Knoxville Historic Zoning Commission

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These guidelines were adopted by:
Knoxville-Knox County Metropolitan Planning Commission on October 9, 2003
Knoxville Historic Zoning Commission on October 16, 2003
Knoxville City Council on November 25, 2003
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Old North Knoxville was developed as part of the incorporated city of North Knoxville. Its growth was a result of the expansion of the streetcar, Knoxville's booming economy and growing population after the Civil War, and other technological advances that made suburban living desirable. The long straight streets of Old North paralleled the streetcar line. The automobile did not have a major influence on Knoxville until the 1920's so there are only a few driveways or garages in the neighborhood; most of them were built after 1920. Some carriage houses remain behind the oldest houses, but most people did not own a horse and carriage. They depended on the streetcars for transportation and used neighborhood sidewalks to reach the streetcar lines.

Several original subdivisions make up the current Old North Knoxville Historic Overlay District. Within each of these subdivisions, streets are laid out in a grid pattern, usually parallel with the nearest major street (Broadway or Woodland) where a streetcar could be found. Old North is a typical streetcar suburb, with a strong pedestrian orientation guiding its design. Most of its residents walked to their homes from the streetcar stop. The blocks were rectangular with parallel streets and service alleys. Interesting angles were formed where the streets met.

The town of North Knoxville was incorporated on January 16, 1889. Larger than the current Old North Knoxville neighborhood, it was a series of speculative real estate expansions that reinforced the image of a desirable residential area. The town grew rapidly. The city of North Knoxville provided a central water supply touted as superior to the neighboring Knoxville's water. It had improved streets (unlike some areas of Knoxville), fire protection, a city hall and a school for approximately 100 students. Electric lights were installed in 1899. City gas lines and a sewer system were planned, but not built before Knoxville annexed North Knoxville in 1897.

The architectural styles in the neighborhood reflect economic conditions and living customs of the late 19th and early 20th centuries. The houses range from the large middle and upper class areas developed along Oklahoma, Scott, Glenwood and Armstrong to the smaller homes found on some sections of Oklahoma, Harvey and other locations. The smaller homes are worker housing that emerged during Knoxville’s industrial revolution, some of it tied to the Brookside Knitting Mill then located on Baxter Avenue, and some located in the neighborhood because the streetcar lines were available. Many late 19th century neighborhood residents worked for the Southern Railway. There are particularly good examples of Victorian-era shotguns and cottages located on Harvey.

Architects probably designed many of Old North Knoxville’s houses, but most of the information that credits their designs has not been discovered. However, it is known that homes by George Barber, his son Charles Barber and David Getaz are located in the neighborhood. Most of the buildings are distinctive architecturally with a high degree of ornamentation. The styles found in the
neighborhood are described in the Architectural Styles section found in these guidelines.

The buildings of Old North Knoxville make a unified statement about Knoxville's history and architectural development. Although changes have occurred to the neighborhood since its establishment, the houses and public improvements remain very intact. Efforts of Old North Knoxville, Inc., the neighborhood association, have been instrumental in creating a climate for restoration and rehabilitation activities, and in publicizing the neighborhood and its attributes. Designation of Old North Knoxville as a local historic district has reinforced past activities in the neighborhood, helping to create a strong, viable residential section that contributes to Knoxville's progress while symbolizing its history.
Old North Knoxville contains distinctive architectural styles that date from the late 19th and early 20th centuries. As is true with most of the historic architecture in Knoxville, there are very few “pure” styles. Instead, the styles found in the Old North Knoxville H-1 Historic Overlay District draw characteristics from several styles to form an eclectic mix. Styles most representative of the neighborhood are discussed in this section, with drawings that illustrate that style’s characteristics.

LATE NINETEENTH CENTURY STYLES
The last half of the 19th century saw a shift from the restrained, classical designs of Georgian, Federal and Greek Revival to the textured, varied designs of the Victorian era. By the time houses were being designed and built in Old North Knoxville, in the late 1800’s, these Victorian designs were well established.

Queen Anne
The Queen Anne style was popularized by 19th century architect Richard Norman Shaw, but has nothing to do with the time of Queen Anne’s reign.
in England, which was from 1702-1714. The first American example of Queen Anne style is thought to be the Watts Sherman house in Newport, Rhode Island, built in 1874. By 1880, architectural pattern books were spreading the style through the country. The expanding railroads helped to popularize it by making pre-cut architectural details widely available.

The Queen Anne style contains varied, exuberant architectural elements. Details from many other styles are reinterpreted and captured in Queen Anne design. Queen Anne houses have irregular floor plans, large porches, and elaborate decoration on exterior surfaces. Roofs are steeply pitched. Some have coverings of colored slate, patterned oversize asphalt shingles or terra cotta tiles. Ornamental wood shingles, with a diamond, square or fishscale pattern, are often used on gables. Turned wood porch columns usually have trim of elaborately sawn wood, lacy spandrels, spindle work, beaded balusters, and ornamental attic vents, bargeboards or windows.

Windows may be leaded and stained glass, and transoms and sidelights are often found. A Queen Anne window of small square stained glass panes surrounding a large central pane is common. The Queen Anne window may be one or both sashes of a double hung window.

Queen Anne Cottage

The Queen Anne Cottage grew out of the Queen Anne style. It could have been either a product of an architect's design or designed by a builder. One or one and one-half stories in height, it usually has a hip and gable roof, corbelled interior chimneys and sawn wood ornamentation. The Queen Anne Cottage has a large front porch. Wood columns that may be turned, chamfered or rounded usually support the porch roof. Brackets, sAWN wood or louvered attic vents and spindle work balustrades are often found. Windows are double sash, with either two over two or one over one panes. There may be transoms and sidelights, with leaded or stained glass. Wall coverings are usually weatherboard. There may be patterned wood shingles in gables, with wood louvered or sAWN wood attic vents and
sawn wood bargeboard. A Cottage window, an early form of the picture window, is often found in Queen Anne Cottages. It consists of a large fixed pane with fixed or movable transoms and narrow side windows that are double hung sashes. The transoms and side windows are made of smaller panes, sometimes using stained or beveled, leaded glass.

**Eastlake**
The Eastlake style was also used at the same time as the Queen Anne and is similar to it. It was developed as a furniture style, and quickly seized on by the era’s builders and architects, so it is often thought of first with interior design. It was developed by Charles Eastlake. It is more vertical than the Queen Anne style, with more massive wood trim, usually formed by a chisel or gouge. Rolls of spindles and beaded trim are common.

**Shotgun**
The term “shotgun” refers to a floor plan arrangement in which the rooms of the house open in succession from front to rear without a hallway. The term “shotgun” comes from the description that a shotgun could be fired in the front door and all of the shot would exit through the rear doorway without hitting any intervening walls. Front gable roofs are common on the shotgun house, which as a full or three-quarter front porch. The houses were usually worker housing. Trim is not elaborate, and may be either from the Victorian era or from the later Craftsman period. Window pane configuration reflects the style of trim applied to the house. In Old North Knoxville, it is appropriate to refer to the shotgun in connection with styles of the Victorian era, because the trim and ornamentation of most of these houses is reflective of that era.

**Folk Victorian**
Another style present in the Old North Knoxville Historic District is Folk Victorian, which usually highlights a front gable and trim derived from Queen Anne styles. Full length porches with chamfered or turned posts are common, and double hung windows are prevalent. In some instances, a style thought of as Folk Victorian may have been classified as a more elaborate Queen Anne in its original design. Over the years, as trim decayed and was removed, the building’s style has been simplified so that what remains is perceived to be Folk Victorian.

