

Urban Enterprise Zone Historic Preservation Commission

GUIDELINES FOR HISTORIC PROPERTIES

These Guidelines were developed in collaboration between the Gloucester City Urban Enterprise Zone (GCUEZ) and the Gloucester City Historic Preservation Commission (GCHPC) in order to enhance the visual aesthetics in the Gloucester City commercial and historic districts.

Program Overviews:

The GCHPC reviews Certificate of Appropriateness (COA) applications for proposed exterior alterations to properties within the historic districts visible from a public way. The applicant is responsible for complying with the provisions of the Zoning and Building Codes at the time of application. applicant must obtain a Certificate Appropriateness (COA) as well as all necessary permits prior to proceeding with any work. For more information, or to obtain permit applications, please call the Administrative Zoning Officer at (856) 456-7689.

The GCUEZ program promotes economic growth by helping neighborhood businesses succeed through offering incentives which encourage growth while stimulating the local economy. One of these such programs is the GCUEZ signage and matching façade grant program where UEZ businesses only can receive up to \$10,000 in matching facade grants as well as \$1,000 in signage grants to enhance their business storefronts. For more information, contact the UEZ Coordinator at (856) 456-6075 or via email at uez@cityofgloucester.org.

Using the Guidelines:

Please review this information during the early stages of planning your project. Familiarity with this material can assist in moving a project quickly through the approval process, saving applicants both time and money.

Additional *Guidelines* addressing other historic building topics and application forms are available at the Municipal Building and on the City's web site at www.cityofgloucester.org.

WHY IS HISTORIC PRESERVATION IMPORTANT IN GLOUCESTER CITY?

The City of Gloucester recognizes that the character and quality of life enjoyed by its citizens depends in great measure upon the City's rich heritage. This historical, cultural, architectural, archeological, social and economic heritage is entrusted to each generation, enriched and passed on to future generations.



How is historic preservation recognized in Gloucester City?

To promote the continued enhancement of local heritage, the City of Gloucester first enacted the Historic District Ordinance in 1993 to:

- 1. Safeguard the heritage of the City of Gloucester by preserving the part of the City which reflects elements of its cultural, social, economic and architectural history;
- 2. Preserve the integrity of design of the eighteenth, nineteenth and early twentieth century buildings and streetscapes within the Historic District;
- 3. Preserve historic and architecturally significant buildings;
- 4. Maintain and improve property values;
- 5. Preserve and promote the Historic District as an essential element of municipal character and identity, as an important factor in the economy of the City and property values therein;
- 6. Foster civic pride;
- 7. Promote the use of the District for the education, pleasure and welfare of the citizens of the City and its visitors; and
- 8. Assure that construction, alterations, repairs, replacements such as lighting, fences, walkways, signs, color and landscaping are compatible with the City's historic, cultural, aesthetic and architectural heritage.

WHAT IS A HISTORIC RESOURCE?

A Historic District or Historic Site is an individual building, structure, site, object, or district that has been determined to have historical significance and whose distinctive character conveys a unique architectural and cultural heritage. Since the enactment of the State of New Jersey Municipal Land Use Law, Section 107 of Title 40:55D, many local municipalities, including Gloucester City, have passed local ordinances to review the effect of proposed change on the historic resources in their communities.

Historic districts are comprised of significant concentrations of historic resources, historically united by plan or development. Although all properties within Historic Districts are important to the sense of place, it is understood that some resources are more significant than others. Resources in the City of Gloucester's Historic District are classified into two categories:

- Contributing: resources that are integral components because they date from the same time period or are architecturally significant
- **Non-Contributing:** resources that are not historically or architecturally significant

Although all properties within the bounds of the Historic District are subject to the review of the Historic Preservation Commission, the Commission will tend to be more flexible with reviews of non-contributing properties than contributing properties.

WHAT IS THE HPC?

The Historic Preservation Commission (HPC) is a public advisory body that helps to protect the architectural and cultural heritage within the City of Gloucester. Among its responsibilities, the HPC considers the effects of proposed exterior changes to individual, locally designated Historic Sites, and to locally designated buildings and properties within Historic Districts, and comments on the appropriateness of those changes.

The five Members and two Alternate Members of the HPC are appointed by the Mayor. Most members of the HPC are City residents and serve without pay in overlapping terms. The professional membership of the HPC includes:

- A person who is knowledgeable in building design, construction or architectural history
- A person who is knowledgeable or with demonstrated interest in of local history
- Citizen with an interest in history, historic preservation, or a related field



WHY HAVE DESIGN GUIDELINES?

The brochures that comprise the *Design Guidelines* are intended to act as a tool to help manage change and protect the City of Gloucester's architectural and historical resources. They are intended to provide information and guiding principles rather than seen as rigid rules to property owners, design professionals, contractors, the HPC and the City with regard to historic resources.

It is recommended that applicants review the information in the *Design Guideline* brochures during the early stages of planning a project. Familiarity with this material can assist in moving a project forward quickly, saving applicants both time and money.

AVAILABLE GUIDELINES

The *Guidelines* addressing historic materials and building topics are available at the Municipal Building and on the City's web site at www.cityofgloucester.org. The following *Guidelines* were prepared as part of this project:

- Guidelines for Historic Properties
- Guidelines for the UEZ
- Guidelines for Exterior Maintenance
- Guidelines for Roofing
- Guidelines for Exterior Woodwork
- Guidelines for Masonry & Stuccos
- Guidelines for Wood Windows & Doors
- Guidelines for Landscape Elements
- Guidelines for Additions & New Construction
- Guidelines for Storefronts
- Guidelines for Signs & Awnings

WHAT IS THE HPC'S ROLE?

The HPC conducts monthly meetings and has the power and duty to:

- Identify, record and maintain a survey of historic resources and make recommendations to the City regarding the designation of Historic Sites and Districts to the Gloucester City, New Jersey or National Registers of Historic Places
- Issue a Certificate of Appropriateness (COA) for the repair, erection, replacement, reconstruction, alteration, restoration, demolition, or razing of any building or structure in whole or in part within a locally designated Historic District or designated a Historic Site
- Provide technical assistance to property owners on how to appropriately preserve, restore and rehabilitate buildings and structures
- Develop applications, and the inclusion of Historic Sites and Historic Districts as related to capital improvement programs
- Promote the City's continued historic preservation efforts through advisory, educational and informational functions

The HPC is also available to provide informal informational meetings with property owners who are considering a project that might require a Certificate of Appropriateness.

WHEN IS A COA NOT REQUIRED?

- The HPC does not review any interior changes, unless they affect the exterior appearance of the building, although building permits may be required for interior work.
- The HPC does not review minor in-kind repair work where the materials, profiles, details, dimensions and colors remain unchanged.
- A COA is also not required for what in the Administrative Zoning Officer's opinion constitutes an emergency repair. Emergency repairs consist of only those immediate remedial actions required to alleviate the cause of damage to life or property in which time will not permit the property owner to obtain a COA. Please contact the Administrative Zoning Officer at (856) 456-7689 to determine whether proposed work constitutes an emergency repair.

WHEN IS A COA REQUIRED?

In most instances, property owners or tenants will interact with the HPC when applying for a Certificate of Appropriateness (COA) for a proposed project. If work is proposed at any property within the bounds of a Historic District or at a designated Historic Site, the City requires that an applicant obtain a COA. The types of projects reviewed by the HPC include:

- Change of the exterior appearance of any building, structure, site, object or improvement including additions, alteration, reconstruction, or replacement of materials
- Relocation or demolition of any building, structure, site, object or improvement
- Changes to fences, walls, garden structures

The HPC reviews the proposed changes to determine whether they are appropriate to the individual property and within the surrounding historic context in regard to the architectural style, general design, arrangement, location, and materials. Once the HPC determines that the proposed changes are appropriate, they will determine whether a COA should be issued for the proposed work.

It must be stressed, however, that the HPC review is required for some work that would not otherwise require a building permit. This includes the replacement of doors and windows.

It should also be noted that a COA is necessary but not sufficient for the granting of a building permit. Each project is also subject to City review for compliance with zoning, building, and safety codes.

MAJOR AND MINOR COA APPLICATIONS

There are two types of COA applications considered by the HPC, major and minor applications.

- Major Application: Involves removal of all or part of a structure; the addition to any structure located within the Historic District or designated Historic Site; the erection of new buildings within the Historic District; or the retrofitting and/or minor rehabilitation of existing structures.
- Minor Application: General maintenance, repair and upkeep including in-kind replacement of elements to a property within the Historic District or designated Historic Site. For minor applications, a COA can be issued within 10 days of the HPC meeting, and any necessary permits can be obtained if required.

HPC APPLICATION REVIEW PROCESS

To have your Certificate of Appropriateness (COA) application reviewed by the HPC, Major Applications must be submitted 10 days prior to the HPC meeting at which the application is to be reviewed and Minor Applications 5 days prior to the Administrative Zoning Officer at the Municipal Building. HPC meetings typically occur the first Wednesday of each month. Please call (856) 456-7689 to confirm the meeting dates. The HPC must have all required information to review an application for a COA, otherwise the application may be recommended for denial or tabled until all the information is received.

It is recommended that the applicant or a project representative attend the HPC meeting to answer questions or clarify information. At the meeting, the application will be either approved with or without conditions, tabled pending additional information, or denied.

The HPC recommendations are then forwarded to the Planning Board for their review. At the next regularly scheduled Planning Board meeting, the applicant can appeal the HPC recommendation. If the application is approved or approved with conditions by the Planning Board, and the applicant accepts the stipulated conditions, the applicant can obtain a COA from the Administrative Zoning Officer. If the applicant does not accept the stipulated conditions or the Planning Board denies the application, the decision can be appealed to the New Jersey Superior Court.

COA approvals expire two years from the Planning Board approval date or at the end of the building permit, whichever is longer. Applicants are required to resubmit expired applications for HPC review.

TIMING FOR REVIEW

The City makes every effort to simultaneously conduct required reviews. If an application is incomplete, if the HPC requests a change, or if all City deadlines are not met, the issuance of permits and approvals could take several months.

- If the proposed work only requires HPC review:
 A minimum of three weeks is required from the submission deadline of the HPC permit application to the issuing of the permit
- If the proposed work requires other reviews in addition to HPC review: The Housing and Construction Department will make every effort to review the submission for permits simultaneously with the HPC review schedule

WORKING WITHOUT A COA

A HPC representative will review all work for compliance with the approved COA. If any changes are proposed after approval for a COA, please contact the Administrative Zoning Officer at (856) 456-7689 to determine whether any additional reviews may be required.

Completed work that is not in compliance with the approved COA is subject to possible fines; imprisonment; removal; and restoration of the building, structure site or object to its appearance prior to the violation.

GUIDELINES FOR HPC DECISIONS:

When reviewing a proposed project, the HPC review is guided by principles contained in *The Secretary of the Interior's Standards for the Treatment of Historic Properties*, and more specifically, the *Standards for Rehabilitation*. The *Standards for Rehabilitation* provide property owners and tenants common-sense guidelines to allow sensitive contemporary uses for their sites while retaining their architectural and cultural heritage.

In reviewing projects, the HPC encourages sensitive rehabilitation involving the least amount of intervention or change as identified in the following guidelines:

- **Identify, retain, and preserve** the overall form, materials, and details that are important in defining the architectural and historical character of the building and site.
- Protect and maintain historic materials and features. This involves protection from other work that may occur in proximity to the historic materials, and also protection through regular maintenance. A regular program of protection and maintenance usually involves the least degree of intervention, and can prevent or postpone extensive and costly work.
- Repair rather than replace deteriorated historic materials and features. Repairs maintain the building in its current condition while making it weather-resistant and structurally sound. Repairs should involve the least intervention possible, concentrating specifically on areas of deterioration. When repair is not possible, the HPC encourages replacement in-kind, reproducing by new construction the original feature exactly, including the original material, finish, detailing, and texture.

