A. FOUNDATIONS

The foundation forms the base of a building. On many buildings it is indistinguishable from the walls of the building. On others, it is a different material or texture; or it is raised well above the ground level.

Maintenance

- Ensure that land is graded so that water flows away from the foundation; and, if necessary, install drains around the foundation.

- Keep crawl space vents open so that air flows freely.

- Remove any vegetation that may cause structural disturbances at the foundation.
Chapter 3: REHABILITATION OF BUILDING ELEMENTS

Foundation Guidelines

1. Retain any decorative vents that are original to the building.

2. Avoid filling in between piers with brick or other materials that may detract from the historic appearance of foundations and porches.

3. Repair and replace deteriorated foundation materials such as bricks, stone and mortar, matching existing historic materials in-kind. See Guidelines for Masonry in Chapter 4, Section B.

See Preservation Brief #39
Holding the Line: Controlling Unwanted Moisture in Historic Buildings
B. PORCHES

Entrances and porches are quite often the focus of historic buildings, particularly when they occur on primary elevations. Together with their functional and decorative features, such as doors, steps, balustrades, pilasters, and entablatures, they can be extremely important in defining the overall historic character and style of a building. Their retention, protection, and repair should always be carefully considered when planning rehabilitation work. For resident buildings, porches have traditionally been a social gathering place, as well as a transitional area between the interior and exterior.

Inappropriate Treatments

- Avoid stripping porches and steps of original materials and architectural features, such as handrails, balusters, columns, brackets, and roof decorations.
- Do not enclose porches on primary elevations.
- Porches on secondary elevations that can be seen from a public right of way shall not be enclosed.
- Do not replace original trim with trim that conveys a different period, style, or theme. If trim is missing, the replacement should be based on physical evidence, or barring that, be compatible with the original buildings.
Porch Guidelines

1. Retain porches that are critical to defining a specific building’s design and the integrity of the overall historic district. *Non-original porches reflecting later architectural styles are often important to the building’s historic character.*

2. Repair damaged elements of porches by matching the materials, methods of construction, and details of the existing original fabric.

3. Applicants seeking to remove, alter, or replace a porch must provide documentary evidence that the desired alteration is appropriate to the historic and architectural character of the structure. The existing porch must not be considered historically significant as defined by the Secretary of the Interior’s Standards.

4. Alternative materials will be considered under the guidance of the most recent Technical Preservation Services Briefs, as these guidelines continually evolve to include new restoration products and techniques.

See Preservation Brief #16
The Use of Substitute Materials on Historic Building Exteriors

A program of the National Park Service, Technical Preservation Services helps develop historic preservation policy and guidance on preserving and rehabilitating historic buildings, administers the Federal Historic Preservation Tax Incentive Program for rehabilitating historic buildings, and sets the Secretary of the Interior’s Standards for the Treatment of Historic Properties.

Contact Technical Preservation Services
Technical Preservation Services
National Park Service
1201 "Eye" Street, NW, 6th Floor
Washington, DC 20005

Phone: (202) 513-7270
Email: NPS_TPS@nps.gov
Chapter 3: REHABILITATION OF BUILDING ELEMENTS

Porch Types

**Full-Width, One Story Porches** may vary according to style. Columns and decorative details often reflect classical elements. Many of the houses that have full width porches are simple vernacular structures without very much decoration.

![603 Brown Avenue](image)

**Secondary Porches** on the side or rear of the building can be one or two stories.

![1015 Pecan Avenue](image)

**Porticos** are found on Federal and Colonial Revival houses and are identified by their columns and classical details.

![608 Prince Henry Street](image)

**Wraparound Porches** on Victorian-era and/or Bungalows are extensions of the front porch that wrap around the side of the dwelling.

![600 Brown Avenue](image)

*See Preservation Brief #45 Preserving Historic Wooden Porches*
C. DOORS

Generally the front door makes the biggest statement about the house. Together with their functional and decorative features, such as sidelights and transoms, they can be very important in defining the overall historic character and style of a building. Their retention, protection, and repair should always be carefully considered when planning rehabilitation work.

Inappropriate Treatments

- Avoid removing original doors or entry features, such as transoms or sidelights.

- Do not alter a primary entrance to give an appearance that was not originally intended, such as adding a pediment to a simple vernacular entrance.