**EARLY TWENTIETH CENTURY STYLES**
After 1900, the style of buildings gradually began to change from the elaborate Victorian-era designs to simpler designs. Some of these were revival styles, based on earlier historic precedents. Particularly popular were Colonial and Neoclassical Revivals, but an interest in history also encouraged styles drawn from the Spanish Colonial, Dutch Colonial, Tudor and Italian Renaissance periods. Another design emphasis involved the Prairie, Bungalow and Craftsman designs. The Craftsman design particularly used exposed rafters and structural elements. These stylistic influences are particularly notable in the porch designs of Old North Knoxville. Many houses that are obviously derived from Victorian-era styles in their interior massing, room arrangements and trim details exhibit Neoclassical or Colonial porches that were altered after the beginning of the 20th century. A collection of houses on Grainger Avenue and Leonard Place were originally designed as Queen Anne Cottages with Craftsman detailing on their porches. Others were designed initially with interior and exterior designs reflecting the early 20th century styles.
Neoclassical
Facades of Neoclassical houses may feature columns the full height of the two-story building; however, one-story cottages are also present. Houses usually have a full or partial-width porch with columns. Symmetrical front facades and multiple-pane glazing in double sash windows are used, especially on the front façade.

French Eclectic
This style is based on precedents provided by French domestic architecture. The style may be symmetrical, asymmetrical or towered, usually displays brick, stone or stucco wall cladding, flared eaves, and a tall, steeply pitched hipped roof. Doors may be in arched or flat openings. Windows may be either double hung or casement windows. If they are casement sashes, they may have small leaded panes. French doors are often used.

Minimal Traditional
This style was dominant after the 1920’s and has a conservative, simple form of detailing. Eaves are usually small or flush, roof shapes are low-pitched (6/12 to 8/12) and porch hoods or covered porticos are common. Windows are usually double hung, with multiple pane glazing in each sash. Facades may be either symmetrical or asymmetrical.

Colonial Revival, Tudor Revival and Dutch Colonial Revival
These styles were used in the same time period, and have many universal characteristics. Steeply pitched roofs, usually gabled, characterize the Tudor Revival style, which also uses half-timbering, tall-narrow windows and massive chimneys. Stucco or masonry is often used as a wall covering material, along with weatherboard. Dutch Colonial Revival buildings use a mansard roof, while Colonial Revival styles use a gable end roof. All may use six over six double-hung windows, and details such as dentil molding. Entry porticos supported by slender columns, or front stoops, were common.
Craftsman and Bungalow
Buildings of this style have low-pitched (8/12 or higher) gable roofs with wide eave overhangs. Roof rafters are visible, and decorative beams and knee braces are widely used on Craftsman houses. Porches usually stretch across all or more of the front façade, with a roof supported by tapered or square columns, or by posts resting on piers or a balustrade. Dormers are used extensively. Weatherboard is a common wall surface material. Windows are usually double hung, although casement windows are becoming more prevalent. The windows have upper sashes with three, four or more panes, while the lower sash has one. Bungalows differ from Craftsman styles in having much simpler ornamentation, with a more limited use of exposed rafters and exposed trusses or braces.

American Four Square
Like the Shotgun style discussed previously, a description of this style has more to do with the massing of the house and the stylistic changes demanded by that massing, than with the exterior trim details found on the building. It was used from the 1900’s through the 1930’s and is recognized by its square appearance and often hipped, pyramidal roof. Front dormers are often used. The house is almost always two or two and one-half stories in height, and interior spaces are arranged into four main, square or nearly square spaces. A full front porch is most common in these buildings. Detailing on the house may be from any of the styles common in the early 20th century. Sidelights and transoms are often used on an American Four Square, and these may be of leaded, stained or beveled glass. Double hung windows are usually used, and they may have a patterned upper sash or may be in a one over one configuration.
Historic Overlay Districts (H-1) and Neighborhood Conservation Overlay Districts (NC-1) have a set of design guidelines that residents and the Knoxville Historic Zoning Commission use to guide rehabilitation and new construction. These guidelines are drafted in consultation with a committee of neighborhood property owners and residents, and are adopted by the Knoxville Historic Zoning Commission, MPC and the Knoxville City Council. If a property owner is planning a construction project that affects the outside of a building, that owner must follow the guidelines and receive a Certificate of Appropriateness from the Knoxville Historic Zoning Commission.

Certificate of Appropriateness
If a building permit is required for exterior work, the property owner will be required to produce a Certificate of Appropriateness before the permit can be issued. It is better for the owner to meet with the Historic Zoning Commission or its staff to discuss the work that will be done. When the work is exterior work, the owner must apply for a Certificate of Appropriateness. The Historic Zoning Commission will review the project to be sure that it does not harm the historic appearance of the structure, or its structural integrity. A Certificate of Appropriateness will then be issued. If the proposed work is repair work that includes the repair of siding, soffit or fascia, windows, roof or some other features with identical material (called a Level 1 Certificate), the staff may issue the Certificate immediately.

The levels of Certificate of Appropriateness applications are:

- Level 1: Standard repair of siding, fascia, soffit, windows, roof, or other features using identical materials and design.
- Level 2: Major structural repair and replacement, such as a complete exterior rehabilitation or the addition of new space or an outbuilding.
- Level 3: Construction of a new primary building or a subdivision, or for the use of a replacement material or a design that deviates from the adopted design guidelines.
- Level 4: Demolition or relocation of a contributing structure.

The historic district regulations apply only to exterior changes, that require a building permit. Interior changes, landscaping, paint colors, or other things not requiring a building permit will not require approval from the Knoxville Historic Zoning Commission.

Old North Knoxville, Inc., as the organization representing the district, will be asked to appoint at least one representative to meet with the Knoxville Historic Zoning Commission at least annually, and to receive monthly notices of the meeting. The responsibility of Old North Knoxville’s representative will be twofold: 1) to provide information about the neighborhood to the Historic Zoning Commission; 2) to offer neighborhood opinions about applications for Certificates of Appropriateness.
The Secretary of the Interior's Standards for Rehabilitation

These design guidelines are derived from The Secretary of the Interior's Standards for Rehabilitation (1990). The Secretary's Standards are used by the Historic Zoning Commission as the basis for determining the appropriateness of exterior rehabilitation projects and new construction. A summary of the standards appears on the facing page.
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<tbody>
<tr>
<td>1.</td>
<td>A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site environment.</td>
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<td>2.</td>
<td>The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.</td>
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<td>3.</td>
<td>Each property shall be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.</td>
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<td>4.</td>
<td>Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.</td>
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<td>5.</td>
<td>Distinctive features, finishes and construction techniques or examples of craftsmanship that characterize a property shall be preserved.</td>
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<td>6.</td>
<td>Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old design, color, texture, and other visual qualities and, where possible, materials. Replacement or missing features shall be substantiated by documentary, physical or pictorial evidence.</td>
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<td>7.</td>
<td>Chemical or physical treatments, such as sandblasting, that cause damage to historic materials, shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.</td>
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<td>8.</td>
<td>Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures should be undertaken.</td>
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<td>9.</td>
<td>New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale and architectural features to protect the historic integrity of the property and its environment.</td>
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<td>10.</td>
<td>New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.</td>
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Design Guidelines:
For Rehabilitation and New Construction with Suggestions for Maintenance

The special appearance of Old North Knoxville is made up of each building’s individual architectural details. Porch columns, roof materials and trim, chimney, windows, wall coverings and wood trim all determine the building’s style, and help to form the architectural richness and character of the neighborhood. The buildings combine with distinctive street and sidewalk paving, street markers, stone retaining walls and curbs to make Old North Knoxville a distinctive neighborhood reflecting this area’s history and development.