- Replace missing or deteriorated historic materials and features when the extent of deterioration precludes repair. Similar to repair, the preferred approach is to replace the entire feature in-kind to match the original material, finish, detailing, and texture. Since this in not always technically or financially feasible, substitute materials are acceptable when they convey the original appearance and finish of the original feature.
- Reconstruct missing historical features if adequate historical, pictorial, and physical documentation exists so that the feature may be accurately reproduced. The addition of features from other historic buildings or addition of historical elements for which there is no documentation is not appropriate.
- Alterations and additions are sometimes needed to ensure the continued use of a building. An alteration involves returning a building to a useful condition while saving those parts that represent its historical, architectural or cultural significance. It is important that alterations do not radically alter, obscure or destroy character-defining spaces, materials, features, or finishes. An addition, however, is new construction at the exterior of an existing building and should be avoided. If considered, new additions should be clearly differentiated but compatible in size, mass, form, fenestration, detailing and style with the historic building, and constructed at a less visible side or rear elevation, so the character-defining features are not radically obscured, damaged, or destroyed.

THE SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

The following *Standards for Rehabilitation* were developed in 1995 by the National Park Service of the U.S. Department of the Interior. They are the national standard to guide rehabilitation work on historic resources and are used by the City of Gloucester's HPC when rendering its recommendations.

Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural or architectural values.

- 1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
- 2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
- 3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties will not be undertaken.
- 4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
- 5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- 6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
- 7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- 8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
- 9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the historic property and its environment.
- 10. New additions and adjacent or related new construction will 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.

Rehabilitation as a Treatment: When repair and replacement of deteriorated features are necessary; when alterations or additions to the property are planned for a new or continued use; and when its depiction at a particular period of time is not appropriate, Rehabilitation may be considered as a treatment. Prior to undertaking work, a documentation plan for Rehabilitation should be developed.

MAINTENANCE IS PRESERVATION

Regular maintenance helps to preserve buildings and property, protect real estate values and investments, and keeps Gloucester an attractive place to live, work and visit. Lack of regular upkeep can result in accelerated deterioration of building elements and features. In the case of historic buildings, these features often represent character defining elements that are difficult and costly to replace. Long-term lack of maintenance can impact a building's structure, resulting in expensive repairs.

It is prudent to regularly inspect properties to identify potential problems. If problems are detected early, minor maintenance may not only improve a property's overall appearance and value, but also can prevent or postpone extensive and costly future repairs. Regular maintenance items typically include cleaning gutters and downspouts, and painting of exterior woodwork.

The HPC encourages:

- Prolonging the life of original materials on historic structures through regular maintenance
- Avoiding replacement of original materials with newer materials
- Referencing the Guidelines for Exterior Maintenance

REPAIRS AND REPLACEMENT

When it is no longer feasible to maintain a historic feature, repairs or replacement in-kind may be necessary. Repairs maintain the building in its current condition while making it weather-resistant and structurally sound, concentrating specifically on areas of deterioration. When repair is not possible, the HPC encourages replacement in-kind. Similar to a regular maintenance program, these activities can prevent or postpone extensive and costly future repairs.

The HPC encourages:

- Non-intrusive repairs, focused at deteriorated areas, stabilizing and protecting the building's important materials and features
- When repair is not possible, replacement in-kind to the greatest extent possible, reproducing by new construction the original feature exactly, matching the original material, size, scale, finish, detailing, and texture, and utilizing similar techniques
- When replacement in-kind is not possible, the use of compatible materials and techniques that convey an appearance similar to the original feature, similar in design, color, texture, finish, and visual quality to the historic elements



General maintenance such as painting is essential to preserving original building fabric and unique architectural elements and details.

ALTERATIONS AND RENOVATIONS

Alterations and renovations are sometimes needed to ensure the continued use of a building, but have the potential to alter the character of historic properties. When considering alterations or renovations, great care should be given to the original building and its relationship to the alteration or renovation.

The HPC encourages:

- Identification, retention, and preservation of the character defining features of the historic building
- Minimal alteration to the original design, materials, and features
- New design elements and scale that are compatible with the historic building and setting
- Use of materials and techniques that are compatible to the historic building and setting
- Maintaining the appropriate historic contextual setting

ADAPTIVE REUSE

In adaptive reuse projects, alterations or renovations might be necessary to use a building for a different purpose from which it is currently or was originally designed, as permitted under the Zoning Code. Similar to alterations or renovations, great care should be given to the original building and its relationship to the alteration or renovation.

Examples of Adaptive Reuse:

- Conversion of a house to apartments or offices
- Conversion of industrial or commercial buildings into housing
- Conversion of institutional buildings into commercial space

Benefits of Adaptive Reuse:

- Retention of Historic District character and high quality historic materials and craftsmanship
- Promotes stability of ownership and occupancy of historic resources
- Potential cost savings over new construction
- Presence of established neighborhood and existing infrastructure



This building has been a bank, synagogue and a restaurant.

ADDITIONS AND NEW CONSTRUCTION

Additions and new construction within a Historic District can dramatically alter the appearance of the individual property, the District and the surrounding landscapes. Although the exact reproduction of historic buildings is not encouraged, contemporary design must be reviewed within the context of the historic resources and their surroundings. Because of the sensitivity of the area, the property owner should take great care when proposing either an addition or new construction within a Historic District.

The HPC encourages:

- Preservation of the cohesive ambiance of historic resources with compatible, sympathetic, and contemporary construction
- Compatible siting, proportion, scale, form, materials, fenestration, roof configuration, details, and finishes
- Construction of additions at secondary elevations wherever possible, subordinate to the historic building, and compatible with the design of the property and neighborhood
- Construction of additions so that the historic building fabric is not radically changed, obscured, damaged, or destroyed
- Referencing the Guidelines for Additions & New Construction

DEMOLITION OR MOVING STRUCTURES

The demolition or relocation of all or portions of resources on properties or within a Historic District or on a Historic Site are considered drastic actions since they may alter the character of the streetscape, surrounding buildings, and the demolition site. Once resources or buildings that contribute to the heritage of the community are destroyed, they cannot be replaced. Similarly, if a building is relocated from its historic context, the character of the area is changed.

Both demolition and relocation could represent a lost educational resource for the community whether the building was an example of past construction techniques, or has associations with a significant individual or event in our history. As a result, demolition or relocation of buildings within a Historic District or on a Historic Site is rarely considered to be an appropriate option.

The HPC encourages:

- An evaluation of the significance of the historic resources
- All attempts to reuse a historic resource be exhausted prior to considering demolition
- All attempts to retain a building in its original location be exhausted prior to considering relocation
- Referencing Guidelines for Additions & New Construction

The HPC does not recommend demolition unless:

- The proposed demolition involves a non-significant addition or portion of the building, provided that the demolition will not adversely affect those portions of a resource that are significant
- The proposed demolition involves a non-significant resource, provided that the demolition will not adversely affect significant parts of the site
- Required by the State of New Jersey

The HPC does not recommend relocation of a building unless:

- The proposed relocation is the only alternative for saving a significant building
- The building is relocated in a similar setting as the original site including orientation and distance from the roadway, and proximity to other buildings and adjacent properties
- Related resources, such as secondary buildings and structures, walls, fences, walkways, etc. are also relocated to the new site to re-establish original relationships
- Required by the State of New Jersey

FREQUENTLY ASKED QUESTIONS

Q: How do I make sure that my project will be approved by the HPC?

A: It is helpful to have an understanding of what makes your property architecturally or culturally significant when considering a project. This will allow you to make informed decisions about the proposed project with an understanding of some of the issues considered by the HPC. Carefully reviewing this brochure, the other applicable *Guidelines*, and the application package prior to submitting your application can assist in the approval of your project.

Q: Is the review process expensive? Do I need to hire an outside professional?

A: There is no fee associated with HPC review, but proper preparation and filing complete applications on time can reduce the time required to complete the process. Carefully reviewing this brochure, the other applicable Guidelines, and the application package for the Certificate of Appropriateness prior to hiring a design professional or contractor can assist in the early planning stages of your project. You are welcome to submit applications for work without the assistance of a design professional or contractor. If you are retaining the services of a professional, it is helpful to work with architects, contractors, etc. who are familiar with the requirements of working within Historic Districts. Before submitting your application, verify that the application is complete and all materials are included with your submission. If the applicant is incorporated, they are required to have an attorney present.

Q: I am planning a complex project. When is the best time to talk to the HPC?

A: If you project is complex or requires multiple review Boards, the best time to talk to the HPC is early in the project before you invest a lot of time and money into the design process. If you would like to discuss your project informally with the HPC to obtain an informational review before finalizing your plans, please contact the Administrative Zoning Officer at the Municipal Building at (856) 456-7689 to be placed on the HPC agenda.

Q: Is there a way to expedite the review process?

A: It is important to thoroughly complete the application and submit all requested materials to the Administrative Zoning Officer at Municipal Building to be placed on the agenda for the next scheduled meeting. We suggest that you call the Administrative Zoning Officer directly for the next month's submission deadline and meeting date.

Q: What information do I need to submit with my application?

A: The specific submission requirement will vary based upon the complexity of the proposed project. All applications should include:

- Completed application form
- Photographs of the overall building and site with details of proposed work area
- Description of the proposed work
- Scaled drawings indicating the proposed changes
- Information regarding proposed exterior materials and colors

For specific information regarding the submission requirements for your proposed project please contact the Administrative Zoning Officer at the Municipal Building at (856) 456-7689. Completed Major Applications must be submitted a minimum of ten days prior to the upcoming HPC meeting to be placed on the agenda for a formal review, and Minor Applications five days. If the information is not complete, you can request to be placed at the end of the meeting agenda to appear before the HPC for an informal informational review.

Q: Can I begin construction immediately after I get the HPC's approval?

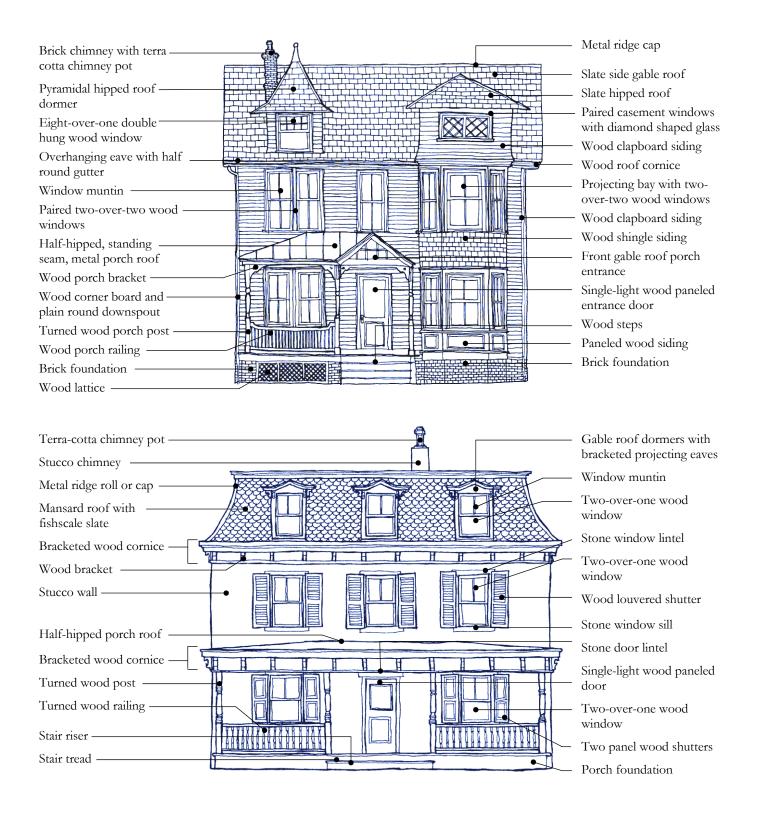
A: The HPC review is necessary but not sufficient for the granting of a building permit. Each project is also subject to City review for compliance with zoning, building, and safety codes. HPC review is just one step in obtaining a building permit. You must complete all necessary reviews and obtain all necessary permits prior to proceeding with any work. If the HPC and Planning Board recommend an application for approval and no other permits are required, it is possible to obtain an approved permit within two weeks following the Planning Board meeting. If the complexity of the project requires other permits or reviews, the City will make every effort to perform simultaneous reviews and minimize any potential delays.

