

Chapter 3

Lot, Structure, and Design Standards

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- 3.3 General Building Design Requirements
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- 3.5 Streets and Sidewalks
- 3.6 Parking and Loading Requirements
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3.1. LOT STANDARDS

A. Applicability

The provisions in this Chapter shall apply generally to all development regardless of the underlying zoning district provisions. The notable exception shall be a Conditional District, which is intended to create its own use and dimensional design standards, unique to a specific site, so long as they are of equal or greater quality to the standards set forth in this Section herein and not intended to circumvent the variance process.

B. Interpretation

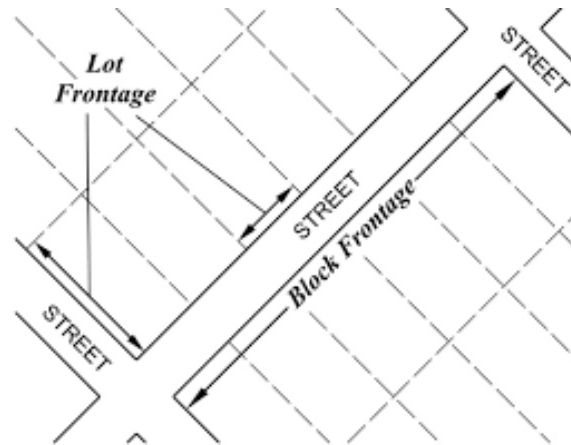
When any requirement of this Ordinance results in a fraction of a unit, a fraction of one-half (0.5) or more shall be considered a whole unit and “rounded up” to the next whole number. A fraction of less than one-half (0.5) shall be disregarded and “rounded down” to the nearest whole number. This shall not apply when the determination of the number of dwelling units permitted on a lot results in a fraction of a dwelling unit, in which case any fractional component shall be disregarded and “rounded down” to the nearest whole number.

C. Lot Requirements

1. All Lots Shall Front on a Public Street or Public Space

- a. All lots shall front upon a public street.
- b. With the provision of an alley access, lots may front upon a common open space, but access shall be of sufficient design to allow for emergency services.
- c. In no case shall a lot have less than twenty (20) feet of frontage on a public street right-of-way.

Figure 3.1
Frontage



2. Number of Principal Buildings per Lot

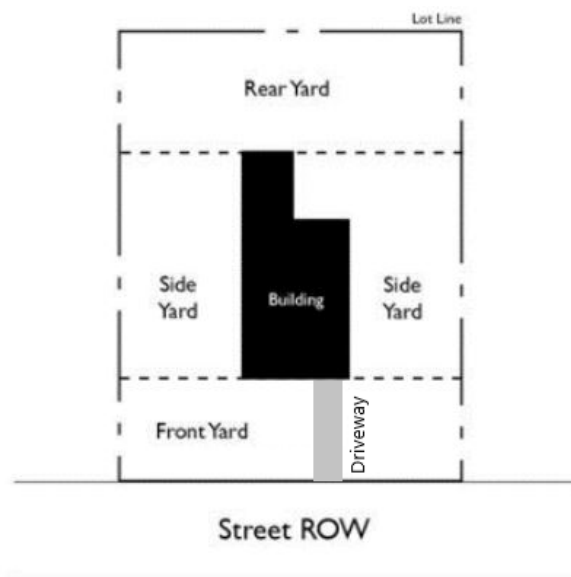
- a. Every building hereafter erected, moved or structurally altered shall be located on a lot and in no case shall there be more than one (1) principal building and its customary accessory buildings on any lot, except as provided in Subsection b. (below).
- b. Specially designed institutional, multifamily, commercial, office, or industrial buildings in an appropriate zoning district, may have more than one (1) principal building on a single lot provided that the following requirements are met:
 - (1) Uses in complexes shall be limited to those which are permitted, or special uses within the zoning district in which the project is located.
 - (2) The overall intensity of land use shall be no higher, and the standard of open space no lower, than that permitted in the district in which the project is located, for the type of use to be established.
 - (3) The overall lot must meet the minimum front, side, and/or rear yard requirements of the district in which the project is located. No buildings shall be permitted within the required yards.
 - (4) The building heights shall not exceed the height limits permitted in the district in which the project is located.
 - (5) The buildings shall be located to provide access for emergency vehicles.
 - (6) Unless the separation between building is regulated by another provision in this Ordinance, the minimum spacing between buildings in a complex shall be the same as the minimum side yard requirements of the district in which the project is located.

(7) If any of the uses proposed require a special use permit, all of the use standards specific to the use and any conditions imposed by the Special Use Permit during the approval process, shall be met.

3. Location of Required Yards

- a. **Front Yard:** A space extending the full width of the lot between the principal building façade and the front lot line or the fronting street right-of-way measured perpendicular to the building at the closest point to the front lot line. Typically, this yard is required to remain open and unoccupied by structures, with the exception of certain encroachments such as porches, bay windows, porticos, arcades, stoops, sidewalks, handicapped accessibility facilities, street furniture, fences, walls, signs, and landscaping.
- b. **Side Yard:** A space extending from the front yard to the rear yard between the principal building facade and the side lot line and measured perpendicular from the side lot line to the closest point of the principal building facade. Side yards extend from the sides of a building to a street right-of-way or property line.
- c. **Rear Yard:** A space extending across the full width of the lot between the principal building facade and the rear lot line and measures perpendicular to the building to the closest point of the rear lot line. Rear yards extend from the back of a building to a property line.
- d. **Corner Lot:** Any building on any corner lot shall comply with the minimum front yard for each street which the corner lot abuts.

**Figure 3.2
Typical Yard Locations**



- e. No yard for one principal building shall be considered as a yard for any other principal building.

4. Irregular Lot Yard

The location of required front, side, and rear yards on irregularly shaped lots shall be determined by the Zoning Administrator. The determination will be based on the intent and purpose of this Ordinance to achieve an appropriate spacing and location of buildings and buildings on individual lots and additional consideration of the neighborhood design. Where questions arise as to appropriateness, the subdivider may be required to provide additional design information.

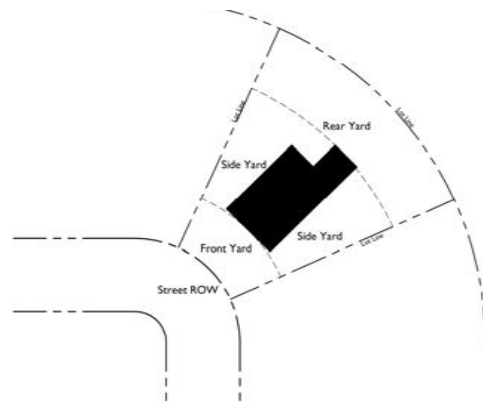
5. Side Lot Lines

Side lot lines shall be substantially at right angles or radial to street lines. (See Figure 3.3.)

6. May Not Modify Lots Below Minimum Requirements

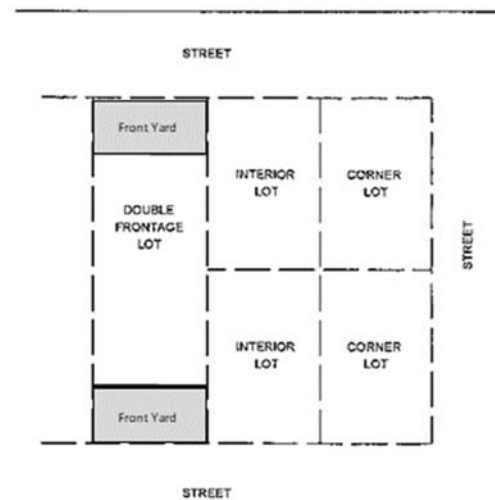
- a. Yards and lots created after the effective date of this Ordinance shall meet the minimum requirements established herein.
- b. No lot shall be changed in size so that the total area; minimum frontage; front, side, or rear setbacks; or other dimensions, areas, or open spaces required by this Ordinance are not maintained.
- c. These prohibitions shall not be construed to prevent the purchase or condemnation of narrow strips of land or parcels for public utilities, substations, street rights-of-way, or similar purposes.