It is important that old North Knoxville residents remember that they own a piece of history. Most of the buildings of Old North Knoxville are older than the people who now own them; with care they will survive for many more generations. As property owners consider making changes to their buildings, they must remember that the change will either enhance the history of the building or destroy it. The buildings have survived because earlier owners cared for them. These guidelines inform today’s owners about techniques for restoration, rehabilitation and maintenance. An important purpose of the design guidelines is to introduce a consistent standard for rehabilitation and restoration projects and new construction. That consistency will allow the fabric of the entire neighborhood to be maintained.

A Note About Terminology

1. The Old North Knoxville Design Guidelines use the terms “should,” “shall” and “must” which mean that compliance is required.

2. Use of terms such as “consider the use of”, “can be appropriate,” and other permissive phrases are suggestions, but are not requirements.

3. When activities are described as “inappropriate,” the Historic Zoning Commission will not approve such actions.
**Roofs**

**HISTORIC CHARACTERISTICS**

Roof pitches on Old North Knoxville’s historic houses are often 12/12 (the roof pitch rises one foot in height for every foot in width). Even when the pitch is not as steep as 12/12, the roofs form steep sided triangles. Many houses have multiple gables, or a combination of hip and gable roofs. Porches often have shed roofs. Turrets may appear on the main or porch roofs. Dormer windows are sometimes used. There is usually an eave overhang on the historic houses in Old North Knoxville.

The roofs in Old North Knoxville are now nearly all modern asphalt shingles. There were a variety of original roofing materials, such as standing seam metal or metal shingles, wood or slate shingles, large patterned asphalt or asbestos shingles, or shaped roof tiles of terra cotta or concrete. The historic roof colors would have been darker shades of brown, gray, red, green or black. If the roofs were metal, unless they were copper, they were probably painted a dark color to harmonize with the exterior siding and trim colors. Copper roofs were allowed to anodize naturally.

The best roof materials to use when roofing are replicas of the original. If that cannot be done, asphalt or fiberglass shingles can be used, but their colors should be carefully selected to reflect the original roofing colors. When building new structures, roof materials should be carefully chosen to suggest the colors, patterns and materials that would have been found in the neighborhood originally.

Details associated with the roofs of the houses, such as dentil or other patterned molding, roof cresting or finials, attic vent windows, bargeboards, chimneys and other features should be saved, repaired or replaced in kind. All of these features add richness to the architecture of the neighborhood.

**REHABILITATION & NEW CONSTRUCTION**

A. **Roofs**

1. The shape of replacement roofs or roofs on new construction shall imitate the shapes of roofs on neighboring existing houses or other houses of the same architectural style. Roof pitch shall duplicate the 12/12 pitch most often found in the neighborhood or replicate the pitch of neighboring building. Roof shapes shall be complex, using a combination of hips with gables, dormers where appropriate to the style, turrets, or other features that emphasize the importance of Victorian-era or Craftsman styling.

2. The eaves on additions or new buildings shall have an overhang that mimics existing buildings near the property. A minimum eave overhang of at least eight inches must be retained or used on new buildings or additions to existing buildings.

3. Repair or replace roof details (chimneys, roof cresting, finials, attic vent windows, molding, bargeboards and other unique roof features). Use some of these details in designing new buildings.
4. Materials used in roofing existing buildings or new construction shall duplicate the roofing materials originally found in the neighborhood. Asphalt or fiberglass shingles can be appropriate, as are wood, slate, standing seam metal, or metal shingle or tile roof coverings. The color of roofing materials should be a dark green, charcoal gray, black or dark reddish brown to simulate the original roof colors.

5. Do not place solar collectors or modern skylights on roof areas that are visible from the street, and do not install them where they interfere with decorative roof elements.

6. Roofs that are visible from streets shall retain their original shapes. Do not introduce roof elements such as dormers to a roof shape that is original.

7. Gutters shall be half-round if they are replacing half-round gutters; newly installed gutters may be half-round with round downspouts if they are installed on Victorian-era buildings.

**MAINTENANCE SUGGESTIONS**

- Checking regularly for leaks, repairing problems as they occur, and keeping gutters and downspouts free of litter and debris.

- Providing adequate ventilation in the form of soffit vents and ridge vents, which add life to the roof and keep the airspace in the attic dry.

- Previous layers of roofing should be removed before installing a new roof, so that the structure does not support extra weight and built-up layers do not mask later leaks.

- Gutters and downspouts can be installed, and are important in maintaining the foundations of buildings. Consider repairing built-in gutters rather than roofing over them or hanging an additional gutter system at the edge of the roof.
Windows

HISTORIC CHARACTERISTICS
Windows are a very important architectural element of historic buildings. They help to define each building’s character. They are usually wood and are hung so that both the bottom and top sash can open (double-hung). Two over two or one over one sashes are common, but there are also windows with multiple panes and there are attic windows and some upper sashes with stained glass and irregular shapes. The use of patterned glass is typical in Old North Knoxville. Transoms and sidelights, sometimes of patterned beveled or leaded stained glass, are often found at the entries. They were a way of admitting extra light into the entry halls.

Windows are often a prime target of rehabilitation projects. In order to judge the necessity of replacing windows, a careful survey should be made of the windows and their condition. This survey should include a consideration of their value in the overall architectural design of the building. It can be cheaper initially and more energy-saving over a longer period, to retain and repair existing wood windows. Wood can be repaired easily, painted readily, lasts for a long time, and resists corrosion. The original windows found in Old North Knoxville are made of old growth wood, which is more stable and resistant to deterioration than much of the wood in windows manufactured today. While many people assume that removing wood windows is necessary to achieve energy efficiency, many others have found that repairing existing windows will result in equally impressive energy savings.

As a general rule, repair to windows includes only replacing missing putty around the glass, repairing the sash lock, adding weather-stripping and installing good storm windows. These relatively limited repairs can result in energy efficient, reliable, original windows at a cost that is less than replacement of the windows.

REHABILITATION & NEW CONSTRUCTION

B. Windows

1. Original windows shall be reused if possible. It will be much less expensive and much better historically to retain the original windows, and it is inappropriate to replace them with new windows that differ in size, material or pane division.

2. If replacement windows are necessary, they shall be the same overall size as the originals, with the same pane division and the same muntin depth, width and profile. They shall be the same materials as the original windows, which were generally wood.

3. True divided lights shall be used in replacement window sashes with more than one pane.

4. Tinted or reflective glass may not be used on primary or other important elevations.

5. It can be appropriate to design and install additional windows on the rear or another secondary elevation. The design must be compatible with the overall design of the building.
6. Windows may not be blocked in. They must retain the full height and width of the original opening.

7. Storm windows can be allowed as a way to increase the energy savings of a historic house. Interior storms should be considered. Exterior storms can be appropriate, if they are designed so their meeting rail duplicates that of the original window, and if they are wood or color clad metal, matching the building's trim. Exterior storm windows shall not be used unless they do not damage or obscure the original window and frames.

8. Reuse existing, serviceable window hardware.

9. Burglar bars or other security devices that are more obvious or visually intrusive than storm windows are not allowed.

10. Security doors, unless they are full view glass and painted to blend with the trim color of the building, are not allowed.

**MAINTENANCE SUGGESTIONS**

- Make windows weather tight by recaulking, replacing broken panes, and installing weather-stripping, increasing the window's thermal efficiency.
- Protect and maintain the wood or architectural metal that makes up the window frames, sash, muntins and surrounds. Use appropriate surface treatments like cleaning, rust removal, limited paint removal and caulking, priming and painting.
Porches

HISTORIC CHARACTERISTICS
Almost every house in Old North Knoxville has a porch. Porches were a form of air conditioning when the neighborhood houses were built. They shaded the windows and doors. They provided a protected outdoor room that offered entertainment and an opportunity for neighborhood social life in the days before television and radio were introduced. They were graceful, welcoming and introduced the house to passers-by. They could stretch across the full width of the house, or wrap around corners. They might even be two story porches, with upper story balconies. Enclosing a porch with a visible enclosure harms the house by detracting from the original character and design.

