.nps.gov/tps/how-to-preserve/tech-notes.htm>

#### 1.42 Match, as closely as possible, the profile of the sash and its components to that of the original window.

- A historic wood window has a complex profile. Within the window's casing, the sash steps back to the plane of the glazing (glass) in several increments. These increments, which individually only measure in eighths or quarters of inches, are important details. They distinguish the actual window from the surrounding plane of the wall.
- Where true divided lights were used historically, using them in a replacement window is preferred; alternatives, such as snap-on muntins applied to the exterior may be considered on secondary elevations. Using strips of material inserted between double-glazing panes is discouraged.



Before



After: Using the same material as the original is preferred, especially on character-defining facades.

## Windows - Accessories

### 1.43 Preserve historic shutters.

- Historic shutters contribute to the character of a property and also offer opportunities for energy conservation. They provide shading and cooling during summer months and protection to windows during storms.
- Window awnings and shutters are appropriate in limited circumstances. They are only appropriate on specific architectural styles.



*Historic shutters contribute to the character of a property and also offer opportunities for energy conservation.*

### 1.44 Install new shutters to be in character with those used historically.

- Operable shutters are preferred. These help support sustainability objectives of the city.
- New shutters should match the opening that they frame in size and shape.
- If shutters are missing, use historical documentation, or examples from properties of similar period and style to assure authenticity.



*Appropriate:  
Exterior storm window*

### 1.45 Enhance the energy efficiency of an existing historic window, rather than replace it.

Use these measures:

- Add weather stripping and caulking around the window and frame.
- Install a storm window.
- Install an insulated window shade.



*Unfinished metal storm windows such as these alter the character of window openings, and should not be used on primary elevations. A metal storm window may be appropriate if the frame matches the proportions and profiles of the original window and has a painted finish.*

**1.47 Use an insect screen to enhance energy conservation and ventilation.**

- Fit the screen to match the historic window shape and character.
- Half screen units that cover only the lower sash opening are acceptable.

**1.48 Minimize the visual impacts of security devices on windows.**

- Avoid installing bars on the exterior of windows on a building front when feasible.

# Doors - General

## Policy:

The character-defining features of a historic door and its distinct materials and placement should be preserved. In addition, a new door should be in character with the historic building. This is especially important on primary facades. Also, repairing, weather-stripping and/or insulating (perimeter wall cavity) a door is more energy efficient, and less expensive than replacement.

## Guidelines:

### 1.49 Preserve the decorative and functional features of a primary entrance.

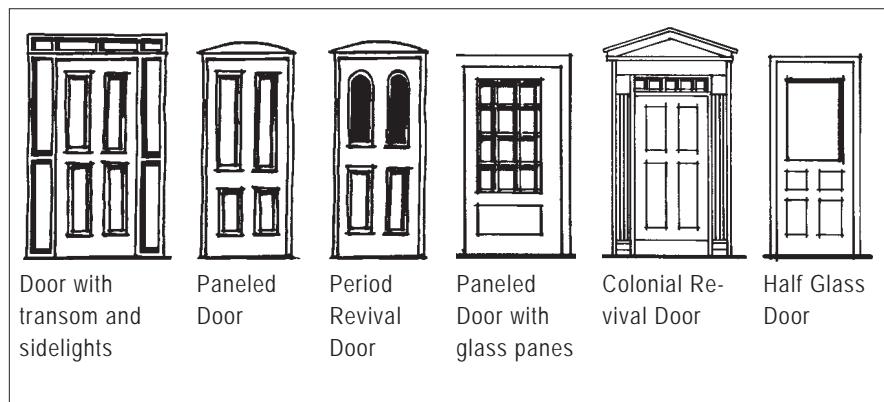
- Maintain features important to the character of a historic doorway. These may include the door, door frame, screen door, threshold, glass panes, paneling, hardware, detailing, transoms and flanking sidelights.
- Avoid changing the position and function of original front doors and primary entrances.

### 1.50 Maintain the original proportions of a significant door.

- Altering the original size and shape of a significant door is inappropriate.

### 1.51 When a historic door is damaged, repair it and maintain its general historic appearance.

- If original features are missing or beyond repair, splice and patch in those components to replicate the original in size, shape, profile and finish.



*The character-defining features of a historic door and its distinct materials and placement should be preserved. In addition, a new door should be in character with the historic building.*

## Historic Door and Entry Components

Original door and entry features include:

- Door Detailing
- Sills
- Surround
- Transoms
- Heads
- Threshold
- Moldings
- Jambs
- Landing (mosaic tiles)
- Flanking sidelights



*Preserve the decorative and functional features of a primary door.*



*When replacing a door, use materials that appear similar to that of the original.*



*A new door such as this, that differs from the original or that is inconsistent with the historic style, is inappropriate on a primary wall.*

**1.52 When replacing a door, use materials that appear similar to that of the original.**

- A metal door, if seen from the street, is inappropriate where the original was wood.
- Alternative materials for a door may be considered on secondary walls.

**1.53 When replacing a door, use a design that has an appearance similar to the original door, or a door associated with the building style or type.**

- Very ornate doors are discouraged, unless photographic evidence can support their use.

**1.54 Avoid installing a new door opening on a key, character-defining wall.**

- A new opening may be considered on a secondary wall.

**1.55 If energy conservation and heat loss are a concern, consider using a storm door instead of replacing a historic entry door on a residential building.**

- Generally, wood storm doors are most appropriate.
- A metal storm door may be appropriate if it is simple in design and if the frame is painted so that raw metal is not visible.

**1.56 Enhance the energy efficiency of an existing historic door, rather than replace it.**

Use these measures:

- Add weather stripping and caulking around the window and frame.
- Install a storm door.
- Install an insulated window shade over glazed portions of the door on the interior.

## Doors - Accessories

### 1.57 Preserve a historic screen door or storm door.

- Historic screen doors and storm doors contribute to the character of a property and also offer opportunities for energy conservation.

### 1.58 Use a new storm door to enhance energy conservation rather than replace a historic door.

- Match the design to the original if feasible.
- A metal storm door may be appropriate if the frame matches the proportions and profiles of the original door.
- Use a finish (painted or natural wood) that is similar to those seen historically; do not use an anodized or a milled (a silvery metallic) finish.

### 1.59 Use a screen door to enhance energy conservation and ventilation.

- Fit the screen door to match the historic opening in shape and character.
- Use a glass design that permits visibility to the historic door beyond.

### 1.60 Minimize the visual impacts of security devices on a primary door.

- Avoid installing bars on the exterior when feasible.



*This screen door is of wood, and has a painted finish that is similar to the primary door, which is appropriate. A frame that more closely matches the proportion of wood to window on the historic door would be preferred.*



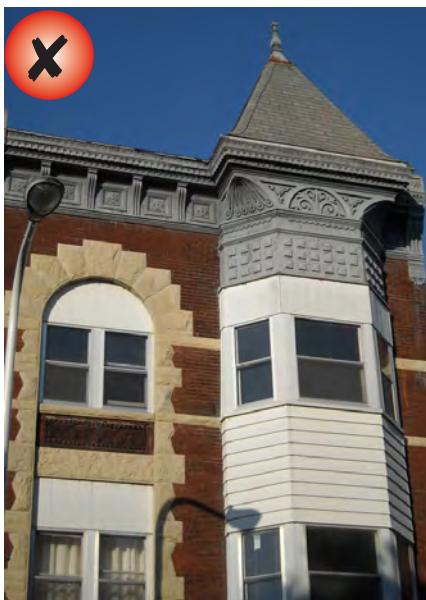
*This new metal storm door has a painted finish and the glass permits the historic door behind to be visible which is appropriate. A color that more closely matches the surrounding trim would be preferred.*



*Inappropriate reduction in window size*



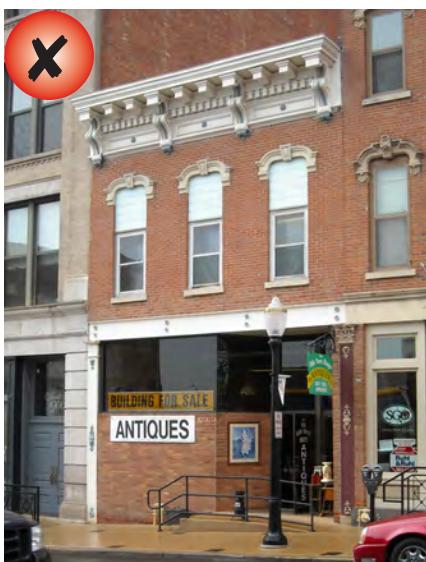
*Inappropriate treatment on upper story windows*



*Inappropriate profile for window replacements; the proportions are inaccurate*



*Inappropriate door and transom replacement*



*Inappropriate reduction in upper story windows and storefront modification*



*Inappropriate storefront modification*

# Foundations

## Policy:

Many building foundations contribute to the character of historic structures in Dubuque. These may include rusticated stone walls, brick, or metal skirting. Keeping moisture away from a foundation is the primary objective. In cases where special conditions of a specific project are such that the detailed design guidelines do not appear to address the situation, this general policy statement will serve as the basis for determining the appropriateness of the proposed work.

## Guidelines:

### 1.61 Maintain foundation vents in operating order.

- Ventilation openings help the walls dry out after getting wet. (They also help keep moisture from building up in basements and crawl spaces.)
- Ventilation openings or basement windows should not be filled in with permanent materials such as brick or concrete block; use wood or metal panels in place of window glass if windows must be blocked up, but retain the wood or metal framing and sash.

### 1.62 Provide positive drainage away from foundations.

- The soil or pavement next to the foundation wall should slope away from the wall.
- This will keep water from soaking down into the wall and surrounding soil. Wet soil can lose its weight-supporting capacity and result in foundation and wall cracks.

## Foundation Maintenance

### Tips:

Plants tend to retain moisture and keep damp walls from drying. Therefore, the following precautions should be taken:

- Vines and other plants should not be allowed to grow on foundation walls.
- Weeds and shrubs should not be allowed to come in contact with foundation walls.
- Avoid piling items such as firewood, trash, or mulch against a foundation wall.

### 1.63 Maintain gutters and downspouts in working order to carry water away from the foundation wall.

- Connect a downspout to an underground drain, or onto splash blocks which carry the water away from the foundation wall.

### 1.64 Avoid cutting a new window or door opening in a foundation wall, or enlarging an existing one.

- This can weaken the foundation significantly. If an alteration is needed, get qualified advice on how the foundation will be affected.

### 1.65 Avoid covering historic foundation materials.

- Materials such as composite “brick” veneer or cementitious coverings diminish the character of the structure. These also may hold moisture in the foundation wall and cause damage to the structure.

# ACCESSIBILITY

## Policy:

Owners of historic properties should comply to the fullest extent possible with the Americans with Disabilities Act and other accessibility laws, while also preserving the integrity of the character-defining features of their buildings and sites. Special provisions for historic buildings exist in the law that allow some alternatives in meeting the ADA standards.



## Guideline:

**1.66 Generally, creating an accessibility solution that is independent from the historic building and does not alter its historic characteristics is encouraged.**

- Identify the historic building's character-defining spaces, features and finishes so that accessibility code-required work will not result in their damage or loss.
- Alterations to historic properties that are designed to improve access for persons with disabilities should create minimal negative effect on the historic character or materials.
- Provide barrier-free access that promotes independence for the disabled to the highest degree practicable, while preserving significant historic features.
- Minimize impacts to a historic building; a design that is reversible is preferred.

*Generally, creating an accessibility solution that is independent from the historic building and does not alter its historic characteristics is encouraged.*

## ADAPTIVE RE-USE

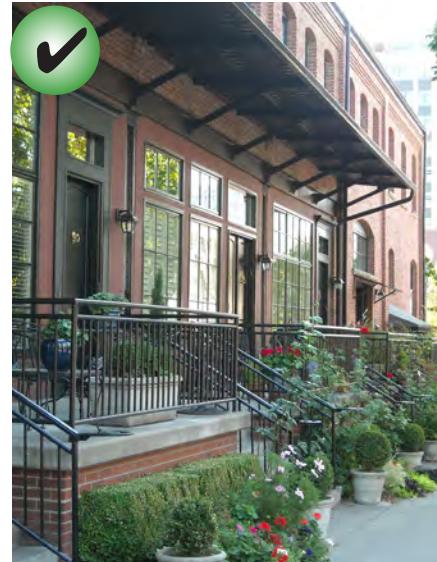
### Policy:

Converting a building to a new use that is different from that which its design reflects is considered to be “adaptive re-use.” For example, converting a residential building to an office is adaptive re-use. A good adaptive re-use project retains the historic character of the building while accommodating its new function.

### Guideline:

#### 1.67 Seek uses that are compatible with the historic character of the building.

- Building uses that are closely related to the original use are preferred. An example would be the conversion of a residential-type building to an office. This can be accomplished without radical alterations to either the interior or exterior of the structure.
- Avoid altering porches and original windows and doors.



*Alternative designs that are contemporary interpretations of traditional industrial buildings may be considered where historic building features are missing.*

## BALCONY ADDITIONS

### Policy:

Although in most cases one should avoid adding elements or details that were not part of the original building, a balcony addition may be considered. This can enhance the adaptive reuse options for this building type.

The balconies should be located to the rear and/or at a minimum two bays back on the sides of the building. They should have as little impact on the structure as possible and be a simple design. The addition of a balcony should be reversible.



*A balcony railing should be mostly transparent. One should be able to see through to the building fabric behind the rail.*

### Guidelines:

#### 1.68 The balcony should be in character with the building.

- Mount a balcony to accentuate character-defining features.
- The balcony should fit within the opening when feasible.
- A balcony located across two smaller window openings may be considered in limited circumstances. The window opening and balcony proportion should be balanced.
- Use colors that are compatible with the overall color scheme of the building. In most cases dark metal matte finishes are appropriate.

#### 1.69 A balcony should be simple in design.

- Simple metal work is most appropriate.
- Heavy timber and plastics are inappropriate.
- The balcony should be mostly transparent. One should be able to see through to the building fabric behind the guard rail.

## HANDRAIL ADDITIONS

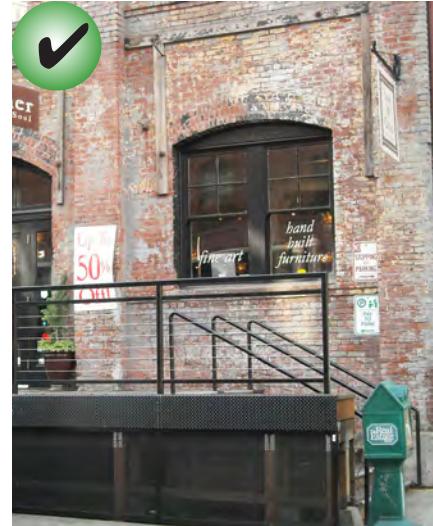
### Policy:

In some circumstances it may be necessary to add handrails to a historic commercial or warehouse building in order to address a new building use, or accessibility life safety issues. In order to preserve the historic integrity at the building, these elements should not detract from the historic character.

### Guideline:

#### 1.70 Railings should be simple in design.

- Simple metal work is most appropriate.
- Heavy ornate metal, plastic or wood is inappropriate.
- The railing should be mostly transparent. One should be able to see through to the building fabric.



*Handrails must be transparent, one must be able to see through to the building fabric.*

## HISTORIC ADDITIONS

### Policy:

Some early additions may have taken on historic significance of their own right and merit preservation. In contrast, more recent additions that detract from the character of the building should be considered for removal.

### Guideline:

#### 1.71 Preserve an older addition that has achieved historic significance in its own right.

- For example, a porch or a kitchen wing may have been added to the original building early in its history. Such an addition is usually similar in character to the original building in terms of materials, finishes and design.

## HISTORIC SECONDARY STRUCTURES

### Policy:

Preserving the historic fabric along an alley in a historic district is important. This includes sheds, garages and carriage houses. They are traditionally subordinate in scale and character to the primary structure and are typically located to the rear of the lot. These structures and their features should be retained when feasible. If alterations to these structures need to be addressed, refer to other rehabilitation guidelines in this chapter.

### Guideline:

#### 1.72 Preserve an existing secondary structure when feasible.

- Retain original materials and features when feasible.
- Maintain the subordinate character of the structure also.

#### 1.73 A new garage door should be compatible with the structure.

- If a garage door replacement is necessary, it should be compatible in style and materials with the existing building. For example, hinged wood-panel carriage doors and wood paneled overhead doors with glazed lights are appropriate. Solid metal or metal panel doors, or industrial-like rolled doors are inappropriate.



*Preserve an existing secondary structure when feasible.*



*This building reflects compatible new construction with the primary building on site.*



*If a garage door replacement is necessary, it should be compatible in style and materials with the existing building.*

## EMERGENCY EGRESS

### Policy:

In some cases, exterior exit stairs or fire escapes may be needed in order to comply with life safety regulations. These alterations can help extend the usefulness of a building and can be designed to minimize impacts on the historic character of the property.

### Guideline:

#### 1.74 Design exterior life safety exits to minimize impacts on key features of a historic property.

- Locating an exit system to the side or rear is preferred.
- When it must be located on the front, design it to maintain visibility of key character-defining features.



*Locating an exit system to the side or rear is preferred.*



*A contemporary interpretation of a fire escape is an appropriate addition to the rear or secondary facade of a historic building.*



*The new fire escape is appropriately located on the secondary facade and is also a good representation of a compatible design.*

# REHABILITATION OF HISTORIC COMMERCIAL PROPERTIES

These design guidelines for rehabilitation of commercial properties supplement the preceding general guidelines for historic buildings. Both sections apply.

## PRESERVATION OF COMMERCIAL STOREFRONTS

### Policy:

Many storefronts in Dubuque have components seen traditionally. The repetition of these standard elements creates a visual unity along the street that should be preserved. These features should not be altered, obscured or removed. The preservation of a historic storefront will help maintain the interest of the street to pedestrians by providing views to goods and activities inside first floor windows.

### Guidelines:

#### 1.75 Preserve these character-defining features of a commercial storefront building type:

- **Cornice molding:** A decorative band at the top of the building.
- **Display windows:** The main portion of glass on the storefront, where goods and services are displayed.
- **Transom:** The upper portion of the display window, separated by a frame.
- **Kickplate:** Found beneath the display window. Sometimes called a bulk-head panel.
- **Entry:** Usually set back from the sidewalk in a protected recess.
- **Upper-story windows:** Windows located above the street level often have a vertical orientation.
- Note that a corner building may have storefront elements on two walls, all of which should be preserved.



*Traditional commercial building facade.*



*Preserve the historic character of a storefront when it is intact.*

## For More Information

See web link to *Preservation Brief 11: Rehabilitating Historic Storefronts*  
<http://www.nps.gov/tps/how-to-preserve/briefs/11-storefronts.htm>



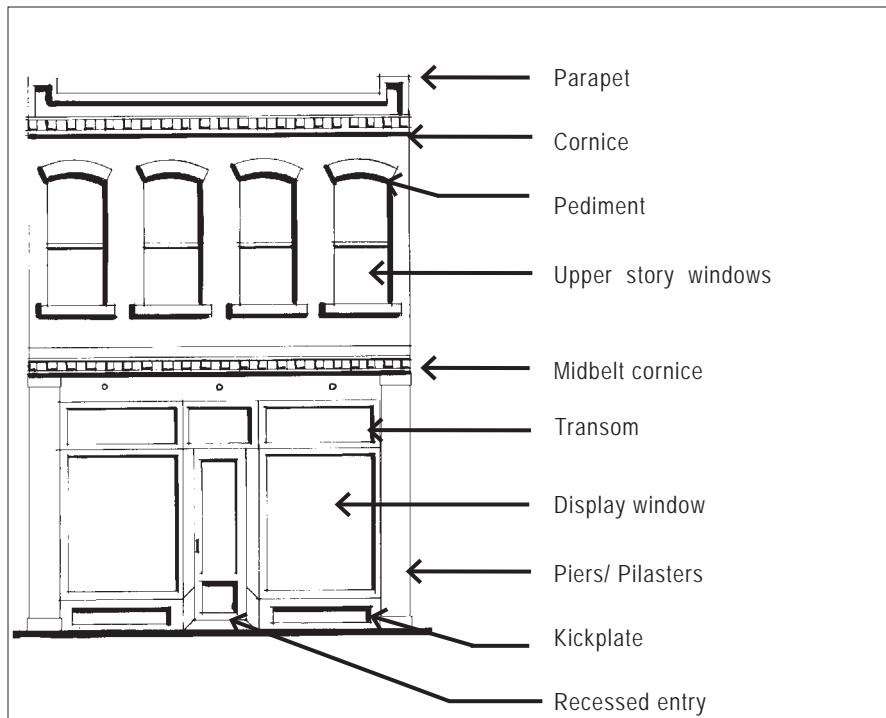
*If a storefront is altered, restoring it to the original design is preferred.*



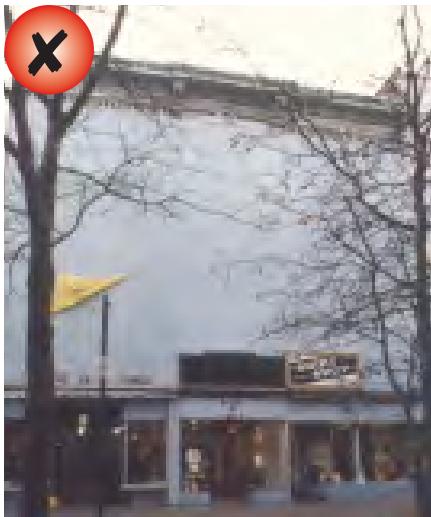
*Maintain storefront components in good condition.*

## 1.76 If a storefront is altered, restoring it to the original design is preferred.

- Remove more recent coverings that obscure original features.
- If evidence of the original design is missing, use a simplified interpretation of similar storefronts.
- Historic photographs of commercial buildings in Dubuque are widely available and should be used when determining the original character of a storefront design.
- An alternative design that is a contemporary interpretation of a traditional storefront may be considered where the original is missing and no evidence of its character exists.
- The new design should convey the character of a typical storefront, including the transparency of display windows.
- Greater flexibility in treatment of rear walls is available.
- While using materials that match the original is preferred, alternative materials may also be considered.



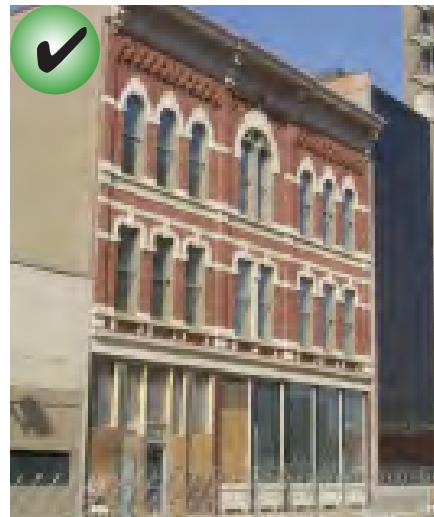
*Typical commercial facade components*



*Before rehabilitation*



*Storefront rehabilitation in progress*



*After rehabilitation*



*Before rehabilitation*



*After rehabilitation*



*Before rehabilitation*



*After rehabilitation, see above for before.*

## Storefront Maintenance

Storefronts communicate to the customer the nature of the merchant's business. The storefront materials, signs, window displays, and lighting establish an image for the merchant and the outside world. It is important to:

- Keep storefronts neat and clean
- Establish attractive window displays
- Provide adequate lighting



*A kickplate, located below the display window adds interesting detail to the streetscape and should be preserved.*



*Transoms, the upper glass band on door openings, introduced light into the depths of the building, saving on light costs. These bands should not be removed or enclosed.*

### 1.77 Retain an original kickplate.

- The kickplate, located below the display window, adds interesting detail to the streetscape and should be preserved.
- If the original kickplate is covered with another material, consider exposing the original design.

### 1.78 If the original kickplate is missing, develop a sympathetic replacement design.

- Wood is an appropriate material for replacements on most styles. However, ceramic tile and masonry may also be considered when appropriately used with the building style.
- 

### 1.79 Retain the original shape of the transom glass in a historic storefront.

- Transoms, the upper glass band of traditional storefronts, introduced light into the depths of the building, saving on light costs. These bands should not be removed or enclosed.
- The shape of the transom is important to the proportion of the storefront, and it should be preserved in its historic configuration.
- If the original glass is missing, installing new glass is preferred. However, if the transom must be blocked out, be certain to retain the original proportions. One option might be to use it as a sign panel or decorative band.

## Contemporary Storefront Designs

When an original storefront is largely missing, it may be appropriate to design a replacement that is a contemporary interpretation of a traditional storefront. A contemporary replacement design should:

- Promote pedestrian interest and an active street-level facade
- Use high-quality, durable materials that are similar in type and scale to traditional materials
- Be located within the original structural frame of sidewalls and lintel or cornice of the storefront opening
- Convey the characteristics of typical historic storefronts, including:
  - Traditional storefront elements such as a bulkhead and transom
  - The transparent character of the display windows
  - Recessed entry
- Use a simple and relatively undecorated design
- Relate to traditional elements of the facade above
- Preserve early storefront alterations that have become historically significant

# ADDITIONS TO COMMERCIAL PROPERTIES

## Policy:

Two distinct types of additions to historic commercial buildings may be considered. First, a ground-level addition that involves expanding the footprint of a structure may be considered. Such an addition should be to the rear or side of a building. This will have the least impact on the character of a building, but there may only be limited opportunities to do this.

Second, an addition to the roof may be designed that is simple in character and set back substantially from the front of a building. In addition, the materials, window sizes and alignment of trim elements on the addition should be compatible to those of the existing structure.

## Guidelines:

### 1.80 An addition should be compatible in scale, materials and character with the main building.

- An addition should relate to the building in mass, scale and form. It should be designed to remain subordinate to the main structure.
- An addition with a pitched roof is inappropriate for a building with a flat roof.
- An addition to the front of a building is inappropriate.



### 1.81 An addition should not damage or obscure architecturally important features.

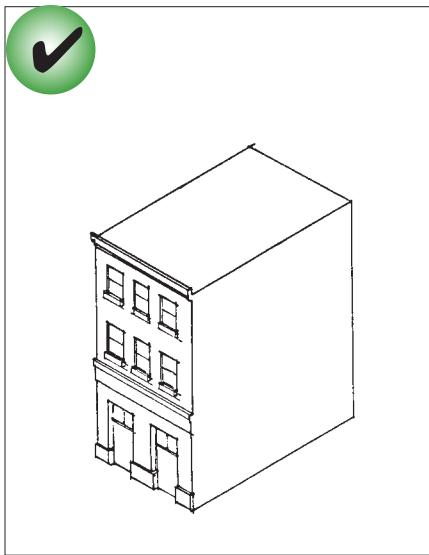
- For example, loss or alteration of a cornice line should be avoided.



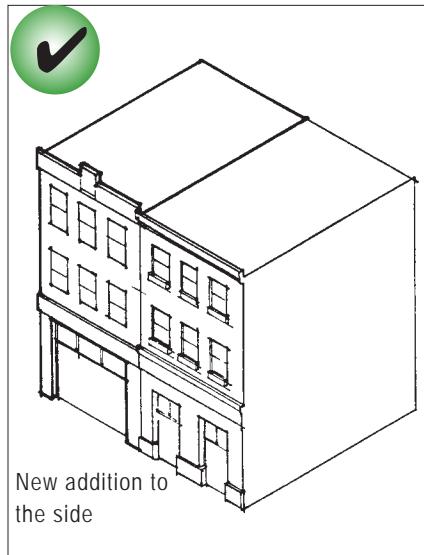
### 1.82 An addition may be made to the roof of a building if it does the following:

- An addition should be set back from the primary, character-defining facade, to maintain one's perception of the historic scale and character of the building.
- Its design should be modest in character, so it will not detract attention from the historic facade.
- The addition should be distinguishable as new, albeit in a subtle way.

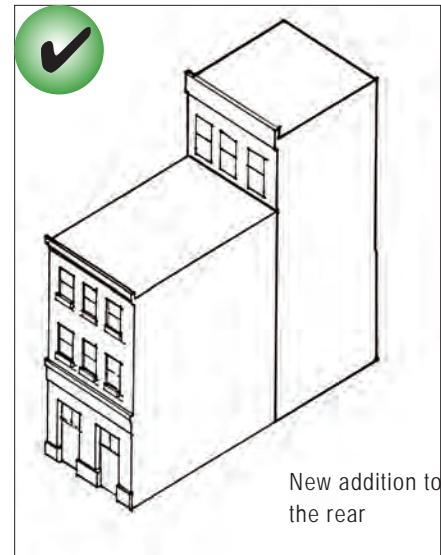
*The historic structure illustrated above has a rooftop addition that is set back from the primary facade to be minimally visible from the public street and sidewalk.*



*An original three-story building, before an addition. Compare with sketches to the right.*



*Appropriate alternative approaches to additions*



*New addition to the rear*

#### For More Information:

See web link to *Preservation Brief 14: New Exterior Additions to Historic Buildings: Preservation Concerns*  
<http://www.nps.gov/tps/how-to-preserve/briefs/14-exterior-additions.htm>



*Addition to the side, set back from the front*

# Rehabilitation of Historic Residential Properties

These design guidelines for rehabilitation of residential properties supplement the preceding general guidelines for historic buildings. Both sections apply.

## PORCHES

### Policy:

Preserve a porch in its original condition and form. A porch is one of the most important character-defining elements of a facade. Porches help to provide visual interest to a building, and can influence its perceived scale, protect entrances and pedestrians from rain and provide shade in summer.

### Guidelines:

#### 1.83 Maintain an original porch when feasible.

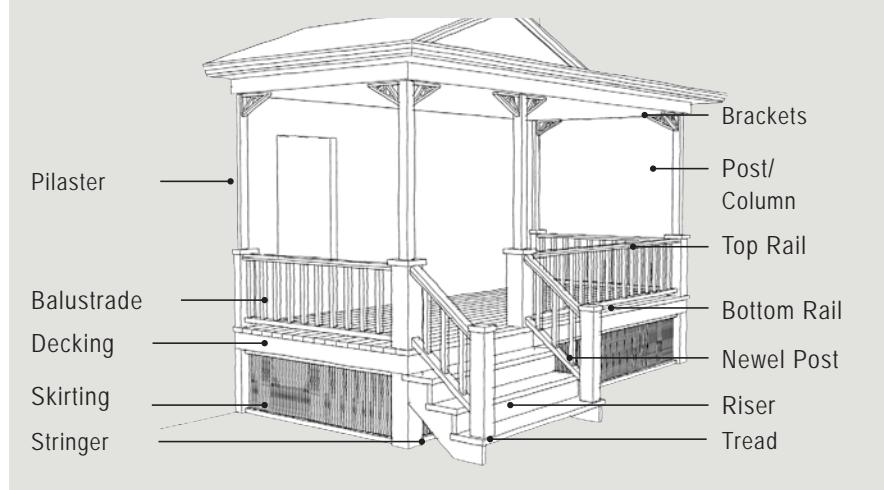
- This is especially important in a key, character-defining location, such as the front of the building.
- Maintain the existing location, shape, details and posts of the porch.
- Missing or deteriorated decorative elements should be replaced to match existing elements; e.g., match the original proportions and spacing of balusters when replacing missing ones.
- Avoid using a porch support that would be substantially smaller than other supports on the porch or than that seen historically.
- Do not remove an original porch from a building.



Maintain an original porch.

### Historic Porch Components

The most typical components of a historic residential porch are illustrated below.



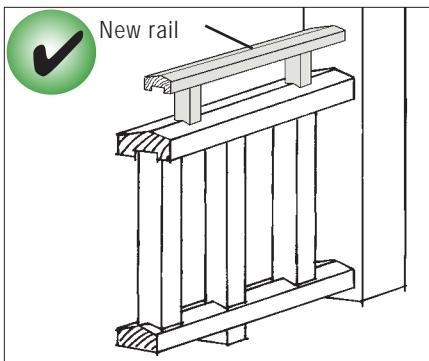
### Alternative Porch and Stoop Designs

If it is not possible to match original components or replace a missing porch or stoop with one that appears similar in character, alternatives may be considered in the following locations:

- On a non-primary facade, accessory building or addition
- On a primary facade if no other option is available

Alternative designs should:

- Match the general form and appearance of original components or a complete porch or stoop.
- Not use synthetic materials for columns, flooring or railings.