- Existing entrances should not be removed when a historic structure has been re-oriented to accommodate a new use.

- Do not use replacement doors and/or door surrounds with stamped or molded faux paneling or leaded, beveled, or etched glass.

Door Guidelines

1. Every effort should be made to repair existing, architecturally significant and original door(s).

2. Repairs can be made to sections of the door, transom or sidelights. Missing sections can be replaced by using products such as wood epoxies or wood patches. Splicing or reinforcing the original materials is encouraged.

3. When replacing glass, snap-on grills or grills between the glass are not acceptable; only clear-paneled, non-tinted glass shall be used for replacement panes.

4. If replacement is necessary, the new door(s) must be the same size, design, material (wood) and type as used originally, or sympathetic to the building style.

5. Replacement with alternative materials will be considered with guidance from the Secretary of the Interior’s most current Preservation Brief related to this issue.

6. A new door, transom, or sidelight glass must match the original overall size and opening area.

7. If a door is no longer needed (e.g. double house as single family), the door, trim, and hardware should be retained so that it appears to be a functional element of the building.
Storm Door Guidelines

1. Materials must match the existing trim around the door in width, depth, opening size, etc.

2. The door must be consistent with style, time period, and color scheme of the main or entry door of the house.

3. Exterior storm doors should not damage either the door or door frame. Storm door divisions should match the original door.

4. The most appropriate material is wood.

5. Use the same overall dimension for the storm door as the existing door.

6. Paint the storm door the same color as the main door.

7. Only full view, clear-paned, non-tinted glass shall be used in metal storm doors.

Screened Door Guidelines

1. All screened doors must be made of wood.

2. The style of a screened door must be consistent with the style, time period, and color scheme of the house.

See Preservation Brief #3
Improving Energy Efficiency in Historic Buildings
Examples of Local Doors

Good examples of doors within the City Point Historic District, Left to Right, Top to Bottom:

- 608 Prince Henry Avenue
- 505 Cedar Lane
- 1013 Maplewood Avenue
- 1010 Pecan Avenue
- 1015 Pecan Avenue
D. TRIM

Trim Guidelines

1. Retain existing trim that defines the architectural character of the historic building.

2. **Repair rather than replace existing trim.**

3. Do not remove elements that are part of the original composition, without replacing them “in-kind.”

4. Match original materials, decorative details, and profiles.

5. If architectural features are missing or need to be replaced instead of repaired, the feature should be replaced “in-kind.”

Decorative frieze and cornice at 1030 Maplewood, Bank of City Point

Tuscan columns at 608 Prince Henry
E. WINDOWS

Windows add light to the interior of a building, provide ventilation, and allow a visual link to the outside. The window sash, framing and architectural detail surrounding the window, play a major part in defining a building’s particular style, scale, and character.

Because of the variety of architectural styles and periods in the City Point Historic District, there is a corresponding variation of styles, types, and sizes of windows. Illustrations of common window types for each architectural style are found in Appendix B: Common Architectural Styles.

Windows are one of the major character-defining features on most buildings and can be varied by different designs of sills, panes, sashes, lintels, decorative caps, and shutters. They may occur in regular intervals or in asymmetrical patterns. Their size may highlight various bay divisions in the building. All of the windows may be the same in one building, or there may be a variety of types that give emphasis to certain parts of the building.

Elements of a Double Hung Window
### Window Guidelines

#### Retain and Repair

1. Retain original windows and historically significant examples, including glass and hardware, when possible. The first growth wood, from which many original older windows are fabricated, has more dense growth rings that provide for better resistance to water and insect damage than the wood available today.

2. Retain and preserve windows that contribute to the overall historic character of a building, including their functional and decorative features, such as frames, sash, glass, muntins, sills, heads, moldings, surrounds, shutters, and blinds.

3. Protect rare examples of window types. Any windows that include original stained, leaded, etched, colored, or other specialty glass should be retained.

4. Preserve window trim details. Wood sills and exterior frames should not be covered or obscured by replacement siding.

5. Uncover and repair covered-up windows, and reinstall windows with their original dimension, where they have been blocked in.

6. If the window is no longer needed, the glass should be retained and the back side frosted, screened, or shuttered so that it appears from the outside to be in use.

7. Repair original windows by patching, splicing, consolidating, or otherwise reinforcing, such that existing material is retained to the highest possible extent.

