



# City of Shelby Design Guidelines

CITY OF SHELBY HISTORIC DESIGN COMMISSION 2024

PERSPECTUS

*“When a historic building is maintained and periodically rehabilitated, the financial benefits of that investment are not the owner’s alone. Adjacent building owners, nearby businesses, and local government all receive monetary benefit. The entire place within which the historic property exists benefits.”*

DONOVAN RYPKEMA, *THE ECONOMICS OF HISTORIC PRESERVATION*

## **Acknowledgments**

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*This publication is made possible in part by a grant from the National Park Service, U.S. Department of the Interior, administered by the State Historic Preservation Office of the Ohio History Connection. This program receives federal financial assistance for identification and protection of historic properties. The U.S. Department of the Interior prohibits discrimination in departmental federally assisted programs on the basis of race, color, national origin, age or disability. Any person who believes he or she has been discriminated against in any program, activity, or facility operated by a recipient of federal assistance should write to: Office of Equal Opportunity, National Park Service, 1849 C Street, NW, Washington, D.C. 20240.*

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# 01

## Historic Preservation in Shelby

### Purpose

The City of Shelby recognizes the value of the City's historic, cultural, and aesthetic heritage being among one of its most valued assets. The care for and use of its historic buildings can enhance economic development and revitalization, promoting the health, prosperity, and general welfare of the people of Shelby. Contributing to a special sense of character unique to Shelby these historic properties represent the layers of historic development over the 19th and 20th centuries, which comprise the Shelby story.

City of Shelby Historic Preservation Commission commissioned Perspectus to create the City of Shelby Design Guidelines ("the Design Guidelines"). These Design Guidelines were written to help property owners make good decisions in the maintenance and improvement of their historic buildings. City of Shelby Historic Preservation Commission's goal for the Design Guidelines is also to create a useful guide for decisions made in support of projects in the downtown that contribute to the overall aesthetics and vitality of the area.

The project approach was to study a sample area of the downtown, to document the types and styles of architecture and gather a list of typical building materials. The study area was Shelby Center Historic District on the north and south sides of Main Street between 76-78 West to 21 East.

This document addresses stakeholder concerns, gathered at public input meetings, and includes a discussion of architectural styles represented in the downtown commercial buildings. A section on general maintenance is also provided in the current document. Further, resources to consult for additional information, and available economic incentives for rehabilitation have been included.

The Design Guidelines that follow serve several other purposes. The Design Guidelines provide citizens, business owners, and property owners with a history of the community and with an illustration of the types of buildings that represent Shelby's unique past. The Design Guidelines highlight different types and styles of buildings found in Shelby, and describe the historic values, influences, and features that are associated with each.

## **APPLICABILITY & PROCESS**

These Design Guidelines contain helpful information on the proper maintenance of historic materials, including metal work, brick and stone masonry, windows and doors, and roofing and rainwater systems. Lists of resources for more information are included in a bibliography and list of web-based sources.

These guidelines are intended to be an illustration of accepted national standards, such as the Secretary of the Interior's Standards for the Treatment of Historic Properties. The Design Guidelines will provide a better understanding of "best practices" of historic preservation. Although these guidelines are not officially tied to the Certificate of Appropriateness process, they can be used as a resource, in non-legal language, to guide owners of historic properties when planning work on their historic properties. See Page 9 for more information about the City of Shelby's historic preservation ordinance and how to designate local historic districts and historic structures (individual buildings).

## **HISTORIC PRESERVATION COMMISSION (HPC)**

In February 2014, the City of Shelby adopted an ordinance, 20-2014, to recognize and protect buildings and areas in the City that have a special value to the community. The Ordinance establishes a Historic Preservation Commission (HPC) and gives the City the ability to designate Historic Landmarks and Historic Districts, and review proposed changes to those properties through the issue of a Certificate of Appropriateness (COA). The HPC was established for the purpose of reviewing properties and districts nominated for historic designation, as well as reviewing proposed alterations to those properties and areas deemed worthy of preservation.

Working closely with the State of Ohio Historic Preservation Office, the legislation was carefully written to qualify the city as a Certified Local Government. This special designation allows locally designated landmarks and districts to qualify for Ohio Historic Preservation Tax Credits when certain criteria are met. Eligibility for Historic Preservation grants is another benefit of Certified Local Government (CLG status).

The HPC is a voluntary, five-member commission, appointed by the Mayor with consent of the Council. A majority of the HPC members are Shelby resident electors. The HPC reports to Council.

## **HPC RESPONSIBILITIES**

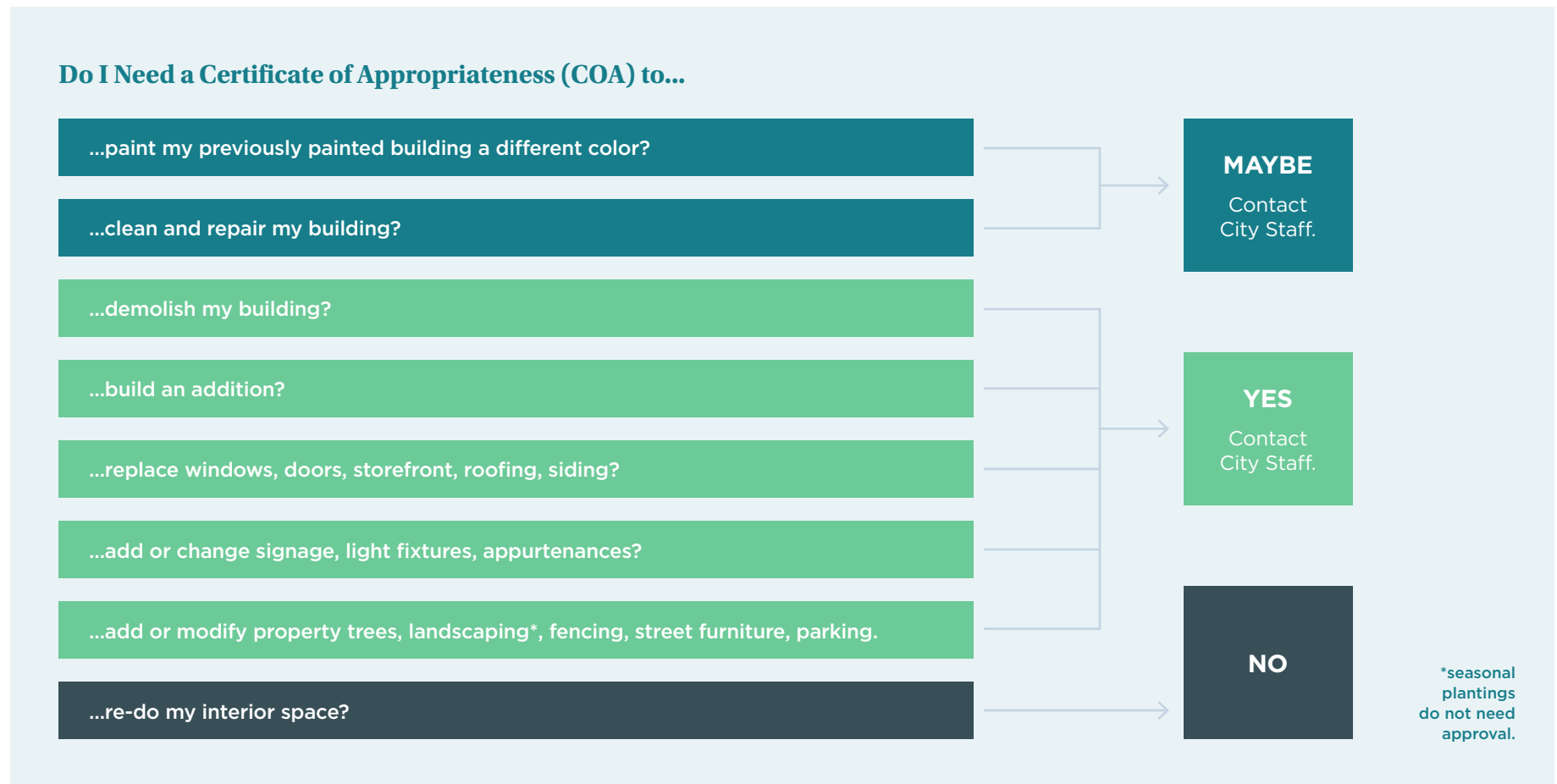
1. Issuing a Certificate of Appropriateness (COA).
2. Maintaining a list of designated Historic Properties and Districts in the City of Shelby.
3. Proposing criteria for evaluating and procedures for processing applications for COA.
4. Proposing to Council alterations to guidelines.
5. Preparing annual report for Mayor and Council.
6. Educating City residents about historic preservation.
7. Adopting by-laws.
8. Interfacing with other historic preservation organizations.
9. Enlisting professionals to assist with historic preservation efforts when HPC members do not have the needed expertise.

### A CERTIFICATE OF APPROPRIATENESS (COA)

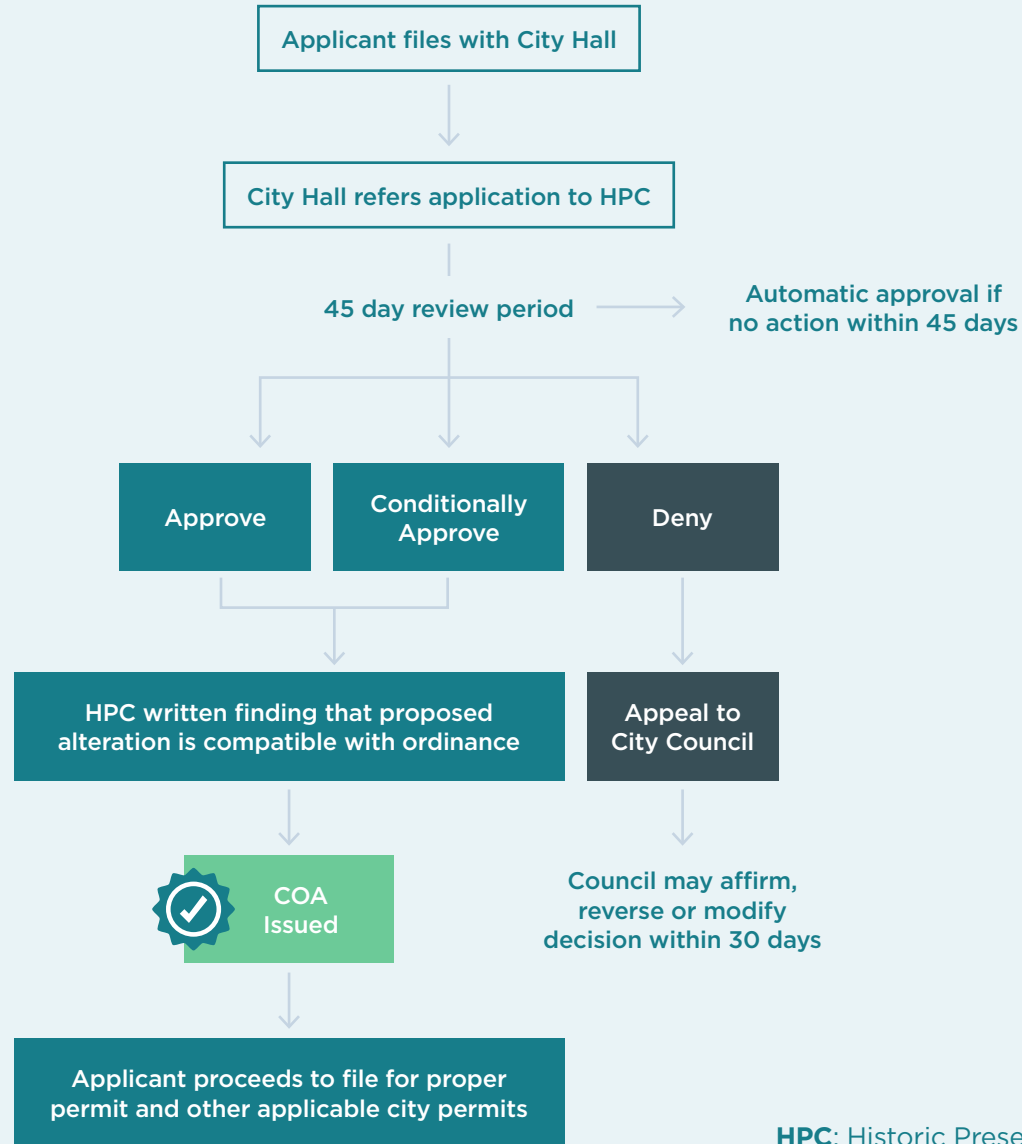
A COA is required for any exterior alteration, demolition or change to the environment of a property that is within a historic district or is a designated landmark. A COA is required prior to the issuance of a building permit and is defined in section 1433.09 of the Ordinance.

Work conducted without a COA is subject to fines. The owner of the property must be the applicant for the COA, regardless of whether they or their tenant are undertaking the cost of the work.

The procedure for a COA is to file forms prescribed by the HPC with City Hall. Applicants should contact the City of Shelby when they are just beginning to plan for a project that requires design review to facilitate the process and avoid time delays or costly design mistakes at a later date. Commission members are available to consult early in the project. The HPC has a 45 day review period after the filing.



### City of Shelby Certificate of Appropriateness (COA) Process



HPC: Historic Preservation Commission

## DESIGNATING CITY LANDMARKS AND DISTRICTS

The Shelby ordinance encourages the identification of historic properties; outlines procedures for designation of city landmarks and historic districts; and creates a review process for work done to designated properties.

**The Standards for Designating a City Landmark** are located in Chapter 1488 Section 1488.05 of the Codified Ordinances of the City of Shelby. A designated landmark is property that must have integrity of design, material, workmanship, architectural style, and have historic or cultural significance such as:

- Associated with an event or events that made a significant contribution to broad patterns of history.
- Associated with the life of a person significant to the past.
- Embodies the distinctive characteristic of a type, period, method of construction, or distinguishing characteristics of an architectural style, architect, or builder.

**The Standards for Designating a City Landmark Historic District** are located in Chapter 1488 Section 1488.06 of the Codified Ordinances of the City of Shelby. Historic Districts must meet at least one of the criteria for Historic Landmarks as well as must:

- Have defined boundaries that set the area off in relation to surrounding.
- Have a high degree of historic integrity without excessive loss of architectural or historic character.
- Have internal historic cohesiveness in the sense of shared common history, historical development according to a master

plan, shared architectural styles, or a body of architecture illustrating evolution over a period of time.

### **Procedures for Designation of Individual City Landmarks and Historic Districts**

When a proposal to designate an individual property as a landmark is received from a property owner or initiated by the Commission with permission of the property owner, the Commission shall consider the proposal in terms of criteria specified in Section 1488.05 of the Codified Ordinances of the City of Shelby and make a recommendation to City Council for approval.

The procedure for proposed individual landmarks recommended to City Council for the local list of historic places is detailed in Section 1488.07 and includes:

- Notification of the property owner(s) by personal service or certified mail of the date, time, and place of a public hearing on the proposed designation. The property owner(s) and the public may respond in writing or in attendance.
- No sooner than 30 days after the notice to the owner(s) and publishing a legal notice in the local newspaper, the Commission shall conduct a public hearing to review written comments and open comments.
- After the hearing and with no objection by the property owner(s), the Commission forwards a copy of the minutes along with its recommendations to City Council.
- City Council shall vote by motion on the proposed designation of property at the next regular City Council meeting.

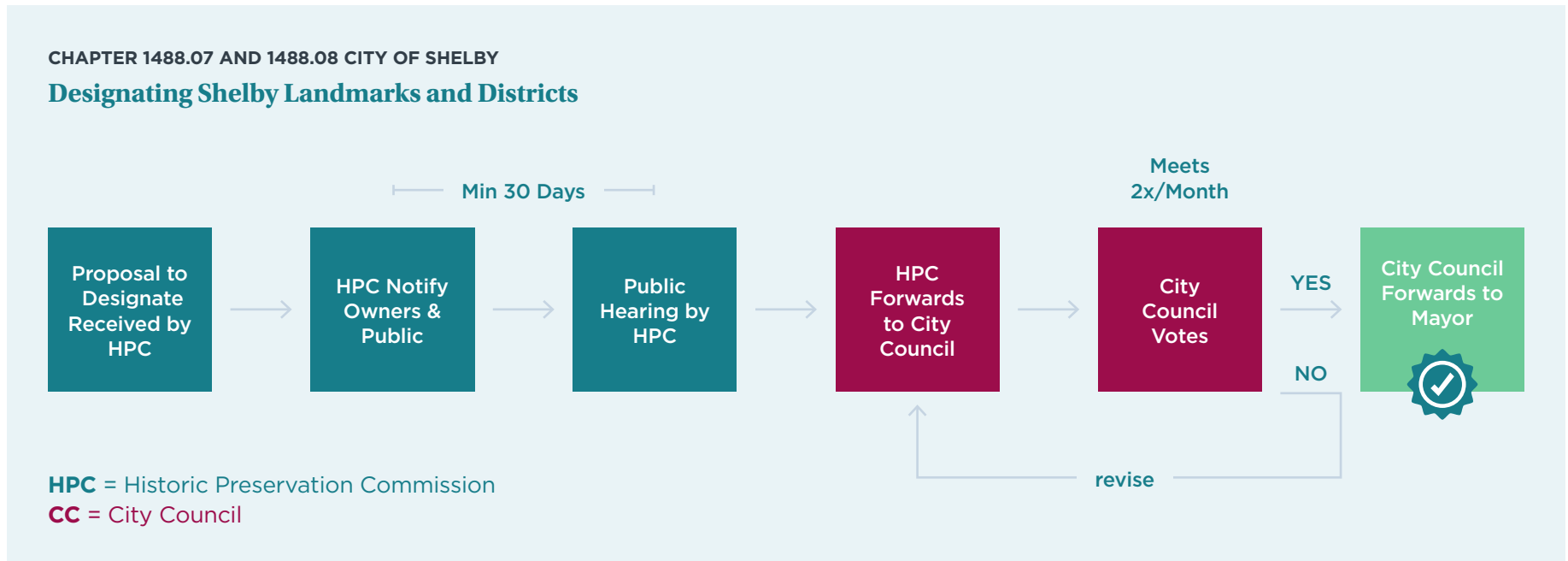


- If Council does not approve the nomination, and if the property owner(s) does not object, the Commission may revise and/or resubmit the nomination with additional supportive information and notify the property owner(s) of the date Council will act on the re-nomination.
- After approval by City Council, the Clerk of Council shall notify affected property owners(s) of the decision in writing, add the

individual landmark designation to the list of same, and forward a copy of the information to the Mayor and pertinent city personnel.

- The Commission may recommend that City Council remove from the landmarks list properties that no longer meet the criteria.

Refer to the following flow chart for an illustration of this process.



## Benefits of Design Guidelines

These Design Guidelines have been produced for Shelby, tailored to this community's needs and historic fabric. It is a working tool to help illustrate and summarize best practice that follows national standards for historic preservation. These Design Guidelines will be updated on an ongoing basis. The goal is to simplify and make owning and maintaining historic buildings a less daunting task.

Communities which value historic preservation see the benefits of:

- Higher property values which retain value during economic fluctuations
- Increased business traffic in historic downtown areas – customers enjoy shopping, dining and doing business in areas that are meaningful, attractive and well kept
- Sharing their local history with residents and visitors who value learning about the past
- Using economic incentives for historic preservation through State and Federal Historic Tax Credits;
- Qualifying for Block Grant Funds; American Rescue Funds; Private Foundations; Façade Grants

## Overview of the National Register of Historic Places

The National Register of Historic Places is the nation's list of properties recognized by the National Park Service (U.S. Department of the Interior) as being worthy of preservation for their local, state, or national significance. They must be significant in areas of American history, architecture, archeology, engineering, or culture. The program in Ohio is administered by the State Historic Preservation Office, referred to as SHPO.

In general, properties eligible for the National Register should be at least 50 years old, retain their historic integrity, and meet at least one of the four National Register criteria. Benefits of listing in the National Register include recognition of a property's significance which can lead to greater awareness and appreciation for the property; eligibility for use of the 20% Historic Rehabilitation Federal Tax Credit; and a certain level of protection through reviews of federally funded or assisted projects that might have an adverse impact on the property. Additionally, many public and private funding programs use the National Register listing as a prerequisite for funding.

Listing in the National Register is honorary only; it does not prevent the owner of the property from maintaining, repairing, altering, selling, or even demolishing the property with other than federal funds. It does not obligate the owner to make repairs or improvement to the property, nor does it automatically make it subject to local design review.

For more information about the National Register program, contact the Ohio State Historic Preservation Office.

## Shelby Historic Commission Authority

National Register listing alone does not trigger the COA process, only local designation. Contact City Hall for the list of locally designated historic properties.

# Shelby Commission's Review Area



NOT TO SCALE

# 02

## Shelby History & Development

### Context

The City of Shelby is located 12 miles Northwest of Mansfield in Richland County. The area of Shelby is about 6.5 square miles. Located to the north is Plymouth, to the east Ganges, to the south Bethlehem, and to the west Tiro.

Running through the city, the Black Fork River travels North/South directly through the center of town parallel to S. Gamble St. Two main railroad lines travel through the city at north/south parallel with S. Gamble St and Northeast/Southwest crossing near the Northeast boundary of Shelby. Visitor traffic comes in from the nearby highways, Ohio State Route 39, 61, and 96.

The downtown district is in the middle of the City of Shelby. It extends 7 blocks east/west and 2 blocks north/south. Most of the heavy industrial areas are located on the north, west, and east sides of the city. The residential areas of Shelby are primarily concentrated to the South of State Street and distributed to the east of Broadway Street and West of Gamble Street.

### Early Settlement & Founders

The first settlers in the area known today as Shelby were the Stephen Marvin, Eli Wilson and Henry Whitney families, coming from Fairfield County, Connecticut in April of 1818. Other settlers came to the general area a few years earlier and settled north and east of town, including Stephen Marvin's father Isaac Marvin and family. To the west lied the Wyandot Indian reservation at the crossing of two Indian trails along the Black Fork River. The early settlers quickly erected log cabins and used their trades to survive in the wilderness - Marvin as a tanner and shoemaker, Whitney as a blacksmith and Wilson as a carpenter.

Revolutionary War veteran James Gamble and his son John came to the area from New York and in 1824 bought land from the Wilsons. The Gambles built a horse-powered gristmill to grind grain and corn for the growing community. The area became known as Gamble's Mill.

Gamble's Mill was listed as a government Post Office in 1827. In 1834, James Gamble platted the first formal lots (23) of land on

the south side of West Main Street. In 1836, the name was officially changed to Shelby, Ohio, after General Isaac Shelby.

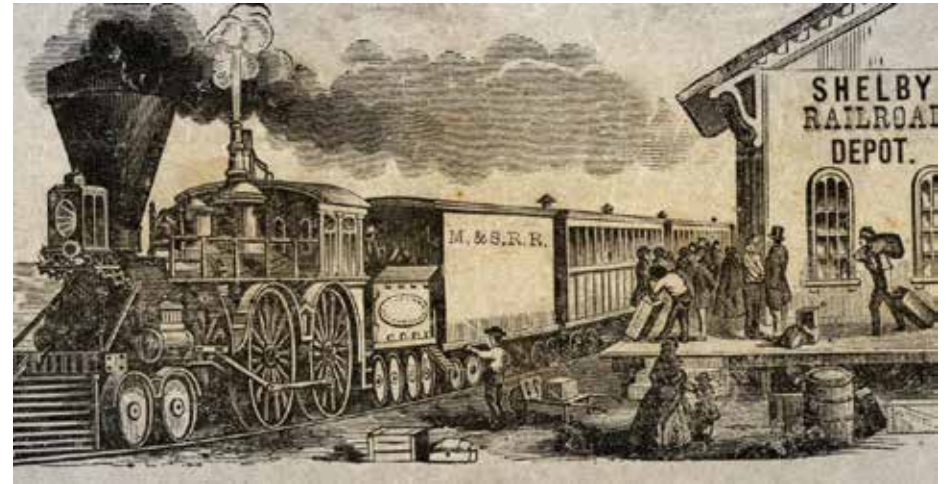
Eli Wilson built a saw mill on the Black Fork River in 1824 and homes began to be built of sawn lumber instead of log cabins. Stephen Marvin's house on 57 Gamble Street (1833) and Eli Wilson's house on 26 Mansfield Avenue (1833) are still standing as examples of New England-style Federal architecture.