**Figure 3.3
Lot Lines on Curved Streets**



7. Double Frontage Lots

Double frontage lots should be avoided. However, on lots having frontage on two (2) streets, but not located on a corner, the minimum front yard shall be provided on each street in accordance with the provisions of this Ordinance. Where a lot has frontage on three (3) or more streets, the setbacks shall be determined by the Zoning Administrator based on the proposed principal building façade and the provision of two (2) required front yards.



**Figure 3.4
Setback on Double Frontage Lot**

8. Yard Setbacks along Thoroughfares

Setbacks along existing thoroughfares shall be measured from the future right-of-way as determined by the locally adopted thoroughfare plan and/or long-range transportation plan for roadway widening. The developer shall be responsible for ensuring that the appropriate right-of-way is provided.

9. Rights-of-Way Not Considered in Yard Requirements

Rights-of-way or easements for streets and roads shall not be considered a part of a lot or open space, or front, side, or rear yards for the purpose of meeting yard requirements.

3.2. DIMENSIONAL STANDARDS

All primary and accessory structures shall be subject to the intensity and dimensional standards for the district in which they are located as set forth in the following table:

**Figure 3.5
Table of Dimensional Standards**

District	Min. Lot Size (Square Feet)	Min. Lot Width (Feet)	Minimum Yards (Feet) ^(h)				Max Height (Feet) ^(b)	Max Lot Coverage (% of Total Lot Area) ^(c)	Max Dwelling Units per Lot ^(d)	Max Density (Gross Units per Acre) ^(e)	Addtnl. Regs.
			Front	Side	Rear	Corner ^(a)					
LDR, Low Density Residential (previously R-20)											
Single-Family	30,000	100	40	12	20	15	35	20%	1	2	
Two-Family	30,000	110	40	12	20	15	35	20%	2	2	2.7.B
Townhouse	30,000	50	30	12	20	15	35	30%	1	4	2.7.A
All other permitted uses	30,000	100	40	20	30	30	35	24%	n/a	n/a	See Sec. 2.7 for Use
MDR, Medium Density Residential (Previously R-12)											
Single-Family	12,000	80	30	10	15	15	35	60%	1	3	
Two-Family	12,000	80	30	10	15	15	35	60%	2	3	2.7.B
Townhouse	12,000	50 ^(g)	30	10	15	15	35	60%	1	5	2.7.A
All other permitted uses	12,000	80	30	10	20	20	35	60%	n/a	n/a	See Sec. 2.7 for Use

District	Min. Lot Size (Square Feet)	Min. Lot Width (Feet)	Minimum Yards (Feet) ^(h)				Max Height (Feet) ^(b)	Max Lot Coverage (% of Total Lot Area) ^(c)	Max Dwelling Units per Lot ^(d)	Max Density (Gross Units per Acre) ^(e)	Addtl. Regs.
			Front	Side	Rear	Corner ^(a)					
HDR, High Density Residential (previously R-8)											
Single-Family	8,000	70	30	10	10	15	35	65%	1	5	
Two-Family	8,000	50	20	10	10	15	35	65%	2	5	2.7.B
Townhouse	8,000	50 ^(g)	20	10	10	15	35	65%	1	5	2.7.A
Multi-Family (up to 20 Units)	8,000	100	30	10	10	15	35	65%	20	5	2.7.C
All other permitted uses	8,000	80	30	10	10	15	35	65%	n/a	n/a	See Sec. 2.7 for Use
HDMF, High Density Multi-Family (same district)											
Multi-Family	n/a	n/a	40	20 ^(f)	30	30	35	65%	n/a	12	2.7.C
All other permitted uses	10,000	75	40	20	30	30	35	65%	n/a	n/a	See Sec. 2.7 for Use
MA, Medical Arts (same district)											
Multi-Family	15,000	100	50	10	20	20	50	60%	20	5	2.7.C
Mixed use residential	15,000	100	50	10	20	20	50	60%	n/a	10	2.7.D
All other permitted uses	15,000	100	50	10	20	20	50	60%	n/a	n/a	See Sec. 2.7 for Use
DMX, Downtown Mixed Use (previously B-1)											
Single-Family	8,000	70	20	10	15	15	35	70%	1	3	
Two-Family	8,000	70	10	10	15	15	35	70%	2	6	2.7.B
Townhouse	8,000	50 ^(g)	10	10	10	15	35	70%	1	6	2.7.A
Mixed use residential	8,000	n/a	0	10 ⁽ⁱ⁾	15 ^(j)	15	50	70%	2	10	2.7.D
All other permitted uses	8,000	n/a	0	10 ⁽ⁱ⁾	15 ^(j)	15	50	70%	n/a	n/a	See Sec. 2.7 for Use
RF, Riverfront (new)											
Townhouse	8,000	70 ^(g)	20	10	10	15	35	70%	1	6	2.7.A
Mixed Use residential	8,000	n/a	10	10 ⁽ⁱ⁾	15 ^(j)	15	50	70%	2	10	2.7.D
All other permitted uses	8,000	50	10	10 ⁽ⁱ⁾	15 ^(j)	15	35	70%	n/a	n/a	See Sec. 2.7 for Use

District	Min. Lot Size (Square Feet)	Min. Lot Width (Feet)	Minimum Yards (Feet) ^(h)				Max Height (Feet) ^(b)	Max Lot Coverage (% of Total Lot Area) ^(c)	Max Dwelling Units per Lot ^(d)	Max Density (Gross Units per Acre) ^(e)	Addtl. Regs.
			Front	Side	Rear	Corner ^(a)					
HB, Highway Business (previously B-2)											
Mixed use residential	8,000	n/a	10	10	15	15	35	60%	4	8	
All other permitted uses	8,000	80	10	10	15	15	35	65%	n/a	n/a	See Sec. 2.7 for Use
NB, Neighborhood Business (previously B-3)											
Single-Family	8,000	70	30	10	10	15	35	65%	1	5	
Two-Family	8,000	80	20	10	10	15	35	65%	2	5	2.7.B
Townhouse	8,000	70 ^(g)	20	10	10	15	35	65%	1	5	2.7.A
Mixed use residential	8,000	n/a	20	20	15	20	50	60%	n/a	10	2.7.D
All other permitted uses	8,000	50	10	10	15	15	35	65%	n/a	n/a	See Sec. 2.7 for Use
M-1, Light Manufacturing (same district)											
All permitted uses	5 Acres	100	50	20	25	20	50	70%	n/a	n/a	See Sec. 2.7 for Use
M-2, Heavy Manufacturing (same district)											
All permitted uses	10 Acres	100	75	25	40	25	50	70%	n/a	n/a	See Sec. 2.7 for Use
MH, Manufactured Home (same district)											
Manufactured Home	1 acre	100	40	15	20	15	35	24%	1	1	
Mobile Home Park	5 acres	100	40	15	20	15	35	24%	35	4	2.7.E
All other permitted uses.	20,000	100	40	15	20	15	35	24%	n/a	n/a	See Sec. 2.7 for Use
-CD, Conditional District											
Refer to Chapter 2											

Notes:

- a) Corner setbacks apply when a lot abuts two streets; one frontage shall be the "front" with the other being the "corner side" or "secondary frontage."
- b) Height shall be measured from the grade at the front elevation to the peak of the roof.
- c) Maximum lot coverage refers to the amount of built upon area permitted per lot.
- d) Max. number of dwelling units on one lot of record. See definitions of Townhouse and Multi-Family in Chapter 11.

- e) Maximum gross density is calculated by taking to the total units on a parcel and dividing it by the acreage.
 Example $100 \text{ units} \div 50 \text{ acres} = 2 \text{ dwelling units per acre}$; $100 \text{ units} \div 50 \text{ acres} = 2 \text{ dwelling units per acre}$.
- f) Building to building setbacks shall be twenty (20) feet minimum.
- g) The minimum lot width for a townhouse development shall be as listed. Each individual townhouse unit shall be a minimum width of eighteen (18) feet.
- h) Accessory structure setbacks may be reduced by up to fifty percent (50%) for the applicable yard.
- i) Required only where the side or rear of lot abuts the LDR, MDR, HDR, or HDMF district, or a residential use. Where a side yard that is not required is provided, it shall be at least eight (8) feet in width.

3.3. GENERAL BUILDING DESIGN REQUIREMENTS

A. Applicability

The following provisions shall apply throughout the jurisdiction of this Ordinance, regardless of the underlying zoning district provisions.

