

Module 3: Development Standards

Public Review Draft

March 2015



UPDATE

HIGH POINT

DEVELOPMENT ORDINANCE



CLARION

TABLE OF CONTENTS

Chapter 1: General Provisions.....	1-1
Chapter 2: Administration.....	2-1
Chapter 3: Zoning Districts	3-1
Chapter 4: Use Standards	4-1
Chapter 5: Development Standards	5-1
Chapter 6: Environmental Standards	6-1
Chapter 7: Subdivision Standards.....	7-1
Chapter 8: Nonconformities	8-1
Chapter 9: Enforcement	9-1
Chapter 10: Measurement and Definitions	10-1

CHAPTER 5: DEVELOPMENT STANDARDS

5.1.	Public Infrastructure	5-1
5.2.	Zone Lot and Access Standards	5-1
5.2.1.	Principal Buildings on a Zone Lot	5-1
5.2.2.	Street Access.....	5-1
5.2.3.	Cross-Access	5-2
5.3.	Off-Street Parking and Loading	5-4
5.3.1.	Purpose and Intent	5-4
5.3.2.	Applicability.....	5-4
5.3.3.	Off-Street Parking Requirements	5-4
5.3.4.	Bicycle Parking Requirements	5-8
5.3.5.	Off-Street Loading Requirements	5-9
5.3.6.	Standards for Off-Street Parking Spaces and Loading Areas.....	5-9
5.3.7.	Parking Alternatives	5-12
5.4.	Landscaping Standards	5-14
5.4.1.	Purpose and Intent	5-14
5.4.2.	Applicability.....	5-14
5.4.3.	Exemptions	5-15
5.4.4.	General Requirements.....	5-15
5.4.5.	Plant Material Specifications.....	5-15
5.4.6.	Limitations on Landscaping Placement.....	5-17
5.4.7.	Credit for Existing Vegetation.....	5-19
5.4.8.	Time for Installation of Required Landscaping	5-20
5.4.9.	Parking Lot Landscaping	5-20
5.4.10.	Perimeter Landscape Yards.....	5-22
5.4.11.	Landscape Yards on Slopes.....	5-30
5.4.12.	Alternate Landscape Plan	5-30
5.4.13.	Additional Planting Yard Flexibility	5-31
5.4.14.	Landscape Yard Maintenance.....	5-31
5.4.15.	Removal or Relocation of Trees and Shrubs	5-32
5.5.	Screening	5-34
5.6.	Signage	5-36
5.6.1.	Purpose and Intent	5-36
5.6.2.	Applicability.....	5-36
5.6.3.	Variances	5-36
5.6.4.	General Standards	5-36
5.6.5.	Design, Construction, and Maintenance	5-37
5.6.6.	Prohibited Signs.....	5-38
5.6.7.	Exempt Signs	5-39
5.6.8.	Signs not Requiring a Sign Permit	5-39
5.6.9.	Freestanding Signs Requiring a Sign Permit.....	5-41
5.6.10.	Attached Sign Requiring a Sign Permit.....	5-47
5.6.11.	Outdoor Advertising Sign Requiring a Sign Permit.....	5-52
5.6.12.	Sign for Historic Structures or Properties.....	5-53
5.6.13.	Common Signage Plan	5-53
5.6.14.	Encroachment agreement for Entrance Sign.....	5-53
5.7.	Sidewalks.....	5-55
5.8.	Exterior Lighting.....	5-58
5.8.1.	Purpose and Intent	5-58
5.8.2.	Applicability.....	5-58

5.8.3.	Prohibited Lighting	5-58
5.8.4.	Lighting Plan	5-59
5.8.5.	General Standards for On-Site Exterior Lighting	5-59
5.8.6.	Design Standards for Specific Uses and Site Features.....	5-60
5.8.7.	Measurement	5-60
5.9.	Fences.....	5-61
5.9.1.	Purpose and Intent	5-61
5.9.2.	Applicability.....	5-61
5.9.3.	Locational Requirements	5-61
5.9.4.	Height Standards.....	5-62
5.9.5.	Materials.....	5-63
5.9.6.	Finished Side.....	5-64
5.9.7.	Security Exemption Plan	5-64
5.9.8.	Maintenance.....	5-64
5.10.	Open Space.....	5-65
5.10.1.	Purpose and Intent	5-65
5.10.2.	Applicability.....	5-65
5.10.3.	Minimum Open Space Amount	5-65
5.10.4.	Open Space Standards	5-66
5.11.	Development Types	5-68
5.11.2.	Multiple Lot Development	5-68
5.11.3.	Pocket Neighborhood	5-69
5.11.4.	Large Retail.....	5-73
5.11.5.	Corner Retail	5-76
5.11.6.	Conservation Subdivision	5-76
5.12.	Sustainability Incentives.....	5-82
5.12.1.	Purpose and Intent	5-82
5.12.2.	Applicability.....	5-82
5.12.3.	Procedure	5-82
5.12.4.	Menu of Sustainable Development Features	5-83
5.12.5.	Failure to Install or Maintain Sustainable Development Practices	5-85

Commentary

- This Chapter includes the development and design standards for development in the City.
- The parking standards are lowered generally and require fewer spaces in the Core City relative to the balance of the City. There are more detailed configuration standards, simplified dimensional requirements, bicycle parking space requirements, and several flexibility techniques to allow modification from the parking standards.
- The landscaping standards include new minimum size at time of planting and species diversity requirements. There are new comprehensive vehicular use area landscaping requirements for internal and perimeter areas. There are revised perimeter landscape yard standards applied based on land use intensity, and there are new width alternatives. There are accelerated credits for the retention of existing trees, and as with the parking standards, there are new flexibility techniques for landscaping.
- There are new comprehensive screening requirements for loading areas, refuse collection areas, and ground-based equipment.
- The signage standards are largely carried forward but reformatted to be easier to administer.
- There are new sidewalk standards that clarify sidewalk location and include provisions for in-lieu fees.
- The exterior lighting standards establish new footcandle maximums at the lot line to prevent light trespass.
- The fence standards provide additional clarity on fence height and also include new minimum appearance standards for fences proximate to major streets.
- There are open space standards for the most dense forms of residential development and nonresidential development in planned development districts. There are new standards for ownership and maintenance.
- There are new special standards for certain types of development such as multiple lot developments, pocket neighborhoods, large retail developments, corner retail, and conservation subdivisions.
- The sustainability incentives provisions allow new development to increase building heights, densities, lot coverages through the provision of sustainable development features such as energy conservation, water conservation, or sustainable building design.

CHAPTER 5: DEVELOPMENT STANDARDS

5.1. PUBLIC INFRASTRUCTURE

- 5.1.1.** When development occurs within the corporate limits of the City, it shall be served by the City's public water and sewer systems, unless the Public Services Director determines that it is not required in accordance with the City Code.
- 5.1.2.** When development occurs within the City's ETJ, the applicable County Health Department is authorized to approve private well and on-site wastewater treatment systems. Connections to the City's public water and sewer system is authorized only in accordance with established City Council policy.

5.2. ZONE LOT AND ACCESS STANDARDS

5.2.1. PRINCIPAL BUILDINGS ON A ZONE LOT

Every building must be located on a zone lot. No more than one principal building is permitted on a zone lot, except as follows:

A. Nonresidential Group Development

Two or more principal nonresidential buildings are permitted on a zone lot pursuant to a group development plan approved in accordance with Section 2.5.9, Group Development, and provided that vehicular access is maintained to each building for service and emergency vehicles.

B. Residential Group Development

Two or more principal buildings are permitted on a zone lot in a multi-family or single-family attached development pursuant to a group development plan approved in accordance with Section 2.5.9, Group Development, and provided that access is maintained to each building for service and emergency vehicles.

5.2.2. STREET ACCESS

A. General Standards

Except where an alternative configuration is allowed in accordance with Section 5.2.2.B, Alternative Configuration, all development shall comply with the following street access standards:

1. Except as provided in this section, every zone lot shall abut and have direct access to a publicly-maintained street.
2. Except as provided in this section, no building or structure shall be constructed or placed on a zone lot that does not have direct access to a publicly-maintained street.

B. Alternative Configuration

As an alternative to compliance with the general standards in section (A) above, development may incorporate one of the following alternative street access standards:

1. Dead-End Streets

The terminus of a dead-end street is not required to provide the required access to a publicly maintained street unless it is configured as a circular turnaround or other

turnaround approved and constructed in conformance with Chapter 7: Subdivisions Standards.

2. Private Streets

Private streets may be used to meet the access requirements for single-family lots in a planned development district, single-family attached developments, and multiple lot developments, provided the district or development as a whole abuts and has direct access to a publicly-maintained street.

3. Single-Family Attached Development

- (a)** Individual lots shall have rights of access through a common area containing private streets or private drives that are at least of 24 feet in width and lead to a publicly-maintained street.
- (b)** Direct access to a publicly-maintained street from an individual lot containing a single-family attached dwelling shall require prior approval from the TRC approval.

4. Multiple Lot Development

Individual lots in a multiple lot development must have shared rights of access along private streets or private drives that are at least 24 feet in width and lead to a publicly-maintained street.

5. Alleys

Alleys may be used to meet the access requirements.

6. Single-Family Lot of Record

Lots of record established as of July 1, 1992 that do not abut a publicly-maintained street may establish access through a recorded access easement provided the lot is used for only one single-family detached dwelling.

7. Special Purpose Lot

Special purpose lots may establish access through an easement a minimum of ten feet in width, in accordance with Chapter 7: Subdivisions Standards.

C. Access through Residential Districts Prohibited

Access to nonresidential zoning districts may not be taken through residential zoning districts.

5.2.3. CROSS-ACCESS

A. Purpose and Intent

Cross-access between adjacent lots reduces vehicular travel on a public street and motorists entering and leaving driveways. Reduced traffic results in fewer accidents and improved traffic flow. The intent of this section is to provide for cross-access between comparable land uses that front major and minor thoroughfares so that vehicles leaving one lot may access the adjoining lot without having to reenter the public street system. It is not the intent of this section to reduce the number of driveways beyond what is allowed in the City's Driveway Ordinance.

B. Cross-Access Required

Except where exempted in Section 5.2.3.C Cross-Access Not Required, the following development shall be designed to provide cross-access to adjacent lots:

- 1.** New commercial and industrial developments, as defined in Section 4.2, Use Classifications, Use Categories, **and** Use Types, (and configured as individual lots,

subdivisions, multiple lot developments, or group developments) that front major or minor thoroughfare streets; or

2. Existing commercial and industrial developments fronting major or minor thoroughfares with building additions of over 3,000 square feet of gross floor area.

C. Cross-Access Not Required

Cross-access is not required when any of the following conditions are present:

1. Adjacent lots do not have common frontage along a thoroughfare;
2. Significant topographical differences in existing or proposed conditions are present;
3. Significant natural features exist in the only viable location for cross-access connections;
4. Vehicular safety factors including, but not limited to, unsafe turning movements or pedestrian conflicts;
5. Sufficient cross-access already exists;
6. Residential, institutional, or other incompatible land uses, as defined in Section 4.2, Use Classifications, Use Categories, **and** Use Types, are present on adjacent lots;
7. Existing infrastructure obstructions; or
8. Other safety or security factors.

D. Easement Recordation

A cross-access easement must be recorded on the final plat for property involving a subdivision, or recorded by separate instrument when no plat is proposed.

E. No Obstruction of Access

All cross-accessways shall be built to the lot line. An accessway shall not be obstructed unless approved by the Transportation Director.

F. Off-street Parking

Where a required cross-accessway eliminates required off-street parking spaces, replacement spaces shall not be required.

G. Perimeter Landscaping

Where a required cross-accessway eliminates a required landscape planting area, the landscaping requirements may be reduced to accommodate the cross-accessway and replacement landscaping shall not be required.

H. Joint Maintenance

When a cross-access easement is created to serve more than one lot, an owners' association or binding contract is required for the purpose of maintenance.

I. Property Owner Cooperation

Developers are not required to seek cooperation or permission from the adjacent land owner, but new development proposed on lots abutting existing cross-accessways shall connect to an existing cross-accessway unless exempted in accordance with sub-section (C) above.

5.3. OFF-STREET PARKING AND LOADING

5.3.1. PURPOSE AND INTENT

The purpose and intent of this section is to ensure the provision of safe off-street parking and loading facilities for development allowed by this Ordinance. The standards in this section are intended to avoid requiring an over-supply of parking that pose economic and environmental impacts while ensuring off-street parking is provided to mitigate impacts to streets and neighborhoods.

5.3.2. APPLICABILITY

A. General

Whenever a building is constructed, enlarged or increased in capacity, or a principal use is established or enlarged, the development shall meet the requirements of this section, except as specifically exempted in this Ordinance.

B. Use Change

If the principal use changes, then the new principal use shall meet the requirements of this section, except that if the use change results in an increase of less than five percent in the required number of parking spaces, or less than five additional parking spaces, no additional parking spaces are required.

C. Nonconforming Sites

Expansion or enlargement of an existing development that does not comply with the standards of this section shall be subject to and comply with the standards of Section 8.6, Nonconforming Sites.

D. Exemptions¹³¹

1. CB District

Development on land within the CB district shall comply with the requirements of this section, except that it is exempt from the minimum off-street parking requirements of Table 5.3.3.B, Minimum Off-Street Parking Standards.

2. Historic Properties

No off-street parking is required for:

- (a) Rehabilitation or reuse of a National Register site or locally designated landmark;
- (b) Rehabilitation or reuse of a contributing building within a National Register district or the LHO; and
- (c) Rehabilitation or reuse of a structure included in the City's inventory of historic architecture as determined by the HPC.

5.3.3. OFF-STREET PARKING REQUIREMENTS

A. Parking Plan Required

Every application for a site plan, group development plan, building permit, or zoning compliance permit, shall ensure that adequate off-street parking is provided for the uses or

¹³¹ This is a new subsection that spells out the exemptions to the section.

buildings contained in the application. Off-street parking must be provided to meet the parking demand without use of public streets, except as specifically allowed by this section.

B. Minimum Off-Street Parking Standards

The minimum number of off-street parking spaces required for development shall be in accordance with Table 5.3.3.B, Minimum Off-street Parking Standards.