Consider providing a smaller railing above the historic railing to achieve a greater overall railing height.

**1.84** Enclosing a porch with opaque materials that destroy the openness and transparency of the porch is inappropriate.

- Where a porch must be enclosed, use transparent materials (such as insect screens or glass) and place them behind the balusters and balustrade to preserve the visual character of the porch.

**1.85** Where building codes stipulate that new porch railings lower than 36 inches in height be augmented or corrected to raise their effective height to 36 inches, consider the following:

- Provide a smaller railing above the historic railing to achieve a greater overall railing height.



**Existing Condition:** Italianate style house with an altered porch.



**Preferred Approach, when historic documentation is available:** Italianate style house with a replacement porch designed similar to that seen historically.



**Acceptable Approach, when historic documentation is not available:** Italianate style house with a simplified interpretation of a traditional porch design.



**Existing Condition:** A folk or vernacular style house with the original porch removed.



**Preferred Approach, when historic documentation is available:** A folk or vernacular style house with a replacement porch designed similar to that seen historically.



**Acceptable Approach, when historic documentation is not available:** A folk or vernacular style house with a simplified interpretation of a traditional porch design.

## Repair a Porch

### Policy:

Repair a deteriorated porch instead of removing or replacing it. The preferred treatment for a deteriorated porch is to repair it, rather than replace it altogether. This approach is preferred because the original materials contribute to its historic character. Even when replaced with an exact duplicate, a portion of the historic building fabric is lost; therefore, such treatment should be avoided when feasible.

### Guidelines:

#### 1.86 Repair those elements of a porch that are deteriorated.

- Removing damaged materials that can be repaired is not appropriate.



*Before: Porch missing*



*After: Porch reconstructed*

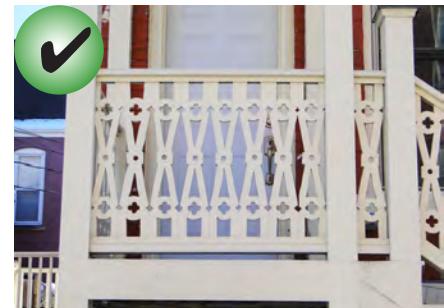
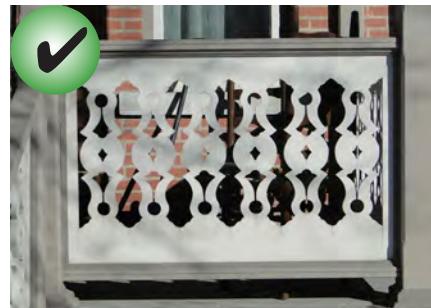
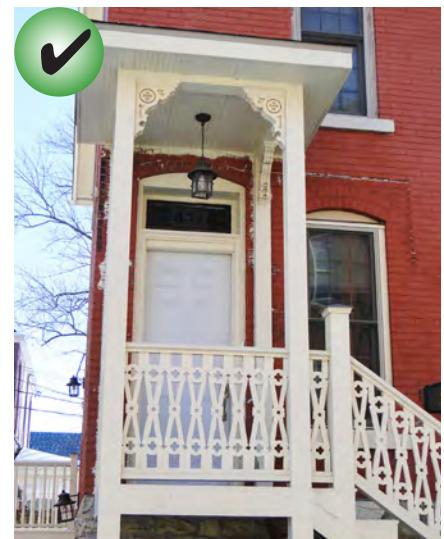
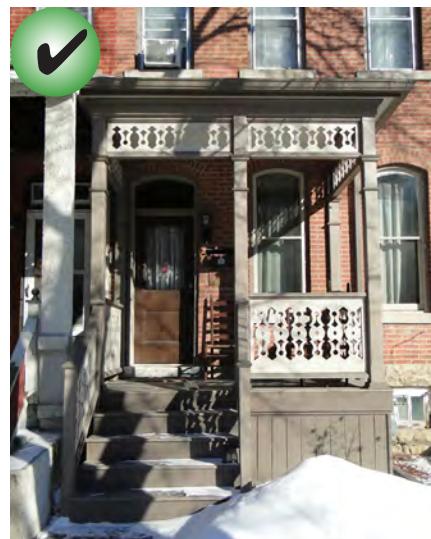


*Before: Porch missing and windows enclosed*



*After: Reconstructed porch and new windows installed in original openings*

## Appropriate Porch Railing Rehabilitations and Replacements



*Appropriate contemporary interpretations of a porch and its features.*



*New porches and their features should be similar in character, design, scale and materials to those seen traditionally.*

## Replace a Porch

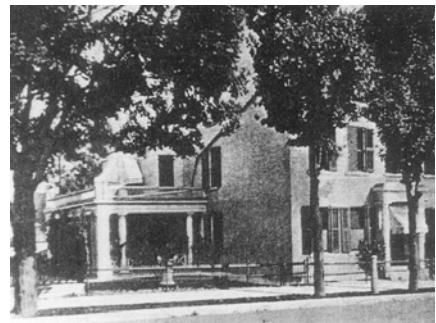
### Policy:

Replace a missing porch with one that appears similar to that seen historically. When a porch is to be replaced, the first step is to research the history of the house to determine the appearance and materials of the original porch. The most important aspects of a replacement design are its location, scale and materials. Unless reconstructing a porch from historic documentation, it is not necessary to replicate the details of the original porch or a porch design copied from a similar style house. However, it is important that new details be compatible (similar form, scale and materials) for the design of the porch and the style of the house.

### Guidelines:

**1.88 When porch replacement is necessary, it should be similar in character, design, scale and materials to those seen traditionally.**

- The size of a porch should relate to the overall scale of the primary structure to which it is attached.
- Base the design of a replacement porch on historic documentation if available.
- Where no evidence of the historic porch exists, a new porch may be considered that is similar in character to those found on comparable buildings.



*Before: Historic image*

**1.89 Porch supports should be of an appropriate size to complement the entry and existing structure.**

- Wood columns are best for most structures in Dubuque.
- Brick or stone may be appropriate for some architectural styles.
- See the styles document for further information.



*After: Replace a missing porch with one that appears similar to that seen historically.*

**1.90 A porch should use materials similar to those seen historically.**

- Use materials similar to those seen historically. Wood decking, steps, balustrades and porch supports were most common.
- While matching original materials is preferred, when detailed correctly and painted appropriately, fiberglass columns may be considered.
- Do not replace a wood porch decking and steps with concrete.

## ADDITIONS TO RESIDENTIAL PROPERTIES

### Policy:

When planning an addition to an existing building, consider the effect it will have on the structure. The following guidelines avoid any negative impacts of an addition. While the choice of a style is not a concern of these principles, there is an awareness that each property has some style that helps define its character. Additions that reflect elements of the existing predominant style reinforce the positive character. Those elements that seem unintentionally foreign to the individual property and detract from the overall design should be minimized and not considered positive elements upon which to base the design of an addition.

Also, consider maximizing the potential for environmental benefits. The design should take advantage of existing site features, the orientation of the property and its prevailing wind and solar patterns.

### Guidelines:

**1.91 The loss of historically significant features, where they exist, should be minimized.**

- When preserving original details and materials, follow the guidelines at the beginning of this chapter.

**1.92 Place an addition at the rear of a building or set it back from the front to minimize the visual impacts.**

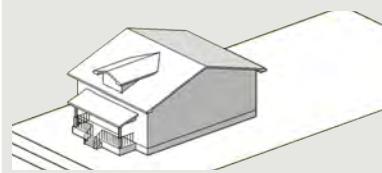
- This will allow the original proportions and character to remain prominent.
- A roof top addition should be set back at least ten feet from a primary facade.

## Locating and Designing an Addition to a Historic Residential Structure

An addition to a historic residential structure should be subordinate to, and clearly differentiated from, the original historic structure as illustrated below.

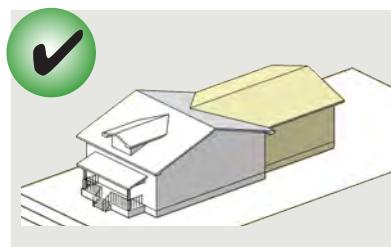
### Original Structure

The one-and-a-half story bungalow illustrated at right is historic.



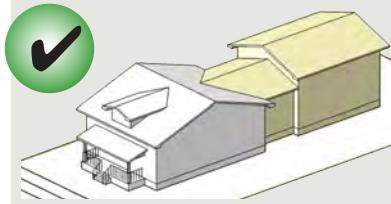
### One-Story Addition

The addition illustrated at right is appropriate because it is clearly differentiated from the original structure with a change in roof plane and is nearly invisible from the street.



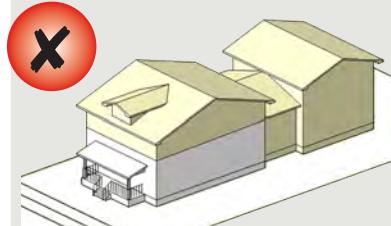
### One-and-a-Half Story Addition

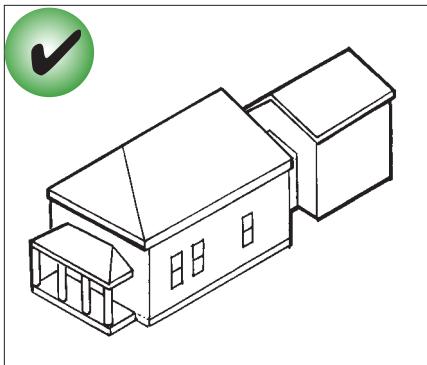
The addition illustrated at right is appropriate because it is set back and clearly differentiated from the original structure with a connector.



### Inappropriate Two-Story Addition

The addition illustrated at right is inappropriate because it substantially alters the primary facade of the historic structure.

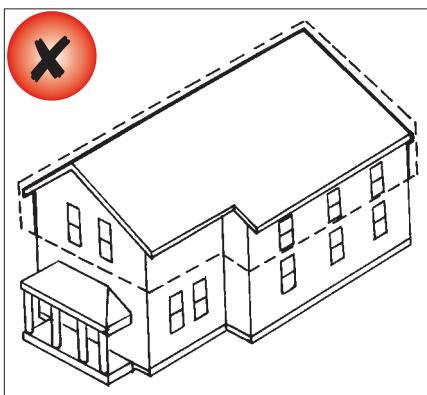




*This addition is set back behind the original structure and the new addition is accessed by a connector.*



*Additions set to the rear, and with a connector*



*This roof top addition is not subordinate to the existing structure.*

**1.93 An addition should be compatible in scale, materials and character with the main building.**

- While a smaller addition is visually preferable, if the addition is to be significantly larger than the original building, one option is to separate it from the primary building, when feasible, and then link it with a smaller connector.
- In some cases, adding vertically, through construction of dormers, will help to minimize the impacts of additions and preserve rear yards.
- A new addition should fit within the range of stories that help define the character of the neighborhood.
- For a larger addition, break up the mass of the addition into smaller modules that relate to the historic house.
- An addition should be simple in design to prevent it from competing with the primary facade.
- The addition should be distinguishable as new, albeit in a subtle way.

**1.94 The roof form of a new addition should be in character with and subordinate to that of the primary building.**

- It is important to repeat the roof lines and slopes found on the primary structure. Typically, gable, hip and shed roofs are appropriate for residential-type building additions. Flat roofs may be appropriate for commercial buildings or International style structures.

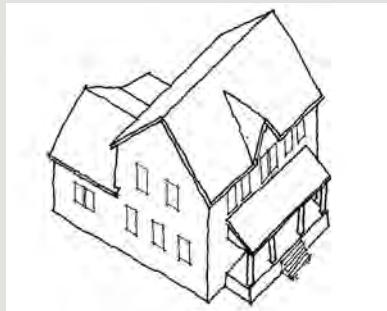
**1.95 When constructing a rooftop addition, keep the mass and scale subordinate to the primary building.**

- The addition should not overhang the lower floors of the primary building.

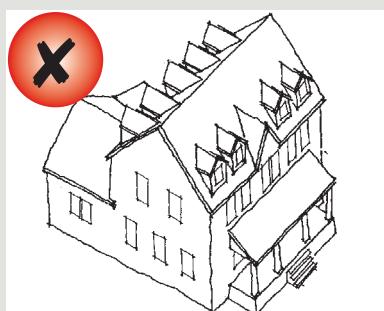
## Dormer Location

Do not visually overwhelm the original roof with dormers (middle). Locate new dormers on side or rear-facing roof slopes, if possible (right).

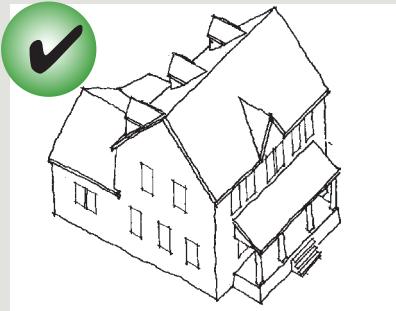
Original



New Dormers



New Dormers



### 1.96 A rooftop dormer may be appropriate.

- Dormers are typically added to a structure to increase the amount of headroom in upper floors. Traditionally, dormers are designed as smaller elements. If significant increases in space are desired, do not consider oversized dormers. Rather, develop an addition to the rear of a structure.
- A dormer should be subordinate to the overall roof mass and should be in scale with those on similar historic structures.
- The dormer should be located below the ridge line of the primary structure and to the rear of the roof.
- A dormer should be similar in character to the primary roof form.
- The number and size of dormers should not visually overwhelm the scale of the primary structure.

# Rehabilitation of Historic Industrial/Warehouse Properties

## PRESERVATION OF INDUSTRIAL/WAREHOUSE FAÇADES

### Policy:

Many of Downtown Dubuque's buildings possess components traditionally seen on industrial/warehouse buildings. The repetition of these standard elements creates a visual unity at the street that should be preserved.



*Historic photographs of Dubuque's industrial use buildings are widely available and should be used when determining the original character of a building facade.*



*A rehabilitation project of an industrial/warehouse building should preserve character-defining elements such as a loading dock, canopy and man door.*

### Guidelines:

#### 1.97 For an industrial/warehouse building, a rehabilitation project should preserve these character-defining elements:

- **Man-door:** A small door for use by people entering the building. These can be similar in character to a storefront on a retail building. They often include a transom.
- **Windows:** Windows located at the street level. These often are larger and display a similar pattern to the upper story windows.
- **Upper-story windows:** Windows located above the street level. These usually have a vertical orientation.
- **Cornice molding:** A decorative band at the top of the building.
- **Loading dock:** A raised landing for handling goods; some project from the facade while others are inset behind the building plane.
- **Loading bay doorway:** A large opening at the landing dock. Typically these are rectangular, although sometimes arched. Rolling overhead or horizontal sliding doors were used in these openings. Singular and multiple openings were found on facades.
- **Canopy:** A metal structure usually sheltering the loading dock. Some were horizontal and others were sloped. They were supported on metal and heavy timber supports that were wall mounted.

#### 1.98 Preserve the historic character of the building facade.

- Preserve loading docks, loading bay openings, windows and door frames.
- If the glass is intact, it should be preserved.

**1.99 If the facade is altered, restoring it to the original design is preferred.**

- If evidence of an original design component is missing, use a simplified interpretation of similar components in the area.
- Historic photographs of Dubuque and its industrial/warehouse buildings are widely available and should be used when determining the original character of the facade.
- Alternative designs that are contemporary interpretations of traditional industrial buildings may be considered where the historic facade is missing and no evidence of it exists.
- Where the original is missing and no evidence of its character exists, a new design that uses the traditional elements may be considered. However, the new design should continue to convey the character of typical facades in the area, including the repetitive window patterns and openings seen along the building fronts.



**1.100 Preserve the character of the cornice line.**

- Most historic industrial buildings have simple masonry cornices to cap their facades. Their repetition along the street contributes to the visual continuity on the block.



*Preserve character-defining elements such as windows and loading bay openings.*

**1.101 Reconstruct a missing cornice when historic evidence is available.**

- Use historic photographs to determine design details of the original cornice.
- Replacement elements should match the original in every detail, especially in overall size and profile. Keep sheet metal ornamentation well painted.
- The substitution of another old cornice for the original may be considered, provided that the substitute is similar to the original.



*Preserve industrial/warehouse building features, when feasible.*

**1.102 A simplified interpretation is also appropriate for a replacement cornice if evidence of the original is missing.**

- Masonry is the most appropriate material for a cornice in the warehouse district.



*Contemporary interpretation of historic warehouse storefront*

**1.103 Retain the original shape of the transom glass in existing openings.**

- Transoms, the upper glass band on door openings, introduced light into the depths of the building, saving on light costs. These bands should not be removed or enclosed.
- The shape of the transom is important to the proportion of the opening, and it should be preserved in its historic configuration.
- If the original glass is missing, installing new glass is preferred. However, if the transom must be blocked out, be certain to retain the original proportions. One option might be to use it as a sign panel or decorative band.

**1.104 A parapet wall should not be altered, especially those on primary elevations or highly visible facades.**

- When a parapet wall becomes deteriorated, there is sometimes a temptation to lower or remove it. Avoid doing this because the flashing for the roof is often tied into the parapet, and disturbing it can cause moisture problems.
- Inspect parapets on a regular basis. They are exposed to the weather more than other parts of the building, so watch for deterioration such as missing mortar or excessive moisture retention.
- Avoid waterproofing treatments which can interfere with the parapet's natural ability to dry out quickly when it gets wet.
- A parapet wall should not be altered, especially those on primary elevations or highly visible facades.



*Before*



*After: A parapet wall, loading docks, and canopies should not be altered, especially those on primary facades, or when they are highly visible.*

*Also, note the successful incorporation of the railroad tracks into the road improvements.*

# ADDITIONS TO INDUSTRIAL/WAREHOUSE PROPERTIES

## Policy:

Three distinct types of additions to historic industrial/warehouse buildings may be considered. First, a ground-level addition that involves expanding the footprint of a structure may be considered. Such an addition should be to the rear or side of a building. This will have the least impact on the character of a building, but there may only be limited opportunities to do this.

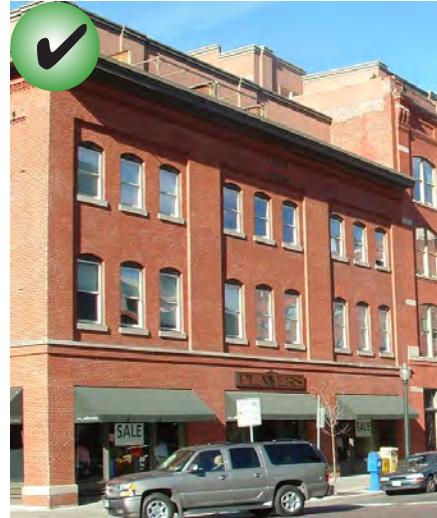
Second, an addition to the roof may be designed that is simple in character and set back substantially from the front of a building. In addition, the materials, window sizes and alignment of trim elements on the addition should be compatible to those of the existing structure.

A third option, which only will be considered on a case-by-case basis, is to design an addition within the wall plane of the existing building. This option is the most difficult and requires the most care to respect the relationship of the building to the street. Such an addition should provide a visual distinction between the existing structure and its addition. This may be accomplished through the use of a belt course element or a subtle change in building materials.

## Guidelines:

### 1.105 An addition should be compatible in scale, materials and character with the main building.

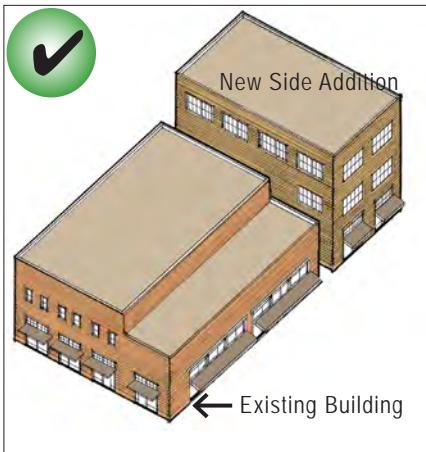
- An addition should relate to the building in mass, scale and form. It should be designed to remain subordinate to the main structure.
- An addition with a pitched roof is inappropriate for a building with a flat roof.
- An addition to the front of a building is inappropriate.



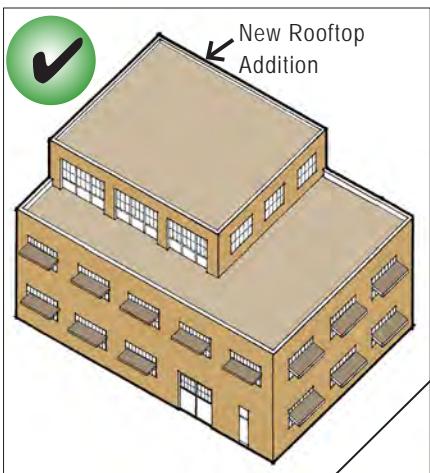
*Rooftop addition is appropriately set back.*

### 1.106 An addition should not damage or obscure architecturally important features.

- For example, loss or alteration of a cornice line or loading dock should be avoided.



*Side addition is connected to the historic warehouse with a low scale connector.*



*An addition should be set back from the primary, character-defining facade to preserve the perception of the historic scale of the building.*

*Addition to the side: original building to the left, addition to the right; linked by a connector*

**1.107 An addition may be made to the roof of a building if it does the following:**

- An addition should be set back from the primary, character-defining facade, to preserve the perception of the historic scale of the building.
- Its design should be modest in character so it will not attract attention from the historic facade.
- The addition should be distinguishable as new, albeit in a subtle way.

# Chapter 2

# Guidelines for Site and Landscape Design

## In this Chapter:

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This chapter provides guidelines for the treatment of exterior landscape and for site improvements in public spaces and private spaces that are visually accessible to the public. The guidelines also focus on the retention and replication of features and objects that are unique to the area for the purpose of protecting and maintaining historic character.

# SETTING

## Policy

The building setting is the area or environment in which a historic structure is found. The elements of setting, such as the relationship of buildings to one another, property setbacks, fence patterns, views, driveways and walkways, together with street trees and other landscaping features create the specific character of the neighborhood.



*Historic settlement patterns seen in street and alley plans often contribute to the distinct character of the historic district and should be preserved.*

## Guidelines:

### 2.1 Preserve key features that are important in defining the traditional character of the setting.

- These include roads and streets, furnishings and fixtures, natural or topographic features, key views and vistas.
- Retain the historic relationship between buildings, streets and landscape features.
- Preserve significant view corridors.
- When removal and replacement of an existing historic feature is necessary (and replacement in kind is not economically feasible) substitute materials that simulate the original in appearance may be considered.
- When it is not economically viable to save and repair original materials or to use substitutes that simulate the original in appearance, then new or common materials may be considered.

### 2.2 Avoid the removal, relocation, or substantial alteration of any streetscape or landscape element that contributes to the traditional character of the setting.

- Avoid changing the historic relationship of a building to its setting.
- Removal and replacement of existing historic features with new materials, when it is economically feasible to save and repair originals, also is inappropriate.

# STREETSCAPE

## Policy:

Maintain the traditional character of the streetscape. The character changes between commercial, warehouse and residential areas.

## Guideline:

### 2.3 Maintain the traditional character of the streetscape.

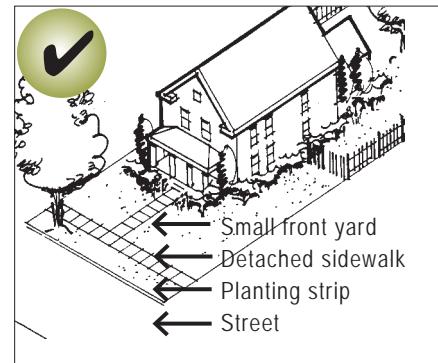
- **Commercial areas:** Maintain wide sidewalks, street trees, light fixtures and furnishings. Consider adding similar features to accent the public sidewalk.
- **Warehouse areas:** Consider adding features, such as consistent lighting fixtures and landscaping, which complement the existing industrial character.
- **Residential areas:** Maintain street landscaping and planting strips, which are typically found between the curb and sidewalk. Consider the use of additional street trees in these areas.



*In commercial areas street trees, light fixtures and furnishings accent the public sidewalk.*



*In warehouse areas streetscapes include attached sidewalks and scattered areas of small vegetated setbacks.*



*Streetscapes such as these should be continued throughout residential areas. Notice the lack of fences in the front yards and the use of a planting strip between the street and sidewalk.*



*In residential areas planting strips are typically found between the curb and sidewalk.*

# ALLEYS

## Policy:

Alleys accommodate service functions and provide pedestrian connections and secondary vehicle access. All alleys, both paved and unpaved, contribute to the character of an area.

Primary and secondary buildings, and parking areas, often line the edge in a commercial setting. Small accessory or secondary buildings, fencing, parking pads and plantings define the edge in several areas. These edges also define the scale and character of the alley and should be maintained.

## Guidelines:



*Alleys accommodate service functions and provide pedestrian connections and secondary vehicle access.*



*Maintain the traditional character and scale of an alley by locating buildings and fences along the alley edge to define it.*

### 2.4 The traditional scale and width of alleys should be continued.

- Maintain the traditional character and scale of an alley by locating buildings and fences along the alley edge to define it.
- In residential settings, plantings located along the alley edge also define it, and are appropriate.

### 2.5 Alley pavement should use sustainable materials, when feasible.

- When feasible, retain the historic brick pavers. If this proves to be a hardship, salvage material upon removal and reuse in other streetscape or interpretive park/plaza improvements.
- In some instances where it is necessary to keep dust levels down and it is necessary to pave the alley, recycled asphalt is the preferred material.

# SIDEWALKS, WALKWAYS, STEPS AND CURBS

## Policy:

Preservation and replication of any of the historic materials is preferred. Substitute materials may be considered when other alternatives are not feasible.

## Guidelines:

### 2.6 Preserve original historic paving, limestone and steps.

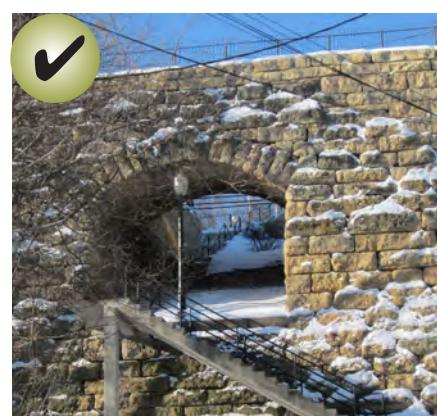
- Maintain historic curbs, steps and gutters.
- When replacement is necessary, use materials that are consistent with the historic ones.
- Replace deteriorated limestone with new limestone when feasible.
- Install a new sidewalk to match the historic width of the walkway, where contemporary usages and city codes allow.



*Preserve original historic paving and curbing.*

### 2.7 Consider using a substitute material that simulates the original when replacement with the original is not feasible.

- Using colored concrete pavers and stamped and/or stained concrete are examples of appropriate alternative materials.
- Substitute materials that simulate the original limestone curbing in color, texture, and shape, such as straight curbs of tinted concrete poured with a textured form liner, also may be considered.
- A common material, such as standard concrete, may be considered when it is not economically viable to retain the original or to use a substitute material which simulates the original in appearance.
- Using a pebble-surface concrete or asphalt is inappropriate.



*Preserve original limestone and steps.*

## Background:

Sidewalks in the Cathedral District originally were wood plank, which was later replaced with brick pavers in different patterns, or they were poured concrete with a crushed limestone aggregate. A historic hexagonal concrete paver was used in limited quantities in the Langworthy, Old Main and Cathedral Districts. It is currently city policy to remove and replace these materials with broom finish poured concrete or, more recently, stained concrete pavers or stained and stamped concrete.

Limestone was the traditional curb material throughout the city. As with the sidewalks, it has been city policy to remove and replace these with concrete.

# SITE FEATURES

## Policy:

The area surrounding a historic building and contained within an individual parcel of land is considered the building site. The site, including all of its associated historic features, contributes to the overall integrity of the property, and should be preserved. As a result, the relationship between the building and contributing features within the site's boundaries should be considered when designing improvements.



## Guidelines:

### 2.8 Preserve site features that are important in defining the historic character of the site.

- This includes sidewalks and paths, furnishings, light fixtures, sculpture, water features, natural or topographic features and potential archaeological resources.
- Retain the historic relationship between buildings and secondary structures, and between buildings and landscape features.

### 1.9 When the removal and replacement of an existing historic site feature is necessary (and replacement in-kind is not economically feasible) replace it with substitute materials that simulate the original in appearance.

- When it is not economically viable to save and repair an original feature or to use substitute materials that simulate the original in appearance, then new or common materials may be used. Vinyl is inappropriate.

### 2.10 Avoid removing or altering any site feature that contributes to the historic character of the site.

- Altering the historic relationship of a building to a key site feature is inappropriate.

### 2.11 Devise plans for the repair, maintenance and long-term protection of these features.

- Permitting damage or deterioration of existing features through inadequate protection or maintenance is inappropriate.

# TOPOGRAPHY

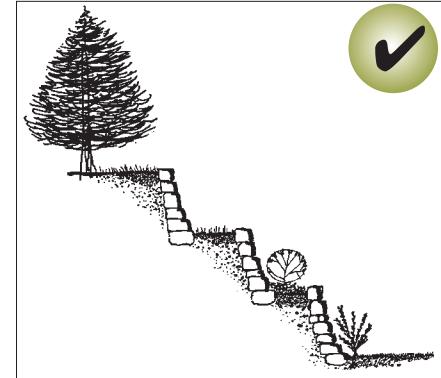
## Policy:

Site work should be planned to protect the assets of the existing topography.

## Guidelines:

### 2.12 Preserve historic grading features of a site.

- Any addition or removal of ground material on a historic property is considered to be a change in grade. As a general rule this should be avoided. Such changes generally result in the alteration of the visual character of the property, and also may damage the site and its structures through erosion or improper drainage.
- Minor changes in grade that will improve drainage of a site, or that will serve to direct moisture away from a structure are appropriate.
- Minor changes in grade for the purpose of site or landscape improvements or restoration are appropriate.



*Where a large grade change is necessary, divide the grade changes into a series of benches and terraces.*

### 2.13 Minimize cut and fill on a site.

- For example, when necessary, divide large grade changes into a series of benches or terraces.

### 2.14 Design a new building foundation to conform to the existing topography, rather than creating extensive cut and fill.

- Step the foundation of a building to follow site contours, when feasible.
- If stepping the foundation is not possible, disguise the cut with building placement and/or building walls, and provide a landscape buffer system at the top of the cut.

### 2.15 Avoid a change in grade that would obscure or conceal portions of the primary structure.

- A change in grade that may have an adverse effect on the site's structures or neighboring structures through the redirection of moisture or storm water is inappropriate.
- A change in grade that would alter the visual relationship of historic buildings to the site is inappropriate.

# FENCES, WALLS AND GATES

## Policy:

Retaining walls, fences and site walls are found throughout Dubuque. They are typically associated with residential contexts; however, these features are also used to screening parking and service areas in commercial settings.

Retaining walls are typical features in neighborhoods where the primary structures are elevated from the street, due to a change in topography. These walls are character-defining features and help to establish a sense of visual continuity, and should be preserved. They typically align along the edges of sidewalks, and they also occur as terraces within a site. Where new retaining walls are installed they should complement the traditional retaining walls in the neighborhood.

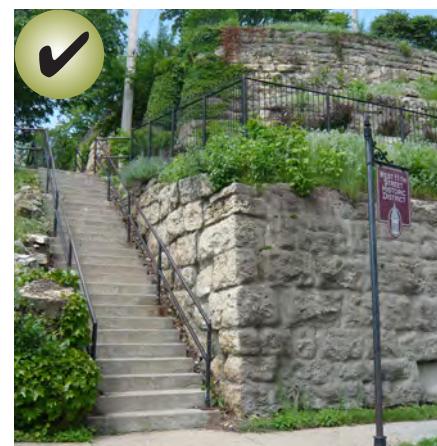
Front yard fences also occur in some areas. Traditionally, these fences were relatively low in height and had a “transparent” character that allowed views into yards, providing interest to pedestrians. Solid plank wood fences were used occasionally along alley edges, but also were relatively low in height. Traditional fences should be maintained on a site. A new or replacement fence should be similar in character with those used traditionally in the neighborhood. In addition, fences should relate in character to the principal structures on the lot and to the context.