The settlement became a village in 1854, with William Hiles as the first mayor. By 1870, The population of Shelby was 2,000 and by 1900, the population had doubled. The village officially became a city and adopted a charter in 1921.

## Railways

The arrival of the railways in Shelby created more opportunity for growth. The Sandusky, Mansfield and Newark Railroad was the first to arrive. Eli Wilson was named a commissioner when the company was formed. Others wanted to route the tracks through Ganges, but Wilson persuaded the company to build the tracks right by the front door of his mansion. The route became the Baltimore & Ohio in 1869 and is currently called Ashland Railway. In 1848, work began on the Cleveland, Columbus, Cincinnati & Indianapolis Railway, known as the "Big Four" line.

With the addition of the two railroads through Shelby, raw products could be delivered, and finished goods could easily be shipped throughout the nation. Notable extant buildings from the 1860s-1870s include: Mickey Building (62 West Main, 1868); First National Bank (60 West Main, 1871); Daily Globe (37 West Main, 1871); W.A. Shaw Building (northeast corner of W. Main and S. Gamble, 1876).



Historic newspaper showing Shelby Railroad Depot. [https://www.richlandsource.com/area\\_history/underground-railroad-unscheduled-cargo-in-shelby/article\\_3f993de4-dd8a-11e6-8043-1f7332f4dd48.html](https://www.richlandsource.com/area_history/underground-railroad-unscheduled-cargo-in-shelby/article_3f993de4-dd8a-11e6-8043-1f7332f4dd48.html)

In 1904, an interurban line was completed from Mansfield to Shelby. It entered Shelby from the south on the west side of the B & O railroad until reaching Tucker Avenue. Turning west and then north on Mack and High School Avenues, it then continued beside the Black Fork until reaching the station on Mohican Street. A rail route was established between Norwalk and Plymouth in 1903/04 and was completed to Shelby in 1904/05. In 1934, the interurban in Shelby was decommissioned due to the growing means of alternative transportation. In its heyday, the interurban provided transportation for many out-of-town factory workers, as well as shopping and entertainment in nearby towns.

## Bicycle, Steel Tube and Other Industry

In the late 1880's, the bicycle craze was sweeping the country. The only source for steel tubing was from England, which was very expensive to import. Henry Lozier and Joseph Yost, who owned a bicycle manufacturing company in Toledo, traveled to England and secured jobs in a factory to learn the trade, then brought the technology back to the United States. Local salesman Jonas Feighner learned of their plans and started to raise money to bring the steel tube company in Shelby. Feighner, and Civil War veteran

and businessman Capt. David L. Cockley, raised \$37,000, enough to bring the factory to Shelby. In March of 1891, the Lozier-Yost Seamless Tube Works was opened. Within six months, the name was changed to Shelby Steel Tube Company and Cockley became president.

The seamless tube company spurred development of downtown Shelby; overnight the rural community became an industrial town. By the fall of 1891, the factory was making 12,000 feet of tube weekly. By 1897, the company became part of a trust that acquired five competing steel mills. In just ten years after the company was formed, the trust produced 90 percent of the seamless tubing in America.

The original factory burned down in 1908. The parent company, United States Steel Corporation, decided not to rebuild the factory, meaning many Shelby citizens would lose their main source of



Historic photo showing the Shelby Steel Tube Company Fire, June 18, 1908. <http://sites.rootsweb.com/~ohscogs/Indusries/ShelbySteelTube2.html>

income. But within a year, citizens raised funds to build a new factory, built on the land of the original factory. Through the years, the company also made bicycle parts, automotive parts, and airplane framework, including the frame for the Spirit of St. Louis, which flew nonstop from New York to



Historic postcard showing Shelby, Ohio's Baltimore & Ohio Railroad Station. <https://www.pinterest.com/pin/348817933618917977/?lp=true>

Paris in 1927. The company still exists under the name ArcelorMittal.

Shelby's foray into the bicycle industry began in 1895 with the Shelby Cycle Manufacturing Co., locally known as the Cycle Works. The sprawling plant, nestled between the B & O railroad and the Black Fork River on Smiley Avenue, was home to the Ideal bicycle. Two Chicagoans, Thomas Jeffery and Phillip Gormully, looking to produce a mid-level bicycle to complement their pricey Rambler, moved their cycle business to Shelby to be located closer to the source of steel. Within the first year, the company made around 10,000 Ideal bicycles. The company became part of the American Bicycle Company trust in 1899. The trust fell apart within three years, but the factory closed earlier in 1901.

In 1903, Brightman Manufacturing Co. of Millersburg, bought the 80,000 square foot plant and moved their shaft manufacturing factory to Shelby. The factory burned to the ground in 1910, causing \$250,000 in damage and putting more than 100 men out of jobs.

In 1897 Adolphe Chaillet, a French immigrant and John C. Fish, of Shelby, started an association which was the beginning of Shelby Electric Company. By 1898, it was the third largest employer in Shelby. By 1907, the company completed an addition to make more

room for production and employed 400 residents. In 1914, Shelby General Electric was absorbed by General Electric due to increased cost of manufacturing, but the “Mazda” and “Shelby” name and trademarks continued to be used due to its reputation for quality.

#### **OTHER INDUSTRY**

Many other companies proudly carried the Shelby name through the years. Among them were: Shelby (Shreffler) Carriage Works (horse carriages, 1873), Shelby Motor Car Co. (cars and trucks, circa 1900), Shelby Spring Hinge Co. (door and cabinet hardware, circa 1900), Autocall Co. (signaling equipment, 1906) Shelby Tractor and Truck Co. ( 1918), Chicago Handle Bar Company (bicycle handlebars, 1904), Shelby Gum Co. (first bubble gum, 1924), Shelby Cycle Frame Builders (bicycle frames, 1921) and the Shelby Cycle Co. (Shelby bicycles, 1925). Many of these companies located here because of the seamless tube industry and were built near rail transportation.

Notable extant buildings from the 1880s-1890s include: Phalen Building (southwest corner of W. Main and S. Gamble, 1880); Brickley Building (northwest corner of W. Main and S. Gamble, 1895). Notable extant buildings from the 1900s include: Shelby Telephone Company (northwest corner of W. Main and Water, 1900); Masonic Temple (21 E. Main, 1902); and the K Building (155 W. Main, 1920).

### **Business**

One of the first stores in Shelby, a general store, was built by Charles Post in 1832 on the northwest corner of Main and Gamble streets. Post merged his building with the hotel next door which was built by John A. Duncan and they formed Duncan & Post in 1832.

The first permanent doctor, Dr. Calvin McMillen from Trumbull County, Ohio, arrived in Shelby in 1847.

In 1868, The Farmers Exchange Bank was opened by T. Mickey and Co. This was the first organized bank in town and was located on the southwest corner of Main and Gamble Street; it is still extant today.



Historic photo of the Shelby City Mills, circa 1896. <http://sites.rootsweb.com/~ohscogs/Indusries/Industries-CenterMills-CityMills.html>

Two other buildings in the historic district were banks until the early 21st Century. The First National Bank on the southeast corner of Main and Gamble streets was opened on April 9, 1872; it is still extant today. The Citizens Bank began in half of the Sutter Furniture building in 1893. In 1911, a grand neo-classical building was built on the corner of Main and Washington Streets. The building is currently The Vault Wine Bar.

Shelby Mutual Insurance Company was in existence for more than 100 years, starting in 1880 as the Mutual Fire Underwriters Association of Shelby, Ohio. Within five years, the name was changed to Shelby Mutual Plate Glass, then went through many name changes to reflect the types of insurance sold. To celebrate its 50th anniversary, a new building was built at 23 W. Main Street. The building was originally part of the historic district but was torn down after flooding. In 1953, another building was built at 19

**HISTORICAL POPULATION  
OF SHELBY, 1860–2020**

Census	Population	%±
1860	1,003	
1870	1,807	
1880	1,871	
1890	1,977	
1900	4,685	
1910	4,903	
1920	5,600	
1930	6,200	
1940	6,600	
1950	8,000	
1960	9,100	
1970	9,800	
1980	9,600	
1990	9,600	
2000	9,800	
2010	9,300	
2020	9,269	



Shelby Mutual Insurance  
1953 building at 19  
Mansfield Avenue. Photo  
courtesy of City of Shelby.

Mansfield Avenue, which still stands. For the 100th anniversary in 1980, a new \$10 million building was built at 175 Mansfield Avenue. At one point, more than 1,000 were employed nationwide, a third of them in Shelby. The building, now owned by North Central State College, is called the James W. Kehoe Center for Advanced Learning.

J. R. McDonald, J. S. Sabin, and Elza Slaybaugh manufactured bricks on Raymond Ave. J. K. Cumberworth made tile and brick on Third St. Many of the buildings in the Shelby Center Historic District and homes were made of local bricks from these businesses.

**Army Air Force Depot 1943**

Despite the Great Depression, the Shelby community stayed afloat. When World War II began, factories were retooled to produce wartime products. The Ohio Seamless Tube, Shelby Cycle company, and Autocall answered

the demand for tank tubes, gun shells, airplane rockets and other products. After the war, the factories returned to producing their typical products.

Because of the rail connections through Shelby, the city was selected to receive an Army Air Force Depot during World War II. The depot opened in 1943 as the 27th Army Air Force Supply Depot, then changed names several times, including Parsel Supply Depot, then Wilkins Air Force Depot. In 1944, the depot shipped 526 gliders worth \$9.2 million overseas. It was later learned those gliders were used in the invasion of Holland. The depot also shipped aircraft ties and clothing. The depot experienced its best years following the Korean conflict with peak employment of 3,300 people, from 58 towns in 15 counties surrounding Shelby. The depot closed in 1963 and is still used by several companies as manufacturing space and warehouses.



## Neighborhoods

Residential areas in Shelby sprouted as the need to house factory workers and managers arose. The first of these neighborhoods was the Gump Addition on Jeffrey and Smiley Avenues in the late 1890's. The low-cost lots afforded the Cycle Works factory workers to own homes. Factory managers lived on Marvin Avenue. An additional subdivision west of the "Tuby" (Shelby Seamless Tube) factory became Tubytown. Factory managers and owners built homes on Grand Boulevard, east of Mansfield Avenue. The Shelby Mutual Insurance Company brought mid-level managers to Shelby, creating a housing area in the 1950's in the Seltzer Park area of mid-century modern homes.

## Early Historic Preservation Efforts

Shelby took early efforts as a community to support historic preservation, following the National Historic Preservation Act of 1966 which established a collaborative approach to protecting historic properties. By 1979, 55 properties had been documented by the Ohio Historic Inventory Form, and by 1986 two buildings and one historic district were listed on the National Register of Historic Places. Since 2014, Shelby has continued taking steps to localize historic preservation efforts with its 2014 ordinance, the 2015 formation of the Historic Preservation Commission, and in 2017, Certified Local Government (CLG) status was granted. Becoming a CLG is an important step; through this certification process, local communities make a commitment to national historic preservation standards. This allows the community to access CLG grants to carry out historic preservation activities.

In 2019, the City completed the Historic Preservation Plan and by 2024, the city will have created Design Guidelines.

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### Sources

Compiled by Tom Clabaugh and Christina Drain

Newspaper articles on <http://marvin.advantage-preservation.com/>

<https://www.shelbyohiohistory.com/>

<http://shelbycity.oh.gov/community/history>

# Chronology of Styles & Types

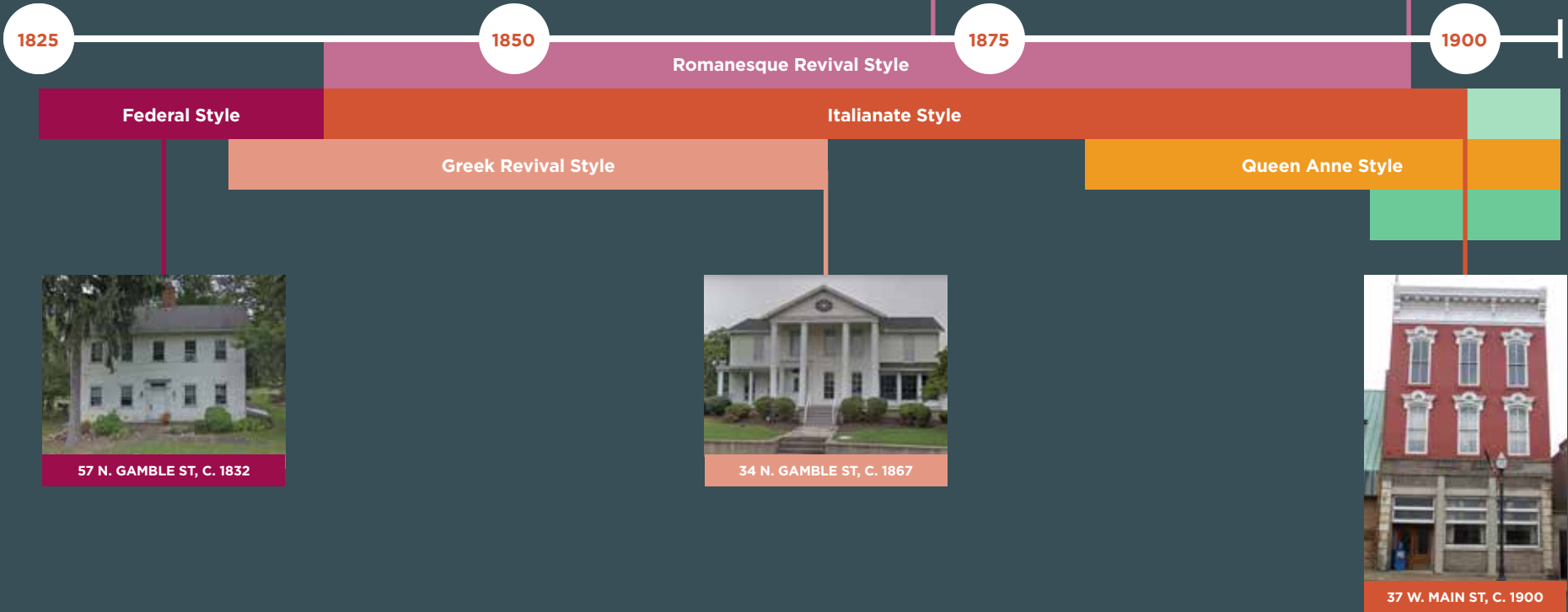
This timeline shows examples of different architectural styles and building types in Shelby and the time period to which these styles and types generally date. A “style” is a trend in design influenced by the popular culture of the time. “Typology” refers to building form including overall shape, massing, roof type and plan.



14 E. MAIN ST, C. 1872



69 E. MAIN ST, C. 1897





73 W. MAIN ST, C. 1915

1925

1950

1975

Early 20<sup>th</sup> Century Two-Part Commercial Style

Post war, Baby Boomer period

Neo-Classical Style

Cape Cod House Type

Ranch House Type



29 W. MAIN ST, C. 1912

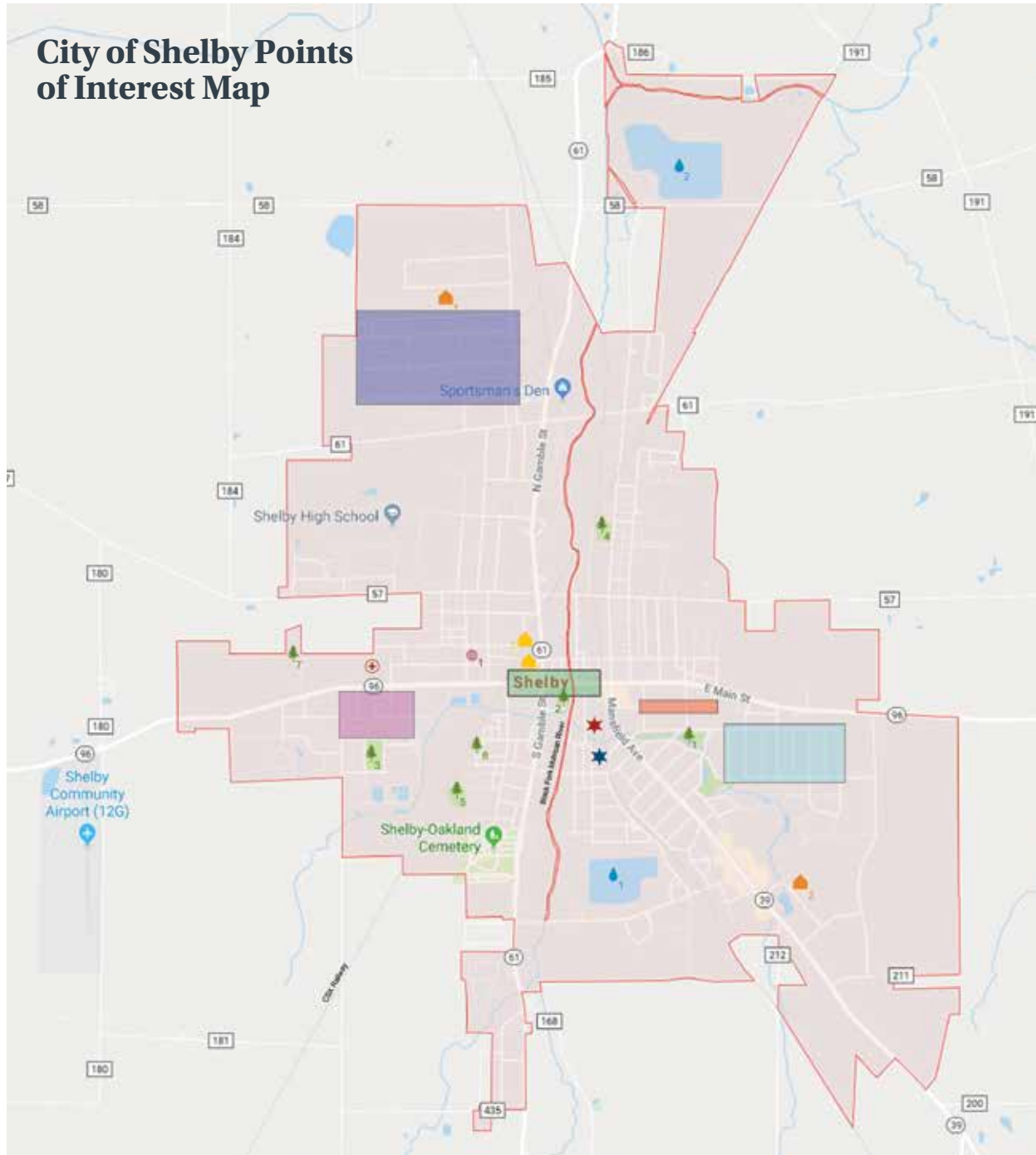


20 VERNON AVE, C. 1944



46 LOUISE DRIVE, C. 1961

# City of Shelby Points of Interest Map



## Legend

- 1. Seltzer Park
- 2. Black Fork Commons
- 3. Veteran's Park
- 4. McBride Park
- 5. Conley Field
- 6. Easterling Park
- 7. Rabold Park
- 1. Shelby Upground Reservoir 2
- 2. Shelby Upground Reservoir 3
- 1. Most Pure Heart of Mary Church (National Register of Historic Places)
- Shelby Fire Department
- Shelby Police Department
- Shelby Hospital
- 1. Pioneer Career & Technology Center
- 2. North Central State College
- 1. Shelby City Hall
- 2. Marvin Memorial Library
- Shelby Center Historic District
- Potential Mid-Century Housing District
- Potential Tuby Town District
- Potential Wilkins Air Force Depot District
- Potential Grand Boulevard District

# 03

## Illustrations of Styles & Types

### STYLES AND TYPES IN DOWNTOWN SHELBY

“Styles” refer to trends in design that were influenced by the popular culture of their time period. They reflect fashion, as well as political and social influences of the day. “Typology” refers to the building form and the traditional methods of construction, typically handed down through generations. Typology can also refer to the original use of the building, such as a commercial building, church, school, barn, depot, mill or residence.

The architectural style of a building is defined by the floor plan and three- dimensional shape of the structure, and expressed through its details including windows, doors, chimneys, porches, and ornament. Architecture of Shelby is characterized by the styles listed. Styles of commercial typologies are addressed. Dates refer to the era of popularity in Shelby and in Ohio.

<i>Style</i>	<i>Dates</i>
<b>MID 19TH CENTURY</b>	
Italianate	1840 - 1880
<b>LATE 19TH CENTURY</b>	
Romanesque Revival	1840 - 1900
Eastlake	1880 - 1890
Queen Anne	1880 - 1905
<b>EARLY 20TH CENTURY</b>	
Neoclassical	1895 - 1950
Craftsman / Arts & Crafts	1900 - 1925

## Italianate (1840–1880)

The Italianate style was very popular for commercial structures during the mid- to late-19th century. English pattern books, illustrating the latest European fashions, introduced the Italianate style to America. In America, the style was adapted and embellished, making it unique to the country. American pattern books by Andrew Jackson Downing defined and promoted the Italianate style in America. The Italianate style is marked by projecting, bracketed cornices, tall and thin windows, and sometimes round-arched windows with surrounds or hood molding.

### SUGGESTED COLORS

- Light earth tones (yellow, tans and grays)
- Sometimes reds and pinks
- Color combinations were generally simple.
- During the late Victorian period (ca. 1880), colors grew darker and richer, with greens, dark reds, browns, oranges and olives. Color combinations became more complex.

### IDENTIFYING FEATURES

1. Metal or masonry cornices
2. Tall and thin windows
3. Segmental (less than a half circle) and/or round arched window heads
4. Projecting, heavy bracketed cornice
5. Window hoods or surrounds
6. Shadows and highlights; maturing to textures and colors during the Second Empire style.



## Romanesque Revival (1840–1900)

The architecture of the Romanesque Era (A.D. 800-1150) in Europe presented Victorian builders with simple, sturdy models that could be adapted to 19th century needs. The style was most frequently used for large-scale public buildings, such as courthouses, city halls, train depots, and churches. Few homeowners chose to build in the Romanesque Revival mode.

Romanesque Revival buildings usually have compact plans and blocky massing. The single most characteristic feature of the style is the use of heavy masonry (brick or roughly finished stone) walls pierced by massive, multiple coursed round arches. Architects placed massive corner towers and lofty hip roofs to give buildings the impression of a medieval fortress.

### SUGGESTED COLORS

- Darker and richer colors
- Greens, dark reds, browns, oranges and olives
- More complex color combinations

### IDENTIFYING FEATURES

1. Grouped windows
2. Deeply recessed windows
3. Round-topped openings
4. Arches rest on columns, often columns with short proportions
5. Rough-faced masonry walls
6. Many textures of stone
7. Two or more colors



## Eastlake (1880–1890)

The Eastlake style is named after Charles Eastlake, an English architect who influenced building design through the publication of his book *Hints on Household Taste* (published in 1868). This look deviates from the curvilinear earlier styles in favor of angular, notched, and carved elements influenced by Medieval designs. Incised patterns were commonly found on hood moulds and brackets. Three dimensional ornamentation became popular to this style because of the new advances in technology for woodworking machinery, such as scroll saws, chisels, power lathes, and spindle shapers. The power lathes and spindle shapers are the two tools that made the fancy details and posts. Eastlake style ornament was applied to other Victorian buildings, primarily designed in the Queen Anne and Stick styles.

### SUGGESTED COLORS

- Dark Greens, red, rust.
- Lighter colors can be gray and white.

### IDENTIFYING FEATURES

1. Patterned hood molds
2. Dimensional ornamentation
3. Fancy spindles, posts and details





## Queen Anne (1880–1905)

The Queen Anne style originated in England under Richard Norman Shaw, who also introduced the style to America during the Philadelphia Centennial Exhibition of 1876. Pattern books detailing the design encouraged the advancement of this style across America. Queen Anne commercial buildings often feature highly decorative masonry and metal work. Projecting bays and rounded corner bays were also common, and to a lesser degree, turrets and finials. Queen Anne buildings typically have larger one-over-one windows, but can also have colored glass in the upper sash, or groups of windows in a Palladian motif. Patterned masonry and narrow mortar joints paired with very smooth faced (hydraulic pressed) brick were typical. Stonework was typically rock-faced or carved. In later examples of the style, classical columns and the aforementioned Palladian windows were indicators of the “Free Classic” subclassification of the style. Colors cover a broad range, with dark greens, reds and rusts, as well as lighter colors such as gray and white. Examples of Queen Anne in Shelby represent high-style urban examples with more restrained decorative details executed in masonry with pressed metal ornament.