8. Wood that appears to be in poor condition because of peeling paint or separated joints, often can, in fact, be repaired.

#### Maintenance Tips

- Ensure that all hardware is in good operating condition.

- Ensure that caulk and glazing putty are intact and that water drains off the sills.

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See *Preservation Brief #9*

The Repair of Historic Wooden Windows

See *Preservation Brief #13*

The Repair and Upgrading of Historic Steel Windows

See *Preservation Brief #33*

The Preservation and Repair of Historic Stained and Leaded Glass

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### Storm Window Guidelines
1. Use interior storm windows, if possible.

2. If used, exterior storm windows should meet the following criteria:
   - Match divisions to sash lines of the original windows. Use meeting rails only in conjunction with double-hung windows, and place them in the same relative location as in the primary sash.
   - Size exterior storm windows to fit tightly within the existing window opening, without the need for a sub-frame or panning (a filler panel) around the perimeter.
   - Match the color of the frame with the color of the primary window frame.
   - Use only clear glass.
   - Set storm sash as far back from the plane of the exterior wall surface as practicable.

**Inappropriate Treatment of Windows**

- Installing replacement windows that do not fit openings.
- Using materials or finishes that radically change the sash, depth of reveal, muntin configuration, reflective quality or color of glazing, and appearance of frame.
- Using clip-in/false muntins and removable internal grilles, as they do not present an historic appearance.

**Window Replacement**

- Changing the number, location, size, or glazing pattern on the primary elevation(s).
- Installing horizontal, picture, round or octagonal windows not appropriate to the architectural style of the house.
- Cutting a new opening(s).
- Blocking in existing windows.
Window replacement means replacing both the frames and the sash.

Sash replacement means replacing just the parts of the window that frame the glass and may be a less costly alternative to full window replacement.

Prior to any replacement of windows, a survey of existing window conditions is required. Note the number of windows; whether each window is original or replaced; the material, type, hardware and finish; the condition of the frame, sash, sill, putty, and panes. Representative photographs showing the condition of the windows should be submitted when requesting a Certificate of Appropriateness.

- Replace only those features of the window that are beyond repair.
- Replace windows only when they are missing or beyond repair.
- Retain existing wood window trim. This reduces potential damage to the interior and exterior historic fabric surrounding the window, when replacing the complete unit.
- If a window on the primary façade of a building must be replaced, and an existing window in good condition, of the same style, material, and size is identified on a secondary elevation, relocate the historic window to the window opening on the primary façade.
- Use wood sash replacements where wood windows are badly deteriorated. * By placing a new track and a new sash in the old frame, no trim is removed, so there is no need to repair and repaint woodwork or adjacent walls.
- Base reconstruction of missing windows on physical evidence or old photographs.
- Energy efficiency is addressed on pages 3-16 & 3-17.

Original window at the Christopher Proctor House on Prince Henry Avenue
Appropriate Window Replacements

If replacement of a deteriorated window is necessary, replace the unit “in-kind”, by matching the following:

**Design and Dimension of the Original Sash**

- The original size and shape of window components should be maintained. Thin sash frames rarely maintain shadow lines, planar qualities, and/or overall appearance of historic sash.

- It is important for full window replacements to fit the height and width of the original opening.

- A dividing bar matching the width and depth of the historic meeting rail is essential.

- Appearance of double-hung windows should be retained, whether one or both sashes are operable.

- Do not reduce glazed surface area.

**Pane Configuration**

- Maintain original number and arrangement of panes.

- True divided lights, or three-part, simulated divided lights, with integral spacer bars and interior and exterior fixed muntins, give depth and profile to windows and are preferred when replacing similar examples, thus preserving dimension and shadow lines.

**Detailing**

- Small variations in the detail of the window may be permitted if those variations do not impact the historic characteristics of the window design, such as the width and depth of the muntins and sash, and the shadow effect created on glazed areas.

- Finish windows in a historically appropriate paint color.

- Retain associated details, such as arched tops, hoods, and decorative elements.

**Materials**

- Replace a wood window with a wood window.

- Use translucent or low-e glass.

- The use of substitute materials on buildings in the City Point Historic District is subject to review by the ARB.