B. Exceptions

Innovative planning or design ideas for development in any district where the proposed building types are different than those allowed by the base district requirements may be approved subject to the approval of a Conditional District.

C. General Standards

Unless otherwise noted, all buildings except manufactured buildings and those regulated by the North Carolina Building Code for One and Two-Family Dwellings shall meet the following provisions. The Zoning Administrator may deny a development permit if a building is not compatible with the character of surrounding buildings or subject zoning district.

1. All Buildings to Front on Street or Common Space

All buildings shall front on a street or common space. Such buildings shall include a principal building façade. With the provision of alley access, lots may front upon a common open space which shall have street access but shall be of sufficient design to allow for emergency services.



Figure 3.6
Example of Building Frontage on a Public Street

2. Building Entrances

A primary entrance façade shall be oriented toward the street, be designed for the pedestrian, and be distinguishable from the rest of the building and other entrances. Additional entrances may be oriented toward side or rear parking lots. Service entrances for shipping and receiving shall be oriented away from the public street.



Figure 3.7
Example of a Primary Building Entrance

3. Architectural Style

When a building design exhibits a known architectural style (e.g., Colonial, Victorian, Classical Revival) the details shall be complementary with that style. Features unique to that style shall be preserved whenever possible.



Figure 3.8
Example of an Art Deco Style of Architecture

4. Compatibility

Adjacent buildings should relate in similarity of scale, roof pitch, height, architectural elements, and/or lot configuration.

5. Wall Materials

- a. The use of light, subdued or neutral (earth tone) colors and natural building materials, such as brick, or stone are encouraged.
- b. Adjacent buildings should be painted different, but complementary colors. No strikingly contrasting colors.
- c. Different window frame and sash colors are encouraged but should complement the main color of the building.
- d. Primary colors are prohibited on façade exteriors.
- e. Stripes, polka dots, checkerboard patterns and other patterns combinations are permitted as accents only on a building façade and limited to less than thirty (30) percent of any building face. Historic building materials should be preserved in their original condition, where intact and feasible.

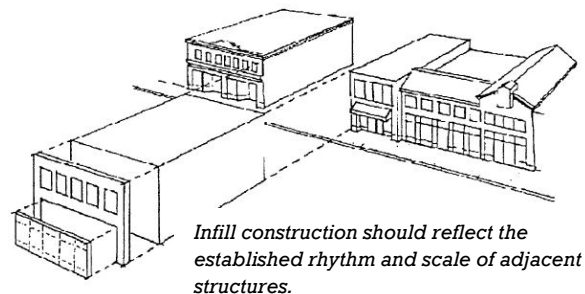


Figure 3.9
Example of Wall Materials

6. Type of Construction

- a. The characteristic proportion (relationship of height to width) of existing facades should be respected in relation to new infill development.
- b. Monolithic street wall facades should be “broken” by vertical and horizontal articulation (e.g. sculpted, carved or penetrated wall surface defined by recesses and reveals) characterized by: (1) breaks (reveals, recesses) in the surface of the wall itself; (2) placement of window and door openings; or (3) the placement of balconies, awnings, and canopies.

Figure 3.10
Example of Appropriate Infill

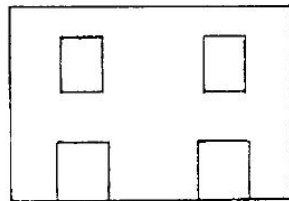


Infill construction should reflect the established rhythm and scale of adjacent structures.

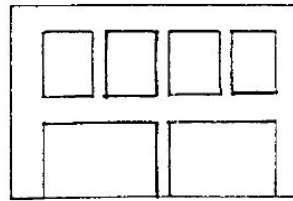
- c. Storefront facades and entrances shall be designed to provide interest and architectural diversity. This can be achieved in a number of ways including: (1) dividing the façade into a series of display windows with smaller panes of glass; (2) constructing the façade with small human scale materials such as brick or decorative tile along bulkheads; (3) providing traditional recessed entries; (4) careful sizing, placement, and overall design of signage; and (5) providing consistent door and window reveals.



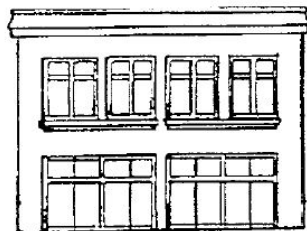
Figure 3.11
Example of Construction Treatments



Proportion of the opening sizes to building mass is too small.



Increase opening size.



Articulate openings.



Break up building mass.

Figure 3.12
Example of Storefront Proportions

7. Public Art

Public art, such as statues, fountains, and other works of art are encouraged.

D. Building Heights

Building heights shall be as specified in the Table of Dimensional Standards (Figure 3.5) that follow and shall be determined according to the provisions below.

1. Determination of Building Height

Height shall be measured as the vertical distance in feet between the finished floor (not to include finished grade of a basement) to the highest point of the structure at the front elevation.

2. Items Not Included in Calculation

The height limitations of this Ordinance shall not apply to church spires, belfries, cupolas, and domes not intended for human occupancy, monuments, water towers, observation towers, transmission towers, chimneys, smokestacks, flagpoles, masts, and antennas (provided evidence from appropriate authorities is submitted to the effect that such building or buildings will not interfere with any airport zones or flight patterns).

3. Exception to Building Height

In the M1 and M2 zoning districts, the maximum building height of fifty (50) feet may be increased during the approval process should the use necessitate the increase. However, the approving body shall ensure that the fire department can adequately provide services to support the proposed height.

E. Encroachments

Certain architectural features are permitted to encroach into the front setback (except as noted). Under no circumstance shall the encroaching features reduce sidewalk width beyond the minimum standards of the Americans with Disabilities Act Accessibility Guidelines (ADAAG). The following standards shall be established for encroachments:

1. Arcades

Building arcades within the DMX Downtown Mixed-Use and RF Riverfront District, if provided, should be designed to avoid the swing of car doors parked parallel to the arcade. In addition, the sidewalk within the arcade should be sufficient to accommodate the intended uses (i.e., outdoor seating) while providing suitable clearances per the American with Disabilities Act Accessibility Guidelines (ADAAG).

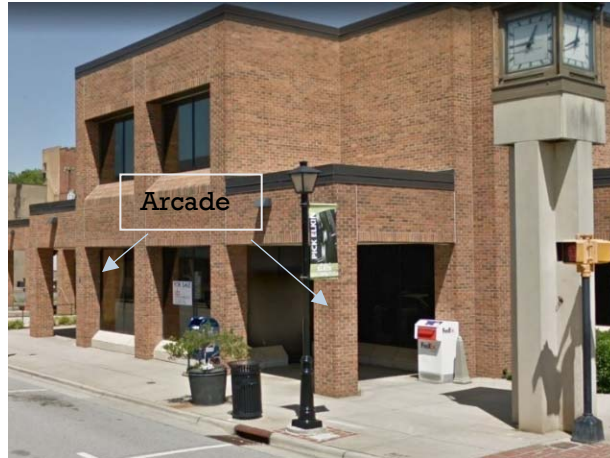


Figure 3.13
Building Arcades

Should avoid the swing of car doors and provide adequate space for pedestrians.

2. Awnings

All commercial awnings, if provided, may encroach and shall be supported by means of a frame attached directly to the building receiving beneficial use of the awning. In no case shall awnings be supported by a frame attached to a sidewalk or other public right-of-way or provide less than eight (8) feet of clearance.

3. Bay Windows

Commercial Bay windows shall not exceed a maximum projection of two (2) feet from the primary wall. In addition, it shall not contain habitable floor space, but may provide seating as an integral element.

4. Balconies, and Stoops

Only open balconies, and stoops are permitted as encroachments. To the extent possible, these features are to remain visually permeable so that the front door can be easily seen from the street or sidewalk. Roofs and required railings are permitted.

5. Handicapped Ramps

A ramp installed on a residential building to provide access for a disabled resident may encroach into the front setback, unless a less obtrusive means of access can be provided at another entry point (i.e., the back door).

F. General Design Requirements for Residential Building Types

The following standards apply to all apartment buildings and manufactured housing.

1. Building Walls

- a. Building walls shall be primarily clad in wood clapboard, cementitious fiber board, wood shingle, wood drop siding, primed board, wood board and batten, brick, stone, stucco, vinyl, or synthetic materials similar and/or superior in appearance and durability.