Site walls should complement the traditional architectural materials and context where they are installed.

## Guidelines:

### 2.16 Preserve historic fences, gates and retaining walls.

- Avoid damaging or removing historic materials.
- Replace only those portions that are deteriorated beyond repair.
- Any replacement material should match the original in color, texture, size and finish.
- Maintain any distinctive details and protective finishes.



*Preserve historic fences, gates and retaining walls.*

## 2.17 Maintain historic retaining walls.

- For retaining walls, if repointing is necessary, use a mortar mix that is similar to that used historically and apply it in a joint design that matches the original.
- Painting a historic masonry wall, or covering it with stucco or other cementitious coating is inappropriate.
- Increasing the wall height to create a privacy screen is inappropriate.



## 2.18 Design a new retaining wall to be compatible with the historic character of the property.

- A new retaining wall should be similar in scale and materials to that seen historically, such as cut rock and stone. It should be based upon historic prototypes whenever possible.
- When using a material that appears similar to the historic one is not feasible, then a common material, such as standard concrete, may be considered in some cases.
- Using railroad ties, rough-cut concrete block or standard concrete block, and similar is inappropriate.
- A retaining wall that defines the sidewalk edge or is used in the front yard, generally should not exceed 36 inches.



*Maintain historic retaining walls.*



*Contemporary interpretations of a traditional fence should be compatible with the historic context. It should be based upon historic prototypes whenever possible.*



*Historic wrought iron fence prototype*

## 2.19 Design a new fence to be compatible with the historic character of the property.

- A fence that defines the front yard is usually low to the ground (less than 40 inches) and “transparent” in nature.
- Contemporary interpretations of a traditional fence should be compatible with the historic context. It should be based upon historic prototypes whenever possible.
- Simple wire and wrought iron fences are appropriate materials in most settings. Wood picket fences are appropriate in residential contexts.
- Install decorative features to face the public way.
- Chain link, horizontal board, split rails, plastic, concrete block or other solid masonry are inappropriate.
- Note that a fence also must comply with city codes.
- Note that using no fencing at all in the front yard in a residential setting is often the most appropriate approach.

## 2.20 Minimize the visual impacts of a privacy fence.

- Locate a privacy fence at the rear of the property only.
- Consider removing inappropriate chain link or privacy fences when visible from the street.
- Planting of windbreaks or hedgerows to function as a privacy “fence” in front may be considered, where adequate historic documentation exists.

## DRIVEWAYS, PARKING, PAVING - RESIDENTIAL

### Policy:

In many of the residential contexts housing patterns were dense, and rear alleys provided access to sheds, carriage houses, or garages at the back or side of the property. With the coming of the automobile, these structures were increasingly converted to or replaced by garages. Within the districts the traditional paving materials associated with features should be preserved. The insertion of new curb cuts and parking—both garages and driveways—should be kept to a minimum.

### Guidelines:

#### 2.21 Preserve a historic driveway and its original design, materials, and location.

- Removing historic paving materials is inappropriate.
- When it is damaged beyond repair, use a replacement material that is consistent with the historic one. These include crushed-limestone aggregate concrete and brick pavers.

#### 2.22 When using a historic paving material is not feasible, use a substitute that is similar in appearance to the original.

- Porous paving materials are encouraged that are compatible with the context.
- Tinted asphalt and stained and/or stamped concrete are acceptable.
- Standard concrete or plain asphalt also may be considered, when it is not economically viable to save and repair originals or to use substitute materials which simulate the original in appearance.

#### 2.23 Minimize the visual impacts of a new parking area.

- Locate a new parking area near the rear of the property.
- Screen it with landscaping when it would be visible from the street.

#### 2.24 Avoid introducing paving features that are out of character with the site and the district.

- Inserting a new semi-circular or drive-thru lane in a front yard is inappropriate if it was not a part of the history of the property.
- Note that gravel or dirt drives are not permitted in city codes.

# SITE LIGHTING

## Policy:

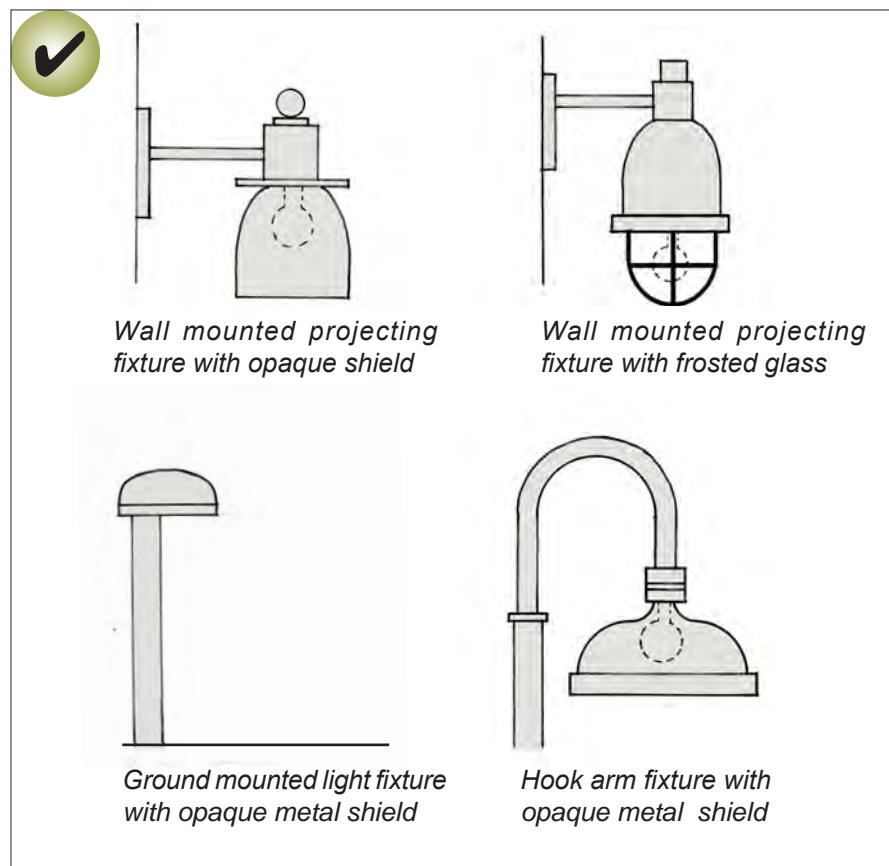
Standards for outdoor lighting are provided in the city's design standards. This section addresses some of the qualitative aspects of site lighting design that should also be addressed.

Light spill onto adjacent properties and into the night sky should be minimized. The light level at the property line is a key design consideration. This is affected by the number of fixtures, their mounting height, and the lumens emitted per fixture. It is also affected by the screening and design of the fixture.

## Guideline:

### 2.25 Use shielded and focused light sources to prevent glare.

- Light fixtures should incorporate cut-off shields to direct light downward.
- Luminaires (lamps) shall not be visible from adjacent streets or properties.
- Avoid excessive light spill from buildings.



# SITE AMENITIES

## Policy:

A variety of site amenities are used in public areas for the convenience of the community. These include benches, clocks, trash receptacles, hitching posts and street signs, some of which are historic. Few of these historic items survive, but can be viewed in historic photographs. Where historic features do survive, they should be preserved and maintained. Where evidence for historic site amenities is available, an effort should be made to replicate them.

The city has installed new benches in public spaces in the downtown area and at Cable Car Square, and they plan to continue the use of this style throughout the historic districts. This style is also suitable for public areas in residential and commercial districts. To minimize the costs of maintenance and replacement for the city, it is advisable to utilize one or two styles for all features throughout the historic districts and their neighboring areas.

## Guidelines:

### 2.26 Preserve historic site amenities.

- These include clocks, hitching posts, tramways, and benches.
- Repair historic site amenities when feasible.
- Removing historic site amenities is inappropriate.



### 2.27 Design a new site amenity to be compatible with the historic context.

- New features may be based upon historical precedents.
- Use durable materials that appear similar in character and finish to those seen historically.
- Utilize one or two styles for all features throughout a historic district and their neighboring areas.



*Preserve historic site amenities such as the Fenelon Place elevator lift.*

*Preserve historic site amenities such as the Town Clock which is listed on the National Register Historic Places.*

## YARDS AND PARK FEATURES

### Policy:

The historic districts contain green space in the form of private yards and public parks. Most notable of the public spaces are Jackson and Washington Parks. Historic pathways and a pergola have been reconstructed in Washington Park, based on archival documents. Similar documentation is available for Jackson Park. It is desirable that this park be restored to its appearance in the early twentieth century. This does not preclude introducing contemporary outdoor sculpture or outdoor installations in these spaces, however.

Yard space that is on private property is not generally regulated by the city. It is recommended that private property owners remain aware of the views of their property from the public way, and maintain these views in a manner that is consistent with the historic character of their district.

### Guidelines:

#### **2.28 Preserve historic features of public parks to the extent feasible.**

- Consider reconstructing original park features that are missing, including the restoration or recreation of pergolas or grandstands.
- Avoid removing historic site features.
- Install new amenities and wayfinding materials in public green spaces that are in keeping with the historic district. This may include artwork, fountains and pergolas.

#### **2.29 Maintain green space on private property that is visible from the public way in a manner that is in keeping with the historic character of the district.**

- Avoid removing historically significant features that are visible from the public way.
- Preserve historic site features in good condition.
- Install new features that are compatible with the historic context.

# PLANT MATERIALS

## Policy:

Some photographic evidence exists for the various forms of landscaping in the historic districts. Many of these plant materials merit continued use, but these schemes sometimes may not be appropriate for restoration, because they may be an invasive species or could cause damage to historic structures. In many cases, there will be alternative plant materials that can convey the general character seen historically while meeting new standards for sustainability. Plant materials selection in the historic districts therefore will be guided largely by existing landscaping ordinances, which designate tree and shrub species, sizes, and appropriate locations on public and private property.

Where evidence of historic plantings exists, and can contribute to the historic character of the district, efforts should be made to preserve or restore these features. Such work should be carried out with the consultation of the City Forester to ensure that it meets the city ordinance, and does not pose a threat to the health of the surrounding landscape, or the safety of the public.

## Guidelines:

### 2.30 Preserve traditional plant materials, when feasible.

- Preserve and maintain mature trees, replacing them when they become diseased or die.
- Avoid removal of mature, character-defining plantings and beds unless damaged, aged or diseased beyond preservation.
- Consider reconstructing planting schemes that have historical significance.
- Install new landscaping that meets the requirements of the city's landscaping ordinance and that conveys the general character of the historic planting scheme when feasible.

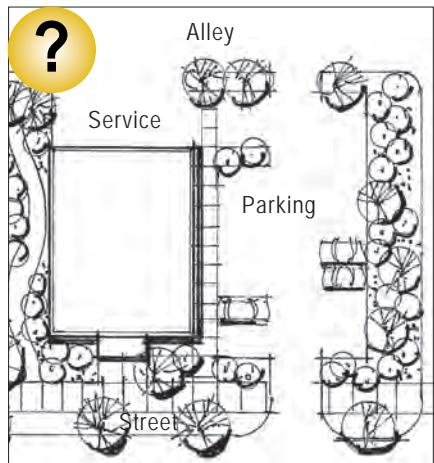
### 2.31 Avoid planting schemes that are out of character with the district.

- Avoid new planting schemes that may pose a hazard to the health of surrounding landscape features, or to public safety.
- Also avoid planting schemes that may contribute to the deterioration of nearby structures or streetscape features.

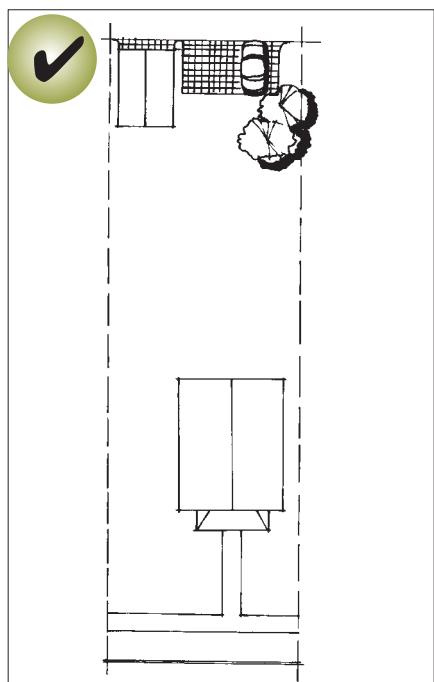
# SURFACE PARKING

## Policy:

The visual impact of surface parking should be minimized. On-site parking should be subordinate to other uses and the front of the lot should not appear to be a parking area.



*In commercial areas, locate surface parking to the side of a building when it is not feasible to locate parking to the rear.*



*In residential neighborhoods where alley access is possible, the use of parking off the alley is preferred and appropriate. Marking the parking spaces with a different type of material is appropriate as well.*

## Guidelines:

### 2.32 In commercial settings, locate a surface lot in the interior of a block whenever possible.

- This acknowledges the special function of corner properties. They are generally more visible than interior lots, serve as landmarks and provide a sense of enclosure to an intersection.
- Locate surface parking to the side of a building when it is not feasible to locate parking to the rear.

### 2.33 Site a surface lot so it will minimize gaps in the continuous building wall of a commercial block.

- Where a parking lot shares a site with a building, place the parking at the rear of the site or beside the building.

### 2.34 Minimize the visual impact of surface parking in residential neighborhoods.

- Locate and access a parking area at the rear of a site.
- Do not use a front yard for parking. Instead, use alley access or a long driveway that leads to parking located behind a building.

# BUFFERS

## Policy:

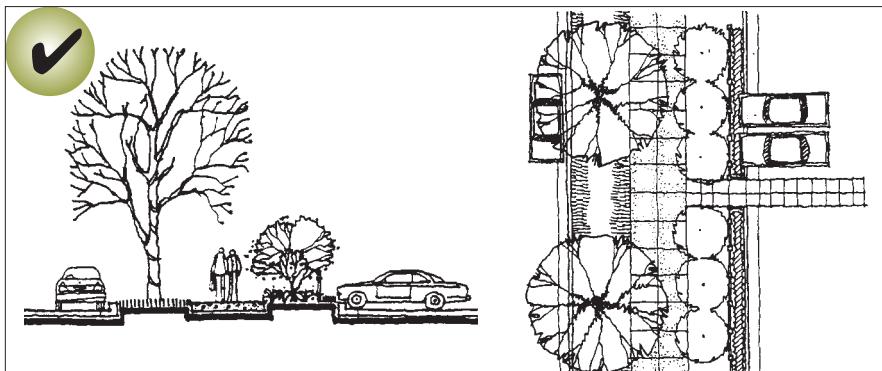
When site development, such as parking, storage and equipment areas, creates an unavoidable negative visual impact on abutting properties or to the public way, it should be mitigated with landscaping that may buffer or screen it. The landscape design should complement the existing natural character and context of the site.

Note that these guidelines supplement the city's design standards, that define the minimum amounts of land area to be landscaped and of plant units to be used.

## Guideline:

### 2.35 Landscape buffers should be provided along edges of parking and service areas.

- Provide a landscape buffer at the edge of a parking lot and between parking lots.
- Consider providing an evergreen landscape buffer at ground mounted mechanical equipment, service and/or storage areas.



*When site development, such as parking, storage and equipment areas, creates an unavoidable negative visual impact on abutting properties or to the public way, it should be mitigated with landscaping that may buffer or screen it.*



*Provide a visual buffer where a parking lot abuts a public sidewalk.*



*A combination of fences and shrubs can be used to create a landscape buffer.*



# Chapter 3

# Guidelines for New Buildings

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New buildings are anticipated in Dubuque as investment in the area continues. This is anticipated to occur mostly in the downtown area. Opportunities exist for many new infill projects that will increase density, in line with the City's goals. Design principles that result in a some compatible scale and enhanced pedestrian-oriented environment are key, while also drawing upon the traditions of Dubuque at large as an inspiration for new, creative designs.

# Designing In Context

## Policy:

Projects in Dubuque's historic districts should be compatible with the surrounding historic context. This is especially important when considering new construction in a historic district.



*This building project appropriately transitions a commercial context to a residential context. The corner commercial form of the building is located on the commercial street and the residential building form is located adjacent to a residential setting.*

## BUILDING MASS AND SCALE

The mass and scale characteristics of typical buildings contribute to the general feeling or perception of a context. When buildings tend to have similar mass and scale characteristics, a neighborhood context will often feel very consistent. Where mass and scale characteristics vary, a neighborhood may be defined by a feeling of design diversity.

Specific features in this category that may be used in defining physical character:

- Building height
- Building form
- Roof form
- Variations in wall planes
- Relationship of building floor area to lot size

## BUILDING DESIGN

The design characteristics of typical existing buildings helps define rhythms that may contribute significantly to the character of a neighborhood.

Specific features in this category that may be used in defining physical context:

- Building age
- Building style
- Design character
- Building materials
- The relationship of windows to solid wall areas
- Building use
- Roof lines
- Eaves
- Location of entries
- Placement of accessory structures

# General Guidelines for New Buildings

## ARCHITECTURAL CHARACTER

### Policy:

In order to assure that the history of a historic district can be understood, it is important that any new building be distinguishable from the historic structures. That is, a new building should appear as a product of its own time in terms of its style, while also being compatible with the context of the area.

### Guideline:

#### 3.1 Design a new building to reflect its time period, while respecting key features of its context.

- Use contemporary interpretations of historic architectural building types when designing a new building.



#### 3.2 Contemporary interpretations of traditional designs and details may be considered.

- Contemporary interpretations of building forms, massing, materials and details are encouraged.

*This building project appropriately reflects a commercial context. It maintains a commercial storefront at the street edge.*

#### 3.3 Use similar window and door proportions to those seen traditionally .

- Windows with a vertical emphasis are encouraged. A general rule is that the height of the window should be twice the dimension of the width in most districts.
- If a larger window is needed, combine sets of vertically proportioned windows.
- Odd window shapes such as octagons, triangles and diamonds are generally inappropriate in the historic districts.

# MATERIALS

## Policy:

Building materials of new structures and additions to existing structures should contribute to the visual continuity of the neighborhood. They should appear similar to those seen traditionally to establish a sense of visual continuity. Select materials which are high quality, convey a sense of human scale and provide visual interest. Use green materials and those which improve environmental performance that have been proven effective in the local climate. Materials should also minimize negative environmental impacts.



*New materials that are similar in character to traditional materials may be acceptable when they appear similar in scale, proportion, texture and finish to those used traditionally.*

### Appropriate materials are:

- Locally manufactured.
- Easy to maintain.
- Proven to be durable in the Dubuque climate.
- Have long life spans.
- Recyclable.
- Made from recycled or repurposed materials.
- Not manufactured using harsh chemicals.
- Do not off-gas harsh chemicals.
- Will not interact negatively with historic building materials.

## Guidelines:

### 3.4 Use building materials that appear similar to those used traditionally in the area.

- Brick is found in all character areas and, therefore, is an appropriate material to use.
- Horizontal lap siding is appropriate in transitional areas and on residential style buildings.
- All wood siding should have a weather-protective finish.
- The use of highly reflective materials is discouraged.

### 3.5 Use masonry that appears similar in character to that seen historically.

- Brick should have a modular dimension similar to that used traditionally. Brick larger than the nominal 2-3/8" x 8" is discouraged. Brick should also appear structural in its application; it is load-bearing and should be detailed accordingly.
- Stone, similar to that used traditionally, is also appropriate.

### 3.6 New materials that are similar in character to traditional materials may be acceptable with appropriate detailing.

- Alternative materials should appear similar in scale, proportion, texture and finish to those used traditionally for that particular building type.

### 3.7 Use building materials that contribute to the traditional sense of scale of the block.

- This will reinforce the sense of visual continuity in the area.

### 3.8 Use high quality, durable materials.

- Materials should be proven to be durable in the local climate.
- Facade materials should maintain an intended finish over time, or acquire a patina which is understood to be an outcome of normal interaction with the elements.
- Attach materials in a manner that will remain secure.

### 3.9 Use green building materials that are compatible with the historic context.

- They should employ the guidelines noted above.



*Contemporary interpretations of traditional designs and details are encouraged.*



*New contemporary designs for storefront elements provide visual interest and reinforce the established storefront pattern in the commercial context.*

# General Guidelines for New Commercial Building Types

This section provides design guidelines for new commercial building types. These new infill buildings would reflect many of the design features found within traditional commercial buildings. The guidelines also apply to new additions to non-historic commercial buildings.

## BUILDING SETBACKS

### Policy:

Buildings create a strong edge to the street because they are traditionally aligned on the front lot line and usually built out the full width of the parcel to the side lot lines. Although small gaps do occur between some structures, they are the exception. These characteristics are vitally important to the Main Street Historic District and in areas abutting the district where a street wall is a prominent feature.

### Guidelines:

#### 3.10 Reflect the traditional setbacks seen within the block.

- Place the facade of the building at the property line. This should only vary in very special circumstances.
- Locating entire building fronts behind the established storefront line is inappropriate.



*New construction should align with nearby historic structures.*

# BUILDING MASSING

## Policy:

Building massing should fit with existing patterns, but need not directly copy them. Existing patterns and traditions in building massing include varied heights, articulated masses, visually interesting skylines and pedestrian-scaled street fronts. Building massing should continue to provide a variety of pedestrian-friendly scales and visually appealing masses. Buildings should not be monolithic in scale or greatly contrast with the existing scale in the area.

A sense of human scale is achieved when one can reasonably interpret the size of a building by comparing features of its design to comparable elements in one's experience. Using building material of a familiar dimension such as traditional brick is an example, as is using windows of similar dimensions.

To ensure human scale is achieved in new development, it is important to focus design attention on aspects most directly experienced by pedestrians, such as the scale of buildings and architectural details at the street level. For example, providing a storefront and a band of smaller upper story windows creates a human scale.

These features are some of the important characteristics of commercial building types and should be respected in all new construction.

## Guidelines:

### 3.11 Maintain the average perceived size of buildings at the sidewalk.

- Facade heights of new buildings should fall within the established range of the block, and respect the traditional proportions of height to width.
- Floor-to-floor heights should appear similar to those of traditional buildings in the area.



*Facade heights of new buildings should fall within the established range of the block, and respect the traditional proportions of height to width.*

### 3.12 Traditional spacing patterns created by the repetition of uniform building widths along streets should be maintained.

- New facade widths should reflect the established range of the building widths seen on the block.
- Where a building must exceed this width, use a change in design features to suggest the traditional building widths. Changes in facade material, window design, facade height or decorative details are examples of techniques that may be considered. These variations should be expressed through the structure such that the composition appears to be a collection of smaller building modules.



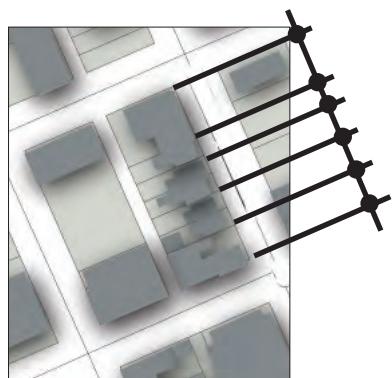
*Place the facade of the building at the property line.*



*Changes in facade material, window design, facade height or decorative details are examples of techniques that may be considered to reflect traditional building widths.*



*Floor-to-floor heights should appear similar to those of traditional buildings in the area.*



*New facade widths should reflect the established range of building widths seen on the block.*

### 3.13 A new building should incorporate a base, middle and a cap.

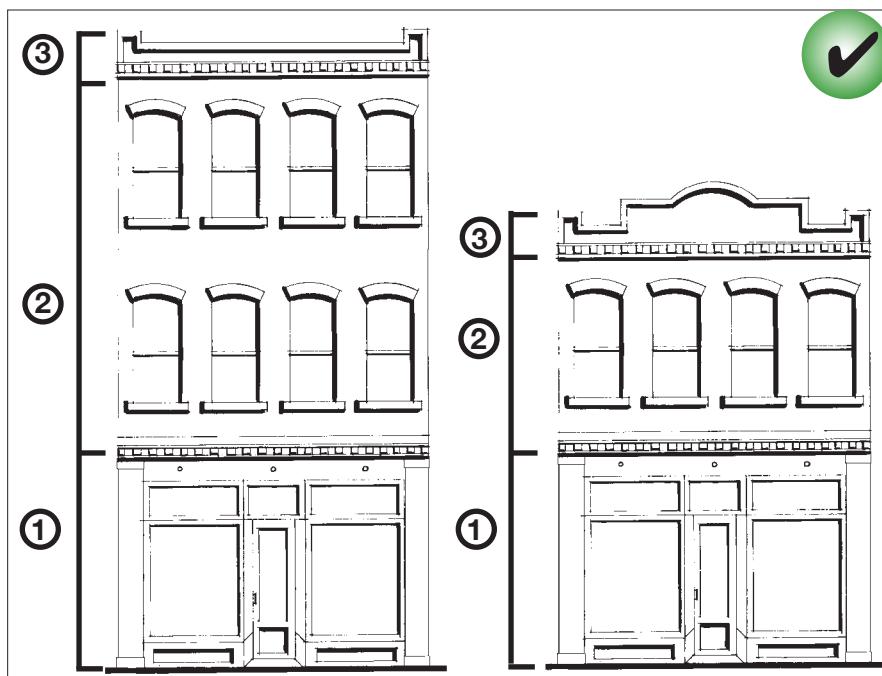
- Traditionally, buildings were composed of these three basic elements. Interpreting this tradition in new buildings will help reinforce the visual continuity of the area.

### 3.14 Position taller portions of a structure away from neighboring buildings of lower-scale.

- Where permitted by the base zoning, towers and other taller structures should be located to minimize looming effects and shading of lower-scaled neighbors.
- Buildings should step down towards lower-scaled neighbors, including adjacent historic properties and districts.

### 3.15 Establish a sense of human scale in building designs.

- Use vertical and horizontal articulation to break up large facades.
- Incorporate changes in color, texture and materials in building designs to help define human scale.
- Use architectural details that create visual interest and convey a three-dimensional facade.
- Use materials which help to convey scale through their proportions, detailing and form.
- Size and locate signs to engage pedestrians and help define building entries.



These two building models incorporate basic building elements: (1) base, (2) middle and (3) cap.



*A new building should incorporate a base (1), middle (2) and cap (3).*



*Buildings should step down towards lower-scaled neighbors.*



*Use vertical and horizontal articulation to break up large facades.*

## BUILDING AND ROOF FORM

### Policy:

One of the most prominent unifying elements of the commercial area is the similarity in building form. Commercial buildings were simple rectangular solids, deeper than they were wide. This characteristic is important and should be continued in new projects.



*Rectangular forms should be dominant on commercial facades.*

### Guidelines:

#### 3.16 Rectangular forms should be dominant on commercial facades.

- Rectangular forms should be vertically oriented.
- The facade should appear as predominantly flat, with any decorative elements, and projecting or setback “articulations”, appearing to be subordinate to the dominant form.

#### 3.17 Roof forms should be similar to those used traditionally.

- Flat roofs are appropriate.
- “Exotic” roof forms, such as A-frames and steep shed roofs, are inappropriate.



*Roof forms should be similar to those used traditionally.*

## HORIZONTAL ALIGNMENT

### Policy:

A strong alignment of horizontal elements exists along the street. Alignment is seen at the first floor level with moldings found at the top of display windows; at upper floor levels, alignment is found among cornices, window sills and headers. This alignment of horizontal features on building facades is one of the strongest characteristics of the street and should be preserved. It is important to note, however, that slight variations do occur, which add visual interest. Major deviations from these relationships, however, disrupt the visual continuity of the street and are to be avoided.

### Guidelines:

#### 3.18 Maintain the general alignment of horizontal features on a building front.

- Typical elements that align include: window moldings, tops of display windows, cornices, copings and parapets at the tops of buildings.
- When large buildings are designed to appear as several buildings, there should be some slight variation in alignments between the horizontal facade elements.



*The general alignment of horizontal features on building fronts must be maintained.*

#### 3.19 Define the first and second floors of commercial type buildings with clearly distinguishable details.

- Changes in horizontal details and architectural panels may be used to help define the first and second floors.
- Changes in material, color, texture, pattern or wall plane may be used to help define the first and second floors.

## SOLID-TO-VOID

### Policy:

A typical building appeared to be a rectangular solid, with holes “punched” in the walls for windows and doors. Most commercial buildings have similar amounts of glass, resulting in a relatively uniform solid-to-void ratio. This ratio on a new building, the amount of facade devoted to wall surface as compared to that developed as openings, should be similar to that of traditional buildings within the neighborhood.



*Use a ratio of solid-to-void (wall-to-window) that is similar to that found on traditional commercial structures.*

### Guideline:

**3.20 Use a ratio of solid-to-void (wall-to-window) that is similar to that found on traditional commercial structures.**

- Large surfaces of glass may be inappropriate. Divide large glass surfaces into smaller panes similar to those seen traditionally.



*Use a ratio of solid-to-void (wall-to-window) that is similar to that found on traditional commercial structures.*

## NEW STOREFRONT CHARACTER

### Policy:

The street level floors of historic Dubuque commercial buildings are clearly distinguishable from the upper floors. First floors are predominantly fixed plate glass with a small percentage of opaque materials with recessed entries. Upper floors are the reverse—opaque materials dominate, and windows appear as smaller openings puncturing the solid walls. These windows are usually double-hung. The street level is generally taller than the upper floors. Storefronts of 12 to 14 feet high are typical, whereas second floors of 10 to 12 feet are typical. This typical storefront character should be maintained.

### Guidelines:

#### 3.21 Maintain the distinction between the street level and the upper floor.

- The first floor of the primary facade should be predominantly transparent glass.
- Upper floors should be perceived as being more opaque than the lower floor.
- Highly reflective or darkly tinted glass is inappropriate.
- Express the distinction in floor heights between street levels and upper levels through detailing, materials and fenestration. The presence of a belt course is an important feature in this relationship.



*The first floor of the primary facade should be predominantly transparent glass.*

#### 3.22 Maintain the traditional spacing pattern created by upper story windows.

- Maintain the historic proportions of windows.
- Headers and sills of windows on new buildings should maintain the traditional placement relative to cornices and belt courses.



*The typical storefront pattern is maintained on this new building.*

#### 3.23 Maintain the pattern created by recessed entryways.

- Set the door back an adequate amount from the front facade to establish a distinct threshold for pedestrians. A recessed dimension of four feet is typical.
- Where entries are recessed, the building line at the sidewalk edge should be maintained by the upper floor(s).
- Use transoms over doorways to maintain the full vertical height of the storefront.
- Oversized and undersized interpretations are inappropriate.



*This building maintains the traditional spacing pattern created by upper story windows.*



*Express the distinction in floor heights between street levels and upper levels through detailing, materials and fenestration.*

# Guidelines for New Residential Building Types

This section provides design guidelines for new residential buildings in the downtown overlay and in the city's historic districts. It addresses low-rise residential buildings in single-family, duplex and townhome forms. It also provides guidance for mid-rise apartment buildings. The guidelines also apply to new additions to non-historic residential buildings.

## RESIDENTIAL CONTEXT AND FEATURES

### Policy:

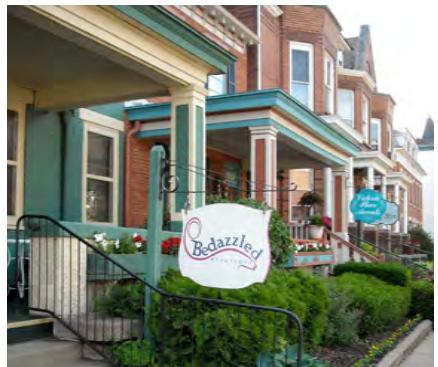
A new low-rise residential infill building should be compatible with its context and reflect design features found in traditional residential building types. This includes building setbacks, scale and overall height, the number of stories, massing, foundation height, roof form, window and door size and placement, and porches.