Q: Who can help me?

A: We encourage you to contact the HPC at the earliest stage of your project. This initial informal informational review can help move a project quickly through the review process saving both time and money. If you would like to discuss your project informally with the HPC to obtain feedback prior to finalizing your plans, please contact the Administrative Zoning Officer at the Municipal Building at (856) 456-7689.

GLOSSARY OF ARCHITECTURAL TERMS:

The following diagrams represent composite buildings and provide a basic vocabulary of architectural elements and terms. Please refer to the individual *Guidelines* and architectural dictionaries for additional information sources.



PRESERVATION ORGANIZATIONS

Local Organizations

Gloucester City Historical Society

34 North King Street; Gloucester City, NJ 08030 (856) 456-3487

www.cityofgloucester.org/historical.php

Gloucester City Public Library

50 N. Railroad Avenue; Gloucester City, NJ 08030 (856) 456-4181; www.gloucestercitylibrary.org

Camden County Historical Society 1900 Park Boulevard; Camden, NJ 08103 (856) 964-3333; www.cchsnj.com

State Organizations

New Jersey Historic Preservation Office P.O. Box 404; Trenton, NJ 08625-0404 Phone: (609) 292-2023, 292-2028, 984-0140 Fax: (609) 984-0578; www.state.nj.us/dep/hpo

Preservation New Jersey 30 S. Warren Street; Trenton, NJ 08608 Phone: (609) 392-6409; Fax: (609) 392-6418 www.preservationnj.org

New Jersey Historic Trust P.O. Box 457; Trenton, New Jersey 08625-0457 Phone: (609) 984-0473; Fax: (609) 984-7590 www.njht.org

The New Jersey Historical Society 52 Park Place; Newark; NJ 07102 Phone: (973) 596-8500; Fax (973) 596-6957 www.jerseyhistory.org

The New Jersey Homepage of the American Local History Network – www.usgennet.org/usa/nj/state

National Organizations

Historic Preservation Learning Portal www.historicpreservation.gov

National Park Service; Heritage Preservation Services www.cr.nps.gov/hps

National Park Service; Historic Landscape Initiative www.cr.nps.gov/hps/hli

National Center for Preservation Technology & Training 645 University Parkway; Natchitoches, LA 71457 Phone: (318) 356-7444; Fax: (318) 356-9119 www.ncptt.nps.gov

National Trust for Historic Preservation 1785 Massachusetts Avenue, NW Washington, DC 20036-2117 Phone: (800) 944-6847; www.nationaltrust.org

PRESERVATION RESOURCES

CITY OF GLOUCESTER HISTORY

- Camden County Historical Society Bulletins, Books and Booklets. Available from the Camden County Historical Society.
- Dorwart, Jeffery M. and Philip English Mackey. *Camden County, New Jersey, 1616-1976: A Narrative History.*Camden County, NJ: Camden County Cultural & Heritage Commission, 1976.
- Prowell, George. *The History of Camden County*. Camden, NJ: Camden County Historical Society, 1999.
- Local publications available from the Gloucester City Public Library and Gloucester City Historical Society:
- Corcoran, John H. Meandering with John H. Corcoran: through the history of Gloucester City, NJ. 1999.
- Gloucester City History. [Tercentenary]. 1964.
- Llewellyn, Louisa, ed. *Gloucester City NJ: A Bicentennial Community*. 1976.

Munn, David. ed. Gloucester City 100th Anniversary. 1968.

REFERENCE MATERIALS

- Birnbaum, Charles A. and Heather Barrett. *Making Educated Decisions: A Landscape Preservation Bibliography*. http://www.cr.nps.gov/hps/hli/makedec.htm
- Blumenson, John J. *Identifying American Architecture: Pictorial Guide to Styles and Terms 1600-1945.* Nashville: American Association of State and Local History, 1977. Rev. ed. New York: Norton, 1981.
- Bucher, Ward (ed.). *Dictionary of Building Preservation*. New York: John Wylie & Sons, 1996.
- Christensen, Alan. *Dictionary of Landscape Architecture and Construction*. New York: McGraw Hill, 2005.
- Harris, Cyril (ed.). A Dictionary of Architecture and Construction. New York: McGraw Hill, 2006.
- McAlester, Virginia and Lee. Field Guide to American Houses. New York: Knopf, 1984.
- Philbin, Tom. *The Illustrated Dictionary of Building Terms*. New York: McGraw Hill, 1997.
- Phillips, Steven J. Old House Dictionary: An Illustrated Guide to American Domestic Architecture 1600-1940. New York: John Wylie & Sons, 1995.
- Poppeliers, John C. and S. Allen Chambers, Jr., What Style is it? A Guide to American Architecture, Revised Edition. New York: John Wylie & Sons, 2003.
- Rifkin, Carol. A Field Guide to American Architecture. New York: New American Library, 1980.

BUILDING & LANDSCAPE MAINTENANCE, REHABILITATION AND PRESERVATION

Several of the National Park Service publications are available electronically through the Heritage Preservation Services website or the US Government Printing Office Bookstore at www.bookstore.gpo.gov.

- Bernhard, Sandy and Tom Ela. The House Journal: A Resource to Evaluate and Document the History, Alterations, and Records of Your House and Property. Washington, DC: The Preservation Press, 1993.
- Birnbaum, Charles A. and Christine Capella Peters, ed. The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes. Washington, DC: National Park Service, Cultural Resource Stewardship and Partnerships, Heritage Preservation Services, 1996.
- Chambers, J. Henry, AIA. *Cyclical Maintenance for Historic Buildings*. Washington, DC: National Park Service, 1976.
- Crosbie, Michael J. *Home Rehab Handbook*. New York: McGraw Hill, 2002
- Cultural Landscapes. Washington, DC: National Park Service, Cultural Resources Division. www.cr.nps.gov/landscapes.htm
- Favretti, Rudy and Joy Favretti. For Every House A Garden: A guide for reproducing period gardens. Chester, CT: The Pequot Press, 1977.
- Favretti, Rudy J. and Joy Putman Favretti. *Landscapes* and Gardens for Historic Buildings, 2nd Rev. ed. Nashville, TN: American Association for State and Local History, 1991.
- Kitchen, Judith L. Caring for Your Old House: A Guide for Owners and Residents. New York: John Wylie, 1995.
- Heritage Preservation and National Park Service. *Caring for Your Historic House.* New York: Abrams, 1998.
- Moss, Roger W. ed. *Paint in America: The Colors of Historic Buildings*. New York: John Wylie & Sons, 1995.
- National Register Bulletins. Washington, DC: National Park Service, National Register of Historic Places, 1997. www.cr.nps.gov/nr/publications/bulletins.htm
- National Trust for Historic Preservation. Landmark Yellow Pages: Where to Find All the Names, Addresses, Facts, and Figures You Need. 2nd ed. New York: John Wylie & Sons, 1997.
- Poore, Patricia (ed.). The Old-House Journal: Guide to Restoration. New York: Dutton, 1992.
- Preservation Briefs. Washington, DC: National Park Service, Technical Preservation Services. www2.cr.nps.gov/tps/briefs/presbhom.htm

- Preservation Tech Notes. Washington, DC: National Park Service, Technical Preservation Services. www.cr.nps.gov/hps/tps/technotes/tnhome.htm
- Ramsey, Charles George and Harold Reeve Sleeper. Traditional Details: For Building Restoration, Renovation, and Rehabilitation. New York: John Wylie & Sons, 1998.
- Technical Preservation Services, National Park Service. Respectful Rehabilitation: Answers to your Questions About Old Buildings. Washington, DC: The Preservation Press, 1982.
- Tyler, Norman. Historic Preservation: An Introduction to Its History, Principles, and Practice. New York: W.W. Norton & Co., 1999.
- Weaver, Martin E. Conserving Buildings: A Manual of Techniques and Materials, Revised Edition. New York: John Wylie & Sons, 1997.
- Weeks, Kay D. and Anne E. Grimmer. The Secretary of the Interior's Standards for the Treatment of Historic Properties: With Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings.

 Washington, DC: National Park Service, Technical Preservation Services, 1995.

 www2.cr.nps.gov/tps/standguide/index.htm

PERIODICALS AND LINKS TO HISTORIC BUILDING & LANDSCAPE INFORMATION

APT Bulletin

Association for Preservation Technology International 4513 Lincoln Ave., Suite 213; Lisle, IL 60532-1290 Phone: (630) 968-6400; www.apti.org

Preservation and Preservation Forum
National Trust for Historic Preservation
1785 Massachusetts Ave., NW;
Washington, DC 20036
Phone: (800) 944-6847
www.nationaltrust.org

Old-House Journal, Old-House Journal's Restoration Directory, Old-House Journal's Traditional Products, Clem Labine's Traditional Building, and Preservation Sourcebook Restore Media, LLC

1000 Potomac Street, NW; Suite 102 Washington, DC 20007; Phone: (202) 339-0744 www.oldhousejournal.com www.traditionalbuilding.com

The Alliance for Historic Landscape Preservation 82 Wall Street, Suite 1005
New York, NY 10005
www.ahlp.org/docs/contact.htm

Thanks go to the following individuals who helped make these *Guidelines* possible:

GLOUCESTER CITY MAYOR

Mayor William P. James

GLOUCESTER CITY COUNCIL

Councilpersons Jay F. Brophy

Kellie Ferry

William R. Hagan, Sr. John Hutchinson

Nicholas F. Marchese, Jr.

Bruce Parry

Former Councilpersons Jean Kaye

Anthony Kormann

Elsie Loebell

GLOUCESTER CITY URBAN ENTERPRISE ZONE DEVELOPMENT CORPORATION

Chairperson William P. James (Mayor)

Vice Chairperson Patrick Healey

Secretary/ Councilman Nicholas F. Marchese, Jr.

Treasurer Bob Booth Members Dianne Fisher

Joseph Kenney Dave Stallwood

Former Member Jean Kaye

GLOUCESTER CITY HISTORIC PRESERVATION COMMISSION

Chairperson David Munn
Secretary Frances Pollander
Members Mary Lou Adams

William Giesey Louisa Llewellyn Paula Conroy Dave Townsend Rae Whelan

Former Members Mary Jane Goheen

Sally Green

DESIGN GUIDELINES COMMITTEE

William P. James, Mayor/UEZ Chairperson

Paul Kain, Administrator/City Clerk

Regina Dunphy, UEZ Coordinator/Director of

Community Development

David Munn, HPC Chairperson

Dianne Fisher, GCUEZ Board Member



ACKNOWLEDGEMENTS

All components of the *Guideline* brochures including all text, graphic design, photography and illustrations unless noted otherwise were prepared by:

PRESERVATION DESIGN PARTNERSHIP

Principal-in-Charge: Dominique M. Hawkins, AIA

FUNDING



This publication was initiated and overseen by the City of Gloucester City and made possible through a Smart Future grant provided by the New Jersey Department of Community Affairs (NJDCA). Regardless, the contents and opinions expressed in these *Guidelines* do not necessarily reflect the views or policies of NJDCA nor does the mention of trade names constitute endorsement or recommendation by NJDCA.

© Dominique M. Hawkins, AIA, of Preservation Design Partnership in Philadelphia, PA, preparer of this publication.



Urban Enterprise Zone Historic Preservation Commission

GUIDELINES FOR EXTERIOR MAINTENANCE

These Guidelines were developed in collaboration between the Gloucester City Urban Enterprise Zone (GCUEZ) and the Gloucester City Historic Preservation Commission (GCHPC) in order to enhance the visual aesthetics in the Gloucester City commercial and historic districts.

Program Overviews:

The GCHPC reviews Certificate of Appropriateness (COA) applications for proposed exterior alterations to properties within the historic districts visible from a public way. The applicant is responsible for complying with the provisions of the Zoning and Building Codes at the time of application. The applicant must obtain a Certificate of Appropriateness (COA) as well as all necessary permits prior to proceeding with any work. For more information, or to obtain permit applications, please call the Administrative Zoning Officer at (856) 456-7689.