TABLE 5.3.3.B: MINIMUM OFF-STREET PARKING STANDARDS

USE CLASSIFICATION	USE CATEGORY	USE TYPE	REQUIREMENT
Agricultural	Agriculture	All	No minimum spaces required
	Common Elements Recreation	Common elements recreation	No minimum spaces required
Residential	Household Living	SF detached; Family care home; Manufactured dwelling; Duplex dwelling; Live/work	2 spaces per dwelling unit; except in pocket neighborhoods (See Section 5.11.3, Pocket Neighborhood)
		Multi-family major & minor; SF attached	1.5 spaces per dwelling unit; except 0.5 spaces per dwelling unit for elderly housing developments
	Group Living	Dormitory, private; Fraternity or sorority house; Rooming house; SRO; Social service facility	1 space per bedroom
	Life Care	Assisted living	0.3 spaces per room; minimum of 5 spaces provided
		CCRC	As required by this table for specific uses (e.g. household living, assisted living, long-term/skilled nursing facilities, etc.)
		Long-term care/skilled nursing	0.3 spaces per room
	Institutional	Civic	Assembly & Cultural Facilities, major
Assembly & Cultural Facilities, minor			1 space per 500 sf GFA; minimum of 5 spaces provided
Cemetery			No minimum spaces required
Correctional facility			1 space per 2 employees at peak shift
Governmental facility; Public safety facility			As required for the most similar non-governmental use
Public Recreation facility			No minimum spaces required
Day Care		Day Care Center	1 space per 400 sf GFA

TABLE 5.3.3.B: MINIMUM OFF-STREET PARKING STANDARDS

USE CLASSIFICATION	USE CATEGORY	USE TYPE	REQUIREMENT
	Education	College or university	1 space per 4 students
		School, minor	1 space per classroom
		School, major	1.5 space per classroom
		Other post-secondary educational facility	1 space per 400 sf GFA
		Truck driving school	1 space per 400 sf GFA
	Health Care	Hospital; specialty hospital	1.5 space per bed
		Medical care facility, major	1 space per 500 sf GFA
		Medical care facility, minor	1 space per 800 sf GFA; minimum of 5 spaces provided
	Religious Institutions	All	1 space per 6 seats in main assembly room or for institutions without seating, 1 space per 50 sf of seating area in the main assembly room
	Transportation	Airport	No minimum spaces required
		Park and ride facility	No minimum spaces required
		Passenger terminal	No minimum spaces required
		Taxi or limousine service	1 space per 400 sf GFA of office area
	Utilities	Communication or broadcasting facilities	1 space per 2 employees at peak shift
		Solar array; Wireless telecommunication facility; Utility minor	No minimum spaces required
Utility major		1 space per 2 employees at peak shift	
Commercial	Adult Entertainment	Adult entertainment	1 space per 200 sf GFA
	Animal Care	Animal care	1 space per 400 sf GFA of office area
	Eating establishments	Bars or nightclub	1 space per 100 sf GFA
		Restaurant major & minor	1 space per 200 sf GFA
	Offices	Major and minor	1 space per 800 sf GFA; minimum of 4 spaces provided
	Commercial Parking	Commercial Parking	No minimum spaces required
Personal Services	All	1 space per 500 sf GFA	

TABLE 5.3.3.B: MINIMUM OFF-STREET PARKING STANDARDS

USE CLASSIFICATION	USE CATEGORY	USE TYPE	REQUIREMENT
	Recreation and Leisure	Amusement & entertainment	1 space per 6 seats in theaters and similar places of assembly, and 1 space per 400 sf GFA all other areas
		Amusement parks	1 space per 600 sf of outdoor area and 1 per space 400 sf GFA of indoor area
		Sports & fitness centers	1.5 spaces per 1000 sf GFA; minimum of 5 spaces provided
	Retail Sales	All	1 space per 400 sf GFA up to 400,000 sf and 1 space per 800 sf GFA for area over 400,000 sf; minimum of 5 spaces provided
	Vehicle Establishments	All	1 space per 400 sf GFA of sales and office area; minimum of 5 spaces provided
	Visitor Accommodations	Bed and Breakfast	1 space per guest room, plus 1 space for owner/operator
Hotel or motel		1 space per guest room	
Industrial	Extractive Industry	Extractive industry	1 space per 2 employees at peak shift
	Industrial Service	All	1 space per 400 sf GFA of sales and office area
	Manufacturing and Production	All except those listed below	1 space per 2 employees at peak shift
		Motion picture production	1 space per 2000 sf GFA
	Warehouse and Freight Movement	Freight movement; Warehouse and distribution	1 space per 2 employees at peak shift
		Self-storage	1 space per 400 sf GFA of office area
	Waste-Related Service	All	1 space per 2 employees at peak shift
	Wholesale trade	All except those listed below	1 space per 400 sf GFA of sales and office area; minimum of 5 spaces provided
Market Showroom		1 space per 2000 sf GFA	

C. Uses Not Listed

For uses that do not correspond to the use types listed in Table 5.3.3.B, Minimum Off-Street Parking Standards, the Planning and Development Director shall determine the minimum parking space requirement. In such instances, the application shall provide adequate information for review, which includes, but is not limited to the type of use(s), number of employees, the occupancy of the building, square feet of sales, service and office area, parking spaces proposed and hours of operation.

D. Other Vehicles Located Off-street

The following vehicles are not included in Table 5.3.3.B, Minimum Off-Street Parking Standards, and shall be parked or located outside required parking spaces and any public street right-of-way in accordance with this Ordinance:

1. Vehicles for sale or lease;
2. Vehicles being stored, serviced or repaired; or
3. Vehicles belonging to the use, such as company vehicles.

E. Multiple-Use Development¹³²

Development containing more than one principal use shall provide parking spaces in an amount equal to the total of all individual principal uses, except as allowed in Section 5.3.7, Parking Alternatives.

F. Driveways Used to Meet Requirements¹³³

Except for multi-family dwellings, driveways may be used to meet the minimum off-street parking space requirements for all use types in the Household Living se category, provided that sufficient space is available to meet the standards of this section.

G. On-Street Parking Credited

The use of on-street parking to meet the minimum off-street parking space requirements is permitted for nonresidential development in the Core City, subject to the following standards:

1. On-street parking exists within 500 linear feet of the primary entrance of the development;
2. The on-street parking spaces directly abut (not across the street) the lot containing the development and is served by a sidewalk;
3. There is not a negative impact to existing or planned traffic circulation patterns; and
4. The on-street spaces shall not be reserved for sole use by the development.

5.3.4. BICYCLE PARKING REQUIREMENTS

Bicycle parking, in accordance with this section, is required in the MX, MS, and RM-26 districts for residential developments with 30 or more dwelling units and nonresidential development with 10,000 or more square feet of gross floor area.

A. General Standards

1. Bicycle parking shall be provided at the rate of one bicycle space for every 30 residential dwelling units or every 5,000 square feet of nonresidential gross floor area. A minimum of at least two bicycle parking spaces shall be provided.
2. A bicycle rack or other device shall be provided to enable bicycles to be secured.
3. Bicycle parking shall be located where it does not interfere with pedestrian traffic and is protected from conflicts with vehicular traffic.
4. Bicycle parking should be accessible to the primary entrances of the development and in a visible, well-lit area.

B. Shared Bicycle Parking

1. Adjoining developments may share required bicycle parking spaces provided:
 - (a) Each use provides or is served by an improved walkway from the bicycle parking spaces to the primary entrance.
 - (b) The shared bicycle parking spaces and the improved walkway are depicted

¹³² This subsection builds on Section 9-5-6 (a)(3) of the current ordinance.

¹³³ This is a new provision that clarifies that driveways may be used to satisfy off-street parking requirements for attached and detached single-family dwellings.

on a site plan or group development plan, whichever is appropriate.

5.3.5. OFF-STREET LOADING REQUIREMENTS

A. Loading Space Required

Every application for a site plan, group development plan, building permit, or zoning compliance permit for a nonresidential use shall ensure that adequate loading space is provided so that loading vehicles do not occupy required off-street parking spaces, block vehicular access, or prevent appropriate on-site maneuvering.

B. Minimum Off-Street Loading Space Requirements

A minimum number of loading spaces is not established; however, off-street loading space shall be provided and maintained in sufficient numbers to adequately handle the needs of a nonresidential use.

5.3.6. STANDARDS FOR OFF-STREET PARKING SPACES AND LOADING AREAS¹³⁴

Off-street parking, stacking, and loading spaces along with drive aisles and private drives are referred to a "vehicular use area". Vehicular use areas shall meet the standards of this section.

A. General

1. All required off-street parking, stacking, and loading spaces shall be located on the same lot as the principal use it serves, except as allowed in Section 5.3.7, Parking Alternatives.
2. All required off-street parking, stacking, and loading spaces shall not be used for any other purpose, including, but not limited to the storage or display of goods or the sale, lease, storage, or repair of vehicles.
3. Required off-street parking shall be maintained for the duration of the principal use and shall not be reduced unless the principal use ceases or changes.
4. Off-street loading spaces shall be not be located in any required parking space or protrude into any public street.

B. Easements

A vehicular use area shall not be located within an easement without approval of the easement holder.

C. Parking Space Access

All off-street parking spaces shall be accessed directly from drive aisles or private driveways and not directly from public streets.

D. Vehicle Backing

1. Vehicular use areas shall be designed so that a vehicle is not required to back onto a public street to enter or exit the vehicular use area, a parking space, or a stacking space.
2. Except in the CB district, off-street loading shall be designed so that no backing into or from a public street is necessary.

E. Dimensional Standards for Parking Spaces and Aisles

¹³⁴ This section builds on Section 9-5-6 of the current ordinance, adding more specificity about the standards for vehicular use areas, stacking, and loading areas, as noted in the footnotes.

Standards parking spaces and parking aisles shall comply with the minimum dimensional standards established in Table 5.3.4.E, Dimensional Standards for Parking Spaces and Aisles.

TABLE 5.3.4.E: DIMENSIONAL STANDARDS FOR PARKING SPACES AND AISLES

PARKING ANGLE (DEGREES)	SPACE WIDTH (FEET)	SPACE DEPTH (FEET)	MINIMUM AISLE WIDTH (FEET)
Parallel (0°)	9	20	12
Angled (30°)	9	17.3	11
Angled (45°)	9	19.8	13
Angled (60°)	9	21	18
Perpendicular (90°)	9	18	24

F. Handicapped Accessibility

Development providing off-street parking spaces must ensure a portion of the off-street parking spaces are designated, located, and reserved for use by persons with physical disabilities in accordance with the standards of the North Carolina State Building Code.

G. Dimensional Standards for Loading Spaces

Except for loading spaces used by semi-tractor trailers, off-street loading spaces shall be at least 12 feet wide and at least 25 feet long. Off-street loading spaces used by semi-tractor trailers shall be at least 60 feet long. Overhead clearance shall be at least 14 feet.

H. Pedestrian Connections

Pedestrian connections between the principal buildings on a development site and a public street(s) must be provided through improved walkways with a minimum unobstructed width of four feet. Parking spaces shall be designed to ensure vehicles do not encroach into the walkways.

I. Stacking Spaces

1. General

Uses with drive-through facilities and other auto-oriented uses where vehicles queue up to access a service shall provide adequate stacking spaces on-site for the uses or buildings in accordance with this section. Such uses include but are not limited to: restaurants with drive-through, convenience store with fuel sales, and other uses with service bays or drive-throughs.

2. Design

Required stacking spaces are subject to the following design and layout standards:

(a) Size

Stacking spaces shall be a minimum of nine feet wide and 16 feet long.

(b) Traffic Movements

Stacking spaces shall not impede vehicular traffic movements or movements into or out of parking spaces, whether on-site or off-site.

(c) Bicycle and Pedestrian Movement

Subsection 5.3.6 Standards for Off-Street Parking Spaces and Loading Areas

Stacking spaces shall not impede onsite or offsite bicycle or pedestrian traffic movements, whether on-site or off-site.

(d) Separation

Stacking spaces shall be clearly delineated through such means as striping, landscaping, pavement design, or curbing.

J. Private Drives

1. A vehicular use area shall be connected to a public street in a manner that affords safe and convenient ingress and egress.
2. A one-way drive shall be at least 12 feet wide and a two-way drive shall be at least 20 feet wide.
3. Off-street parking spaces shall not be directly accessible off a private drive, except as allowed for use types in the Household Living use category in Section 5.3.3.F, Driveways Used to Meet Requirements.
4. A private drive for vehicular use areas containing 200 or more parking spaces shall be unobstructed for at least 30 feet in length from the right-of-way line to a drive aisle or parking space to accommodate the ingress and egress of at least two vehicles without conflict with vehicles accessing parking spaces or drive aisles and creating an obstruction in the public street.
5. The design and location of private drives accessing public streets shall be subject to the City's Driveway Ordinance.

K. Surface Material

1. All required parking spaces, drives, and loading spaces in a vehicular use area shall be paved and maintained with concrete, asphalt, or similar material of sufficient thickness and consistency to support anticipated traffic volumes and weights, except as provided in this section.
2. The use of pervious or semi-pervious materials may be approved as an alternate means of paving provided it is demonstrated that the materials will function in a similar fashion as required materials.
3. Private drives accessing public streets shall be paved and maintained from the curb line or edge of pavement to a point at least ten feet from the public street right-of-way for all vehicular use areas and at least 30 feet for all vehicular use areas with 200 or more parking spaces, whether the vehicular use area is paved or unpaved.
4. Required parking may be constructed with gravel or other approved comparable all-weather surface for:
 - (a) Parking used on an irregular basis for religious institutions, private minor assembly uses, and other similar nonprofits organizations;
 - (b) Parking for residential uses or a bed and breakfast establishment where six or fewer spaces are required;
 - (c) Parking for an office use converted from a single-family detached dwelling where four or fewer spaces are required; and
 - (d) Parking for industrial uses in the HI district, or manufacturing and production uses in the LI district.

L. Grading and Drainage

The vehicular use area shall be graded, properly drained, stabilized, and maintained to minimize dust and erosion.

M. Curb and Gutter

Where vehicular use areas are paved, curb and gutter or an equivalent drainage system shall be provided along the periphery of the area.

N. Markings

All spaces and lanes in vehicular use areas shall be clearly delineated with paint lines, bumper guards, curbs, or other treatment, whether the vehicular use area is paved or unpaved.

O. Curbs and Wheel Stops

All parking spaces provided shall have curbs or wheel stops located so that no part of the parked vehicle will extend onto a sidewalk, walkway, adjacent property or landscape area, whether the vehicular use area is paved or unpaved.

P. Exterior Lighting

Exterior lighting in vehicular use areas shall be designed to prevent glare or illumination exceeding maximum allowable levels on adjacent land and shall comply with the standards of Section 5.8, Exterior Lighting, as appropriate.

Q. Landscaping

Landscaping shall be provided in accordance with Section 5.4.9, Parking Lot Landscaping.

5.3.7. PARKING ALTERNATIVES¹³⁵

The Planning and Development Director is authorized to approve an alternative parking plan for development that proposes alternatives to providing the number of off-street parking spaces required by Table 5.3.3.B, Minimum Off-Street Parking Standards, in accordance with the standards of this sub-section. Nothing in this section shall limit the utilization of one or more of the following off-street parking alternatives by a single use. .

A. Shared Parking

- 1.** The required off-street parking for a use may be met off-site with the required off-street parking spaces of another use in accordance with the following standards:
 - (a)** The shared parking is located within 1,000 feet as measured from the entrance of the use to the nearest shared parking space.
 - (b)** An improved walkway is provided to the shared parking area from the use.
 - (c)** If the shared parking is located across a thoroughfare, then an adequate and safe pedestrian street crossing shall exist to safely manage pedestrian crossings. If pedestrian improvements are needed for safe crossings, then the improvements shall be installed prior to use of the shared parking.
 - (d)** The uses served by the shared parking plan must have different peak parking demands, differences in hours or days of operation, or otherwise operate such that the uses have access to the required minimum parking spaces when in operation.
- 2.** The Planning and Development Director may approve up to 100 percent of the minimum parking requirement of a use through a shared parking plan.
- 3.** A written agreement allowing the shared use of parking shall be executed by the owners involved and filed with the Planning and Development Director prior to the

¹³⁵ This section sets out a set of alternative parking arrangements that provide developers additional flexibility in meeting parking demands—through shared parking, offsite parking for nonresidential development, deferred parking, valet and tandem parking, transportation demand management—or in justifying providing more spaces than the maximum generally allowed, or requesting the use of alternative paving materials (non-previous). In addition to providing developers flexibility, several of these alternatives are intended to encourage reduction of the amount of impervious surface devoted to parking—and thus improve stormwater management and the visual impact of expansive parking areas.

use of shared parking facilities. The agreement must guarantee the long-term availability of parking. Should the agreement cease, then the use shall be considered to contain nonconforming site conditions and future expansions of the use shall be prohibited unless the use is brought into compliance with the minimum parking requirements of this section.