Figure 3.14
Example of Building Walls

- b. The following requirement shall apply to multi-family residential buildings:
 - (1) Vinyl siding shall be limited to twenty percent (20%) of each façade.
 - (2) Siding materials will be varied in type and/or color on thirty percent (30%) of each façade on each building.
 - (3) Recesses and projections shall be provided for at least fifty percent (50%) of each facade on each building.
 - (4) Four (4) of the following decorative features shall be used on each building: decorative shake, board and batten siding, decorative porch rails and posts, shutters, decorative functional foundation and roof vents, recessed windows, decorative windows, decorative brick or stone, decorative gables, decorative cornices, or metal roofing.
 - (5) A varied color palette shall be utilized throughout the development to include a minimum of three (3) color families for siding and shall include varied trim, shutter, and accent colors complementing the siding color.

2. Roofs

- a. Roofs shall be clad in wood shingles, asphalt shingles, standing seam metal, terne, slate, or synthetic materials similar and/or superior in appearance and durability.
- b. Multi-family residential buildings shall implement a varied roof line which shall be used to avoid single massing.

3. Porches and Balconies

Multi-family residential porches and/or balconies facing a public right-of-way shall be enclosed.

G. General Design Requirements for Commercial/Office/Institutional Building Types

The following additional provisions apply to all commercial/office/institutional buildings:

1. Building Walls

- a.** The use of vinyl siding or unpainted cinder-block walls shall be prohibited, but the use of decorative, split-faced masonry products is permissible.
- b.** Metal, modular, and vertical sided buildings which include but are not limited to buildings sided with vinyl and masonite are prohibited unless architectural building plans and elevations are submitted to the Board of Commissioners for review and approval based on the following criteria:
 - (1)** A minimum of fifty percent (50%) of each wall elevation mass shall be a nonmetal or vertical siding material; and horizontal runs shall have a vertical break in building materials.
 - (2)** The color(s) of the metal or vertical siding shall be complementary with the color of nonmetal or vertical siding materials used on the building.
 - (3)** Metal or vertical siding shall be used in a manner which maintains the architectural unity and integrity of the entire building.
 - (4)** In a multi-building development, metal or vertical sided building(s) shall utilize a uniform architectural theme with other buildings on the site, and shall be designed to create a harmonious style through consideration of scale, proportion, detail, materials, color and site planning.
 - (5)** Corrugated and/or sheet metal are prohibited to be used to cover entire structures. These materials shall be allowed as a design element for wall materials provided that no more than twenty percent (20%) of a wall is covered.

2. Building Materials

Manufactured and mobile units shall be prohibited, except for temporary use during construction or for storage of materials during construction.

3. Review of Design Elements for Large Non-Residential Projects

- a.** Design guidelines for multi-tenant commercial developments and/or nonresidential developments shall be required for the purpose of facilitating unified developments with compatible architecture, scale, proportion, and building elements that provide visual unity and are harmonious with other buildings in the surrounding area. Prior to the development of any phase of a commercial multi-tenant and/or nonresidential development, design guidelines governing the appearance of all buildings within the property shall be submitted by the developer for the review of the Technical Review Committee (TRC) and the approval of the Administrator prior to the approval of any final development plan or the issuance of any permits. Said guidelines shall address and include the following criteria:
 - (1)** Common signage plan requirements and criteria, including locations, area(s), copy, illumination proposed, height(s), material(s), proposed color schemes, and provisions for shared use of signage.
 - (2)** Exterior building materials and colors, including examples of materials and colors to be consistent throughout the development.
 - (3)** Façade design, mass (size and scale), and rhythm (continuity of elements, such as lines, shapes, and patterns).
 - (4)** Common landscaping scheme, including street yard(s) and peripheral plantings, parking area plantings, and tree preservation.
- b.** At the discretion of the developer, the design guidelines shall address at least two (2) of the following criteria, which shall be unified throughout the development: building heights, roof shapes, and pedestrian circulation and sidewalks.

4. Design Standards for DMX and RF Districts

Within the DMX, Downtown Mixed-Use and RF, River Front districts, the following shall apply:

- a.** Commercial storefront entries are typically recessed and/or sheltered by a covered arcade structure, canopy, or awning. Original building footprints should not be altered.
- b.** Awnings are encouraged and should have a single color or two-color stripes. Lettering and trim, utilizing other colors is allowed but will be considered as sign area.

- c. Awning shape should relate to the window or door opening. Barrel shaped awnings should be used to complement arched windows. Awnings shall be placed so as not to cover transom glass.
- d. Historic building features should be preserved wherever possible, including original glass, tile, doors and windows, and other architectural elements.
- e. No permanent outdoor displays or sales shall be allowed.

5. Other Requirements (All Districts)

a. Sidewalks

Sidewalks shall be required on both sides of all new and existing streets for all new developments or redevelopments where the improvements are greater than fifty percent (50%) of the current value. Where development is only on one (1) side of the street, sidewalk shall only be required along the site frontage.

b. Screening and Placement

- (1) All mechanical equipment and trash receptacles shall be completely screened from the ground level of any adjacent property or from any public right-of-way, with architectural materials that are consistent with those used on the primary building and with landscaping to accentuate the design and architecture of said building and enclosure.
- (2) No satellite dishes, utilities, trash, or other mechanical equipment should be located within the front yard or on the front façade of the building. Where facilities must be located in the front yard or on the front façade, screening and landscaping measures shall be utilized.

H. General Design Requirements for Industrial Building Types

The following standards apply to all industrial buildings:

- 1. Loading Docks and Service Areas: Loading docks, service areas, and trash disposal facilities shall be hidden or screened from view of streets, parks, squares, waterways, or significant pedestrian spaces. Screening shall utilize the primary materials of the building or approved vegetation.
- 2. To the greatest extent possible, mechanical fixtures and equipment should be located within the structure.

I. Maintenance

1. Windows

- a.** Boarded or sealed window and door opening[s] create a health, safety, and fire hazard to adjoining property owners, tenants, customers, and emergency personnel.
- b.** After the effective date of this Ordinance boarding up windows will be prohibited except as a temporary measure for no longer than thirty (30) days.
- c.** Missing and broken windows shall be replaced with glass to allow for safe and rapid egress in case of emergency and shall not be boarded or sealed over unless:
 - (1)** There is at least one (1) window opening for every room adjacent to the outside/exterior of the building, and
 - (2)** The building complies with all current fire codes, and
 - (3)** The sealed opening is constructed of the same material and architectural look to appear as if such opening never existed (i.e., windows missing in a brick building shall be sealed with brick of similar color and style as the existing structure), and
 - (4)** The architectural renderings of the material proposed to be used to seal such opening are approved by the Elkin Planning Board; or,
 - (5)** The Town Board otherwise approves of the architectural and safety measures in place for such sealed opening.
- d.** Boarded or sealed windows and door openings existing on the date of original enactment of this Ordinance, shall be brought into compliance at the rate of six (6) openings per year until completion with the following exception.
 - (1)** A building owner that is unable to bring their building into full compliance with the terms and conditions of this Ordinance at the rate of six (6) openings per year may apply for an extension stating the estimated completion date that will have to be approved by the Zoning Administrator. In the interim, the property owner shall submit progress reports twice a year to the Zoning Administrator regarding the repairs and the expected date of completion.
 - (2)** Failure to take reasonable steps to make the repairs or submit progress reports twice a year to the Zoning Administrator shall constitute a public health and safety nuisance and may be abated by the Town in accordance with the Nuisance Abatement proceedings contained within the Elkin Code

of Ordinances and/or the North Carolina General Statutes. The costs incurred by the Town in the event of such abatement shall be assessed as a tax lien in accordance with the abatement process prescribed therein.

- (3) The Town Board, at its discretion, may otherwise approve of the architectural and safety measures in place for existing sealed openings.

2. Façades

Building façades, including windows, doors, glass, awnings, siding, rails, steps, fixtures, signs, etc., shall be maintained as follows, unless otherwise regulated:

- a. Paint and material finishes shall be periodically applied to replace checked, cracked, peeled, or weathered surfaces.
- b. All windows shall be clean, broken glass replaced and obstructions removed that are not part of a current window display or sign. This shall not apply to devices designed to facilitate the passage of air or light.
- c. All exterior building parts, including gutters, shall be maintained in a safe and secure condition and all exterior parts that show signs of deterioration, obsolescence, or disrepair shall be removed, replaced, or renovated.