The GCUEZ program promotes economic growth by helping neighborhood businesses succeed through offering incentives which encourage growth while stimulating the local economy. One of these such programs is the GCUEZ signage and matching façade grant program where UEZ businesses only can receive up to \$10,000 in matching facade grants as well as \$1,000 in signage grants to enhance their business Exterior Maintenance. For more information, contact the UEZ Coordinator at (856) 456-6075 or via email at uez@cityofgloucester.org.

Using the Guidelines:

Please review this information during the early stages of planning your project. Familiarity with this material can assist in moving a project quickly through the approval process, saving applicants both time and money.

Additional *Guidelines* addressing other historic building topics and application forms are available at the Municipal Building and on the City's web site at www.cityofgloucester.org.

PURPOSE

These *Guidelines* were prepared to assist property owners with information regarding exterior building maintenance to encourage the continued preservation of their property. It is not intended that these *Guidelines* should replace consultation with qualified architects, contractors, the GCUEZ, the GCHPC, and/or the applicable ordinances.



The wood base is in contact with the concrete foundation. Regular wood dampness can eventually lead to rot and deterioration, necessitating future replacement.

BUILDING MAINTENANCE

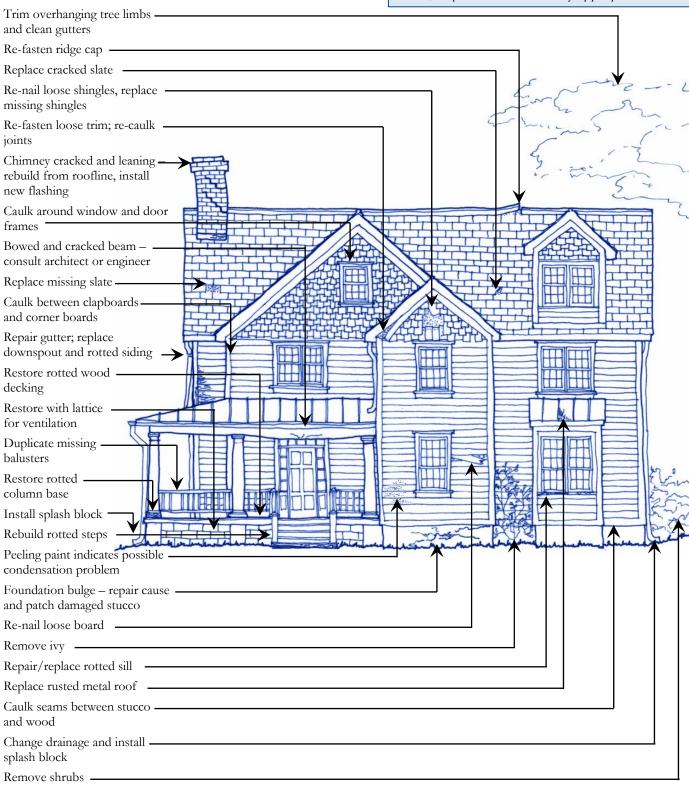
The historic architecture of the City of Gloucester features a well-constructed housing stock of midnineteenth through mid-twentieth century buildings. Many of these homes continue to serve City residents because they have been maintained by previous and present owners.

A building is typically a family's largest single investment. One of the best ways to help a property retain its value in the marketplace is to implement a regular and preventive maintenance schedule. Unlike the buyer of an automobile, a new property owner is not provided with an operator's manual or warranty book outlining a recommended maintenance schedule. As a result, many owners do little or no regular maintenance or repair until a serious problem develops. When the problem is finally noticed, the associated repairs can be significantly more involved and costly to address.

TYPICAL BUILDING MAINTENANCE NEEDS

General:

Scrape all loose paint; prime bare wood and metal; re-paint with historically appropriate colors





The regular cleaning of gutters and downspouts is one of the most effective preventive maintenance tasks. Clean gutters and downspouts provide a means for moisture that accumulates on the roof to be directed away from the building without causing damage. This gutter is filled with leaves, twigs and debris preventing clear drainage and allowing water to overflow the gutter and damage exterior wall surfaces. Gutters and downspouts should be cleaned at least twice each year to minimize potential problems.

BUILDING ENVELOPE DETERIORATION

The exterior envelope of a building is made up of various components that typically include roofing, walls, windows and doors. Each of these building components can be present in various materials within the same building envelope such as a combination of shingle roofing at sloped surfaces and rolled roofing at flat surfaces. Overall, these components of various materials act together as a system to protect the interior from exterior environmental extremes. Some of the environmental influences affecting the exterior building envelope include:

- Moisture, rain, snow, ice, humidity, groundwater
- Wind
- Sunlight
- Temperature variations
- · Atmospheric chemicals and acid rain
- Insects, birds and rodents
- · Vegetation, molds, algae and fungi

All building materials, new or old, will deteriorate over time. Each of the environmental influences listed above, individually and in combination, has the potential to react differently with the materials that compromise a building's exterior envelope and cause deterioration. The potential reactions are further complicated by the way the materials are installed, joined together, and their relative locations. However, by implementing a regular maintenance and repair program, the rate of deterioration can be dramatically slowed, allowing the City's historic buildings to last for centuries.

REPAIRS AND REPLACEMENT

When it is no longer feasible to maintain a historic feature, repairs or replacement in-kind may be necessary. Repairs maintain the building in its current condition while making it weather-resistant and structurally sound, concentrating specifically on areas of deterioration. Similar to maintenance, repair costs and effort can be minimized if the problem is addressed quickly, preventing or postponing costly future repairs. As an example, it might be possible to repair an existing wood window rather than incur the much higher expense of replacement windows.

When repair is not possible, the GCHPC and GCUEZ encourage replacement in-kind. Although it is tempting to install newer materials such as vinyl siding or replacement windows, many of these materials are not compatible with historic building systems and can lead to costly future repair needs or an ongoing replacement schedule. In the case of vinyl siding, it can trap moisture within a wall cavity and rot the structural framing.

The GCHPC and GCUEZ encourage:

- Non-intrusive repairs, focused at deteriorated areas, stabilizing and protecting the building's important materials and features
- When repair is not possible, replacement in-kind to the greatest extent possible, reproducing by new construction the original feature exactly – using similar techniques to match the original material, size, scale, finish, detailing and texture
- When replacement in-kind is not possible, the use of compatible materials and techniques that convey an appearance similar to the original feature, similar in design, color, texture, finish, and visual quality to the historic elements

The GCHPC and GCUEZ discourage:

- Introducing modern materials that can accelerate and hide deterioration
- Removing or encapsulating decorative building features such as brackets, spindles, cornices, columns, posts, etc.

HIRING A CONTRACTOR

- All contractors are not necessarily experienced in all materials or working with historic buildings
- · Verify extents of warranty for materials and labor
- Check references, especially from 5 years prior, to understand how well their work has held up

MAINTENANCE IS PRESERVATION

Regular maintenance helps to preserve buildings and property, protect real estate values and investments, and keeps the City of Gloucester an attractive place to live, work and visit.

Lack of regular upkeep can result in accelerated deterioration of building elements and features. Small openings or unpainted surfaces can allow moisture penetration and eventually rot. In the case of historic buildings, these features often represent character defining elements that are difficult and costly to replace. Long-term lack of maintenance can impact a building's structure, resulting in expensive repairs.

It is prudent for property owners to inspect their properties regularly to identify potential problems. If problems are detected early, smaller investments of money may not only improve a property's overall appearance and value, but also can prevent or postpone extensive and costly future repairs. Regular maintenance items typically include painting, and cleaning gutters and downspouts. It is also prudent to inspect the roof and any signs of moisture infiltration, open joints, and cracks or bulges.

The GCHPC and GCUEZ encourage:

- Semi-annual reviews of buildings and structures to identify maintenance and repair needs
- Prolonging of the life of original materials on historic structures through regular maintenance
- Avoiding replacement of original materials with newer materials

DEMOLITION BY NEGLECT:

The destruction of a building or structure caused by the failure to perform maintenance over a long period of time.

BUILDING CODES

In the completion of construction projects, City of Gloucester refers to the *Uniform Construction Code, UCC*, of New Jersey. The intent of the *Codes* is to protect the public health, safety and welfare of citizens against the hazards of inadequate, defective or unsafe conditions. The *Codes* address the interior and exterior conditions of buildings, building systems, and the surrounding property.

For specific information regarding the applicable codes for your project, please contact the Administrative Zoning Officer at (856) 456-7689

PREVENTIVE MAINTENANCE CHECKLIST

The following pages include preventive maintenance checklists to assist property owners in recording the current condition of their building as well as keep track of maintenance tasks as they are performed.

The checklists refer to typical problems associated with various materials and recommended actions. The checklist should be modified to address the specific materials found at each property. If a building has serious problems, a more detailed inspection can be performed by a qualified architect or engineer who can recommend an appropriate treatment approach.

It is recommended that owners conduct property reviews at a minimum each spring and fall. The spring review will help identify work that should be completed during the warm weather months while the fall review will assist in the weatherization of a property before winter and the identification of projects to be scheduled for the following year. Areas of deterioration or problems should be photographed during each inspection. Dating of the photographs can help document an ongoing problem's progression and assist in planning future repairs. Please refer to Page 14 for information on creating a Maintenance Manual.

For more specific information regarding the various materials identified, please refer to the individual topic-specific *Guideline* brochures available at the Municipal Building or on the Gloucester City web site at www.cityofgloucester.org.



Regular repainting helps to protect wood from deterioration.



The mineral granules on the asphalt shingles have almost completely worn away. Portions of shingles have broken off and can be found in the gutters and on the ground. Prior patching is evident at the edge of the roof. The top of the roof curves down from the chimney, a possible indication of a structural problem.



Slates are cracked, dislodged and missing. Some of the surfaces are delaminating. Approximately 25 to 30 percent of the slates on this roof are either missing or damaged. Given the pervasiveness of the problems, considering roof replacement would be appropriate.

ROOFING AND RELATED ROOFING ELEMENTS CHECKLIST

As a general rule, roofing and the related elements should be reviewed every spring and fall, corresponding with the regular cleaning of leaves and debris from gutters and downspouts. In addition, it is best to review the gutters, downspouts and attic areas during a rainstorm to determine whether they are functioning properly. Flat roofs are best reviewed immediately following a rainfall to determine whether standing water or ponding is present. Great care should be taken when reviewing or maintaining roofs since they are potentially dangerous, particularly when wet.

If there are questions regarding whether the severity of deterioration warrants replacement of an element, consultation with a professional is recommended. It is usually less costly to fix a small problem than to delay action resulting in more extensive deterioration and repair needs. For further information, please refer to the Guidelines for Roofing.