### SUGGESTED COLORS

- Darker and richer colors
- Greens, dark reds, browns, oranges and olives
- More complex color combinations

### IDENTIFYING FEATURES

1. Large 1/1 or grouped windows
2. Deeply recessed windows
3. Curved glass windows, especially in curved bays and turrets
4. Classical details (in late examples)
5. Smooth brick with narrow joints
6. Textured or rough-faced stonework
7. Two or more colors



## Neoclassical (1895–1950)

Neoclassical style sparked interest after the 1893 World's Colombian Exposition in Chicago and the 1901 Pan-American Exhibition in San Francisco. Famous architects of that time showcased their dramatic designs of white colonnaded buildings. The buildings of the exposition were monumental and inspired many commercial and public buildings thereafter. During the first half of the 20th century, the Neoclassical became a popular style for domestic buildings throughout the country. The first wave of these buildings occurred from 1900-1920 and displayed hipped roofs, elaborate, classic columns, and pedimental entries. The second phase happened from 1925-1950, which included side-gabled roofs and simple columns.

### SUGGESTED COLORS

- Lighter, cooler colors such as cream, yellow, and white

### IDENTIFYING FEATURES

1. Roof supported by columns, or suggestion of
2. Pediments
3. Rectangular windows
4. Symmetrically located windows
5. Ionic or Corinthian capitals, or suggestion of
6. Dominant front porch



## Craftsman / Arts & Crafts (1900–1925)

The Craftsman style was part of an international movement with William Morris (1834–1896), a 19th century English designer, championing the movement through his philosophy, style and art. The Craftsman style in the United States was inspired by two California brothers: Charles Sumner Greene (1868–1957) and Henry Mather Greene (1870–1954). Their designs were influenced by the English Arts and Crafts movement and Oriental wood architecture.

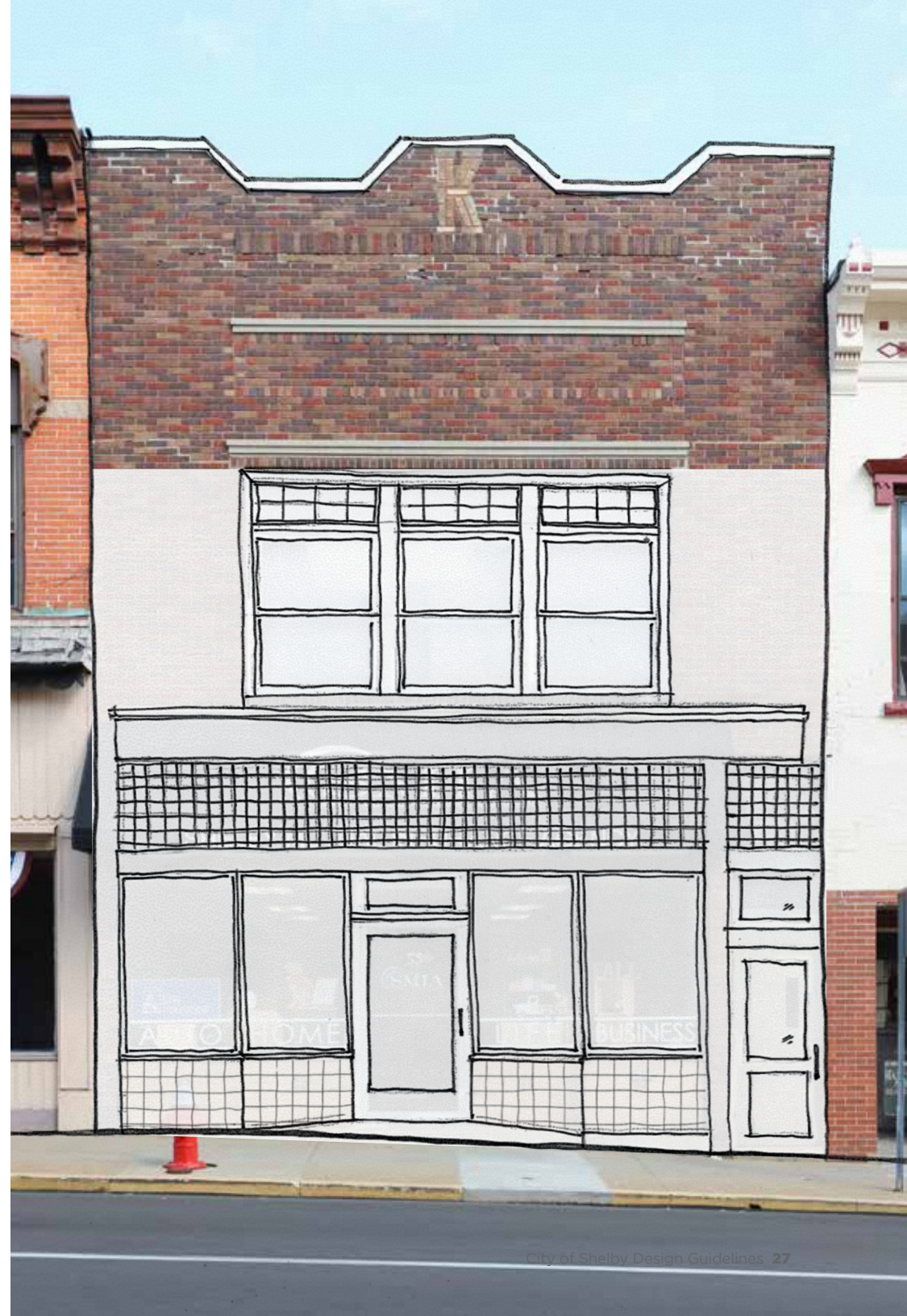
The designs focused on the natural beauty of the materials, and detailed craftsmanship with simple, clean lines. Ornamentation was kept to a minimum. Publications of Greene & Greene’s designs in magazines such as the Ladies Home Journal and Good Housekeeping helped to popularize the style. Furniture manufacturer Gustav Stickley (1858–1942) published a popular magazine called the Craftsman, featuring both architectural and furniture designs. The style became so prevalent that a flood of pattern books were produced. Some companies, such as Sears, offered entire packages of pre-cut lumber, doors, windows, plaster, trim, and fixtures.

### SUGGESTED COLORS

- A broad range of colors
- Dark greens, reds and rusts, as well as lighter colors such as gray and white

### IDENTIFYING FEATURES

1. Low pitched wide gable
2. Simple craftsmanship



# 04

## Guidelines to Changes for Shelby Center Historic District

A historic building can still grow, change and adapt while maintaining its unique character. In preservation terms, this is known as rehabilitation. This section focuses on the exterior, public facing elements, but can be applied to interior historic fabric as well.

Rehabilitation is defined as maintaining or returning a historic building to a state of usefulness while preserving the design elements that give the building its essential character. Rehabilitated buildings are modern, functional, safe, and efficient, while retaining the ornamentation and stylistic elements that make them special.

When planning a rehabilitation project, and before proposing changes to the building, take a moment to understand the "Elemental Prioritization" (Chapter 5): the historic building's placement, form, solid/void relationships, facade organization, materials, and details. The following chapter organizes facade elements in this sequence, and addresses design, function and maintenance for each. The "General Recommendations" section identifies treatment options for specific scenarios, such as missing elements, deteriorated elements, non-original elements, salvage of materials, and guidelines for treatment in terms of design and maintenance.

The guidelines in this chapter include:

### GENERAL RECOMMENDATIONS

#### 1 BUILDING PLACEMENT

- Streetscape
- Landscape
- Parking
- Sustainability

#### 3 SOLID/VOID PATTERN

- Storefronts
- Doors & Entries
- Upper Floors
- Windows

#### 4 FACADE ORGANIZATION

- Cornices, Friezes and Parapets

#### 5 MATERIALS

- Foundations
- Exterior Walls

#### 6 DETAILS

- Ornamentation
- Paint Color
- Exterior Lighting
- Signage

# General Recommendations

## CARING FOR SHELBY'S HISTORIC STRUCTURES

- Avoid adding elements to a building that were not originally present.
- Inspect and maintain building elements on a regular basis. See section on General Maintenance & Repairs.
- Repair before replacing elements or materials. Replacement is an option only after other possibilities have been considered.

## MISSING ELEMENTS

- Replace or reconstruct the missing element using materials that are compatible with the original as closely as possible.
- If no evidence can be found to document the element's original appearance, the replacement should be consistent with the building's size, scale, and materials. The replacement should be simplified to avoid creating a detail that may not have been part of the original design and creating a false sense of history.
- Examining other buildings of the same architectural style can help determine what may be appropriate.

## DETERIORATED ELEMENTS

- Repair deteriorated elements as soon as possible to prevent further damage or loss of material.
- If a historic element is deteriorated beyond repair and removal has been approved, document with photographs and measurements before removal. Then reproduce the element, approximating the original design and materials.

## NON-ORIGINAL ELEMENT

- If an element has been previously replaced, consider retaining the existing element if it is unique, aesthetically complements the building, or is a good example of what was in style in its own time (i.e., a well-designed and constructed 1880s façade on an 1840s building).
- If the element is considered inappropriate for the building, replace the element with one that is appropriate, or if it can be removed without damage and the original is extant.
- Avoid giving a false impression of historic character by use of ornament not appropriate to the time period and stylistic influences.

## SALVAGE MATERIAL

- Avoid adding elements to a building from other structures. This generally creates a false history and would be inappropriate.
- Respect each building for its own design and style. If salvage material is used for repairs, such as old brick that matches the correct size and color, it is appropriate to mark the salvage items on the back so that they can be identified later.

## SUBSTITUTE MATERIALS

- The National Park Service devotes an entire Preservation Brief to "The Use of Substitute Materials on Historic Building Exteriors." This brief stresses that substitute materials should match the historic materials as closely as possible and should not cause damage.
- Substitute materials may be considered if the historic materials and/or skilled craftsmen are unavailable, there are inherent flaws in the historic materials, and/or there are code-related changes.



### PLACEMENT: SITE CONTEXT

While the primary emphasis of these Design Guidelines is the rehabilitation and new construction of buildings in Shelby, there are other elements of the environment which contribute to its historic character and also deserve attention. Elements that can complement or detract from building placement include the various parts of the streetscape, including sidewalks, trees and shrubs, parking areas, and green spaces. Additional elements to consider as affecting the building context are fences and screening, parking, and solar panels. These elements add significantly to the total picture of Shelby's study area.

The site is a significant factor in the interpretation of a place because it is experienced at the level of the observer. For example, looking at a building from across the street provides a view of the entire facade at a scale to which one can relate. When walking past a building, the scale of the facade dramatically changes. Multi-story buildings tower above, and only the storefront and the features of the site are observed at eye level.

Responsibility for these features is both public and private, the domain of both the community at large and the building owner. Issues that come into play are maintenance, parking area screening, vacant lots, trees and shrubs, and handicapped accessibility to buildings, among others.

## PLACEMENT: SITE CONTEXT

# Streetscape

The streetscape interacts directly with the pedestrian. A combination of elements defines the streetscape and provides a setting for the building.

### RECOMMENDATIONS

- Incorporate street trees and flowers into the wide sidewalks of the commercial district.
  - Place containers at storefronts to feature additional plantings.
  - Provide benches and waste cans to accommodate shoppers and businesspeople.
  - Locate streetlights near businesses for illumination and safety.
  - Place light fixtures on the facade to provide additional light and illuminate business signs.
  - Keep street trees, planters and benches in good condition so that they can contribute to a pleasant atmosphere.
- Keep existing sidewalks and alleyways in good repair for the benefit and safety of visitors, employees and customers.
  - Make every effort to retain these features, as they add character to the building and the streetscape. If handicapped accessibility is needed, consider where a ramp may be added. Use compatible materials when constructing ramps, and keep the design simple.
  - Certain buildings are set back from the street. Be careful to retain and maintain green space or architectural features that exist in these settings, such as retaining walls, low-rise fencing, and other elements.
  - Use environmentally-friendly snow and ice removal options for sidewalks, such as sand, low chloride de-icing salt, or heated sidewalks (requires permit).



## PLACEMENT: SITE CONTEXT

# Landscaping

Shelby downtown is typical for a small city center, the built environment developed with buildings at the lot line, leaving minimal space for landscaping. The primary landscape feature is street trees, while smaller plantings such as bushes and shrubs, lawn areas, and planting or flowerbeds are less common. The responsibility for street trees typically falls to the City and should be carefully planned in placement and scale to avoid obscuring business signage while adding shade and cooling in the downtown. Smaller seasonal plantings in removable pots can add a pleasant character to the downtown environment. They should be kept to a scale that does not interfere with pedestrian traffic or views to the business show windows. Side streets, where more buildings are set back from the street, can successfully incorporate neat well-kept shrubs and lawn areas.

The National Park Service has created the Guidelines for the Treatment of Cultural Landscapes which addresses preservation, rehabilitation, restoration and reconstruction of landscapes while meeting the Secretary of the Interior's Standards for the Treatment of Historic Properties. These guidelines support retaining the landscape form, features and details as they have evolved over time. They acknowledge that rehabilitation may need to alter or add to the landscape to meet new uses while retaining the historic character. Restoration would include re-creating a landscape with new materials, primarily for interpretive purposes.

Contact Shelby for applicable guidance on landscaping.



## RECOMMENDATIONS

- Select appropriate species that will grow well in an urban setting and that will not cause problems with dropped branches and seeds, or with root systems that might affect sewer and water lines. Select native, non-invasive species. Qualified arborists or tree companies can provide advice.
- Keep landscaping materials at least a foot away from buildings, to prevent accumulation of moisture that may not dry out. Keep leaves and plant debris, as well as soil, from building up around foundations.



**PLACEMENT: SITE CONTEXT**

## Parking



The City of Shelby maintains onstreet parking throughout the study area. Considerations for parking are especially important in pedestrian-oriented settings, because the circulation pattern must accommodate automobiles with minimal infringement upon people. Parking spaces along streets have been the primary location for parking, while parking lots in commercial districts are a relatively new development. The Richland County Transit (RTC) operates numerous routes and there is a taxi service for Shelby residents within city limits through a partnership with RTC and the Area Agency on Aging.

### **RECOMMENDATIONS**

- Providing on-street parking is encouraged because this minimizes the need for parking lots.
- Parking lots should be in scale with the site, located behind buildings, and screened by utilizing structures and landscaping to minimize their visibility from streets.

## PLACEMENT: SITE CONTEXT

# Sustainability

The most sustainable building may be one that already exists. Thus, good preservation practice is often synonymous with sustainability. There are numerous treatments—traditional as well as new technological innovations—that may be used to upgrade a historic building to help it operate even more efficiently. Increasingly stricter energy standards and code requirements may dictate that at least some of these treatments be implemented as part of a rehabilitation project of any size or type of building. Whether a historic building is rehabilitated for a new or a continuing use, it is important to utilize the building's inherently-sustainable qualities as they were intended.

Passive solar energy has been understood for centuries. Building site orientation, porches, eave overhangs, window size and orientation, and thermal masses are all examples of historic building details that early builders and architects have used to capture, shield, or store the sun's light and energy. A solar energy program in a historic district should first start with understanding the historic building's natural and passive design for daylighting, heating and cooling. Often, the original details have been altered, and should be considered for restoration before adding photovoltaic (PV) or active systems.

Improved performance as well as appearance is a trend in the development of active solar energy technology. The availability of tax incentives and a focus on sustainability have also increased interest and demand for alternative energy.

When incorporating these technologies into historic districts, it is important to be sensitive to the impact of their appearance and mitigate potential damage to historic materials due to installation details.



**Above:** This historic manufacturing building uses daylighting through the use of clerestory windows along the edge of the roof.

**Left:** The Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings (2013). This Technical Preservation Services document reviews sustainability covering the following topics: Planning, Maintenance, Windows, Weatherization, Insulation, HVAC, Solar Technology, Wind Power, Roofs, Site Features, and Daylighting.

Reference NPS Sustainability Guidelines: <https://www.nps.gov/tps/standards/rehabilitation/guidelines/index.htm>



Flat roof parapet installation at Joliet Junior College.  
Photo: IMEG Corp.

Active solar technology can be separated into three basic categories. Most people are familiar with Building Applied Photovoltaic (BAPV) panels, large rigid panels of photovoltaic (PV) cells, typically mounted on metal racks at an angle on roofs and oriented to the path of the sun. Newer systems, available and in development, include Building Integrated PV (BIPV), and Membrane Integrated PV (MIPV). Building Integrated systems are thin flat panels, that can be integrated into the building wall or roof systems. They are designed and intended to be parallel or integrated to the building surface, rather than on racks mounted on the building. The most common type is BIPV glass panels that are used for curtain walls and canopies in new construction.

Another BIPV product is glass PV roof tiles. These tiles can be installed on a whole roof or integrated into a traditional tile or slate roof. BIPV roof tiles should only be used on buildings that historically would have had tile or slate roofs. Membrane Integrated PV systems are thin flexible sheets, that are adhered to the wall or roof. Depending on the application, these newer types of systems may be more appropriate for historic structures than conventional applied panels.

#### RECOMMENDATIONS

- Building Applied PV solar systems should be shielded from the public view.
- On sloped roof buildings, BAPV are only permitted on rear-facing slopes.
- On flat roof buildings with a parapet, BAPV should be located and mounted so that they are not visible from the public view.
- Active solar systems must be installed so that they do not cause damage to the historic building materials and can be removed in future without damage.
- Building Integrated PV and Membrane Integrated PV systems can be considered on public facing areas of the building, if the details are well integrated into the historic appearance and the installation does not cause damage to the historic materials.

## SOLID / VOID

# Storefronts

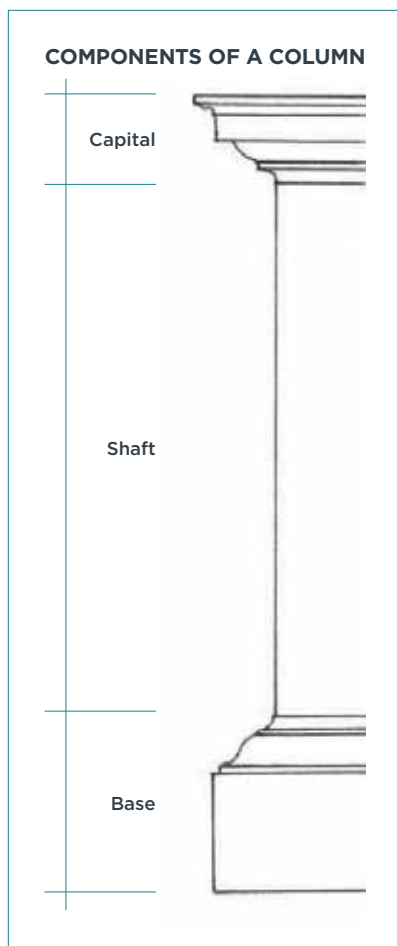
Storefronts and their windows, which have the main purpose of displaying items for sale, are a very important part of a commercial structure, and shape the pedestrian's perspective of the district. Several significant original storefronts remain in downtown Shelby, having changed little over the years. Many others have been removed altogether and replaced with new materials. Still others may yet be discovered intact behind modern coverings which currently hide them from view.

The typical 19th century storefront consists of single or double doors flanked by display windows and structural supports of wood or cast iron. The entrance is usually recessed, both to protect the customer from the weather and to provide a larger display area for merchandise. The storefront is typically designed in a three-part composition: a fairly low bulkhead of wood or metal panels at the base, large glass display windows, and transom windows at the top providing additional natural light to the interior. Transom windows were often topped by a cornice and themselves often had small panes of prism glass that gathered light and projected it toward the rear of the stores. Canvas awnings were often used to help control light and temperature in the store.

In the 1920s and 1930s, a variety of new materials were introduced to storefront design, including glass block, neon signs, architectural glass panels, and aluminum framing for display windows. The increasing use of steel frames in buildings of this period permitted storefronts to become light and airy. Doorways were often deeply recessed to provide greater display window area. Detailing was kept to a minimum as storefront design was simplified and streamlined.

COMPONENTS OF A TYPICAL LATE-19TH CENTURY COMMERCIAL FAÇADE





**RECOMMENDATIONS**

- Surviving historic storefront elements-bulkheads, wood or metal trim or window hardware, transom windows-should be retained. Such elements are part of the study area and contribute to its character and high visual quality.
- Designs for new storefronts or renovations to existing ones should be respectful of the size and proportions of elements typical of the area's older storefronts. They should, for example, have bulkheads, display windows, and transoms. The storefront must fit within the original storefront opening that is defined by end piers or columns and horizontal members. Piers and columns should remain exposed.
- Refrain from making the storefront look like a residence or office through the use of small or multi-paned windows. If necessary, screen large display windows with interior horizontal blinds or roller shades if privacy is desired for an office use.
- Traditional materials should be used when storefronts are rehabilitated or reconstructed in older buildings. Bulkheads should be paneled wood for 19th and early-20th century buildings, though ceramic tile was sometimes used, especially in the 1920s. Brick and stucco were not typically seen in the bulkhead area.
- Display windows usually were supported by fairly light wood or metal framing systems, leaving a maximum glass area. Heavy wood framing or masonry materials were not typically used in the display. Transom windows were commonly framed in wood or metal. The glass was usually clear, to transmit maximum natural light into the store.
- Use a traditional flat, sloping awning. Awnings should have a matte rather than a glossy surface. Avoid rounded or "bullnose" awnings, except at roundheaded window openings where the rounded awning shape is appropriate.
- Awning color is important. Manufacturers can provide durable, long-lasting fabric for awnings in a wide range of colors. Awning colors can be compatible with historically appropriate colors used on the building, avoiding ornate patterns or multiple colors.
- The best awning material for the downtown and residential areas is canvas that has been weather-treated for long life. Acrylic awnings may be appropriate on some industrial or warehouse structures. Aluminum should be avoided altogether as an awning material.



## SOLID / VOID

# Doors & Entries

Doors and the entries have a major effect upon a building's character. The main entrance is usually a focal point of the building and, as a result, can have a level of detailing not found elsewhere on the exterior. Many historic doors have been decorated and embellished with moldings and other decorative panels and motifs found throughout the structure. In maintaining the general style and importance of a historic structure, it is essential to preserve the value and significance of a historic entrance door.

Commercial buildings typically have one or more storefront doors and one or more secondary doors providing access to the rear of the building or its upper floors. Historically, these doors were tall and stately in proportion and built of wood with a large glass panel. Storefront doors serve an important commercial purpose in drawing the customer into the store. Secondary doors were more understated, and often were solid paneled doors or doors with glass in the upper half.

## RECOMMENDATIONS

- Historic entrance doors should be preserved and maintained whenever possible. They should be kept in operable condition, allowing for smooth opening and closing. Doors performing poorly should be rehung before shaving or undercutting. Their hardware and thresholds should be tightened and maintained.
- Historic doors that do not match the period of the structure should still be preserved as existing historic doors are more valuable and accurate than a new door designed to match the building.



- Only deteriorated or missing portions of a historic entrance door should be replaced. These replaced elements should be reproduced to match the original material and style. If replacement of the entire door is necessary, the original frame should be preserved, maintaining the dimensions and location of the door. Historic hardware and glazing should be salvaged and preserved. It is preferred that the replacement door be a replica of the historic door. If this is not possible the new door should match the style of the historic structure.
- A new entrance door to a historic building should be contemporary in design but compatible in size, scale, material and color with the style of the building. Restoration of a missing historic door is appropriate only with historical, pictorial or physical documentation. Because doors are such a prominent feature in a building, it is essential that the door, restored or reconstructed, hold the style of the structure without altering its character. For example, a residential type door should not be placed on a commercial building.
- Watch the lower parts of doors for signs of deterioration. The portion in contact with the door sill tends to absorb a lot of standing water, so it is important to keep doors well painted; or, if your door is one that historically would have been stained and varnished, be sure it has a good waterproof finish.
- Be sure that door thresholds and steps drain water away from doors as much as possible. In the winter, clear accumulated ice and snow to minimize moisture penetration when warm weather returns.
- Repair water-damaged elements as soon as possible. The lower rails of doors can be replaced; it is not always necessary to replace the entire door. A storm door - preferably a very simple one with full glazing that keeps the door fully visible - is a good way to cut down the rate of weathering and deterioration.