B. Off-Site Parking

- 1.** The required off-street parking for a use may be met off-site in accordance with the following standards:
 - (a)** The off-site parking is located within 1,000 feet as measured from the entrance of the use to the nearest shared parking space.
 - (b)** An improved walkway is provided to the off-site parking area from the use.
 - (c)** If the off-site parking is located across a thoroughfare, then an adequate and safe pedestrian street crossing shall exist to safely manage pedestrian crossings. If pedestrian improvements are needed for safe crossings, then the improvements shall be installed prior to use of the off-site parking.
- 2.** A written agreement allowing the off-site use of parking shall be executed by the owners involved and filed with the Planning and Development Director prior to the use of off-site parking facilities. The agreement shall guarantee the long-term availability of parking. Should the agreement cease, then the use shall be considered to contain nonconforming site conditions and future expansions of the use shall be prohibited unless the use is brought into compliance with the minimum parking requirements of this section.

C. Compact Spaces

Up to 20 percent of the required off-street parking spaces may be provided as compact car spaces in accordance with the following standards:

- 1.** Each compact car space shall be at least eight feet wide and 16 feet deep.
- 2.** Compact car spaces shall be clearly marked or posted for compact cars only.

D. Administrative Adjustment

The Planning and Development Director is authorized to grant a Type I Administrative Adjustment to the minimum required parking spaces in accordance with Section 2.5.15, Type I/Type II Administrative Adjustment.

5.4. LANDSCAPING STANDARDS

5.4.1. PURPOSE AND INTENT

The purpose of this section is to establish minimum requirements for landscaping. These standards are intended to:

- A.** Advance the general purposes of this Ordinance;
- B.** Ensure and encourage the planting, maintenance, restoration, and survival of trees, shrubs, and other plants;
- C.** Promote the conservation of existing healthy trees and vegetation, and provide for the restoration of land denuded as a result of grading and construction;
- D.** Ensure visual screening of unsightly areas;
- E.** Establish appropriate planting yards and screening features to reduce the negative impacts of glare, noise, trash, odors, lack of privacy, and visual appearance that can occur when higher intensity land uses locate near lower intensity land uses;
- F.** Safeguard and enhance property values and aesthetic qualities, and protect public and private investment;
- G.** Encourage the use of low impact development techniques and sustainable development practices;
- H.** Protect and improve environmental functions and conditions by providing eco-system features such as shade, air purification and oxygen regeneration, filtering of stormwater runoff, and mitigation of noise, glare, and heat; and
- I.** Assure that the appearance of High Point positively contributes to its growth and economic prosperity.

5.4.2. APPLICABILITY

Except where exempted in accordance with Section 5.4.3, Exemptions, this standards in this section shall apply to the following development in the City, including:

A. New Buildings or Uses

Principal buildings or open uses of land constructed, reconstructed, or established after [redacted] (*insert the effective date of this Ordinance*).

B. Changes in Use

Changes in use of one or more in land use intensity (see Table 5.4.10.D, Land Use Intensity), in which case the landscaping requirements of this section apply to the entire zone lot.

C. Expansions

In the case of an expansion of an existing building, outdoor use area, or off-street parking lot, the following standards shall apply:

- 1.** For expansions of the lesser of 50 percent or 3,000 square feet, the standards in this section shall apply only to the expanded portion of the building, outdoor use area, or off-street parking lot; or
- 2.** For expansions that exceed the lesser of 50 percent or 3,000 square feet, the standards in this section shall be applied to the entire zone lot.

5.4.3. EXEMPTIONS

- A.** The following development is exempted from the standards in this section:
- 1.** Single-family detached dwellings;
 - 2.** Duplex dwellings;
 - 3.** Development in the CB district, except for parking areas;
 - 4.** Repaving or restriping of an existing parking area;
 - 5.** Where lot lines abut the following forms of development, no planting yard is required:
 - (a)** Railroad right-of-ways or easements;
 - (b)** Utility easements of 60 feet or more in width; and
 - (c)** Street right-of-way that has remained unopened for a period of at least 15 years.
- B.** In addition, some zoning districts and overlay districts, such as the MS, MX, and the GCO districts, include additional district-specific landscaping exemptions (See Chapter 3: Zoning Districts).

5.4.4. GENERAL REQUIREMENTS

A. Landscape Plan Required

A landscape plan depicting how required landscaping will be planted on a development site shall be included with an application for site plan, group development, or building permit, as appropriate, to ensure compliance with this section. A landscape plan shall contain, as a minimum, the following:

- 1.** Location of required planting material;
- 2.** Identification of trees and plants;
- 3.** Minimum and maximum dimensions of all planting yard areas (see Section 10.2, Rules of Measurement);
- 4.** Calculations determining the number of canopy trees, understory trees, and shrubs required (see Section 10.2, Rules of Measurement);
- 5.** Locations, species, and sizes of existing vegetation to be retained and counted towards minimum landscaping requirements; and
- 6.** Existing topography, or proposed topography where site grading is proposed to occur.

B. Stormwater Detention Pond

If landscaping is proposed around or on the embankment of a stormwater detention pond, a landscape plan must be submitted for review to determine that the safety and functionality of the device will not be compromised by the addition of trees and/or shrubs.

C. Phased Development

Development that is planned in phases may submit a landscape plan for the entire development, or separate landscape plans for each phase, which shall be approved prior to approval of the final plat.

5.4.5. PLANT MATERIAL SPECIFICATIONS

A. Canopy Tree Size

- 1.** Canopy trees shall have a minimum height at maturity of 40 feet and a minimum

crown width of 30 feet.

2. Drought tolerant deciduous canopy trees shall have a minimum caliper size of two inches at planting.
3. All other deciduous canopy trees shall have a caliper size of three inches at planting.
4. Evergreen trees shall be a minimum of six feet in height at planting.

B. Understory Tree Size

1. Understory trees shall have a minimum height at maturity of 25 to 40 feet, except that trees to be placed below overhead utility lines may not exceed a mature height of 20 feet.
2. Drought tolerant understory trees must have a minimum caliper size of one inch at planting.
3. All other understory trees must have a minimum caliper size of two inches at planting.

C. Shrub Size and Type

1. Required shrubs in a Type A planting yard or shrubs located parallel to the edge of parking lots, access drives, loading and unloading areas, and outdoor storage shall be evergreen with a minimum height or spread of 18 inches at the time of planting and reach a minimum height of 36 inches and a minimum spread of 30 inches within three years of planting.
2. Required shrubs in a Type B planting yard shall be 50 percent or more evergreen.
3. Required shrubs in a Type C planting yard shall be 25 percent or more evergreen.
4. Required shrubs in a streetyard or in a Type D planting yard may be evergreen or deciduous.
5. Except in a Type A planting yard, all shrubs must be at least a three-gallon size (per ANSI standards) at the time of planting.

D. Species

Plant species used in required landscape yards must be native species or species of a locally adapted nature. Other species may be approved by the Planning and Development Department Director. Refer to the *Development Guidebook* for listings of acceptable plant material, which includes drought tolerant species and species suitable for planting within 20 feet of overhead utilities.

E. Species Diversity¹³⁶

To curtail the spread of disease or insect infestation in a plant species, new plantings shall comply with the following standards:

1. When fewer than 20 trees are required on a site, at least two different species shall be utilized, in roughly equal proportions.
2. When more than 20 but fewer than 40 trees are required to be planted on site, at least three different species shall be utilized, in roughly equal proportions.
3. When 40 or more trees are required on a site, at least four different species shall be utilized, in roughly equal proportions.
4. A larger number of different species than specified may be utilized.
5. In no instance shall invasive species be utilized as landscaping materials to meet the requirements of this section.

¹³⁶ These are new standards described on Page 2-42 of the Code Assessment.

F. Stabilization¹³⁷

Landscape yards shall be stabilized and maintained with ground cover, mulch, or other approved materials to prevent soil erosion and allow rainwater infiltration.

G. Grouping of Plant Material

1. Except within a Type A planting yard, plant material may generally be grouped or clustered within the required landscape yards, however, the overall intent of the particular planting yard must be adequately addressed. Groupings or clusters shall be depicted on the landscape plan and be approved by the Planning and Development Director.
2. Perimeter landscaping materials adjacent to parking lots, access drives, loading and unloading areas, and outdoor storage may not be grouped.
3. Required plant material in a Type A planting yard may not be grouped, and shall be planted according to the required on-center spacing in Table 5.4.10.C, Perimeter Landscape Yard Types.

H. Berms¹³⁸

1. Berms may be used independently, or in conjunction with a wall or fencing, to meet the screening intent of the Type A Planting Yard.
2. Berms must be stabilized, have a slope not exceeding 3:1 (horizontal to vertical), have a crown width at least one-half the berm height, and may be no taller than eight feet above the toe of the berm slope.
3. A berm may not damage the roots of existing healthy vegetation designated to be preserved.
4. A berm may not be designed or placed as to interfere with required sight distances.

I. Fences

1. Opaque fences, a minimum of five feet in height, constructed within required planting yards, may reduce the minimum and average planting yard width requirement in accordance with Table 5.4.10.C, Perimeter Landscape Yard Types.
2. If utilized, fences shall be located within the planting yard and all required shrubs shall be planted between the fence and the lot line. Required trees may be planted behind the fence.

J. Planters

1. Planters shall be constructed of masonry, stone, or pressure treated lumber stamped for ground contact.
2. Planters shall have a minimum height of 30 inches and have an effective planting area of seven feet (measured in any direction) if trees are to be planted and an effective planting area of four feet (measured in any direction) if no trees are to be included.
3. The minimum height of shrubs in the planter, except for ground cover, shall be six inches at the time of planting.
4. ADA-approved grates must be used atop all tree wells.

5.4.6. LIMITATIONS ON LANDSCAPING PLACEMENT

¹³⁷ These are new standards.

¹³⁸ These standards replace the berm standards in Section 9-5-11(c)(9) of the current ordinance.

A. Easements

1. In cases where an easement is within or adjacent to a required landscape area, the required landscape area shall maintain a minimum width of five feet or half the minimum required landscape yard width, whichever is greater.
2. When an easement is located within a required landscape area, at least 50 percent of the required plantings shall be provided outside of the easement.
3. Required trees and shrubs that are proposed to be planted within electric utility easements and in drainage maintenance and utility easements, whether above or below ground, must be approved by the easement holder. When trees and shrubs are planted in a utility easement, the landowner is responsible for replacement of any required vegetation if maintenance or other utility requirements result in its removal.

B. Fire Protection System

Minimum clear separation distances required by the current adopted version of the North Carolina Fire Code shall be maintained for landscaping near a fire protection system..

C. Obstructions at Intersections

No trees or shrubs shall be planted or maintained in such a manner as to obstruct visibility for motorists at any street intersection in accordance with the standards of Chapter 6 of the City Code, Visibility at Intersections.

D. Plantings in the Right-of-Way

Required planting materials shall not be located within a public right-of-way unless approved in accordance with Section 5.4.12, Alternate Landscape Plan, and shall be subject to an encroachment agreement between the landowner and the City..

E. Permitted Encroachments

The following are permitted in required landscape yards as indicated, provided the landscaping requirements are met and there is no interference with visibility at intersections.

1. The following features may be located entirely within landscape yards required by this section:
 - (a) Landscaping features such as, ornamental pools, planting boxes, sculpture, arbors, trellises, and birdbaths;
 - (b) Pet shelters;
 - (c) At-grade patios;
 - (d) Play equipment;
 - (e) Outdoor furniture and fireplaces;
 - (f) Ornamental entry columns, gates, fences, walls, and retaining walls;
 - (g) Flagpoles of 30 feet in height or less;
 - (h) Lamp and address posts;
 - (i) HVAC equipment, well houses, and utility cabinets of four feet in height or less;
 - (j) Mailboxes and incidental signage;
2. The following features may encroach up to two-and-one-half feet into a required landscape yard, but no closer than three feet from any lot line:
 - (a) Cornices;
 - (b) Steps;
 - (c) Canopies;

- (d) Overhanging eaves and gutters;
 - (e) Window sills, bay windows or similar architectural features;
 - (f) Chimneys; and
 - (g) Fire escapes, fire balconies, and fire towers.
3. Up to 15 percent of a required landscape yard may be occupied by walkways and steps that are not connected to any above-grade structure.
 4. A stormwater facility with an approved alternate landscape plan.
 5. Handicap ramps, but not porches or landings.

F. Multiple-Lot Development

1. A multiple-lot development, such as a shopping center, that is configured and developed as a single entity shall be treated as a single zone lot for the purposes of applying the parking lot, landscape yard, and streetyard standards.
2. Individual lots within a multiple-lot development shall be subject to the screening requirements in Section 5.5, Screening.

5.4.7. CREDIT FOR EXISTING VEGETATION

A. General Standards

Existing healthy, well-formed canopy and understory trees that are in or within ten linear feet of a required landscape yard and that meet or exceed the standards of this section may be credited toward the applicable tree planting requirements of this section, in accordance with the following:

1. The canopy and understory trees to be credited are protected before and during development by tree protection fencing in accordance with the *Development Guidebook*.
2. The location of the existing canopy and understory trees to be credited contribute to the screening or buffering functions of the landscaping.
3. Any canopy or understory trees for which credit has been received that die shall be replaced in a manner that ensures the landscaping meets the requirements of this section.

B. Amount

1. Existing trees meeting the standards in (A) above that are retained during and after development shall be credited towards the minimum landscape requirements at a rate of 1.25 times the tree's actual DBH.
2. Trees to be credited shall be verified prior to credit being provided.

C. Credit Determination

The amount of credit towards the number of required new trees is determined by dividing the total DBH of trees to be retained by the minimum caliper inch size of required plantings (see Section 5.4.5, Plant Material Specifications). Example: A development site that retains three eight-inch DBH canopy trees will be credited for a total of 30 inches DBH of existing trees $((8 \times 3) \times 1.25 = 30 \text{ DBH})$, or ten newly-planted canopy trees $(30/3=10)$.

D. Streetyard Requirements

Regardless of the number or size of preserved trees in required streetyards, there shall be at least one canopy tree for every 50 linear feet of required streetyard.

5.4.8. TIME FOR INSTALLATION OF REQUIRED LANDSCAPING¹³⁹

A. Timing

Required landscaping (including mulching and seeding) shall be installed in accordance with this section prior to the issuance of a certificate of occupancy unless a financial guarantee is established to ensure installation at a later date.

B. Financial Guarantee

A financial guarantee prepared in accordance with Section 7.2, Financial Guarantees, shall be in place whenever occupancy is desired and required landscaping has not been completed. The maximum length of time for a landscaping financial guarantee shall be six months, which may be extended one time for up to 90 days by the Planning and Development Director.

C. Multi-Phase Development

Multi-family, nonresidential, and mixed-use development that is planned and developed in phases shall be required to install landscaping that is associated with the active phase or phases only, unless an alternative arrangement is otherwise agreed to by the Planning and Development Director and the developer.

5.4.9. PARKING LOT LANDSCAPING

A. Applicability

1. Unless exempted, in accordance with Section 5.4.3, Exemptions or Section 5.4.9.D, Exemptions, the parking lot landscaping standards in this section shall apply to all new development with five or more parking spaces.
2. Expansions of existing parking lots shall provide additional parking lot landscaping in accordance with Section 5.4.2.C, Expansions.