MATERIAL / LIFE SPAN	Inspection Review	RECOMMENDED ACTION
	Laid on open sheathing or batten strips – verify from attic	☐ If not, provide proper ventilation in attic
Slate and Terra Cotta Tile	Broken or missing slates or tiles	☐ Re-attach, re-secure or replace loose or missing units in kind
50+ years	 Units delaminating or flaking apart Slate or tile particles in valleys, gutters and the base of downspouts 	☐ Replace deteriorated individual units in-kind ☐ Consider roof replacement when over 20% of units are split, cracked, missing or deteriorated
Asphalt Shingles	 Mineral granules in gutters and at the base of downspouts Mineral granules almost totally worn off single surface Edges of shingles look worn 	☐ Replace deteriorated individual units in-kind ☐ Consider roof replacement when over 20% of units are split, cracked, missing or deteriorated
20+ years	Nails popping up	☐ Re-fasten or replace affected nails
	Moss or mold forming on roof surface	 □ Clean and treat surface to inhibit future growth □ Trim back overhanging tree limbs to allow sun to hit roof surface

MATERIAL / LIFE SPAN	Inspection Review	RECOMMENDED ACTION
Metal Roofs 60+ years	 Substantial number of rust or corrosion spots Signs of previous tar patch jobs 	 □ Tin, terne coated steel and terne coated stainless all need regular repair and painting every 5-10 years and can last indefinitely if properly maintained □ Attempt patching with compatible materials if area of deterioration is isolated □ Consider roof replacement if deterioration is substantial or prevalent
	 Punctures in the metal Broken joints or seams	 □ Attempt patching or re-soldering with compatible materials if area is isolated □ Consider roof replacement if deterioration is substantial or prevalent – verify condition of roof substrate
	Spring in surface of flat metal roofPonding or standing water on surface	☐ Consider roof replacement if deterioration is substantial or prevalent
	Laid on open sheathing or batten strips – verify from attic	☐ If not, provide proper ventilation in attic
Wood Shingles or Shakes	Moss or mold forming on roof surface	☐ Clean and treat surface to inhibit future growth ☐ Trim back overhanging tree limbs to allow direct sunlight onto roof surface
30+ years	Cupping or warping of woodIndividual shingles or shakes are split or uniformly thin from erosion	 □ Replace deteriorated shingles or shake in-kind □ Consider roof replacement if deterioration is substantial or prevalent
Flat Roofs	 Bubbles, separation or cracking of the asphalt or roofing felt Roof feels loose or squishy underfoot Water ponding on roof Mineral graduals or gravel worn away Roofing felt looks dry or cracked 	 □ Attempt patching of seams with compatible materials if area is isolated □ Consider roof replacement if deterioration is substantial or leaking is observed – verify condition of roof substrate
Flashing (Formed sheet metal at joints or intersections to prevent moisture penetration)	 Loose, corroded, broken or missing flashing Roofing cement or tar on flashing Un-caulked openings or gaps at the tops of flashing Vertical joint does not have both base and counter flashing 	 □ Attempt patching with compatible materials if area of deterioration is isolated □ Consider roof replacement if deterioration is substantial
Roof Projections (Dormers, vent pipes, cupolas, TV antennae, lightening rods, weathervanes)	Connections around roof projects are not properly flashed and watertight	 □ Attempt patching with compatible materials if area of deterioration is isolated □ Consider flashing replacement if deterioration is substantial

MATERIAL / LIFE SPAN	INSPECTION REVIEW	RECOMMENDED ACTION
Chimneys	 Flashing around chimney is not watertight Mortar joints in chimney badly weathered Masonry or stucco coating is cracked or crumbling Chimney is leaning 	 □ Attempt patching with compatible materials if area of deterioration is isolated □ Re-point deteriorated or open mortar joints □ Consider replacement if deterioration is substantial – replacement might necessitate chimney rebuilding from the roof surface up, attempt to replicate all chimney detailing in reconstruction
	Chimney is not properly cappedChimney is not properly lined	 ☐ Install an appropriate chimney cap for the building style ☐ Install a chimney liner if wood-burning fireplaces are used or if masonry inside of flue is crumbling
Gutters and Downspouts	Clogged gutters or downspouts	 □ Review roof drainage during a rainstorm – water should collect in gutters and flow through downspouts without "spilling over" roof edge □ Clean out debris at least twice each year, in the spring and fall, or more based upon accumulation □ Install metal screens over length of gutters and/or strainers over downspout locations
	 Rusty, loose, askew or tilting gutters or downspouts Open or missing seams in hanging gutters 	 □ Attempt repair or patching with compatible materials if area of deterioration is isolated □ Consider gutter or downspout replacement if deterioration is substantial
	Broken seams in metal lining of built-in box gutter	 □ Re-solder open joints □ Consider gutter and downspout replacement if deterioration is substantial
	Water ponding adjacent to foundation	 □ Verify water from exiting downspouts is directed away from building foundation – install splash blocks or downspout extensions at base of downspouts □ Re-grade area at foundation to direct ground water away from building



The alligatored roof surface indicates roof deterioration and possible need for replacement.

The downspout is discharging immediately adjacent to the building onto a concrete surface.

The storm water splashing onto the concrete surface can saturate the masonry wall.



EXTERIOR WOODWORK CHECKLIST

As a general rule, exterior woodwork should be reviewed every spring and fall. The spring review will alert a property owner to damage that occurred over the winter months and allow for immediate repair. The fall review allows a property to be weatherized for winter and allows planning for spring repair and painting.

If there are questions regarding whether the severity of deterioration warrants replacement of a component or an element, consultation with a professional is recommended. For further information, please refer to the Guidelines for Exterior Woodwork and Guidelines for Windows & Doors.



The siding staining is an indication of mold or algae growth. The shrubs should be removed or thinned to increase ventilation and allow sunlight to strike the wall. The siding is located only 2 to 3 inches above grade making it susceptible to water damage.

MATERIAL	INSPECTION REVIEW	RECOMMENDED ACTION
Exterior Walls – General	 Exterior walls not plumb or vertically straight Bulges visible at exterior walls Doors and window frames out-of-square Siding undulates 	☐ Can indicate differential or uneven foundation settlement or severe structural problems — consultation with an architect or structural engineer is recommended, particularly if condition worsens
Wood Siding, Shingles and Decorative Woodwork	Loose, cracked, missing or open joints at wood siding, shingles or decorative woodwork	 □ Could lead to water infiltration and rot – repair or replace in-kind as appropriate □ Apply caulk to open joints – verify compatibility with adjacent materials
	Thin or worn shingles	 □ Attempt patching with compatible materials if area of deterioration is isolated □ Consider replacement in-kind if deterioration is substantial or prevalent
	 Open joints around window and door frames Open joints between dissimilar materials (such as wood siding and porch roof) 	☐ Re-caulk, repair or replace deteriorated flashing as appropriate – verify compatibility of caulk with adjacent materials
	Mold or mildew on siding or trim, especially on north side or shady areas	 □ Indication of potential moisture problem – verify installation of sufficient vapor barrier in wall □ Clean and treat surface to inhibit future growth – do not clean with high pressure water since this could result in more significant problems □ Trim back shrubs and overhanging tree limbs to allow air circulation and sun to hit surface
	Original siding or trim has been covered with vinyl or aluminum siding	☐ Vinyl and aluminum siding and capping can trap moisture and hide rot and damage — if possible, vinyl or aluminum siding and capping should be removed and woodwork repaired

MATERIAL	INSPECTION REVIEW	RECOMMENDED ACTION
Water and Termite	Signs of dirt veins on exterior walls, particularly near foundation, steps, under porches, etc.	☐ Possible indication of termite damage, contact extermination company to determine if active infestation and extent of damage
	Wood is soft when stuck with a small blade or ice pick, particularly window sills, porches, steps, sills and siding (Refer to Guidelines for Exterior Woodwork for wood rot test)	☐ Possible indication of wood rot or insect infestation — eliminate source of moisture to control rot and replace defective elements in-kind, contact an extermination company for potential infestation
Damage	Wood is located within 6 inches of ground	☐ Wood close to the ground can be a target for rot and termite infestation — review appropriate alternatives and conduct regular inspections
	Vegetation, such as shrubs, are located immediately adjacent to foundation	☐ Vegetation can trap moisture in woodwork by blocking sunlight and air circulation — remove or thin vegetation close to a building or conduct regular inspections for rot behind vegetation
Windows and Doors (Refer to Guidelines for Windows and	Windows and doors do not fit or operate properly	 □ Verify whether frame is wracked or out-of-square – possibly an indication of differential or uneven foundation settlement □ Verify whether windows are painted shut and hardware (including sash cord or chains) is operational
	Wood rot, particularly at sills and lower rails	 □ Repair or selectively replace deteriorated components in-kind □ Following repairs, verify deteriorated areas are well painted and joints caulked
	Weather stripping is deteriorated or missing	☐ Replace with compatible weather stripping – weather stripping is typically located between the door and window and the frame as well as at the meeting rail (where the upper and lower sash abut) of windows
Doors for more information)	Glass is cracked	☐ Replace glazing to match existing
,	Glazing putty is missing, cracked or deteriorated	☐ Replace glazing putty – verify compatibility with adjacent materials
	Storm or screen windows or doors are missing, deteriorated or non- operational	☐ Repair deteriorated units as appropriate ☐ Consider installing interior storm windows in lieu of exterior — interior storms can minimize potential condensation between the storm and window, reduce drafts, are virtually invisible, and make the exterior more attractive
	Chalky or dull finish	☐ Surface cleaning might be all that is needed☐ If repainting, additional preparation might be required
Painting	Paint surface worn	☐ Wood generally needs repainting every 5 to 8 years
	Peeling, curling and blistering	 □ Possible indication of a moisture problem – review drainage, potential leaks and whether there is a vapor barrier in the wall □ Paint failures near roofs, downspouts and porch ceilings are often the result of drainage problems

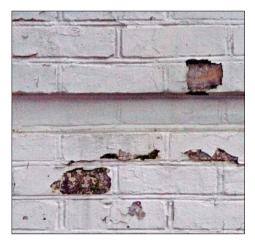
EXTERIOR MASONRY AND STUCCO CHECKLIST

Almost all buildings include some masonry, if not as a wall material, then as a foundation or chimney. Since masonry is often used as part of the structural system for older buildings, it is critical that it be maintained to prevent serious problems. For the best results, it is recommended that all masonry and stucco repairs and cleaning be conducted between mid-April and mid-November to minimize potential spalling and problems associated with colder temperatures.

If there are questions regarding whether the severity of deterioration warrants replacement of an element, consultation with a professional is recommended. It is usually less costly to fix a small problem than to delay action resulting in more extensive deterioration and repair needs. For further information, please refer to the *Guidelines for Masonry & Stucco*.

MATERIAL	INSPECTION REVIEW	RECOMMENDED ACTION
Exterior Walls - General	Cracks in masonry wall	 □ Can indicate differential or uneven foundation settlement or severe structural problems – consultation with an architect or structural engineer is recommended, particularly if condition worsens □ Vertical or diagonal cracks or cracks that split individual bricks or stones tend to represent a more significant problem such as differential settlement □ Horizontal cracks or hairline cracks limited to mortar joints or individual stones or bricks tend to be less severe □ Monitor and photograph condition after repair during each inspection to see if cracks return
	Bows or bulges in wall plane Leaning walls	☐ Can indicate differential or uneven foundation settlement or severe structural problems — consultation with an architect or structural engineer is recommended, particularly if condition worsens
	 Water ponding adjacent to foundation Vegetation, such as shrubs, are located immediately adjacent to foundation Damp walls Moss or algae on masonry surface 	 □ Verify water from exiting downspout is directed away from building foundation – install splash blocks or downspout extensions at base of downspouts □ Vegetation can trap moisture in masonry by blocking sunlight and air circulation – remove or thin vegetation close to a building or conduct regular inspections for algae and mold behind vegetation □ Re-grade area at foundation to direct ground water away from building □ Clean moss or algae from wall surface with low pressure water, with the possible use of gentle detergent and brushing
	Efflorescence – water-soluble salts leached out of masonry and deposited on a surface by evaporation, usually as a white, powdery surface	 □ Clean efflorescence from wall surface with low pressure water, with the possible use of gentle detergent and natural bristle brush □ Review area for possible additional sources of moisture
Mortar	 Soft and crumbling Open joints or broken joint bonds	 □ Attempt patching with compatible mortar if area of deterioration is isolated – mortar should match original in appearance, profile, hardness and composition □ Consider replacement if deterioration is substantial

MATERIAL	INSPECTION REVIEW	RECOMMENDED ACTION
Stones and Bricks	 Spalling, chipping, flaking, cracking or crumbling of surface Loose or missing stones or bricks 	 □ Attempt patching with compatible materials if area of deterioration is isolated □ Consider replacement if deterioration is substantial
	Pitted surface from sandblasting or pressure wash	 □ Masonry with a damaged surface is more likely to absorb moisture leading to accelerated deterioration – consult a professional and consider appropriate water repellant coating □ Monitor and photograph condition to see if it continues to deteriorate □ Review adjacent materials and interior finishes for
Stucco	Cracks in surface	signs of moisture infiltration and rot Attempt patching with compatible stucco if area of deterioration is isolated Consider replacement if deterioration is substantial Substantial cracks might indicate differential or uneven foundation settlement or severe structural problems – consultation with an architect or structural engineer is recommended, particularly if condition worsens
	Bulges in wall	☐ Verify keying of stucco to lath — if wall area moves when pushed, area of stucco is not bonded and should be replaced with compatible material to avoid potential surface collapse
Painted Masonry	Chalky or dull finish	☐ Additional preparation might be required prior to repainting
	Peeling, flaking, curling and blistering	 □ Possible indication of a moisture problem – review drainage, potential leaks and whether there is a vapor barrier in the wall □ Paint failures near the roof edge, downspouts, porch ceilings and foundations are often the result of drainage problems
	Paint surface worn	☐ Similar to woodwork, painted masonry tends to need repainting every 5 to 8 years with compatible paint



The loose, flaking paint should be removed and the cause for peeling determined. It is likely that the paint was not intended for masonry applications or the surface was not properly repaired and prepared prior to painting.