- Alternative materials will be considered under the guidance of the most recent *Technical Preservation Services Briefs*, as these guidelines continually evolve to include new restoration products and techniques.
F. SHUTTERS

Shutter Guidelines

1. Retain shutters, including original hardware, if they are original to the building.

2. Avoid shutters on multiple or bay windows.

3. Repair existing historic shutters following the guidelines for wood found in Chapter 4: Rehabilitation of Building Materials.

4. Replace shutters that are beyond repair with “in-kind” examples according to the following criteria:

   - Shutters should be operable.

   - Shutters should be mounted on hinges. Do not nail or permanently secure a shutter opening and eliminate its hardware.

   - Shutters should be sized to fit the window opening and result in the covering of the window opening, when closed.

   - Shutters should be of a design appropriate and complementary to the structure.

   - Shutters should be constructed of wood or a composite material that retains the characteristics of wood, and is able to be sawn and painted. Vinyl and aluminum shutters are not appropriate for any historic structure.
Chapter 3: REHABILITATION OF BUILDING ELEMENTS

G. STORM WINDOWS, STORM DOORS, AND THERMAL EFFICIENCY

Storm windows and doors can save energy and provide increased comfort by reducing air leakage. Storm windows also provide an insulating air space between the storm and primary window.

See Preservation Brief #3
Improving Energy Efficiency in Historic Buildings

Weatherizing Historic Buildings
With heightened concern for the environment and rising fuel costs, many owners are looking for ways to reduce energy consumption in their historic properties. Technical Preservation Services has created a guide to improve the energy efficiency of historic buildings: www.nps.gov/tps/sustainability/energy-efficiency.htm.

Did You Know?
There are tax incentives available for improving the energy efficiency of your historic building. Not only could your project qualify for a historic preservation tax credit, but it may also be eligible for federal income tax incentives for energy efficiency. Learn more about these credits from the non-profit Tax Incentives Assistance Project (TIAF): www.energytaxincentives.org
Steps to Improve Thermal Efficiency

Interior Storm Windows

Storm windows made for interior use can be successfully installed and are more energy efficient than exterior storm windows.

- Look for models with airtight gaskets.
- Ventilation holes and/or removable clips should be provided to ensure proper maintenance and avoid condensation damage.
- A COA is not required for the installation of interior storm windows as long as the following conditions are met:
  - There are no mullions, muntins, or wide frames visible from the exterior of the building.
  - The glazing consists of clear glass or other transparent material.

Exterior Storm Windows

An original wooden window with an exterior storm window may provide as good, if not better insulation, than a double-paned new window. A COA is required for installation of exterior storm windows.

Wood

- Insulates better than metal.
- Can be painted to match trim.
- Easily repaired.
- Available with glass and screen inserts.

Aluminum

- Lighter weight than wood.
- Integrated glass and screen panels.
- Should be pre-painted to match the color of the window frame.

Weather-Stripping

- Rolled vinyl weather-stripping can be tacked in place on a window frame.
- Metal strips or plastic spring strips can be installed on rails, and when space allows, between sash and jamb.
- Heavy solid wood doors are good insulators if they fit tightly and are weatherized. Install weather-stripping of spring bronze, felt, or new vinyl beading around the edges of the doorway.

Sash Locks

- Install on meeting rail to ensure tight fit between upper and lower sash.

Caulking, Putty

- Caulk joints/seams around edges of window frame to avoid moisture penetration.
- Replace deteriorated glazing putty and repaint to create weather-tight seal.
- Install new recessed metal tracks with springs to hold existing sash while providing a tighter fit to the frame.
H. ROOFS

One of the most important elements of a structure, the roof serves as the “cover” to protect the building from the elements. Good roof maintenance is absolutely critical for the roof’s preservation and for the preservation of the rest of the structure.

A variety of roof forms appear throughout the City Point Historic District. These add appreciably to the essential character and silhouette of the buildings in the District.

ROOF TYPES

Gable

A gable roof, pictured at right (1015 Pecan Avenue), is pitched in the shape of a triangle. In a front-gable structure, the narrower, triangular portion of the roof faces the street. A cross-gable, two gables perpendicular to each other, covers L-shaped buildings. Typical cladding materials were metal, or in very early buildings, wood shingles. A typical form for Federal, Georgian, and Colonial Revival styles, gable roofs cover many of the houses in the District.