B. General Rate

Parking lot landscaping shall include at least one canopy tree for every 12 parking spaces.

C. Placement of Canopy Trees

1. Required interior and perimeter parking lot canopy trees shall be placed such that no parking space is more than 80 feet from the trunk of a canopy tree for new or redeveloped nonresidential parking areas, and 50 feet for new or redeveloped residential parking areas.
2. In cases where an approved alternate landscape plan permits understory trees to be substituted for canopy trees, they shall be placed such that no parking space is more than 50 feet from the trunk of an understory tree for nonresidential parking areas, and 30 feet for residential parking areas.
3. Additional trees above the minimum number required may be used to meet this standard.

D. Exemptions

Off-street parking lots of 20 or fewer spaces located in the Core City and on the same lot as the principal use they serve are exempted from the standards of this section.

E. Interior Landscaping Standards

1. General Standards

¹³⁹ This section replaces the deferral of landscaping provisions in Section 5-7-11(e) of the current ordinance.

- (a) For the purposes of parking lot landscaping, the interior of a parking lot shall be all of the area within the outer boundary of the parking lot as shown in Figure 5.4.9.F, Parking Lot Landscaping Area.
- (b) These standards shall not apply to parking structures, or vehicle display areas.
- (c) Required interior canopy trees shall be distributed throughout parking areas and may be located in landscape islands, landscape divider medians between rows of parking, or in driveway medians. Trees used to satisfy the general rate requirement in Section 5.4.9.B, General Rate, may not be counted toward any landscape yard requirement.

FIGURE 5.4.9, PARKING LOT LANDSCAPING AREA

2. Landscaping Islands

A parking aisle with more than 12 spaces in a single row shall provide and maintain landscaping islands in accordance with the following standards.

- (a) Islands or other planting areas for canopy trees shall have a minimum area of 162 square feet, including the curb, for single-loaded parking bays and 324 square feet for double-loaded bays.
- (b) Landscape islands that do not contain canopy trees shall contain three or more shrubs.

3. Light Poles Next to Trees

In order to prevent the need to excessively trim trees within landscape islands to maintain parking area lighting, light poles shall be spaced at least ten linear feet from a canopy tree trunk so as to minimize future trimming due to interference with lighting.

4. Protection of Landscape Islands

Landscape islands shall be protected from vehicle damage by the installation of curbing, wheel stops or other comparable methods. The placement of plant material within landscape islands shall allow for a two-foot vehicle overhang from the face of the curb or wheel stop.

5. Stormwater Management

A landscape island may be designed to function as a stormwater management device.

F. Perimeter Parking Lot Landscaping Requirements

Where a parking lot abuts a street, vacant land, or other development (except another parking lot), perimeter landscape strips shall be provided and maintained between the parking lot and the abutting street or lot line in accordance with the following:

1. Intent

The perimeter landscape strip shall be designed to soften the view of the parking lot from an adjoining street or land and to filter spillover light from vehicle headlights. Plant material shall be planted in such a way as to best achieve this intent.

2. Width

The perimeter landscape strip shall be a minimum width of five feet, measured outward from the edge of the parking lot.

3. Planting Rate

The perimeter landscape strip shall contain a minimum of two understory trees and 18 evergreen shrubs per 100 linear feet. This plant material may be credited toward an applicable landscape yard requirement.

4. Size of Plant Material

The size of evergreen shrubs used in a perimeter landscape strip shall be in accordance with Section 5.4.5.C, Shrub Size and Type, and once achieved, shrubs shall be maintained at a minimum height of 36 inches.

5. Perimeter Landscape Strip Not Required

- (a)** An opaque or semi-opaque decorative fence may be provided in-lieu of the shrub requirement of a perimeter landscape strip provided the fence is 48 inches above grade level, and is made of brick, stone, wrought iron, painted wood, or composite material. Upon review, the Planning and Development Director may require up to 50 percent of the required rate of shrubs where a semi-opaque fence is proposed. Chain link fencing may not be used as a substitute for a perimeter landscape strip, but may be incorporated between a perimeter landscape strip and the parking area.
- (b)** Where two or more parking lots are located adjacent to one another, but on different lots, a perimeter landscape strip is not required along the common boundary of the parking lots. However, any required landscape yard shall be installed in accordance with Section 5.4.10, Perimeter Landscape Yards.

5.4.10. PERIMETER LANDSCAPE YARDS

A. Applicability

Landscape yards are required along the perimeter, extending inward from the lot line, of a zone lot or development site in accordance with Table 5.4.10.C, Perimeter Landscape Yard Types, and Table 5.4.10.D, Landscape Yard Type Application. They are intended to mitigate potential adverse impacts that may result when higher intensity land uses are located adjacent to lower intensity land uses.

B. General

- 1.** In cases where a lot line is within a drainage easement, the perimeter landscape yard shall extend to the edge of the easement instead of the lot line.
- 2.** The width of permitted driveways and permitted cross-access easements, measured at the lot line, shall be excluded from the calculation of required plant material.
- 3.** A perimeter landscape yard may be located along shared access easements between parcels in nonresidential development.
- 4.** A perimeter landscape yard in a multiple lot development that is configured and developed as a single entity, is only required around the outer perimeter of the development.
- 5.** Stormwater management devices that incorporate vegetation (e.g., bioretention basin, rain garden, constructed wetlands, etc.) may be placed within a perimeter landscape yard provided the screening function of the landscape yard is maintained. Any plant material meeting the minimum requirements for the landscape yard may be counted toward the requirements.

C. Types of Landscape Yards

Table 5.4.10.C, Perimeter Landscape Yard Types, establishes standards for the following different landscape yards:

- 1.** Streetyard;
- 2.** Type A Opaque Landscape Yard;
- 3.** Type B Semi-Opaque Landscape Yard;
- 4.** Type C Intermittent Landscape Yard; and
- 5.** Type D Basic Landscape Yard.

The standards are based on whether the development is within or outside the Core City.

TABLE 5.4.10.C: PERIMETER LANDSCAPE YARD TYPES

LANDSCAPE YARD TYPE	DESCRIPTION/MINIMUM REQUIREMENTS	
	INSIDE CORE CITY	OUTSIDE CORE CITY
STREETYARD		
<p>Intent: This landscape yard functions to distinguish the edge of the street right-of-way and adjacent private land and to provide continuity of vegetation along public streets.</p>		
Average width (feet) [1]	8	10
Minimum width (feet) [2]	5	8
Maximum width (feet)	15	15
Canopy trees per 100 linear feet [3]	2	2
Shrubs per 100 linear feet	17	17
TYPE A OPAQUE LANDSCAPE YARD		
<p>Intent: This landscape yard functions as an opaque screen from the ground to a height of eight feet. This type of buffer prevents visual and auditory contact between uses and creates a strong impression of total separation.</p>		
Average width (feet)	25	45
Minimum width (feet) [2]	20	35
Maximum width (feet)	30	70
Canopy trees per every 100 linear feet/on-center spacing (feet) [3]	2/50	4/25
Understory trees per every 100 linear feet/on-center spacing (feet)	5/20	10/10
Evergreen shrubs per every 100 linear feet/on-center spacing (feet)	10/10	33/3
Five-foot opaque fence	Reduces average and	Reduces average

TABLE 5.4.10.C: PERIMETER LANDSCAPE YARD TYPES

LANDSCAPE YARD TYPE	DESCRIPTION/MINIMUM REQUIREMENTS	
	INSIDE CORE CITY	OUTSIDE CORE CITY
	minimum widths by five feet	and minimum widths by ten feet
TYPE B SEMI OPAQUE LANDSCAPE YARD		
<p>Intent: This landscape yard functions as a partially opaque screen from the ground to a height of six feet. This type of buffer prevents visual contact between uses and creates a sense of spatial separation.</p>		
Average width (feet)	15	25
Minimum width (feet) [2]	12	20
Maximum width (feet)	25	45
Canopy trees per every 100 linear feet[3]	2	4
Understory trees per every 100 linear feet	4	6
Evergreen shrubs per every 100 linear feet	8	25
Five-foot opaque fence	Reduces average width by three feet and minimum width by two feet	Reduces average and minimum widths by five feet
TYPE C: INTERMITTENT LANDSCAPE YARD		
<p>Intent: This landscape yard functions as an intermittent visual screen from the ground to a height of five feet. It is intended to partially block visibility between different uses but not totally obstruct visual contact from one use to another.</p>		
Average width (feet)	10	15

TABLE 5.4.10.C: PERIMETER LANDSCAPE YARD TYPES

LANDSCAPE YARD TYPE	DESCRIPTION/MINIMUM REQUIREMENTS	
	INSIDE CORE CITY	OUTSIDE CORE CITY
Minimum width (feet) [2]	8	10
Maximum width (feet)	20	35
Canopy trees per every 100 linear feet [3]	2	3
Understory trees per every 100 linear feet	3	4
Evergreen shrubs per every 100 linear feet	6	20
Five-foot opaque fence	Reduces average width by two feet	Reduces average and minimum widths by five feet

TYPE D: BASIC LANDSCAPE YARD

Intent: This landscape yard functions as a means to demarcate boundaries between different uses and provide only a slight visual obstruction between different uses.



Average width (feet)	5	10
Minimum width (feet) [2]	5	8
Maximum width (feet)	10	20
Canopy trees per every 100 linear feet [3]	None	
Understory trees per every 100 linear feet	2	2
Evergreen shrubs per every 100 linear feet	12	15
Five-foot opaque fence	No additional reductions	

NOTES:

- [1] Within the Core City, where a required streetyard cannot be accommodated due to the location of existing development or other site related issue, an adjustment may be approved in accordance with Section 2.5.15, Type I/Type II Administrative Adjustment
- [2] If the required principal building setback is less than the required landscape yard width, the principal building setback controls and the landscape yard width shall be reduced only along the length of the building wall that encroaches into the landscape yard. Regardless of reduction in streetyard width, the required planting material must be installed, though its location may be modified in accordance with Section 5.4.12, Alternate Landscape Plan.
- [3] With the prior approval of the Planning and Development Director, understory trees may be substituted for a canopy tree where the canopy tree would conflict with overhead utilities at a rate or two understory trees for each canopy tree

D. Landscape Yard Type Application

1. To determine the type of landscape yard required, first identify the land use intensity of the proposed (new, changed, or expanded) use, then identify the land use intensity of each existing use on adjacent sites (see Table 5.4.10.D, Land Use Intensity). Then, using Table 5.4.10.E, Type of Landscape Yard Required, the intersection of the row associated with the proposed use and the column associated with the adjacent use shows the type of planting yard required.
2. The land use intensity is a number that corresponds to the intensity of development.
3. A land use is considered to "exist" on an adjacent property when a building permit is issued.
4. If a zone lot contains uses with different land use intensities, the higher numbered land use intensity applies unless an Administrative Adjustment is approved in accordance with Section 5.4.12, Alternate Landscape Plan.
5. No landscape yard shall be required where a proposed use is adjacent to an existing agricultural use.

TABLE 5.4.10.D: LAND USE INTENSITY

USE CLASSIFICATION	USE CATEGORY	USE TYPE	LAND USE INTENSITY SCORE
Agricultural	Agriculture	All	Crops: 1 Livestock: 3
		Common Elements Recreation	1
Residential	Household Living	SF detached; Family care home; Manufactured dwelling; Duplex dwelling; Live/work	1
		Multi-family major & minor; SF attached	2
	Group Living	All except SRO	All others: 2
		SRO	3
	Life Care	All	2
Institutional	Civic	Assembly & Cultural Facilities, major	3
		Assembly & Cultural Facilities, minor	3
		Cemetery	1
		Correctional facility	4
		Governmental facility; Public safety facility	3

TABLE 5.4.10.D: LAND USE INTENSITY

USE CLASSIFICATION	USE CATEGORY	USE TYPE	LAND USE INTENSITY SCORE
		Public Recreation facility	3
	Day Care	Day Care Center	3
	Education	All, except truck driving school	3
		Truck driving school	4
	Health Care	All	3
	Religious Institutions	All	3
	Transportation	Airport	5
		Park and ride facility	3
		Passenger terminal	4
		Taxi or limousine service	4
	Utilities	Communication or broadcasting facilities	3
		Solar array; Wireless telecommunication facility; Utility minor	3
		Utility major	4
Commercial	Adult Entertainment	Adult entertainment	4
	Animal Care	Major	4
		Minor	3
	Eating establishments	All	3
	Offices	All	3
	Commercial Parking	Commercial Parking	3
	Personal Services	All	3

TABLE 5.4.10.D: LAND USE INTENSITY

USE CLASSIFICATION	USE CATEGORY	USE TYPE	LAND USE INTENSITY SCORE
	Recreation and Leisure	Amusement & entertainment	3
		Amusement parks	5
		Sports & fitness centers	3
	Retail Sales	All	3
	Vehicle Establishments	All	3
	Visitor Accommodations	Bed and Breakfast	1
		Hotel or motel	3
	Industrial	Extractive Industry	Extractive industry
Industrial Service		All	4
Manufacturing and Production		All, except microbrewery and motion picture production	5
		Microbrewery	4
		Motion picture production	3
Warehouse and Freight Movement		All	4
Waste-Related Service		All	4
Wholesale trade		All, except market showroom	4
	Market Showroom	3	

TABLE 5.4.10.E: TYPE OF LANDSCAPE YARD REQUIRED

A= type A buffer B = type B buffer C = type C buffer D = type D buffer n/a = no buffer required

LAND USE INTENSITY OF PROPOSED USE	LAND USE INTENSITY OF EXISTING ADJACENT USE					
	1	2	3	4	5	VACANT
1	n/a	n/a	n/a	n/a	n/a	n/a
2	C	n/a	C	B	B	D
3	B	B	n/a	C	B	D
4	A	A	C	n/a	C	D

TABLE 5.4.10.E: TYPE OF LANDSCAPE YARD REQUIRED						
A = type A buffer B = type B buffer C = type C buffer D = type D buffer n/a = no buffer required						
LAND USE INTENSITY OF PROPOSED USE	LAND USE INTENSITY OF EXISTING ADJACENT USE					
	1	2	3	4	5	VACANT
5	A	A	B	C	n/a	n/a

E. Streetyard Standards

1. Streetyard landscaping shall be installed in accordance with Table 5.4.10.C, Perimeter Landscape Yard Types. In no instance shall trees associated with streetyard landscaping be located closer than four linear feet from the right-of-way line.
2. Off-street parking, storage, or display shall be prohibited within a streetyard.
3. No streetyard landscaping shall be required along an alley.

5.4.11. LANDSCAPE YARDS ON SLOPES

A. Tree Covered Slopes

If a landscape yard has a slope of more than 33 percent but less than 50 percent and the required tree coverage for the required landscape yard exists on the slope, then the slope area will be deemed to satisfy landscape yard requirements, provided that no healthy trees or other vegetation are removed and no grading or other clearing occurs.

B. Slopes With Minimal or No Tree Cover

1. If a landscape yard has a slope of more than 33 percent but less than 50 percent and lacks the required tree coverage for a required landscape yard, then additional trees and vegetation shall be provided to satisfy minimum landscape yard requirements.
2. No healthy trees or vegetation may be removed and no grading or other clearing may occur.