## SOLID / VOID

### Upper Floors

Architectural treatment of the upper floors can be quite decorative or rather plain, depending upon the period and style of the building. Upper stories in downtown Shelby are generally faced with brick and stone. Buildings dating around 1860 were simple and understated by comparison to those built closer to the close of the 19th century. A number of Shelby buildings, the majority two to three stories in height, have decorative facades from the 1870s-1890s with heavy hoodmolds around windows, intricate brickwork, and/or carved stone trim.

After the turn of the century, exterior ornamentation was again restrained, and upper floors returned to simpler designs. As the 20th century progressed, the trend toward simplicity frequently resulted in large areas of windows in relation to wall surfaces. See the separate “Windows” section in this document for further discussion.

Some upper facades in downtown Shelby are completely covered with modern metal panels or wood. While this detracts from the historic character of the area, it also causes damage to the building from anchoring techniques and moisture that is trapped beneath the modern cover.

## RECOMMENDATIONS

- Decorative features such as hoodmolds, patterned brick, or stone detail elements should be preserved and maintained. Consider a regular program of survey to be sure that joints are tight.
- Projecting elements, such as balconies or bay windows, should be repaired and retained. Periodic survey and care will prevent deterioration and allow these features to remain.
- Preservation of original windows or appropriate window replacement is very important to the character and appearance of the upper facade of a building. See the separate “Windows” section in this document for further discussion.
- If decorative upper story elements have been removed in the past, it may be possible to restore them based on photographs or physical cues (such as a paint “shadow” showing the profile of a bracket).





## SOLID / VOID

### Windows

Windows are one of the most important design elements of a building. Because they tend to be numerous and to take up a large portion of the exterior wall surface, windows have a strong influence on a building's character and quality of integrity.

The size, spacing, and proportions of the windows are determined by the overall composition of the building and its storefront. Buildings from the 19th and early-20th centuries traditionally have upper story windows made of wood which are double-hung and contain clear glass.

The number of window panes relates to the style of the building. Original window sash in downtown Shelby are generally 2 panes over 2 panes (2/2) or 1 pane over 1 pane (1/1).

The most economical and historically appropriate method for revitalizing wood and steel windows is to repair the original ones. New windows are generally heavier, with bulkier sash and muntins, and do not retain the appearance of the original windows. The older glass also has characteristic imperfections that new glass will not have.

When windows have been altered (in-filled, downsized, or replaced with contemporary windows); original window openings should be maintained at their original size. Occasionally it is necessary to replace severely deteriorated windows. It may be appropriate to use new replacement windows with the same profile as the originals. If approved, new windows need to match the profile, design, material, size, and construction of the original. New window lites should also match the existing in number and configuration. To discourage vandalism and avoid an abandoned appearance, interior window treatments may be added to unoccupied floors.

Exterior or interior storm windows are recommended to increase energy efficiency and help preserve the historic windows. Storm sash should complement the dimensions of the historic windows. Interior storms may be preferred. Storm windows must be ventilated to avoid condensation build-up on the historic sash and trim.

Other windows accessories, such as added shutters or added ornament, are inappropriate without evidence that they were originally present.

## RECOMMENDATIONS

- Retention and repair of historic wood and steel windows is always the first choice, rather than replacement. Note that historic windows may not always be original - often buildings from the early-19th century received replacement wood windows in the late-19th or early-20th centuries. These “new” windows, in turn, have been associated with the building for so long that they now are considered historic and have become a character-defining feature.
- Energy efficiency is often an issue with single-glazed historic wood and steel windows. The insulating ability of windows can be greatly increased by the use of interior or exterior storm windows. An added benefit of using exterior storms is that they protect the historic windows from weathering. Use storm windows if energy efficiency is a concern. In some cases, where the wood sash is thick enough, it may be possible to re-glaze historic windows with insulated glass units. However, do not remove old, wavy historic glass, leaded and stained glass - it must remain in place. Storm windows should have the same horizontal division as the window itself.
- If deteriorated windows must be replaced, the new windows must match the material, dimensions, profiles, and details of the historic windows as closely as possible. Do not use “snap-in” or applied muntins (the wood grid that holds the individual panes in place) to create a “historic” look —see the architectural guide for the few styles that call for multiple-paned windows. If you cannot obtain true through-the-glass muntins, windows with applied muntins (inside and out) with a spacer are preferred to one-over-one windows when historic windows were multiple-paned.
- Obtain real wood and steel windows where the original windows were wood and steel. Wood may be clad with aluminum rather than painted. However, new replacement windows must match the dimensions and profiles of the historic windows.
- Do not use a window design that is inappropriate for the style of your building. Modern tinting on window glass is not appropriate. Original window openings should not be enlarged or reduced to accommodate a new window. Replacement windows should be made to fit the existing opening exactly.
- Install shutters only if there is some evidence - old photos, surviving hinges, old shutters - that your building had them in the past. Be sure that they are the right size; they do not have to operate but must look as though they could close properly and correctly cover the opening on which they are mounted.
- Watch for peeling paint and loose glazing putty in window sash. This may occur particularly on the south and west elevations, which are the “weather sides,” the ones most exposed to the effects of rain, wind, and sun.

### WINDOW REPAIR IS BEST

Historic windows are significant character-defining features. Even if original windows are not in place, windows can be considered significant if they reflect original design intent, reflect period or regional styles or practices, reflect changes related to major periods/events, or show exceptional craftsmanship.

Every attempt should be made to retain significant windows. Repaired historic windows, with proper maintenance, can have a longer life cycle than replacement windows of low quality materials. Energy performance of historic windows can be improved with proper weather stripping and match performance of new replacement windows by adding exterior or interior storm windows. Secondary storm windows should be reversible and compatible with the original window design.

*For more information on windows, see Preservation Briefs 9 and 13, listed in Appendix C.*

A **Dutchman** (repair) is when a matching piece of good material, generally wood when talking about window, is used to patch a damaged section.

### HOW TO DETERMINE REPAIR VS. REPLACEMENT

The level of deterioration ultimately determines whether a feature warrants replacement rather than repair. Deficiencies that can easily be corrected and do not justify replacement involve peeling paint, missing putty, weathered surfaces, or small areas of decay. Solutions to these deficiencies could include routine maintenance, removal of peeling paint and repainting, stabilization of existing materials, or dutchmen repairs (see below, left).

### WHEN IS IT TOO DAMAGED?

Wood windows are considered too damaged when the wood substrate of the sills, jambs, and sashes are badly checked or deteriorated. Steel windows are damaged beyond repair when the deterioration has corroded the metal, resulting in significant loss of the metal's section and even holes through the metal's section.

### HOW TO CORRECTLY REPLACE WINDOWS

If the severity of deterioration requires replacement of a distinctive window, the new window should match the old in design, color, and where possible, materials. Replacement of missing



On buildings three stories or less, windows on primary (street facing) elevations should match in details and materials.



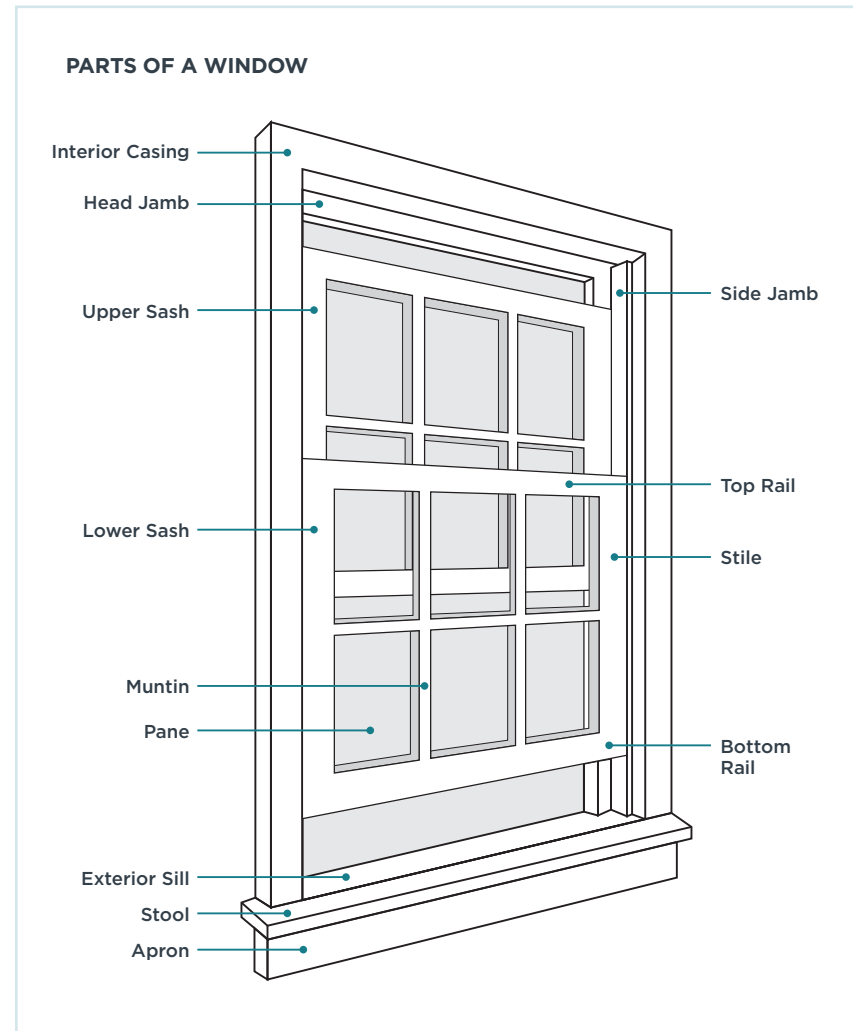
This photograph shows a window sill damaged beyond repair.

features should be substantiated by documentary and physical evidence. When considering how to replace missing or deteriorated windows, one should consider what floor level it is on, the elevation, the visibility, and the level of craftsmanship. Windows on primary (street-facing) elevations, or highly visible secondary elevations, and windows of high detail should match historic windows in details and materials.

The details which should be examined and matched include the sash, frame and casing profiles and the relationship of the glass to the opening and sash plane, along with the shadow lines.

If no historic window remains but there is evidence of the historic configuration, from photos or physical evidence, the recommendation is to replace with a compatible window of the same configuration. When no historic window remains and there is no evidence of historic configuration, the recommendation is to replace with a window that is compatible to the building, typically a 1 over 1 window.

When working on windows it is best to retain the historic or significant windows, unless damaged beyond repair. If replacement windows are needed, select ones that best match the historic windows. If historic windows are not known, select a compatible replacement. Take into consideration shape, size, color, material, and level of detail.



A six over six double-hung wood window.



## FAÇADE ORGANIZATION

### Cornices, Friezes and Parapets

Cornices, friezes, and parapets are projecting horizontal bands which appear near the top of a building. They provide a visual termination at the top of the wall. Downtown Shelby has selected late -19th and early 20th century buildings with decorative cornices of pressed metal, terracotta and wood.

During the early-20th century, parapets (a low wall that extends along the roof edge) became more common. By the 1920s and 30s, however, most cornice and parapet features were greatly simplified, displaying a minimum of decoration.

Because of their roofline location, cornices, friezes and parapets are exposed to the elements and subject to deterioration if not maintained.

## RECOMMENDATIONS

- Address cornice, frieze, and parapet repair immediately. If repairs must be delayed, take measures to keep the public safe from debris that may fall.
- If stable, avoid removing original or early cornice, frieze or parapet features. These features are an important part of the building and their removal damages the building's historic character. In addition, the roof flashing is often tied into a parapet wall and its removal could lead to moisture problems in the building.
- Be sure that cornices and frieze elements are protected and left in place during re-siding or masonry cleaning.
- Wood and metal cornices and friezes can often be painted in trim colors that accentuate their design. Stone and brick cornices or parapets should be left unpainted.
- Cornices and parapets must not be covered with non-original or incompatible materials. Waterproofing treatments can prevent the parapets from properly drying after a rain or snow fall, thereby causing more damage; this type of treatment should be avoided.
- Cornices, friezes, parapets and other roofline elements should not be added to the facade unless physical or photographic evidence indicates that the building once had them. Adding new decorative elements gives a false history to the building which is not warranted or needed.

## MATERIALS

# Foundations

Some downtown buildings have visible foundations which contribute to their physical appearance. While the foundations of many buildings are not visible and therefore not integral to the design impact of the façade, the foundation's structural role should not be forgotten. It provides support for the entire building and spreads out the building's weight with footers so that the bearing capacity of the soil is not exceeded. To prolong the life and reduce necessary maintenance on the foundation, there are a few things that can be accomplished.

### RECOMMENDATIONS

- Do not alter the appearance of an original foundation wall. A stone wall, for example, must not be covered with stucco or paint, or replaced with concrete block. This changes the original appearance, and stucco and paint may prevent the wall from drying properly when it gets wet.
- If an original foundation wall is deteriorated, attempt repair with matching materials. If original materials are unavailable or too costly, suitable modern replacements may be appropriate. Some concrete block materials, for example, may match older concrete materials fairly closely. Rock-faced concrete block might in some cases be a suitable replacement for stone, but matching color and shape of the stone may be difficult. Do not infill original basement window openings with glass blocks, because this significantly changes the character of the foundation.
- Soil, paving materials, and planting beds must slope away from the foundation to provide positive drainage. Slope toward the foundation can permit large amounts of water to soak into the foundation, resulting in a wet basement, growth of moss and mildew, and loss of support from the soil around the foundation.



- Moss, mildew, or a dark area on a foundation wall may indicate an overflowing or leaking gutter, downspout, or drain line. Watch during a rainstorm to see whether a gutter problem is causing excessive water to splash onto the foundation wall. Be sure that downspouts are connected into underground drains or empty onto splash blocks or extensions of pipe that carry the water away from the building's base. Be sure, also, that the downspouts do not empty onto pedestrian paths.
- Foundations like to breathe. The easiest way to do that is to allow 18 to 24 inches clear space from the foundation to plantings. Vines and other plants should not be allowed to grow on the foundation. If vines are a desired feature, they should be cut back to the base periodically. They will grow faster and softer if they are "clear cut." Larger plantings with more extensive root systems might require a greater distance from the foundation.
- Dirt and mulch should be piled away from the foundation as they hold dampness and often hold termites (yes, termites will go through the masonry foundation!).
- Avoid closing ventilation openings in a foundation wall, as it is important to keep the air flowing through them. Consider adding ventilation if there is none. If security is an issue, consider adding a simple iron grate in front of the opening.



- Avoid cutting new openings in foundation walls. If you do such alterations, do it with the advice of an architect or structural engineer to avoid the possibility of weakening the foundation.
- Improper maintenance or alterations to foundations can adversely affect their capacity to function properly. The building can 'settle' resulting in cracked plaster, damaged masonry, and uneven floors. It should be noted that buildings can settle immediately after their construction, causing the same effects along with pushing windows and doors out of plumb. If the initial settlement has ceased, the problems may be minor; continuing settlement is a problem for which to seek professional help.



## MATERIALS

### Exterior Walls

Common building materials, such as wood, stone, and brick, vary greatly in how they are manufactured, designed, and used. Older buildings, for example, may have walls made of hand-molded soft brick from the early-19th century, while brick from the early-20th century is typically hard-fired machine-made brick. Smooth-finished stone blocks and rough-faced, rustic-looking stone are used in downtown Shelby. Terra cotta, a brick-like molded clay material, is often used in ornamental elements.

Another exterior material is stucco, which usually was a later surface treatment intended to improve the appearance of a building; it was used on both frame and masonry buildings and could date from the late-19th century until well into the 20th century. Painted brick is yet another method which was used on exteriors, often to cover damaged or poor quality brick.

Contributing to a wall's design and integrity are the mortar joints, which perform an important function in cushioning and separating the masonry units. Mortar was designed to be softer and more permeable than the masonry units so that mortar could be easily repaired while retaining the masonry units. Skilled masons often took pride in tooling and finishing the joints, adding to the building's craftsmanship. Occasionally, the owner may find the need to repoint the mortar joints.

**HISTORIC LIME MORTAR** (See Chapter 9 for General Maintenance & Repairs) Using an incorrect approach to mortar can be detrimental to your building's masonry elements. Masonry elements include stone, brick, terra cotta, concrete, adobe, stucco and mortar. Traditional mortars used in the United States before 1900 were softer, comprised of lime putty, sand, and water. Bricks and other elements used in 19th century and earlier buildings may be made of hand-molded brick. After 1900, bricks began to be machine-made and hard-fired, better able to accept modern mortars. Around the 1930s, Portland Cement became the main ingredient in mortar, creating a harder mixture that can damage historic, softer bricks. Historic structures are dependent upon proper and successful repointing.



## GENERAL RECOMMENDATIONS

- The general approach to the exterior walls of historic structures is to maintain the original materials: deterioration slows with proper care. Brick walls need to be kept clean of salt from the winter sidewalks and vines from the summer gardens.
- It is essential to clean using the gentlest means possible. High-pressure water methods can drive water deep into the walls, causing problems on the inside of the building, and erosion and damage to the exterior. Low-pressure water wash (300 psi) and scrubbing with a natural bristle brush is often sufficient to remove surface soiling. Where isolated heavy staining from atmospheric deposits or rust occur, use of a non-acidic chemical cleaner may be helpful.
- The original wall material should not be covered. The act of covering can be detrimental to the original materials and detracts from the original design, altering the original details and the original colors and textures of the building.
- If the building has already been covered with a non-historic siding, consider removing it.
- Substitute materials such as vinyl or aluminum are not appropriate for use in the study area. Even on new construction within a historic district, vinyl and aluminum siding may not be appropriate. Refer to the National Park Service Preservation Brief #16 on Substitute Materials for further information.

## WOOD SIDING RECOMMENDATIONS

- The first recommendation is to keep existing wood siding, repairing or replacing missing or damaged pieces as needed. You may believe that replacement siding (vinyl or aluminum) is more convenient and easier to care for, but no siding is truly maintenance free. Further, installation of artificial siding may damage historic siding and trim material and may cause or conceal water problems that did not exist previously. Also, vinyl or aluminum siding does not have the character of true historic wood siding. Make every effort to retain wood siding, especially shingle and decorative siding.



- There may be instances where replacement siding is acceptable, and where installing such siding does not eliminate a building's historic character. Best practices include:
  - The new siding must simulate beveled wood siding and have the same exposure (width) and appearance as the historic siding.
  - The old siding must remain in place, so that the new siding may be removed and the historic siding restored in the future.
  - New siding may be applied only where siding exists already - it must not cover decorative shingles or similar areas; it may not be used to wrap porch columns; and it may not cover eaves, soffits, or fascias.
  - Application of new siding must not result in loss of or damage to brackets, medallions, panels, or other decorative elements; cornerboards and window trim must be left in place, with the siding ending at the outer edges of these elements.
- Substitute materials that are not acceptable are vinyl and aluminum siding. Fiber cement siding may be appropriate.
- Consider removing existing replacement siding if the original siding underneath is in good condition or is repairable. Many building owners have found that doing so greatly improves the appearance of their properties.



Historic masonry walls contribute to the character and design.

### MASONRY - BRICK AND STONE RECOMMENDATIONS

- Avoid cleaning historic masonry walls. Only if you are sure that accumulated dirt is causing damage or moisture retention should you consider cleaning. An aged patina on a masonry wall is evidence of a building's long life and should be left in place.
- If you do undertake masonry cleaning, always use the gentlest means that give the result you desire and never sandblast historic masonry. Generally it is better to leave a little residual dirt rather than giving your building too much of a "scrubbed" look. Work with a qualified contractor with experience in cleaning historic buildings. Always try plain water or a masonry detergent before moving on to harsher and more expensive chemicals. Keep application and wash water pressure below 300 pounds per square inch, especially on 19th century soft brick and many softer stones such as sandstone; higher pressures can break or gouge the masonry. Clean a sample area in an inconspicuous spot before cleaning the whole building; some cleaners will stain stone. Avoid waterproof coatings; allow the masonry to get wet and dry out naturally without the interference of a surface coating.
- Do not cut new openings or enlarge existing openings in masonry walls. Doing so can affect structural stability and strength of the masonry around the opening.
- Re-pointing of historic masonry walls must be done with a carefully-chosen mortar of the correct composition. Incorrect mortar causes the masonry units to crack and spall when they

expand and contract with heat, cold, and moisture. Later hard-fired brick can take a somewhat harder mortar, but the mortar should contain no more Portland cement than is needed to keep it from crumbling too easily. Mortar joints must be tooled in the same way as the original joints. In no case should mortar be smeared out of the joints and onto the adjacent masonry.

### OTHER EXTERIOR MATERIALS RECOMMENDATIONS

- Stucco must remain on a building that has been stuccoed, and it must not be applied to a building that has not been stuccoed in the past. Wood frame buildings that have been stuccoed were likely built that way - the stucco is the exterior surface. Masonry buildings that have been stuccoed often had their surfaces chipped or scored to hold the stucco and look unappealing when the stucco is removed. For un-stuccoed buildings, retain the exposed masonry and repair it; do not stucco over deteriorated masonry.
- Similarly, painted masonry buildings must remain painted, and unpainted ones should not be painted. Removing paint from masonry is difficult, and often it is impossible to do completely. Such work often requires harsh chemicals and can cause damage to the masonry; sandblasting must never be undertaken due to the damage it does to masonry.



## DETAILS

# Ornamentation

Ornamentation refers to the decorative elements applied to buildings to give them individuality, distinctiveness, and character. Specific kinds of ornamentation are associated with various architectural styles (see the section on Illustration of Styles & Types) and are considered to be character-defining features.

In the past, ornamentation was also a way to update buildings and make them seem more "modern." Some older buildings received Victorian-era ornamentation that gave them a more contemporary look, and these materials have themselves become significant and a part of the buildings' character over a long period of time.

## RECOMMENDATIONS

- Do not remove elements such as window and door trim, cornerboards, brackets, fascias and friezes, and similar character-defining elements. Retaining and repairing these forms of ornamentation is always the best choice. Unless an element is severely deteriorated, sometimes all that is necessary is a coat of paint.
- Some of Shelby's storefronts display tile bulkheads, tile foyers, and prism glass transoms from the early-20th century. These should be exposed and preserved wherever possible.
- Keep painted ornamental elements well-painted. Wood, plaster and metal (except copper) features should be painted. Watch for peeling paint, cracking, and other signs of weathering and deterioration. Building elements which are unpainted, such as stone lintels and sills, terra cotta, and glazed tile, should remain unpainted.
- If a decorative detail is so deteriorated that it must be replaced, be sure to use a replacement that is as nearly identical as possible in material, size, and design. Most materials can be milled, molded or fabricated today to match the original. If necessary, use a substitute material (such as fiberglass for stone features).
- Avoid adding ornamentation to a building unless physical or photographic evidence shows that it once existed. Adding unnecessary details can make a building look pseudo-historic, diminishing its true character and undermining the significance of the historic features.

## DETAILS

# Paint Color

Color is a major design element that strongly affects a building's historic character. Color is directly associated with the historic architectural style and the concurrent advancements in technology. The following paragraphs provide a general guide to residential color use in the 19th and 20th centuries. See Illustrations of Styles & Types for more detail.

Early- and mid-19th century buildings were frequently painted off-white, cream, light gray and sand. After about 1860, typical colors included greens, reds, browns and olives that were fairly dark and rich. The body color usually was lighter, with trim painted in darker compatible colors; but sometimes just the opposite was true. Color patterns were simple, usually with only two different colors used for body and trim. In the period before about 1870, muted rather than bright colors were most common.