Hipped

A hipped roof, pictured at right (602 Prince Henry Avenue), has slopes on all four sides. Original cladding materials include metal or slate. Approximately one-third of the houses in the District have hipped roofs, which was a variant roof form for Georgian, Colonial, Greek Revival, and Federal styles.

Gambrel

A gambrel roof, pictured at the bottom right (510 Cedar Lane), has its angle of pitches part way between the ridge and eaves. The style resembles that of a barn roof and is considered to be the straightforward version of the mansard roof.

Mansard

A mansard roof has the distinctive feature of allowing the attic room to be larger than in simpler forms of pitched roof construction. This feature arises because the roof has two sloping planes.

The lower sloped plane is steeper than the upper sloped plane. There are no examples of mansard roofs in the City Point Historic District.
Roof Guidelines

1. Retain original or historically significant roof materials whenever possible.

2. Repair historic and original roof materials using “in-kind” materials.

3. Consolidate original roof materials to the most visible areas, and use replacement materials on areas not in view of public right-of-ways.

4. Replace the entire roof only when the roof is beyond repair. Salvage historic and original materials for reuse where possible.

5. If replacement is necessary, the new material should match the original roof covering in composition, size, shape, color, and texture.

6. Appropriate roof cover materials are dependent upon the style/era of the structure. See the Guide to Roof Materials on page 3-21 and 3-22.

7. Skylights may be approved, if placed inconspicuously on the rear of buildings.

8. The original roof shape should be preserved.

9. When rehabilitation is the aim, the appropriateness of roof forms must be considered in the context of existing roof forms on the original buildings. In new construction, roof forms on adjacent buildings must be considered.

10. Architectural features, including dormers, cupolas, cornices, brackets, and chimneys should be retained.

11. Repairs or replacement of parts should be made “in-kind”, with materials that duplicate the original materials.
Solar Panels

- The addition of solar panels should not require the removal of historic roofing.
- The installation method should be reversible and not compromise the historic integrity of the structure.
- Solar panels should be minimally visible from the public right-of-way.
- Every effort shall be made to conceal them.

Mechanical Equipment

- Rooftop units should be located so that they are minimally visible from the public right-of-way, and screening should be considered.
- Exhaust vents or fans should be installed where their visibility is minimized and with the least impact on historic materials.

See Preservation Brief #29
The Repair, Replacement and Maintenance of Historic Slate Roofs

See Preservation Brief #19
The Repair and Replacement of Historic Wooden Shingle Roofs

See Preservation Brief #4
Roofing for Historic Buildings

Appomattox Plantation
Guide to Roof Materials

Slate Shingles

Although its use in Virginia is documented as early as Jamestown, slate was not easily shipped and did not enjoy wide popularity until canals and railroads made its transport more economically feasible in the mid-nineteenth century. The most common roof slate found in the City Point Historic District is either Buckingham or Pennsylvania slate.

Buckingham slate is from Buckingham County, Virginia and is one of the hardest slates available. Its life expectancy is approximately 150 years.

Pennsylvania slate is noted for its variation in color. This variety will often start to delaminate in 75 years, with a life expectancy of no more than 125 years.

Faux slate is manufactured from recycled plastic and rubber, and costs as little as one-third the price of natural slate, as well as weighing less than half of the natural. When chosen carefully, these slates replicate the historic appearance of the real thing and can last up to 50 years.

Wood Shingles

The availability of wood made this roofing popular with the first settlers, and regional stylistic characteristics developed over time. Although there was a decline in the use of wood shingles in urban communities in the nineteenth century due to fire concerns, wood shingle roofs endured in rural areas. Replacement roof shingles should replicate the appearance of the early, thin, usually oak shingles which were often fish-scale or rectangular in shape. Modern cedar shingles are not an acceptable substitute.

In the early twentieth century, the Colonial revival, shingle and bungalow styles were responsible for resurgence in the popularity of this material. Longevity: 20-25 years.

For 18th and early 19th-century structures, random width, wood shingles, ranging in size from 2.5 to 5 inches, either round or square butt, may be appropriate.

Concrete Shingles

Marketed as an alternative to slate and wood shingles for over a century, today’s concrete shingle can be reinforced with cellulose that allows design to simulate wood shingles. These concrete materials vary by product, but generally have a life expectancy of 60 years. They can be more fire retardant than their wood counterparts and less expensive than slate.