A new mid-rise apartment building should be compatible with its context and reflect traditional building features along the block. Apartment buildings are most appropriate along transitional edges near the downtown core.

### Guidelines:

#### 3.24 Maintain the design context of the neighborhood.

- Each new structure should be designed to be compatible with its specific context.
- Note that a design may be appropriate in one district and may not be appropriate in another.



*The images above reflect traditional residential design contexts and features. Note the variation in setback in the images.*

# BUILDING SETBACKS

## Policy:

Building setbacks within a typical residential context reflect a hierarchy of public and private space. It is a progression that begins at the street, which is the most public space, then proceeds through the front yard, which appears “semi-private,” and ends at the front door, which is the “private” space. This sequence enhances the pedestrian environment and contributes to the character of a residential neighborhood; this should be maintained.

## Guidelines:



### 3.25 Maintain the traditional setback pattern of the neighborhood.

- Align a new building within the established range of setbacks that occur along the block.
- In a traditional residential neighborhood, the front yard should be maintained with planting material and not covered with paving or large outdoor decks. (See also Chapter 2 for site and landscape guidelines.)

### 3.26 Provide a walkway from the street to the building when a front yard is present.

- In traditional single-family residential neighborhoods a walkway running from the street to the front porch provides unity to the streetscape. Where a walkway is an element of the neighborhood hierarchy, this should continue in new construction.



*Align new buildings within the established range of setbacks that occur on the block. Note that a variety of setbacks occurs in the historic districts.*

# PRIMARY ENTRANCE

## Policy:

A new residential building should appear to be clearly connected to the street.

## Guidelines:

### 3.27 Clearly define a primary entrance.

- Provide a front porch or similar feature for single-family and two-family residential buildings.
- A porch should be “functional,” in that it is used as a means of access to the entry.
- Projecting porticoes, porches, canopies, awnings and recessed entries with decorative surrounds define a primary entry for multifamily building types and should serve as models for similar new buildings.



### 3.28 Orient the primary entrance to the street.

- While a porch or a similar entry-defining feature serves as a transition from the street to the building, it is also an essential element of the streetscape. It provides human scale to the building, offers interest to pedestrians, and is a catalyst for personal interaction.



*Provide a front porch or similar entry feature for single-family and two-family residential buildings.*

# MASS AND SCALE

## Policy:

The massing of a new building should fit within existing patterns, but need not directly copy them. Variables in building massing include varied heights, articulated masses and pedestrian-scaled entryways. Building massing should continue to provide a variety of pedestrian-friendly scales and visually appealing forms. Buildings should not be monolithic in scale or greatly contrast with the existing scale of the area.

A sense of human scale is achieved when one can reasonably interpret the size of a building by comparing features of its design to comparable elements in one's experience. Using a building material of a familiar dimension such as traditional brick is an example, as is using windows of similar dimensions.

To ensure that human scale is achieved in new development, it is important to focus design attention on aspects most directly experienced by pedestrians, such as the scale of buildings and architectural details at the street level. For example, providing a front porch creates a human scale, especially in a residential setting. These features should be respected in all new construction.

## Guidelines:



### 3.29 Construct a new building to be similar in mass and scale to traditional buildings in the neighborhood.

- Use traditional features that convey a human scale, such as windows and doors of similar sizes.
- Use building materials of traditional dimensions. Brick is encouraged.
- Include horizontal elements in the design of residential buildings. For example, porches, balconies and eaves should be used to reflect the articulation of buildings in predominantly residential areas.
- Use architectural details to create visual interest and convey a three dimensional quality. For single-family buildings this can include a one-story porch.



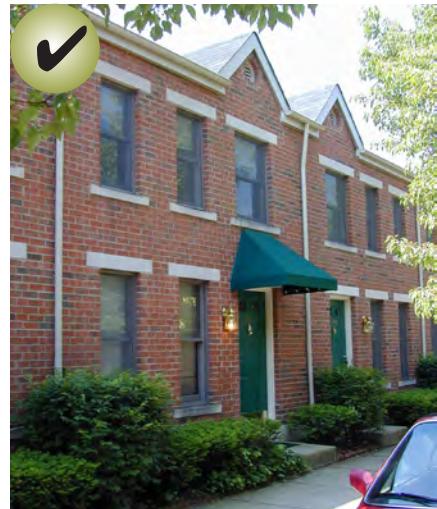
### 3.30 The front wall of a new structure should appear similar in width to traditional buildings in the neighborhood.

- The primary plane of the front should not appear wider than those in the neighborhood.

*Construct a new building to be similar in mass and scale to traditional buildings in the neighborhood.*

**3.31 A facade should appear similar in dimension to traditional buildings in the neighborhood.**

- Facade heights of new buildings should fall within the established range of the block, and respect the traditional proportions of height to width.
- Floor-to-floor heights should appear similar to those of traditional buildings in the area.



**3.32 On a larger structure, subdivide the mass into smaller "modules" that are similar in size to traditional buildings in the neighborhood.**

- Subordinate modules may be attached to the primary building form.

**3.33 Position taller portions of a structure away from neighboring buildings of lower-scale.**

- Where permitted by the base zoning, a taller structure should be located to minimize looming effects and shading of lower-scaled neighbors.
- A building should step down towards lower-scaled neighbors, especially historic properties.

*This new townhouse infill building appropriately reflects traditional residential building features and is compatible with its context.*



*Subdivide a larger mass into smaller modules. This also applies to the design of single-family homes.*



*The original block in this image was a mix of low-scale retail and residential building types. The fabric of the established context is negatively impacted by the new large-scale retail building.*



*Construct a new building to have similar floor, roof and foundation heights as traditional buildings along the block. The floor to floor heights are generally appropriate; however, the foundation wall is set high and does not reflect the actual foundation height.*



*On larger structures, subdivide the larger mass into smaller “modules” that are similar in size to traditional buildings in the neighborhood.*

## BUILDING AND ROOF FORM

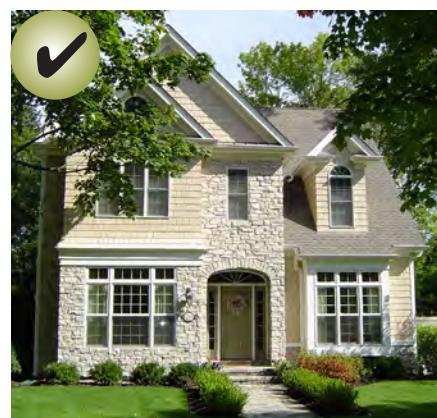
### Policy:

In most neighborhoods, a similarity of building and roof form also contributes to a sense of visual continuity. In order to maintain this characteristic, a new building should have basic building and roof forms similar to those seen traditionally.

### Guideline:

#### 3.34 Use building and roof forms similar to those seen traditionally on the block.

- Exotic and shed roof forms are inappropriate on primary structures.
- Flat roofs are appropriate in the downtown and commercial areas and sloped roofs are appropriate in areas adjacent to residential contexts.



*Use building and roof forms similar to those seen traditionally on the block.*

## SOLID-TO-VOID

### Policy:

A typical building appeared to be a rectangular solid, with holes “punched” in the walls for windows and doors. Most residential buildings have similar amounts of glass, resulting in a relatively uniform solid-to-void ratio. This ratio on a new building, the amount of facade devoted to wall surface as compared to that developed as openings, should be similar to that of traditional buildings within the neighborhood.



*The facade should reflect traditional solid-to-void ratios.*

### Guideline:

**3.35 Use a ratio of solid-to-void (wall-to-window) similar to that found on traditional residential structures.**

- Large surfaces of glass are inappropriate.



*Large openings are inappropriate.*

# BUILDING MATERIALS

## Policy:

Building materials for new structures and additions to existing buildings should contribute to the visual continuity of the context. They should appear similar to those seen traditionally.

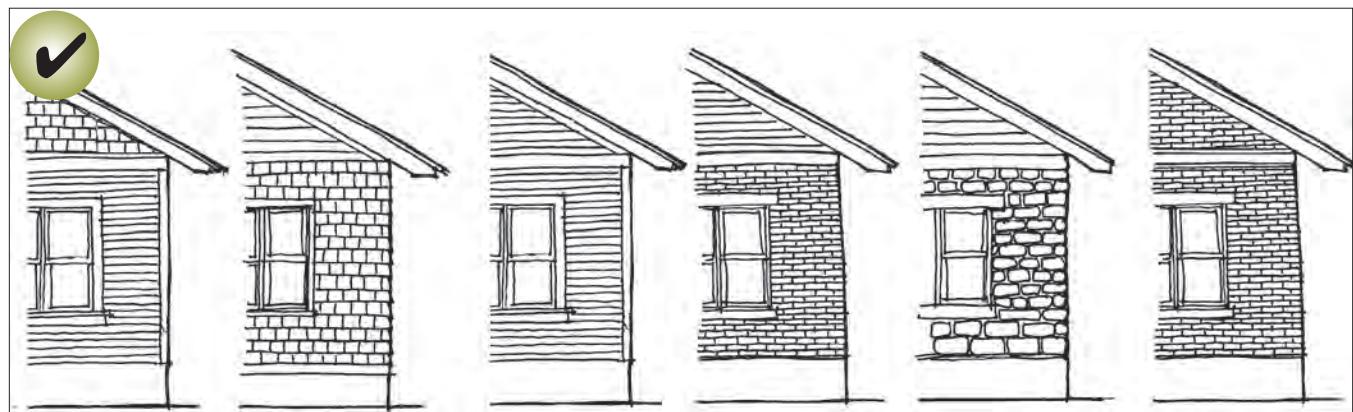
## Guideline:

### 3.36 Incorporate materials similar to the way they were used traditionally on single-family homes.

- Foundations were typically stone and upper floors were brick or wood lap siding.
- In some cases, an accent was used in a gable end: for example, wood shingles were sometimes used. This helped to break up the mass and scale of a facade. A similar approach should be considered on a new infill building.
- Generally, do not mix a variety of materials on a single-family facade.



*Incorporate materials similar to the way they were used traditionally on single-family homes.*



*Incorporate materials similarly to the way they were used traditionally on single-family homes. The foundations were typically stone and upper floors were wood or brick. In some cases, a simple combination of materials were used.*

## Examples of Mid-rise Apartment Buildings that Incorporate Traditional Building Features

*The preceding guidelines focus on lower-scaled residential buildings, but the same principles apply where larger residential buildings are permitted. These are some examples. Several of the buildings shown would be appropriate near the downtown core, while those on the bottom row would be more appropriate in the Mill District.*



## SECONDARY STRUCTURES

### Policy:

Secondary structures are traditionally subordinate in scale and character to a primary structure and are typically located to the rear of the lot. They are primarily used for parking garages and storage. While structures in the rear generally have little impact on the character of the street, they do have an impact on the character of the alley and the neighbors to the rear. This subordinate character should be maintained.

### Guidelines:

#### 3.37 A new secondary structure should be subordinate in height to primary structures seen along the street front.

- A secondary structure of no more than one-and-one-half stories in height is preferred.



#### 3.38 Locate a secondary building to the rear of the lot.

- Locating a secondary structure to the side of the primary structure, but set back significantly from the front wall plane, is also appropriate.
- A secondary structure should be oriented similar to those seen traditionally along the alley, where they are available.



#### 3.39 Locate a garage such that its visual impacts will be minimized.

- A garage should be located off an alley where possible.
- On a lot where a garage must be accessed from the street, set it back from the front wall plane of the primary structure.

*A secondary structure should be compatible with the primary building. This building has a similar paint color and siding as the primary building on the site.*

#### 3.40 A secondary structure should be compatible with the primary building.

- It should be made of similar materials.
- It should be compatible with the primary building.



*Locate a secondary building to the rear of the lot.*



*On a lot where a garage must be accessed from the street, set it back from the front wall plane of the primary structure.*

# New Industrial/Warehouse Building Types

This chapter provides design guidelines to develop new industrial/warehouse building types. Many of these infill sites occur in the Millwork District. (See also Chapter 6 for a description of some of the key features of that context.) These new buildings should reflect the design features found within traditional industrial/warehouse buildings. The guidelines also apply to additions to non-historic industrial/warehouse building types. Note that while this chapter addresses a warehouse or industrial form, a mix of uses may be housed in this building type.

## BUILDING SETBACKS

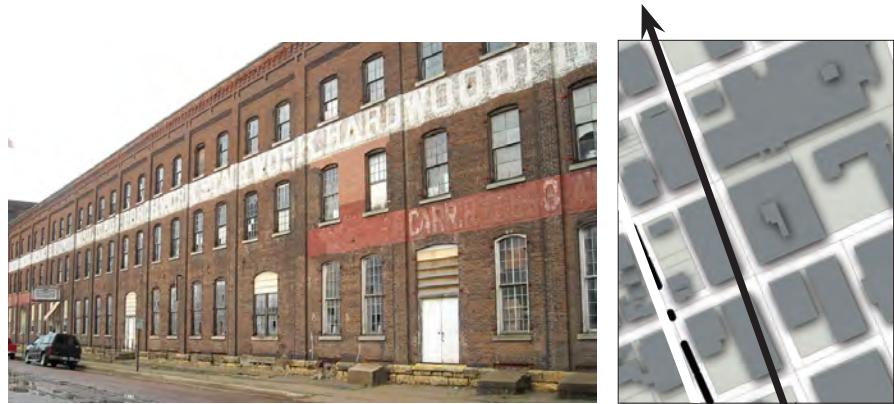
### Policy:

When a new building is to be constructed, it should reflect historic siting patterns in the area. The general spirit of the relationship of buildings to streets and open spaces should be conveyed. Industrial/warehouse buildings create a strong edge to the street because they traditionally aligned on the front lot line and were usually built out to the full width of the parcel. Reflecting this siting pattern is encouraged.

### Guidelines:

#### 3.41 Maintain the uniform alignment of facades in the block.

- Align a new building front at the street edge.
- Some small variation in setback may be appropriate to provide an outdoor use area.
- Locating an entire building front back substantially from the established building line is inappropriate.



*Continue to align building fronts at the street edge. This is an important characteristic of the warehouse area.*

# MASS AND SCALE

## Policy:

A new building should reflect the massing of traditional industrial/warehouse buildings. Because of the diversity of building sizes exhibited throughout the warehouse area, a wide variety of building sizes will be appropriate, as long as a human scale is conveyed.

A sense of human scale is achieved when one can reasonably interpret the size of a building by comparing features of its design to comparable elements in one's experience. Using a building material of a familiar dimension such as traditional brick is an example, as is using windows of similar dimensions.

To ensure that human scale is achieved in new development, it is important to focus design attention on aspects most directly experienced by pedestrians, such as architectural details at the street level. For example, providing a series of vertical pilasters and a band of windows creates a human scale. Traditional warehouses included interesting fenestration which created visual interest, and is partially why the older industrial buildings are so visually appealing. These features are some of the important characteristics of the warehouse area and should be respected in all new construction.

## Guidelines:

### 3.42 Maintain the average perceived size of buildings at the sidewalk edge.

- The facade height of a new building should fall within the established range of the block, and respect the traditional proportions of height to width.
- Floor-to-floor heights should appear similar to those of traditional buildings in the area.



### 3.43 A new building should incorporate a base, a middle and a cap.

- Traditionally, buildings were composed of these three basic elements. Interpreting this tradition in new buildings will help reinforce the visual continuity of the area.

### 3.44 Establish a sense of human scale in building design.

- Use vertical and horizontal articulation to break up large wall surfaces.
- Incorporate changes in color, texture and materials to help define human scale.
- Use architectural details that create visual interest and convey a three-dimensional gravity.
- Use materials which help to convey scale through their proportions, detailing and form.

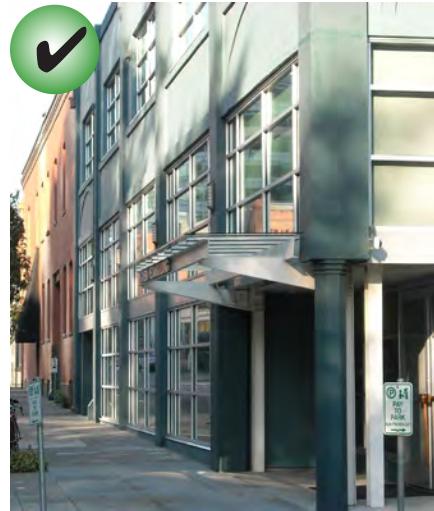
*Use materials which help to convey scale through their proportions, detailing and form.*



*Use materials which help to convey scale through their proportions, detailing and form.*



*Floor-to-floor heights should appear similar to those of traditional buildings in the area.*



*Use architectural details that create visual interest and convey a three dimensional facade.*



*Maintain the traditional height of buildings seen along the street by setting back taller portions of buildings from the front facade.*



## BUILDING AND ROOF FORM

### Policy:

One of the most prominent unifying elements of the industrial/warehouse area is the similarity in building forms that exist. Industrial/warehouse buildings were simple rectangular solids. This characteristic is important and should be continued in new projects.

### Guidelines:

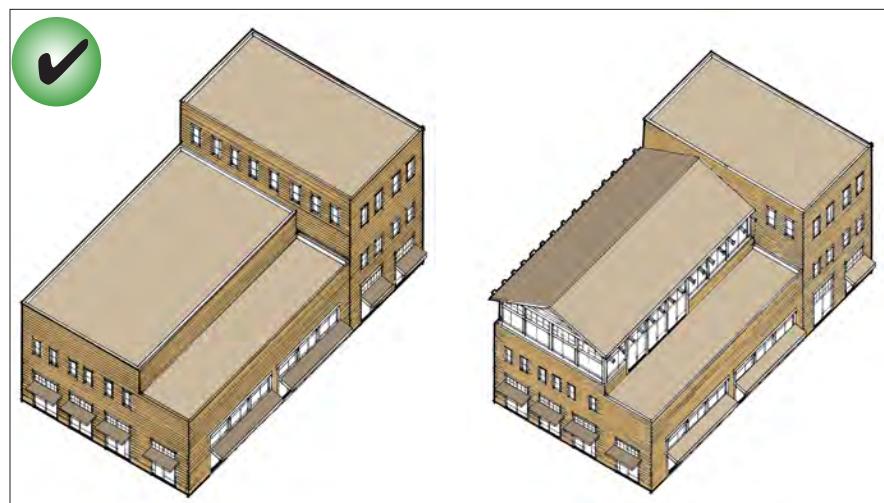
#### 3.45 The primary form of a industrial/warehouse building type should appear similar to those seen traditionally.

- Simple rectilinear building forms are appropriate. Avoid the use of highly complex forms.
- The facade should appear as predominantly flat, with any decorative elements and projecting or setback “articulations” appearing to be subordinate to the dominant form.
- Avoid the use of highly complex building and roof forms.



#### 3.46 Roof forms should be similar to those used traditionally.

- Flat roofs and gable forms are appropriate.
- “Exotic” roof forms, including mansards, are generally inappropriate in the warehouse context.



*Simple rectangular building forms are appropriate.*

## HORIZONTAL ALIGNMENT

### Policy:

A strong alignment of horizontal elements exists along the street. Alignment is found among cornices, window sills and headers. This alignment of horizontal features on building facades is one of the strongest characteristics of the street and should be preserved. It is important to note, however, that slight variations do occur, which add visual interest. Major deviations from these relationships, however, disrupt the visual continuity of the street and are to be avoided.

### Guidelines:

**3.47 The general alignment of horizontal features on building fronts should be maintained.**

- Typical elements that align include window moldings, cornices, copings and parapets at the tops of buildings.



*Align building elements such as window moldings, cornices, copings and parapets at the tops of buildings.*



*This alignment of horizontal features on building facades is one of the strongest characteristics of the street and should be maintained with new infill buildings.*

## SOLID-TO-VOID

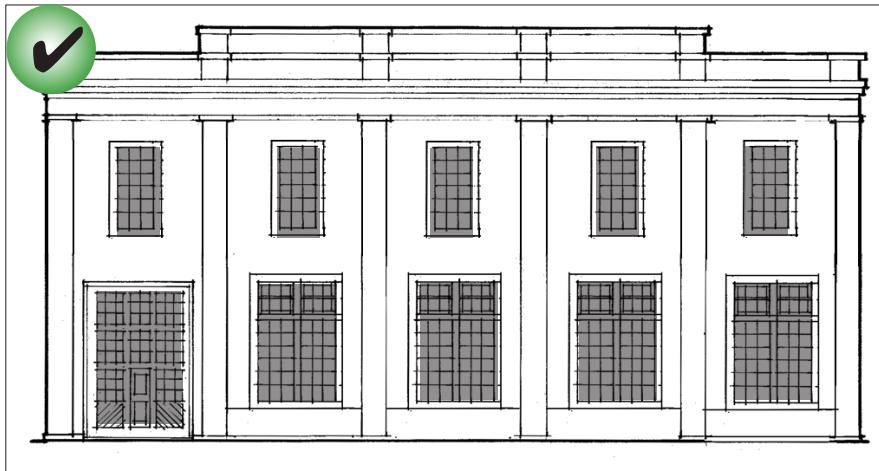
### Policy:

A typical building appeared to be a rectangular solid, with holes “punched” in the walls for windows and doors. Most warehouse buildings have similar amounts of glass, resulting in a relatively uniform solid-to-void ratio. This ratio on a new building, the amount of facade devoted to wall surface as compared to that developed as openings, should be similar to that of traditional buildings within the neighborhood.

### Guidelines:

**3.48 Use a ratio of solid-to-void (wall-to-window) similar to that found on traditional industrial/warehouse structures.**

- Large surfaces of glass may be inappropriate. Divide large glass surfaces into smaller panes similar to those seen traditionally.



*Use a ratio of solid-to-void (wall-to-window) similar to that found on traditional industrial/warehouse structures.*

*A typical building appeared to be a rectangular solid, with holes “punched” in the walls for windows and doors. Most industrial/warehouse buildings have similar amounts of glass, resulting in a relatively uniform solid-to-void ratio.*

## NEW FACADE CHARACTER

### Policy:

The street level floors of historic Dubuque industrial/warehouse buildings are clearly distinguishable from the upper floors. The first floor is punctuated with large operable openings, entrances and in some cases large industrial windows. The large first floor windows allowed additional light into the ground floor space and the operable doors allowed for loading and unloading of goods. The use of loading docks with a series of operable doors and canopies were also seen. The upper floors were punctuated with a series of smaller windows. The design patterns these buildings elements provide is encouraged on new construction.

### Guidelines:



*The large first floor windows allowed additional light into the ground floor space and the operable doors allowed for loading and unloading of goods. Reinterpreting these building patterns in new construction is appropriate.*

#### 3.49 Maintain the traditional spacing pattern created by upper story windows.

- Maintain the historic proportions of windows.
- Headers and sills of windows on new buildings should maintain the traditional placement relative to cornices and belt courses.

#### 3.50 Maintain the distinction between the street level and the upper floor.

- The first floor of the primary facade should be predominantly transparent glass with space between openings. Consider a variation in size for some openings, for example, larger operable doors were seen on industrial/warehouse buildings.
- Upper floors should be perceived as being more opaque than the lower floor.
- Highly reflective or darkly tinted glass is inappropriate.
- Express the distinction in floor heights between street levels and upper levels through detailing, materials and fenestration. The presence of a belt course is an important feature in this relationship.



*The street level floors of historic Dubuque industrial/warehouse buildings are clearly distinguishable from the upper floors.*

**3.51 Maintain the pattern created by entryways.**

- Set the door back from the front facade an adequate amount to establish a distinct threshold for pedestrians.
- The use of transoms over doorways and service entries to maintain the pattern created by entryways is appropriate.
- Undersized interpretations are discouraged.



*Express the distinction in floor heights between street levels and upper levels through detailing, materials and fenestration. The presence of a belt course is an important feature in this relationship.*



*Providing openings with industrial glass similar in size to traditional loading doors is appropriate.*

# Civic Facilities

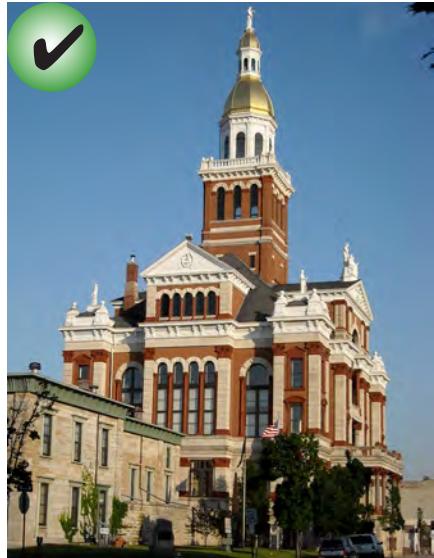
The design guidelines in this section focus on principles for new civic building projects that reinforce the historic building fabric and enhance the pedestrian environment in the city. To do so, they draw upon principles established in traditional commercial and residential buildings. While these are the majority of property types that will occur in the area, civic facilities should be a part of the mix as well.

Civic facilities include museums, churches, schools, libraries, fraternal buildings, transit improvements, courts and governmental offices. This tradition of designing civic institutions as landmarks in the urban fabric should be continued. At the same time, the basic principles of urban design outlined in this document should still apply.

## Policy:

Civic facilities should reflect basic urban design principles in their designs.

### Guidelines:



#### 3.52 An outdoor civic space should enhance the downtown fabric of streets, public spaces and sidewalks.

- Outdoor civic space should be scaled to the context.
- Outdoor civic space should be designed for active public use.
- The visual impacts of automobiles should be minimized.
- The edges of an outdoor civic space should be inviting to pedestrians.
- Convenient pedestrian connections should be provided.
- Significant view corridors should be maintained.
- A balance of landscape and hardscape elements should be provided.
- Outdoor civic space should include streetscape furnishings, such as lighting, benches and public art.



#### 3.53 Construct a civic facility that is appropriately scaled to its environment and engages the pedestrian along the street.

- Civic facilities should provide a pedestrian-friendly street level.
- Civic facilities should reflect the design guidelines for mass, scale and materials for commercial building types.
- A sense of human scale should be conveyed.
- Entrances should face the street or outdoor civic space, not to parking lots.
- The building may consider an exceptional state-of-the-art design that sets it apart from other traditional buildings within the context.

*These civic facilities (historic and contemporary) incorporate basic urban design principles in their design.*

# Chapter 4

# Design Guidelines

# For all Properties

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This chapter covers design guidelines for all properties in the downtown and the city's historic districts. It includes a variety of topics that may arise in rehabilitation projects, new building designs and site improvements.

# Various Guidelines Topics That Apply To All Project Types

## AWNINGS AND CANOPIES

### Policy:

In this context, a canopy is a fixed structure attached to a building with a rigid roof material, usually metal. It may be flat (horizontal), or sloped. Awnings are typically fabric attached to light, sloped metal frames. They may be operable or fixed. When installing these features, do not damage historic materials.

Traditionally, awnings and canopies were noteworthy features on commercial buildings; they were also installed on some residential buildings. Their continued use is encouraged. These elements are simple in detail, and they reflect the character of the buildings to which they are attached.



*Minimize damage to historic materials when mounting canopies and awnings.*



*Fixed metal canopies may be appropriate for certain building styles.*

### Guidelines:

#### 4.1 Minimize damage to historic materials when mounting canopies and awnings.

- Avoid anchoring directly into architectural features, when feasible.

#### 4.2 A fabric awning is encouraged.

#### 4.3 Historically, fabric awnings are what were most commonly found in Dubuque.

- Operable awnings are appropriate.

#### 4.4 A fixed metal canopy may be considered.

- Appropriate supporting mechanisms are wall mounted brackets and chains.

#### 4.5 The awning and canopy should be in character with the building and streetscape.

- Mount an awning or canopy to accentuate character-defining features. The awning or canopy should fit in the opening of the building.
- Use colors that are compatible with the overall color scheme of the facade. Solid colors are encouraged.
- Simple shed shapes are appropriate for rectangular openings. Odd shapes, bullnose awnings and bubble awnings are inappropriate.
- Internal illumination of an awning is inappropriate.



300 block of Main, looking northwest. Note the use of awnings.  
(Center for Dubuque History, Photo KRK 2420)



*The installation of this canopy is generally acceptable; however, a better approach is to locate the canopy to fit within the wall opening.*



*Wall mounted brackets are appropriate supporting mechanisms for fixed metal canopies.*



*An awning or canopy should fit in the opening of the building.*



*Arched canopies placed within rectangular openings are inappropriate. A more subdued color scheme would also be more appropriate.*



*Appropriate installation of an awning.*

# BUILDING LIGHTING

## Policy:

The character and level of lighting that is used on a building is of special concern. Traditionally, exterior lights were simple in character and were used to highlight signs and building entrances on commercial buildings. For residential buildings, lighting highlighted the entrance with a fixture located on the porch ceiling or near the front door. Most fixtures had incandescent lamps that cast a color similar to daylight, were relatively low intensity and were shielded with simple shade devices. Although new lamp types may be considered, the overall effect of modest, focused, building light should be continued.

When installing lighting on a historic building, use existing documentation as a basis for the new design. If no documentation exists, use a contemporary light fixture that is simple in design. Building lighting should be installed in a manner so as not to damage the historic fabric of the building and should be reversible.

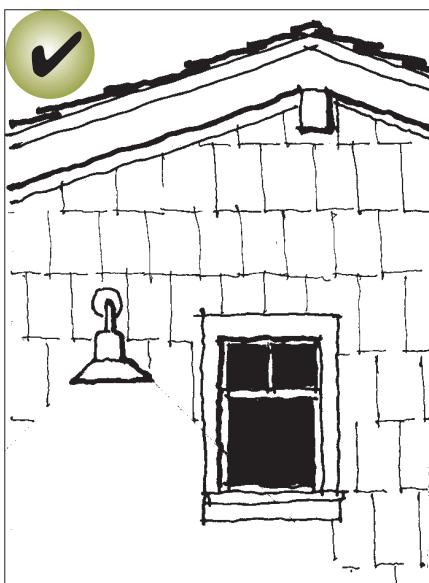
## Guidelines:

### 4.6 Use lighting to accent:

- Building entrances
- Architectural features on civic buildings of community interest

### 4.7 Minimize the visual impacts of building lighting.

- Use exterior light sources with a low level of luminescence.
- Use lights that cast a similar color to daylight.
- Do not wash an entire building facade in light.
- Use lighting fixtures that are appropriate to the building and its surroundings in terms of style, scale and intensity of illumination.
- New lighting fixtures should have simple designs that do not draw attention away from the facade.
- Mount exterior fixtures in an inconspicuous manner.
- Do not damage or obscure historic building components and fabric when mounting exterior fixtures.
- Do not use high intensity light sources or cast light directly upward.



*Light fixtures should incorporate cut-off shields to direct light downward.*

# PARKING FACILITIES

## Policy:

New parking facilities should be designed to be attractive, compatible additions to the streetscape. Using high quality materials, providing a sense of scale in architectural details and providing active uses at the sidewalk edge are methods that can mitigate the potentially negative impacts of new parking facilities. In general, a new parking facility should remain subordinate to the street scene. Parking structures should be designed to enhance the activity of the streetscape. At a minimum, a parking structure should help to animate the street and be compatible with the surroundings. The visual impact of the cars themselves should be minimized.

## Guidelines:

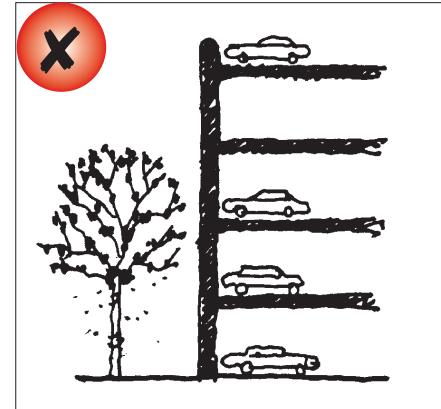
### 4.8 Design a parking structure so that it creates a visually attractive and active street edge.