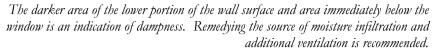
PROPERTY CHECKLIST

Exterior maintenance extends beyond a building's perimeter to include the surrounding property. Seasonal property maintenance includes cutting grass, raking leaves and shoveling snow. Larger maintenance issues include water management on the site, trimming trees and regular repairs to fences, walls, walkways and paved surfaces. For further information, please refer to the *Guidelines for Historic Landscape Elements*. No chain link fences can be erected in the City of Gloucester.

MATERIAL	INSPECTION REVIEW	RECOMMENDED ACTION
Water Management	Groundwater directed towards building foundation	☐ Re-grade area at foundation to direct ground water away from building
	Water ponding adjacent to foundation	☐ Verify water from exiting downspouts is directed away from building foundation — install splash blocks or downspout extensions at base of downspouts
	Vegetation, such as shrubs, are located immediately adjacent to foundation	□ Vegetation can trap moisture in wall surfaces by blocking sunlight and reducing air circulation − remove or thin vegetation close to a building or conduct regular inspections for rot, algae, fungus and mold behind vegetation
	Tree limbs extend over roof	☐ Consider trimming limbs away from house — they provide shade from the sun that can lead to the formation of moss, fungus, mold or algae; leaves and debris collect and clog gutters and downspouts; tree limbs have the potential to cause severe damage if they fall during a storm
Fences and Walls	Wood fences	 □ Check for deterioration and follow recommendations in the Exterior Woodwork Checklist □ Anticipate repainting or re-staining every 5 to 8 years
	Stone walls	☐ Check for deterioration and follow recommendations in the Masonry and Stucco Checklist
	Metal fences	☐ Check for rust spots or bare metal – remove rust and prepare for re-painting
Walkways, Patios and Pavers	Brick, flagstone or concrete pavers cracked or missing	☐ Verify the condition of the sub-base and replace deteriorated or missing units in-kind
	Water ponding on paved surfaceSubsidence of paved surface	☐ Verify the condition of the sub-base and reset individual units to allow appropriate drainage
	Vegetation growing between individual units	☐ Some vegetation has a substantial root structure that can dislodge individual paving units – remove vegetation if appropriate
Asphalt Paving and Driveways	Cracked asphalt	☐ Seal cracks to minimize potential water infiltration ☐ Consider sealing or repaying entire surface if cracks are substantial or prevalent
	Water ponding on paved surfaceSubsidence of paved surface	☐ Verify the condition of the sub-base and patch to allow appropriate drainage

INTERIOR CHECKLIST

Exterior maintenance problems can be most evident at the interior of a building. The areas most likely to demonstrate exterior problems tend to be the least-visited parts of a house, the attic and the basement. It is important to remember that attics and basements tend to be unique spaces with distinct Attics usually sit directly under roofs which can be highly conditions. susceptible to moisture infiltration. Similarly, basements are primarily located below the surrounding grade and are also susceptible to moisture and pest infiltration and damage. Because these spaces tend not to be used as regularly, and because they do not tend to be conditioned with heat, air conditioning and moisture control to the same level as the rest of the house, problems can fester and become more severe before being notice





MATERIAL	INSPECTION REVIEW	RECOMMENDED ACTION
Attic Space	Water stains on rafters or roof boards – probably indicated by either a dark patch on the wood or plaster or possibly a white bloom representing salt crystallization	☐ Review during or immediately following a rainstorm to understand whether staining is a current or past problem – pay particular attention to flashing locations around roof penetrations such as vent pipes, chimneys and dormer windows as well as at valleys and eaves
	 Mildew on underside of roof structure Dampness in attic space Overheated attic 	□ Verify whether the attic is sufficiently ventilated
	Broken or missing collar beamsCracked or sagging rafters	☐ Potential structural problem — consultation with an architect or structural engineer is recommended, particularly if condition worsens
	Inadequate insulation at attic floor or between rafters	☐ Install appropriate insulation
Basement or Cellar	 Mortar of walls soft and crumbling Damp or moldy smell Evidence of dampness under first floor or around pipes Evidence of wood rot or insect infestation at wood sills on top of foundation walls or first floor joists Periodic flooding 	 □ Review for potential moisture infiltration □ Verify water from exiting downspouts is directed away from building foundation – install splash blocks or downspout extensions at base of downspouts □ Re-grade area at foundation to direct ground water away from building □ Check underground water supply and drainage systems for cracked or clogged pipes □ Re-point deteriorated mortar □ Install a dehumidification system □ Contact an extermination company for potential infestation
	Inadequate insulation below first floor, around pipes, heating and air conditioning ducts, and water heater in unheated basements	☐ Install appropriate insulation – condensation can form on unheated equipment and frozen pipes can burst



Problems with the downspout have resulted in deterioration of the mortar joins and efflorescence and staining of the brick surface. The projecting water table has been previously patched with stucco and the paint is peeling from both the water table and foundation below. There have been various repointing efforts of the brick as evidenced by the different mortar colors and joint styles.

MAINTENANCE MANUAL

It can be helpful for property owners to develop a maintenance manual to keep track of conditions, problems, maintenance tasks and contractors who performed the work. This outline of conditions will assist property owners in diagnosing problems, prescribing remedies, and tracking the effectiveness of those remedies in a similar manner that a physician tracks a patient's health. The information in the manual generally falls into three categories:

- 1. General information
- 2. Documentation
- 3. Inspection and maintenance requirements

- General information should include the names and telephone numbers for emergency services and repairs, as well as basic information on specific building equipment. This includes:
 - Address and tax parcel or block and lot number
 - Telephone numbers and addresses for:

Fire Department

Police Department

Building Department

Contractors

Electrician

Electric Company

Gas Company

Water Company

HVAC Repair (Heating, ventilation and air conditioning)

Pest Extermination Services

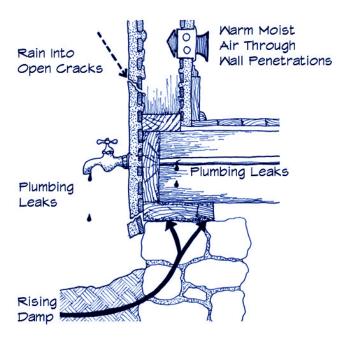
- Diagram locating electrical disconnects and various utility cut-offs (such as water and gas)
- Documentation information should include historical, construction, alteration and legal information that is specific to the property's past and current conditions. This includes:
 - Architectural drawings and specifications of original construction or later additions or alterations as available
 - Historic photographs and photographs of existing conditions and dated inspection photographs (as referred to in the Checklists)
 - Construction records including all contracts, bonds, guarantees, equipment data and operating instructions
 - Copies of deeds and other legal documents including covenants and easements
- The third major component is the preventive maintenance checklists, which should outline the following:
 - Items to be inspected
 - Frequency of the inspections for various components
 - Information on particular repair and upkeep techniques of particular components, materials and equipment

Since the maintenance manual should be updated regularly to be the most effective, it might be helpful to keep this information in a three-ring binder. This information can assist a homeowner keep abreast of new and ongoing problems before they become costly emergency repairs.

MOISTURE

Typically moisture is the primary agent of decay in a building. No matter how "waterproof" a building is, water vapor will find its way into the structure. When moisture saturates a building's materials, it can:

- Make wood desirable as a food for insect and plant consumption
- Promote the growth of mold, algae and fungi
- Cause building materials, particularly wood and masonry, to swell when wet, exerting additional pressures, particularly during freezing temperatures
- Compromise the structural integrity of the building
- Cause chemical reactions that might deteriorate materials by transmitting salts and minerals through walls, particularly in masonry
- Damage or destroy interior finishes and furnishings



Rain and Precipitation can enter the exterior envelope through damaged or cracked surfaces and crevices with adjacent materials including window and door frames.

Rising Damp is the migration of moisture from the soil into the building structure through capillary action. The soil adjacent to the foundation can become saturated through improper drainage from gutters and downspouts and vegetation planted adjacent to the foundation.

Plumbing Leaks include piping as well as bathroom fixtures, kitchen and laundry appliances, and underground piping.

Condensation occurs when warm moist air from bathrooms, kitchens and laundry facilities comes in contact with cold surfaces and changes to water droplets.

SAFETY PRECAUTIONS

Repair and maintenance of a building can potentially be dangerous work. It is recommended that all manufacturers' recommendations be followed and appropriate safety precautions with ladders, tools, materials and processes be taken. Property owners should consult a professional for work that is unfamiliar or potentially unsafe.

Older buildings can have dangerous materials such as asbestos, lead, radon and mold that might be uncovered during work. Property owners should familiarize themselves with these materials and their building's conditions before beginning work. Information about common hazardous materials can be found by contacting the following organizations:

Asbestos

US Environmental Protection Agency Hotline: (800) 368-5888

New Jersey Department of Environmental Protection: (609) 984-6985 www.epa.gov/asbestos

Lead

National Lead Information Clearinghouse: (800) 424-LEAD www.epa.gov/lead

Radon

The National Safety Council's Radon Hotline: (800) SOS-RADON www.epa.gov/radon

New Jersey Department of Environmental Protection Radon Section: (800) 648-0394

Mold

Indoor Air Quality Information Clearinghouse: (800) 483-4318 www.epa.gov/iaq/molds/index.html

Information concerning asbestos and radon are also available though the New Jersey Department of Environmental Protection website at:

www.state.nj.us/dep

For additional questions or information, please contact the City of Gloucester's Administrative Zoning Officer at (856) 456-7689 for general questions, or your personal physician for health-related concerns.

INSULATION AND WEATHERIZATION

Insulation can be an effective means of controlling heat loss in a building. There are three general types of insulation:

- · Rigid board insulation
- Fiberglass batt insulation
- Blow-in insulation includes fiberglass, rock wool and cellulose

When combined with a vapor barrier, integral on most batt insulations, insulation can reduce moisture migration through a building's envelope. (In this climate, it is generally recommended that the vapor barrier is installed between the livable space and the insulation. When installing batt insulation in an attic floor installation, the vapor barrier should be facing down and the fiberglass batts exposed within the attic.)

In addition to the attic and walls, it is also important to insulate the perimeter of the cellar or crawlspace or the underside of the first floor framing. Before installing insulation, all cracks and openings should be caulked or sealed, and if the cellar or crawlspace will not be heated, the water heater and exposed piping and ducts should be insulated.

To minimize the potential for trapped moisture, it is critical that moisture problems or leaks be addressed before installing insulation. Typical areas of concern are adequate attic, kitchen, bathroom and laundry area ventilation as well as any areas of leaks or condensation.

The GCHPC and GCUEZ encourage:

- Remedying moisture problems before insulating
- Installing adequate ventilation in attics, bathrooms, kitchens and laundry areas

A common area of concern for heat-loss is windows. It is important to verify windows operate and sit properly in their frames, the frame perimeters are caulked, and weather stripping is installed around each sash. Storm windows can greatly increase the thermal efficiency of windows, with wood exterior storm windows or interior storm windows generally being the most appropriate for historic houses. Interior storm windows can be very airtight, substantially reduce condensation and are generally removable during warm weather.

The GCHPC and GCUEZ encourage:

- Making windows operable and sit properly in frames, and caulking open joints around windows
- Installing exterior or interior wood storm windows

PAINT REMOVAL SAFETY

Paint removal is potentially hazardous work. Keep children and pets clear of work areas. Property owners should consult a professional for work that is unfamiliar or potentially unsafe.