C. Reforestation of Man-Made Slopes Greater Than 33 Percent

1. Newly-graded slopes greater than 33 percent shall be reforested to provide tree cover over the entire area.
2. Plans for reforestation shall include a minimum of one canopy tree per 400 square feet of surface area and may be made up of a mixture of deciduous hardwood and evergreen trees meeting the minimum standards of Section 5.4.5, Plant Material Specifications.
3. Plans for reforestation are subject to the approval of the Planning and Development Director.

5.4.12. ALTERNATE LANDSCAPE PLAN

An alternate landscape plan may be approved by the Planning and Development Director, that allows modifications to the requirements of this section. Natural physical conditions (such as streams, wetland areas, and topography), lot configuration, utility easements, desire to retain

existing vegetation, and impractical situations that would result from application of Section 5.4 Landscaping Standards, may justify approval of an alternate landscape plan.

A. Intent

Any alternate landscape plan approved shall meet the intent of the applicable planting yard(s) and the purpose and intent of the landscaping standards of this section.

B. Allowable Modifications

1. The following landscape standards may be modified by an alternate landscape plan.
 - (a) The location of required plant materials;
 - (b) The configuration of required plant materials; and
 - (c) The number of required plant materials.
2. The alternative landscape plan shall include justification for the modifications requested, based upon but not limited to the following:
 - (a) The presence or planned location of public utilities, infrastructure, or easements;
 - (b) The location of existing healthy vegetation or other beneficial site features to be retained after development;
 - (c) The size, shape, or topographic elevation of the site relative to the street(s) it abuts; and
 - (d) The need to protect solar access or avoid permanently shaded areas on the site.

5.4.13. ADDITIONAL PLANTING YARD FLEXIBILITY

A. Substitution

1. Canopy trees may be substituted for shrubs at the rate of one canopy tree for eight shrubs, and understory trees may be substituted for shrubs at the rate of one understory tree for five shrubs if approved by the Planning and Development Director.
2. Understory trees may be substituted for canopy trees at the rate of two understory trees for each canopy tree when deemed necessary by the Planning and Development Director due to overhead utility lines.

B. Existing Lots of Record

1. On lots of record that existed prior to March 1, 1992 that are less than 55,000 square feet in area, no development is required to landscape more than 15 percent of the lot. Priority shall be placed on meeting streetyard requirements first, then on other perimeter landscape yards.
2. Where a required landscape yard is reduced in width by ten feet or more than the minimum requirement, and the differential in land use intensity is two or more categories, a five-foot opaque fence may be required by the Planning and Development Director.

C. Plantings in Shaded Areas

Where a building is located less than ten feet from a lot line, and the landscape yard would be heavily shaded by buildings on either side of the lot line, required trees and shrubs may be planted outside the shaded area to improve their chances of survival.

5.4.14. LANDSCAPE YARD MAINTENANCE

A. General

The landowner is responsible for maintaining all required plant materials and landscape yards in good health and appearance. Any dead, unhealthy, severely damaged, or missing plants (whether preserved or installed) must be replaced with new plant material equal in quantity and quality. Replacement plant material shall be installed within 180 days of the date of owner notification. The obligation for continuous maintenance is binding on any subsequent owners of the land, or any other parties having a controlling interest in the property.

B. Protection of Plant Material

The landowner or developer shall take actions to protect trees and landscaping from unnecessary damage during all facility and site maintenance operations. When landscape yards are adjacent to parking lots or drives, plants shall be protected from damage by vehicles, lubricants, or fuels.

C. Maintain Shape and Function

All required trees (whether canopy or understory) shall be maintained in their characteristic natural shape, be allowed to reach their mature size, and shall not be severely pruned, sheared, topped, or shaped as shrubs. Trees (including, but not limited to crepe myrtles) that have been so altered, such that they no longer serve their intended function as trees within the landscaping yard, shall be considered as damaged vegetation and shall be replaced in accordance with this section.

D. Trimming and Pruning

Trimming and pruning of trees shall be conducted in strict compliance with ANSI standards and the *Development Guidebook*. Shrubs shall be maintained in a way that does not obstruct sight distances at public street intersections, obstruct traffic signs or devices, or interfere with the use of sidewalks or pedestrian trails.

5.4.15. REMOVAL OR RELOCATION OF TREES AND SHRUBS

A. Authorized Removal

1. Once installed and inspected, required landscape material shall not be removed or relocated without approval of an alternate landscape plan in accordance with Section 5.4.12, Alternate Landscape Plan.
2. If approved, the removal or replacement shall be in accordance with the following:
 - (a) Understory trees and shrubs, if removed, shall be replaced in a ratio of one-to-one; and
 - (b) Canopy trees, if removed, shall be replaced in a ratio of two-to-one.

B. Hazardous Trees

If any required tree is determined to be in a hazardous condition such that it is an immediate danger to the public safety, or it is an immediate threat to or has caused disruption of public services, the Planning and Development Director may authorize the removal of the tree without prior alternate landscape plan approval. Following removal, the Planning and Development Director shall determine if tree replacement is necessary in accordance with section (A)(2) above.

C. Unauthorized Removal

1. Except in accordance with Section 5.4.15.B, Hazardous Trees, if any required plant material is removed without approval of an alternate landscape plan, it shall be considered a violation of this Ordinance in accordance with Chapter 9:

Enforcement.

2. In addition to the applicable remedies in Chapter 9: Enforcement, unauthorized removal of trees and shrubs shall result in the requirement for landscape material replacement in accordance Table 5.4.15, Replacement of Landscape Material Following Unauthorized Removal:

TABLE 5.4.15, REPLACEMENT OF LANDSCAPING MATERIAL FOLLOWING UNAUTHORIZED REMOVAL

TYPE OF REQUIRED LANDSCAPING MATERIAL REMOVED [1] [2]	REPLACEMENT RATIO [AMOUNT REPLACED: AMOUNT REMOVED]
Canopy trees less than or equal to 8 inches DBH	2:1
Canopy trees between 8 inches and 23.9 inches DBH	3:1
Canopy trees of 24 inches or more DBH	4:1
Understory trees less than or equal to 8 inches DBH	2:1
Understory trees between 8 inches and 14.9 inches DBH	3:1
Understory trees of 15 inches DBH or more	4:1
Shrubs	2:1

NOTES:

[1] If the size of removed trees cannot be accurately determined, all removed trees shall be replaced in a 3:1 ratio

[2] Any replacement trees and shrubs that cannot be accommodated on the same development site shall be installed on City-owned land where determined by the UFC

D. Replacement of Dead or Diseased Material

The replacement of dead or diseased trees and shrubs in a 1:1 ratio in the same location is considered normal landscape yard maintenance and shall not require approval of an alternate landscape plan.

5.5. SCREENING

A. Purpose and Intent

These screening standards are intended to reduce the impact of necessary site structures and equipment upon adjacent property and enhance the aesthetics of the public streetscape.

B. Applicability

Unless exempted in accordance with Section 5.5.C, Exemptions, the following structures and equipment shall meet the requirements of this section:

1. Solid waste collection facilities including dumpsters, compactors, or other large solid waste facilities;
2. Loading docks and loading bays; and
3. Ground-based mechanical equipment.

C. Exemptions

1. Structures and equipment in the HI district are exempted from the requirements of this section, unless the structure or equipment is within 100 feet of a lot with an existing residential use.
2. Loading docks and loading bays in the CB district are exempted from the requirements of this section..

D. General Standards

1. Applicable structures and equipment shall be screened from view from any street, and from any adjacent residential use, as seen from any point on the lot line at a height of six feet.
2. The area and height of required screening depend upon the location of the structure or equipment relative to any adjacent residential lot and the view from the street.

E. Specific Standards for Solid Waste Facilities

In addition to the general standards, solid waste collection facilities:

1. Should be located behind the rear building line of the principal building; and
2. Shall be enclosed when located within 50 feet of a lot containing a residential use.

F. Screening Methods

Structures and equipment may be screened by any of the following methods, in single use or in combination:

1. Evergreen vegetation meeting the requirements of Section 5.4.5, Plant Material Specifications, so as to achieve the minimum screening height within three years of planting;
2. Berms meeting the requirements of Section 5.4.5, Plant Material Specifications;
3. Opaque fence constructed of treated wood, rot-resistant wood (such as cypress or redwood), plastic, or vinyl;
4. Masonry wall constructed of brick, textured concrete masonry units, or stuccoed block; or
5. Walls of a principal or accessory structure.

G. Prohibited Screening Materials

Chain-link fencing with woven slats of opaque materials is not an allowable method for screening compliance.

5.6. SIGNAGE¹⁴⁰

5.6.1. PURPOSE AND INTENT¹⁴¹

The purpose of this section is to support and compliment the various commercial and nonresidential uses through regulations concerning the placement, number, location, size, appearance, illumination, and animation of signs. The erection of signs is controlled and regulated in order to promote the health, safety, welfare, convenience, and enjoyment of travel on streets. The provisions of this section are more specifically intended to:

- A.** Promote the reasonable, orderly, and effective display of signs, displays, and devices;
- B.** Protect the public welfare as well as land values by preserving the aesthetic qualities of the City's environment;
- C.** Preserve the City's environment from excessive and obtrusive signs;
- D.** Promote the safety of persons and land by providing that signs do not create traffic hazards or hazards due to collapse, fire, collision, decay, or abandonment;
- E.** Promote the efficient transfer of general public and commercial identification or information, and maintain a viable business community throughout the year by improving the legibility and effectiveness of signs; and
- F.** Enhance the image, appearance, and economic vitality of the City.

5.6.2. APPLICABILITY

A sign may only be erected, affixed, placed, painted, or otherwise established in the City in accordance with the standards in this section.

5.6.3. VARIANCES

The sign height and location standards in this section may only be varied in accordance with standards and requirements of Section 2.4.14, Variance. The standards in this section pertaining to sign number, size, illumination, or minimum spacing may not be varied.

5.6.4. GENERAL STANDARDS

A. Area

Sign face area and height shall be measured in accordance with the standards in Section 10.2.10, Signage.

B. Removal of Signs

A sign for which a sign permit has lapsed or has been revoked, or for which the time allowed for the continuance of a nonconforming sign has expired, shall be removed.

C. Multiple-Lot Development

Signage within a multi-lot development shall be subject to the following standards:

- 1.** A multiple-lot development shall be considered as a single lot for the purposes of sign review and permitting;
- 2.** Signage in a multiple-lot development shall be configured in accordance with

¹⁴⁰ These standards carry forward the standards in Section 9-5-15 of the current ordinance with no substantive changes except where noted. Minor modifications are made to ensure consistent formatting with the new draft ordinance.

¹⁴¹ These are new purpose and intent standards proposed for the City's consideration.

Section 5.6.13, Common Signage Plan;

3. Signage associated with a multiple-lot development shall be permitted in accordance with the regulations governing outparcels and lease lots in the RC district; and
4. A development entrance or development identification sign shall be permitted in accordance with the zoning district where it is located.

D. Signs in Right-of-Way

A sign installed or placed on public land or rights-of-way, except in compliance with this section or under an encroachment agreement with NCDOT or the City, shall be forfeited to the public and be subject to confiscation.

E. Obstructions at Street Intersections

No sign shall be erected or maintained in a manner that obstructs visibility for motorists at any street intersection in accordance with the standards in Chapter 6: Visibility at Intersections, of the City Code of Ordinances.

F. Obsolete Sign

A sign which advertises a business no longer conducted on the premises shall be removed within 90 days of cessation of such business.

G. Unsafe Sign

A sign which is unsafe or insecure, or is a menace to the public shall be removed after due notice is given by the Planning and Development Director.

H. Deteriorated or Abandoned Sign

A sign which is abandoned or which is not properly maintained, including cleaning and painting of painted surfaces and replacement of damaged parts, shall be removed after due notice is given by the Planning and Development Director.

I. Sign Installed Without a Permit

A sign which is installed in violation of the State Building Code or in violation of this Ordinance shall be removed after due notice is given by the Planning and Development Director.

J. Nonconforming Signs

Nonconforming signage shall be subject to the requirements in Section 8.5, Nonconforming Signs.

5.6.5. DESIGN, CONSTRUCTION, AND MAINTENANCE

A sign shall be designed, constructed, and maintained in accordance with the following standards:

A. Other Codes

A sign shall comply with applicable provisions of the State Building Code and the electrical code.

B. Permanence

Except for banners, flags, temporary signs, and window signs conforming with the requirements of this section, all signs shall be constructed of permanent materials and shall be permanently attached to the ground, a building, or another structure by direct attachment to a rigid wall, frame, or structure.

C. Maintenance

A sign shall be maintained in good structural condition, in compliance with the building and electrical codes, and in conformance with this section.

D. Obstruction

A sign shall not be erected so as to obstruct a fire escape, required exit, window, door opening, or wall opening intended as a means of ingress or egress.

E. Ventilation Interference

A sign shall not be erected so as to interfere with an opening required for ventilation.

F. Above Ground Clearance

A sign shall be located in such a way that it maintains horizontal and vertical clearance from all electrical power lines and communication lines in accordance with the applicable provisions of the National Electrical Safety Code (NESC).

G. Ground Clearance

A sign and its supporting structure shall maintain clearance from surface and underground utilities, conduits or easements for water, sewage, gas, electricity or communication equipment. In addition, the placement of a sign and its supporting structure shall not interfere with natural or artificial drainageways.

H. Interference to Warning or Instructional Sign

A sign shall not be erected so as to interfere with any existing warning or instructional sign.

I. Minimum Wind Loads

A sign, except a sign attached flat against the wall of a building, shall be constructed to withstand minimum wind loads as specified by the State Building Code.

5.6.6. PROHIBITED SIGNS

Unless otherwise allowed under this section or this Ordinance, the following signs are prohibited:

- A.** A windblown device such as a pennant, banner, streamer, spinner, balloon, gas filled figure, and other similar device, except as temporary identification for market showrooms and as advertising for a temporary event or special promotion.
- B.** An animated sign, except video wall signs that use changing light to depict action or create special effects.
- C.** A video wall sign, except in the CB district.¹⁴²
- D.** An electronic changeable copy sign, except in the CB, GB, MS, LB, and RC districts.¹⁴³
- E.** A portable sign legible from the public right-of-way, except with a certificate of zoning compliance, or as permitted in Table 5.12.8, Specifications for Signs not Requiring a Permit, for A-frame signs and temporary off-site signs.
- F.** A sign which projects over a public right-of-way, except that a wall sign may project not more than 18 inches over a public right-of-way in zoning districts which permit structures to be built at the lot line adjoining the street.
- G.** A sign on a vehicle that is parked in a location which is visible to the public, for a period of time which indicates that the principal use of the vehicle is for advertising rather than transport.
- H.** A sign which is affixed to a tree, rock, or other natural feature.

¹⁴² This change is included to address TA14-04.

¹⁴³ This change is included to address TA12-03, TA13-06, and TA 14-02.

- I.** A sign of any type which imitates a traffic control device.
- J.** A sign which extends vertically above the highest portion of the roof of any structure.
- K.** A sign on a roadside appurtenance, including but not limited to a roadside bench, bus stop shelter, planter, utility pole, or refuse container.
- L.** A series of two or more signs placed in a line parallel to a public or private street, or a series of two or more parallel signs carrying a single commercial message.