In many Old North Knoxville houses, the original porches were rebuilt when the house approached fifty years of age, and many of the new porches were of a different design than the original house. These designs are themselves over fifty years old, and have acquired their own historic significance. It is appropriate to maintain them, but it can also be appropriate to replace them with a replica of the older porch, provided photographs or remnants of the original can document its design.

The individual design elements of the neighborhood porches – turned wood columns, elaborate railing and balusters, heavy wood posts or columns, wood bead board ceilings and tongue in groove floors, gingerbread or sawn wood trim – all are important to the style of the houses. These individual details should be repaired and preserved, or replicated if good documentation of the original porch exists. New buildings constructed in Old North Knoxville must include porches, so they will blend better with the neighborhood. The proportion of new porches must be consistent with those on neighboring houses.

REHABILITATION & NEW CONSTRUCTION

C. Porches

1. Historic porches on houses in Old North Knoxville should be repaired, or may replicate the original porch if documentation of its size and design can be discovered.

2. Design elements to be incorporated in any new porch design must include tongue and groove wood floors, beadboard ceilings, wood posts and/or columns and sawn and turned wood trim when appropriate. If balustrades are required, they must be designed with spindles set into the top and bottom rails.

3. New buildings constructed in Old North Knoxville must contain front porches large enough (at least eight feet deep) to provide adequate seating.

4. In new construction, the proportion of the porches to the front facades shall be consistent with the historic porches in the neighborhood.
5. Porches and balconies visible from a street may not be enclosed unless the enclosure provides as much transparency as existed prior to the enclosure and is designed to be immediately removable.

6. A wood porch floor may not be replaced with a poured concrete floor, which will absorb and retain moisture and eventually damage the structure, as well as the appearance of the building.

MAINTENANCE SUGGESTIONS

The maintenance of porches shall be an ongoing process of oversight and correction of small problems that can quickly become major ones. The most important part of the process is assuring that water-related damage does not occur.

- Perform careful seasonal maintenance to preserve porches and entrances, including installing an adequate gutter and downspouts on porches.
**Entrances**

**HISTORIC CHARACTERISTICS**
*The doors originally used on Old North Knoxville’s houses were wooden, and a majority had beveled, or stained glass inserts. Screen doors were commonly used. Storm doors were not used, and while they can be appropriate, they should be color clad and shall have a full view glass so they do not obstruct the view of the front door.*

**REHABILITATION & NEW CONSTRUCTION**

**D. Entrances**

1. Entry features which shall be preserved include sidelights and transoms of plain, patterned, beveled or stained glass, fan light windows and transoms, entablatures and the original doors.

2. Contemporary interpretations of stained glass or etched glass entry doors are usually inappropriate.

3. It may be appropriate to design or construct a new entrance if the historic one is completely missing. Any restoration shall be based on historical, pictorial or physical documentation, if available. It shall be compatible with the historic character of the building or with adjacent buildings.

4. A replacement entrance shall not create a false historic appearance. A new entrance or porch must be compatible in size, scale, or material.

5. Entrances must not be removed when rehabilitating a building; adaptation to new uses must include the original entrance.

6. Service (rear) entrances may not be altered to make them appear to be formal entrances by adding paneled doors, fanlights, transoms or sidelights.

7. Secondary entrances must be compatible with the original in size, scale and materials, but clearly secondary in importance.

8. Determine if a storm door will be instrumental to saving energy. If a storm door is used, it must have a color-clad frame and a full view glass, or be designed to respect the original entry door.

9. Retain and repair original storm doors, or replace them with new screen doors of comparable design.
Wall Coverings

HISTORIC CHARACTERISTICS OF WOOD WALL COVERINGS
The walls of Old North Knoxville houses may have been covered with weatherboard wood siding, wood shingles, novelty wood siding, brick or stone veneer or stucco. (Brick, stone and stucco are discussed in the Masonry section of these guidelines.) Corner boards, cornices, sawn wood trim and other details are common and should be retained on existing houses and installed on new ones. Wood shingles, usually used on second stories or in gables, are no wider than four inches and may have been rectangular or shaped in fishscale or diamond patterns.

Vinyl, aluminum or other synthetic sidings are not appropriate for existing or new houses in Old North Knoxville. They are particularly dangerous for existing houses, because they can mask drainage problems or insect infestation and prevent good ventilation. Even on new construction, when the synthetic siding is used in place of wood siding, it is not as easily repairable as wood siding, nor can it be painted easily. Over a long period of time, synthetic siding is usually much more expensive than installing or repairing wood siding and maintaining it properly. Synthetic sidings have a different appearance than wood siding. New synthetic sidings are also untested as to longevity. Wood siding has been used in this country for over three hundred years, and if properly maintained, is still serviceable. In Old North Knoxville there are many houses built before 1900 that still retain their original wood siding.

REHABILITATION & NEW CONSTRUCTION

E. Wood Wall Coverings

1. Synthetic siding is inappropriate and is not allowed either as replacement siding on existing buildings or new siding in new construction.

2. Do not use destructive paint removal methods such as propane or butane torches, sandblasting or water blasting. These methods can damage historic wood. Blasting with any material—sand, water, glass beads, walnut shells, etc.—is an abrasive technique, and therefore should not be used.

3. Replacement siding must duplicate the original. Trim and patterned shingles that must be replaced must also duplicate the original material.

4. New construction must incorporate corner and trim boards and appropriate door and window trim to be compatible with adjacent historic buildings.

5. Wooden features shall be repaired by patching, piecing-in, or otherwise reinforcing
the wood. Repair may also include limited replacement with matching or compatible substitute materials, when elements remain and can be copied.

6. Wood features that are important in defining the overall historic character of the building shall not be removed.

7. Replace only deteriorated wood. Reconstructing in order to achieve a uniform or “improved,” “new” appearance is inappropriate because of the loss of good historic materials.

8. An entire wooden feature that is too deteriorated to repair or is completely missing shall be replaced in kind. If features are replaced, the materials they are made from shall be compatible with the original in size, scale and material. Replacement parts should be based on historical, pictorial and physical documentation.

9. Paint shall not be removed from unprotected wood surfaces in order to apply stain or clear finish that will permanently reveal bare wood. This exposes historically painted surfaces to greatly increased weathering.

10. Remove damaged or deteriorated paint only to the next sound layer using the gentlest method possible (e.g., hand sanding or hand scraping).

11. Retain paint and other coats that help protect wood from moisture and sunlight. Paint removal must be considered only where there is paint surface deterioration and as part of an overall maintenance program which involves repainting or applying other appropriate protective coatings.

12. If artificial siding is present on any elevation of a building and must be removed in order to repair the building structurally, it can be replaced on the building if no more than 49% of any elevation's artificial siding is removed. If 50% of the artificial siding on any elevation is removed for repair, it cannot be replaced.

MAINTENANCE SUGGESTIONS

The most important activity in saving historic wood wall coverings and trim involves proper maintenance.

- If paint must be removed from a building, chemical strippers may supplement other methods such as hand scraping, hand sanding, or the use of electric heating devices. If detachable wood elements such as shutters, doors and columns are chemically stripped, do not allow them to soak in a caustic solution, which raises the grain and roughens the wood.