In the years between about 1880 and 1900, when architectural designs became more complex and ornamental, color followed suit. Three colors on a single building became more common, and there was a re-introduction of lighter colors such as pale yellow or light green that had seen less use in the 1870 to 1880 period. When combined with darker colors, this created a more varied effect that complemented the generally more complex building designs. Blues and grays saw some use as trim colors but generally were not used as body colors. After about 1900, architectural design entered a period of reaction to the heavy, ornate compositions of the late-19th century. Architects used simpler, plainer designs and turned to the classical forms and ornamentation of the past. In the Renaissance Revival and other styles of this period, colors tended to be lighter and cooler, including creams, grays, yellows, and whites.



The Secretary of the Interior's Standards for the Treatment of Historic Properties recommends repainting with colors that are documented. Do not use paint colors that would not be used during the historic time period.

This trend generally continues today. People often prefer lighter rather than darker colors for both body and trim, and often the brighter colors used in the past seem wrong for today's tastes. Even on older buildings that might have had brighter colors in the past, lighter color schemes can be appropriate. In the case of brick buildings, usually the color of the unpainted brick walls forms the base or body color, and trim colors should be selected for compatibility with that body color. In general, on buildings with dark red brick walls, white window sash and dark green or black shutters and doors are appropriate. For lighter tan or buff-colored brick, and for stone of similar color, consider yellow, cream, or white trim colors.

Generally, a guideline for color is to consider the building in three parts: the main body, the trim, and the window sash and doors. The architectural style is a basis for which elements are different colors and which elements are the same. Much documentation is available for this type of information. When it is appropriate to use multiple colors for the main body, changes in color generally occur where different materials are used. Some architectural styles are distinct because of the use of accent colors. Consider the building as a whole, be selective when choosing what to accent. The key to the selection and application of colors is consistent across the facade. For example, each window sash should be the same color. Painting of brick is not recommended, but brick color should influence color selection.

## RECOMMENDATIONS

- Research the building's original paint colors as a starting point for color selection. What combinations of colors were used and in what locations? Search for old photos or postcards which can help to determine an original or early color scheme.
- Paint analysis can be done in a lab or in-situ using a microscope to examine the layers at magnification. The Ohio State Historic Preservation Office (SHPO) has a list of consultants who may provide this service.
- You can chip, scrape, or sand down through older paint layers to expose earlier colors. Remember, though, that old paint may contain lead and should be considered hazardous, especially if it is dry and powdery. Always observe safety precautions and use safety eyewear and protective breathing apparatus. It is best to employ a qualified painting contractor with experience on old paint layers for this work.
- Match color chips for color selection; most paint stores and suppliers have historic paint palettes for older buildings.
- While paint analysis to reveal original colors is often possible, such analysis is not always necessary. Conducting a bit of research into its style will give the owner a basis upon which to select colors. Finding a typical regional example of the style is an excellent guide.
- Only paint surfaces that have been painted before. Most masonry was not painted, but sometimes it was painted to hide fire damage or to improve the weather resistance of poor quality brick or stone. This was frequently true of very old Federal or Greek Revival style buildings made of soft brick.
- Similarly, do not remove paint from an already-painted building. The likelihood of damage to the underlying masonry is high, and cleaning may not remove all of the adhered paint. The simplest and least expensive option is to remove loose paint and re-paint an already-painted building.
- For unpainted buildings, let the natural colors of the brick or stone guide the selection of complementary trim colors. Avoid bright primary colors, which are incompatible with most masonry.



**Above, left:** This building has repeated the storefront colors on the upper floors to unify the façade. No more than three colors were used, on an overall simple color scheme. **Above, right:** Modern bright colors are not in keeping with historic character of 19th and 20th century buildings. Off white, light gray, sand, green, reds, browns and olives are more appropriate choices. Trim generally features darker colors.

- Keep color schemes on buildings simple, unless paint analysis and research suggest otherwise. Contrasting colors may be appropriate for ornate late-19th century buildings, but avoid too many colors on one building. The use of more than three colors is discouraged unless it can be documented.
- Use a chosen color scheme consistently throughout the lower and upper portions of the facade. Usually, the color selected for the storefront is repeated in the upper story windows or cornice, helping to unify the facade.
- Be sure to follow proper preparation procedures so that the time and effort on color selection is not wasted on prematurely failing paint.

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### General Color Reference

Moss, Roger W., and Gail Caskey Winkler. *Victorian Exterior Decoration: How to Paint Your Nineteenth-Century American House Historically*. New York: Henry Holt and Company, 1987; revised paperback edition, 1992.

Moss, Roger W. *Century of Color: Exterior Decoration for American Buildings, 1820-1920*. Watkins Glen, N.Y.: American Life Foundation, 1981.



## DETAILS

# Exterior Lighting

Exterior lighting is a necessary feature of an architectural environment. It is generally used for safety and aesthetic purposes. Lighting allows pedestrians to see where they are going, illuminating a pathway or obstacle in front of them. It instills a sense of security in people while in public spaces. Proper lighting can also provide charm and visual identity to a historic building. Brightening an inviting entry or casting light on an important architectural feature could enhance the character of a historic structure.

Exterior lighting should be used to illuminate entrances, walkways and significant architectural features, and should be appropriate and compatible with the style of the historic building. Exterior lighting might include wall-mounted fixtures; pole lights in the yard or along walks; low-level fixtures along walks and paths; and area lights on poles, exterior accessory buildings, and building walls.

When installing exterior lighting, consider the appropriateness of the fixtures for the style, design, and period of the structure; also consider the brightness of the lamps and the degree to which they might "spill" light onto adjacent properties.

## RECOMMENDATIONS

- Retain and repair historic light fixtures to the greatest extent possible. Re-wiring and re-lamping can considerably extend the life of an older fixture. Removing existing lighting could alter the character of a historic structure and is strongly discouraged.
- Simple designs usually are best when selecting new light fixtures. Do not use overly ornate fixtures and ones that are out of scale. Brightness of the lamp(s), and not fixture size, most strongly affects the amount of light a fixture will provide. Choose the smallest and simplest fixture that will give you the light you need.
- Don't over-fixture your property. Usually only two or three well-placed lights will do the job.
- Modern LED lighting on buildings, or on signs or billboards should respect the historic character of the property. If these were not used on the building during the restoration period, it is not recommended to add them.
- Replica bulbs are available in LED styles, which work well with clear glass fixtures, particularly in early-20th century buildings.
- The warmer end of the spectrum for lighting color works best with historic fabric and exteriors, as opposed to a cooler, "blue-tinge" modern light.
- New lighting installed on a structure should not cause damage to the building and should be reversible.

## DETAILS

### Signage

Signage is used to locate a business and to advertise products or services that the business offers to the public. When designing a sign, it is important to consider the building it is representing.

During the late-19th century and the early-20th century, signs were frequently integrated into the design of the storefronts and buildings. Space above the storefront was often reserved for a sign board or for a projecting sign hanging perpendicular to the storefront. Display windows sometimes held painted window signs. Fabric awnings also provided location for signage. Signs such as these might contain letters (painted or applied individual letters) or symbols which gave a quick graphic reference to the business inside. A hammer might serve as a graphic representation of a hardware store, a clock would represent a jewelry store, while a hobby horse could announce a toy store. These signs reflected appropriate treatments for signage in a commercial district through the use of quality materials and design, pedestrian scale, proportional size, and appropriate location. Electricity and the influence of the automobile brought innovations in signage. Neon and electric signs were introduced in order to capture the attention of people whizzing by in cars.

A sign that complements the building makes the business and the entire district more attractive to visitors. Signage should enhance the facade and not obscure or distract from it. See Shelby 1480.04D sign ordinance relating to historic properties and Preservation Brief 25 (The Preservation of Historic Signs).



## RECOMMENDATIONS

- Historic signage, including signs painted on the sides of buildings, should be maintained wherever possible.
- New signage should be designed and constructed using materials and methods that are consistent with the building's architectural style. Consider a sign board, projecting sign, painted window signs, or signs on fabric awnings.
- The colors on the building should influence the colors of the sign, and no more than four (4) colors should be used. Subdued colors should dominate.
- Attach signage in a way that it will not damage historic materials (i.e. on masonry structures, attach only in mortar joints).
- Consider the effects of illuminated signs, such as light pollution and unnecessary use of energy. Flashing signs are not recommended.
- Temporary signs for individual businesses should be smaller in aggregate size, limited in time in place, and follow the recommendations in the Ordinance.
- Signs for businesses in buildings that originally served as residences should be ground-mounted signs. If needed, they should only use external illumination.

# 05

## **Preservation & Design Philosophy Parallel to National Standards**

### **Preservation Philosophy**

The Secretary of the Interior's Standards for Rehabilitation summarize preservation philosophy in the United States. The standards include ten common-sense concepts that stress retention of original or historic building materials to the greatest extent possible. When elements must be replaced, the standards dictate to reference documented evidence only and to avoid creating a false historic appearance. Replacement materials should be compatible with the originals in size, color, and texture. Substitute materials such as vinyl for wood should be avoided. New additions and new construction may be distinguishable from the historic while being compatible with the existing structure or surrounding structures. Additions and new construction should be reversible, so if removed, it will not impair the historic structure's form or integrity.

Refer to the Secretary of the Interior's Standards for Rehabilitation located in Appendix B.



## Design Philosophy

### BUILDING TYPOLOGY

Successful design within an existing historic context includes both an understanding of the typology of the existing structures, as well as the meaning of their style in a place in time. Building type or typology is the form a building takes (related to its materials, function, and visual organization.) It also can describe a regional or vernacular method of building. It is important to be able to describe, critique, and prioritize components of typology and style in architecture.

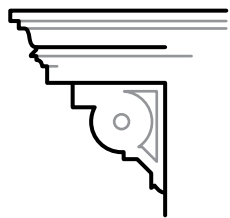
### FABRIC AND OBJECT BUILDINGS

Within the context of most downtown communities, there are two principal building categories: Fabric Buildings and Object Buildings. Fabric Buildings make up the sense of place and they define general character or fabric and set a scale for the site.

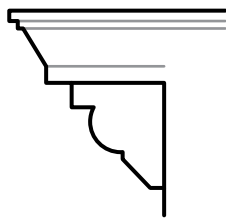
This is communicated visually through the materials which enclose the interior of a building – the structural materials, the cladding, insulation, finishes, and decorative details. Fabric buildings typically have a commercial or residential use. They are the majority of the buildings and are usually built during the same time period.

Object Buildings are buildings of cultural or civic importance and have a symbolic presence. Object Buildings can include churches, post offices, theaters, libraries, town halls, courthouses, and other civic or cultural institutions. These buildings have a variety of forms and methods of visual organization and do not necessarily blend in with the town’s fabric buildings.

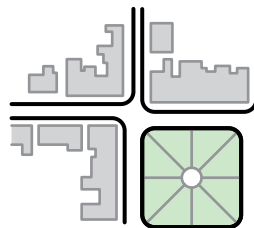
In downtown Shelby, the majority of buildings would categorize as Fabric buildings. An Object building is the historic Firehouse which stands at 10 E. Main.



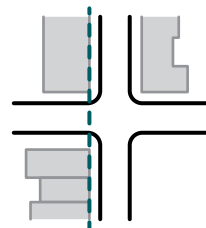
Historic



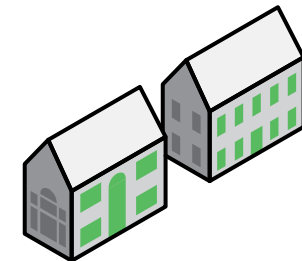
Simplified



Community Streetscape



“Built to Line” or Building Setback



If the building on the right represents the predominant solid-void pattern of the windows, the one on the left is not appropriate for the district.

## Elemental Prioritization

When considering the application of design principles to new work in an existing context, the priority of the design principles ranges from the general to the specific. A well-designed building placed poorly on the site undermines the overall design. A poorly proportioned building with elaborate details will fail to fit within an existing context because the observer sees the form first and the details second. Conversely, a building placed and proportioned appropriately with simplified or contemporary details will work well within an existing context.

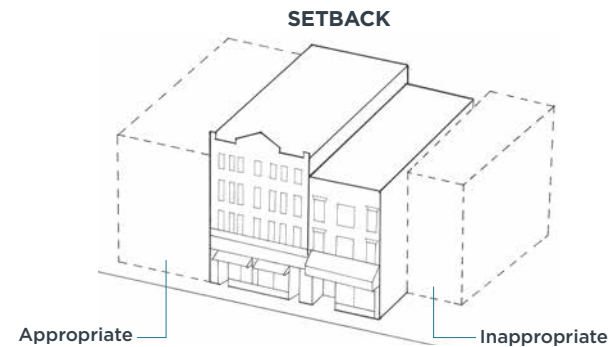
Therefore, the priority of the design elements should be as follows:

- 1 BUILDING PLACEMENT
- 2 FORM
- 3 SOLID/VOID PATTERN
- 4 FACADE ORGANIZATION
- 5 MATERIALS / COLOR / TEXTURE
- 6 DETAILS

### 1 BUILDING PLACEMENT

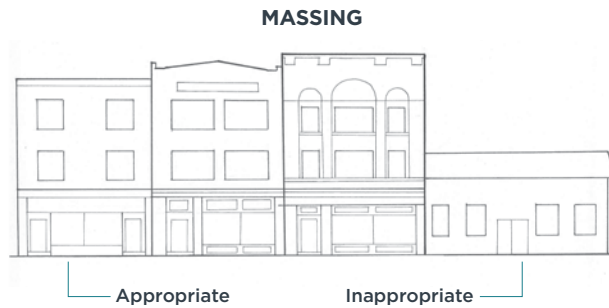
Within an existing context of historic buildings, there is a customary or prescribed building placement. It is important to respect the common setback and placement of buildings in order to maintain the continuity of the streetscape. This should be regarded as a “build to line,” as well as a “building setback.”

Consideration should also be given to the vistas both along the streetscape or roadway for structures set near the road, and from the road for structures set back away from the road. Carefully consider new construction adjacent to the existing structures: will the new construction interfere with the views?



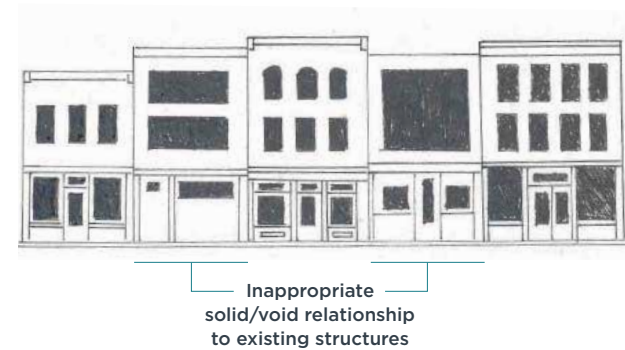
## 2 FORM

Whenever possible, the existing historic context of the building form should be respected, including the volume of the form in relation to its site. Building proportion (i.e. tall and narrow, short and wide, etc.), roof configuration (i.e. steep slope roof, low-slope roof, etc.) and lot coverage should be compatible with the dominant form on the street. Orientation of the form to the street also should be the same as the context. For example, if all of the buildings on a given street are gable-fronted facing the street, new infill buildings should have a similar form and orientation.



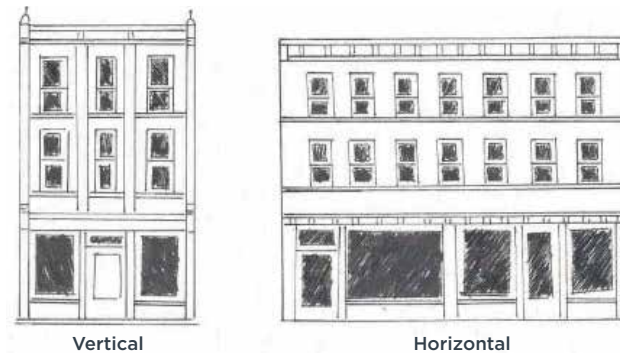
## 3 SOLID / VOID PATTERN

The ratio and pattern of wall-to-window openings is common within a given building type and age. Respecting this pattern helps to unify the streetscape.



## 4 FACADE ORGANIZATION

Horizontal versus vertical facade organization of architectural elements is usually similar within a given context. Some buildings have prominent horizontal elements such as belt courses, continuous sills or lintels, or projecting cornices or entablatures. Other buildings exhibit an emphasis upon vertical elements such as continuous pilasters that separate the facade into bays. When a dominant pattern of either horizontal or vertical organization exists in the historic context, this pattern should be imitated by any new construction.



**5 MATERIALS/COLOR/TEXTURE**

Selecting materials that are compatible in color and texture with adjacent structures helps to create a unified design within the district.



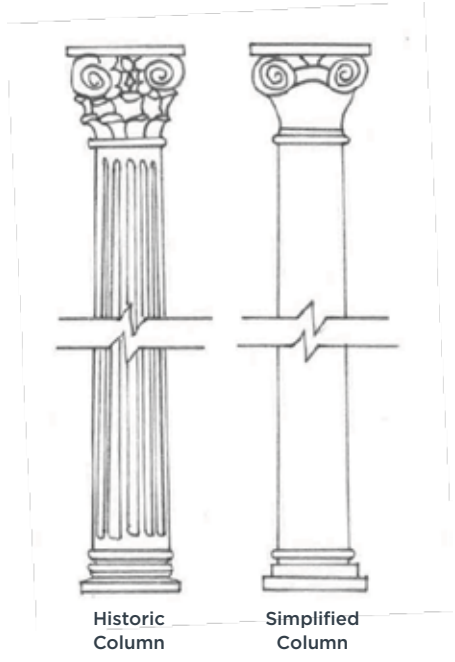
Inappropriate Materials



Left: Wayne Agency Building (Cuyahoga Falls, Ohio) before (top) and after (bottom).

**6 DETAILS**

Imitating details of historic structures exactly when creating new structures is generally not necessary or desirable. Respecting the general placement, form, visual organization, colors, and materials within a given context is sufficient to create a new building that is compatible. It is not necessary to create a replica of a historic building by copying exact details. Simplified details of similar proportions to those found within the district are sufficient.





This photo shows the elements of continuity in brick bands and matching elevation of this urban infill's side façade. The addition houses additional office space, with the newer windows aligning with the historic windows but not completely matching in size or style



An example of unsuccessful solid/void patterning in newer construction.

# 06

## Guidelines for New Construction: Historic Context

The City of Shelby has grown and evolved over the nearly 200 years since its founding. It maintained its industrial roots for decades, and flexed to also become a bustling community aiding the war efforts during the middle of the 20th century. As the City grew and prospered over these time periods, new buildings were constructed in the downtown area that reflected popular architectural styles and available building materials. The resulting collection of buildings represents several different periods in the City's history and tells the story of Shelby's history visually, through its architecture. This architectural diversity is unified, however, by several common elements:

1. Commercial façades align and form an even plane along the street, except for open spaces next to the river and community park.
2. There is consistency in overall building height, with two- and three-story buildings the most dominant. Occasional multi-story buildings (The Masonic Temple on East Main) reflect a vibrant Shelby in the early- to mid-20th century.
3. Buildings contain three parts (storefront, upper facade and cornice), unifying the streetscape.

Historically, builders in downtown Shelby keyed their designs to what had come before, building upon existing traditions. New

buildings were designed to fit into, and enhance, the existing architectural framework. Building design today should be guided in the same way, taking cues from the visual patterns and physical character of surrounding buildings.

New construction may take the form of:

1. **An infill building** closes a gap in a row of commercial facades, constructed on a site with one or more of its walls adjoining buildings on adjacent sites. The infill site is vacant because it was either never developed or a building was removed from the site.
2. **A new free-standing structure** is on an open site some distance away from neighboring buildings. It may be acceptable to construct a freestanding building on the site of an underutilized parking lot.
3. **An addition to an existing building** connects to that building on one or more elevations and levels.

In downtown Shelby, opportunities exist for all three types of construction, although demolition of an existing historic structure to accommodate new construction should be a last resort. The goal of new construction should be visual compatibility with the existing architectural and historic character of the area.

## Recommendations for New Construction

The construction of new buildings in Shelby to fill existing gaps in the streetscape should be encouraged when the construction supports economic development or when vacant, existing buildings cannot be adapted for new use.

As already noted, the design of a new building should be guided by its surroundings. By taking its cues from its neighbors, the new building can be made to fit into the broad visual patterns of the area. This does not mean that the styles of existing buildings should be copied, but rather that a new and contemporary building design can be compatible with the historic architecture that exists. New construction – whether infill or freestanding – should be clearly new, using contemporary materials, finishes and techniques.

Each building site and environment is unique, so there can be no hard and fast rules for new design. However, there are several important factors which should be considered when planning a new building in Shelby:

- **Relationship to the Street:** A new building should reflect adjacent structures in its orientation and placement in relation to the street. For example, most commercial facades are located at the edge of the sidewalk creating a single plane, and an infill building should reflect this even setback of the existing streetscape.
- **Building Spacing:** New construction should observe the rhythm of surrounding building spacing. Creating a continuous facade on downtown streets is appropriate for infill construction. Free-standing construction on corner lots may provide more flexibility in allowing for open space.



This historic bank has a rear addition for extra office space. The addition respects the historic building in scale and its proportion of openings, and the style and character of a more modern design.

- **Scale:** Scale refers to the perceived size of a structure in relationship to the typical size of a person and the surrounding structures. Pedestrian scale is created when buildings and their details are easily visible from the sidewalk and do not overwhelm the passerby. Monumental scale is just the opposite, where buildings and details are larger than human needs would dictate. Monumental scale is sometimes used to create an impression of grandeur. New construction should observe the scale of surrounding structures. In downtown, pedestrian scale is most appropriate.
- **Form:** This is defined as the external shape and configuration (building footprint, width, height) of the structure.
- **Mass:** This is the combination of forms and is associated with a perceived weight of the building.
- **Height:** New construction should be of similar height to that of adjacent and nearby buildings.
- **Proportion:** This is the relationship between the width and height of a building: tall and narrow, low and squat, square. New construction should employ proportions similar to those of adjacent buildings.
- **Relationship of Roof Shapes:** New construction should reflect the predominant roof shapes in the area. Flat roofs are most appropriate for downtown infill construction. Roof pitches should be similar to that which currently exists.
- **Existing Addition:** Retain an addition if it contributes to the character and historic integrity of the structure.
- **Rhythm of Solids and Voids:** In a building façade, the wall areas (solids) alternate with the window and door openings (voids) to create a pattern. New construction should reflect the rhythms of adjacent and nearby structures. For example, an all-glass facade would be inappropriate when placed between two typical late-19th century commercial buildings.
- **Proportion of Openings:** The size and proportion of window and door openings in new construction should be similar to those on surrounding facades.
- **Style and Character:** New construction should be expressed in terms of contemporary design. The new building should not try to duplicate historic styles, and pseudo-historic elements should not be applied to contemporary structures to make them look older.
- **Quality** design, materials, and craftsmanship should be incorporated in additions and new construction.
- **Materials, Textures and Colors:** New construction in Shelby should reflect the historic materials, textures and colors which exist, including natural brick, natural stone, cast iron, painted wood, pressed metal, and architectural glass panels.



## Recommendations for Additions

Additions to buildings are not particularly common in Shelby today, primarily because of the tremendous amount of unused space which already exists in upper stories of existing buildings. In fact, people seeking to expand are encouraged first to look at existing space before considering an addition.

However in some cases, additions to existing and historic structures are necessary to adapt to a changing economy and new or increased demands for products and services. Additions must be considered on an individual basis because each building is unique. In the same manner, new construction should be designed specifically for the site it will occupy and relate to surrounding structures. Reference Preservation Brief 14 (New Exterior Additions to Historic Buildings).

Where additions are proposed, the following guidance is offered:

### **When designing the addition, preserve the historic character.**

The historic character of a building is revealed through its setting, shape/form, window arrangements, materials, craftsmanship, color, and interior. An addition should respect and relate to these characteristics, paying particular attention to proportion and mass to avoid overpowering the structure to which it is being added.

- Additions should have rooflines lower than the main building.
- Window arrangements should complement the historic arrangements.
- Select materials and colors that are compatible with the historic building, including brick, stone or wood. Avoid rough-sawn siding, artificial stone, or other materials which never would have been used in downtown, for example.