3. Planted Areas

All planters, gardens, green areas, etc. shall be kept free of weeds, litter, and plant material that is dead, dying, diseased, or infested by insects. Overgrown plants shall be trimmed and kept within designed planting areas. At the end of the growing season, not later than December 1st of each year, a continuous layer of shredded bark or pine needle mulch (2-3" deep) shall be applied to soil surfaces that are not planted with a ground cover.

3.4. ACCESSORY STRUCTURES AND USES

A. Principal Buildings Required

The construction of an accessory building is not permitted unless a principal building is located on the lot.

B. General Requirements

1. Location

Residential accessory structures shall be located only in side or rear yards for non-corner lots. Residential accessory structures shall be in rear yards only for corner lots. All non-residential accessory structures must be located in the rear yard.

2. Materials

Accessory structures not subject to regulation under the North Carolina Residential Code for one and two-family dwellings must be primarily clad in wood clapboard, cementitious fiber board, wood shingle, wood drop siding, primed board, wood board and batten, brick, stone, stucco, vinyl, metal (Horizontal lap siding only. Vertically oriented metal siding is not allowed), or synthetic materials similar and/or superior in appearance and durability.

3. Relationship to Primary Structure

Accessory structures not subject to regulation under the North Carolina Residential Code for one and two-family dwellings shall be painted or finished in such a manner that is congruent to the materials of the primary structure.

4. Number of Structures

Accessory structures, as defined in Chapter 11, shall be limited to one detached garage plus one additional structure per lot, except in the LDR District where two additional accessory structures are permitted. Accessory carports shall not be permitted in the DMX Zoning District.

5. Coverage

For all zoning districts except Low Density Residential (LDR), the aggregate area of accessory use buildings shall not exceed fifty percent (50%) of the floor space of the principal use building. In the LDR zoning district, the aggregate area of accessory use buildings shall not exceed fifty percent (50%) of the floor space of the principal use building for parcels less than one acre in size and shall not exceed one hundred percent (100%) of the floor space of the principal use building for parcels of one (1) acre or more in size.

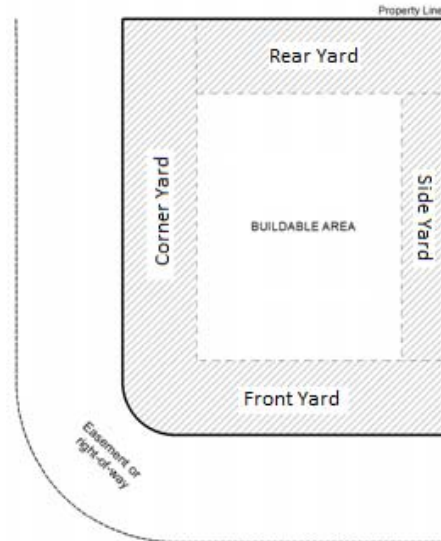


Figure 3.15
Yards on Corner Lots

6. Permit

A zoning permit is required for all accessory structures greater than ten (10) feet in any direction or greater than one hundred forty-four (144) square feet including all utilities and equipment.

7. Buffer

Lots with non-residential uses that utilize an accessory structure must have a Type B buffer along the rear property line. See Chapter 6 for planting rates and information.

8. Garage

A garage for more than three (3) motor vehicles shall not be permitted as an accessory use in connection with any one family or two-family dwelling, except in the LDR District.

9. Setbacks

See Section 3.2 for applicable setbacks based on type of principal building.

10. Swimming Pools

All permanent outdoor swimming pools having a depth of eighteen inches (18") or greater at the deepest point, shall be completely surrounded by a fence, barrier or a wall with a height of no less than four feet (4'). The fence or wall may be made of any suitable and durable materials.

3.5. STREETS AND SIDEWALKS

- A.** Streets shall have a maximum block length of eight hundred (800) feet. Cul-de-sacs shall not exceed four hundred (400) feet in length.
- B.** Streets shall be designed with street trees in accordance with Chapter 6 and planted in a manner appropriate to their function. Commercial streets shall have trees which complement the face of the buildings and shade the sidewalk. Residential streets shall provide for an appropriate canopy, which shades both the street and sidewalk and serves as a visual buffer between the street and the home.
- C.** Wherever possible, street locations should account for difficult topographical conditions, paralleling extreme contours to avoid excessive cuts and fills and the destruction of significant trees and vegetation outside of street rights-of way on adjacent lands.

- D.** All streets and alleys, whether publicly or privately maintained, shall be constructed in accordance with NCDOT Roadway Design Manual or NCDOT Subdivision Roads Minimum Construction Standards as appropriate.
- E.** Street acceptance for public maintenance is at the discretion of the Board of Commissioners following submission of a petition for acceptance.
- F.** Closed or gated streets are strictly prohibited on publicly maintained streets and alleys.
- G.** The use of traffic calming devices such as raised intersections, lateral shifts, and traffic circles are encouraged as alternatives to conventional traffic control measures.
- H.** Sidewalks shall be required on both sides of all local roadways. Where development is proposed, sidewalks shall be installed along the site frontage. Design standards for all sidewalks shall be in accordance with the requirements found in Chapter 4, Subdivision and Infrastructure.

3.6. PARKING AND LOADING REQUIREMENTS

A. Purpose and Intent

Vehicle parking and loading areas, while a necessary element of the Town, are known to increase stormwater volume and velocity, increase the levels of surface pollutants, increase surface level heat and glare, reduce the efficiency of the connecting street system, and increase the number of potential conflict points with the surrounding pedestrian network. This section regulates the construction, expansion, and renovation of parking and loading areas in a manner that seeks to minimize and mitigate these known impacts.

B. Applicability

The standards of this section are applicable across all zoning districts, with exception to the DMX Downtown Mixed-Use district. At the time of the erection of any building or at the time any principal building is enlarged or increased in capacity by adding dwelling units, guest rooms, seats, or floor area, or before conversion from one type of use to another, permanent off-street parking space in the amount specified by this Section shall be provided. Such parking space may be provided in an existing parking lot, garage or a properly graded open space, newly created to accommodate such spaces and designed in accordance with the standards of this Chapter.

C. Bicycle Parking Requirements

- 1.** Multi-family residential uses shall provide bicycle parking at a rate of one (1) bicycle parking space for every twenty (20) motorized vehicle spaces; however, no more than thirty (30) total bicycle parking spaces shall be required for any single development.

2. Nonresidential uses with off-street parking for motorized vehicles of at least fifteen (15) spaces and not more than forty (40) spaces shall provide a minimum of two (2) bicycle parking spaces.
3. Nonresidential uses with off-street parking for motorized vehicles of more than 40 spaces shall provide bicycle parking at a rate of one (1) bicycle parking space for every twenty (20) motorized vehicle spaces; however, no more than thirty (30) total bicycle parking spaces shall be required for any single development.

D. Bicycle Parking Design Standards

Bicycle parking is required to encourage the use of bicycles for personal transportation and to provide for bicycle access to employment, retail, and other destinations in Elkin.

1. Rack Design

Where bicycle racks are used, "Inverted U" type racks or other racks that support the bicycle at two points on the bicycle frame are required. Unique rack shapes and designs are encouraged.



Figure 3.16
Town of Elkin "Grape Clusters" Bike Rack. Example on Main Street.

2. Rack Siting and Dimensions

Racks shall be secured to the ground on a prepared surface such as concrete, asphalt unit pavers, or rock dust gravel.

- a. Each bicycle parking space shall provide six (6) feet by two (2) feet in area per bicycle plus the area needed for access.
- b. Bicycle parking shall be located no closer than three (3) feet from any wall to provide adequate space for access and maneuvering.

- c. At least four (4) feet between parallel racks shall be provided for access.
- d. Bicycle racks installed on sidewalks should provide for a clear, unobstructed width of at least five (5) feet for pedestrians and should be installed parallel to and at least three (3) feet from the face of curb.
- e. Bicycle racks shall be placed a minimum of four (4) feet from existing street furniture (i.e., mailboxes, light poles, benches) and be no closer than twelve (12) feet from the edge of fire hydrants.
- f. Racks should be placed along a major building approach line and clearly visible from the approach and no more than fifty (50) feet from building entrances. Rack placement should allow for visual monitoring by people within the building and/or people entering the building.
- g. Where bicycle parking is provided, perimeter plantings shall be provided to separate the parking from pedestrian areas. A minimum of one (1) shrub per five (5) linear feet of parking area shall be provided. Perennials, ground covers, and grasses may also be used.