- Use extreme caution when stripping wood with electric heat guns. Historic houses have large amounts of coal soot and debris inside wall coverings; this material can be heated to the point of ignition quickly if agitated by the output of a heat gun. It is best not to use the heat gun where it might blow into wall spaces. Using a heat
gun can also cause lead additives in old paint to vaporize and be inhaled, leading to lead poisoning.

- Stripping flat surfaces with electric heat plates can be effective if they are not held too long in one location. It is fairly easy to ignite paint and the wood surfaces that support it, so extreme caution must be used with a heat plate, and a fire extinguisher should be included in the paint removal equipment. This method can also cause lead additives in old paint to vaporize and be inhaled, leading to lead poisoning.

- Repaint with colors that are historically appropriate to the building and district; however, the final color decision is left up to the property owner. Before repainting, the surface should be gently cleaned. Appropriate primers, caulking and a good outdoor paint should be used.

- Protect and maintain a wood feature by providing proper drainage so that water is not allowed to stand on flat, horizontal surfaces or accumulate in decorative features.

- Identify, evaluate and treat the causes of wood deterioration, including faulty flashing, leaking gutters, cracks and holes in siding, deteriorated caulking in joins and seams, plant material growing too close to wood surfaces, or insect or fungus infestation.

- Maintain a good coat of paint or apply a chemical preservative that is environmentally safe to wood features such as ends of beams or rafters that are exposed to decay hazards.

**HISTORIC CHARACTERISTICS OF MASONRY WALLS**

Masonry was used in some way on nearly all of Old North Knoxville’s buildings. Brick, stone or stucco may form walls, foundations, chimneys, piers for porch columns, or other features of the historic houses. Concrete block, if it is used, is usually ashlar faced.

**Mortar Mix**

In order to understand how to maintain and repair historic masonry, it is important to understand the characteristics of the mortar that unifies the masonry units. There is a very low percentage of Portland cement in old mortar, which is made up of much higher percentages of sand and stone than new mortar. This allows the mortar to expand and contract at the same rate as soft brick, stone, or older ashlar-faced concrete. If repointing is necessary, any new mortar should match the old both in color and in composition. Old deteriorating mortar that must be removed from mortar joints should be removed using hand tools.

Masons and homeowners planning on pointing masonry should use the following mortar mix:

- 9 parts sand
  (Use river sand rather than builder's sand to obtain the proper color.)
- 2 parts hydrogenated lime
- 1 part Portland cement
This mix will produce a mortar that blends in color and hardness with the older mortar. This type of mortar mix is called “type O” and is no longer stocked ordinarily. It can be ordered, but it can also be mixed as noted above.

If a harder, more heavily concentrated Portland cement mixture is used, the mortar will be more rigid than the masonry unit. As the wall absorbs moisture and then is subjected to freeze and thaw cycles that are so prevalent in Knoxville’s climate, the mortar will not move with the stone or brick, causing spalling and deterioration of the masonry units, and causing the architectural feature to fail.

**Cleaning**

Any cleaning of masonry should be done using the gentlest methods available, and only to remove any encrustation of dirt or pollutants that are harming the masonry. Blasting with any material — sand, water, glass beads, walnut shells, etc. — is an abrasive technique. It will cause the masonry to deteriorate, by:

- Removing the hardest protective layer created through firing in the case of brick or through aging and weathering in the case of stone, creating problems with the freeze-thaw cycle and exposing the masonry units to environmental pollution;
- Removing large amounts of mortar, either through abrasion or through a thorough soaking in the case of water blasting, making an entire repointing of the masonry feature necessary;

If chemical cleaners are to be used, they should be carefully tested to assure that they do not harm the surface of the masonry. Chemical cleaners can interact with the chemicals that are present in the masonry wall, causing harm to the masonry. Any testing of cleaning methods should begin with test patches of at least two square feet. After testing, give the cleaned surface adequate time to react to the weather and the chemicals used to clean it, so that any damage can be accurately assessed. The best cleaning techniques are the least invasive and involve using a soft bristle brush with gentle soap and water and rinsing with a pressure no greater than that of an ordinary faucet.

### REHABILITATION & NEW CONSTRUCTION

#### F. Masonry Wall Coverings

1. Never waterblast masonry surfaces.

2. Never sandblast brick or stone surfaces using dry or wet grit or other abrasives, including walnut casing, seashells, glass pellets, or any other material that cleans through abrasion.

3. Evaluate the overall condition of the masonry to determine whether more than protection and maintenance are required.

4. Identify and preserve masonry features that define the historic character of the building, including walls, railings, foundations, chimneys, columns and piers, cornice and door and window pediments.

5. Replace an entire masonry feature that is too deteriorated to repair. Use the remaining physical evidence to guide the new work, and match new
to old. Examples can include large sections of a wall, a cornice, balustrade, columns, stairways or chimneys.

6. If historical, pictorial or physical documentation cannot be found about a masonry feature, a modern design sympathetic to the building would be more appropriate than a hypothetical historical one. A new masonry feature should be compatible in size, scale, material and color.

7. Match replacement mortar to the original mortar in color, composition, profile and depth. If necessary, analyze the original mortar to determine the proportions of lime, sand and cement. A "scrub" technique shall not be used to repoint. The width or joint profile shall not be changed unless the change will return the joint to its original appearance. Sound mortar should not be removed.

8. Never repoint with mortar of high Portland cement content, unless that is the content of the original mortar.

9. Historic masonry shall not be coated with paint, stucco, vapor permeable water-repellent coatings or other non-historic coatings.

(NOTE: Coatings are frequently unnecessary, expensive, and may change the appearance of the historic masonry as well as accelerate its deterioration.)

10. Split-faced block shall not be used in new construction or as a replacement for deteriorated masonry units.

11. Before removing paint from historically painted masonry, determine whether paint on that masonry feature is significant to the historic integrity of the building.

12. Stucco surfaced masonry can be an appropriate for foundation in new construction. Brick and stone can also be appropriate.

MAINTENANCE SUGGESTIONS

Careful maintenance and evaluation of historic masonry can result in avoiding expensive repair.

- Evaluate and treat the various causes of mortar joint deterioration such as leaking roofs or gutters, uneven settlement of buildings, capillary action or extreme weather exposure.

- Protect and maintain masonry by providing proper drainage so that water does not accumulate on flat, horizontal surfaces or in curved decorative features.

- Patinas, which developed over time and are a part of the building's historic character, should not be removed.

- Clean masonry only when it is necessary to stop deterioration or to remove paint or heavy soiling due to pollution. Do not introduce unnecessary moisture or chemicals into the building.
· Never use a cleaning method that involves water or liquid chemical solutions if there is any possibility of freezing temperatures.

· Prior to major surface cleaning, use test patches and observe them over a period of time so the unintended consequences of the cleaning method can be observed.

· Follow manufacturers’ product and application instructions if using cleaning or painting products.

· Repair masonry by repointing mortar joints where there is evidence of disintegrating mortar, cracks in joints, loose bricks, damp walls or damaged plasterwork or stucco.

· Remove deteriorated mortar by carefully hand-raking the joints to avoid damaging the masonry joints. Electric tools may damage historic mortar and brick and should not be used. Only repoint the areas that actually have failing mortar.

· Repair stucco by removing the damaged material and patching with new stucco that duplicates the old in strength, color, composition and texture.