- When feasible, a parking structure should be wrapped with retail, commercial or another active use along the street edge to separate the facility from the street and to add activity to the street.
- A combination of other methods of accomplishing this may be used, but should not dominate the facade of a structure. These include, but are not limited to:
  - Murals or public art
  - Landscaping
  - Product display cases



### 4.9 A parking structure should be compatible with traditional buildings in the surrounding area.

- Respect the regular window pattern and other architectural elements of adjacent buildings.
- Maintain the alignments and rhythms of architectural elements as seen along the street.
- Express the traditional widths of buildings in the area.
- Continue the use of similar building materials.
- Avoid multiple curb cuts. These complicate turning movements and disrupt the sidewalk.



*When feasible, a parking structure should be wrapped with retail, commercial or another active use along the street edge to separate the facility from the street and to add activity to the street.*



*A parking structure should be compatible with traditional buildings in the surrounding area. It should respect the regular window pattern and other architectural elements of adjacent buildings.*



*A parking structure should be compatible with traditional buildings in the surrounding area. It should respect the regular window pattern and other architectural elements of adjacent buildings.*

*The parking structure reflects a visually attractive edge with recessed areas that contain landscaping and creative screens. These features conceptually reflect storefront elements.*



*Design a parking structure so it creates a visually attractive and active street edge. Consider a wrap of retail, commercial or other use to screen parking areas.*

# PUBLIC ART

## Policy:

Streetscape art should be designed as an integral component of the streetscape plan. The artist should “customize” or reinterpret conventional features of a streetscape beautification design. For example, new waste receptacle design may be commissioned that would be unique to the area. Other forms of public art should be strategically located to serve as accents in the streetscape design, such as at gateways into the downtown or as focal points in the public parks and at civic buildings.

## Guidelines:

### 4.10 The use of public art is encouraged.

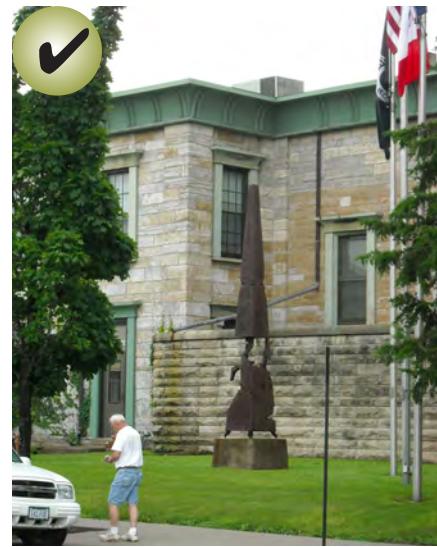
- Consider locations such as gateways, bridge crossings, small plazas and points where views terminate at a public open space.
- Incorporate art into streetscapes or building elements that complement the context and/ or character of the building.
- Strategically place public art at civic facilities to serve as accents.

### 4.11 Public art should be compatible with the historic context.

- Art installation should not impede one's ability to interpret the historic character of the context.

### 4.12 Locate public art such that the ability to perceive the character of historic buildings nearby is maintained.

- Placing a large sculpture in front of a historic building front, for example, is inappropriate.



*Strategically place public art at civic facilities to serve as accents.*

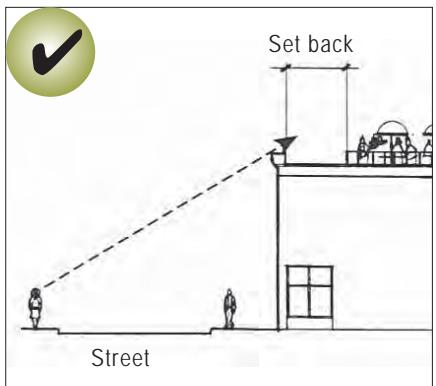


*Incorporate art into streetscape or building elements that complement and enhance the setting.*

## ROOFTOP USES

### Policy:

Rooftop uses along a primary street face are acceptable; however, they should not visually impact the architectural character of the structure. For example, the use of lighting effects, planting, guardrails and other furnishings should be set back from the front facade and/or parapet.



### Guideline:

#### 4.13 Set rooftop activities back such that they are not prominently visible from the front facade.

- Rooftop activities should be set back five to ten feet from the front facade.

*Set rooftop activities back such that they are not prominently visible from the front facade.*

## SERVICE AREAS

### Policy:

Service areas should be visually unobtrusive and should be integrated with the design of the site and the building.

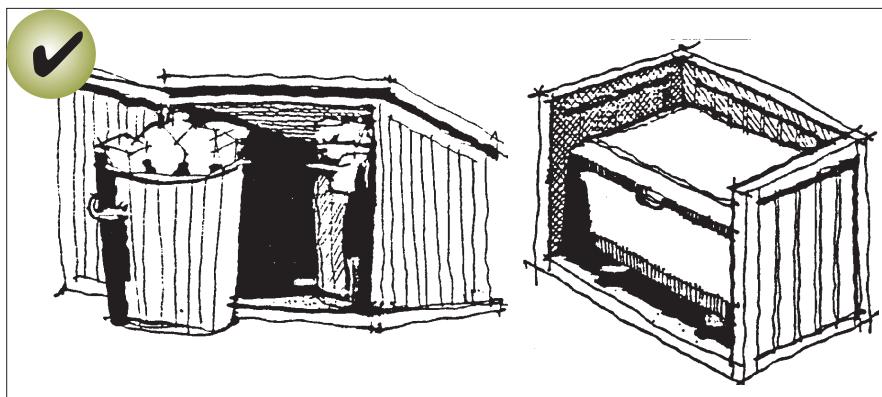
### Guidelines:

#### 4.14 Orient service entrances, waste disposal areas and other similar uses toward service lanes and away from major streets.

- Screen service entrances with walls, fences or planting.
- When it will be visible from a public way, a service area screen should be in character with the building and site it serves.
- Locate areas for outdoor storage, truck parking, trash collection or compaction loading, or other such uses so as not to be visible from abutting streets.

#### 4.15 Position service areas to minimize conflicts with other abutting uses.

- Minimize noise impacts by locating sources of offensive sounds away from other uses.
- Use an alley system to locate service areas, when feasible.



*Screen service entrances with walls, fences or planting.*

# UTILITIES

## Policy:

Utility connection boxes, external fire connections, telecommunication devices, cables, conduits, satellite dishes, HVAC equipment and fans can have a negative visual affect on the character of an area and the building. These devices shall be screened from public view to avoid negative effects on historic resources.

## Guidelines:



### 4.16 Minimize the visual impacts of utility equipment on the public way and surrounding neighborhood.

- Locate new utilities where they will not be prominently visible from the street.
- Screen equipment from view. Consider the use of plantings or architectural screens.
- Do not locate window equipment on a primary facade.
- Use low-profile or recessed mechanical units on rooftops.
- Locate satellite dishes out of public view.



### 4.17 Minimize the visual impacts of utility connections.

- Locate utility connections on secondary walls when feasible.
- Use new utility boxes that are less obtrusive in their appearance and their location.

*Service areas should be visually unobtrusive and should be integrated with the design of the site and the building. The service area in the top image shows a service enclosure that is compatible with the traditional commercial context and the one shown below complements an industrial context.*

# Signs

A sign typically serves two functions: to attract attention and to convey information. All new signs should be developed with the overall context of the building and of the area in mind.

The commercial areas of the historic districts, including all of the Old Main district and the central and southern portion of the Cathedral district near Cable Car Square, have exhibited a wide array of signs from the late nineteenth century through the present day. Few examples from the nineteenth century survive, but there is photographic evidence for signs on Main Street throughout the twentieth century. It is desirable that new signs attempt to reference the historic signs of the early twentieth century in size, scale, style and coloration, but substitute materials are acceptable for the purposes of increased durability. Several examples of appropriate signs can be seen in Cable Car Square.

Given its age and cultural significance, neon signs from the mid-century are now considered to be historic in their own right. The retention and/or replication of these materials for contemporary use should be evaluated by the Preservation Commission on a case-by-case basis.

## Recommended

- All signs should follow regulations outlined in City ordinances.
- Identify, repair, and preserve existing signs from the first half of the twentieth century or earlier.
- Identify and preserve signs from the 1950s and 1960s, where appropriate.
- Construct signs of traditional and historic materials such as carved and painted wood, cast bronze, or painted metal.
- Use signs that replicate or reference historic signs in their style, scale, and materials.
- Use signs that replicate symbols or logos associated with the business, product or trade.
- Coordinate sign color with overall scheme of building exterior.
- Place signs at traditional locations, such as storefront belt courses, upper facade walls, hanging or mounted inside the windows, or projecting from the face of the building.



## Not recommended

- Removal or destruction of historic signage either through deliberate action or neglect
- Signs that are out of scale with the building, and with neighboring buildings and signs
- Signs of inappropriate materials, such as plastic or vinyl
- Insertion or attachment of signs in such a way as to inflict damage to the building
- Internally lit signs

*Examples of inappropriate sign materials, scale and color scheme.*

## HISTORIC SIGNS

### Policy:

Historically, signs mounted and/or painted on the exterior of a building advertised the primary business conducted there. Many of these signs still stand today and should be preserved when feasible.



*Preserve a historic sign where it exists, when feasible.*

### Guideline:

#### 4.18 Preserve a historic sign where it exists, when feasible.

- Historic signs should be retained whenever possible, it is especially important when they are a significant part of a building's history or design.
- Historic painted wall signs, or "ghost signs" should be left exposed whenever possible, and should not be restored to the point that all evidence of their age is lost.

## SIGN CHARACTER

### Policy:

A sign shall be in character with the materials, colors and details of the building. The integration of the sign with the building or building facade is important and should be a key factor in its design and installation.



*Scale signs to fit with the facade of the building.*

### Guideline:

#### 4.19 Signs should be subordinate to the overall building composition.

- Design a sign to be simple in character.
- Scale signs to fit with the facade of the building.
- Locate a sign to emphasize design elements of the facade itself.
- Mount signs to fit within existing architectural features using the shape of the sign to help reinforce the horizontal lines of the building.
- Rooftop, animated and message board signs are inappropriate.

## SIGN MATERIALS

### Policy:

A sign should exhibit qualities of style, permanence and compatibility with the natural and built environment.

### Guideline:

#### 4.20 Use sign materials that are compatible with the building facade.

- Use colors, materials and details that are compatible with the overall character of the facade.
- Permanent, durable materials that reflect the Dubuque context are encouraged.
- Avoid highly reflective materials.



*Use sign materials that are compatible with the building facade.*

## SIGN COLOR

### Policy:

Color shall be used both to accentuate the sign design and message and also to integrate the sign or lettering with the building and its context.

### Guideline:

#### 4.21 Use colors for the sign that are generally compatible with those of the building front.

- Limit the number of colors used on a sign. In general, no more than three colors should be used, although accent colors may also be appropriate.



*Use colors for the sign that are generally compatible with those of the building front.*

## SIGN INSTALLATION

### Policy:

The installation of a sign is an integral aspect in the retention of key architectural features and in minimizing damage to the building.

### Guideline:

#### 4.22 Avoid damaging or obscuring architectural details or features when installing signs.

- Minimize the number of anchor points when feasible.

## SIGN LIGHTING

### Policy:

The sign illumination source shall be shielded to minimize glare. Light intensity shall not overpower the building or street edge. Small and discreet modern light fittings may provide an unobtrusive alternative to traditionally styled lamp units.

### Guidelines:



*Direct lighting at signage from an external, shielded lamp.*

#### 4.23 Use shielded lighting source on a sign.

- Direct lighting at signage from an external, shielded lamp is appropriate.
- A warm light, similar to daylight, is appropriate.
- Strobe lighting is not appropriate.
- Internal illumination is not appropriate.

#### 4.24 Halo illumination may provide an effective and subtle form of lighting which can be used to accentuate both sign and building.



*Design the sign bracket as a decorative or complementary element of the sign. The bracket should appear as part of the sign composition and design.*

## SIGN CONTENT

### Policy:

Sign content shall be designed to be visually interesting and clearly legible.

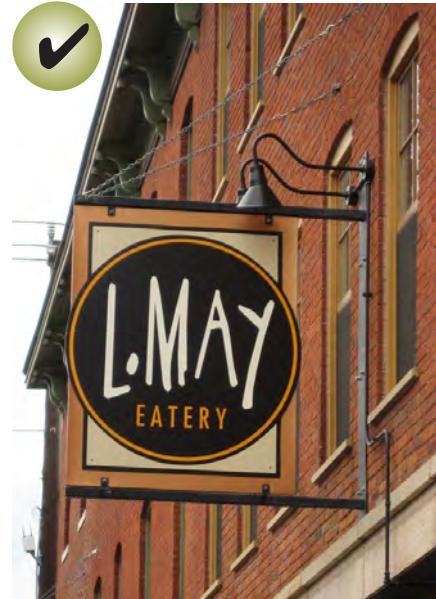
### Guideline:

#### 4.25 A simple sign design is preferred.

- Typefaces that are in keeping with those seen in the area traditionally are encouraged.
- Avoid hard-to-read or overly intricate typeface styles.



*Sign content shall be designed to be visually interesting and clearly legible.*



*Use sign colors, materials and details that are compatible with the overall character of the building's facade.*



*A simple sign design is preferred.*

# Appropriate Sign Types

## Policy:

Sign types that are considered generally to be appropriate are defined here. While selecting a sign, an important design principle to consider is that signs should not overwhelm the architecture of the building. Consistent placement of signs according to building style, type, size, location and materials creates a sense of visual continuity.



*Canopy and awning signs are most appropriate in areas with high pedestrian use.*

## CANOPY AND AWNINGS SIGN

This is a sign located on the face of a canopy or awning.

### Guideline:

**4.26** A sign located on or under a canopy or awning may be considered.

- These are most appropriate in areas with high pedestrian use.
- Consider sign lettering centered on a building canopy where a flush-mounted sign would obscure architectural details.



*Consider sign lettering centered on a building canopy where a flush-mounted sign would obscure architectural details.*

## DIRECTORY SIGN

This is a small scale sign located on the primary first-floor wall of any building containing multiple tenants to display the tenant name and location.

### Guideline:

#### 4.27 Consider a directory sign for larger buildings with numerous occupants.

- Consolidate small, individual signs and place them on a single panel as a directory to make them easier to locate.

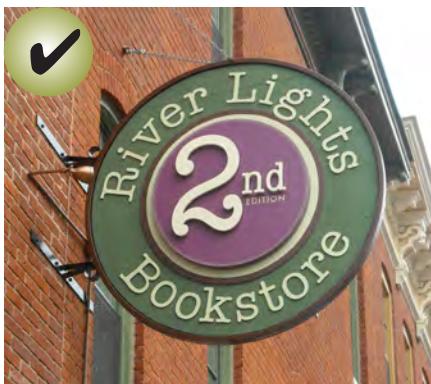


*Consider a directory sign for larger buildings with numerous occupants.*

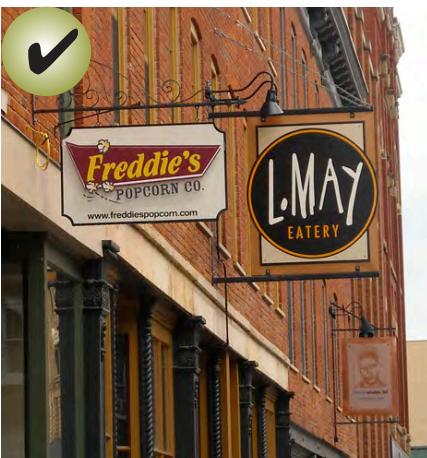
### Guideline:

#### 4.28 Design interpretive signs to have a consistent design character.

- Interpretive signs should stand alone, and not be attached to streetscape furnishing or buildings.
- Interpretive signs should not disrupt or block views.



*Sign content shall be designed to be visually interesting and clearly legible.*



*Projecting signs, those which are attached to a building and do not employ ground support in any matter, are common in downtown Dubuque.*



*Locate small projecting signs near the business entrance, just above the door or to the side of it.*

## PROJECTING OR HANGING SIGN

This is an attached sign which projects and has one end attached to a building, and which does not employ ground support in any matter.

Guidelines:

**4.29** Design a projecting sign to be similar in character to those seen traditionally.

- Design the sign bracket as a decorative or complementary element of the sign. The bracket should appear as part of the sign composition and design.

**4.30** Projecting or blade signs may be considered.

- Locate small projecting signs near the business entrance, just above the door or to the side of it.
- Mount large projecting signs higher on the building, centered on the facade or positioned at the corner.
- Small hanging signs are appropriate under a canopy on commercial building types or from the inside of a porch on residential building types.

## SYMBOL SIGNS

This refers to a symbol displayed on a sign that portrays a certain word, name or idea. This may be located on the interior of a display window and may also be installed on an exterior facade.

Guideline:

**4.31** Using a symbol for a sign is encouraged.

- A symbol sign adds interest to the street, can be read quickly and is often remembered better than written words.

## WALL SIGN

This is an attached sign painted on or attached to the wall or surface of a building or display surface which is parallel to the supporting surface.

### Guidelines:

#### 4.32 Flush mounted wall signs may be considered.

- Place wall signs to align with nearby buildings.
- Determine if decorative moldings exist that could define a sign panel. If so, locate a flush-mounted wall sign to fit within a panel formed by moldings or transom panels.
- Do not obstruct character-defining features of a building with signage.



*Locate a flush-mounted wall sign to fit within a panel formed by moldings or transom panels.*

#### 4.33 Design a wall sign to minimize the depth of a sign panel or letters.

- A wall sign shall be relatively flush with the building facade.
- Design a wall sign to sit within, rather than forward of, the fascia or other architectural details of the building.



*Design a window sign to minimize the amount of window covered and be painted on the glass or hung inside a window.*

## WINDOW SIGN

This is a sign painted on the surface of, or located on the interior of, a display window.

### Guideline:

#### 4.34 Design a window sign to:

- Minimize the amount of window covered
- Be painted on the glass or hung inside a window

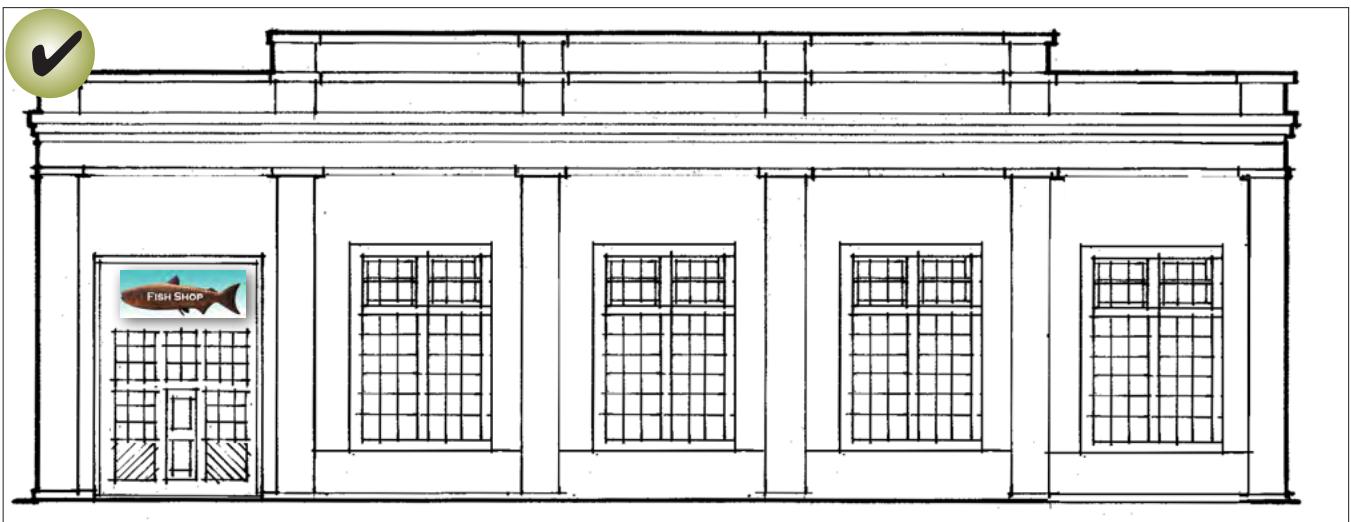
## Appropriate sign placement on building types



Appropriate wall sign placement on a commercial building type.



Appropriate hanging sign placement on a residential building type.



Appropriate wall sign placement on a warehouse building type.

## WAYFINDING SIGN

The nature and appearance of street signs and wayfinding materials are determined to a certain extent by code. The size, shape, and graphics of street signs may not be altered in certain instances. However, the city has recently installed decorative signposts in the area around the City Hall. It is recommended that this type of post, or a variant of it, be used for new signs.

Kiosks and information boards are not historic features of Dubuque, but they are important assets in serving both the local population and visitors to the city. New wayfinding materials should be in keeping with the style, materials and colors established for other public amenities such as benches and waste receptacles.

It may be desirable to alter the wayfinding materials slightly in color, material, or style for each district as a means of clearly separating and defining them according to their historic character.

Banners or other gateway markers may be desirable as a means of defining each district. Historic examples are recorded in photographs, and these should be replicated or referenced.

### Recommended

- Maintain a consistency of style, color, and scale in all wayfinding features to contribute to the overall historic character of each district in general, and the amenities in particular.
- Maintain a consistency in style of text and graphics within each district, or within the districts as a whole.
- Use decorative signposts that reference historic street features.
- Use gateways or banners that are consistent with the styles, colors and materials selected for each district's wayfinding materials, or for the districts in general.

### Not Recommended

New signs, kiosks or boards that are incompatible with the other streetscape amenities.

- New wayfinding materials that are out of scale with the surrounding buildings and streetscape, or with the other streetscape amenities
- Installation of wayfinding materials in such a manner as to disrupt or block critical vistas or views
- Installation of wayfinding features in such a way as to damage existing historic streetscape materials, or the surrounding structures



*Maintain a consistency of style, color, and scale in all wayfinding features to contribute to the overall historic character of each district in general, and the amenities in particular.*



# Chapter 5

# Design Guidelines For Sustainability

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## For More Information:

See web link to National Park Service Sustainability information:  
<http://www.nps.gov/tps/sustainability.htm>

## Note:

This chapter provides guidance related to sustainability (in one location in the design guidelines), but readers should note that comments related to sustainability appear throughout the other chapters.

Promoting a more sustainable community is a fundamental goal for the City of Dubuque. The guidelines in this section address sustainability from a design perspective and apply to both historic preservation and new construction throughout downtown and in the city's historic districts.

At a neighborhood level, this may include ways in which buildings are designed to provide solar access to abutting properties. For individual historic buildings, it includes making best use of inherent energy-saving features, and for all sites, considerations for use of sustainable materials, managing storm water, and a variety of technological systems.

# General Sustainability Guidelines for all Projects

The guidelines in this section apply to all types of projects that might incorporate improvements that could enhance the sustainability of the building or site.

## LANDSCAPE IMPROVEMENTS FOR SUSTAINABILITY

### Policy:

Landscape improvements can have a very significant impact on sustainability. For example, a landscape design can moderate the temperature of a home by providing shade in summer and solar warming in winter. Landscape improvements can contribute to water efficiency, clean air and minimize urban heat island effects. In all cases, designing improvements to enhance the sustainability of a building, its site and neighborhood is a goal.

Landscape designs, including plantings and site structures, can take advantage of microclimatic conditions for energy conservation. Consider managing solar and wind exposure in all seasons in making landscape decisions. Researching the local Dubuque climate to understand how to best take advantage of these factors will be important.

### Guidelines:



*Consider the use of alternative rainwater collection devices. Research the City's most recent water regulations before implementing stormwater storage systems.*

#### 5.1 Select plant species that support sustainability.

- Use native and drought-tolerant species in a landscape design where feasible.

#### 5.2 Locate plants to maximize sustainability benefits while retaining the character of the traditional context.

- Locate deciduous trees and other vegetation to provide for summer shading and allow winter solar access.
- Locate vegetation to provide wind protection in the wintertime while maintaining predominant summer breezes.

#### 5.3 Design landscape improvements to maximize the efficiency of water use on site.

- Plan to minimize or eliminate watering. For example, place drought-tolerant plants along the contours of a sloped site to help slow runoff and increase percolation into the soil, thereby reducing or eliminating the need to water those plants.
- Where use of watering system is necessary, use one which minimizes water loss, such as a drip irrigation system.
- Place more water intensive species in areas which receive shade, as this reduces evaporative water loss.
- Provide natural stormwater drainage, storage and usage systems on site. For example, a rain garden or similar small swale can be utilized to both minimize water demand and to reduce runoff and sewer system demand.

## ENVIRONMENTAL IMPACTS TO NEIGHBORS

### Policy:

A design should take into account the potential effect on an adjoining property and the neighborhood setting, in terms of its sustainability and solar access.

### Guidelines:

#### 5.4 Maintain solar access opportunities for neighboring properties.

- For example, limit shading of south-facing facades, outdoor dining areas, plazas and garden areas.

#### 5.5 Incorporate sustainable practices and green infrastructure which increases energy efficiency and beautifies buildings and spaces.

## PAVING MATERIALS FOR SUSTAINABILITY

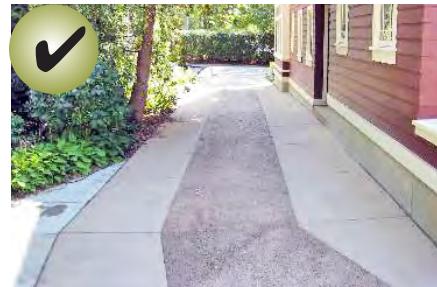
### Policy:

Permeable paving maintains moisture in the soil, reduces demand on storm sewer systems and allows for ground water recharge. Permeable paving materials should be incorporated into site designs including courtyards, plazas, and walkways. They also should be considered in the design of service and parking areas.

### Guidelines:

#### 5.6 Design a permeable paving system to convey a character similar to traditional paving materials in residential neighborhoods.

- The application of permeable paving materials should be similar to traditional paving methods in a historic context.
- Using paving strips and paving stones or bricks for walks and drives in traditional residential settings is encouraged.



Permeable parking surface

#### 5.7 Provide a permeable parking surface when feasible.

- Permeable surface parking systems are encouraged in residential and commercial areas. They reduce stormwater runoff, and enhance water filtration and storage. These types of systems can also help to reduce heat island effects.



Permeable pavers in the Millwork District

## Historic Preservation and Sustainability

By preserving existing buildings and guiding compatible redevelopment, the *Design Guidelines* promote the three key elements of community sustainability:

**Economic Prosperity.** The economic benefits of protecting historic resources include higher property values, job creation in rehabilitation industries and increased heritage tourism.

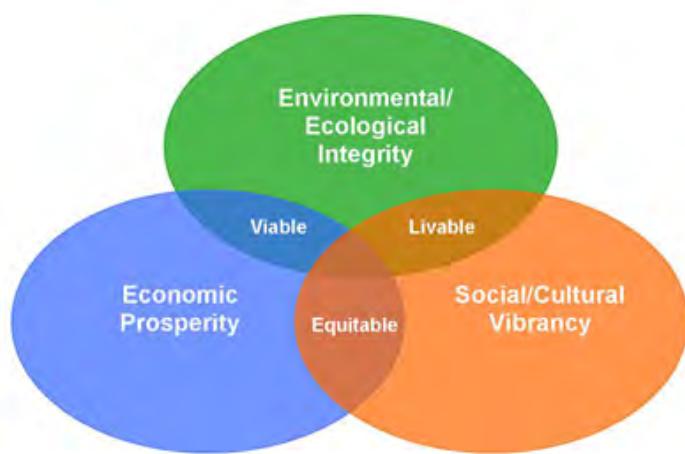
**Environmental Sustainability.** Rehabilitation of historic resources conserves energy that is embodied in the construction of existing structures. It also reduces impacts on land fill from demolition and reduces the need to fabricate new materials.

**Social/Cultural Sustainability.** Preserving historic places and patterns promotes social and cultural sustainability by supporting everyday connections between residents and the cultural heritage of the community. It also enhances livability in the community.

# Historic Preservation and Sustainability

The guidelines in this section demonstrate how historic resources can meet sustainability objectives while also adhering to the city's policies for historic preservation. They address many design features and building components that are also discussed in other sections of the preservation guidelines, so it is important to use them in conjunction with others found throughout this document.

Preserving and enhancing historic places promotes the three basic components of sustainability. These are: (1) Cultural/Social Sustainability, (2) Environmental Sustainability and (3) Economic Sustainability. Each of the components is described in greater detail in the following pages.



*Preserving historic places promotes the three basic categories of sustainability.*

## SOCIAL/CULTURAL COMPONENT OF SUSTAINABILITY

This component relates to the maintenance of the community's cultural traditions and social fabric. Preserving historic places and patterns promotes cultural and social sustainability by supporting everyday connections between residents and the cultural heritage of the community. These connections are reinforced by the physical characteristics of historic places, which often directly support environmental sustainability.

Historic properties in the downtown and historic districts provide direct links to the past. These links convey information about earlier ways of life that help build an ongoing sense of identity within the community. Residents anchored in this sense of identity may be more involved in civic activities and overall community sustainability efforts.

The development patterns of Dubuque's historic districts promote social interaction that supports a high quality of life and helps build a sense of community. These neighborhoods are compact and walkable, providing for impromptu mixing of different cultural and economic groups. Direct connections to the public realm also provide opportunities for community interaction. These physical development patterns, combined with their inherent cultural connections, provide significant support for the community's overall sustainability efforts.

#### For More Information:

See the following web link to *Preservation Brief 3: Improving Energy Efficiency in Historic Buildings*:

<http://www.nps.gov/tps/how-to-preserve/briefs/3-improve-energy-efficiency.htm>

## ENVIRONMENTAL COMPONENT OF SUSTAINABILITY

This is the most often cited component of sustainability. It relates to maintenance of the natural environment and the systems that support human development. Rehabilitation of historic resources is an important part of environmental sustainability and green building initiatives. It directly supports environmental sustainability through conservation of embodied energy, adaptability, and other factors that keep historic buildings in use over long periods of time.

Historic districts are also compact and are accessible by alternative modes of transportation that minimize carbon emissions. There are also these more specific environmental sustainability features of preserving historic buildings:

### Embodied Energy in Building

Embodied energy is defined as the amount of energy used to create and maintain the original building and its components. Preserving a historic structure retains this energy. Re-using a building also preserves the energy and resources invested in its construction, and reduces the need for producing new construction materials, which require more energy to produce. Studies confirm that the loss of embodied energy by demolition takes three decades or more to recoup, even with the reduced operating energy costs that may occur in a replacement building. Also, restoring an original building is sustainable, since it will extend the lifetime of the structure.

### Building Materials

Many of the building materials used in Dubuque's historic districts contribute to environmental sustainability through local sourcing and long life cycles. Buildings constructed with wood and masonry were locally sourced and were built for longevity and ongoing repair. Today, new structures utilize a significant percentage of manufactured materials. These are often less sustainable and require extraction of raw, non-renewable materials. High levels of energy are involved in production, and the new materials may

also have inherently short life spans. They also typically require shipping, increasing financial cost and greenhouse gas emissions.

The sustainable nature of historic building materials is best illustrated by a window: older windows were built with well seasoned wood from durable, weather resistant old growth forests. A historic window can be repaired by re-glazing as well as patching and splicing the wood elements thereby conserving the original materials. Many contemporary windows cannot be repaired and must be replaced entirely. Repairing, weather-stripping and insulating an original window is generally as energy efficient and much less expensive than replacement.

### **Landfill Impacts**

According to the Environmental Protection Agency, building debris constitutes around a third of all waste generated in the country. The amount of waste is reduced significantly when historic structures are retained rather than demolished and sent to a landfill.

## **ECONOMIC PROSPERITY COMPONENT OF SUSTAINABILITY**

This component of sustainability relates to the economic balance and health of the community. The economic benefits of protecting historic resources are well documented across the nation. These include higher property values, job creation in rehabilitation industries, and increased heritage tourism. Dubuque's historic districts also enhance that quality of life for the community at large, which can help in attracting new businesses to the city and thereby strengthen the local employment base.

### **Historic Rehabilitation Projects**

Historic rehabilitation projects also generate economic benefits. Direct benefits result from the actual purchases of labor and materials, while material manufacture and transport results in indirect benefits. Preservation projects are generally more labor intensive, with up to 70% of the total project budget being spent on labor, as opposed to 50% when compared to new construction which means that more of a rehabilitation project cost stays in the community. In this way, expenditure on local labor and materials benefits the community's economy.