3. Shared Bicycle Parking

Any property owner required to have bicycle parking may elect to establish shared bicycle parking with any other property owner with a lot within one-fourth (1/4) of a mile of the subject lot to meet the combined requirements.

E. Off-Street Motorized Vehicle Parking Requirements

**Figure 3.17
Minimum Parking Requirements Table**

Use	Minimum Parking Required
A. Residential	
Dwelling, Townhome	1.75 per dwelling unit plus an additional 10% of the total number of required spaces.*
Manufactured Homes- Single Family	1.75 per dwelling unit plus an additional 10% of total number of required spaces.*
All other Residential	2 per dwelling unit.
B. Lodging	
Short term housing	1 per rental unit, minimum 2 spaces.
Campground/RV Park	1 per campsite.
Bed and Breakfast	2 per dwelling unit plus 1 per employee.
All other Lodging	1 per guest room.
C. Office & Service Uses	
Animal Services and Veterinarian Office	3.5 per 1,000 gross floor area.

Use	Minimum Parking Required
Car wash and auto detail shops	2 vehicles per wash bay.
All other Office & Service Uses	3.5 per 1,000 gross floor area.
D. Recreational/ Entertainment	
Adult establishment	1 per 4 persons permitted.
Brewery or Distillery	1 per 200 sq. ft. gross floor area.
Commercial recreation facilities such as bowling alleys, skating rinks, and similar uses	1 per 4 persons permitted.
Event Centers	1 per 3 persons permitted.
Gyms and Fitness Centers	1 per 3 persons permitted.
Indoor Recreation Billiard, Pool Halls, Game rooms, or Amusement Centers.	1 per 3 persons permitted.
Theaters, indoor	1.5 per 5 seats.
Winery	1 per 1,000 sq. ft. gross floor area of production plus 1 per 3,000 sq. ft. gross floor area.
Wine Tasting Room and Bar	1 per 200 sq. ft. gross floor area.
All other Recreational/Entertainment Uses	1 per 2,000 sq. ft. gross floor area.
E. Retail & Wholesale Uses	
Automobile, motorcycle, recreational vehicle and all-terrain vehicles sales, new and used	2 per 1,000 sq. ft. gross floor area plus 1 per 7,000 sq. ft. outdoor display area.
Big box retailers	1 per 300 sq. ft. gross floor area sales area and 1 per 800 sq. ft. gross floor area storage area.
Bus Station	2 per 1,000 sq. ft. gross floor area.
Heavy Equipment Sales and Rentals	2.75 per 1,000 sq. ft. gross floor area. Plus 2 per service bay.
Mobile home display lots	1 per 1,000 sq. ft. gross floor area.
Restaurants	1 per 3 customer seats plus 2 per employee on largest shift.
Drive-Thru restaurants	1 per 150 sq. ft. gross floor area.
Services Goods and Gas Stations	3.5 per 1,000 sq. ft. gross floor area.
Shopping centers	4 per 1,000 sq. ft. gross leasable area.
All other Retail & Wholesale Uses	3.5 per 1,000 sq. ft. gross floor area.
F. Civic, Government, & Institutional	
Art Schools, music and dance studios, and similar uses	1 per 400 sq. ft. gross floor area.
Auditorium, community center, or similar facility	1 per 300 sq. ft. gross floor area.
Cemeteries	None
Churches	1 per 4 seats in the main assembly hall.
Hospitals	1 per 2 patient beds.
Industrial trade schools and research laboratories	10 per 1,000 sq. ft. gross floor area, or 40 per 1,000 sq. ft. of classrooms, whichever is greater.
Kindergartens and Day Nurseries	1 per 8 pupils based on maximum capacity plus 2.

Use	Minimum Parking Required
Public and private elementary and secondary schools	2 per classroom.
Public recreational parks	See note 1.
Public safety facilities such as fire and police stations and rescue squad headquarters	3 per 1,000 sq. ft.
Laboratory	1.5 per 1,000 sq. ft. gross floor area.
All other Civic, Government, & Institutional	3 per 1,000 sq. ft. gross floor area.
G. Industrial/Wholesale/ Storage	
Outdoor Sales and Storage (Boats, trailers, RV, building supplies, trucks, industrial supplies, equipment, tractors, farm equipment, monuments, outdoor furniture, etc.)	2 per 1,000 sq. ft. gross floor area plus 1 per 7,000 sq. ft. outdoor display area.
Quarrying and mining	1 per 3,000 sq. ft. gross floor area.
Railroad and freight classification yards	1 per 3,000 sq. ft. gross floor area.
Stone and gravel works	1 per 3,000 sq. ft. gross floor area.
Distribution Facility	1 per 3,000 sq. ft. gross floor area.
Truck terminals, transfer companies	1 per 3,000 sq. ft. gross floor area.
Wholesale, warehousing establishments	1 per 3,000 sq. ft. gross floor area.
All other Industrial	1 per 1,000 sq. ft. gross floor area.
H. Agriculture	
All Agriculture Uses	See note 1.
I. Infrastructure	
Air Strip/Airport/Helicopter Pad	See note 1.
Public works and public utilities including electrical transmission, distribution and substation equipment, pumping stations, water towers, and telephone exchange provided	See note 1.
J. Other	
Temporary Uses	See note 1.
K. Accessory Uses & Structures	
Accessory Structure Retail	3.5 per 1,000 gross floor area.
Dwelling, Accessory	1 per dwelling unit.
All other Accessory Uses & Structures	See note 1.

Use	Minimum Parking Required
* To calculate number of spaces for townhouse units & manufactured homes: (DU * 1.75 * 1.10)	
<p>Note 1: These uses, due to their unique nature, have widely varying parking and loading demand characteristics, making it impossible to specify a single off-street parking or loading standard. Upon receiving a development application for a use subject to this note, the Administrator shall apply the off-street parking and loading standard specified for the listed use that is deemed most similar to the proposed use or shall establish minimum off-street parking requirements based on a parking and loading study prepared by the applicant. Such a study must include estimates of parking demand based on recommendations of the Institute of Traffic Engineers (ITE), or other acceptable estimates as approved by the Administrator, and should include other reliable data collected from uses or combinations of uses that are the same as, or comparable with, the proposed use. Comparability will be determined by density, scale, bulk, area, type of activity, and location. The study must document the source of data used to develop the recommendations.</p>	

F. Adjustments to Motorized Vehicle Parking Ratios

The minimum number of spaces required by Section 3.8.E may be adjusted by the Administrator when it has been determined that the reductions are necessary to preserve a healthy tree or trees (with a twelve- (12-) inch or greater DBH) from being damaged or removed, and where the site plan provides for the retention of said tree or trees.

G. Additional Standards for Motorized Vehicle Parking

1. Accessibility

Parking for the disabled shall be provided in accordance with the North Carolina State Accessibility Code.

2. No Vehicle Storage or Loading

Required parking areas shall be available for the parking of operable vehicles of residents, customers, and employees, and shall not be used for the storage of vehicles or materials, or for the parking of vehicles used for loading or unloading, or in conducting the use.

3. On-Street Parking

Where parking on-street is permitted, a use may count the marked spaces directly along the parcels frontage toward the parking requirement.

4. Shared Parking

Up to one-half (½) of the parking spaces required for one (1) use may be used to satisfy the parking requirements for a second use on an adjacent lot, subject to certification by the Administrator that such joint usage of the shared parking complies with both:

- a. The peak usage of the parking facility by one (1) use will be at night or on Sundays (such as with theaters, assembly halls, or churches), and the peak usage of the parking facility by the second use will be at other times; and
- b. The joint use of shared off-street parking between two (2) uses is made by contract between two (2) or more adjacent property owners.