### **When connecting the addition, preserve significant historic materials and features.**

Connecting an addition to the historic property involves the loss of some material from the original structure. Additions should be designed to preserve significant historic materials and features with minimal damage or loss of significant materials and craftsmanship such as, but not limited to, roof shapes, window patterns, entrances, cornices, decorative molding, or glazing.

- Alterations to primary elevations should be avoided.
- Where space permits, locate an addition to the rear of the building, possibly creating a new rear or secondary building entrance.

- Avoid roof-top additions, penthouses or the creation of roof decks on downtown buildings. Such additions are incompatible with the scale and character of the downtown.
- Skylights may be added to flat-roofed buildings, but their placement and design should guard against leakage.

**When detailing the addition, protect the historical significance by making a visual distinction between old and new.** The initial thought for a design that will preserve the historic character of the structure may be to detail it using the same features as the existing structure. This design concept should be abandoned as it will make the addition indistinguishable from the historic structure, negatively impacting the historical significance of the structure. Plan the addition so it provides some differentiation in architectural characteristics.

- The new addition should complement the existing structure through simplified detailing so that it does not overpower the original structure.
- The use of pseudo-historic details and elements should be avoided.



Example of a poorly designed roof addition to an existing structure

# 07

## Accommodating Code Compliance with Historic Buildings

There are numerous myths about the building code and historic structures. The most prevalent are: “An old building cannot meet the current building code” and “It is too expensive to bring that old building up to code.”

The governing code for building construction and renovation in Shelby is the Ohio Building Code - 2021, and the IEBC (International Existing Building Code) as adopted by Ohio Building Code - 2021. It is a uniform code for commercial properties across the entire state and based on national and international codes. Except for the provisions of the Americans with Disabilities Act, building codes are not retroactive. Key aspects of safety considered by the code are: the construction materials, the building size, and the ability of the users to exit in an emergency.

It is important to note that the building codes are reviewed and updated on a regular cycle, typically every five (5) years. Your design professional, an architect or engineer, will verify the current code that is applicable to your project.

### Terms that Should be Considered

**Changes of Use** Must be reviewed by the Chief Building Official for the jurisdiction.

**Additions** An extension or increase in floor area, number of stories or height of a building or structure. Additions shall comply with traditional code.

**Alterations** Any construction or renovation to an existing structure other than repair or addition. Alterations shall comply with the requirements of traditional code.

**Existing Structure** A structure regulated by the code that was erected or one for which a plan approval has been issued. Reusing or restoring an existing structure allows you to take advantage of the special provisions in the existing building code.

**Historic Building** Buildings that are historically designated in one of the following ways will be considered a “historic building”: through an approved local designation, an individual listing with the National Park Service, or a building that is a contributing structure in a designated historic district. Special accommodations are made for things like technical infeasibility, existing circulation components that need to remain and accessibility considerations, where these items do not make the building any less safe or constitute a distinct life safety hazard.

**Compliance Methods** The code allows a designer to use one of three different methodologies when analyzing an existing structure: Prescriptive, Work Area and Performance Compliance. These compliance paths provide alternatives to traditional code. For instance, the performance compliance path utilizes a point system, allowing the building to achieve additional points where it exceeds safety requirements and deducts points where the building is deficient.



# The Application of the Americans with Disabilities Act to Historic Properties

When carrying out work on an existing public building or constructing a new public building, accommodations must be made for people with disabilities in accordance with established regulations. The Americans with Disabilities Act (ADA) is a Civil Rights Act intended to offer people with disabilities the same opportunities and enjoyment as the general public in employment, access to public buildings, and transportation. In turn, these businesses will benefit from the additional patronage. ADA applies to existing and new structures, including spaces that are leased for public use. Title V (ADA) specifically addresses building additions, alterations, and historic preservation. (Reference Preservation Brief 32 Making Historic Properties Accessible).

Title V, Section 4.1.7 of ADA “Accessible Buildings: Historic Preservation” provides some flexibility in meeting accessibility requirements where such requirements would threaten or destroy the historic significance of the building. Some provisions of ADA apply regardless of whether an existing building is undergoing a complete rehabilitation. The need to comply with ADA already exists; the need to meet the building code is triggered by a decision to rehabilitate.

## REGULATIONS FOR BUILDING ACCESSIBILITY

- ADA Accessibility Guidelines (ADAAG), 2010
- State and local building codes

**Note:** Code requirements allow for some exceptions for historic properties (See Chapter 7 on Accommodating Code Compliance with Historic Buildings). Additional information and assistance is available from the Mid-Atlantic ADA Center, funded by the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR).

Concerns about the applicability of ADA to your building, or about whether the historic preservation provisions may provide flexibility with compliance, may be addressed with an architect with preservation and compliance experience. Ramps and lifts sometimes needed to provide the disabled with access to buildings can have a significant visual impact: their location, design, and materials are important. These elements should be designed to minimize their impact on the entry facade.

The design of ramps and handrails should be simple and contemporary and not necessarily try to mimic existing handrails. Materials should be the same as or similar to those used in the building itself. Avoid non-traditional materials such as unpainted wood. Also avoid solid masonry walls, which can make a ramp much more visually prominent than it needs to be. If providing access to a building's front entrance is only a matter of overcoming a few inches difference between sidewalk and entrance, consider redoing a portion of the sidewalk so that it is sloped upward to accommodate the height difference. In such a case, a handrail may not even be necessary. Likewise, if the building is set back from the street, often the grade can be sloped to avoid the appearance of a "ramp."

Consider use of a lift rather than a ramp in some cases. Experience has shown that when the height to be overcome exceeds about three feet, ramps and lifts tend to cost about the same. A lift can be especially useful when space for a ramp is limited, or when the visual impact of a ramp would be too great.

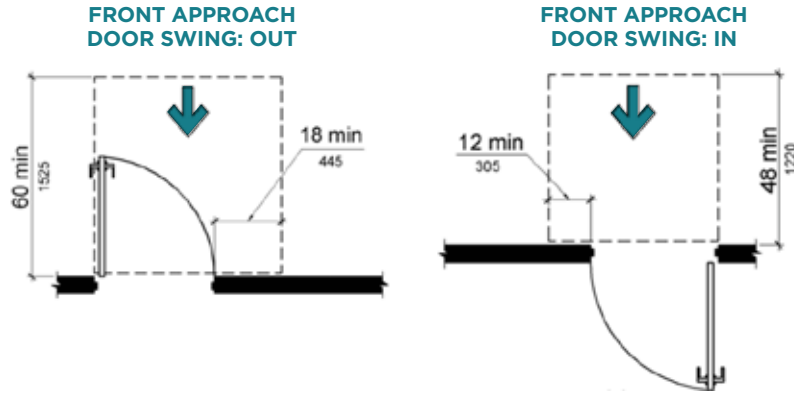


The rear entry to this historic building has added this ramp and parking space for accessibility to the main areas of the building.

# Key Accessibility Concepts

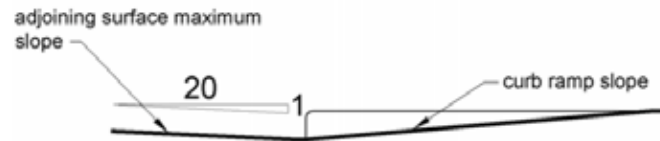
Source: 2010 ADA Standards for Accessible Design

## ACCESSIBLE DOOR ENTRY

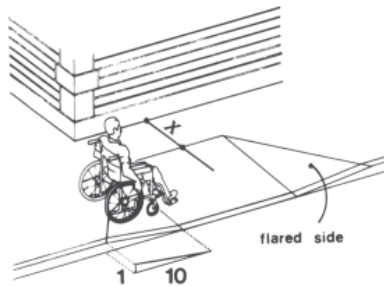


## CURB RAMP

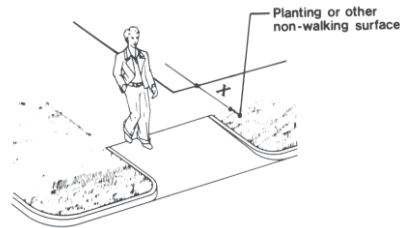
### MEASUREMENT OF CURB RAMP SLOPES



Counter Slope of Surfaces Adjacent to Curb Ramps



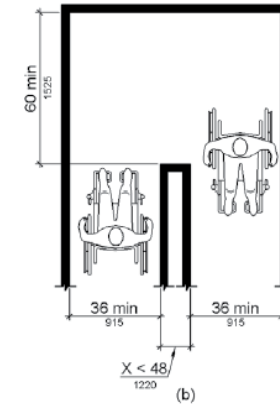
Flared Sides. X = 36" min. Where x does not meet 36" min. at top of curb ramp, flared sides shall not exceed 1:12.



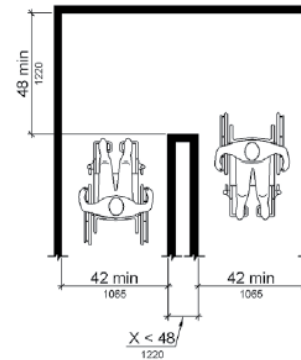
Returned Curb

## ACCESSIBLE ROUTES

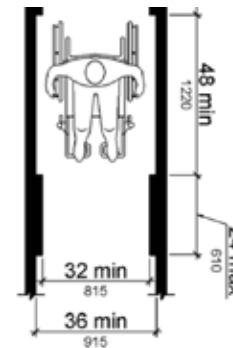
### 180 DEGREE TURN (EXCEPTION)



### 180 DEGREE TURN



### PROTRUDING ELEMENTS AND DOOR MIN. 32"



# 09

## General Maintenance & Repairs

### Continued Care

Guidelines in this section are general and intended to educate owners of historic properties on the importance of continual care of historic materials, both ongoing maintenance and targeted interventions. Historic Buildings that are within the City of Shelby require appropriate treatment to maintain integrity of the district and should comply with Ordinance 20-2014.

#### EXPERIENCED PROFESSIONALS

For assessment and treatment of a historic building's specific conditions, historic building owners should engage the services of an experienced licensed architect/engineer and/or restoration contractor.

Regular maintenance of a structure often prevents the need for costly interventions (repairs) in the future, and preserves the investment of a restoration. Maintenance items include gentle surface cleaning, removal of debris from drains, painting, and masonry repairs. Fully evaluating the building conditions before

rushing to the local store for materials will provide a more long-term remedy, instead of just a quick patch. Proper planning can often save time, effort and expense. When repairs are necessary, note the following general guidelines from this manual, as based upon the Secretary of the Interior's Standards for Rehabilitation.

When planning a repair project, keep in mind that each building functions as a system. Each of the building's structural elements – roof, walls and foundation – work together to make the building sound. The building's roof and drainage system should be in good working order to protect it from problems with moisture; the maintenance of wood and masonry wall surfaces can affect a

**NOTE:** Preservation Briefs provided by the U.S. Department of the Interior provide valuable information and guidance on maintenance and repair of historic properties and materials. See Appendix C for a list of titles.

<https://www.nps.gov/tps/how-to-preserve/briefs.htm>



Foundations may exhibit efflorescence as a result of damage from salt-based snow removal chemicals.

building's structural soundness and ability to resist weather; the foundation is a key to the stability and safety of the building.

The intention of repairs is not to make historic buildings look new, but to preserve and protect the original materials. Some signs of aging contribute to the building's character, and retaining the character of the building is the purpose of these Design Guidelines. Likewise, artificial aging should be avoided. Work performed on a historic structure should be carried out using the least intrusive and least destructive methods that will obtain the desired result. Damaged elements should be repaired rather than replaced. Where elements must be replaced, do so using materials and methods that match the appearance and quality of the original as closely as possible. The services of an architect experienced in historic building materials are often beneficial to the property owner.

### Process for Repairs

- 1 Identify the Problem** Identify the location and extent of the perceived problem.
- 2 Determine the cause of the problem** Carefully consider what may be the underlying cause of the problem.
- 3 Select treatment(s) for the problem** Choose a treatment method to remedy the problem and repair the damage.

The advice of an experienced, licensed architect, engineer, and/or craftsman may be beneficial in taking these steps.





### 1 IDENTIFY THE PROBLEM

Identification of the problem is primarily done by observation. Problem areas most often appear different in color and/or texture. A visual survey of the entire building will provide a comprehensive list of conditions. It is important to determine the extent of the problem, including the depth of the deterioration and how large an area it encompasses.

### 2 DETERMINE THE CAUSE OF THE PROBLEM

An unsightly or deteriorated area may be an indicator of a more serious issue occurring in the structure that may not be clearly visible. Therefore, determining the cause is usually more difficult than identifying the problem and requires more active investigation. The cause of the problem must be resolved before the damage can be repaired; otherwise, damage may soon reoccur. Remember that problems inside the building are often indicative of a problem with the exterior walls, roof, or foundation.

Frequent causes of problems include:

- An underlying problem (for example, insect infestation in moist wood) may have a related cause. The roof leaked, allowing the wood framing to become soaked, inviting insects that reside in wet wood.
- Inappropriate or inferior materials, especially those from prior repairs, are often more susceptible to failure than the building's original fabric. For instance, repointing a 19th century building with a high Portland cement content mortar will likely cause the low-fired, hand-pressed brick to crack, which is an irreversible problem. Another example may be replacing a six inch copper gutter with a four inch aluminum one that has the potential to fail because it is too small to carry the water runoff; it also has the potential to fail because the dissimilar metals can result in galvanic action, increasing the opportunity for corrosion and leaking.
- Poor workmanship or installation can also be a source of problems. For instance, if the flashing is not properly installed on a roof valley, water can seep into the building, soaking interior walls or ceilings, and may not be discovered until the plaster is so wet that it falls off the lath. If the gutters are installed without a positive slope toward the downspout, the building is at risk for ice dams in the winter and overflowing gutters in times of heavy rainfall.



### 3 TREATMENT(S) FOR THE PROBLEM

Some conditions initially determined to be problems may not require repair. If the condition has stabilized and it is not adversely affecting the structure, it is likely that no further work is necessary (for instance, if there was initial settlement at the time the building was erected, but no further movement in the last 80 years, there is probably nothing to warrant concern.) If the condition is worsening or the structure has been compromised, repairs must be made to prevent further damage to the building (for instance, if the initial settlement was so drastic that a crack extends through three wythes of brick and the plaster, allowing water to enter the building, then perhaps there is reason for concern.)

In light of the concept of pursuing the lowest level of intervention possible, the treatments should be considered in the order of least invasive first. Can we repair the crack inside? Can we repair the crack on the outside and repair the plaster on the inside? Might we replace the outside wythe of brick and repair the rest? Might we replace two wythes of brick and cut out the damaged plaster to replace that portion of the wall? It should be understood that the least invasive methods are generally the best for the historic structure, as well as the best economically.

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

The Shelby Design Guidelines are based upon national standards:

- Retain the character of the historic structure.
- Artificial aging should be avoided.
- Use least intrusive, least destructive methods.
- Damaged elements should be repaired rather than replaced.
- Meet quality and appearance with repairs or replacement.

See Appendix B for the full text of the Secretary of the Interior's Standards for Rehabilitation.

# Masonry

Brick and stone are two of the most durable historic building materials; however they are still susceptible to damage caused by inappropriate repairs and cleaning methods.

## REFERENCE PRESERVATION BRIEFS:

- #1 “Cleaning and Water-Repellent Treatments for Historic Masonry Buildings”
- #2 “Repointing Mortar Joints in Historic Masonry Buildings”
- #6 “Dangers of Abrasive Cleaning to Historic Buildings”
- #38 “Removing Graffiti from Historic Masonry”
- #39 “Holding the Line: Controlling Unwanted Moisture in Historic Buildings”

## IDENTIFY THE PROBLEM

Indicators of problems in masonry include, but are not limited to:

- Bulge in the wall.
- Cracks in the masonry.
- Deteriorated or spalled masonry.
- Open joints.
- Dirt or stains (discoloration).

## DETERMINE THE CAUSE OF THE PROBLEM

The majority of problems in masonry are caused by movement or moisture. Movement may be due to settlement of the building over time or compromised structural elements such as window and door headers. Movement can also be caused by the vibration of trucks passing by buildings located close to a road. Movement in a masonry building is most evident by a bulging wall or cracked masonry (for example, a step crack that extends from opening, to opening, to top of the wall.)

Moisture can travel up walls through capillary action (wicking), run down walls from gravity, or enter walls from the interior through condensation caused by a difference in temperature between the interior and exterior of the building. Excessive moisture is often present where masonry is deteriorated or spalled, and is often marked by a darker shade in color caused by dampness or a white haze caused by efflorescence (salts that leach from the masonry.)

Dirt and staining are primarily an aesthetic concern and rarely cause damage to masonry. Exceptions to that statement include years of accumulated carbon deposits from industrial pollution, and some forms of biological growth. Stains may include rust and copper from adjacent metals, graffiti, paint, oil, tar, and organic matter such as moss and algae.

### TREATMENT(S) FOR THE PROBLEM

There may be multiple masonry problems that need to be repaired, and it is often beneficial to do each of the repairs in one project for the sake of time and money. Prioritize the order of repairs according to the following list:

- Repair sources of excessive water (i.e. leaking gutters, downspouts, flashing, vapor penetration from the inside).
- If the building is to be cleaned, undertake cleaning prior to minor masonry repairs or repointing. Exception: Areas of extensive masonry damage that may allow water into the wall during cleaning should be repaired first.
- Repair damaged masonry and repoint as necessary.

### CLEANING

It is important to determine if cleaning is absolutely necessary as it can be very harmful to masonry, especially when improper methods are used. Still, there are times when cleaning masonry is needed or desired. When cleaning masonry, identify the type of soiling to be removed in order to select an appropriate cleaner. Conduct a variety of sample tests to determine the gentlest method possible to obtain an acceptable level of cleanliness. Sandblasting or high-pressure water blasting should never be used on masonry because these abrasive cleaning methods can remove the outer surface of the brick (the "fire skin"), permanently damaging the brick, and making the brick more susceptible to deterioration.



Displacement of brick by movement in the parapet wall.



Deterioration of brick caused by moisture is marked by discoloration and brick erosion.



Damage to brick caused by sandblasting.

# Mortar

Traditional mortar was composed of lime putty, sand, and water. Portland cement was patented in Great Britain in 1824 and became commonly used in the United States in the early-20th century. Initially, Portland cement was used as an additive to speed the set time of the traditional mortar. By the 1930s, it became a main ingredient, producing a harder mortar. The significance of the difference in compressive strength between traditional and modern mortars is critical when working on a historic structure because of the damage that modern mortar can cause to the historic masonry. In addition, caulking is generally an inappropriate treatment for masonry-to-masonry joints. The integrity of the masonry wall and the historic structure is dependent upon proper successful repointing.

Repointing is most often necessary where masonry repairs are required. Mortar joints provide level bedding for masonry units, and they absorb stresses in the masonry due to expansion, contraction, moisture migration, and settlement. The appearance of mortar joints also contributes to the aesthetic quality and character of the building. Mortar was designed to be softer and more permeable than the masonry units so that mortar could be easily repaired while retaining the masonry units.

**REFERENCE PRESERVATION BRIEFS:**

#2 “Repointing Mortar Joints in Historic Masonry Buildings”

**IDENTIFY THE PROBLEM**

Indicators of problems in mortar joints include, but are not limited to:

- Disintegrating mortar.
- Cracks in mortar or open mortar joints.
- Loose masonry units.
- Damp walls.
- Damaged finishes on interior.

**DETERMINE THE CAUSE OF THE PROBLEM**

Problems in mortar joints are often caused by structural movement, moisture, or improper mortar composition and placement. The causes must be addressed prior to repointing.



Incorrect use of mortar can impact the aesthetics and character of a building.

### TREATMENT(S) FOR THE PROBLEM

After addressing the cause of the problems, the first step of beginning a repointing project is to analyze the historic mortar to determine its physical and visual characteristics. A sample of un-weathered, original mortar establishes the parameters for the new repointing mortar. If the building owner is pursuing historic rehabilitation tax credits, the mortar should be analyzed by a qualified laboratory to determine its composition.

- Repointing mortar should match original mortar in composition, color, texture, and tooling. (Sand defines the color and texture).
- Joints should be raked out and gently cleaned to a sufficient depth so that the repointing mortar can key into the existing remaining mortar and masonry units.
- Repointing mortar must have greater vapor permeability than the masonry units.
- Repointing mortar must be at least as vapor permeable and soft as the original mortar.
- Repointing mortar must be softer (in compressive strength) than the masonry units.



Loose brick due to poor conditions of mortar joints (moisture and movement in masonry system).



Previous poor repointing. Repointing mortar is deteriorating due to improper execution.



Recent poor repointing. New mortar has been smeared onto the face of the brick and does not match original mortar in color, texture or tooling.

# Wood

In response to rising concerns about fire safety by the end of the 19th century, wood typically was limited to window frames and sashes, storefronts, cornices, ornament, and framing within “fireproof” masonry and steel structures. Exposed wood was painted for protection. Sometimes, wood supports and cornices were covered with sheet metal for aesthetic reasons. Wood has remained a popular building material because it is flexible, performs well structurally in tension and compression, and is easy to manipulate. Wood, however, is most susceptible to moisture-related deterioration, insect and biological attacks, weathering, and fire.

## REFERENCE PRESERVATION BRIEFS:

#9 “The Repair of Historic Wooden Windows”

#10 “Exterior Paint Problems on Historic Woodwork”

## IDENTIFY THE PROBLEM

Indicators of problems in wood include, but are not limited to:

- Paint failure (visually apparent)
- Decay/rot (soft, crumbly, or cracked wood)
- Insects (small holes and/or bore dust)
- Ultraviolet degradation (dry, gray, split wood)

## DETERMINE THE CAUSE OF THE PROBLEM

Excessive moisture is the primary cause of deterioration in wood. Moisture can cause paint failure and facilitate fungi that cause decay and rot. This makes wood susceptible to insects which feed on wet or rotting wood. Paint failure can occur when water that



has infiltrated the wood builds up behind the paint’s impenetrable vapor barrier and finally escapes, breaking the coating. Decay, also known as rot, is caused by fungi that feast on wood. Signs of decay include areas of soft, spongy, crumbling, and cracked wood. Decay may be identified by poking questionable areas with an awl or small pointed tool used for piercing holes; if the wood is decayed, it will come up in short, irregular pieces. Long, fibrous splinters typically indicate the wood is sound.

## CONDITIONS

Fungi require three conditions. If any one of the three is not present, decay can not survive, though it can lay dormant until the three conditions are again present:

1. Suitable temperatures (typically between 50-90° F).
2. A small quantity of air.
3. Sufficient moisture.

## SIGNS OF INSECT INFESTATION

- Subsurface galleries or tunnels.
- Wood bore dust, excreta, and other debris.
- Exit holes, fragments of deceased insects.

Insects are attracted to moist wood because it is soft and easy to ingest or bore through it. Wood used in the northeastern United States can be attacked by beetles, termites, carpenter ants, wood-boring bees and insects that attack just one species. Much of the damage is done while the insects remain hidden from view, but they can be identified by the evidence they leave behind.

### ULTRAVIOLET DEGRADATION

- Dry, gray wood.
- Deep fissures, split wood.
- Lack of integrity: wood will break with the grain easily in your hands.

### TREATMENT(S) FOR THE PROBLEM

If there is reason to believe that insects are present, consult a professional exterminator for advice prior to making repairs. Suitable treatments for damaged wood include consolidation and filler, patches, and full replacement. Consolidants and epoxy fillers strengthen and stabilize the damaged areas of wood and can be painted like the original wood. Damaged areas also may be replaced by patches of wood that match the original material and are installed by traditional methods such as a “dutchman.” Full replacement of wood members or elements is the extreme and should be done only when absolutely necessary.

Some species of wood are naturally resistant to decay, insects, and ultraviolet degradation. Spruce, red oak, birch, and poplar are more susceptible to decay and should not remain exposed. When replacing wood in whole or in part, it is essential to consider the original species so that the old and new elements will act in the same manner.