5.6.7. EXEMPT SIGNS

The following signs are exempt from the requirements of this section except that a lighted sign requires an electrical permit:

- A.** A governmental sign.
- B.** A work of art with no commercial message.
- C.** Lights and decorations with no commercial message that are temporarily displayed on traditionally accepted civic, patriotic or religious holidays.
- D.** A hand carried sign.
- E.** A sign located on the interior of a building, court, lobby, athletic field, stadium, or other structure which is not intended to be seen from the exterior of the building or structure.
- F.** A sign located on or affixed to an athletic field scoreboard that is not oriented toward the playing field, unless the sign:
 - 1.** Is an off-site sign or outdoor advertising sign;
 - 2.** Is larger than, or protrudes from the scoreboard;
 - 3.** Is a projecting sign; or
 - 4.** Is illuminated.
- G.** A sign affixed to a vehicle or trailer used in the normal transport of goods or persons where the sign is incidental and accessory to the primary use of the vehicle or trailer.
- H.** A sign affixed to the window of a vehicle displaying information on the terms of sale for the vehicle.
- I.** A sign not legible from a public or private street.
- J.** Flags of the United States, North Carolina, local governmental jurisdictions, foreign nations having diplomatic relations with the United States, and any other flags adopted or sanctioned by the local governing body, except they are subject to the laws found in the U.S.C, Title 4, Chapter 1, Title 18, Chapter 33 and Title 36, Chapter 10.
- K.** A window sign painted on or attached to a window.

5.6.8. SIGNS NOT REQUIRING A SIGN PERMIT

Signs not requiring a sign permit are allowed only in accordance with the following general and specific standards.

A. General Standards for Signs Not Requiring a Permit

- 1.** Except where otherwise specified, all signs shall be restricted to an on-site location.
- 2.** Signs that include lighting or are illuminated shall be subject to an approved building permit for electrical service.

B. Specific Standards for Signs Not Requiring a Permit

In addition to the standards in Section 5.6.8.A, General Standards for Signs Not Requiring a Permit, signs not requiring a sign permit shall be subject to the following specific standards.

1. Table of Requirements

Signs subject to the standards in this section shall comply with the applicable provisions in Table 5.6.8.B, Requirements for a Signs Not Requiring a Sign Permit.

TABLE 5.5.6.8.B: REQUIREMENTS FOR A SIGN NOT REQUIRING A SIGN PERMIT

SIGN TYPE	NUMBER PERMITTED	AREA (SQ. FT.)	SETBACK (FEET)	MAXIMUM HEIGHT (FEET)	ILLUMINATION
Warning signs in residential districts	n/a	4	n/a	8	Direct
Warning signs in nonresidential districts	n/a	6	n/a	8	Direct
Historical, memorial markers in all districts	1/lot	4	R/W	6	Indirect
Flags, emblems, insignia in all districts	1/frontage	60	R/W	6	Indirect
Religious, philosophical, or educational signs in all districts [1]		6	R/W	6	
Temporary real estate, yard sale and construction signs in AGR and R Districts [1]		6	R/W	6	
Temporary real estate and construction signs in RM districts, nonresidential districts, and major subdivisions in R districts [1]		100	R/W	12	
Temporary political signs in all districts		6	6	R/W	
Identification signs	1/building	2/unit	R/W	6	n/a
A-Frame in CB district and MS district (sub-district B)	1/building entrance	6	R/W	3	

NOTES:

[1] Temporary off-site signs are permitted in accordance with Section 5.6.8.B.2(d)8.B.2.e

2. Additional Specific Standards

In addition to the standards in Table 5.6.8.B, Requirements for a Signs not Requiring a Sign Permit, signs subject to the standards in this section shall also comply with the following:

- (a) A warning sign provided the sign contains no commercial message except a business logo or name.
- (b) A flag, emblem, or insignia of corporate, political, professional, fraternal, civic, or educational organization.
- (c) A religious, philosophical, or educational sign.
- (d) A temporary sign, including:
 - (1) A temporary real estate or construction sign which is removed within seven days of the end of the completion of construction, sale, or lease of land;
 - (2) A temporary off-site sign, subject to the standards in Section 5.6.8.B.2.e (below);

Subsection 5.6.9 Freestanding Signs Requiring a Sign Permit

- (3) A temporary yard sale sign which is posted for no longer than three days per sale; and
 - (4) A temporary political sign located on private land with the landowner's permission, provided the sign is removed within seven days after the election.¹⁴⁴
- (e) Temporary off-site signs shall comply with the following standards:
- (1) Be located outside the street right-of-way, or at least six feet from the back of curb or edge of pavement where no curb exists;
 - (2) Not be placed in public street medians or traffic islands;
 - (3) Not interfere with or obstruct pedestrian or vehicular traffic, or obstruct safe sight distances at intersections;
 - (4) Not be placed on private land without the consent of the landowner or occupant; and
 - (5) Be posted only within the hours from noon on a Friday to noon on the following Monday.
- (f) An A-frame sign in the CB district, MS district, and Sub-district B of the MS district, if:
- (1) It is displayed only during operational hours of the use and is removed each day at the close of business;
 - (2) There is one sign per building entrance that fronts on the primary street, and only one sign per nonresidential use;
 - (3) Windblown devices, including but not limited to balloons and streamers, are not attached or otherwise made part of the sign;
 - (4) It does not interfere with safe sight distances for motorists on the adjacent roadways, does not interfere with or obstruct pedestrian or vehicular traffic, and allows a minimum of five feet of clear passage on the sidewalk between the street and the sign;
 - (5) It is not be anchored to the sidewalk or affixed to a pole, vending box, or other structure or appurtenance; and
 - (6) It may be placed on the public sidewalk portion of the public street right-of-way directly in front of the use.
- (g) An historical or memorial plaque, tablet, or marker.
- (h) A sign painted or attached to a vending machine, gas pump, ice machine, or similar device that indicates the contents of the machine, the name or logo of the supplier, the price, or operating instructions.
- (i) Identification signs:
- (1) Name and address plates, including those identifying home occupations; and
 - (2) Building markers (cornerstones or plaques).

5.6.9. FREESTANDING SIGNS REQUIRING A SIGN PERMIT

A freestanding sign requiring approval of a sign permit in accordance with Section 2.5.13, Sign Permit, shall comply with the following general and specific standards:

A. General Standards for Freestanding Signs Requiring a Permit

1. Location Standards

- (a) It shall be allowed only as an accessory to an existing principal use.

¹⁴⁴ This standard has been refined to remove the limitation on commercial message from Section 9-5-16(d)(4)(d) from the current development ordinance.

- (b) Except where otherwise specified, all signs shall be restricted to an on-site location.
- (c) If greater than six feet in height, it shall not be located within 100 feet of a residential district.
- (d) Where two or more establishments at the same location receive approval of directional signs, the signs shall share the same support structure.

2. Illumination Standards

(a) Residential Districts

- (1) Indirect illumination of a freestanding sign is allowed in all residential districts.
- (2) Direct illumination of a freestanding sign in a residential district requires a special use and is subject to the following standards:
 - (i) It must be for a permitted nonresidential use;
 - (ii) The nonresidential use and sign must front on a thoroughfare; and
 - (iii) Illumination of the sign must be needed for identification of the nonresidential use due to the use's non-daylight activities.

(b) Nonresidential Districts

- (1) Indirect illumination of a freestanding sign is allowed in all nonresidential districts.
- (2) Direct illumination of a freestanding sign is allowed in the AGR, LB, GB, RC, CB, MS, MX, LI, and HI districts.
- (3) In the TO, OI, and EC districts, direct illumination of a freestanding sign is allowed if it is limited to cut-out letter and shielded silhouette lighting.
- (4) Direct illumination of a freestanding sign in the I district requires a special use. Illumination of the sign must be needed for identification of the use due to the use's non-daylight activities.

B. Specific Standards for Freestanding Signs Requiring a Permit

In addition to the standards in Section 5.6.9.A, General Standards for Freestanding Signs Requiring a Permit, freestanding signs requiring a permit shall be subject to the following specific standards:

1. Table of Requirements

Signs subject to the standards in this section shall comply with the applicable provisions in Table 5.6.9.B, Requirements for a Freestanding Sign Requiring a Sign Permit.

TABLE 5.6.9.B: REQUIREMENTS FOR A FREESTANDING SIGN REQUIRING A SIGN PERMIT

ZONING DISTRICT OR SIGN TYPE	MAXIMUM NUMBER PER LOT FRONTAGE	AREA (SQ FT)		SETBACK FROM ROW (FEET)	MAX HEIGHT (FEET)	AREA COMPUTATION (SQUARE FEET PER EACH LINEAR FOOT OF LOT FRONTAGE)
		MAX	MIN [1]			

TABLE 5.6.9.B: REQUIREMENTS FOR A FREESTANDING SIGN REQUIRING A SIGN PERMIT

ZONING DISTRICT OR SIGN TYPE	MAXIMUM NUMBER PER LOT FRONTAGE	AREA (SQ FT)		SETBACK FROM ROW (FEET)	MAX HEIGHT (FEET)	AREA COMPUTATION (SQUARE FEET PER EACH LINEAR FOOT OF LOT FRONTAGE)	
		MAX	MIN [1]				
SIGN STANDARDS BY ZONING DISTRICT							
AGR district (nonresidential uses only)	1	50	n/a	n/a	10	n/a	
All R districts and PNR districts (nonresidential uses only)	1	50	n/a	n/a	6	n/a	
I and TO districts	1	100	12	n/a	6	0.25	
OI, LB, and EC districts	1	100	25	n/a	15	0.25	
MS District	A & D sub-districts	1	150	50	n/a	15	1.0
	B & C sub-districts	1	75	50	n/a	6 in B 8 in C	1.0
MX district	1	40	n/a	n/a	6	n/a	
LI and HI districts	1	200 [2]	75	n/a	30 [3]	1.0	
GB District	outparcel & lease lot	1/parcel	50	n/a	n/a	6	NA
	all other lots	1	200 [2]	75	n/a	30 [3]	1.0
CB district	1	100	50	n/a	6	1.0	
RC District	outparcel and lease lot	1/parcel	50	n/a	n/a	6	n/a
	all other lots	1/lot	100	50	n/a	6	0.5
	development identification sign	1/street frontage	300	200	10	30 [3]	n/a
	playbill sign	1/theater complex	200	n/a	10	30	n/a
SIGN STANDARDS BY SIGN TYPE							
Banners for special events (all districts)	1/500 ft frontage	25	n/a	n/a	20	n/a	
Development entrance signs (all districts)	1 pair/entrance	50/entrance	n/a	n/a	6	n/a	
Identification signs (all districts)	1/building entrance	20	n/a	15	10	n/a	
Instructional signs (all districts)	n/a	6	n/a	n/a	8	n/a	
Off-premise directional signs in the GB, LI, HI districts	1 total	8	n/a	n/a	6	n/a	
Portable signs for temporary events (all districts)	1/lot	32	n/a	n/a	6	n/a	
Special promotion signs (all districts)	n/a	n/a	n/a	n/a	n/a	n/a	

NOTES:

[1] "Minimum" sign area refers to the minimum sign size allowed by right, regardless of the size which would be allowed by computation

[2] The maximum area may be increased by 75 feet if the sign is within 400 feet of an interstate highway ROW

[3] Maximum sign height may be increased to 50 feet if the sign is within 400 feet of an interstate highway ROW provided there are no government sponsored logo signs installed

2. Specific Standards By District

(a) CB District

- (1) Maximum height may be increased to 15 feet if the sign is a monument sign;
- (2) A maximum of three signs per lot shall be permitted;
- (3) The area and height of one freestanding sign may be increased provided that:
 - (i) No wall sign shall be permitted or erected on the same side of the building. This is deemed to include all sections of the building wall parallel with or within 45 degrees of parallel with the lot line or street ROW;
 - (ii) The sign face is placed parallel to the building, and is located such that it does not impair vehicular sight distance from driveways or along public streets;
 - (iii) The area of the freestanding sign does not exceed 50 percent or 150 square feet, whichever is smaller, of the area of wall signage that would be permitted on the side of the building where the freestanding sign is to be located. The wall signage calculation shall include all sections of the building wall parallel with or within 45 degrees of parallel with the property line or street right-of-way line; and
 - (iv) The height of the freestanding sign does not exceed 40 feet or the height of the building (or average height where variations in height occur), whichever is less.

(b) GB District

Under no circumstance shall there be more than one freestanding sign per principal building.

(c) MS and MX Districts

Freestanding signs must be monument type signs only.

3. Specific Standards By Sign Type

(a) Development Entrance Sign (All Districts)

- (1) May be erected in the public right-of-way with an encroachment agreement.
- (2) Only permitted in subdivisions, developments of over 15,000 square feet of gross floor area, multi-family developments of more than eight units in a single building, or developments with more than 40,000 square feet in open air uses of land.
- (3) The entrance sign may identify only the name of the development, management or developer, and/or address or location of development.

(b) Development Identification Sign in the RC District

- (1) Sign may identify only the name of the shopping center and the tenants. Maximum sign height may be increased by five feet and maximum area may be increased by 50 square feet if a permitted freestanding playbill sign is combined with the development identification sign.
- (2) Up to one additional freestanding sign may be allowed provided:

Subsection 5.6.9 Freestanding Signs Requiring a Sign Permit

- (i) The lot frontage exceeds 1,000 linear feet;
 - (ii) The maximum area for either sign does not exceed 200 sf; and
 - (iii) The additional sign is more than 250 feet from any other freestanding sign on the same lot or any freestanding sign on an adjoining lot.
- (3) Sign area shall be allowed as follows:
- (i) Up to 200 sf for centers with two to 15 tenants; and
 - (ii) Up to 300 sf for centers with 16 or more tenants.
- (c) **Identification Sign (All Districts)**
- (1) Includes only directory signs (listing occupants of buildings and their address) in developments with multiple occupants, individual tenant signs, and building name/address signs for buildings with multiple occupants. An individual tenant identification sign may only be erected if there is no wall mounted identification sign present.
 - (2) A directory sign or single tenant identification sign shall, at its closest point, be located within six feet of the entrance it is intended to identify.
- (d) **Instructional Sign (All Districts)**
- Colleges, universities, hospitals, coliseums, and convention centers may have signs exceeding the maximum allowable area subject to approval of a special use that determines that a larger sign is a public necessity in accordance with Section 2.4.10, Special Use.
- (e) **Off-Site Directional Sign in the GB, LI, and HI Districts**
- (1) The number of off-site directional signs allowed shall be determined through review of a special use in accordance with Section 2.4.10, Special Use, and be based on the need for the signs(s) and the difficulty of access to the establishment. The special use shall expire after two years unless a different expiration period is approved by City Council. The special use may be re-approved for a subsequent period(s) of time by the City Council upon request.
 - (2) Off-site directional signs require the permission and written agreement of the landowner where located.
- (f) **Special Promotion Sign (All Districts)**
- Sign shall be limited in duration to a maximum of 30 continuous days and not more than three occurrences in a calendar year.
- (g) **Electronic Changeable Copy Sign Requiring a Permit¹⁴⁵**
- (1) **General Standards**
 - (i) **Districts Allowed**

Electronic changeable copy signs shall be permitted only in the CB, GB, MS, LB, and RC districts.

¹⁴⁵ These standards carry forward the provisions in Text Amendment 12-03, 13-06, and 14-02 with no substantive changes.

(ii) Permit

A sign permit shall be required for all new electronic changeable copy signs, and conversions from static signs to electronic changeable copy signs.

(iii) Location and Type

Electronic changeable copy signs shall be located on-site, as a portion of, and on the same support structure with a legal conforming accessory freestanding sign. Such signs shall not be added to a sign that is nonconforming, nor shall any part of an existing nonconforming sign be converted to an electronic changeable copy sign.