5. Remote Parking

Remote parking (a dedicated off-site satellite parking lot) may be permitted, subject to certification by the Zoning Administrator that the following requirements have been met:

- a. The use being served by the remote parking shall be a permitted principal use, as established in Chapter 2, in the zoning districts within which the lot containing such parking is located;
- b. A safe, direct, paved, lighted and convenient pedestrian route shall exist or be provided between the remote parking and the use being served;
- c. At least one (1) parking space within each remote parking lot shall be within five hundred (500) feet of the main entrance of such principal use as measured along the route provided in accordance with Subsection (b); and
- d. Said land shall be used for no other purpose so long as no other adequate provision for parking space meeting the requirements of this Ordinance has been made for the principal use.

H. General Off-Street Parking Design Standards

1. Location

No off-street parking area is permitted within any required setback, except that driveways providing access to the area may be installed across said setback. It is the intent that these driveways be as nearly perpendicular to the street right-of-way as possible.

2. Dimensions

Parking space dimensions (other than those designed for the disabled) shall be a minimum of eighteen (18) feet long and nine (9) feet wide. Parallel parking space dimensions shall be a minimum of twenty (20) feet by eight (8) feet. (Twenty (20) feet by seven (7) feet may be used in constrained conditions or on residential streets.) The dimension is measured from the face of the curb and may include the gutter.

3. Driveway Widths for Parking Lots

Driveways for parking lots shall be a minimum of twelve (12) feet in width for one-way traffic and twenty-four (24) feet in width for two-way traffic. Driveway widths

shall not exceed twenty-four (24) feet, except as required by the Town of Elkin or the North Carolina Department of Transportation (NCDOT).

4. Surfacing

All parking area surfacing shall be constructed in accordance with the following:

- a. **Porous Paving Permitted:** The Administrator may permit and/or require that porous paving materials be substituted for paved surfaces in some portion of a vehicular surface area where it finds it is necessary to protect the root system of an existing tree or trees from damage or reduce the amount of impervious surface.
- b. **Overflow Parking:** Off-street areas used for special event parking (to accommodate occasional overflow volumes) may be constructed of any dust-free compacted, pervious ground cover. The owner of the property shall be responsible for the maintenance of such parking areas in a clean and dust-free condition. Grass and mulch are examples of acceptable pervious ground cover.

5. Landscaping

Parking areas shall be landscaped in accordance with the provisions of Chapter 6.

6. Conservation Design

- a. Creative design which utilizes conservation methods in parking areas is strongly encouraged.
- b. The Zoning Administrator may make modifications to the requirements of this Chapter when it can be shown that the applicant is utilizing bioretention and rainwater infiltration, preserving existing canopy trees and their root systems, installing a variety of plant type to encourage plant diversity, and/or installing environmentally friendly surfaces.

I. Loading Area Requirements

1. Off-street loading berths available for the loading and unloading of vehicles shall be provided for all retail, wholesale, and industrial uses, as well as for any expansion of such uses or change in use requiring the regular delivery or shipment of goods, merchandise, or equipment to the site.
2. Berths shall be located in the rear of the structure.
3. Berths shall have a minimum dimension twelve (12) feet by forty (40) feet and an overhead clearance of fourteen (14) feet in height above the alley or street grade.
4. Loading berths may not otherwise be used for conducting the operations and activities of the permitted use, including, but not limited to, the display or storage of vehicles or materials.

5. Loading berths may not be included for meeting the requirements of bicycle parking or off-street parking.

3.7. LIGHTING REQUIREMENTS

A. Applicability

Any development that proposes exterior lighting shall include a detailed exterior lighting plan as part of the plan submission.

B. Definitions

For the purposes of this Section, the following terms shall be used:

FIXTURE, FULL CUTOFF. A classification of light fixture which produces zero intensity at or above ninety (90) degrees and limited to a value not exceeding ten percent (10%) of lamp lumens at or above eighty (80) degrees.

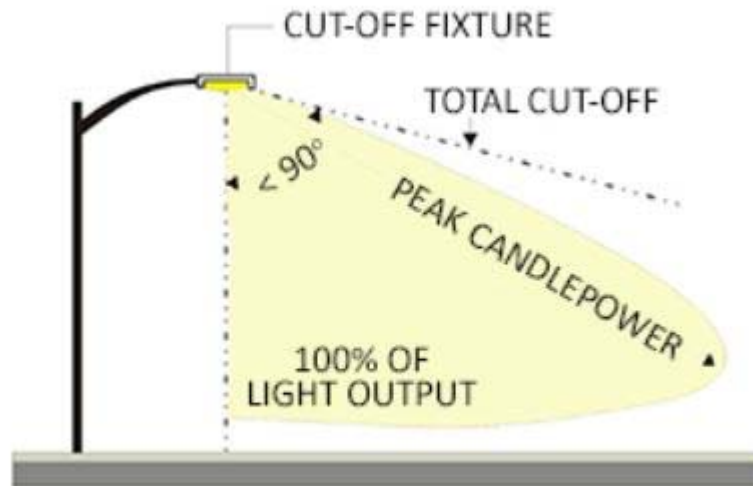


Figure 3.18
Cutoff Fixture

FIXTURE, NON-CUTOFF. A classification of light fixture which does not limit the intensity of lamp lumens at or above eighty (80) degrees.

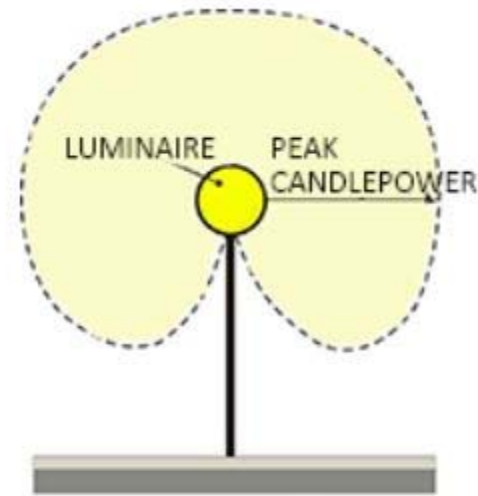


Figure 3.19
Non-cutoff Fixture

FOOT-CANDLE (ISOFOOT CANDLE). A unit of illuminance. One footcandle is one lumen per square foot ($F = L/D^2$).

GLARE. Light emitting from a luminaire, solar panel, glass, or similar reflective surface with an intensity great enough to reduce a viewer's ability to see or to cause annoyance, and, in extreme cases, causing momentary blindness.

LUMINAIRE. The complete lighting unit or fixture consisting of a lamp, or lamps and ballast(s) when applicable, together with the parts designed to distribute the light, including reflector, lens, or diffuser to position and protect the lamps, and to connect the lamps to the power supply.

LUMENS. A unit of illumination, being the amount of illumination of a unit area of spherical surface, due to a light of unit intensity placed at the center of the sphere.

C. Lighting Plan

When required as part of Section 3.7.A. or 9.6.C.3., the lighting plan shall include:

1. Specifications for the lighting fixtures such as: type of unit (cutoff, non-cutoff, glare shields, etc.), lamps (wattage, etc.), electrical load requirements, utility company involved, method of wiring, routing/location of lines, location of lights, timing controls and hours of illumination, and mounting heights.
2. An iso-foot-candle plan that shows typical foot-candle contours or a point photometric grid that indicates foot-candle levels measured at grade across the site and along the perimeter of the site. Other information such as: maximum, average,

and minimum site foot-candles and uniformity ratio (average/minimum) should also be included. Foot-candle levels shall be shown at initial levels.

- Plan certification by a licensed lighting professional holding the PE, LC, or CLEP certification or similar certification that indicates proficiency in the design of outdoor lighting, a lighting manufacturer, or the local electric utility. The certification must verify that the plans meet the Town’s design requirements and illumination standards.

D. Illumination Standards

The tables below set forth standards for lighting intensity and mounting height based upon the base zoning district. Illumination values are presented in foot-candles measured at property line or right-of-way line. Mounting height of illumination is measured from the ground to the light source.

**Figure 3.20
Pedestrian Lighting without Full Cutoff**

District	Maximum Permitted Maintained Illumination*	Maximum Permitted Mounting Height of Illumination
LDR, MDR, HDR, MH	0.1 foot-candles	12 feet
HDMF, MA, NB, HB,	0.2 foot-candles	16 feet
DMX, RF, M-1, M-2	0.3 foot-candles	20 feet
CD	Use base zoning district.	