### STEPS FOR WOOD REPAIR

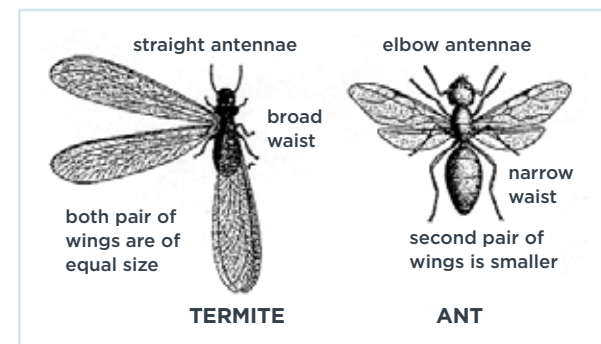
- Allow wood to be dry.
- Remove damaged areas back to sound wood. Keep in mind that the extent of the damage may have spread farther than what is visible, especially in cases of rot and termite damage.
- Make appropriate repairs, which may include using consolidants and epoxy materials.
- Treat wood with a preservative to prevent future attacks.
- Paint wood when it is required or appropriate.



Paint failure on the underside of a wood canopy.



Galleries and debris in a wood floor joist indicate insect infestation.





# Exterior Paint

The exteriors of historic buildings are painted for two primary reasons: to protect and preserve exterior building materials and to create color schemes appropriate for their architectural style and articulation. Paint is a protective coating which aids in deterring the harmful effects of weathering such as moisture, ultraviolet (UV) rays from the sun, and wind. Paint requires maintenance and renewal to ensure a building's long-term preservation, and reapplication is necessary approximately every 5-8 years.

## REFERENCE PRESERVATION BRIEFS:

#10 "Exterior Paint Problems on Historic Woodwork"

#37 "Appropriate Methods of Reducing Lead-Paint Hazards in Historic Housing"

## IDENTIFY THE PROBLEM

Indicators of problems and types of paint failure include, but are not limited to:

- Mildew and chalking (powdering of the paint surface).
- Crazeing and blistering.
- Peeling, cracking, and alligatoring (advanced crazing resulting in deep open cracks).

## DETERMINE THE CAUSE OF THE PROBLEM

Neglecting to correct the causes of paint failures and problems, or to repair deteriorated exterior materials prior to repainting, will cause new paint work to fail prematurely. Improper application of paint, general weathering, the presence of excess moisture, and moisture infiltration are the primary causes of paint failure. Leaking roofs, deteriorated flashings, leaking or missing gutters and downspouts, and overgrown vegetation are the most common sources of excess moisture that affect exterior paint.

## TREATMENT(S) FOR THE PROBLEM

It is important that a building be repainted before its paint fails and allows moisture to penetrate to the substrate, accelerating the rate of deterioration. Good surface preparation is the key to a long-lasting finish; however always use the gentlest means possible. The least amount of water should be used for the paint removal process because it will be absorbed by the wood and may raise the wood grain, or leach into the building. Open flame "blow torches," sandblasting, or water-blasting must not be used to prepare a surface for repainting.

It is not always necessary to remove paint to the bare substrate before repainting. Removal of mildew and chalking does not require paint removal; these surface deposits can be treated by gentle cleaning and preparation prior to repainting. Application of a mild non-ionic detergent and scrubbing with potable water and natural-bristle brushes often is all that is required to remove the soiling. Areas with mildew should be treated with a bleach and water solution. After cleaning, the surface can be rinsed with a direct stream of water from the nozzle of a garden hose and allowed to dry thoroughly before repainting.

Crazing and blistering can be treated with limited paint removal. Scraping and light sanding to a sound surface is the best method for repairing crazing and blistering. Although some hairline cracks and imperfections may translate through the new paint, feathering down the high points and the application of an additional coat of primer in these areas may lessen the effects.

Peeling, cracking, and alligatoring usually require paint removal down to the sound substrate. If these conditions are present only in the top layers, they can be treated the same as crazing and blistering. However, if the conditions have progressed to the bare wood and the paint has begun to fail, the paint will need to be removed by scraping, sanding, heat guns, or chemical strippers. Always test a small, inconspicuous area first.

Some basic rules should be followed when painting:

- Substrates should be sound and properly prepared.
- Substrates should be dry.
- Latex finish coats should not be covered with alkyd resin oil paints; they will not properly adhere.
- Both primer and finish paints should be from the same manufacturer and meet the manufacturer's compatibility requirements.
- Follow the manufacturer's recommendations.



**Left, top to bottom:** Mildew on painted exterior siding; Improper preparation before applying paint results in a poor finish; Alligatoring paint on exterior siding.

**Above:** Painting stone is not appropriate and could trap moisture in the stone.

## Architectural Metals

Metal is found in the decorative columns, cornices, and brackets of the late-19th and early-20th century storefronts. Of these metals, iron and steel are by far the most common, followed by copper and copper alloys, zinc, lead, nickel, and aluminum. Metal architectural features should be identified, retained, and preserved along with their finishes.

### REFERENCE PRESERVATION BRIEFS:

#13 “The Repair and Thermal Upgrading of Historic Steel Windows”

#27 “The Maintenance and Repair of Architectural Cast Iron”

### IDENTIFY THE PROBLEM

Prior to starting work, it is necessary to identify each metal element by its type and its condition so a proper treatment can be prescribed. Determining metallic composition can be a difficult process, especially if components are encrusted with layers of paint.

Indicators of problems and types of metal damage include, but are not limited to:

- Loss of anchorage to backup materials and structural failure.
- Missing elements.
- Corrosion/rust (oxidation or galvanic).
- Impact damage (dents, holes, gauges).
- Failed joints or seams; damage to connections; fatigue and creep.



### DETERMINE THE CAUSE OF THE PROBLEM

After identifying metal types and conditions, the causes of the problems must be determined before repairs are implemented. In general, the primary causes of metal deterioration and failure include high concentrations of moisture and air pollution; wind; general neglect and abuse; poor original design detailing and installation; and failure of protective finish coats.

Corrosion occurs when metals are exposed to moisture and air and it is exacerbated with the presence of high concentrations of airborne salts, sulfur, and other acidic compounds. Galvanic corrosion is an electrochemical action that results when two dissimilar metals react together in the presence of an electrolyte such as water containing salts. Corrosion is accelerated in situations where architectural details provide pockets or crevices to trap and hold liquid corrosive agents and where protective finishes have deteriorated.

Physical deterioration such as failed seams and connections and fatigue are usually caused by a combination of environmental conditions, physical stresses, and insufficient design details.



Corrosion/rust on a steel window sash resulting from exposure to moisture and air.



Galvanic corrosion resulting from a reaction between two dissimilar metals.



A corroded metal fence has failed at the connections between the railings and the post.

#### TREATMENT(S) FOR THE PROBLEM

Protect architectural metals from deterioration by maintaining protective finishes, providing proper drainage, and preventing water from standing on horizontal surfaces or accumulating in curved, decorative features. Suitable treatments for metals include cleaning and maintenance, repair, and selective replacement.

Clean ferrous metals or aluminum to remove corrosion prior to repainting or applying other appropriate protective coatings. Do not remove historic patinas found on some metals such as copper or bronze as this will diminish the metal's historic character and may accelerate deterioration.

- Test to ensure that the gentlest method possible for cleaning is selected or to determine if the cleaning method is appropriate for that particular metal.
- Clean soft metals such as tin, lead, copper, terneplate, or zinc with appropriate chemical methods to ensure their longevity and performance.

- Use mild chemical treatments for hard metals such as cast iron, wrought iron, and steel to remove paint buildup and corrosion. If hand tools are ineffective, low pressure blasting with dry grit may be used by experienced personnel. If the corrosion is minor or if its complete removal is not feasible, the application of a rust “convertor” or “inhibitor” may be advantageous.
- Newly cleaned or bare metal should be immediately coated with a corrosion-inhibiting primer before new rust begins to form.
- Apply an appropriate and compatible finish system after applying the primer. Appropriate systems for ferrous metals are zinc-rich primers (Rust-o-leum and comparable brands from many available paint manufacturers.) Aluminum, especially new aluminum, can undergo a powder-coat paint process. Sometimes an anodized pre-finished aluminum custom color will be appropriate.
- Repaint architectural metals with historically appropriate colors.
- To prevent water penetration at seams, joints, and connections, replace deteriorated or missing sealant with a high-quality architectural grade sealant.



A painted lead-coated copper cornice is missing elements due to advanced deterioration of metal.



A loose stone cornice attached by metal fasteners indicates that its fasteners have failed.



Missing elements are replaced with material to match and look like the original.

Repair architectural metal features by patching, splicing, or otherwise reinforcing the metal following recognized conservation methods and techniques.

- Minor damage or losses may be repaired utilizing epoxy resins or polyester-based patching compounds.
- Repairs may include limited replacement in kind or with small amounts of approved material. Use surviving prototypes of the original features as models (for example: cornices, balusters, or column capitals).

When architectural metal components are beyond repair or when the repairs are only marginally sufficient in extending the functional life of the member, replacement of the deteriorated element is often the only practical solution. If the metal has been deteriorated to a point where it has actually failed, duplication and replacement may be the only course of action.

- All attempts should be made to make replacements with like materials. Replacements should duplicate the appearance of the existing original element by matching the composition of the original and its size and configuration of details. If replacing a structural element, the structural characteristics of the original also should be matched.
- Reproductions or replacements should be based on historical, pictorial, or physical documentation.

# Tile

Tile is found in decorative columns, window, and door surrounds, along with entry floors and bathrooms. Historic tiles often have glazes fired at very high temperatures, making them an industrious and sturdy coating that could be used inside and out. Many glazes were applied over natural fired clays, and had grout with minimal percentage of sand in the mixture. At least 25 tile companies were founded in the US between 1876 and 1894. Zanesville, Ohio became the largest center for pottery and tile-making in the world – the location of facilities was dependent upon the availability of materials: ball clay, kaolin (an extender), and feldspar.

## REFERENCE PRESERVATION BRIEFS:

#40 “Preserving Historic Ceramic Tile Floors”

### IDENTIFY THE PROBLEM

Prior to starting work, identify the type of each tile by its substrate and glaze so proper treatment can be prescribed for maintenance and restoration. It is recommended to have a professional conservator of ceramics, an historical architect, architectural historian or a chemist with experience in this field be consulted.

### DETERMINE THE CAUSE OF THE PROBLEM

While glazed tiles are a practical, low maintenance material, they still are porous. After identifying the type of tile, the cause of the problems must be determined before repairs are implemented. In general, the primary causes of tile deterioration and failure include high concentration of moisture between the grout joints; damage to the protective glaze, neglect or abuse. Physical stress can also cause failures.



### TREATMENTS FOR THE PROBLEM

- Protect decorative tile by maintaining protective finishes, draining water away from the area and preventing standing water on horizontal surfaces or accumulating in curved, decorative features. Suitable treatments for tile include cleaning and maintenance, repair, and selective replacement if matching tile is available.
- Test to ensure the gentlest method possible for cleaning is selected or to determine if that cleaning method is appropriate
- To prevent water penetration at grout seams, joints, and connections, replace deteriorated or missing sealant with a high-quality architectural grade sealant.

### CLEANING

- Tiles should be vacuumed to remove dirt, and cleaned with warm water or a non-soap-based cleaner. Avoid abrasive cleaners, and test in an inconspicuous area for cleaning and stain removal products.

## Prism Glass

Beginning at the turn of the 20th century when glass manufacturing was perfected, upper sashes of storefronts featured prism glass, installed to flood the interior of stores with natural daylight, and often sold under the “Luxfer Prism Daylighting System” brand name, one of the largest dealers of this product. The prism glass was used on sidewalks, show windows, skylights, windows, floors and ceilings. The glass tile was 4” x 4” with a smooth side to the exterior and a prism side on the interior. Steel stiffening bars divided the tiles of glass and were coated with copper for longevity of the metal bar. The panels are cemented into the sash, set in the same manner as plate glass. This configuration of materials is very similar to stained glass and restoration techniques are similar. Before beginning any restoration project, identify the history and composition of the glass and document the date, maker, and style of window.

### REFERENCE

APT Building Technology Heritage Library / Luxfer

<https://www.apti.org/apt-building-technology-heritage-library>

NPS Preservation Brief #33: “The Preservation and Repair of Historic Stained and Leaded Glass”



#### **IDENTIFY THE PROBLEM**

Glass is virtually immune to natural deterioration, but is susceptible to scratching or etching or breakage. Indicators of problems with glass include, but are not limited to:

- Bulging
- Cracks in the glass
- Deteriorated structure
- Dirt or stains (discoloration)

#### **DETERMINE THE CAUSE OF THE PROBLEM**

The greatest cause of damage is physical impact. Excessive force, vibration, and normal use can weaken glass set in operable doors or windows. Cracks can result from improperly set nails or points holding it in the frame. One of the greatest threat to leaded glass is deterioration of the skeletal structure holding the glass. Wood and glazing compounds decay over time from moisture and exposure to sunlight. Steel braces and saddle bars can corrode when not maintained.

#### **TREATMENTS FOR THE PROBLEM**

Repairs should only be undertaken after accessing the condition of the glass by professionals. Minor cracks, sagging, and oxidation are part of the character of historic leaded glass and require no treatment. More extensive cracks and major bulges over 1 ½ inches may require intervention. Ongoing maintenance of the glass will prevent more serious problems. Keeping the frame maintained with regular caulking and painting, and periodic replacement of the glazing compound. Windows that leak water or rattle in the frames may indicate that the waterproofing cement and sealants have deteriorated and maintenance or restoration is needed. This requires removal of the window to make repairs on a bench. It has become a harmful practice to promote major repairs in place, but this results in only a quick fix that will require more costly work in the future.

#### **CLEANING**

Simple cleaning of the glass will allow closer inspection of the problems. Water alone should be tried first (soft water is preferable), deionized water should be used for significant glass and museum quality restorations. If this is not effective, a non-ionic detergent can be used. If the window is covered with shellac, lacquer, varnish, or stubborn grime, it may require the use of alcohol or solvents to remove. Most unpainted glass can be cleaned with acetone, ethanol, isopropyl alcohol, or mineral spirits to remove these coatings. All chemical residues should be removed with a non-ionic detergent and the glass rinsed with water. Painted glass should not be cleaned before the stability of the paint is confirmed.



# 10

## Demolition & Moving

### Demolition

Demolition of an individual building, either in part or whole, both historic and non-historic, can have a detrimental effect on the architectural character of the City of Shelby. Best practice and the most sustainable option is to adapt and reuse existing buildings, in order to reduce the carbon footprint from new construction.

Demolition is irreversible and should be considered only after every other option has been adequately explored. Consideration should be given to alternative/ adaptive uses retaining the integrity of: the building, adjacent historic properties, and the intent and purposes of the proposed design or preservation ordinances. Financial tools such as federal or state historic rehabilitation tax credits or conservation easements may provide alternatives to demolition, as well as locally-provided incentives (city or county).



The City's goal is to avoid demolition by neglect. Structures must be minimally maintained whether they are occupied or vacant. Minimal maintenance includes the means necessary to keep the structure dry and safe. This includes regular maintenance and necessary repairs to the roof system, gutters, downspouts, exterior paint, and provision of ventilation. (Consider Preservation Brief #31 - Mothballing Historic Buildings.)

In addition to mothballing, another option is donation of the property to Shelby's Land Bank.

**Above:** Lack of minimum maintenance over an extended period may render a building beyond rehabilitation.

Historic facades can be restored through stabilization and proper remediation, even after fires.



## Moving

Although moving a building is preferred over demolition, moving is considered the last resort to save a structure. Because a building's connection with its original site is a primary defining feature of the structure's character, separation from the site creates an interruption in the history and significance of the structure. If moving is permitted, the building should be placed on a site that resembles the original and oriented on the new site similarly to that of the original.

Most anything can be saved, and recycling a building reduces our carbon footprint.

## Salvage

The Secretary of the Interior's Standards for Rehabilitation indicate that salvaged materials, such as cornices from other buildings, should not be used. This position is clearly stated in Standard #3:

"...Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken."

### RECOMMENDATIONS

- Do not use salvaged materials from other buildings.
- Instead, when replacing missing or severely deteriorated elements, provide new elements based on documentary evidence.

# Appendix

## Appendix A

# Glossary

### A

**Architectural Features:** The visual arrangement of the exterior of a structure, including but not limited to type, color, texture of materials, components, and finishes. The features include but are not limited to windows, doors, lights, and signs.

**Architrave:** In classical architecture, a horizontal element resting on columns or piers; in current usage, the trim elements around window and door openings.

### B

**Baluster:** Vertical member, usually of wood or stone, which supports the railing of a porch or the handrail of a stairway.

**Balustrade:** Railing or parapet consisting of a handrail on balusters; sometimes also includes a bottom rail.

**Bay:** A spatial structural unit of a building, sometimes marked by fenestration or vertical elements such as columns or piers. A structure protruding out from a wall.

**Bay Window:** See Oriel Window.

**Belt Course:** A horizontal band around the exterior of a building, often of a contrasting material or finish.

**Beveled Siding:** Tapered wood siding that overlaps for weather protection. It is applied horizontally to buildings of frame construction.

**Bond:** The method of masonry construction which is used to hold multi-wythe brick walls together (*Ex: Common bond, Flemish bond, English bond*).

**Bracket:** A projecting member, often decorative, which supports an overhanging element such as a cornice.

**Bulkhead:** The unit that occupies the lowest level of a storefront and can be described as the base which supports the display window.

### C

**Capital:** The uppermost part of a column or other support.

**Casement Window:** A type of window with side hinges and a sash that swings outward.

**Column:** A supporting post consisting of base, shaft, capital; may be fluted or smooth.

**Coping:** The capping member of a wall or parapet, often consisting of masonry units.

**Corbel:** A bracket form produced by courses of wood or masonry that extend in successive stages from the wall surface.

**Cornice:** The projecting uppermost portion of a wall; often treated in a decorative manner with brackets.

### D

**Detail / Craft:** The method of assembly of the building components and the quality of work and material used in the assembly of the building image.

**Dormer:** A structural extension of a building's roof intended to provide light and headroom in an attic space; usually contains a window or windows on its vertical face.

**Double-Hung Window:** (below) A window with two balanced sashes, with one sliding over the other vertically.



**Dutchman:** A repair to stone where a new piece of stone is fit to fill a void in an existing piece of stone. The new stone may be mortared into place and pinned.

### E

**Efflorescence:** An unsightly crystalline deposit caused by evaporation of alkaline salts either in the building materials or transported by capillarity from the ground.

**Entablature:** The construction above the classical column, consisting of architrave, frieze, and cornice.

### F

**Fabric:** A connotation relating to the physical aspects of a building, structure, or city, referring to an interweaving of its component parts.

**Facade:** The architectural "face" of a building, though it can be applied to all sides.

**Fascia:** A flat horizontal member used as a facing at the ends of roof rafters.

**Fenestration:** Pattern of window and door openings in a wall.

**Finial:** The decorative, pointed terminus of a roof or roof form.

**Flashing:** Flat metal or other material that is used to keep water from penetrating the joint between different surfaces and materials, such as around the chimney on a roof.

**Form:** The geometric shape of the building components and their interaction to create a whole image.

**Frieze / Frieze Board:** Board between soffit and sidewall of cladding brick, siding, or stucco. Alternatively, a component of classical entablature.



## G

**Gable:** The triangular section of the end wall of a pitched roof.

**Glazing:** Glass fitted into windows or doors.

## H

**Hoodmold:** Decorative, projecting element placed over a window; may extend down the sides of a window as well as surround the top.

## I

**Infill Buildings:** A new building constructed on a site with one or more of its walls adjoining buildings on adjacent sites.

**In-Kind:** Replacement of one element of a building with another of the same material, design, size, and appearance.

## J

**Jamb:** The side of a doorway or window opening.

## L

**Lites:** Openings between the mullions and muntins of a window, usually glazed; an individual pane of glass.

**Lintel:** Horizontal structural element at the top of a window or door; it carries the load of the wall above and may be of wood, stone, or metal.

## M

**Maintenance:** The repair of an existing product, finish, or material without making an alteration.

**Massing:** The interaction of height, width, depth, and proportion, thus forming a visual image of size.

**Mullion:** A vertical member that divides window sash, doors, or panels set close together in a series.

**Muntin:** The pieces that make up the small subdivisions in a multi-pane glass window.

## O

**Oriel Window:** A projecting bay that forms an extension of the interior floor space. If curved, it is also called a bowfront. If the projection extends from an upper story, the proper term is oriel window.

**Ornamentation:** An applied and incorporated decoration used to embellish the building. Examples are cornices, window hoods, columns, and quoins.

## P

**Pane:** A sheet of glass for a comparatively small opening in a window sash or door as opposed to a large sheet of plate glass, as in a display window.

**Parapet:** The portion of an exterior wall that rises entirely above the roof, usually in the form of a low retaining wall; the parapet may be shaped or stepped.

**Pattern Book:** An illustrated guide to architecture including measured drawings of a building's elevations, plans, sections, and details. Most popular in the United States during the 18th and 19th centuries, these books were utilized by carpenters, architects, and their clients, primarily in domestic design.

**Pediment:** The triangular face of a roof gable; or a gable which is used in porches, or as a decoration over windows, doors, and dormers.

**Pier:** A vertical structural member, more massive than a column, often square or rectangular in plan, which supports a load.

**Pilaster:** A member appearing to be an engaged pier or column with its base, shaft, and capital, but providing no support.

**Plate Glass:** A high-quality float glass sheet, formed by rolling molten glass into a plate that is subsequently ground and polished on both sides after cooling.

**Portico:** An entrance porch, usually supported by columns and sheltering the entry.

**Preservation Professional:** An individual trained in the practice of preservation and/or preservation architecture who meets one or more federal standards (36 CFR 61) for Architecture, Historic Architecture, Architectural History, History and/or Historic Preservation Planning. The State Historic Preservation Office for Ohio keeps a list of these professionals.

**Prism Glass:** Small panes of prismatic glass, usually set in wood or metal framework in the transom over a storefront or entrance, used to diffuse or direct natural light into a deep, poorly lit space.

**Proportion:** The relationship in size, dimension, scale, etc. of the various elements of the building to themselves and the image as a whole.

## Q

**Quoin:** In masonry, a hard stone or brick used to reinforce an outside corner or edge of a wall: often distinguished by size, formal cutting, more conspicuous jointing, or difference in texture from adjacent masonry.

## R

**Repointing:** The process of removing deteriorated mortar from the joints of a masonry wall and replacing it with new mortar.

**Return:** The continuation of a projection or cornice in a different direction, usually around a corner at a right angle.

## S

**Sash:** The framework of the window that supports the glass. Sash may be fixed, sliding, hinged, or pivoted.

**Sill:** The framing member that forms the lower part of window or door opening.

**Setback:** The distance between the front of a land parcel and the facade of a building.

**Sheathing:** A subsurface material, usually wood, which covers exterior walls or roofs before application of siding or roofing materials.

**Sidelight:** A glass panel, usually of multiple panes, at either side of a door; often used in conjunction with a transom.

**Soffit:** A flat wood member used as a finished undersurface for an overhead exposed part of a building, such as a cornice. Commonly found on the underside of eaves.

**Spalling:** (right) A condition of brick or stone in which layers break off parallel to the plane of the building and fall away. This is usually caused by internal pressures due to trapped water or salt crystallization.

**Spandrel:** In frame construction, the spandrel is the blank space between windows in successive stories.

**Style:** The characteristic form, features, and elements during a specific period in history. Examples are Federal, Greek Revival, Italianate, Tudor, International, Moderne, etc.

## T

**Texture:** The feel or shape of a surface visually created by shadows and tangibly created by physical characteristics.

**Transom:** A glass panel placed over a door or window to provide additional natural light and ventilation to the interior of the building. Used on both residential and commercial buildings.

**Turret:** A corbelled projection, usually located at a corner.



## V

**Vapor Barrier:** A waterproof material that is used to prevent moisture from migrating from damp to dry areas, where it may condense and cause problems.

**Vernacular:** Architecture that draws more on folk traditions and forms, stressing basic functionalism, economy, and utility rather than the rules, principles, and ornamentation of high-style architecture. May contain secondary high-style design elements.

## W

**Wythe:** A continuous vertical section of masonry one unit in thickness. A wythe may be independent of, or interlocked with, the masonry behind it.