· Repair masonry by patching or piecing-in. Repair may also include the limited replacement with matching material or with a compatible substitute material that gives the same appearance as the original in size, scale, composition and color. This replacement should only be done where the masonry elements are extensively deteriorated or missing and when there are surviving examples or good photographic evidence of original materials.
New Building Construction

BUILDING FORM AND PLACEMENT
A new building’s form and its placement on its lot help determine the compatibility of the building. Old North Knoxville was developed along streetcar tracks, which followed a straight line. This dictated the pattern of streets in the neighborhood and set the pattern for lot sizes. As a result, the lots of Old North Knoxville are usually rectangular, with their narrowest side parallel to the street. The form of the houses is also rectangular or irregular with the narrow sides facing the street. This development pattern should be respected if new buildings are built in the neighborhood. Also, the consistent setbacks of the buildings in the neighborhood create a visual order, helping to define public and private space, provide privacy for the residents and permit landscaping in front of a building.

HISTORIC BUILDING FORMS
Houses in Old North Knoxville have a shape, or bulk, consistent with their time of construction. They appear larger and taller than new buildings, often with projecting bays or porches not found in newer designs. The window sizes and proportion of the voids or openings of the windows to the solid portions of walls are often different than new construction.

Roofs
Roof forms are complex in many of Old North Knoxville’s buildings. Hip roofs with lower gables, multiple or telescoping gables, conical or round turrets, dormers and balconies are often found. The pitch of historic roofs is also fairly steep.

Foundations
Old North Knoxville’s historic houses are not built on slab foundations. Basements and raised foundations are common, and the texture of the masonry foundations adds richness to the neighborhood’s architecture, while the height and the multi-story designs are also important in preserving the appearance of the neighborhood.

NEW BUILDINGS
New buildings should be contemporary in spirit. Slavish copies of historic buildings confuse the historic value of the existing buildings. New buildings should respond to the present time, the environment, and the use for which they are intended. New buildings constructed in historic areas should be compatible with the existing historic buildings and sensitive to the patterns of the environment where they will be placed. The use of similar materials can help in developing continuity. These principles apply to new homes as well as garages, sheds and other outbuildings.

VACANT LOTS
Vacant lots do exist within the Old North Knoxville Historic District. They introduce a gap in the streetscape. Redevelopment with new buildings that are sympathetic to the historic neighborhood buildings can reinforce the historic character of the neighborhood. If vacant lots are to be retained as side lots for existing buildings, fencing and landscaping can also reinforce the historic character of the neighborhood.
NEW BUILDING CONSTRUCTION

G. Setbacks and Placement on the Lot

1. Maintain the historic façade lines of streetscapes by locating the front walls of new buildings in the same plane as those of adjacent buildings. If existing setbacks vary, a new building's setback shall respect those of adjacent buildings.

2. Do not violate the existing setback pattern by placing new buildings in front of or behind historic buildings on the street.

3. Do not place new buildings at odd angles to the street.

4. Side yard setbacks for new buildings shall be consistent with those of existing historic buildings, so gaps are not left in the streetscape.

H. Scale and Massing

1. Relate the size and proportions of new structures to the scale of adjacent buildings.

2. Break up uninteresting boxlike forms into smaller varied masses like those found on existing buildings by the use of bays, extended front porches, and roof shapes.

3. New buildings must reinforce the scale of the neighborhood by their height, width and massing.

4. New buildings must be designed with a mix of wall areas with door and window elements in the façade like those found on existing buildings.

5. New buildings must be designed with a mix of wall areas with door and window elements in the façade like those found on existing buildings.

6. Roof shapes must relate to the existing buildings, as must roof coverings.

I. Height of Foundations and Stories

1. Avoid new construction that varies in height, so that new buildings are equal to the average height of existing buildings.

2. The foundation height of new buildings shall duplicate that of adjacent buildings, or be an average of adjacent building foundation heights.

3. For new buildings with more than one story, beltcourses or other suggestions of divisions between stories that suggest the beginnings of additional stories shall be used.

4. The eave lines of new buildings shall conform to those of adjacent properties.

J. Materials

1. The materials used for new building exteriors shall be consistent with materials already found on buildings on the street.

2. Artificial siding and split face block are not acceptable materials for use on new buildings.

K. Features

1. Design new buildings with a strong sense of a front entry.

2. Use front porches in new designs, and make the size of those porches useable for sitting. New porches shall be at least eight feet deep, shall contain design features such as columns and balustrades that introduce architectural diversity and shall extend across more than half of the front façade.
L. Additions

1. Locate exterior additions at the rear of or on an inconspicuous side of a historic building, limiting the size and scale in relationship to the historic building, and using appropriate proportions.

2. Design new additions so that it is clear what is historic and what is new.

3. Consider the attached exterior addition both in terms of the new use and the appearance of other buildings in the historic district. Additions shall be distinguishable from the historic building, but shall be compatible in terms of mass, materials, size, texture, and scale. Additions shall be designed so they can be removed without destroying the form of the historic building.

4. New additions should not be visible from streets.

5. Before expanding the size of the historic building with a new addition, try reconfiguring interior space that does not define the historic character of the building in order to accommodate the new space needs.

6. Do not cause a loss of historic character through a new addition.

Houses in Old North Knoxville have a shape, or bulk, consistent with their time of construction.
Auxiliary or Outbuildings

HISTORIC CHARACTERISTICS
Auxiliary or outbuildings were often used in Old North Knoxville, although many of them have deteriorated or been destroyed over the years. Typical outbuildings would have included carriage houses, barns, outhouses or servants’ quarters, often more than one story tall and built with steeply pitched gable roofs or combined gable and shed roofs, with weatherboard or board and batten wall covering. Smaller work sheds were also located in the neighborhood. New houses in the district might have had garages, with the same roof shapes and wall coverings, or with wall coverings that matched the primary building on the lot. Many garages and outbuildings in Old North Knoxville are of later construction, and are not contributing buildings. Consult the property descriptions in the Historic Designation Report if you question whether an outbuilding is contributing.

RECOMMENDATIONS

M. Auxiliary or Outbuildings

1. The design of outbuildings such as garages shall acknowledge and suggest the function of original outbuildings that would have been located in the neighborhood.

2. The design of features like garage doors that face the street shall mimic carriage house doors from an era consistent with the primary building on the lot.

3. Garages shall be located to the rear of the primary building on the lot.

4. Materials used in constructing outbuildings or accessory buildings may only use materials and design characteristics selected from the following list: wood lap siding with a four inch lap or board and batten; a 12/12 roof pitch; overhanging eaves; exposed rafter tails; wood windows; masonry but not exposed concrete block or split-face block; garage doors appearing to be carriage doors or plank doors with x-bracing or perimeter reinforcing timbers.
Accessory Features

HISTORIC CHARACTERISTICS
Old North Knoxville was built as a pedestrian neighborhood. Every attempt should be made to retain its pedestrian character through the design and maintenance of sidewalks, planting and landscaping and lighting. In this case, the active use of the neighborhood by its residents also adds to its character. Encouraging the use through retaining the pedestrian scale is an important part of retaining the neighborhood’s history.

Street Lighting
Street lighting can have a significant impact on the historic district. The neighborhood has made progress in securing and installing replicas of Victorian era streetlights. More modern lighting, with its high intensity fixtures on metal standards or tall wood poles, is inappropriate to the design of the neighborhood. The height of modern fixtures, which was designed for subdivisions of one story houses, means that the light from them is often level with the second story windows and shines directly in the bedrooms located there. The replica fixtures that Old North Knoxville has installed are appropriate for the neighborhood.

Paving Materials
In addition, paving materials and their design should respect the historic antecedents found in the historic overlay district. Asphalt and gravel are unacceptable materials for driveway pavement and walkways, and residents installing driveways should consider retaining or reinstating a grass strip separating the two paved concrete treads.