## Developing an Efficiency Strategy for a Historic Property

When planning a project, follow these steps:

### **Step 1: Establish Project Goals**

Develop an overall strategy and set of project goals to maximize the effectiveness of a project. This will establish a broad view that places individual actions into context. Project goals should focus on minimizing use of resources and energy, avoiding negative environmental impacts and retaining the historic integrity of a property. Strategies should maximize the inherent value of the historic resource prior to considering alterations or retrofitting with energy generation technology.

To inform a project strategy, also consider conducting an energy audit. An energy audit can give a comprehensive view of how energy is currently used in the daily and seasonal cycles of use, and can also provide perspective on the pay-back of investment for potential work on the building. For example, an energy audit, when examined based on an overall strategy, may demonstrate that priorities should be on increasing insulation in walls, ceilings and foundations, rather than replacing windows.

### **Step 2: Maintain Building Components in Sound Condition**

Maintaining the existing building fabric reduces negative environmental impacts. Re-using a building and maintaining its key features preserves the energy and resources invested in its construction and removes the need to produce new construction materials.

### **Step 3: Maximize Inherent Sustainable Qualities.**

Typically historic buildings were built with energy efficiency in mind. Construction methods focused on durability and maintenance, resulting in individual building features that can be repaired if damaged, thus minimizing the need for replacement materials.

Buildings were also built to respond to local climate conditions, integrating passive and active strategies for year-round interior climate control which increase energy efficiency. Passive strategies typically include building orientation for sun, breezes, and features such as roof overhangs and windows to provide both natural daylighting as well as management of solar heat gain. Active strategies typically include operable awnings, double-hung and transom windows.

### **Step 4: Enhance building performance.**

A historic building's inherent energy efficiency can be augmented using techniques which improve efficiency without negatively impacting historic building elements. Non-invasive strategies such as increased insulation, weatherization improvements and landscaping should be considered.

### **Step 5: Add Energy-Generating Technologies Sensitively.**

Many historic structures can accommodate the respectful integration of energy efficiency technologies. Energy-generating technologies are the most commonly known strategies. However, the efficiency of a historic structure will often be great enough that generation technologies aren't the most practical solutions. Utilize strategies to reduce energy consumption prior to undertaking an energy generation project.

When integrating modern energy technology into a historic structure, maintain the resource's historic integrity and the ability to interpret its historic significance. As new technologies are tried and tested it is important that they be installed in a reversible manner such that they leave no permanent negative impacts to a historic structure.

# Sustainability of a Historic Building

## ENERGY EFFICIENCY IN HISTORIC BUILDINGS

### Policy:

Original building features and systems that contribute to sustainability should be maintained in good operating condition.

### Guidelines:

#### 5.8 Preserve the inherent energy efficiency of a historic building.

- Identify inherent sustainable features and operating systems and maintain them in good condition.
- Repair or restore covered, damaged or missing features where appropriate.

#### 5.9 Maintain a building's sustainability features in operable condition.

- Retain original operable shutters, awnings and transoms to increase the range of conditions in which a building is comfortable without mechanical climate controls. (See Awnings and Canopies on page 122 for more information.)
- Repair or restore covered, damaged or missing features where necessary.

### Green Features of Historic Residences

The following images illustrate several of the inherent green features typically found on historic residences in Dubuque.



1 Double-hung windows simultaneously allow cool air in and warm air out.

2 Window arrangements such as these may allow for passive heating in the winter, where proper orientation occurs.

3 A steep roof pitch and large roof area facilitate the collection of rain water, which can be used for irrigation.

4 The porch helps moderate temperature swings.



- 5 Double-hung windows allow cool air in and warm air out in summer.
- 6 Symmetrical window arrangements typically allow for passive cooling and cross-ventilation through the home.
- 7 The porch helps moderate temperature swings.
- 8 Operable shutters can be closed to block solar heat gain in the summer while allowing cooling breezes to pass through.



- 9 A stone exterior provides thermal mass to moderate indoor temperature swings.
- 10 A steep roof pitch and large roof area facilitates the collection of rain water for reuse on the site.
- 11 Fireplaces and their chimneys provide for non-mechanical heating.
- 12 The roof overhang provides for seasonal shading.



*The large area of windows on this facade may also provide for passive heating in the winter where proper orientation occurs.*

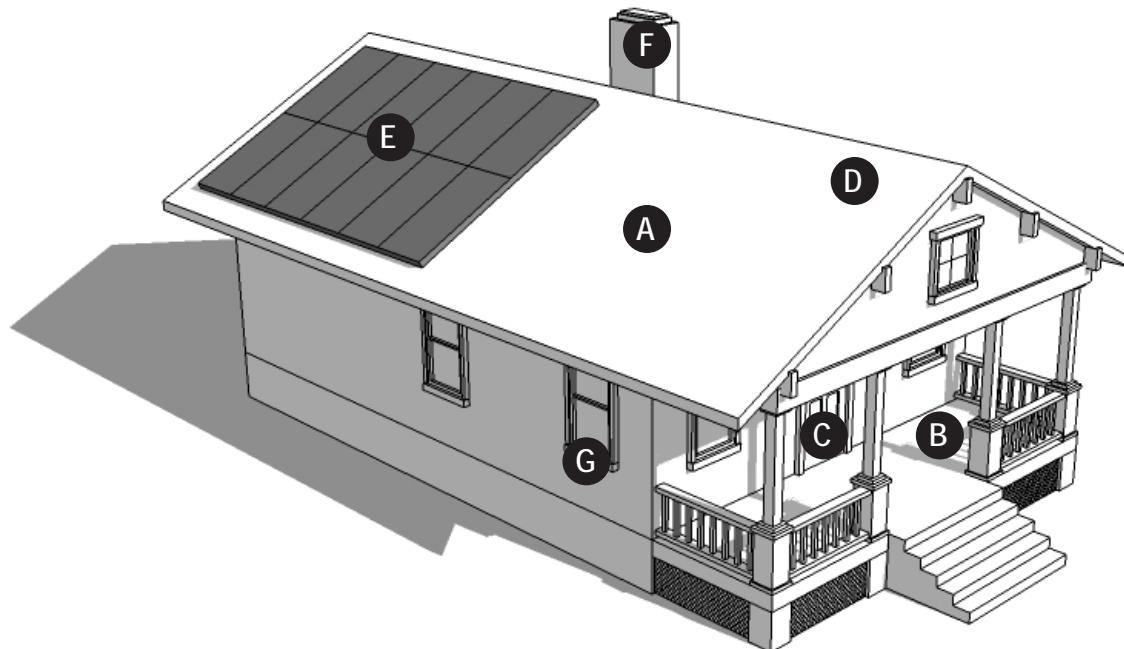
- 13 Substantial roof overhangs provide for seasonal shading.
- 14 A porch helps moderate temperature swings.
- 15 Double-hung windows allow cool air in and warm air out.



*Mature deciduous trees also provide seasonal shading for this home.*

- 16 Double-hung windows allow cool air in and warm air out.
- 17 A steep roof pitch and large roof area facilitate the collection of rain water for reuse on the site.
- 18 A porch helps moderate temperature swings.

## HISTORIC RESIDENTIAL BUILDING ENERGY EFFICIENCY STRATEGY



**A** Attic & Walls   
• Insulate internally

**B** Awnings & Porches   
• Restore porches and awnings

**C** Doors   
• Maintain original doors  
• Weatherstrip  
• Install an storm door

**D** Roof Material   
• Retain & repair

**E** Solar Panels   
• Set back from primary facade to minimize visibility from street

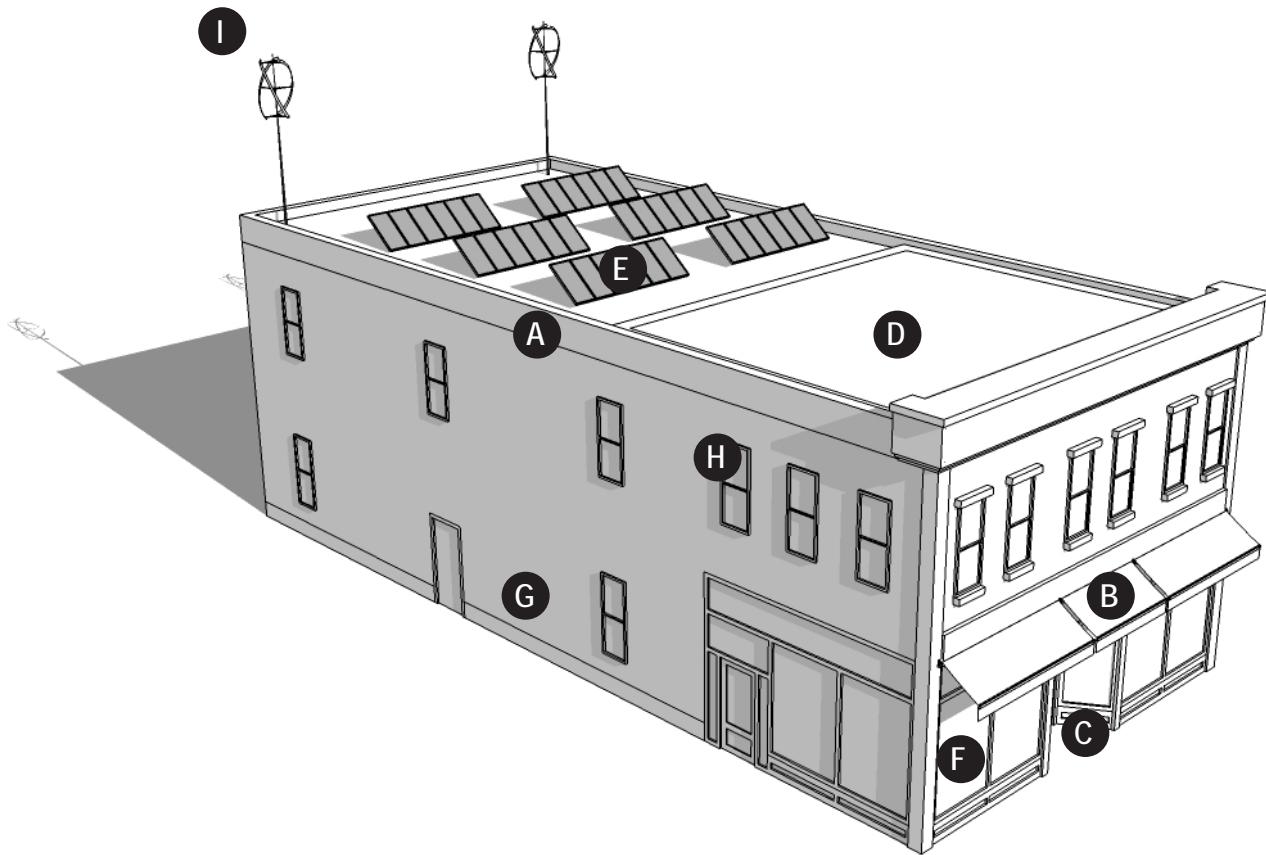
**F** Chimney   
• Install draft stopper

**G** Windows   
• Repair & retain original or early windows  
• Retain original glass  
• Enhance thermal & acoustic efficiency with storm windows (preferably interior)  
• Weatherstrip

: Quick simple fixes that will increase the energy efficiency of a historic building.

*This diagram summarizes a general strategy for energy conservation on a traditional residential building. These measures can enhance energy efficiency while retaining the integrity of the historic structure.*

## HISTORIC COMMERCIAL STOREFRONT BUILDING ENERGY EFFICIENCY STRATEGY



### A Attic & Walls

- Insulate internally

### B Awnings

- Use operable awnings to control solar access and heat gain

### C Doors

- Maintain original doors
- Weatherstrip
- Consider interior airlock area

### D Roof Material

- Retain & repair

### E Solar Panels

- Set back from primary facade to minimize visibility from street

### F Storefront Windows

- Maintain original windows
- Weatherstrip

### G Transoms

- Retain operable transom to circulate air

### H Windows

- Maintain original windows
- Weatherstrip and caulk
- Add storm windows (preferably interior)

### I Wind Turbines

- Set back from primary facade to minimize visibility from street

*This diagram summarizes a general strategy for energy conservation on a traditional commercial building. These measures can enhance energy efficiency while retaining the integrity of the historic structure. A similar approach would apply to warehouse buildings.*

# ENERGY PERFORMANCE IN HISTORIC BUILDINGS

## Policy:

Improvements to enhance energy efficiency should be planned to complement the original building. The structure, form and materials should be sensitively treated to preserve the building's character.

## Guidelines:

### 5.10 Use noninvasive strategies when applying weatherization improvements.

- Weather-stripping, insulation and wood storm windows are energy efficient, cost effective, and historically sensitive approaches.
- Weather-strip the original framework on windows and doors.
- Install additional insulation in an attic, basement or crawl space as a simple method to make a significant difference in a building's energy efficiency. Provide sufficient ventilation to avoid moisture build-up in the wall cavity.
- Where applicable, install draft stoppers in a chimney. Open chimney dampeners can increase energy costs by up to 30 percent.
- Install weatherization in a way that avoids altering or damaging significant materials and their finishes.
- Use materials which are environmentally friendly and that will not interact negatively with historic building materials.

### 5.11 Enhance the energy efficiency of original windows and doors.

- Make best use of original windows; keep them in good repair and seal all leaks.
- Safeguard, retain and reuse early glass, taking special care in putty replacement. Maintain the glazing compound regularly. Remove old putty with care.
- Use operable systems to enhance performance of original windows. This includes wood storm windows, insulated coverings, curtains, and awnings.
- Place wood storm windows internally when feasible to avoid the impact upon external appearance.
- Use wood storm window inserts designed to match the original frame if placed externally.
- Double pane glazing may be acceptable where original glazing has been lost and the frame can support the weight and profile.

# Energy Generating Technologies

## INTEGRATING ENERGY GENERATING TECHNOLOGIES ON HISTORIC BUILDINGS

### Policy:

When integrating modern energy technology such as solar collectors or wind turbines into a historic structure, maintain the resource's historic integrity and the ability to interpret its historic significance. Use of energy-generating technologies should be the final option considered in an efficiency rehabilitation project. One should first utilize strategies to reduce energy consumption (as illustrated in the preceding diagrams) prior to undertaking an energy generation project. Consider the overall project goals and energy strategies when determining if a specific technology is appropriate for a project.

As new technologies are tried and tested, it is important that they leave no permanent negative impacts to historic structures. The reversibility of their application will be a key consideration when determining appropriateness.

### Guidelines:

#### 5.12 Locate an energy generating device to minimize impacts to the historic character of the resource.

- Locate energy generating equipment where it will not damage, obscure or cause removal of significant features or materials.
- Maintain the historic character of the building in doing so.

#### 5.13 Install any new technology in a reversible manner.

- Install energy generating devices in such a way that they can be readily removed and the original character easily restored.
- Use materials which are environmentally friendly and that will not interact negatively with historic building materials.

# SOLAR COLLECTORS

## Policy:

Solar collectors should be designed, sized and located to minimize their effect on the character of a historic building.

## Guidelines:

### 5.14 Minimize potential adverse effects from solar collectors on the character of a historic building.

- Place collectors to avoid obscuring significant features or adversely affecting the perception of the overall character of the property.
- Size collector arrays to remain subordinate to the historic structure.
- Minimize visual impacts by locating collectors back from the front facade when feasible.
- Mount collectors flush below the ridge line on a sloping roof so the basic roof form is apparent.
- Consider installing collectors on a subordinate addition or a secondary structure where applicable.
- Exposed hardware, frames and piping should have a matte finish, and be consistent with the color scheme of the primary structure.



*Locating solar collectors on a secondary structure in a residential neighborhood is a preferred approach. In this case, solar collector panels are located on the roof of a new garage in a historic district.*



*This home uses two appropriate locations for solar collectors, on the roof of a new secondary structure, and on the rear portions of the roof on the primary structure.*

## Locating Solar Panels on a Historic Home



### Existing Building Features

- Gable facing street, side is south facing

### Appropriate



### 5.15 Use the least invasive method feasible to attach solar collectors to a historic roof.

- Avoid damage to significant features.
- Install a collector in such a way that it can be removed and the original character easily restored.
- Collector arrays should not threaten the structural integrity of the building.

### 5.16 Consider using building-integrated photo voltaic technology where the use of new building material is appropriate.

- Installing integrated photo voltaic systems should be planned where they will not hinder the ability to interpret the historic significance of the structure. For example, installing solar shingles on a rear or secondary roof facade where the original roof material is missing or significantly damaged would be appropriate.

### Acceptable



### Not Appropriate



### Features

- Panels located on rear portion of roof
- Panels set back from eaves
- Panels are flush with the roof
- Panels do not overwhelm the roof

### Features

- Panels set back from eave, but closer to the front
- Panels are flush with the roof
- Panels do not overwhelm, and are subordinate to, the roof plane

### Features

- Panels are not set back from eave.
- Panels overwhelm the character of the historic roof and structure.

### When should I use this approach?

- This location provides sufficient solar access
- The building is highly significant
- The context has many intact historic buildings
- Roof is highly visible

### When should I use this approach?

- The preferred option is not feasible
- The building is a contributor to a district
- Site constraints restrict solar access
- Roof is not highly visible

# WIND POWER

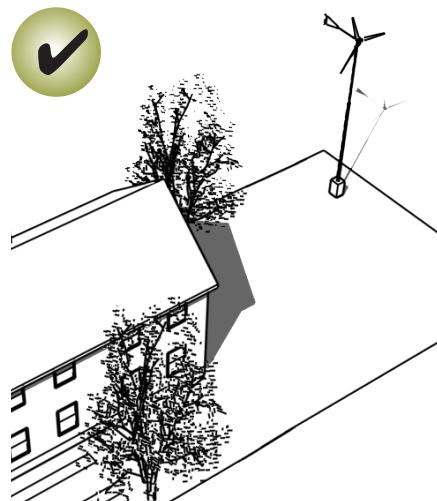
## Policy:

Small-scale wind generators can provide supplementary energy supply in some areas. Minimizing impacts to the historic character of a building as well as to the district should be the primary consideration.

## Guidelines:

### 5.17 Minimize the visual impacts of a wind turbine from primary public view locations.

- The wind turbine design and placement should not impair the ability to perceive the district's historic character and should not be highly visible from the street.
- Wind turbines should not obscure significant features or impair the ability to interpret the building's historic significance.
- Wind turbines should be low scaled and placed to the rear of the property when feasible. Also, for commercial districts a turbine should be placed on the roof to the back of the building when feasible.
- Design the scale and location of the turbine to remain subordinate to the historic structure.
- The turbine and any exposed hardware should have a matte finish, and be consistent with the color scheme of the primary structure.



*Locating detached turbines in the rear yard where they will be minimally visible is a preferred approach.*

### 5.18 Install turbines in such a way that they can be readily removed.

- Attach turbines in a manner that avoids damage to significant features.
- The original condition of the building should be easily restored.

### 5.19 Minimize structural impacts when installing turbines.

- Install turbines as freestanding structures in unobtrusive locations when feasible.
- When attaching to the building, turbines should not overload structural systems, or threaten the integrity of roof protection systems.

## GREEN ROOFS

### Policy:

A green roof, which uses vegetation as a means of moderating building temperatures and conserving water, may be suitable for some flats roofs, particularly on commercial buildings. When planning a green roof, minimize visual impacts that affect one's ability to interpret the historic character of a building. Compatibility with the historic district should be the primary consideration as well. Note that it is not the intent to hide a green roof completely from view, but to assure that the historic character of the property can still be perceived.

### Guidelines:

#### 5.20 Minimize adverse effects of a green roof on the character of a historic building and the district.

- A green roof on a historic residential building should be located to the rear of the building or on a subordinate side wing set back from the front facade.
- A green roof on a flat-roofed historic commercial or warehouse building should set back from the parapet.
- A professional engineer should be consulted to insure an existing structure can be modified to accommodate a green roof.

## LOCATING A NEW ADDITION FOR ENVIRONMENTAL BENEFITS

### Policy:

When placing an addition on a historic building, careful consideration should first be given to assuring compatibility with the historic structure, then to maximizing the potential for environmental benefits. The design should take advantage of existing site features, the orientation of the property, and its prevailing wind and solar patterns. (See also guidelines for designing an addition to a historic building in Chapter 1.)

### Guidelines:

#### 5.21 Locate an addition to take advantage of opportunities for energy conservation.

- Consider impacts and benefits for both the primary structure and the addition as well as those to adjacent properties.
- Locate an addition to maximize the potential for natural daylighting and solar energy collection.
- Position an addition to utilize predominant wind patterns for cross-ventilation.

## MASSING OF AN ADDITION

### Policy:

The manner in which the basic form of an addition is configured will influence its compatibility with the historic building and its opportunities for making use of energy saving design strategies. Arrange the massing of an addition to make best use of natural daylighting, passive solar heating, cross-ventilation and other passive climate control techniques. The overall mass should remain compatible with the primary structure and with the character of the district.

### Guidelines:

#### 5.22 Design the mass of a new addition to remain compatible with the primary structure while maximizing energy saving and generating opportunities.

- Shape the addition's mass to take advantage of natural daylighting, passive solar heating, cross-ventilation, and other climate control opportunities for both the addition and the primary structure.
- Orient roofs to accommodate solar collection, while also reflecting established orientation patterns in the district.

## DECONSTRUCTION AND BUILDING MATERIAL RE-USE

### Policy:

Deconstruction refers to the careful disassembly of a building, or its components, such that the materials can be reassembled or reused in other construction. While maintaining historic building materials in place is best, occasionally their removal will be necessary. To the maximum extent feasible, historic building materials approved for removal should be reused on site or repurposed for use off-site. Keeping these historic building materials in use will reduce demand on landfill space and maintain a greater supply of appropriate materials for the repair of other historic properties in Dubuque.

### Guidelines:

#### 5.23 Plan for the repurposing of historic building materials when approved for removal or demolition.

- Repurpose the maximum amount of historic building materials feasible.
- When alternatives to demolition have been exhausted, and demolition of a historic property approved, a deconstruction program should be used to guide the careful salvage of historic materials, details and features.
- Consider repurposing other intact and salvageable building materials as well.



*Repurpose the maximum amount of historic materials feasible.*

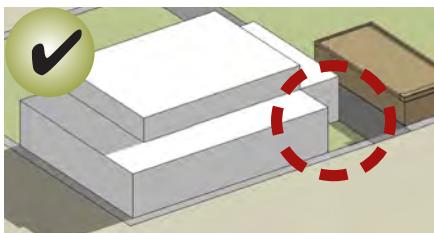
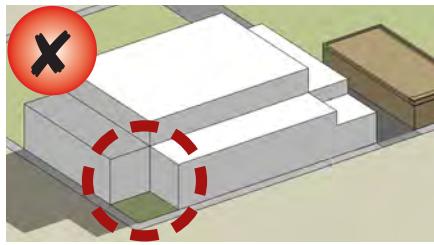
# New Construction and Sustainability

The *Dubuque Comprehensive Plan, Sustainable Dubuque*, sets goals for the long-term sustainability and livability in downtown and historic residential neighborhoods. New construction supports sustainability by leveraging existing infrastructure and bringing housing and employers into closer proximity of downtown. New construction downtown or in historic residential neighborhoods should further support sustainability by incorporating energy efficient designs while maintaining the traditional character of the area.

## SUSTAINABLE BUILDING DESIGN

### Policy:

The design of a new building should maximize the potential for natural daylighting and solar energy collection while also ensuring that the building's massing is compatible with the traditional context.



*Articulate building mass to take advantage of solar energy. The plaza on the top image is shaded during peak winter hours while the plaza on the lower image is enhanced by solar rays during peak winter hours.*

### Guidelines:

#### 5.24 Orient a building to maximize energy efficiency while ensuring compatibility with adjacent, lower-scale structures.

Appropriate strategies include:

- Positioning the taller portion of a building along a north-south axis to minimize shading on lower scale structures to the north.
- Designing a building to minimize shading on south-facing facades of adjacent buildings during winter months.

#### 5.25 Shape a building's mass to maximize solar energy potential.

Consider the following strategies:

- Building designs that allow natural daylighting to the interior.
- Articulated wall planes that provide shade or increase solar access to interiors.
- Roofs oriented to accommodate solar collectors.
- Thermal storage walls on a portion of the south facing building exposure, where appropriate.

# SUSTAINABLE BUILDING ELEMENTS

## Policy:

The elements that make up a building, including windows, mechanical systems and materials, can significantly impact environmental performance. They should be designed to maximize the building's environmental performance, while promoting compatibility with surrounding sites and structures. New materials that improve environmental performance are appropriate if they have been proven effective in the climate of northeastern Iowa.

## Guidelines:

### 5.26 Use green building materials that are compatible with the historic context.

- See materials section on page 90.

### 5.27 Use green building materials whenever possible.

Green building materials often have a long life span and are often:

- Locally manufactured
- Low maintenance
- Recycled or repurposed

### 5.28 Incorporate building elements that allow for natural environmental control.

Consider the following:

- Operable windows for natural ventilation
- Low infiltration fenestration products
- Interior or exterior light shelves/solar screens above south facing windows

### 5.29 Minimize the visual impacts of solar and wind energy devices on the character of the district.

- Where feasible, mount equipment where it has the least visual impact.

### 5.30 Minimize the visual impacts of a green roof on the character of the district.

- Design a green roof to be out of view from the street.
- Use a green roof where a flat roof form is compatible with the building type found in the district.
- Limit the height of the vegetation such that it does not overwhelm the character of the building.

# OVERALL STRATEGY FOR SUSTAINABLE NEW CONSTRUCTION

## **Step 1: Understand neighborhood character**

Careful consideration should be given to balancing sustainable design principles with those related to maintaining the traditional character of the area. It is important to understand what makes up the character of the neighborhood and to maintain compatibility in the scale, placement and design of a new building. When considering a new construction project, first design the building to be compatible with the historic context, then maximize its sustainable design qualities.

## **Step 2: Research local climate**

Consider how predominant wind and solar patterns can be used to advantage. Many historic designs in the area may also have made use of these features and should be analyzed as well.

## **Step 3: Identify existing site features which support sustainability**

Trees create summer shading, purify the air and help minimize urban heat island effects. Mature root systems promote water retention and soil quality. Identify existing landscape features that provide sustainability benefits, particularly those of historic significance, and design a new project to take advantage of these features.

## **Step 4: Maximize passive systems for interior climate control**

Use passive strategies to minimize energy demand and the need for mechanical and electrical systems, especially those strategies that have been used historically in the neighborhood. Design a building to utilize natural daylighting, passive solar heating, cross-ventilation and other passive climate control techniques.

## **Step 5: Use landscape improvements to enhance sustainability**

Plan new landscape features to provide benefits such as summer shading and ventilation and winter solar access and wind protection.

## **Step 6: Select green building materials**

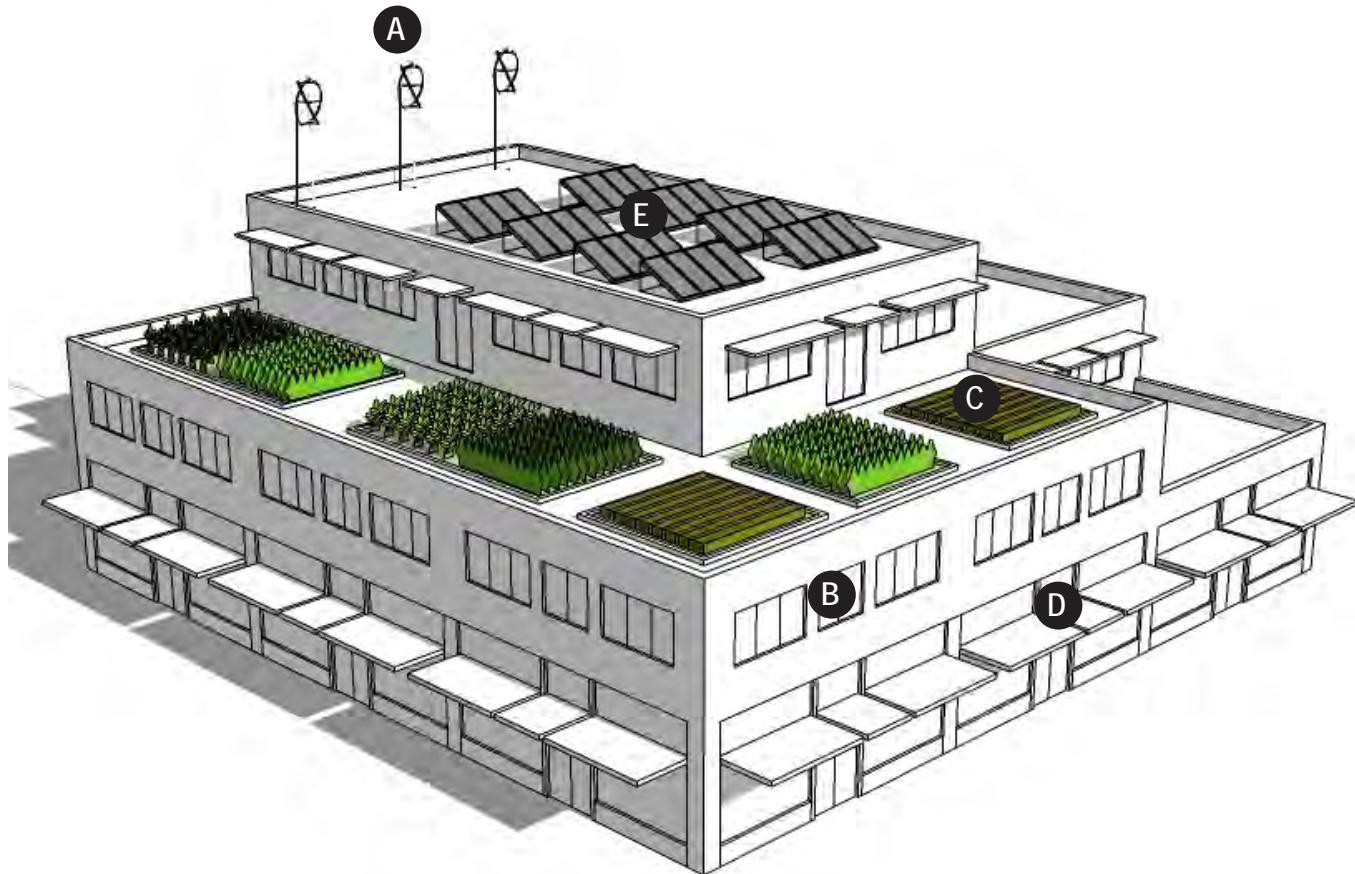
Maintain compatibility with the historic context while maximizing use of products which have minimal environmental footprints. Use green materials and those which improve environmental performance that have been proven effective in the local climate.

## **Step 7: Plan energy generating technology to be compatible with the context**

Use of energy-generating technologies should be the final step considered, after strategies for making best use of passive systems are defined. Energy generation is the most changeable component of green building design, as technologies continue to evolve. More recent materials and products, for example, are less obtrusive in their appearance in terms of visual impacts in historic districts, and future ones may be even more so.

## NEW COMMERCIAL CONSTRUCTION BUILDING ENERGY EFFICIENCY DIAGRAM

Design a building or addition to take advantage of energy saving and energy harnessing opportunities as illustrated below.