(iv) Size

The area of an electronic changeable copy sign shall not exceed 33 percent of the permitted area of a freestanding sign, and shall be counted toward the maximum allowable signage.

(v) Height

The height maximums shown in Table 5.6.10, Requirements for a Freestanding Sign Requiring a Sign Permit, for accessory freestanding signs in the CB, GB, MS, LB, and RC districts shall apply to electronic changeable copy signs.

(vi) Number

Only one electronic changeable copy sign may be permitted per lot.

(vii) Brightness

- (A)** Maximum brightness levels for electronic changeable copy signs shall not exceed 5,000 nits during daylight hours and shall not exceed 500 nits between dusk and dawn, as measured from the sign face.
- (B)** Prior to the issuance of a sign permit, the applicant shall provide a written certification from the sign manufacturer that the light intensity has been factory pre-set not to exceed 5,000 nits.
- (C)** All electronic changeable copy signs shall have a light sensing device that will adjust the brightness in real-time as ambient light conditions change, so that the sign does not exceed the maximum brightness levels allowed by this section.

(2) Personalized Messages

The display of personalized “smart” messages that are triggered or initiated by license plate recognition, facial recognition or by reading or analyzing electronic signals from traffic or an individual vehicle, is prohibited unless used in a public emergency or public service capacity.

(3) Malfunctions

Any electronic changeable copy sign which malfunctions, fails, or ceases to operate in its usual or normal programmed manner, causing therein motion, flashing, movement or an inability to read the text of the message clearly shall be turned off, or shall display a blank screen until repairs can be made.

(4) Additional Standards in the CB District

The following standards shall apply in addition to the standards in Section 5.6.9.B.3(g)(1), General Standards, above:

(i) Location and Type

Electronic changeable copy signs in the CB District may be located on a wall or marquee.

(ii) Size

The area of an electronic changeable copy sign may not exceed 25 percent of the permitted signage area per wall, or 50 percent of the permitted signage area for a marquee.

(iii) Height

The height maximum in Table 5.6.11.A, Requirements for an Attached Sign Requiring a Sign Permit, for wall and marquee signs shall apply to electronic changeable copy signs.

(5) Additional Standards in the GB District

The following standards shall apply in addition to the standards in Section 5.6.9.B.3(g)(1), General Standards, above:

(i) Display

The message displayed shall be static, and complete within itself, with no continuation of content to the next image or message. It shall be no more than four lines of characters or symbols and/or ten words, to allow passing motorists to read the entire copy with minimal distraction. Changes to the message displayed must be as instantaneous as is technologically feasible, with no flashing, zooming, scrolling, fading in or out, twinkling/sparkling, or other operating mode that imitates movement.

(ii) Rate of Change

The rate of change for each individual message shall not be faster than eight seconds.

(iii) Color

The use of color is not limited, however, the entire text of an individual message shall be the same color, and shall not vary in intensity during its display frame.

5.6.10. ATTACHED SIGN REQUIRING A SIGN PERMIT

An attached sign requiring approval of a sign permit in accordance with Section 2.5.13, Sign Permit, shall comply with the following general and specific standards of this subsection:

A. General Standards for Attached Signs Requiring a Permit

1. Maximum Number of Attached Signs

(a) Single-tenant Buildings

- (1) Except in the CB district, up to one attached sign in a single-tenant building is permitted per each building wall that faces a street or parking area. In no instance shall the total number of attached signs on a building exceed four.
- (2) There are no limits on the total number of attached signs in the CB district.

(b) Multi-tenant Buildings

(1) Each Tenant Has Own Entrance

- (i) In a multi-tenant building, each tenant may have one sign, the area of which is based on its proportionate share of the building wall facing a street or parking area.
- (ii) The total area of all signage shall not exceed the total allowed for the building wall.
- (iii) A common signage plan shall be prepared in accordance with Section 5.6.13, Common Signage Plan.

(2) Tenant-Shared Entrances¹⁴⁶

Single- or multi-storied buildings with a shared entrance shall comply with the following standards:

- (i) A maximum of four wall signs shall be permitted.
- (ii) The signs may be grouped on a wall(s) oriented to a street or parking area.
- (iii) When signs are grouped, the maximum area of each sign shall be computed using the formula in Table 5.6.10.A, Grouped Sign Area Computation:

TABLE 5.6.10.A: GROUPED SIGN AREA COMPUTATION	
NUMBER OF GROUPED SIGNS ON A WALL	MAXIMUM AREA AVAILABLE FOR EACH SIGN (SQUARE FEET)
2	$1.5 \times (\text{max. sign area for building wall}) / 2$
3	$2.0 \times (\text{max. sign area for building wall}) / 3$
4	$2.5 \times (\text{max. sign area for building wall}) / 4$

- (iv) Where signs are grouped, a common signage plan shall be prepared in accordance with Section 5.6.13, Common Signage Plan.

2. Illumination Standards

- (a) Illuminated attached signs are prohibited in residential districts.
- (b) In nonresidential districts all signs may be directly or indirectly illuminated.
- (c) In the TO, OI, I, and EC districts, illumination is limited to cut-out letter and

¹⁴⁶ This standard has been simplified to a single standard regardless of building size and made less restrictive than the standards in the current ordinance.

Subsection 5.6.10 Attached Sign Requiring a Sign Permit

shielded silhouette lighting.

- (d) Wall signs that face an abutting single-family or duplex use shall be indirectly illuminated only.

B. Specific Standards for Attached Signs Requiring a Sign Permit

In addition to the standards in Section 5.6.10.A, General Standards for Attached Signs Requiring a Permit, all freestanding signs requiring a permit shall be subject to the following specific standards.

1. Table of Requirements

Signs subject to the standards in this section shall comply with the applicable provisions in Table 5.6.10.B, Requirements for an Attached Sign Requiring a Sign Permit.

TABLE 5.6.10.B: REQUIREMENTS FOR AN ATTACHED SIGN REQUIRING A SIGN PERMIT

SIGN TYPE	NUMBER	AREA (SQ FT)		HEIGHT (FEET)	COMPUTATION
		MAX	MIN [1]		
WALL SIGNS					
TO, & I districts	See 5.6.10.A.1, Maximum Number of Attached Signs	n/a	25	top of wall	5% of wall area [2]
OI, LB, & EC districts			25		7.5% of wall area [2]
GB, RC, CB, MS, LI, & HI districts			50		10% of wall area [2]
AWNING, CANOPY, AND MARQUEE SIGNS					
All nonresidential districts	1/face	n/a	n/a	top of canopy	10% of the canopy, awning, or marquee face
SUSPENDED SIGNS					
All nonresidential districts	1/entrance	6	n/a	[2]	n/a
BANNERS¹⁴⁷					
Special events (all districts)	1/500 ft of frontage	25	n/a	Top of wall	n/a
Temporary identification signs for market showrooms (all nonresidential districts)	n/a	n/a	n/a	top of wall	50% of wall area
SPECIAL PROMOTION SIGNS					
All districts	n/a	n/a	n/a	top of wall	NA
IDENTIFICATION SIGNS					
All nonresidential districts	1 when average wall	75	> 6 feet	top of wall	1% of wall area

¹⁴⁷ This standard is derived from Table 5-16-3 of Section 9-5-16 and has been simplified to allow a maximum of 25 square feet sign versus a smaller size based on lot frontage.

TABLE 5.6.10.B: REQUIREMENTS FOR AN ATTACHED SIGN REQUIRING A SIGN PERMIT

SIGN TYPE	NUMBER	AREA (SQ FT)		HEIGHT (FEET)	COMPUTATION
		MAX	MIN [1]		
	height > 35 feet				

NOTES:

[1] "Minimum" sign area refers to the minimum area allowed by right, regardless of the size which would be allowed by computation

[2] Based on the first 30 feet in height of the wall on which the sign is attached. Buildings over 30 feet in height may have additional sign area based on five percent of the wall area above 30 feet in height, provided the sign is located at or near the top of the building

2. Awning, Canopy, and Marquee Signs (All Nonresidential Districts)

- (a) Signs shall be located at least nine feet above pedestrian ways and 15 feet above vehicular drives.
- (b) The sign face shall include the entire area of the canopy, awning, or marquee structure.
- (c) The total area of all attached signs, whether attached to a wall, canopy, awning, or marquee shall not exceed the total allowed for the building wall.
- (d) All or any portion of this sign allocation may be affixed to the wall, awning, canopy or marquee, provided that no part of the sign projects above the top of the structure served by the signage.

3. Identification Signs (All Nonresidential Districts)

The area of identification signs shall be subtracted from the allowable square footage of wall signs for the wall upon which it is placed.

4. Multiple Franchised Businesses in a Single Building¹⁴⁸

- (a) A business which is the sole occupant (as owner or tenant) of a building and which owns or operates multiple franchised businesses at that building shall be allowed one overall business name sign and one sign for each franchise, which may be located on the same wall.
- (b) The maximum area of business name and franchise signs located on the same wall shall be in accordance with the following:
 - (1) Maximum square footage as determined by this Ordinance (as a percent of wall area), plus:
 - (i) Up to 15 percent where two franchises exist; or
 - (ii) Up to 30 percent where three franchises exist; or
 - (iii) Up to 40 percent where 4 or more franchises exist, provided that these increased maximum permitted areas are applicable to only one wall of a building.
- (c) Other signage may be permitted on this wall but the total area of all signage shall not exceed the applicable maximum under this provision.
- (d) Multiple signs may be permitted on other walls of the same building

¹⁴⁸ These standards carry forward the provisions in Section 1 of TA13-05 with no substantive changes.

Subsection 5.6.11 Outdoor Advertising Sign Requiring a Sign Permit

provided that the maximum area of such wall signage, as provided under this Ordinance without regard to this provision, is not exceeded.

- (e) In all cases where more than one sign is allowed on the same wall, no single franchise sign shall exceed:
 - (1) 60 square feet in area where two or three franchises exist;
 - (2) 50 square feet where four franchises exist; or
 - (3) 40 square feet where more than four franchises exist.
 - (4) This provision shall not apply to a multiple tenant commercial building.

5. Special Promotion Signs

Sign shall be limited in duration to a maximum of 30 continuous days and not more than three occurrences in a calendar year.

6. Temporary Banners Serving Market Showrooms (All Nonresidential Districts)

Banners shall be limited in duration to a maximum of 30 continuous days and not more than two occurrences in a calendar year.

7. Video Wall Signs¹⁴⁹

(a) Where Allowed

Video wall signs shall be permitted only for Market showrooms in the CB district.

(b) Location

It is intended that video wall signs be pedestrian oriented. A video wall sign shall be located flat against a building wall that is parallel to a street, or that faces the interior of a lot. No part of a video wall sign shall be closer than 25 feet from intersecting street right-of-ways.

(c) Projection and Height

A video wall sign cabinet shall not project from the wall more than 18 inches, and its height shall not be more than 15 feet above ground level. Screens shall not be angled and shall be parallel to the wall.

(d) Size

The area of a video wall sign shall be counted toward the maximum allowable wall signage, and shall not exceed 25 percent of the maximum allowable wall signage or 60 square feet, whichever is less.

(e) Number

No more than one video wall sign shall be permitted per zone lot.

(f) Brightness

- (1) Maximum brightness levels for video wall signs shall not exceed 5,000 nits during daylight hours and shall not exceed 1,000 nits between dusk and dawn, as measured from the sign face.
- (2) Prior to the issuance of a sign permit, the applicant shall provide a written certification from the sign manufacturer that the light intensity has been factory pre-set not to exceed 5,000 nits.
- (3) All video wall signs shall have a light sensing device that will adjust

¹⁴⁹ These standards carry forward the provisions in TA14-04 with no substantive changes.

the brightness in real-time as ambient light conditions change, so that the sign does not exceed the maximum brightness levels allowed by this section.

5.6.11. OUTDOOR ADVERTISING SIGN REQUIRING A SIGN PERMIT

A. Districts Allowed

An outdoor advertising sign shall only be allowed in the HI district.

B. Location

An outdoor advertising sign shall be located off-site.

C. Size

The sign area of an outdoor advertising sign, including any extension(s), shall not exceed 450 square feet.

D. Height

An outdoor advertising sign shall not exceed 30 feet in height. The height may be increased to 50 feet if the sign is within 400 feet of an interstate highway ROW.

E. Spacing Requirements

1. Between Signs

- (a) Except within the U.S. Highway 311 Bypass corridor, an outdoor advertising sign shall not be erected, affixed, or otherwise installed within a 500-foot radius of another outdoor advertising sign.
- (b) Within 1,500 feet of the U.S. Highway 311 Bypass corridor ROW, an outdoor advertising sign shall not be within a 2,000-foot radius of another outdoor advertising sign.

2. Adjoining a Residential District or Religious Institution

- (a) An outdoor advertising sign shall not be erected, affixed, or otherwise installed closer than 300 feet to a residential district or a lot containing a religious institution.
- (b) If a residential zoning district boundary runs along the near edge of a street right-of-way, the width of the right-of-way shall be subtracted from the setback requirement.

F. Relationship to Freestanding Sign

1. Lot with One Street Frontage

An outdoor advertising sign shall not be erected, affixed, or otherwise installed on a lot with one street frontage that contains more than one freestanding sign.

2. Lot with Two or More Street Frontages

An outdoor advertising sign shall not be erected, affixed, or otherwise installed on a lot with two street frontages that contains more than two freestanding signs.

G. Setbacks

The support post(s) of an outdoor advertising sign shall comply with the minimum setbacks of the zoning district in which it is located. In addition, a sign or portion of an outdoor advertising sign shall not project closer than 15 feet to a street right-of-way or closer than five feet to another lot line, measured horizontally.

H. Back-to-Back Mounting

An outdoor advertising sign structure may be mounted back-to-back when it shares a common support. The total sign area of any such outdoor advertising structure shall be considered to be one sign.

5.6.12. SIGN FOR HISTORIC STRUCTURES OR PROPERTIES

Properties, buildings, or other structures that have received local historic landmark status from the Guilford County Historic Preservation Commission or that have National Register of Historic Places status may be permitted to construct, reconstruct, replicate, or replace signs subject to an approved certificate of appropriateness (see Section 2.4.4, Certificate of Appropriateness), and the following standards:

- A.** The grounds (in the case of a freestanding sign) and/or exterior of the sign structure shall be an historic element cited by the National Register designation, or cited in the City's ordinance of adoption accepting the local historic landmark designation. Such designation may be for a portion of the grounds or structure.
- B.** The local historic landmark or National Register designation shall be valid. There must be no outstanding violations of process, or any proposed changes to the land that would jeopardize the designation. All required approvals (e.g., certificate of appropriateness) shall be obtained.

5.6.13. COMMON SIGNAGE PLAN

A. In General

- 1.** Common sign plans shall be required for developments with more than one business, building, or lot.
- 2.** Common sign plan application requirements are set out in the *Development Guidebook*.

B. Other Provisions

- 1.** A common signage plan shall be a part of the application for a site plan, group development plan, PD master plan and may be processed simultaneously with such plan.
- 2.** A common signage plan shall be approved prior to the issuance of a building permit(s).
- 3.** The Planning and Development Director may approve minor changes to a common signage plan provided such changes comply with all requirements of this section.
- 4.** A common signage plan may be amended by filing a new plan which complies with all requirements of this section and the application requirements in the *Development Guidebook*.
- 5.** After approval of a common signage plan, no signs shall be erected, affixed, placed, painted or otherwise established except in conformance with the approved plan. The plan may be enforced in the same way as any other provision of this section.