The concrete mix originally used for sidewalks and streets in the neighborhood has been called “diamond chip” material. Two features distinguish this paving material: 1) the sand used in the mix was river sand, which was not a whitish-gray color; and 2) the aggregate was made of materials remaining from the process of East Tennessee marble, and was gray, white, pink, or soft brown in color, rather than the tans and browns found in gravel mined from streams. While the aggregate material is no longer available, the river sand is, and any paving in the neighborhood should use a mix that relies on river sand rather than washed builder’s sand.

Other distinctive features in the public spaces of the Old North Knoxville Historic Overlay District include the “singing pavement” or “Granitoid” pavement still found on Kenyon Avenue, and originally located on most of the neighborhood streets. This paving material should be retained, and should be installed as new street paving. Brick sidewalks, with brick laid in a herringbone pattern, and brick gutters and stone curbs were once more common in the neighborhood than they are now. Brass street markers remain embedded in many of Old North Knoxville’s sidewalks. They should be retained in the event of street repaving, and should be replaced where they are missing.

Masonry Retaining Walls
Most of the buildings in Old North Knoxville have a front yard ending at a masonry retaining wall of stone or shaped block; this wall pinpoints the separation of the public sidewalk and street space from the private yard space.
Swimming Pools
Swimming pools were also not part of the original fabric of the neighborhood, and should be designed to be as unobtrusive as possible.

Satellite Dishes
Satellite dishes, while they may be installed on homes in the neighborhood, should not be visible from public rights of way.

RECOMMENDATIONS

M. Accessory Features

1. Contemporary accessory uses, such as swimming pools, must be carefully designed to be compatible with the historic appearance of the neighborhood.

2. Contemporary accessories such as television antennas must be carefully located and chosen to avoid detracting from the historic architecture.

3. If a swimming pool is to be constructed, it must be an in-ground pool, and fencing must be transparent but may not be chain link.

4. Television antennas and satellite dishes shall not be visible from adjacent streets.

5. Masonry retaining walls located at the sidewalk edge shall be retained and repaired, or reinstalled.

6. Retain and replace the brass street name markers and concrete corner street name markers that were originally located throughout the neighborhood.

7. Repair or replace the “diamond chip” (aggregate of exposed marble) sidewalks that can now be found in the neighborhood, using river sand rather than builder's sand in the paving mixture.

8. Brick gutters and sidewalks, stone curbs and Granitoid pavement shall be retained and repaired.

9. Complete the installation of Victorian replica street lights when funding is available, eventually removing the modern lights now located on taller stands and wooden poles.
Other Design Elements Affecting Neighborhood Character

Design elements like fencing, paint colors and landscaping may not be subject to a Certificate of Appropriateness if the houses do not require a building permit. Yet, they strongly affect the appearance of houses in the Old North Knoxville Historic Overlay District. The recommendations given below are helpful to property owners who are interested in making sympathetic changes to their houses. The staff of the Knoxville Historic Zoning Commission will also advise property owners if they wish assistance.

FENCES

**Historic Characteristics**
Fences were very common in Old North Knoxville, and most of the lots in the neighborhood are marked by masonry retaining walls placed at the sidewalk line. These elements were used to mark the separation of the front yard from the public area of the sidewalk and the street, and to separate side yards from each other. Fences used in Old North Knoxville were made of wrought iron or wood, with shaped pickets and elaborate gates. Fences facing the streets of Old North Knoxville, either in the front yards or on corner lots, were short, usually not more than three feet tall.

**Fence Recommendations**
Fences used today in Old North Knoxville should be wood or wrought iron, no taller than three feet in areas visible from the streets of the neighborhood. The fences should not be a solid board or stockade fence, or a chain link fence. Fences may have a stone foundation. If chain link fences are placed in back yards, they should not be visible from front or side streets, and should be painted a dark green so they blend in with the background.

PAINT COLORS

**Historic Characteristics**
When the houses in the Old North Knoxville Historic Overlay District were new, they were often painted with darker historic colors. Many houses used several different colors in their paint scheme. The houses may have been repainted with white paint later. Since the white color is what most people remember, they may assume that white was the original color.

**Paint Color Recommendations**
The Knoxville Historic Zoning Commission does not regulate paint color in historic districts. Although paint colors are very significant in creating a unified appearance for a historic district, they are also reversible. The Historic Zoning Commission is most concerned about changes to the architectural fabric of designated buildings that can alter or diminish their historic significance. The explanation given below is to assist owners of historic properties who wish to enhance the appearance of their buildings.
A paint analysis should be made to determine the original color of the house. This is true whether you are considering changing the color or not. To conduct the analysis, look for samples of the original color behind shutters or trim, or in a protected corner. These areas will usually show the original colors because they have not been exposed to weather and the elements, and have not been scraped to bare wood. If the original colors cannot be determined, or if you wish to change from those colors, it is appropriate to assume that three or four colors were used in the original paint scheme of the earlier Victorian-era houses. The later revival styles may have only used a two color scheme, and white was very common with that style. Darker paint colors were used on Craftsman and Bungalow designs. It is appropriate to paint trim, window sashes, porch columns, doors, shutters and shaped wood brackets in colors contrasting with the house siding. Window sashes were usually painted the darkest color.

Before deciding to use more than three or four colors, or to use non-historic colors, the homeowner should try to discover what colors are appropriate. Many paint companies now manufacture paint colors that replicate historic colors. Before selecting paint colors, you should consider using these historic color selections. Most importantly, if you change the color, leave an unscraped patch in a protected place so a record of the original paint layers remains on the house. Future owners of the house, who may be interested in recreating the original color scheme, will be grateful to you for that record.

Historic houses were usually painted with a lead base, and later alkyd paint. This paint is generally glossier than latex paint. If you decide you want to use a latex paint on the house, you should first install a good coat of primer manufactured to mask the old oil paint so that the new coat of latex paint will adhere properly. You should also use a glossy finish latex paint to more nearly replicate the original appearance of the house.

### Landscaping

**Historic Characteristics**

The Knoxville Historic Zoning Commission does not require Certificates of Appropriateness for the installation of landscaping in the yards of Old North Knoxville Historic District buildings. However, there are considerations that the Old North property owners should keep in mind because of their appropriateness for the buildings, and because improperly installed landscaping can endanger the structural integrity of the buildings.

Large foundation shrubbery should not be planted or maintained near the older houses of Old North Knoxville. It can create damp conditions around the foundation that can harm the structure. Even in the new houses, if there is shrubbery at the foundation it should be small when it is mature and should not obscure the foundation or block the windows of the building.

Shade trees were also common in Old North Knoxville. They may have been planted in an informal design, but they may also have been street trees, planted at regular intervals along the curbs. Over time, many of the trees in the neighborhood have died or been cut down because of age and disease, and have not been replaced.

The residents of Old North Knoxville are urged to replant trees, using native varieties such as oak or maple and taking care that their mature height will not interfere with the utility lines in the area, or endanger the houses.
The Old North Knoxville Historic District usually does not extend to the major streets of Broadway, Woodland and Central. Yet the appearance of those streets is important to the neighborhood. It serves to introduce the neighborhood to travelers in the area, and can help them identify the unique resource while enhancing the property values and appearance of the historic district. The neighborhood has recognized this in the past, particularly by installing entrance signs as part of its Knoxville Bicentennial Project, and by installing banners within the past several years.

Areas along Broadway and Central are already developed, and the development pattern now present is unlikely to change. However, that development pattern can be enhanced to the benefit of the commercial enterprises and the neighborhood. Also, where commercial development abuts the neighborhood, it is important that a “wall” or edge be developed through landscaping or other improvements so that the residents are protected from noise and visual intrusions.

If additional commercial development occurs adjacent to the historic district, the back edges of the development should be intensively landscaped with a mixture of evergreen and deciduous trees in at least a twenty-five foot strip, in order to form a firm edge and buffer for adjacent residential development.