## Appendix B

# Secretary of the Interior's Standards For Rehabilitation

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

The Standards (Department of Interior regulations, 36 CFR 67) pertain to historic buildings of all materials, construction types, sizes, and occupancy, and encompass the exterior and the interior, related landscape features, and the building's site and environment, as well as attached, adjacent, or related new construction. The Standards are to be applied to specific rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility.

Refer to [www.nps.gov/tps/standards/applying-rehabilitation.htm](http://www.nps.gov/tps/standards/applying-rehabilitation.htm) for greater explanation.

## Appendix C

# Resources for Information or Assistance

### OHIO HISTORICAL SOCIETY AND OHIO HISTORIC PRESERVATION OFFICE

#### Ohio History Connection

800 E. 17th Ave.  
Columbus, Ohio 43211  
[www.ohiohistory.org](http://www.ohiohistory.org)  
(614) 298-2000

### LOCAL HISTORY RESOURCES

#### Shelby Museum of History

23 East Main St.  
Shelby, Ohio 44875  
[shelbyohiomuseum.com/](http://shelbyohiomuseum.com/)  
[shelbymuseum@gmail.com](mailto:shelbymuseum@gmail.com)

#### Richland County - Shelby Chapter of the Ohio Genealogical Society

P.O. Box 766  
Shelby, OH 44875  
[shelbyohiohistory.org/](http://shelbyohiohistory.org/)  
(419) 347-5576

#### Mansfield Richland County Public Library Sherman Room at the Main Library

43 West Third Street  
Mansfield, OH 44902  
[genealogy@mrcpl.org](mailto:genealogy@mrcpl.org)  
(419) 521-3115

#### Shelby Cycle Historical Society

[shelbycyclehistory.org](http://shelbycyclehistory.org)

### CITY OF SHELBY

#### City of Shelby

#### Historic Preservation Commission

43 W. Main St.  
Shelby, OH 44875  
<https://shelbycity.oh.gov/historic-preservation-commission/>

### WEBSITES

#### Ohio History Connection, Ohio Historic Preservation Office

[www.ohiohistory.org/preserve/state-historic-preservation-office](http://www.ohiohistory.org/preserve/state-historic-preservation-office)

This website includes information about the Ohio Historic Preservation Office, the National Register program, and a searchable database of National Register properties in Ohio. By clicking on “Building Doctor” and then Old Building Owner’s Links, the user can download copies of the National Park Service’s Preservation Briefs. A list of the briefs is included in this appendix.

#### Heritage Ohio

[www.heritageohio.org](http://www.heritageohio.org)

This website connects interested parties to information on programs and services such as pilot project Save Ohio’s Treasures Fund, historic conservation easements, and Ohio Main Street Program. There is also a knowledge database and training and workshop information.

#### WHY AND HOW TO HIRE AN ARCHITECT

<https://aiapa.org>

To obtain a building permit, a building owner must submit construction documents signed and sealed by a Registered Architect (RA) in the State of Ohio. Most RAs are members of the American Institute of Architects (AIA), an advocacy organization for the architecture field. The AIA maintains an informative website ([www.aia.org](http://www.aia.org)). The Ohio Chapter AIA website details the benefits of hiring an Architect, as well as providing a directory.

#### National Park Service, U.S. Department of the Interior

[www.nps.gov/tps/](http://www.nps.gov/tps/)

This site has information about the Technical Preservation Services offered by the National Park Service, including information about programs such as the Federal Historic Tax Credit, preservation legislation/standards/guidelines, and training. Through the Education & Training tab, there is access to webinars, online training modules, and printed publications designed for use by historic owners, architects, contractors, developers, and members of design review boards.

[www.nps.gov/tps/education/print-pubs.htm](http://www.nps.gov/tps/education/print-pubs.htm)

This National Park Service site provides a list of free Technical Preservation Services publications that can be ordered online.

#### Preservation Trades Network

[ptn.org](http://ptn.org)

This website connects practitioners of the traditional building trades (slate and metal roofers, stone masons, timber framers, window and door restoration craftsmen, and ornamental plasterers for example), but is open to anyone interested. Individual membership is for a nominal annual fee, but provides access to member directories and educational content.

#### PreserveNet

[www.preservnet.cornell.edu](http://www.preservnet.cornell.edu)

This website contains information about conferences, educational programs, and an extensive list of links to other preservation websites.



## INDEX OF PRESERVATION BRIEFS

Technical Preservation Services, a division of the National Park Service, has assisted homeowners, preservation professionals (see glossary), organizations, and government agencies by publishing easy-to-read guidance on preserving, rehabilitating, and restoring historic buildings. Preservation Briefs can be ordered in print and downloaded as PDFs at [www.nps.gov/TPS/how-to-preserve/briefs.htm](http://www.nps.gov/TPS/how-to-preserve/briefs.htm)

1. Cleaning and Water-Repellent Treatments for Historic Masonry Buildings
2. Repointing Mortar Joints in Historic Masonry Buildings
3. Improving Energy Efficiency in Historic Buildings
4. Roofing for Historic Buildings
5. The Preservation of Historic Adobe Buildings
6. Dangers of Abrasive Cleaning to Historic Buildings
7. The Preservation of Historic Glazed Architectural Terra-cotta
8. Aluminum and Vinyl Siding on Historic Buildings: The Appropriateness of Substitute Materials for Resurfacing Historic Wood Frame Buildings
9. The Repair of Historic Wooden Windows
10. Exterior Paint Problems on Historic Woodwork
11. Rehabilitating Historic Storefronts
12. The Preservation of Historic Pigmented Structural Glass (Vitrolite and Carrara Glass)
13. The Repair and Thermal Upgrading of Historic Steel Windows
14. New Exterior Additions to Historic Buildings: Preservation Concerns
15. Preservation of Historic Concrete
16. The Use of Substitute Materials on Historic Building Exteriors
17. Architectural Character: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character
18. Rehabilitating Interiors in Historic Buildings: Identifying Character-Defining Elements
19. The Repair and Replacement of Historic Wooden Shingle Roofs
20. The Preservation of Historic Barns
21. Repairing Historic Flat Plaster Walls and Ceilings
22. The Preservation and Repair of Historic Stucco
23. Preserving Historic Ornamental Plaster
24. Heating, Ventilating, and Cooling Historic Buildings: Problems and Recommended Approaches
25. The Preservation of Historic Signs
26. The Preservation and Repair of Historic Log Buildings
27. The Maintenance and Repair of Architectural Cast Iron
28. Painting Historic Interiors
29. The Repair, Replacement and Maintenance of Historic Slate Roofs
30. The Preservation and Repair of Historic Clay Tile Roofs
31. Mothballing Historic Buildings
32. Making Historic Properties Accessible
33. The Preservation and Repair of Historic Stained and Leaded Glass
34. Applied Decoration for Historic Interiors: Preserving Composition Ornament
35. Understanding Old Buildings The Process of Architectural Investigation
36. Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes
37. Appropriate Methods for Reducing Lead-Paint Hazards in Historic Housing
38. Removing Graffiti from Historic Masonry
39. Holding the Line: Controlling Unwanted Moisture in Historic Buildings
40. Preserving Historic Ceramic Tile Floors
41. The Seismic Retrofit of Historic Buildings
42. The Maintenance, Repair and Replacement of Historic Cast Stone
43. The Preparation and Use of Historic Structure Reports
44. The Use of Awnings on Historic Buildings: Repair, Replacement & New Design
45. Preserving Historic Wooden Porches
46. The Preservation and Reuse of Historic Gas Stations
47. Maintaining the Exterior of Small and Medium Size Historic Buildings
48. Preserving Grave Markers in Historic Cemeteries
49. Historic Decorative Metal Ceilings and Walls: Use, Repair, and Replacement
50. Lightning Protection for Historic Buildings

## INDEX TO INTERPRETING THE STANDARDS (ITS) BULLETINS

ITS Bulletins assist building owners in applying the Standards to rehabilitation projects. Each Bulletin references the relevant standards. The bulletins are case-specific and are provided as guidance only; they are not necessarily applicable beyond the unique facts and circumstances of each case.

1. Interior Plan: Changes to Shotgun Interior Plan
2. Garage Door Openings: New Infill for Historic Garage Openings
3. New Additions: New Additions to Mid-Size Historic Buildings
4. Exterior Doors: Inappropriate Replacement Doors
5. Exposed Interior Brick: Removing Interior Plaster to Expose Brick
6. Significant Spaces: Preserving Historic Church Interiors
7. Interior Finishes: Painting Previously Unpainted Woodwork
8. Interior Alterations: Interior Alterations to Detached Residences to Accommodate New Functions
9. Porches: Inappropriate Porch Alterations
10. Stair Tower Additions: Exterior Stair/Elevator Tower Additions
11. School Buildings: Interior Alterations to School Buildings to Accommodate New Uses
12. School Buildings: Rehabilitation and Adaptive Reuse of Schools
13. Storefronts: Repair/Replacement of Missing or Altered Storefronts
14. Adding New Openings: New Openings in Secondary Elevations or Introducing New Windows in Blank Walls
15. Industrial Interiors: Treatment of Interiors in Industrial Buildings
16. Loading Door Openings: New Infill for Historic Loading Door Openings
17. Interior Parking: Adding Parking to the Interior of Historic Buildings
18. New Additions: New Additions to Mid Size Historic Buildings
19. Interior Finishes: Deteriorated Plaster Finishes
20. School Buildings: Converting Historic School Buildings for Residential Use
21. Adding New Openings: Adding New Openings on Secondary Elevations
22. Adding New Openings: Adding New Entrances to Historic Buildings
23. Windows: Selecting New Windows to Replace Non-Historic Windows
24. Corridors: Installing New Systems in Historic Corridors
25. Interior Finishes: Altering the Character of Historically Finished Interiors
26. Entrances and Doors: Entrance Treatments
27. Awnings: Adding Awnings to Historic Storefronts and Entrances
28. Corridors: Corridors in Historic Highrise Apartment Buildings and Hotels
29. Garage Doors: Adding Vehicular Entrances and Garage Doors to Historic Buildings
30. New Entries: New Entries on Mill Buildings
31. Interior Features: Retaining Distinctive Corridor Features
32. Roofing Materials: Slate Roof Treatments
33. Secondary Elevations: Alterations to Rear Elevations
34. Additions: Completing Never-Built Portions of a Historic Building
35. Interior Plans: Changes to Shotgun Interior Plan
36. Rooftop Additions
37. Rear Additions: Rear Additions to Historic Houses
38. Alterations Without Historical Basis
39. Site and Setting: Changes to Historic Site
40. Corridors: Corridors in Historic School Buildings
41. Incompatible Alterations to the Setting and Environment of a Historic Property
42. Industrial Bridges in Mill Complexes
43. Converting Fire Escapes to Balconies in Mill Complexes
44. Subdividing Significant Historic Interior Spaces
45. Adding or Modifying Fly Lofts on Historic Theaters
46. Modifying Historic Interior Railings to Meet Building Code
47. Rooftop Additions on Mid-Size Historic Buildings
48. Replacement of Missing or Altered Storefronts
49. Designing Compatible Replacement Storefronts
50. Reusing Special Use Structures
51. Installing New Systems in Historic Buildings
52. Incorporating Solar Panels in a Rehabilitation Project
53. Designing New Additions to Provide Accessibility
54. Installing Green Roofs on Historic Buildings
55. Retaining Industrial Character in Historic Buildings
56. Alterations Without Historical Basis

## OVERVIEW OF FUNDING SOURCES AND OTHER ASSISTANCE

### Local Sources

**City of Shelby Facade Rebate** for Commercial Building Owners: A Storefront Renovation Program for exteriors of commercial structures, which offers up to 50% rebate on eligible expenses. This program is reviewed annually for renewal.

**Shelby Community Improvement Corporation** The mission of this group is to advance the community by researching and attempting to draw new business into the area. The commission/city can work to encourage the SCIC to market Shelby's history and historic places as assets for new business. It is a public private community partnership invested in growth for Shelby.

**Richland County Regional Planning Commission** The Commission oversees the County Revolving Loan Fund that assists small businesses in financing their job creating projects, administers the County Enterprise Zone Program that provides tax incentives for business expansions, and maintains a cooperative relationship with various Richland County Development organizations and partners. [www.rcrpc.org](http://www.rcrpc.org)

### Overview of the National Register of Historic Places

The National Register of Historic Places is the nation's list of properties recognized by the National Park Service (U.S. Department of the Interior) as being worthy of preservation for their local, state, or national significance. They must be significant in areas of American history, architecture, archeology, engineering, or culture. The program in Ohio is administered by the Ohio Historic Preservation Office of the Ohio Historical Society (Ohio History Connection).

In general, properties eligible for the National Register should be at least 50 years old, retain their historic integrity, and meet at least one of the four National Register criteria. Benefits of listing in the National Register include recognition of its significance which can lead to greater awareness and appreciation for the property; eligibility for use of the 20% Historic Rehabilitation Tax Credit; and a certain level of protection through reviews of federally funded or assisted projects that might have an adverse impact on the property. Additionally, many public and private funding programs use the National Register listing as a prerequisite for funding.

Listing in the National Register does not prevent the owner of the property from maintaining, repairing, altering, selling, or even demolishing the property with other than federal funds. It does not obligate the owner to make repairs or improvement to the property, nor does it automatically make it subject to local design review.

For more information about the National Register program, contact the Ohio Historic Preservation Office.

### Overview of the Ohio Historic Preservation Tax Credit (OHPTC)

The OHPTC is available for historic buildings listed (1) in the National Register of Historic Places, either individually or as part of a registered historic district; (2) with a Certified Local Government, either as a local landmark or as part of a local historic district. To use the credit, a building must be "income-producing," just as it is required for the federal historic tax credit.

The OHPTC program, administered jointly by the Ohio Development Services Agency and Ohio Historic Preservation Office, chooses awardees of a 25% credit (with a cap of \$5 million) during two competitive rounds of applications each year. When combined with the federal historic tax credit, the credit may be worth as much as a 45% discount on the cost of rehabilitation. Applications are accepted in March and September, and consists of a detailed application that includes description of the proposed rehabilitation, anticipated budget, secured investors, and estimated income derived from the project. For this award, it is essential that a building owner work with the local government to secure support for the project.

The award of a OHPTC must be a “major factor” in the project’s viability or the applicant’s ability to “increase the level of the investment” in the project. The same restrictions apply to the OHPTC as the federal credit. Staff members of the Ohio Historic Preservation Office can answer questions on the certification process. Consultation with a tax advisor is also recommended.

### **The Historic Rehabilitation Tax Credit (Federal)**

The Historic Rehabilitation Tax Credit is available for historic buildings listed in the National Register of Historic Places, either individually or as part of a registered historic district. To use the credit, a building must be “income-producing;” that is, used for industrial, commercial, office, or residential rental purposes. The rehabilitation must be “substantial;” the project cost is at least as much as the adjusted basis in the property (the value of the property without the land) or \$5,000, whichever is greater. The rehabilitation work must be “certified” as complying with the Secretary of the Interior’s Standards for Rehabilitation.

The Historic Rehabilitation Tax Credit is a credit of 20% of the cost of the building’s rehabilitation and is taken as a credit against federal income taxes owed by the building’s owner. Therefore the tax credit is the same as a 20% discount on the cost of rehabilitation. The acquisition cost of the building cannot be counted as part of the amount on which the credit is taken, nor may the cost of additions or enlargements to the building be counted. When rehabilitation is complete, the depreciable basis of the property must be reduced by the amount of the credit.

Because of the tax situations of building owners can vary, anyone considering use of the Historic Rehabilitation Tax Credit should consult a tax advisor before proceeding. Staff members at the State Historic Preservation Office (SHPO) are available to answer questions regarding the certification process.

## A SURVEY CHECKLIST: WHAT TO LOOK FOR

### EVERY 3 MONTHS

#### Gutters and Downspouts

- Clogs (watch during a heavy rain)
- Loose or sagging gutters, or gutters sloped the wrong way (should slope toward the downspout)
- Broken seams in gutters or downspouts
- Downspout broken off at the foundation

### EVERY 6 MONTHS

#### Roof

- Missing slates, shingles or tiles
- Tears, holes or blisters in the roof materials
- Split seams or rust on metal roofs
- Sagging ridge lines
- Flashing pulled away or missing at ridges and valleys

#### Masonry

- Loose or missing mortar
- Cracks in the masonry or mortar joints
- Growth of moss or green stain on masonry (moisture problem)
- Blistering or peeling paint (moisture problem)
- Bulging walls (structural problem)

#### Exterior Wood Siding and Trim

- Blistering and peeling paint
- Growth of moss or green stain on wood (moisture problem)
- Cracks or warps in wood boards
- Rotted wood (Probe the wood with a sharp instrument like a pocket knife or pick; the wood should resist penetration; if it crumbles, then damage has occurred.)

#### Windows and Doors

- Cracks in sealant around window and door frames
- Loose panes of glass or gaps in glazing putty
- Broken sash cords or other hardware
- Cracks, warps or decayed wood in windows sash or frame
- Cracks, decayed wood or warps in exterior doors

#### Ornamentation

- Blistering, cracking or peeling paint
- Excessive layers of paint which obscure features
- Cracks, dents, hollows or missing pieces
- Rust, corrosion or holes in metal
- Chipped plaster, terra cotta or stone
- Deteriorated wood

#### Porches

- Wood floor boards that buckle or are rotted (tongue and groove porch flooring is particularly susceptible to water penetration)
- Decay at base of wood columns
- Damp or musty smell caused by lack of ventilation beneath the porch
- Stained or deteriorated ceiling (roof leaks or porch is pulling away)

#### Storefronts

- Deteriorated wood, metal, brick or stone materials
- Blistering, cracking or peeling paint
- Broken glass in windows, doors and transoms
- Missing features

### EVERY 12 MONTHS

#### Foundation

- Cracks in foundation wall (watch over several months to see if it is active)
- Tilting or leaning foundation walls
- Loose or crumbling mortar
- Growth of moss or green stain (moisture problem)
- Wet or damp basements (poor foundation drainage)

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Checklist reprinted with permission: *Old Building Owner's Manual*, by Judith L. Kitchen. (Columbus: Ohio Historical Society, 1983).

## Appendix D

# Bibliography

- Andreas, A. T., Atlas Map of Richland County, Ohio. Chicago: 1873.
- Baughman, A.J., History of Richland County Ohio from 1808 to 1908, Chicago: The S.J. Clark Publishing Company 1908,
- Blumenson, John J.-G. Identifying American Architecture: A Pictorial Guide to Styles and Terms, 1600-1945. New York: W.W. Norton & Company, Inc., 1977.
- Bucher, Ward. Dictionary of Building Preservation. New York: John Wiley & Sons, 1996.
- Burden, Ernest. Illustrated Dictionary of Architectural Preservation. New York: McGraw-Hill, 2004.
- Cusato, Marianne. Get Your House Right: Architectural Elements to Use & Avoid. New York, New York: Sterling Publishing Co., Inc., 2011.
- Feilden, Bernard M. Conservation of Historic Buildings. London: Butterworth & Co., 2003.
- Foulks, William G. Historic Building Facades: The Manual for Maintenance and Rehabilitation. New York: John Wiley & Sons, Inc., 1997.
- Garvin, Alexander. The American City: What Works, What Doesn't. New York: McGraw- Hill Companies, Inc., 1996.
- Gates, Garland, Historic Preservation Shelby Architecture Slides
- Gordon, Stephen C. How to Complete the Ohio Historic Inventory. Ohio Historical Society, 1992.
- Grimmer, Anne E. and Kay D. Weeks. The Secretary of the Interior's Standards for the Treatment of Historic Properties, with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings. US Department of the Interior, National Park Service, Washington D.C., 1995.
- Harris, Cyril M. American Architecture: An Illustrated Encyclopedia. New York, New York: W.W. Norton & Company, 2003.
- Herr, Philip B. Saving Place: A Guide and Report Card for Protecting Community Character. Washington, D.C.: National Trust for Historic Preservation, 1991.
- Kitchen, Judith L. Caring for Your Old House: A Guide for Owners and Residents. John Wiley & Sons, Inc., 1991.
- London, Mark. Masonry: How to Care for Old and Historic Brick and Stone. Washington, D.C.: The Preservation Press, 1988.
- Mallszewski-Pickart, Margaret. Architecture and Ornament. Jefferson: McFarland & Company, Inc., 1998.
- McAlester, Virginia and Lee. A Field Guide to American Houses. New York: Alfred A. Knopf, 2015.
- Meeks, Stephanie, as quoted in Kai Ryssdal and Bridget Bodnar, "When historic buildings make economic sense," National Public Radio, May 1, 2017.
- Moss, Roger W., and Gail Caskey Winkler. Victorian Exterior Decoration: How to Paint Your Nineteenth-Century American House Historically. New York: Henry Holt and Company, 1987; revised paperback edition, 1992.
- Moss, Roger W., ed. Paint in America: The Colors of Historic Buildings. Washington, D.C.: National Trust for Historic Preservation, 1994.
- Moss, Roger W. Century of Color: Exterior Decoration for American Buildings, 1820-1920. Watkins Glen, N.Y.: American Life Foundation, 1981.
- National Trust for Historic Preservation. New Energy from Old Buildings. 1981.
- National Trust for Historic Preservation. Old & New Architecture: Design Relationship. The Preservation Press, 1980.

National Trust for Historic Preservation and Edge Research. "Millennials and Historic Preservation: A Deep Dive into Attitudes and Values: Results from an Online Survey of Millennials." Powerpoint presentation. June 18, 2017.

Ohio Department Services Agency. (n.d.). Ohio Historic Preservation Tax Credit Program. Retrieved from [https://development.ohio.gov/cs/cs\\_ohptc.htm](https://development.ohio.gov/cs/cs_ohptc.htm).

PlaceEconomics. The Federal Historic Tax Credit: Transforming Communities. Washington D.C.: Place Economics, 2014

PlaceEconomics. Thirty-Eight Reasons to Keep the Federal Historic Tax Credit. Place Economics, 2018.

Poppeliers, John C. and S. Allen Chambers Jr. What Style is It: A Guide to American Architecture. Hoboken, N.J.: John Wiley and Sons, Inc. 2003.

Preservation Briefs. U.S. Department of the Interior, National Park Service, Cultural Resources.

Richland County-Shelby Chapter of the Ohio Genealogical Society. (n.d.). Shelby Interurban. Retrieved from <http://sites.rootsweb.com/~ohscogs/Interurban/Interurban.html>

Rifkind, Carole. A Field Guide to American Architecture. New York: Bonanza Books, 1984.

Rypkema, Donovan D. Measuring Economic Impacts of Historic Preservation: A report to the Advisory Council on Historic Preservation. Washington, D.C.: Place Economics, 2013.

Rypkema, Donovan D. The Economic Effect of National Register Listing. 1994.

Rypkema, Donovan D. The Economics of Historic Preservation: A Community Leader's Guide. Washington, D.C.: National Trust for Historic Preservation, 2005.

Saylor, Henry H. Dictionary of Architecture. New York: John Wiley & Sons, 1994.

Scott, John S. A Dictionary of Building. Great Britain: Hazell Wateson & Viney Ltd. 1974.

Shelby Museum of History (n.d.). Shelby Electric Company. Retrieved from <https://shelbyohiomuseum.com/AdolpheChaillet.html>

Shelby Ohio. (n.d.). History. Retrieved from <http://shelbycity.oh.gov/community/history>

Shelby Ohio Area History & Genealogy. (n.d.). Industries. Retrieved from <https://www.shelbyohiohistory.com/Indusries/Industries.html>

Summerson, John. The Classical Language of Architecture. MIT Press, 1995.

Walker, Lester. American Shelter: An Illustrated Encyclopedia of the American Home. Woodstock: The Overlook Press, 1996.

Weaver, Martin E. Conserving Buildings: A Guide to Techniques and Materials. New York: John Wiley & Sons, Inc., 1997.

Whiffen, Marcus. American Architecture Since 1780. Cambridge: The M.I.T. Press, 1992.

Wilkinson, C, H (1976). More About Early Shelby. Miamisburg, OH: Miamisburg News.

Wilkinson, R, M (1962). The Beginning...Shelby, Ohio Some Highlights of its Early History. Miamisburg, OH: Miamisburg News.

Wilkinson Hassler, Carolyn, The Story of Early Shelby, Miamisburg, Ohio: Miamisburg News, 1976.







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