**Figure 3.21
Light Source or Luminaire with Cutoff**

District	Maximum Permitted Maintained Illumination*	Maximum Permitted Mounting Height of Illumination
LDR, MDR, HDR, MH	0.3 foot-candles	18 feet
HDMF, MA, NB, HB,	0.5 foot-candles	25 feet
DMX, RF, M-1, M-2	1.0 foot-candles	35 feet
CD	Use base zoning district.	

* Foot-candles (F) are calculated by dividing the lumens (L) by the distance to the property line square (D2). (F = L/D2)

E. Design Requirements

Exterior lighting, such as that used in and around buildings, recreation areas, parking lots, and signs, shall be designed to prevent the excessive spillover of light onto adjacent properties. It shall also be designed to protect against glare onto public rights-of-way thereby impairing the vision of motorists and adversely impacting adjoining properties. All exterior lighting shall be shielded from adjacent properties by existing

vegetation, thick evergreen vegetated buffers, berms, walls, or fences, and/or the use of directional lighting, lighting shields, special fixtures, timing devices, appropriate light intensities, luminaries, and mountings at appropriate heights. External and/or internal shields are required on all lights in vehicular use areas and lights mounted to buildings where they are immediately adjacent to residential uses (such as along the edges of parking lots or mounted to the rear of buildings close to residential uses). All outdoor lighting shall conform to the following design standards:

1. Location

- a.** All outdoor lighting fixtures shall be located a minimum of ten (10) feet from a property or right-of-way line and should be kept out of and at least two (2) feet away from any required perimeter or streetscape buffer, except for the DMX and RF districts, which may be located closer to the right-of-way as existing conditions and pedestrian access allow.
- b.** The layout of lighting shall be designed so that poles do not interfere with other elements of the approved site such as trees, landscaping, and parking. In general, poles should be kept at least twenty (20) feet away from the trunk of any canopy tree and at least ten (10) feet away from the trunk of any understory-type tree.
- c.** Lighting for outdoor display areas, such as auto dealerships, must be located inside the illuminated area or no more than ten (10) feet away from the outside edge of the illuminated area so that the amount of direct glare and the visual field of view does not present a safety hazard to the passing motorist.

2. Architectural/Site Compatibility

Lighting fixtures shall be of a design and size compatible with the principal building of a development and adjacent areas and shall be designed to be an integral part of the entire development site. Light fixtures and poles will be considered neutral elements of the site and must be finished in black, dark brown, or architectural bronze. All light fixtures/poles on site including building mounted lighting shall be the same color throughout the development. Bright colors and white are prohibited.

3. Spillover Light and Glare Control

- a.** All outdoor lighting shall be designed and located such that the maximum illumination measured in initial foot-candles at the property line shall not exceed 0.1 onto adjacent residential sites and 1.0 onto adjacent non-residential sites and public rights-of-way.
- b.** Non-cutoff lights are prohibited along the perimeter of non-residential sites where they are immediately adjacent to adjoining residential properties. Non-

cutoff lights may require external caps, side shields, and/or internal shields to control glare.

- c. Cutoff lights shall be full cutoff.
- d. Cutoff lights used along the perimeter of non-residential sites where they are immediately adjacent to adjoining residential properties must be fitted with externally mounted shields placed on the residential side. The shields must be appropriately sized to sufficiently limit visible glare from the light onto the residential properties. Additional internal shields or other devices may be required to direct the light away from residential properties.

F. Building, Ground Mounted Fixtures and Accent Lighting

Lighting shall not be mounted to buildings or used to illuminate buildings or other site features unless approved as integral elements on the development plan. Lighting will not be approved unless the light fixtures are carefully selected, located, aimed, and shielded so that light is directed only onto limited parts of the building façade, specimen landscape, and site features, and spillover light is minimized. Building, ground mounted fixtures, and accent lighting must meet the following criteria:

1. Lights must not be used to illuminate entire portions of building(s), landscape, or site features.
2. Building mounted lights such as wall-pack and goose-neck type fixtures shall be fully shielded, true cutoff type fixtures (concealed lamp/light source). The lighting must be directed downward.
3. Accent lights must be low-wattage or low-voltage and the maximum illumination on any surface shall not exceed 5.0 average initial foot-candles.
4. Awnings and canopies used for building accents over doors, windows, and etc. shall not be internally lit (i.e., from underneath or behind). If lit from above, the lighting must be spaced sparingly so that only limited portions of awnings and canopies are accented.
5. Lights that flash, move, revolve, rotate, scintillate, blink, flicker, vary in intensity or color, or use intermittent electrical pulsation are prohibited. Continuous lighting such as, but not limited to tubes or strings of lights on rooflines, window surrounds and building edges are prohibited (see also Chapter 7).

G. Floodlights

Floodlights or similar types of directional lighting attached to light poles or buildings to illuminate large portions of the site and/or building(s) are prohibited. The use of floodlights or similar types of directional lighting will only be considered for special

approval for Industrial-type uses or where it can be demonstrated that extreme site or design constraints warrant their use.

H. Lighting for Gas Station/Convenience Store Canopies

Lighting for canopies for service stations and similar uses shall be restricted to no more than two (2) 320-watt recessed lighting fixtures (including lenses) mounted flush with the bottom of the canopy on each side of a gasoline pump island, or any other design that meets the standards of this Ordinance. Lighting for canopies for service stations and other similar uses such as but not limited to bank and pharmacy drive through, and large covered main entrance canopies shall not exceed an initial maximum level of twelve (12) foot-candles as measured at ground level at the inside of the outside edge of the canopy and an initial average level of twenty-five (25) foot-candles under the canopy.

I. Recreation Facility and Athletic Field Lighting

Lighting for ball fields and sports courts may need to exceed illumination standards for general recreational needs to meet higher standards required for tournament play and active recreation. The Administrator may approve deviations from the illumination standards; however, before any changes will be considered the sports lighting must meet these minimum standards:

1. Fixtures to light playing fields must not exceed eighty (80) feet in mounting height (this includes bases and/or other mounting structures). All other lighting fixtures must not exceed thirty-five (35) feet in mounting height (this includes bases and/or other mounting structures).
2. Lighting for fields and active recreational facilities located within one thousand (1,000) feet of a residential use, fixtures must be fitted with the manufacturer's glare control package. If the manufacturer does not have a glare control package, the fixture specification must be changed to a manufacturer that offers a glare control package.
3. Fixtures must be designed and aimed so that their beams fall within the primary playing area and the immediate surroundings, so that off-site direct illumination is significantly restricted. Spillover levels at the property line must not exceed 0.2 foot-candles onto residential properties.
4. Lighting shall be extinguished by 10:00 PM or one (1) hour after the event ends, whichever is later; however, facilities owned and/or operated by the Town of Elkin, may have public facilities lit beyond these times for safety and security, as needed.
5. A Type A buffer (see Chapter 6) shall be required along any property line of a recreation facility when such lighting fixtures are within one hundred (100) feet of a residential use.

6. Such lighting shall be proposed at the time of Master Subdivision Plan or Site Plan approval for new recreation facilities. Approval of a Special Use Permit and a revised Site Plan Lighting Sheet and Landscape Sheet are required for any proposal to exceed illumination standards of this Section at an existing recreation facility.

J. Illuminated Tubing or Strings of Light

Illuminated tubing or strings of light on trees and landscaping or outlining property lines, open sales areas, rooflines, windows or wall edges of buildings are prohibited. This prohibition does not apply to permanent open spaces, civic buildings and spaces, and outdoor eating areas when approved as a part of a lighting plan or site plan, or to Town of Elkin-owned properties or landscaping.

K. Exemptions

The standards of this Section shall not apply to:

1. Lighting associated with temporary uses that have been permitted, provided that the lighting meets the general standards of this Section.
2. Seasonal lighting that is part of customary holiday decorations and annual civic events.
3. Lighting associated with sign illumination as set forth in Chapter 7.
4. Lighting installed within public rights-of-way or on Town-owned property for the benefit of public health, safety, and welfare.

L. Final Inspection

Before certificates of occupancy are released, the owner/builder must supply the Town with a final letter of certification from the lighting engineer, qualified lighting professional, or lighting manufacturer verifying that all site lighting is installed according to Town standards, the approved plans, and any applicable conditions. The certification must include a report indicating that all site and exterior mounted building lighting was inspected, and the light levels measured and recorded (including spillover lighting). Any irregularities or deviations from the approved site plan, Town standards, or applicable conditions must be pointed out in the report.