Any redesign of the interstate system bordering the neighborhood should create a minimum of intrusion to the neighborhood. Design options such as a depressed roadway, extensive landscaping, or sound barriers to buffer the adjacent residential areas from traffic noises and fumes, and fencing compatible in design with the historic character of the adjacent residences should be significant considerations.

Central Avenue

· From Broadway to Oklahoma, where commercial and light industrial development of both large and small scales occur, landscaping should be used to the rear of the buildings to establish an edge and buffer the adjacent residential development from commercial activity.

· Street trees should be planted along Central from Broadway to Woodland if they do not exist.

· From Oklahoma to Scott, where residential scale development still exists, the current residential setback should be enhanced through landscaping and front yard treatments. If new construction occurs in that block, the front setback should be maintained.
· From Oklahoma to Woodland, where a front setback has been maintained in constructing new buildings, landscaping treatment should be installed to enhance the residential-scale setback.

· At the northwest corner of Scott and Central, a landscaped “island” should be installed near the curb, to reinforce this major entrance into the Old North Knoxville neighborhood.

**Woodland Avenue**

· The current residential setbacks should be maintained throughout the length of Woodland, with landscaping and street trees to form an edge for the neighborhood.

**Broadway**

· Street trees should be planted where they do not exist from Central to one-half block north of Grainger.

· A residential setback that mimics the setback of current buildings should be maintained from Central to one-half block north of Grainger Avenue.
Bibliography

- Blumenson, John J. G. *Identifying American Architecture*.
Glossary of Terms

Architrave
Lowest of the three main parts of the entablature. It sits directly on the capital of a column. (See entablature.)

Baluster
Vertical member under a railing. It fills the opening between a handrail and the stair or floor.

Balustrade
Series of balusters connected on top by a handrail. Used on staircases, balconies, porches, etc. Balusters are short pillars or other uprights that support a handrail, such as pickets or spindles.

Beam
Horizontal structural member designed to support loads.

Bonding Pattern
Repeating arrangement of masonry (such as brick or stone) into various patterns.

Bracket
Projecting support member found under eaves or other overhangs. May be only decorative or may be used to support weight.

Capillary Action
Pulling of water through a small opening or fibrous material by the adhesive force between the water and the material.

Capital
The upper, decorated portion of a column or pilaster.

Cast Iron
Iron/carbon alloy that is poured, while a hot liquid, into molds to give it form. It can easily be cast into almost any shape, but it is too hard and brittle to be shaped by hammering.

Caulking
Method of filling with an elastic compound all of the small crevices, holes, and joints between different materials that cannot be sealed by any other method.

Caustic
Capable of burning, dissolving, or eating away by chemical action.

Cement
Any material or mixture of materials (such as clay and limestone) that is allowed to harden in place. Cement is often combined with an aggregate (such as sand or gravel) to form concrete.

Certificate of Appropriateness
Permit to proceed with new construction or alterations to property within a historic district.

Chamfer
A beveled edge on the corner of a porch post.

Clapboard
Twelve to fourteen inch hand split boards used as overlapping horizontal siding.

Column
Pillar that may be square, truncated, patterned or circular and serves as a support for something resting on its top.

Concrete
Mixture of sand, gravel, crushed rock or other aggregate held together by a paste of cement and water. When hardened, concrete has great structural strength.

Cornice
Projecting decorative molding along the top of a building or wall. It is the upper section of an entablature. (See entablature)

Cresting
Decorative work forming the top of a wall, or a decorative railing running along the ridge of a roof.

Cupola
Small structure built on top of a roof, originally providing ventilation.

Dormer
Vertical window projecting from the slope of a roof, usually with its own roof.

Double-hung Window
A window composed of two movable sashes.

Eaves
Lower part of a roof that overhangs a wall.
Elevation
View of a vertical face of a building.

Entablature
Horizontal construction above a classical column or set of columns. (There are three parts: architrave, frieze, and cornice.)

Frieze
Middle part of the entablature between the cornice and architrave. It is often decorated. (See entablature)

Gable
Triangular end of a wall under a roof, formed by two sloping sides. (See roof)

Glazing
Fitting glass into windows or doors.

Infill
Buildings that have been designed and built to replace missing structures or buildings so they fill gaps in the streetscape.

In Kind
Staying with the same material or items used originally.

Joint
Junction at which two surfaces meet.

Lime
Calcium oxide, which comes from burning limestone.

Lintel
Horizontal structural member that supports a load over an opening. May be covered by ornamental or trim board.

Massing
Physical volume or bulk of a building, and the building’s arrangement and organization in relation to the physical site and other buildings.

Mortar
Substance used in bricklaying to join masonry units. It is usually made of cement or lime mixed with sand and water. It dries hard and firm.

Mullion
The vertical bar between coupled windows or multiple windows.

Muntin
Strips separating panes of glass in a window sash.

Oriel Window
A bay window located above the first floor level supported by brackets or corbels.

Pane
A single piece of window glass.

Patina
Mellowing of age on any material due to exposure to the elements. This causes the material to look different than the day it was installed. (Example: over a period of time a greenish coating will appear on the surface of copper.)

Pediment
Triangular part of a gabled roof often used as a crowning element above doors or windows.

Pilaster
Flattened or half-column attached to a wall for decoration.

Pitch
Slope of a roof.

Pointing
The process of removing deteriorated mortar from the joints of a masonry wall and replacing it with new mortar.
Press Tin
Thin sheets of tin molded into decorative designs and used to cover interior walls and ceilings. Pressed tin is sometimes used on exteriors in protected locations.

Primers
First coatings that prepare the surface to accept other coatings such as paint.

Rail
When referring to a window, the horizontal members that meet in the center of two sashes.

Railing
Top member of a balustrade.

Rhythm
Sense of movement created by the regular recurrence of elements across the face of a building, as in the spacing of doors and windows.

Roof
The part of the structure which covers and protects it from weather, together with decorative elements such as cresting, coverings, chimneys, and other elements.

Roof Coverings
Materials used to cover the roof, such as asphalt shingles, concrete or terra cotta tiles, slate, or others.

Sash
The framework into which window panes are set.

Scale
Absolute height and width in relation or proportion to neighboring buildings.

Setback
Distance from the front any part of a building to the street right of way.

Shadowline
Markings left from an original element that has been removed.

Shingle
Thin piece of wood, slate or tin used in overlapping rows to form the surface of an exterior wall or roof. They may be laid in patterns (imbricated).

Diamond
Octagonal
Cove
Segmental
Slaggered
Fish Scale
Hexagonal
Square

Ternenplate
Metal plate that must be painted. Otherwise, it will corrode. Placing ternenplate next to copper or aluminum will also cause corrosion.

Terra Cotta
Fine-grained, fired clay product used as on the exterior building ornamentation or as roofing tiles.

Tooling
Finishing of a mortar joint by pressing and compacting it to create a particular profile.

Transom
Small window or series of panes above a door.

Vapor Permeable
Coatings that allow materials to breathe. They allow for an adequate amount of moisture and air to pass through them.

Water Sealer
Coatings and sealers that keep out a significant amount of moisture.

Weatherboard
Type of wood siding for the exterior covering of a frame building.

Window
A glazed opening in a wall that provides an interior space with natural light and ventilation. For a description of the parts of a window see muntin, mullion, pane, sash and sill.
Window Hood
Protective and sometimes decorative cover found over doors and windows.

Window Sash
Framework in which panes of glass are set. It usually forms a moveable part of a window.

Wrought Iron
Almost pure iron which is soft and bendable, and can be forged or bent into many shapes.