### A Wind Devices

- Set back from primary facade to minimize visibility from street

### B Operable Transoms

- Allows for natural air circulation

### C Green Roofs

- Decreases solar gain
- Reduces runoff

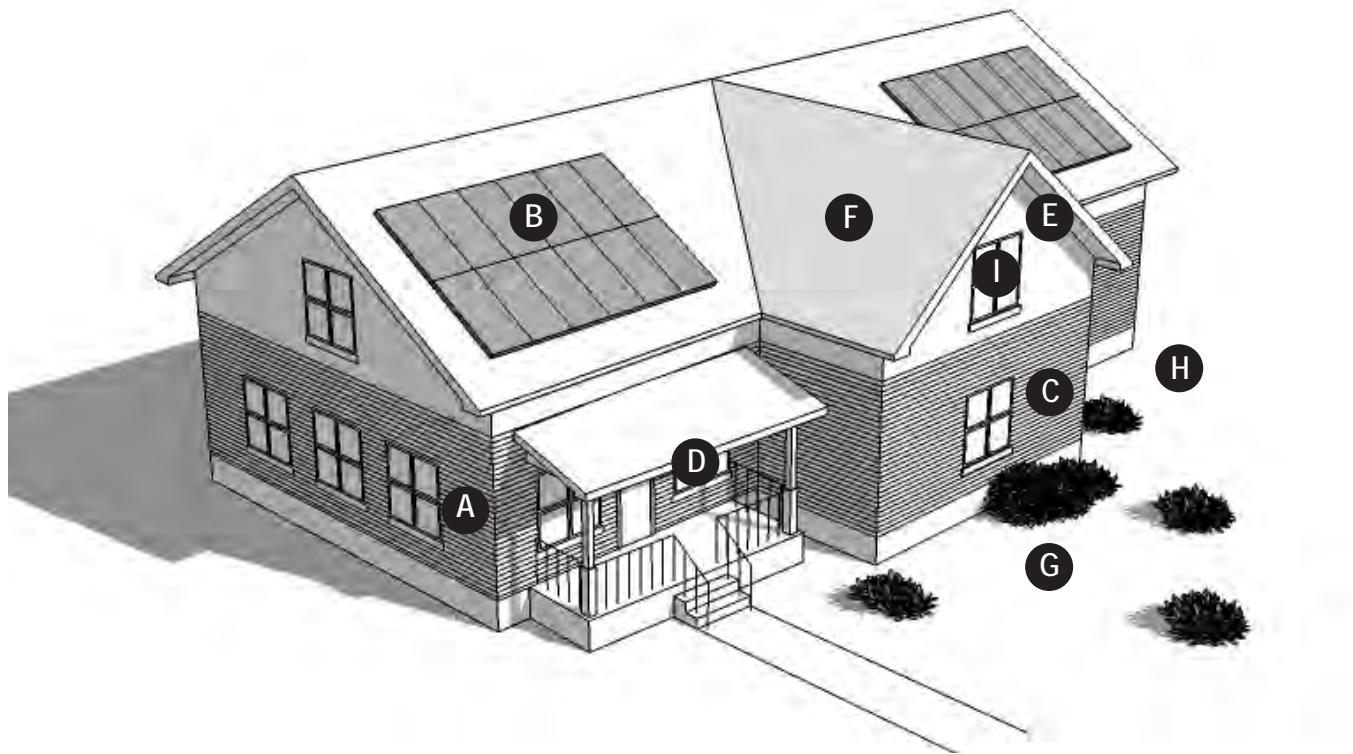
### D Shading devices

- Operable canopies, located above display windows

### E Solar Panels

- Set back from primary facade to minimize visibility from street
- Used as shading devices

## NEW RESIDENTIAL CONSTRUCTION BUILDING ENERGY EFFICIENCY DIAGRAM



- A** Thermal Mass Wall
  - Masonry wall
- B** Solar Panels
  - Use matt finish and simple arrays
- C** Recycled Brick
  - Reuse of materials
- D** Porch
  - Allows for shade in summer and sun in winter
- E** Eave Overlays
  - Provides shade in summer
- F** Cold Roof
  - Increases heating efficiency
- G** Xeriscape
  - Low water plants
- H** Geothermal Heat System
  - Below grade system that uses less energy to run than conventional heating systems
- I** Double-hung windows
  - Internal air circulation

# Appendix

## Benefits of Historic Preservation

### Construction Quality

As a rule, the quality of early construction and materials was higher than today. Lumber used in early Dubuque came from mature trees, was properly seasoned and typically milled to “full dimensions,” providing stronger framing. Buildings also were thoughtfully detailed and the finishes were generally of high quality. The quality of construction in earlier buildings is therefore an asset which is impossible to replace.

### Environmental

Sustainable development and the conservation of resources is an inherent central principle of the preservation of our historic resources. Sensitive stewardship of the existing building stock rather than its replacement can significantly reduce our environmental impact. Preserving and adapting a historic structure is sound environmental policy in all respects. In basic terms, reusing the building preserves the energy and resources invested in its construction and removes the need for producing new construction materials.

### Responsibility of Ownership

Ownership of a historic property carries both the benefits described above and also a responsibility to respect the historic character of the property and its setting. While this responsibility does exist, it does not automatically translate into higher construction or maintenance costs. Ultimately, residents and property owners should recognize that historic preservation is a long-range community policy that promotes economic well-being and overall viability of the city at large.

### IN THE APPENDIX:

[The Secretary of the Interior's Standards for the Treatment of Historic Buildings](#)

[Preservation Briefs & Tech Notes](#)

[Financial Incentive Toolbox](#)

### **Economic Benefits**

Historic properties are finite and cannot be replaced, making them precious commodities. Therefore, preservation adds value to property. Rehabilitation projects also contribute more to the local economy than do new building programs because each dollar spent on a preservation project has a higher percentage devoted to labor and to the purchase of materials available locally. By contrast, new construction typically has a higher percentage of each dollar devoted to materials that are produced outside of the local economy and to special construction skills that may be imported as well. Therefore, when money is spent on rehabilitating a building, it has a higher “multiplier effect”, keeping more money circulating in the local economy. (Also, see the Appendix, Financial Incentive Toolbox, for a list of financial incentives which can assist property owners with downtown rehabilitation and restoration projects.)

### **Adaptability**

Owners also recognize that the floor plans of many historic properties easily accommodate changing needs. Rooms in both historic homes and commercial buildings are frequently large, permitting a variety of uses while retaining the overall historic character.

### **Livability and Quality of Life**

When historic buildings occur on a block, they create a street scene that is “pedestrian friendly,” encouraging walking and neighborly interaction. Decorative architectural features also contribute to a sense of identity that is difficult to achieve in newer areas of the city. This sense of place can also reinforce desirable community social patterns and contribute to a sense of security.

# Key Historic Preservation, Urban Design and Sustainability Principles

The following principles apply to all related work that is proposed and will be used when evaluating the appropriateness of the work:

## KEY DESIGN PRINCIPLES

The guidelines in this document draw upon urban design principles that address how streets are designed to be active and pedestrian-friendly and to establish a sense of relatedness among properties. Many of these concepts are commonly used in the design community, and are described here to assure a broader understanding of how they are applied in the design guidelines.

### Achieve Excellence in Design

Each project should express excellence in design, and it should raise the bar for others to follow. This includes using high quality materials and construction methods and paying attention to detail.

### Promote Creativity

Innovation in design is welcomed. Exploring new ways of designing buildings and spaces is appropriate when they contribute to a cohesive urban fabric. This type of creativity should be distinguished from simply being “different.”

### Design with Authenticity

The downtown and historic districts should be defined by buildings and places that reflect their own time. The result should be a sense of authenticity in building and materials. All new improvements should convey this quality.

### Design with Consistency

Buildings and places in the downtown and historic districts should have a cohesive quality in the use of materials, organization of functions and overall design. Each new project should also embody a single, consistent design concept.

### Design for Durability

Buildings and spaces should be designed for the long term with durable materials.

### Design for Sustainability

Aspects of cultural, economic and environmental sustainability that relate to urban design should be woven into all new improvements.

### **Enhance the Public Realm**

Sidewalks, promenades and other pedestrian ways should be designed to invite their use through thoughtful planning and design. Improvement on private property also should enhance the public realm where they abut.

### **Enhance the Pedestrian Experience**

Each improvement project should contribute to a pedestrian-friendly environment. This includes defining street edges with buildings and spaces that are visually interesting and that attract pedestrian activity.

### **Provide Signature Open Spaces**

These include public and private yards, promenades, plazas and courtyards. Enhance natural resources and habitat for wildlife on-site, for the public to experience.

### **Keep the Automobile Subordinate**

Parking lots and structures should support other functions and not dominate the setting. They should be hidden, or at least visually buffered.

### **Context-Related Design**

Traditional buildings combine to establish a sense of visual continuity in the historic districts and the downtown core. Many of the design guidelines encourage designs that draw upon basic framework features of these established contexts. This is especially important in historic contexts, but also in areas where a stronger sense of visual continuity is a primary objective. For this reason, many guidelines look to establish patterns of facade articulation, use of materials and building massing. Nonetheless, new, creative designs that reinterpret these traditional patterns are also encouraged.

### **Pedestrian-Oriented Design**

Providing features which are visually interesting and that are in human scale are essential to creating a pedestrian-friendly environment. This may include storefront windows, display cases, porches art and landscaping.

## **BASIC PRINCIPLES FOR SUSTAINABILITY FOR HISTORIC PROPERTIES**

These principles for sustainability also apply:

### **Think big, act small**

To achieve a historically and environmental sensitive project it is important to understand the over arching goals of that improvement project. When planning any project, first determine what its overall goal is, then consider which method of achieving that goal will use the least resources and have the least impact to the historic structure.

### **Make the best use of inherent sustainability features**

Make best use of a buildings inherent sustainability features as a first step in any energy conservation project. Managing effectively the existing energy saving features of a historic structure both conserves resources and is sound preservation practice.

### **Minimize negative impacts on the historic resource when installing a new component.**

When installing new components on a historic structure, such as those for energy collection, it is important that they leave no permanent negative impacts to the structure. Locate a new component where it will not damage, obscure or cause removal of significant features or materials. Maintain the ability to interpret the historic character of the building when retrofitting for energy conservation or generation.

### **Use materials that minimize environmental impacts in their manufacture and maintenance.**

When new materials are needed, use those which avoid negative environmental impacts. Such materials include those which are produced locally, are manufactured without use of harsh chemicals, have long lifecycles, are durable in the local climate and which are designed to be repairable and recyclable.

### **Use construction methods that minimize impacts on landfill and reduces waste.**

Preserving the maximum amount of existing building features feasible reduces demolition waste, as well as reduces construction waste generated by replacement building materials. When planning a project, remove only what is necessary and reuse as much material as feasible on-site. Repurpose as much of the remaining building materials and components as possible to minimize waste and demand for landfill space.

# The Secretary of the Interior's Standards for the Treatment of Historic Buildings

It is the intent of this document to be compatible with *The Secretary of the Interior's Standards for the Treatment of Historic Properties.*, while expanding on the basic rehabilitation principles as they apply in Dubuque. (See Appendix A)

The Secretary's Standards for Rehabilitation state that:

1. A property shall be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. The historic character of a property shall be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, shall not be undertaken.
4. Changes to a property that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and, where possible, materials. Replacement of missing features shall be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, shall be undertaken using the gentlest means possible. Treatments that cause damage to historic materials shall not be used.
8. Archeological resources shall be protected and preserved

in place. If such resources must be disturbed, mitigation measures shall be undertaken.

9. New additions, exterior alterations, or related new construction shall not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and shall be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Design for alterations and additions to existing properties should not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material. Such design should be compatible with the size, scale, color, material and character of the property, neighborhood and environment.

The *Secretary of the Interior's Standards for the Treatment of Historic Buildings* can be found on the *National Park Service* website or [www.nps.gov/hps/tps/standguide](http://www.nps.gov/hps/tps/standguide)

# Preservation Briefs & Tech Notes

The Cultural Resources Department of the National Park Service, in the U.S. Department of the Interior has published a series of technical reports regarding proper preservation techniques. This series, *Preservation Briefs and Preservation Tech Notes*, is a mainstay for many preservationists in the field. When considering a preservation project on any historic property these resources should be sought out.

<http://www.nps.gov/tps/how-to-preserve/briefs.htm>

## PRESERVATION BRIEFS

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# Financial Incentive Toolbox

## **Federal Historic Preservation Tax Incentives:**

The Federal Historic Preservation Tax Incentives program is one of the Federal Government's most successful and cost-effective community revitalization programs. The Preservation Tax Incentives reward private investment in rehabilitating historic properties such as offices, rental housing, and retail stores. A tax credit differs from an income tax deduction. An income tax deduction lowers the amount of income subject to taxation. A tax credit, however, lowers the amount of tax owed. Tax credits are awarded for the certified rehabilitation of historic structures. For additional information and to learn about eligibility, please contact Elizabeth (Beth) Foster Hill, Tax Incentive Programs Manager/National Register Coordinator, Department of Cultural Affairs, (515) 281-4137 or [Beth.Foster@iowa.gov](mailto:Beth.Foster@iowa.gov).

## **Iowa Historic Preservation and Cultural and Entertainment**

### **District Rehabilitation Tax Credit:**

The Iowa Historic Preservation and Cultural and Entertainment District Rehabilitation Tax Credit program provides a state income tax credit for the sensitive rehabilitation of historic buildings. It ensures character-defining features and spaces of buildings are retained and helps revitalize surrounding neighborhoods. The program provides an income tax credit of 25% of qualified rehabilitation costs. Another 20% is available if the property qualifies for the Federal Rehabilitation Investment Tax Credit (for income producing properties only). For additional information and to learn about eligibility, please contact Elizabeth (Beth) Foster Hill, Tax Incentive Programs Manager/National Register Coordinator, Department of Cultural Affairs, (515) 281-4137 or [Beth.Foster@iowa.gov](mailto:Beth.Foster@iowa.gov).

### **Low Income Housing Tax Credit:**

The tax credit encourages project owners to invest in the development of rental housing for individuals and families with fixed or limited incomes. The tax credit, rather than a direct federal subsidy, provides a dollar for dollar reduction (or credit) to offset an owner's federal tax liability on ordinary income. Tax credit interest may be syndicated or sold to generate equity for the developments, thus reducing the necessary mortgage financing and providing more affordable terms. For additional information contact the Iowa Finance Authority at (800) 432-7230 or [www.iowafinanceauthority.gov](http://www.iowafinanceauthority.gov)

### **Main Street Mortgage Loan Program:**

Main Street Iowa, the Iowa Finance Authority (IFA) and the Federal Home Loan Bank of Des Moines created the program to make available funds for lending to Main Street communities in Iowa. IFA, as an associate member of the Federal Home Loan Bank of Des Moines, can borrow from the Federal Home Loan Bank at favorable rates and loan that money out for community development projects. Loans are made for the rehabilitation of upper floor housing or commercial properties or for new construction on infill lots in downtown areas of communities that participate in the Main Street Iowa program. The maximum loan amount is \$250,000 per commercial project. The minimum loan amount is \$50,000. Loans for this program may have terms between 3 and 15 years with up to a 30-year amortization. The interest rate is fixed at 1.125 percent above the CIP/CIA interest rate for the proposed loan term. For additional information contact the Iowa Finance Authority at (800) 432-7230 or [www.iowafinanceauthority.gov](http://www.iowafinanceauthority.gov)

### **Economic Development Loan Program:**

The Iowa Finance Authority (IFA) issues bonds and loans the proceeds to private entities or organizations for eligible purposes. The interest on the bonds may be tax-exempt (if eligible under the Internal Revenue Code), taxable or a combination of both. Projects eligible for financing under the Economic Development Loan Program include land, buildings or improvements for the following:

- A voluntary nonprofit hospital, clinic or health care facility;
- loans to one or more physicians for an office building to be used exclusively by professional health care providers, including appropriate ancillary facilities;
- A private college or university or a state institution whether for the establishment of or maintenance of the college or university or state institution;
- An industry for the manufacturing, processing or assembling of agricultural or manufactured products;
- A multifamily housing unit or complex;
- A facility for a 501(c)(3) nonprofit organization; or
- Pollution control facilities that are suitable for use by any industry, commercial enterprise or utility

For additional information contact the Iowa Finance Authority at (800) 432-7230 or [www.iowafinanceauthority.gov](http://www.iowafinanceauthority.gov)

### **Enterprise Zones:**

The city currently has two Enterprise Zones that encompass the downtown area of the city. Property within Enterprise Zones is eligible for state assistance for redevelopment and construction projects. A property within an Enterprise Zone may be eligible for a:

- 10% Investment Tax Credit
- Rebate of Sales and Use Taxes paid on materials
- Additional funding for training new employees

For additional information and to determine eligibility, please contact the Economic Development Department at (563) 589-4393 or [econdev@cityofdubuque.org](mailto:econdev@cityofdubuque.org).

### **Tax Increment Financing (TIF):**

An incentive program which captures the increased property taxes a business pays from improving their property. This incentive can be used to help pay for needed infrastructure improvements or to provide grants to the business. Businesses must commit to job creation in the community or must have an extraordinary positive impact for the community to offer this incentive. This is available in urban renewal districts only. The downtown core and all industrial parks have been designated as urban renewal districts. Any TIF amount will be based on the increased assessed value the project creates. TIF can be structured as an up-front loan, with debt service paid from the future flow of new taxes generated by the project over a 10 year period, or the property owner can opt to take the TIF as a rebate of the new taxes over 10 years. For additional information and to determine eligibility, please contact the Economic Development Department at (563) 589-4393 or [econdev@cityofdubuque.org](mailto:econdev@cityofdubuque.org).

### **Downtown Rehabilitation Loan Program:**

The Downtown Rehabilitation Loan Program is designed to further the goals and objectives of the Greater Downtown Urban Renewal Plan by creating the financial incentives needed to eliminate conditions of blight, encourage revitalization efforts, and to retain or create employment opportunities and/or new housing units within the district. A maximum of \$300,000 per building shall be loaned during the life of the program. Projects may be phased with a minimum of \$10,000 loaned at any one time. For additional information and to determine eligibility, please contact the Economic Development Department at (563) 589-4393 or [econdev@cityofdubuque.org](mailto:econdev@cityofdubuque.org).

### **Community Economic Betterment Account:**

Provides financial assistance to companies that create new employment opportunities and/or retain existing jobs, and make new capital investment in Iowa. The amount of funding is based, in part, on the number of jobs to be created/retained. Funds are provided in the form of loans and forgivable loans. Investments are used to leverage other financial support such as bank financing and private investment, as well as local community support. The program contains a modernization project component. This part of the program is specifically designed for business investing in machinery and equipment and/or technology upgrades to improve or maintain their competitive edge in their respective markets. The CEBA programs can provide assistance up to \$1 million. As an alternative, nontraditional, short-term float loans, or interim loans greater than \$1 million may be available. The funding level for start-up companies varies depending upon employee wage rates. The maximum assistance available through the EDSA program is \$1,000,000. Projects eligible under the program include:

- Building construction or reconstruction
- Land or building acquisition
- Equipment purchases
- Operating and maintenance expenses
- Site development
- Working capital

For additional information and to determine eligibility, please contact the Economic Development Department at (563) 589-4393 or [econdev@cityofdubuque.org](mailto:econdev@cityofdubuque.org).

### **High Quality Job Creation Program:**

Provides qualifying businesses tax credits to off-set the cost incurred to locate, expand or modernize an Iowa facility. To qualify for this flexible assistance package that includes tax credits, exemptions and/ or refunds, a business must be a non-retail or non-service business and meet at least four of nine eligibility requirements. Awarded amounts will be based on the business's level of need, the quality of the jobs, the percentage of created jobs defined as high-quality, and the economic impact of the project. For additional information and to determine eligibility, please contact the Economic Development Department at (563) 589-4393 or [econdev@cityofdubuque.org](mailto:econdev@cityofdubuque.org).

### **Entrepreneurial Ventures Assistance Program:**

The program provides financial assistance and/or technical assistance to start-up and early-stage companies and existing companies that are developing a new product or new technology. The purpose of the Entrepreneurial Ventures Assistance program is to encourage the development of entrepreneurial venture planning and managerial skills in conjunction with the delivery of a financial assistance program for business start-ups and expansions. Up to \$250,000 may be awarded to a single applicant in the form of financial assistance. Repayment of the funds may be in the form of a royalty investment or loan, which is determined by the Iowa Department of Economic Development (IDED) upon approval of application. This funding may be used to leverage conventional financing, for business expenses or working capital, and to purchase machinery, equipment, software or other business expenses deemed reasonable and appropriate by IDED. For additional information and to determine eligibility, please contact the Economic Development Department at (563) 589-4393 or [econdev@cityofdubuque.org](mailto:econdev@cityofdubuque.org).

### **Economic Development Set-Aside Program:**

Provides financial assistance to companies that create new employment opportunities and/or retain existing jobs, and make new capital investment in Iowa. The amount of funding is based, in part, on the number of jobs to be created/retained. Up to \$500,000 in assistance is available. Funds are provided in the form of loans and forgivable loans however, EDSA investments should not be considered a sole funding source. The program leverages other financial support such as bank financing and private investment. At least 51 percent of the created/retained employment opportunities must be made available to individuals presently earning wages defined as low-and-moderate income. The EDSA program assistance is targeted toward business projects located in communities with populations of less than 50,000. The purpose of the program is to create/retain quality employment opportunities for low- and moderate-income individuals. Projects eligible under the program include:

- Building construction or reconstruction
- Land or building acquisition
- Equipment purchases
- Operating and maintenance expenses
- Site development
- Other projects on a case-by-case basis

For additional information and to determine eligibility, please contact the Economic Development Department at (563) 589-4393 or [econdev@cityofdubuque.org](mailto:econdev@cityofdubuque.org).

**Facade Grant:**

The Facade Grant is a matching grant not to exceed \$10,000 and shall be awarded to qualifying projects based on total project costs. The grant is for facade improvements to properties located in the Greater Downtown Urban Renewal District. For additional information and to determine eligibility, please contact the Economic Development Department at (563) 589-4393 or [econdev@cityofdubuque.org](mailto:econdev@cityofdubuque.org).

**Design Grant:**

A maximum of \$10,000 per building may be awarded by the city to offset pre-development costs incurred by Rehabilitation Loan Program participants. The program reimburses for architectural and engineering fees, feasibility studies, environmental assessments, or other related soft costs. For additional information and to determine eligibility, please contact the Economic Development Department at (563) 589-4393 or [econdev@cityofdubuque.org](mailto:econdev@cityofdubuque.org).

**Dubuque Main Street Ltd. Loan Pool:**

A loan of up to \$250,000 per commercial entity located in one of Main Street's seven historic districts: Historic Old Main, Cable Car Square, Town Clock, the Ice Harbor, Upper Main, Jackson Park, Coulter and the Warehouse District. Projects eligible for this program include facade and/or interior renovation, leasehold improvements, and/or acquisition of commercial property located in the above mentioned districts. The real estate acquisition component of the program requires a significant interior or exterior renovation/ improvement project to accompany the purchase. Projects must complement Dubuque Main Street's vision of a revitalized downtown, as indicated in the organization's mission statement. For additional information, terms and conditions contact Dubuque Main Street at (563) 588-4400 or [www.dubuquemainstreet.com](http://www.dubuquemainstreet.com).

**Historic Preservation Revolving Loan Fund:**

Provides a low interest loan for exterior work that meets the Secretary of the Interior's Standards and Guidelines for Rehabilitation for properties located in local Historic Preservation Districts and Conservation Districts. For additional information and to determine eligibility, please contact the Planning Services Department at (563) 589-4210 or [planning@cityofdubuque.org](mailto:planning@cityofdubuque.org).

**Historic Preservation Housing Grant:**

Preservation grants (in the form of a forgivable loan) are available on a competitive basis to income-qualifying owner-occupants and to qualified non-profit organizations in any local historic district or city-designated landmark for specific rehabilitation projects that preserve the original building materials and character-defining features of the home. For additional information and to determine eligibility, please contact the Planning Services Department at (563) 589-4210 or [planning@cityofdubuque.org](mailto:planning@cityofdubuque.org).

**Urban Revitalization Program:**

Offers a property tax exemption for new improvements made to qualified residential properties and limited commercial properties. Owners who upgrade their residential properties located within a designated Urban Revitalization district may receive a 10-year exemption from the property tax liability that would normally accompany numerous property improvements. Owners of commercial properties within the Washington Neighborhood district are eligible for a three-year exemption. For additional information and to determine eligibility, please contact the Housing and Community Development Department at (563) 589-4239 or [housing@cityofdubuque.org](mailto:housing@cityofdubuque.org).

**Lead Hazard Reduction Program:**

Provides financial assistance in the form of a HUD funded forgivable loan for lead hazard reduction for low- and moderate-income home-owners and rental property owners to reduce or eliminate lead-based paint hazards in their properties. The program is specifically targeted to assist families with children under the age of six. Grant funding (in the form of three year forgivable loans) is provided for lead hazard reduction activities, inspection, and risk assessment of enrolled properties, community awareness, education, and training. For additional information and to determine eligibility, please contact the Housing and Community Development Department at (563) 589-4239 or [housing@cityofdubuque.org](mailto:housing@cityofdubuque.org).

**Operation Paintbrush:**

Provides free exterior paint to any owner-occupied single-family or duplex income qualified homeowner. For additional information and to determine eligibility, please contact the Housing and Community Development Department at (563) 589-4239 or [housing@cityofdubuque.org](mailto:housing@cityofdubuque.org).

**Operation Upkeep:**

This program provides forgivable loans or deferred payment loans to low- and moderate-income homeowners to improve the exterior appearance and conditions of their homes. For additional information and to determine eligibility, please contact the Housing and Community Development Department at (563) 589-4239 or [housing@cityofdubuque.org](mailto:housing@cityofdubuque.org).

**Moderate Owner/Developer Rehabilitation Program:**

This program provides short-term, 0% interest loans for rental property owners. This program encourages redevelopment of run down single-family or duplex homes. The structures are to be sold to first-time homebuyers within six month of completion. For additional information and to determine eligibility, please contact the Housing and Community Development Department at (563) 589-4239 or [housing@cityofdubuque.org](mailto:housing@cityofdubuque.org).

**Moderate Income Rental Rehabilitation Program:**

This program provides long-term, low-interest loans for rental property owners. The program is designed to encourage rehabilitation of existing rental housing for the benefit of moderate income tenants. For additional information and to determine eligibility, please contact the Housing and Community Development Department at (563) 589-4239 or [housing@cityofdubuque.org](mailto:housing@cityofdubuque.org).

**Homeowners Rehabilitation Program:**

This program provides low-interest, long-term loans to income qualified, owner-occupied, single-family or duplex home homeowners to rehabilitate their properties. For additional information and to determine eligibility, please contact the Housing and Community Development Department at (563) 589-4239 or [housing@cityofdubuque.org](mailto:housing@cityofdubuque.org).

**Community Partnership Program:**

Community Partnership funds are for organizations, programs or facilities operating within the city limits of the City of Dubuque. The Community Partnership Program (CP2) is designed to assist, on a competitive basis, local organizations in the development of projects that benefit Dubuque's low-and moderate-income residents and/ or programs which address problems of slum and blight. Recipients are required to follow CDBG and HUD regulations, as well as state and local rules. A maximum award of \$50,000 per project is available. Organizations must provide a cash or in-kind match. A variety of activities are eligible for funding under established program guidelines. Applications are available for a limited time during February/March of each year.

For additional information and to determine eligibility, please contact the Housing and Community Development Department at (563) 589-4239 or [housing@cityofdubuque.org](mailto:housing@cityofdubuque.org).

### **Tax Incentives for Improving Accessibility**

The U.S. Department of Justice provides information to small businesses about the Americans with Disabilities Act (ADA) and tax benefits to help them comply with the law. The ADA Tax Incentives Packet contains information about the disabled access credit that is available for small businesses and the tax deduction that is available for businesses of any size to help offset some of the costs of improving accessibility for customers or employees with disabilities. It also includes the Internal Revenue Service (IRS) form and instructions for claiming the disabled access credit, a list of ADA publications available free from the Department of Justice, and a list of telephone numbers and Internet sites to which you can turn for answers to your ADA questions.

If you have questions about the ADA or want to order ADA publications, please call the ADA Information Line at 800-514-0301 (voice) or 800-514-0383 (TTY). Specialists are available to answer questions from 10:00am until 6:00pm Eastern time and automated service is available 24 hours a day to order publications. The ADA Home Page also provides information and publications at [www.usdoj.gov/crt/ada](http://www.usdoj.gov/crt/ada).

Two tax incentives are available to businesses to help cover the cost of making access improvements. The first is a tax credit that can be used for architectural adaptations, equipment acquisitions, and services such as sign language interpreters. The second is a tax deduction that can be used for architectural or transportation adaptations.

(NOTE: A tax credit is subtracted from your tax liability after you calculate your taxes, while a tax deduction is subtracted from your total income before taxes, to establish your taxable income.)

Additional information is available locally from Proudly Accessible Dubuque at <http://www.proudlyaccessibledubuque.com>.

\* The above financial incentives are subject to change. Additional financial incentives may be available through federal, state, and local agencies and organizations.



# City of Dubuque Glossary Booklet



for the Architectural Guidelines

February 3, 2014

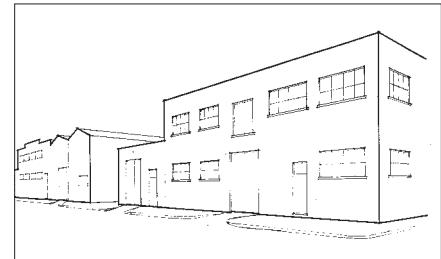


# Glossary of Terms

**Adaptive Use.** Rehabilitation of a historic structure for use other than its original use such as a residence converted into offices.

**Addition.** New construction added to an existing building or structure.

**Alteration.** Any act or process that changes one or more of the exterior architectural features of a structure, including, but not limited to, the erection, construction, reconstruction, addition, sand blasting, water blasting, chemical cleaning, chemical stopping, or removal of any structure, but not including changes to the color of exterior paint.



**Alignment**

**American bond.** A brickwork pattern where most courses are laid flat, with the long “stretcher” edge exposed, but every fifth to eighth course is laid perpendicularly with the small “header” end exposes, to structurally tie the wall together.

**Alignment.** The arrangement of objects along a straight line.

**Appropriate.** Especially suitable or compatible.

**Apron.** A decorative, horizontal trim piece on the lower portion of an architectural element.

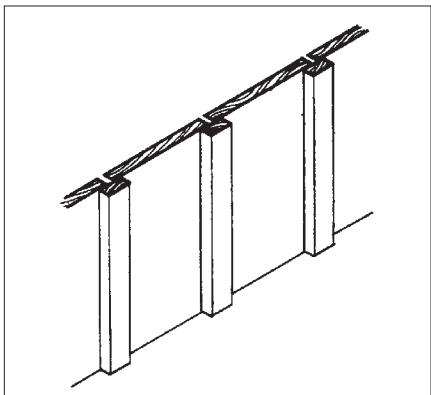
**Appurtenances.** An additional object added to a building; typically includes vents, exhausts hoods, air conditioning units, etc.

**Arch.** A curved construction which spans an opening and supports the weight above it. (See flat arch, jack arch, segmental arch and semi-circular arch)

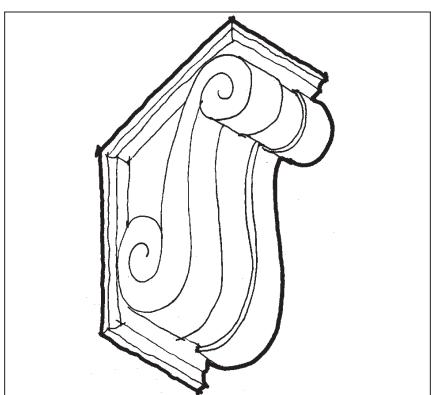
**Asphalt shingles.** A type of roofing material composed of layers of saturated felt, cloth or paper, and coated with a tar, or asphalt substance, and granules.

**Attic.** The upper level of a building, not of full ceiling height, directly beneath the roof.

**Baluster.** One of a series of short, vertical, often vase-shaped members used to support a stair or porch handrail, forming a balustrade.



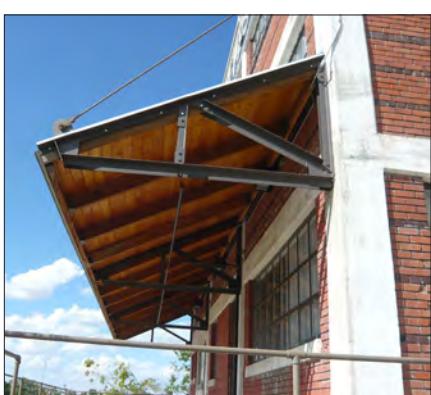
**Board and batten**



**Bracket**



**Bulkhead**



**Canopy**

**Balustrade.** An entire rail system with top rail and balusters.

**Bargeboard.** A board which hangs from the projecting end of a gable roof, covering the end rafters, and often sawn into a decorative pattern.