Asphalt Shingles

First produced in 1903 as individual shingles, cut from asphalt roll roofing, these shingles were given a stone surface. By 1906, the multi-tab strip shingle was being marketed.

By World War I, a number of factors, including its use of non-strategic materials, ease of transportation, fire retardant properties and lower costs, combined to increase its market share.

Ceramic granules have replaced the original crushed stone, and fiberglass mats have replaced felt underlayment to improve this product’s durability. Longevity: 15-50 years.
Copper

Among the first uses of copper roofing was the New York City Hall in 1764. It did not see widespread popularity until the latter part of the nineteenth century, when large quantities of the metal began to be mined in Michigan. Due to high cost, it is more often used for flashing, gutters or downspouts. Since it does not need to be coated, copper weathers well and is easy to install. Longevity: 100 years.

Tin-Plated Iron

From its use at Thomas Jefferson’s Monticello in 1800, this metal product was popular throughout the nineteenth century. As technology improved, the size of sheets grew from 10x14 inches in the 1830’s to 20x28 inches in the 1870’s. Longevity: 100 years.

Terne

The French word for dull, it was used to describe lead coated tin-plate, patented in 1831. Less expensive than tin-plated iron, it became twice as popular by the end of the nineteenth century and was fashioned into shingles, sheets and standing-seam applications. A zinc-tin alloy on a steel substrate has now replaced the lead coated tinplate. Longevity: 30+ years.

Pre-Painted Terne

Modern terne must be painted to ensure its life expectancy. This product comes pre-painted from the factory, reducing later maintenance issues. Certain suppliers have taken care to offer a color palette that approximates historic appearance, rather than shiny coatings. Longevity: 30 years.

Terne-Coated Stainless

This relatively new material consists of stainless steel to which has been applied a zinc-tin alloy. It does not need painting and can be worked in a manner to approximate historic standing-seam metal roof profiles. Longevity: 50-100 years.

Flat Roof Membranes

Shingles and standing seam metal roofing materials require a sloped roof application to prevent water infiltration. Roofing materials for flat roofs are designed with adequate waterproofing measures for flat applications. Flat roof materials can include tar and gravel, built-up roofing membranes, EPDM and other membrane systems. Longevity: 15-30 years.

Elastomeric Roof Coatings

These products can extend the life expectancy of a metal or built-up roof by reducing the roof’s surface temperature and the harmful effects of solar radiation. These products should not be used to repair leaks. Leaks should be repaired using the original roofing material, roofing cement and reinforcing fabric. When used, an elastomeric coating should either match the paint color of the roof, or a clear coating should be used with a matte finish. Longevity: 3-7 years.

Replacement materials should match the original materials in dimension, shape and texture. Pre-formed metal panels should not be used as a substitute for replacement of standing seam metal roofing. Alternative materials can be considered under the guidance of the most recent Technical Preservation Services Briefs, as these guidelines continually evolve to include new restoration products and techniques.
I. GUTTERS AND DOWNSPOUTS

Gutters and downspouts are necessary to provide a path to direct water away from your building and its foundation. The original shape, size and materials of gutters and downspouts also help define the historic character of your building, its age and style.

Gutter and Downspout Guidelines

- Retain original and historically significant metal gutters and downspouts. They should not be removed from the structure.

- Repair original and historically significant metal gutters and downspouts, and provide on-going maintenance to prevent the deterioration of materials.

- Replace gutters and downspouts “in-kind” if the original fabric is too deteriorated to repair. In most instances, the historic profile of the gutter is a half-round, rather than an ogee or “K” rectangular shape. Round downspouts should be replaced with round rather than rectangular downspouts.

- New metal gutters and downspouts should be of the same size as the original and should be finished with enamel or “baked-on” coatings, unless fabricated of copper.

- The finish color should be compatible with the overall color scheme for the building. Copper should remain unfinished.

- If there is no evidence of the construction or the design of the original gutters and downspouts, use a design that is appropriate to the architectural style and period of the structure’s construction.

Maintenance

- When installing gutters and downspouts, avoid removing historic fabric from the building.

- Gutters should be checked on a regular schedule to avoid clogging which can lead to moisture damage.

Copper gutters at St. John’s Episcopal Church with an ogee profile