- Always wear safety goggles
- With heat tools, always wear appropriate clothing and keep a fire extinguisher nearby
- Paint dust from older buildings can contain lead –
 wear a dust mask, avoid open food or beverage
 containers in area of paint removal, and thoroughly
 clean exposed skin and launder work clothes

PAINTING

Paint is one of the most common ways to protect exterior materials from the elements. When the painted surface has been compromised, moisture and the elements can infiltrate the underlying material and accelerate potential deterioration.

In general, exterior surfaces should be repainted every 5 to 8 years, with potential touch-ups of high traffic, worn or deteriorated areas. If the frequency of complete repainting is greater, there might be an indication of another problem such as:

- Presence of excessive moisture
- Paint was applied with inadequate surface preparation or under adverse conditions
- Paint is not compatible to underlying material or previously applied paint

For further information, including how to determine whether painting is necessary and appropriate preparation techniques please refer to the *Guidelines for Exterior Woodwork*.



This publication was initiated and overseen by the City of Gloucester City and made possible through a Smart Future grant provided by the New Jersey Department of Community Affairs (NJDCA). Regardless, the contents and opinions expressed in these *Guidelines* do not necessarily reflect the views or policies of NJDCA nor does the mention of trade names constitute endorsement or recommendation by NJDCA.

© Dominique M. Hawkins, AIA, of Preservation Design Partnership in Philadelphia, PA, preparer of this publication.



Urban Enterprise Zone Historic Preservation Commission

GUIDELINES FOR ROOFING

These Guidelines were developed in collaboration between the Gloucester City Urban Enterprise Zone (GCUEZ) and the Gloucester City Historic Preservation Commission (GCHPC) in order to enhance the visual aesthetics in the Gloucester City commercial and historic districts.

Program Overviews:

The GCHPC reviews Certificate of Appropriateness (COA) applications for proposed exterior alterations to properties within the historic districts visible from a public way. The applicant is responsible for complying with the provisions of the Zoning and Building Codes at the time of application. applicant must obtain Certificate of a Appropriateness (COA) as well as all necessary permits prior to proceeding with any work. more information, or to obtain permit applications, please call the Administrative Zoning Officer at (856) 456-7689.

The GCUEZ program promotes economic growth by helping neighborhood businesses succeed through offering incentives which encourage growth while stimulating the local economy. One of these such programs is the GCUEZ signage and matching façade grant program where UEZ businesses only can receive up to \$10,000 in matching facade grants as well as \$1,000 in signage grants to enhance their business storefronts. For more information, contact the UEZ Coordinator at (856) 456-6075 or via email at uez@cityofgloucester.org.

Using the Guidelines:

Please review this information during the early stages of planning your project. Familiarity with this material can assist in moving a project quickly through the approval process, saving applicants both time and money.

Additional *Guidelines* addressing other historic building topics and application forms are available at the Municipal Building and on the City's web site at www.cityofgloucester.org.

PURPOSE

These *Guidelines* were prepared to assist property owners with information when considering the repair, alteration or installation of roofing. It is not intended that these *Guidelines* should replace consultation with qualified architects, contractors, the GCUEZ, the GCHPC, and/or the applicable ordinances.



This building's shallow hipped roof has deep overhanging eaves with projecting rafters that cast strong shadows on the stucco wall below.

ROOFS

A building's roof provides the first line of defense against the elements and its design greatly affects the overall appearance of a building. Therefore, the following functional and aesthetic concerns should be considered when considering roof alteration.

- Weather-tight roofing preserves a building and provides shelter from rain, wind, sun and snow
- Temperature variation and building movement affect roofing materials
- Roofing helps define the building's character, silhouette and architectural style
- The form, color and texture of roof and roof penetrations affect the scale and massing of the building
- Roofing variations add visual interest to the streetscape

ROOF FORMS

There are six general roof forms. The roof forms can have various pitches and be combined in different manners to provide numerous roof types.

• Gable Roofs include front, side and cross-gable configurations. Gable roofs generally have two equally angled inclined planes that meet at a central ridge and represent one of the most common roof forms for their ability to shed water and relative ease of construction. Most vernacular or traditional buildings in the area use this roof form.

In the side gable configuration, the primary entrance is located below the sloping side eaves of the roof. In the front gable configuration, the main entrance is located at a gable end. A cross-gable roof refers to perpendicularly intersecting front and side gable forms, with the primary entrance at either the front or side gable.

- Shed Roofs, also known as a pent roofs or lean-tos, are roofs with a single slope, essentially forming a half gable, with rafters spanning between one exterior wall and a secondary wall. Shed roofs are typically used for additions to existing buildings.
- **Gambrel Roofs**, also known as Dutch roofs, include a pair of shallow pitched slopes above a pair of steeply pitched roofs on each side of a center ridge.
- **Hipped Roofs** slope inward from exterior walls, meeting at a ridge or a point, as in pyramidal roofs.
- Mansard Roofs include a steeply pitched lower slope beginning at the building cornice, and a nearly flat upper slope that might not be visible from the ground. The lower slope can be straight, concave or convex.
- Flat Roofs might be a true horizontal plane or have a low pitch to allow for drainage. Flat roofs often terminate at a parapet, generally an extension of the building's exterior walls.



This commercial building has a decorative parapet at the front elevation that "conceals" a gable roof to the rear. Above the storefront is a pent roof supported by brackets that provides protection from inclement weather for the patrons.



The cross gables at this roof terminate in jerkin-heads, forming a small hipped roof at the gable end. The deep eaves are supported with decorative wood brackets. Also note that the previous roofing has been replaced with dimensional asphalt shingles with alternating bands of square and scalloped shapes to simulate slate.



Mansard roofs are typical of the Second Empire mode of Victorian architecture and are very common in Gloucester City. The steeply pitched concave lower roof slope in this example retains its alternating bands of square and scalloped slates, providing additional texture and visual interest.

ROOF PITCH AND MATERIALS

The pitch or slope of a roof helps define the appropriate materials for the roof. Low-pitched to flat roofs depend on a continuous or nearly continuous roof surface to minimize moisture infiltration. Material options for low-pitched roofs include built-up hot tar roofing; roll roofing; and soldered flat seam metal. Possibilities for moderately to steeply sloped roofs include unit materials such as slate, wood shingles, standing seam metal and asphalt shingles.

ROOFING MATERIALS

Historically, roofing materials were selected based upon practical and aesthetic criteria including pitch, weather conditions, and availability of materials and craftsmen.

In the City of Gloucester, historic roof materials were generally slate, occasionally wood shingles, and later metal roofing, asphalt shingles. Each material provides a specific color, texture and pattern to a roof surface. Slate and wood shingles provide a modulated surface with variations in color, texture veining or graining and thickness. Decorative slate shingles were also used, particularly in the second half of the nineteenth century, to add additional colors or shapes to roof surfaces. A standing seam metal roof provides distinct shadow lines that establish a rhythm or scale to the building.

With industrialization at the beginning of the twentieth century, new roofing materials were introduced, including asbestos and asphalt based shingles, as well as varieties of rolled or built-up roofing for flat installations. The variety of metal roofing was also expanded, including copper, galvanized sheet steel and aluminum.

More recently, a larger variety of substitute roofing materials intended to simulate historic materials have been developed, with some being more successful than others. These include "dimensional" or "architectural" asphalt-composition shingles; fiberglass, metal or recycled rubber shingles intended to evoke the appearance of wood or slate shingles.

INVESTIGATING HISTORIC ROOFING

Some investigation is needed to determine the historic roof material for a building. A good place to start is in the attic. New roofs are often laid atop older roof surfaces. By looking between rafters, older roofs can sometimes be seen. Another area of review is the roof framing, lath and sheathing. Because of its weight, slate requires more substantial roof framing, tending towards larger rafters with narrower spacing than wood shingle framing. If the original lath is visible, there are variations in lath spacing that relate to standard sizes for slate and wood shingles. Finally, wood sheathing was often needed in metal roof installations, while lath was used in wood and slate shingle installations.

If physical evidence is not available, documentary evidence such as historic photographs, speaking to neighbors or looking at similar buildings in the City might provide clues about original roof materials.



Slates are available in a variety of shapes and colors. The most common color in the City of Gloucester is grey.

SLATE

Slate was a popular roofing material, providing a durable, fire resistant and attractive surface, and in certain conditions, capable of lasting for centuries. It was often used in Colonial as well as Victorian architecture where the variety of shapes and colors for slates, including gray, black, red, green and purple, made the roof surface a visually important building feature.

A slate roof can last 60 to 125 years depending on the stone properties, formation, installation quality and regularity of maintenance. A failing slate slowly delaminates, chips and absorbs moisture, causing the deterioration process to accelerate over time.

Even more often than wood roofing, problems with slate roofs are typically the result of localized failure since many of the roof accessories and fasteners do not have the same 100-year life span as the slate itself. To extend the serviceable life of a roof, property owners are encouraged to address localized problems as they become apparent, using a qualified slate roofer.

Typical localized problems and possible repairs for slate:

- Loosening or corrosion of fasteners for slate or accessories Reattach or replace fastener
- Split or cracked slate Install sheet metal under shingle, fill split or hole with roofing cement
- Missing or damaged slates or roof accessories Replace to match original

If over 20% of the slates on a roof slope are damaged or missing, replacement of the roofing might be warranted, although applicants are strongly encouraged to make every attempt to match decorative patterns and colors with replacement materials. Ceramic tile, rubber and other materials are used to simulate slate, but many have not been available commercially for very long. Dimensional or architectural fiberglass asphalt shingles are manufactured by several companies, simulating the shapes, color and variegated color appearance of slate.

METAL

Metal was popularized for roofing after sheet metal production was expanded following the Civil War, and can be found on primary buildings as well as agricultural structures and outbuildings. Traditional sheet roofing metals include lead, copper, zinc, tin plate, tern plate, and galvanized iron. Many metal roofs require painting with traditional colors including red, silver, green or black. On shallow pitch roofs like porches, cupolas or domes, small rectangular pieces of flat seam metal roofing were installed with edges crimped together and soldered to form a weather-tight surface. On steeper pitched roofs, long continuous seams were used, either in a standing seam or batten seam configuration, providing regular ridges down roof slopes.

A well-installed and maintained metal roof is very durable and can last well over a century. If not properly installed, metal roofing is subject to expansion and contraction with changes in temperature, resulting in buckling and warping. Similar to slate roofing, metal roofing work should be undertaken by a specialist.

Deterioration of the metal surface tends to occur from wearing of the protective painted or galvanized surface, chemical action, pitting or streaking, airborne pollutants, rain or material acids, or galvanic action. Galvanic action occurs when dissimilar metals chemically react against each other and corrode, and can come from adjacent metals, such as fasteners and non-adjacent metals, such as roof cresting via rainwater.

Typical localized problems and possible repairs for metal:

- Worn paint, galvanizing or coating Repaint
- Slipping sheet, open seam or solder joint Refasten and re-solder
- Isolated rusting or holes Replace to match original

If the roof is generally rusting, splitting, pitted, severely buckled or warped, or many of the seams or edges are open or disfigured, replacement of the roofing might be warranted, although applicants are encouraged to make every attempt to match seam patterns and color with the replacement material. Metal roofing replacement alternatives are generally either hand fabricated of copper or tin; or pre-manufactured of aluminum or steel, typically with a baked-on painted finish.



Standing seam metal roofing provides shadows lines on this roof.



Wood shingles are a traditional roofing material that is historically less common in Gloucester City than slate.

WOOD SHINGLES

Wood shingles are typically made from cedar, cypress, redwood, oak, elm or white pine. Historically they represented a less common roofing material in the City of Gloucester than slate or metal roofing.

A wood shingle roof can last 30 to 60 years depending on the roof pitch, quality of materials and installation. However, like all exterior wood installations, a shingle roof is subject to deterioration from rot, splitting, warping and eroding. In many cases, wood shingle roofs are replaced at the first indication of a localized problem when regular maintenance or a less intensive repair would be sufficient. Common locations of failure are the roof accessories including the fasteners, flashing and gutters, which might have a shorter life span than the roofing surface. To extend the serviceable life of a roof, property owners are encouraged to address localized problems as they become apparent.