**Bay.** The portion of a facade between columns or piers providing regular divisions and usually marked by windows.

**Bay window.** A projecting window that forms an extension to the floor space of the internal rooms; usually extends to the ground level.

**Belt course.** A horizontal band across or around a building usually enhanced with decorative molding and marking the floor levels on the exterior facade of the building.

**Board and batten.** Vertical plank siding with joints covered by narrow wood strips.

**Bond.** A term used to describe the various patterns in which brick (or stone) is laid, such as "common bond" or "Flemish bond."

**Bracket.** A supporting member for a projecting element or shelf, sometimes in the shape of an inverted L and sometimes as a solid piece or a triangular truss.

**Building.** A resource created principally to shelter any form of human activity, such as a house.

**Bulkhead.** The structural panels just below display windows on storefronts. Bulkheads can be both supportive and decorative in design. Bulkheads from the 19th century are often of wood construction with rectangular raised panels while those of the 20th century may be of wood, brick, tile, or marble construction. Bulkheads are also referred to as kickplates.

**Bungalow.** Common house form of the early 20th century distinguished by horizontal emphasis, wide eaves, large porches and multi-light doors and windows.

**Canopy.** A roof like projection or shelter that projects from the facade of a building over the sidewalk.

**Capital.** The head of a column or pilaster.

**Casement window.** A window with one or two sashes which are hinged at the sides and usually open outward.

**Certificate of Appropriateness.** A certificate issued by the building official or Historic Preservation Commission indicating its approval of plans for alteration, construction, removal or demolition of a landmark or of a structure within a historic district.

**Certified Local Government.** Any city, county, parish, township, municipality, or borough or any other general purpose subdivision enacted by the National Preservation Act Amendments of 1980 to further delegate responsibilities and funding to the local level.

**Character.** The qualities and attributes of any structure, site, street or district.

**Clapboards.** Narrow, horizontal, overlapping wooden boards, usually thicker along the bottom edge, that form the outer skin of the walls of many wood frame buildings. The horizontal lines of the overlaps generally are from four to six inches apart in older houses.

**Classical order.** Derived from Greek and Roman architecture, a column with its base, shaft, capital and entablature having standardized details and proportions, according to one of the five canonized modes: Doric, Tuscan, Ionic, Corinthian, or Composite.

**Clipped gable.** A gable roof where the ends of the ridge are terminated in a small, diagonal roof surface.

**Colonial Revival.** House style of the early 20th century based on interpretations of architectural forms of the American colonies prior to the Revolution.

**Column.** A circular or square vertical structural member.

**Commission.** The Historic Preservation Commission.

**Compatible.** In harmony with location and surroundings.

**Composition shingles.** See asphalt shingles.

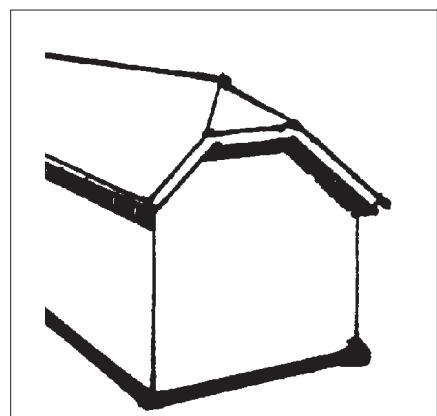
**Configuration.** The arrangement of elements and details on a building or structure which help to define its character.



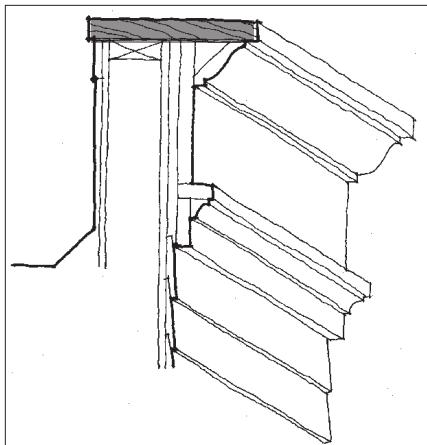
**Capital**



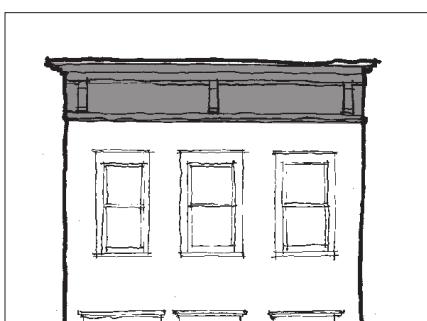
**Clapboards**



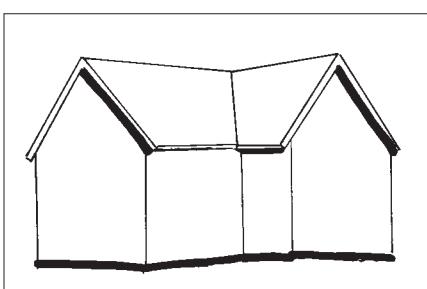
**Clipped Gable**



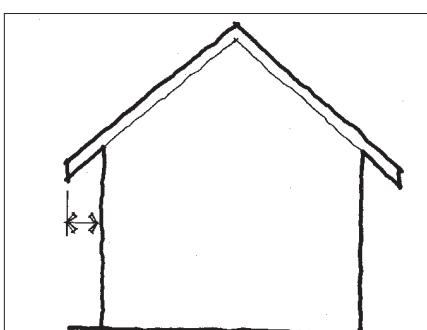
**Coping**



**Cornice**



**Cross-gable**



**Eave**

**Contemporary.** Reflecting characteristics of the current period. Contemporary denotes characteristics which illustrate that a building, structure, or detail was constructed in the present or recent past rather than being imitative or reflective of a historic design.

**Context.** The setting in which a historic element, site, structure, street, or district exists.

**Coping.** The protective uppermost course of a wall or parapet.

**Corbel.** In masonry, a projection, or one of a series of projections, each stepped progressively farther forward with height and articulating a cornice or supporting an overhanging member.

**Corinthian order.** Most ornate classical order characterized by a capital with ornamental acanthus leaves and curled fern shoots.

**Cornice.** The continuous projection at the top of a wall. The top course or molding of a wall when it serves as a crowning member.

**Cresting.** A decorated ornamental finish along the top of a wall or roof, often made of ornamental metal.

**Cross-gable.** A secondary gable roof which meets the primary roof at right angles.

**Demolition.** Any act or process that destroys in part or in whole a landmark or structure within a historic district.

**Dentils.** A row of small, tooth-like blocks in a classical cornice.

**Design guidelines.** The “Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings” as adopted by the Secretary of the United States Department of the Interior, and other guidelines which may be adopted from time to time.

**Doorframe.** The part of a door opening to which a door is hinged. A doorframe consists of two vertical members called *jambs* and a horizontal top member called a *lintel* or *head*.

**Doric order.** A classical order with simple, unadorned capitals, and with no base.

**Dormer window.** A window that projects from a roof.

**Double-hung window.** A window with two sashes (the framework in which window panes are set), each moveable by a means of cords and weights.

**Eave.** The underside of a sloping roof projecting beyond the wall of a building.



**Entablature**

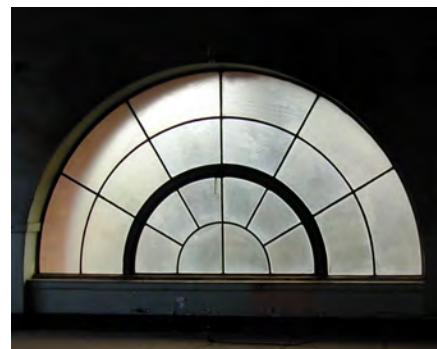
**Element.** A material part or detail of a site, structure, street, or district.

**Elevation.** A mechanically accurate, “head-on” drawing of a face of a building or object, without any allowance for the effect of the laws of perspective. Any measurement on an elevation will be in a fixed proportion, or scale, to the corresponding measurement on the real building.

**Ell.** The rear wing of a house, generally one room wide and running perpendicular to the principal building.

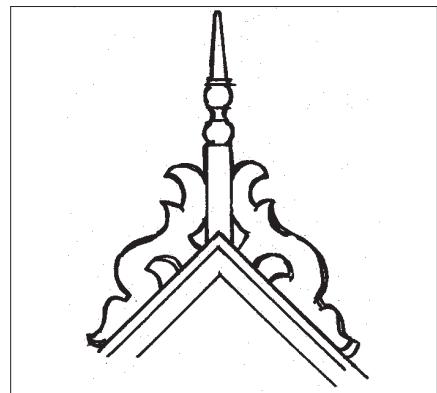
**Engaged column.** A round column attached to a wall.

**Entablature.** A part of a building of classical order resting on the column capital; consists of an architrave, frieze, and cornice.



**Fanlight**

**Fabric.** The physical material of a building, structure, or community, connoting an interweaving of component parts.

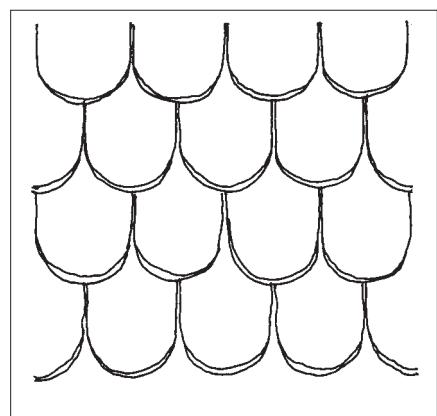


**Finial**

**Facade.** Front or principal face of a building, any side of a building that faces a street or other open space.

**Fanlight.** A semi-circular window usually over a door with radiating muntins suggesting a fan.

**Fascia.** A flat board with a vertical face that forms the trim along the edge of a flat roof, or along the horizontal, or “eaves,” sides of a pitched roof. The rain gutter is often mounted on it.



**Fishscale shingles**

**Fenestration.** The arrangement of windows and other exterior openings on a building.

**Finial.** A projecting decorative element, usually of metal, at the top of a roof turret or gable.

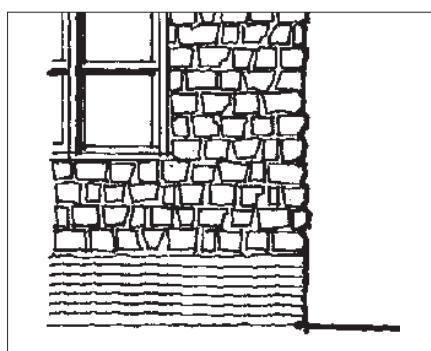
**Fishscale shingles.** A decorative pattern of wall shingles composed of staggered horizontal rows of wooden shingles with halfround ends.

**Flashing.** Thin metal sheets used to prevent moisture infiltration at joints of roof planes and between the roof and vertical surfaces.

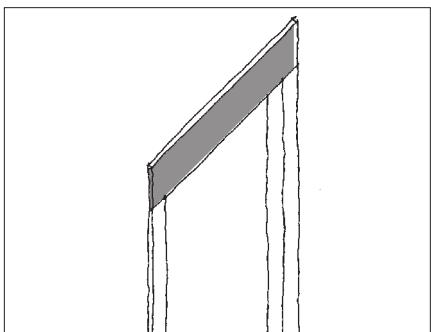
**Flat arch.** An arch whose wedge-shaped stones or bricks are set in a straight line; also called a jack arch.



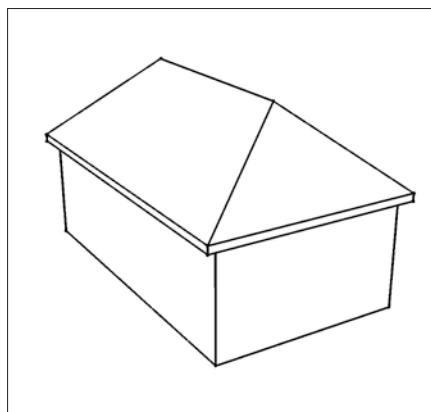
**Fluting**



**Foundation**



**Head**



**Hipped roof**

**Flemish bond.** A brick-work pattern where the long “stretcher” edge of the brick is alternated with the small “header” end for decorative as well as structural effectiveness.

**Fluting.** Shallow, concave grooves running vertically on the shaft of a column, pilaster, or other surface.

**Form.** The overall shape of a structure (i.e., most structures are rectangular in form).

**Foundation.** The lowest exposed portion of the building wall, which supports the structure above.

**Frame.** A window component. See window parts.

**Frieze.** The middle portion of a classical cornice; also applied decorative elements on an entablature or parapet wall.

**Gable.** The portion, above eave level, of an end wall of a building with a pitched or gambrel roof. In the case of a pitched roof this takes the form of a triangle. The term is also used sometimes to refer to the whole end wall.

**Gable roof.** A pitched roof with one downward slope on either side of a central, horizontal ridge.

**Gambrel roof.** A ridged roof with two slopes on either side.

**Ghosts.** Outlines or profiles of missing buildings or building details. These outlines may be visible through stains, paint, weathering, or other residue on a building’s facade. Also known as a palimpsest.

**Glazing.** Fitting glass into windows and doors.

**Greek Revival style.** Mid-19th century revival of forms and ornament of architecture of ancient Greece.

**Harmony.** Pleasing or congruent arrangement.

**Head.** The top horizontal member over a door or window opening.

**Height.** The distance from the bottom to the top of a building or structure.

**Hipped roof.** A roof with uniform slopes on all sides.

**Historic District.** An area designated as a “historic district” by ordinance of the city council and which may contain within definable geographic boundaries one or more landmarks and which may have within its boundaries other proportions or structures that, while not of such historic or architectural significance to be designated as landmarks, nevertheless contribute to the overall historic or architectural characteristics of the historic district.

**Historic imitation.** New construction or rehabilitation where elements or components mimic an architectural style but are not of the same historic period as the existing buildings (historic replica).

**Historic resource.** A structure or streetscape that is unique to its period of significance and as such is to be wisely managed for the benefit of present and future generations.

**Hood molding.** A projecting molding above an arch, doorway, or window, originally designed to direct water away from the opening; also called a drip mold.

**Homestead style.** An architectural form of the late 19th and early 20th centuries featuring dwelling built in Gable Front plans with limited architectural detailing and generally of frame construction. These dwellings were commonly built throughout the Midwest.

**In-Kind replacement.** To replace a feature of a building with materials of the same characteristics, such as material, texture, color, etc.

**Integrity.** A property retains its integrity, if a sufficient percentage of the structure dates from the period of significance. The majority of a building’s structural system and materials should date from the period of significance and its character defining features also should remain intact. These may include architectural details, such as dormers, porches, ornamental brackets, moldings and materials, as well as the overall mass and form of the building.

**Ionic order.** One of the five classical orders used to describe decorative scroll capitals.

**Infill.** New construction where there had been an opening before, such as a new building between two older structures; or block infill between porch piers or in an original window opening.



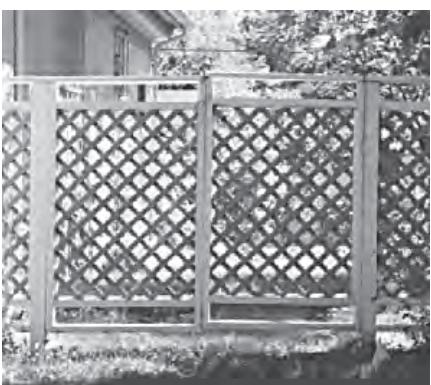
**Ionic order**



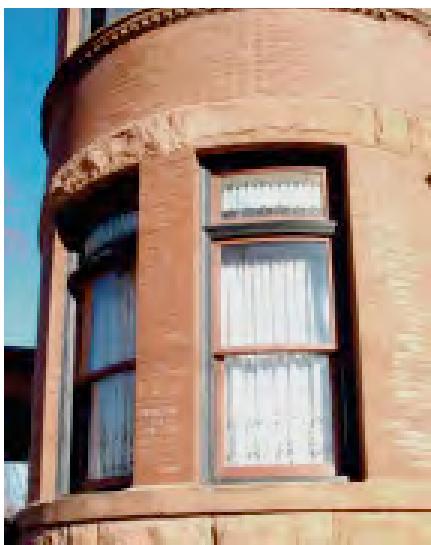
**Keystone**



**Kickplate**



**Lattice**



**Lintel**

**Jack arch.** (see Flat arch)

**Keystone.** The wedge-shaped top or center member of an arch.

**Kickplate.** Found beneath the display window. Sometimes called bulk-head panel.

**Knee brace.** An oversize bracket supporting a roof or porch eave.

**Landmark.** A property, structure or natural object designated as a “landmark” by ordinance of the city council, pursuant to procedures prescribed in this title, that is worthy of rehabilitation, restoration and presentation because of its historic or architectural significance to the city.

**Landscape.** The totality of the built or human-influenced habitat experienced at any one place. Dominant features are topography, plant cover, buildings, or other structures and their patterns.

**Lap Siding.** See clapboards.

**Lattice.** An openwork grill of interlacing wood strips used as screening.

**Lintel.** The horizontal top member of a window, door, or other opening.

**Maintain.** To keep in an existing state of preservation or repair.

**Mansard roof.** A roof with a double slope on all four sides, with the lower slope being almost vertical and the upper almost horizontal.

**Masonry.** Exterior wall construction of brick, stone or adobe laid up in small units.

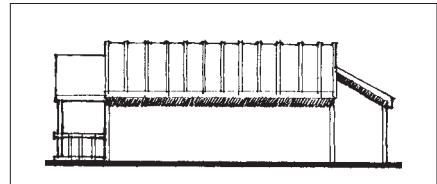
**Mass.** The physical size and bulk of a structure.

**Massing.** The three-dimensional form of a building.

**Masonry.** Construction materials such as stone, brick, concrete block or tile.

**Material.** As related to the determination of “integrity” of a property, **material** refers to the physical elements that were combined or deposited in a particular pattern or configuration to form a historic resource.

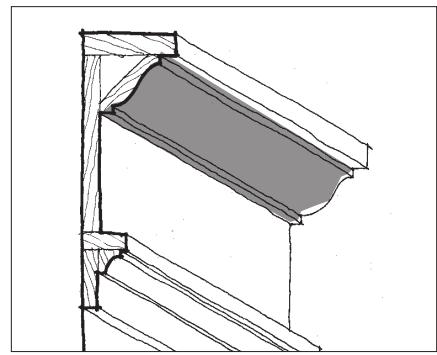
**Material change.** A change that will affect either the exterior architectural or environmental features of an historic property or any structure, site, or work of art within an historic district.



**Metal standing seam roof.**

**Metal standing seam roof.** A roof composed of overlapping sections of metal such as copper-bearing steel or iron coated with a terne alloy of lead and tin. These roofs were attached or crimped together in various raised seams for which the roof are named.

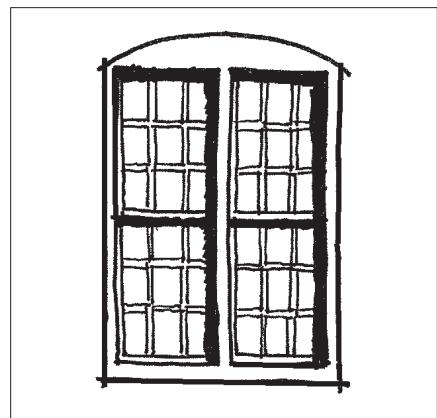
**Modillion.** A horizontal bracket, often in the form of a plain block, ornamenting, or sometimes supporting, the underside of a cornice.



**Modillion**

**Module.** The appearance of a single facade plane, despite being part of a larger building. One large building can incorporate several building modules.

**Molding.** A decorative band or strip of material with a constant profile or section designed to cast interesting shadows. It is generally used in cornices and as trim around window and door openings.



**Muntin**

**Mortar.** A mixture of sand, lime, cement, and water used as a binding agent in masonry construction.

**Mullion.** A heavy vertical divider between windows or doors.



**Oriel window**

**Multi-light window.** A window sash composed of more than one pane of glass.

**Muntin.** A bar member supporting and separating panes of glass in a window or door.

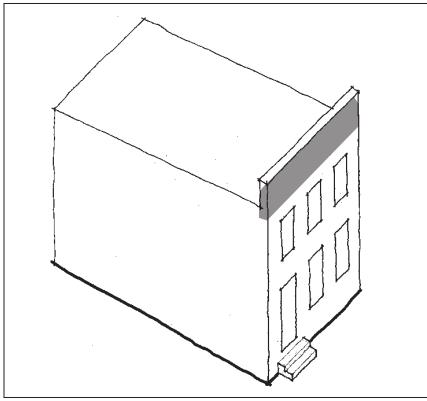
**New construction.** Construction which is characterized by the introduction of new elements, sites, buildings, or structures or additions to existing buildings and structures in historic areas and districts.

**Normally required.** Mandatory actions, summarized in the guidelines, whose compliance is enforced by the Historic Preservation Commission.

**Obscured.** Covered, concealed, or hidden from view.

**Opaque fence.** A fence that one *cannot* see through.

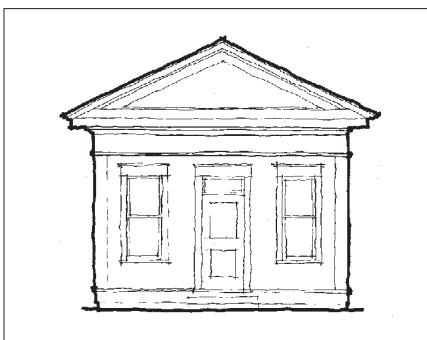
**Oriel window.** A bay window which emerges above the ground floor level.



**Parapet**



**Pilaster**



**Pediment**



**Portico**

**Orientation.** Generally, orientation refers to the manner in which a building relates to the street. The entrance to the building plays a large role in the orientation of a building; whereas, it should face the street.

**Paired columns.** Two columns supported by one pier, as on a porch.

**Palladian window.** A window with three openings, the central one arched and wider than the flanking ones.

**Panel.** A sunken or raised portion of a door with a frame-like border.

**Paneled door.** A door composed of solid panels (either raised or recessed) held within a framework of rails and stiles.

**Parapet.** An upward extension of a building wall above the roofline, sometimes ornamented and sometimes plain, used to give a building a greater feeling of height or a better sense of proportion.

**Pediment.** A triangular crowning element forming the gable of a roof; any similar triangular element used over windows, doors, etc.

**Period of Significance.** Span of time in which a property attained the significance.

**Pier.** A vertical structural element, square or rectangular in cross-section.

**Pilaster.** A square pillar attached, but projecting from a wall, resembling a classical column.

**Pitch.** The degree of the slope of a roof.

**Porico.** A roofed space, open or partly enclosed, forming the entrance and centerpiece of the facade of a building, often with columns and a pediment.

**Portland cement.** A strong, inflexible hydraulic cement used to bind mortar. Mortar or patching materials with a high Portland cement content should not be used on pre-1920 buildings. The Portland cement is harder than the masonry, thereby causing serious damage over annual freeze-thaw cycles.)

**Post.** A piece of wood, metal, etc., usually long and square or cylindrical, set upright to support a building, sign, gate, etc.; pillar; pole.

**Preservation.** The act or process of applying measures to sustain the existing form, integrity and materials of a building or structure, and the existing form and vegetative cover of a site. It may include initial stabilization work, where necessary, as well as ongoing maintenance of the historic building materials.

**Pressed tin.** Decorative and functional metalwork made of molded tin used to sheath roofs, bays, and cornices.

**Proportion.** Harmonious relation of parts to one another or to the whole.

**Protection.** The act or process of applying measures designed to affect the physical condition of a property by defending or guarding it from deterioration, or to cover or shield the property from danger of injury. In the case of buildings and structures, such treatment is generally of a temporary nature and anticipates future historic preservation treatment; in the case of archaeological sites, the protective measure may be temporary or permanent.

**Pyramidal roof.** A roof with four identical sides rising to a central peak.

**Queen Anne style.** Popular late 19th century revival style of early eighteenth-century English architecture, characterized by irregularity of plan and massing and a variety of texture.

**Quoins.** A series of stone, bricks, or wood panels ornamenting the outside of a wall.

**Recommended.** Suggested, but not mandatory actions summarized in the guidelines.

**Reconstruction.** The act or process of reproducing by new construction the exact form and detail of a vanished building, structure or object, or part thereof, as it appeared at a specific period of time.

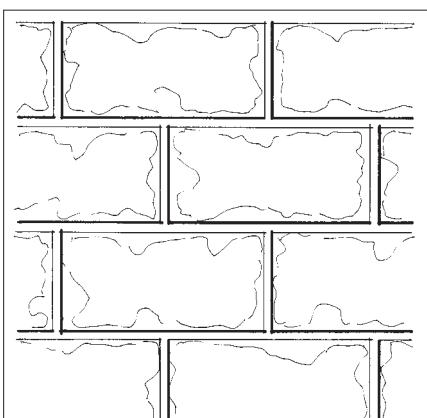
**Rehabilitation.** The act or process of returning a property to a state of utility through repair or alteration which makes possible an efficient contemporary use while preserving those portions or features of the property which are significant to its historical, architectural and cultural value.



**Quoins**



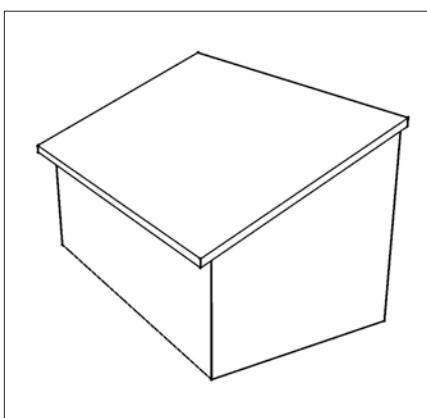
### Re-use



### Rusticated



### Semi-circular arch



### Shed roof

**Replication.** Constructing a building so that it is an exact replica or imitation of an historic architectural style or period.

**Renovation.** The act or process of returning a property to a state of utility through repair or alteration which makes possible a contemporary use.

**Restoration.** The act or process of accurately recovering the form and details of a property and its setting as it appeared at a particular period of time by means of the removal of later work or by the replacement of missing earlier work.

**Retain.** To keep secure and intact. In the guidelines, “retain” and “maintain” describe the act of keeping an element, detail, or structure and continuing the same level of repair to aid in the preservation of elements, sites and structures.

**Re-use.** To use again. An element, detail, or structure might be reused in historic districts.

**Rhythm** . Regular occurrence of elements or features such as spacing between buildings.

**Ridge.** The top horizontal member of a roof where the sloping surfaces meet.

**Rusticated.** Roughening of stonework of concrete blocks to give greater articulation to each block.

**Sash.** The moveable framework containing the glass in a window.

**Scale.** Proportional elements that demonstrate the size, materials, and style of buildings

**Segmental arch.** An arch whose profile or radius is less than a semicircle.

**Semi-circular arch.** An arch whose profile or radius is a half-circle the diameter of which equals the opening width.

**Setting.** The sum of attributes of a locality, neighborhood, or property that defines its character.

**Shape.** The general outline of a building or its facade.

**Sheathing.** An exterior covering of boards of other surface

applied to the frame of the structure. (see Siding)

**Shed roof.** A gently-pitched, almost flat roof with only one slope.

**Shingle style.** Architectural style of the late 19th century which features frame dwellings largely covered with wood shingles on both floors.

**Shingles.** Wood which is split into flat shingles and different shapes. Wood shingles are common elements to the Queen Anne and Bungalow styles.

**Side light.** A vertical area of fixed glass on either side of a door or window.

**Siding.** The exterior wall covering or sheathing of a structure.

**Significant.** Having particularly important associations within the contexts of architecture, history, and culture

**Sill.** The lowest horizontal member in a frame or opening for a window or door. Also, the lowest horizontal member in a framed wall or partition.

**Size.** The dimensions in height and width of a building's face.

**Slate.** Thin sections of stone which were used as a roof surface material for pre-1945 dwellings.

**Spindles.** Slender, elaborately turned wood dowels or rods often used in screens and porch trim.

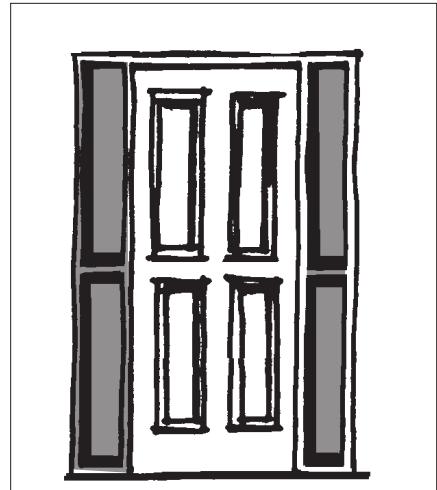
**Stabilization.** The fact or process of applying measures designed to reestablish a weather resistant enclosure and the structural stability of an unsafe or deteriorated property while maintaining the essential form as it exists at present.

**Stile.** A vertical piece in a panel or frame, as of a door or window.

**Storefront.** Exterior facade of a commercial building. Includes the following architectural elements: display window, transom, kickplate, entry, cornice molding, and upper story windows.

**Streetscape.** The distinguishing character of a particular street as created by its width, degree of curvature, paving materials, design of the street furniture, and forms of surrounding buildings.

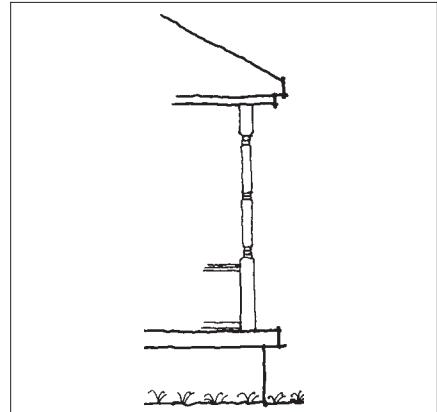
**Stretch bond.** A brickwork pattern where courses are laid flat with the long "stretcher" edge exposed.



**Side light**



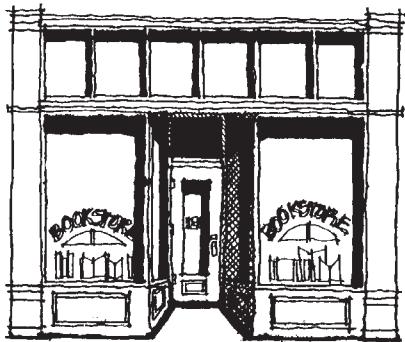
**Slate**



**Spindles**



**Storefront**



**Transom window**



**Turret**



**Wall dormer**

**Style.** A type of architecture distinguished by special characteristics of structure and ornament and often related in time; also a general quality of a distinctive character.

**Surround.** An encircling border or decorative frame, usually at windows or doors.

**Swag.** Carved ornament on the form of a cloth draped over supports, or in the form of a garland of fruits and flowers.

**Traditional.** Based on or established by the history of the area.

**Transom Window.** A small window or series of panes above a door, or above a casement or double hung window.

**Trim.** The decorative framing of openings and other features on a facade.

**Turret.** A small slender tower.

**Veranda.** A covered porch or balcony on a building's exterior.

**Vergeboard.** The vertical face board following and set under the roof edge of a gable, sometimes decorated by carving.

**Vernacular.** This means that a building does not have details associated with a specific architectural style, but is a simple building with modest detailing and form. Historically, factors often influencing vernacular building were things such as local building materials, local climate and building forms used by successive generations.

**Visual Continuity.** A sense of unity or belonging together that elements of the built environment exhibit because of similarities among them.

**Wall dormer.** Dormer created by the upward extension of a wall and a breaking of the roofline.

**Water table.** A projecting horizontal ledge, intended to prevent water from running down the face of a wall's lower section.

**Weatherboard.** Wood siding consisting of overlapping boards usually thicker at one edge than the other.

**Window Parts.** The moving units of a window are known as **sashes** and move within the fixed frame. The **sash** may consist of one large **pane** of glass or may be subdivided into smaller panes by thin members called **muntins** or **glazing bars**. Sometimes in nineteenth-century houses windows are arranged side by side and divided by heavy vertical wood members called **mullions**.