Typical localized problems and possible repairs for wood shingles:

- Loosening or corrosion of fasteners for shingles or accessories *Reattach or replace fastener*
- Split or punctured shingle *Install sheet metal under shingle, fill split or hole with roofing cement*
- Moss or fungi on surface Trim back adjacent trees allowing sun to dry out roof surface; investigate fungicide application; check attic for adequate ventilation
- Missing or damaged shingles or roof accessories Replace to match original

If over 20% of the wood shingles on a roof slope are damaged or missing, replacement of the roofing might be warranted. Wood roofing replacement alternatives include dimensional fiberglass asphalt shingles.

Wood Shingles vs. Wood Shakes: A wood shingle is sawn while a wood shake is split, historically by hand, resulting in more variable thickness. In these *Guidelines*, the term wood shingle is used to refer to either wood shingles or shakes.

ASPHALT

Asphalt became a popular roofing material at the beginning of the twentieth century providing a relatively inexpensive and easily installed roofing material. Early roofing was generally made of asphalt-saturated felts in a variety of shapes, styles, textures and colors. Today, asphalt shingles are made with fiberglass, generally as 3-tab or "architectural" or "dimensional" shingles, which include multiple layers of material with simulated shadows suggesting wood or slate.

An asphalt shingle roof can be expected to last from 15 to 25 years with "architectural" or "dimensional" shingles lasting longer due to their multiple layers. Over time, asphalt shingles can curl, lose their mineral coating, be dislodged by wind or ice, or become brittle.

Typical localized problems and possible repairs for asphalt:

- Split or puncture *Install sheet metal under shingle, fill split or hole with roofing cement*
- Moss or fungi on surface Trim back adjacent trees allowing sun to dry out roof surface
- Missing or damaged shingles or roof accessories Replace to match original

If over 20% of the asphalt shingles on a roof slope are damaged or missing, replacement of the roofing might be warranted. Some historic styles and colors for asphalt shingles are still available. Property owners are encouraged to replace historic asphalt in-kind.



Dimensional asphalt shingles are available in a variety of shapes and colors to simulate natural roofing materials such as slate.



Flat or low-slope roofs are often concealed behind parapets.

FLAT ROOFING SYSTEMS

Although very few roofs are truly "flat", low-sloped, generally defined as a pitch below 3:12 slope, (3 inch rise for 12 inch run), require a watertight roofing system. By contrast steeper pitched roof systems generally employ shingles; in materials such as slate, wood and asphalt; to shed stormwater. There are a variety of flat or low-slope roof systems including: metal roofing; built-up roofing; single-ply roofing, and modified bitumen roofing.

Typical localized problems for flat roofs include:

- Splits, punctures, or cracking of surface
- Standing water or poor drainage

In selecting the most appropriate roofing material it is important to verify the design will address the building's drainage and special details of the exiting conditions including attachment, substrate and weight limitations. Other factors include maintenance requirements and anticipated life span in Gloucester's climate.

ALTERNATE MATERIALS

When considering installing alternate roofing materials, it is important to balance installation costs, the roof's design, long-term durability and aesthetics.

The GCHPC and GCUEZ encourage:

- Maintaining historic appearance of roofs when replacing, including size, shape, texture, pattern, color and other visual characteristics of original
- Installing roofing rather than typical wall materials on the steep slopes of Mansard roofs
- Installing a variegated or blended color of shingles
- Visiting a completed installation rather than relying on brochure photographs
- Verifying that proposed material is appropriate for roof pitch
- Understanding the substrate and attic ventilation appropriate for each material
- Understanding that some artificial materials might fade or change appearance over time

ROOF ACCESSORIES

In addition to the roofing surface, roof accessories are also functional and influence a roof's appearance. Roof accessories include flashing, gutters, downspouts and snow birds.

Flashing is made of thin sheet metal formed to prevent water from entering a building at joints, intersections and changes of pitch. It is typically installed around chimneys, parapet walls, dormer windows, roof valleys, vents, and intersections of porches, additions or bow windows. Flashing often fails before roof surfaces, particularly with more durable roofing such as slate, resulting in interior leaking. If the flashing deteriorates, it is possible to replace it without replacing the entire roof.

When replacing flashing or installing a new roof, it is important to select a flashing material that has an anticipated life span similar or longer than the roofing. Copper, terne, steel, lead and aluminum are all used for flashing. The longevity of each material is based upon its thickness and whether it is galvanized, treated or coated. Generally, copper or lead coated copper has the longest life span, followed by steel, with aluminum being highly susceptible to punctures, tears and a galvanic reaction to other metals and some roofing materials. It is important to verify flashing materials are sympathetic to existing roofing materials.

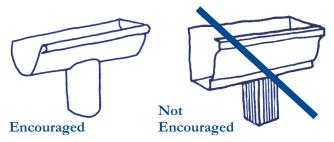


Stepped copper flashing is visible at the inside face of this parapet wall and the bottom of the chimney. The flashing likely turns under the shingles to prevent storm water from entering in at the edge of the roofing. Also note the pole gutter at the bottom edge of the roof to capture stormwater and direct it towards a downspout.

Gutters are typically located near or along the bottom edge of a roof slope to collect rainwater. Built-in gutters are hidden from view from the ground within or behind architectural features such as cornices or parapets. Pole gutters are located near the bottom edge of a roof slope and project perpendicularly to the roof surface. Both built-in gutters and pole gutters are formed of flashing materials typically wrapped around or within wood forms.

Hanging gutters are attached to the building just under the roof slope edge and are half-round or profiled in cross section. Hanging gutters have been made of wood, copper, galvanized metals, aluminum and recently vinyl.

Similar to flashings, gutter materials have different longevities. Generally, copper has the longest potential life span, followed by steel, with aluminum being highly susceptible to punctures, tears, dents and galvanic reaction to other metals. Vinyl can become brittle, fracturing in low temperatures.



Half-round gutters with round or rectangular downspouts are preferred to decorative gutters with corrugated downspouts.

Downspouts, also known as rainwater conductors, are generally surface mounted to a building's exterior to conduct a gutter's water down the face of the building to the ground or an underground drainage system. Similar to gutters, downspouts can be fabricated of copper, galvanized metal, aluminum and vinyl with similar characteristics, in a round or rectangular profile.

The GCHPC and GCUEZ encourage:

- Installing flashing materials that have an anticipated life that is longer than the building's roofing
- Regular cleaning and maintenance of gutters and downspouts
- Retaining original drainage system and appearance, particularly pole (Yankee) gutters or built-in gutters
- Installing half-round gutters rather than a profiled K-gutter, which often compete with building features
- Installing plain round or rectangular downspouts which are more appropriate for use at historic buildings than corrugated downspouts

Snow birds, known as snow guards, are typically cast metal or bent wire devices arranged in a staggered pattern near an eave to prevent large masses of snow from sliding off a roof. Another form of a snow guard is spaced brackets supporting metal rods above the roof surface. Both types of snow retention can protect eaves, cornice and gutters, and take advantage of the insulating effect of snow.



This roof has a variety of features including the steeply pitched segmented hipped roof with alternating rows of square and scalloped slates; decorative cresting along the top ridge; a copper clad gable roof dormer window; snow guards along the eaves; and a massive stone chimney.

ROOF FEATURES

Roof features are decorative and sometimes functional elements that help to define the profile of a roof against the skyline and should complement the building's style. Historic rooftop features include chimneys, dormers, cupolas, bell towers, turrets, finials, cresting and weathervanes.

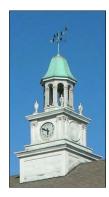


Chimneys were typically designed to complement the style of a building and period of construction. In Gloucester City, many are constructed of brick with some stone, some of which have been covered with stucco. Early Georgian, Federal style Colonial Revival buildings tend towards square or rectangular chimney shafts, sometimes with Victorian chimneys can include molded caps. decorative detailing including corbelling, varied patterns, undulating and molded surfaces decorative terra-cotta chimney pots.



This side gable roof includes three hipped roof dormers at the front elevation providing natural light and increased habitable space at the upper floor.

Dormers, also known as dormer windows, protrude from the roof surface with a window at the downward slope, providing light and additional headroom under roof eaves. Dormers can have various roof shapes including gables, shed, hipped, eyebrow, segmented pediment and other shapes.



Cupolas, also known as monitors or belvederes, are structures project up from the roof, used for ventilation with louvers, or as lookouts with windows. They are often found agricultural on outbuildings to provide ventilation for the animals housed below, but can also be found in urban areas as a decorative feature on important institutional or civic buildings.

When addressing roof features, it is important to remember they are part of the stylistic composition of the roof and building, and can be difficult and costly to replace.

The GCHPC and GCUEZ encourage:

- Maintaining and repairing of historic roof features
- Replacing damaged or missing materials with new to match the material, size, shape, texture, color and other visual characteristics of the original

The GCHPC and GCUEZ discourage:

- Removal of rooftop features without appropriate replacement
- Encapsulating decorative wood elements such as cornices and brackets with vinyl or metal

ROOF REPAIR OR REPLACEMENT

The GCHPC and GCUEZ encourage:

- Maintaining, cleaning or repairing of roofing, roof accessories and rooftop features
- Regular repainting of metal components susceptible to rusting and wood elements susceptible to rot and deterioration
- Cleaning of gutters and downspouts regularly, typically every spring and fall
- Inspect attics periodically after a storm or freeze to catch small leaks early to minimize the potential for interior damage
- Selectively replace damaged or missing materials with new materials to match the material, size, shape, texture, color and other visual characteristics of the original
- If the level of damage or deterioration is beyond repair, completely replacing damaged or missing materials with new materials to match the material, size, shape, texture, pattern, color and other visual characteristics of the original
- If replacement in original material is not possible, replacing the damaged or missing materials with new material of similar size, shape, texture, pattern, color and other visual characteristics of the original
- Installation of fasteners and flashings with a similar expected life span to the roofing material
- Installing roofing rather than typical wall materials on the steep slopes of Mansard roofs

The GCHPC and GCUEZ discourage:

- Removal of roof features such as chimneys, dormers, cupolas, weathervanes, finials, etc.
- Removing or altering historic drainage system
- Adding or altering rooftop features at areas visible from a public way that change roof configuration including skylights, television antennas or dishes, solar collectors, mechanical equipment, roof decks, chimney stacks and dormer windows
- Adding rooftop features that create a false historical sense without supporting documentary evidence such as weathervanes, cupolas or wood shingles on an originally slate roof
- Adding new features that are out of character, scale, materials or detailing to the historic building
- Encapsulating decorative wood elements such as cornices and brackets with vinyl or aluminum capping or siding



The surface of the shingles has worn and individual shingles have been dislodged. Roofing replacement should be considered.

ADDITIONAL AREAS OF CONSIDERATION

- Roofing work is potentially dangerous and should be left to professionals
- All roofers are not experienced in all materials, obtain references and verify that roofers have appropriately completed compatible work
- Verify the extent of both the material and installation warranties and company histories
- Verify whether removal of existing roofing is required before installation of new roofing; too much weight can damage structural elements
- Verify the condition of substrate for rot or decay and make necessary repairs, including the sheathing or lath, and structural elements
- Use substrate appropriate for roof material and provide adequate ventilation under roof surface
- Use appropriate underlayment including building paper, rosin paper and/or ice shield
- Use a single type of metal compatible to roofing at fasteners, flashing, gutters and downspouts to avoid galvanic action
- Select a flashing material with a longer or comparable life span to the roofing material
- Reference industry standards such as SMACNA, Copper and Common Sense, Slate, etc. – The GCHPC and GCUEZ can suggest project specific references



This publication was initiated and overseen by the City of Gloucester City and made possible through a Smart Future grant provided by the New Jersey Department of Community Affairs (NJDCA). Regardless, the contents and opinions expressed in these *Guidelines* do not necessarily reflect the views or policies of NJDCA nor does the mention of trade names constitute endorsement or recommendation by NJDCA.

© Dominique M. Hawkins, AIA, of Preservation Design Partnership in Philadelphia, PA, preparer of this publication.