C. Conflict

In case of any conflict between the provisions of such a plan and any other provision of this section, this section shall control.

5.6.14. ENCROACHMENT AGREEMENT FOR ENTRANCE SIGN

Subsection 5.6.14 Encroachment agreement for Entrance Sign

A development entrance sign shall be allowed to encroach into a public right-of-way provided an encroachment agreement between the sign owner and the City in a form determined appropriate by the City Attorney, is accepted. The encroachment agreement shall, at a minimum, provide that:

- A.** The sign owner shall not be compensated by the City for any loss of or damage to the sign from any cause;
- B.** The sign owner shall remove the sign at the sign owner's expense if the City determines at any time that the sign interferes with the public use of the right-of-way;
- C.** The sign owner shall maintain the sign; and
- D.** If the sign projects or is suspended over the public right-of-way, the sign owner agrees to provide insurance or satisfactory indemnification to the City against liability for injury to persons or property from the sign.

5.7. SIDEWALKS

A. Purpose and Intent

The purpose of these standards is to ensure greater pedestrian safety and ease of access for pedestrians in the City in accordance with the City's adopted policy guidance. More specifically the intent of these standards is to:

1. Establish the locations where new sidewalks are required to be installed as part of development;
2. Promote expanded opportunities for recreational walking and running;
3. Help ensure City residents can meet their daily needs without use of an automobile;
4. Allow easier access to shopping and commercial areas;
5. Clarify the timing of sidewalk installation; and
6. Establish provisions for the payment of a fee in-lieu of sidewalk installation when sidewalk installation would conflict with other infrastructure improvements.

B. Applicability

Unless exempted in accordance with Section 5.7.C, Exemptions, the following standards shall apply to all forms of development:

1. Sidewalks shall be installed along:
 - (a) New streets proposed within a subdivision or group development;
 - (b) Existing streets that abut a subdivision or group development;
 - (c) Existing streets that abut land subject to a site plan; and
 - (d) Other locations as specified in this section.
2. All sidewalks (including those installed voluntarily), shall meet or exceed the applicable standards in this Ordinance and the City's standard specifications for sidewalks.
3. Sidewalks required by this Ordinance shall be constructed along the full length of the street or streets.

C. Exemptions

Sidewalks shall not be required in the following instances:

1. Along local and sub-collector residential streets where the TRC finds the following conditions exist:
 - (a) The proposed development is within an area consisting predominantly of existing single-family detached residential development, where no sidewalks are present; and
 - (b) The character and size of the proposed development will not result in substantial additional pedestrian facility needs; and
 - (c) There are no new pedestrian facilities planned that would provide a pedestrian connection to the proposed development.
2. Along existing streets in predominantly industrial areas where no sidewalks are present and the TRC determines a sidewalk is not necessary or feasible.
3. Along cul-de-sac streets and permanent dead-end streets, of 800 feet or less in length.
4. Along streets that are designated North Carolina Department of Transportation controlled access facilities.

D. Standards

1. Required Locations

Except where expressly subject to lesser requirements included in this section, or where the TRC determines that an alternative configuration is required, the following standards shall apply:

(a) Major and Minor Thoroughfare Streets

Sidewalks shall be installed along both sides of major and minor thoroughfares.

(b) Collector and Sub-Collector Streets

Sidewalks shall be installed on one side of collector and sub-collector streets.

(1) The TRC may determine, during review of a development application, that a collector or sub-collector street requires sidewalks along both sides of the street if one or more of the following conditions exists:

- (i)** The current or projected average daily traffic volume is greater than 8,000 vehicles per day.
- (ii)** The posted speed limit is greater than 35 miles per hour.
- (iii)** The street is identified as a pedestrian route on a City sidewalk plan.
- (iv)** Other pedestrian safety, access, or circulation needs are identified.

(c) Local Streets

Along one side of local streets, unless other pedestrian safety, access, or circulation needs are identified.

(d) Side Determination

Where sidewalks are required to be installed on only one side of a street, the TRC shall determine which side of the street is most appropriate.

E. Additional Zoning District Standards

In addition to the standards in this section, development subject to these standards shall also address all applicable sidewalk standards in Chapter 3: Zoning Districts.

F. Timing of Installation

The site plan, subdivision preliminary plat, or group development plan shall address the phasing and timing criteria for the installation of required sidewalks, including a maximum timeframe for completion.

G. Fee in-Lieu of Required Sidewalk Installation

1. Where the installation of a sidewalk is required, and the Transportation Director determines that installation at the time of development would conflict with a city, state, or federal roadway project, the applicant shall be required to submit a fee in-lieu of sidewalks in accordance with the following:

- (a)** Fees shall be in an amount equal to the entire estimated cost of completing the installation, based on current contract unit prices, as approved by the Engineer Services Director.
- (b)** All fees collected by the City pursuant to this section shall be deposited in the City's sidewalk revolving fund and used only for construction of sidewalks on the site, or in the street right-of-way abutting the site, for

Subsection 5.6.14 Encroachment agreement for Entrance Sign

- which the fee is collected.
 - (c)** Use of submitted funds to construct sidewalks shall be coordinated with the appropriate phase of the conflicting roadway project.
- 2.** In the event that the conflict necessitating the fee in-lieu is eliminated, one of the following shall occur:
- (a)** If the scheduled project is configured with a different alignment, the in-lieu fee shall be refunded to the applicant.
 - (b)** If the scheduled project is a widening of an existing roadway, in-lieu fees for sidewalks shall be used by the City to construct the sidewalk after the widening.

5.8. EXTERIOR LIGHTING

5.8.1. PURPOSE AND INTENT

The purpose of this section is to regulate exterior lighting to ensure the safety of motorists and pedestrians and to minimize adverse effects on adjacent land uses due to excessive light intensity or due to light trespass and glare.

5.8.2. APPLICABILITY

A. General

1. The provisions of this section shall apply to all development unless exempted in accordance with Section 5.8.2.B, Exemptions.
2. Review for compliance with the standards of this section shall occur as part of the review of an application for a site plan, group development plan, or building permit, as appropriate.
3. Compliance with these standards, to the maximum extent practicable, shall also apply to redevelopment of an existing structure, building, or open use of land when it is expanded or enlarged by more than 50 percent.

B. Exemptions

The following are exempted from the standards of this section:

1. Special events, special promotion signage, and holiday displays;
2. FAA-required lighting on buildings, towers or other structures;
3. Security lighting controlled and activated by motion sensor devices for a duration of 15 minutes or less;
4. Outdoor light fixtures producing light directly by the combustion of fossil fuels, such as kerosene lanterns or gas lamps;
5. Public street lighting;
6. Lighting of official government flags;
7. Temporary lighting necessary for construction or emergencies, used by construction workers or emergency personnel; and
8. Single-family detached, attached, and duplex dwellings, except that these forms of development shall be subject to Section **Error! Reference source not found., Error! Reference source not found..**

5.8.3. PROHIBITED LIGHTING

The following forms of exterior lighting shall be prohibited:

- A. Lighting that imitates an official highway or traffic control light or sign;
- B. Lighting in the direct line of sight with any traffic control light or sign;
- C. Flashing, revolving, or intermittent exterior lighting visible from any lot line or public street, except for permitted freestanding or wall signs in accordance with Section 5.6, Signage; and
- D. High intensity light beams, such as searchlights, laser, or strobe lights, except when used by federal, state or local authorities.

5.8.4. LIGHTING PLAN

Unless exempted by the Planning and Development Director, a lighting plan demonstrating how exterior lighting will comply with the standards of this section shall be provided as part of an application for site plan, group development plan, building or electrical permit.

5.8.5. GENERAL STANDARDS FOR ON-SITE EXTERIOR LIGHTING

A. Maximum Illumination Value at Lot Line¹⁵⁰

Exterior lighting shall be designed and located such that the maximum illumination measured in footcandles at ground level at any lot line shall not exceed the standards in Table 5.8.5, Maximum Illumination Levels.

ABUTTING USE [1]	MAXIMUM ILLUMINATION VALUE AT LOT LINE (FOOTCANDLES)
Residential use or vacant land zoned for residential development	1.0
Institutional use	1.5
Commercial use or vacant land zoned for uses other than residential[2]	2.5
Vehicular use area	2.5
NOTES:	
[1] See Table 4.1.9, Principal Use Table	
[2] Includes mixed-use development	

B. Maximum Height

Except for outdoor public recreation, outdoor assembly, and similar uses, the height of exterior lighting, whether mounted on poles, walls, or by other means, shall be no greater than 35 feet above grade at the base of the fixture, unless a Type I Administrative Adjustment is approved by the Planning and Development Director.

C. Light Trespass

1. All outdoor light fixtures that produce more than 4,050 lumens shall be cut-off fixtures that are located, angled, or shielded to focus light on the intended subject or area and prevent light trespass onto adjacent properties or skyward as depicted in Figure 5.8.5.C, Cut-Off Light Fixtures. The lumen output of a lighting fixture is specified by the manufacturer.
2. Exterior lighting devices that produce 4,050 lumens (and need not be cut-off, angled, or shielded) include, but are not limited, to:
 - (a) 200 watt standard incandescent;
 - (b) 150 watt tungsten-halogen (quartz);
 - (c) 50 watt high pressure sodium;

¹⁵⁰ Illumination levels, which vary based on use, measure the amount of glare or light trespass onto adjacent lands from a particular use. A foot-candle is a measurement of light that can be easily measured using a standard light meter. This approach and these maximum illumination standards are used in a number of communities across the Southeast because of its simplicity and ease of use.

- (d) 50 watt cool white fluorescent; and
- (e) 30 watt low pressure sodium.

FIGURE 5.8.5.C, CUT-OFF LIGHT FIXTURES

- 3. Wall packs shall be cut-off and floodlights shall be shielded (e.g., true cut-off type bulb or light source not visible from off-site) to direct light downward and eliminate light pollution above the façade of a structure.

5.8.6. DESIGN STANDARDS FOR SPECIFIC USES AND SITE FEATURES

A. Awnings

Awnings or canopies used for building accents over doors, windows, etc., shall not be internally illuminated (e.g., from underneath or behind the awning) unless the awning material does not allow light to transmit through it.

B. Canopy Lighting

Lighting under a canopy shall be designed to not create glare off-site. This may be accomplished by one or both of the following:

- 1. Recessed fixture incorporating a lens cover that is either recessed or flush with the bottom of the ceiling of the canopy that provides a full cut-off or fully-shielded light distribution.
- 2. Surface mounted fixture incorporating a flat glass that provides a full cutoff or fully-shielded light distribution.
- 3. Light intensity under canopies shall not exceed 30 footcandles.

C. Outdoor Public Recreation, Outdoor Assembly and Similar Uses

All outdoor public recreation, outdoor assembly, and similar lighting fixtures shall be equipped with louvers, shields, or similar devices, and aimed so that light is contained within the primary playing area or performance area and minimizes adverse impacts on traffic safety and residentially-zoned land.

5.8.7. MEASUREMENT

Measurement of glare or light trespass shall be accomplished in accordance with the standards in Section 10.2.11, Exterior Lighting.

5.9. FENCES

5.9.1. PURPOSE AND INTENT

The purpose and intent of this section is to regulate the location, height, and appearance of fences to maintain visual harmony within neighborhoods and throughout the City, protect adjacent properties from the indiscriminate placement and unsightliness of fences, ensure the safety, security, and privacy of land, and ensure that fences are subject to timely maintenance, as needed.

5.9.2. APPLICABILITY

A. General

1. Except where exempted in accordance with Section 5.9.2.B, Exemptions, the provisions of this section shall apply to all construction or replacement of fences.
2. A fence may only be erected in accordance with Section 2.5.16, Zoning Compliance Permit.

B. Exemptions

The following are exempted from the standards in this section:

1. Temporary fences for construction sites, including but not limited to: fencing necessary for soil erosion and sedimentation control and tree protection.
2. The fence height limitations in this section shall not apply to fences built in conjunction with the following:
 - (a) Electric or gas substations;
 - (b) Municipal solid waste disposal facilities;
 - (c) Water or sewage treatment plants or facilities;
 - (d) Municipal water storage facilities;
 - (e) Public correctional and mental institutions;
 - (f) Military facilities; or
 - (g) Hazardous or radioactive waste storage or disposal facilities.

5.9.3. LOCATIONAL REQUIREMENTS

A. General

1. Fences or walls shall be located outside of the public right-of-way.
2. Fences are allowed on the property line between two or more parcels of land held in private ownership.
3. Fences may be located within any required yard or setback.

B. In Utility Easements

Fences located within utility easements shall receive written authorization from the easement holder. The City shall not be responsible for damage to, or the repair or replacement of, fences that must be removed to access such easements.

C. Blocking Natural Drainage Flow

A fence shall not be installed so it blocks or diverts a natural drainage flow onto or off of any other land, unless it is subject to an approved stormwater management plan.

Obstructions at Intersections

No fence shall be erected or maintained in a manner that obstructs visibility for motorists at any street intersection in accordance with the standards of Chapter 6 of the City Code, Visibility at Intersections.

D. Within the LHO

A fence constructed within an LHO district shall comply with the requirements in Section 2.4.4, Certificate of Appropriateness, and all applicable LHO district standards.

5.9.4. HEIGHT STANDARDS

A. Measurement

Maximum fence height shall be determined in accordance with Section 10.2.12, Fences.

B. Residential Uses

The maximum fence height for residential uses is as shown in Table 5.9.4, Fence Height for Residential Uses.

TABLE 5.9.4: FENCE HEIGHT FOR RESIDENTIAL USES	
LOCATION ON A LOT	MAXIMUM HEIGHT (FEET) [1]
Within 15 feet of a thoroughfare or collector street	6
Within 15 feet of a local street except on corner and through lots	4
On corner lots within 15 of any street right-of-way adjacent to the side yard where rear lot lines abut one another [2]	6
On through lots within 15 feet of any street right-of-way along the rear yard as long as the principal structures on both sides of the through lot face the same direction as the through lot principal structure	6
All other locations	8
NOTES: [1] Fence height can be increased through the security plan exemption provisions in Section 5.9.8 [2] The fence shall not encroach into the front yard setback area	

C. Nonresidential and Mixed Uses

No fence shall exceed a maximum height of eight feet unless:

1. The fence is at least 15 feet from a lot line; or
2. The fence complies with the minimum setback requirements applied to the principal structure.

D. Athletic Fields

Athletic fields, tennis courts, playgrounds, or similar recreational areas abutting a street may include a non-opaque fence with a maximum height of 15 feet, provided the fence is not located within a required landscape area.

E. Colleges or Universities

College or universities located in a residential district may include fences with a maximum height of eight feet provided:

1. The land is contiguous to and within 350 feet of a campus area of at least ten acres in area;
2. The land is owned by the college or university, at which time the fence may be placed on any part of the lot;
3. If the land is not owned by the college or university, a fence easement must be obtained from the landowner. The fence may not be located between the right-of-way and the front of an existing dwelling.

5.9.5. MATERIALS¹⁵¹

A. General

The following fencing materials are permitted for fences:

1. Masonry or stone;
2. Ornamental iron;
3. Wood;
4. Composite materials designed to appear as wood, metal, or masonry; or
5. Chain-link, except where prohibited by this Ordinance.

B. Barbed Wire

1. Barbed wire fences are allowed in the AGR district for the purposes of enclosing livestock, up to a maximum of six feet above grade.
2. Barbed wire fences in districts other than AGR shall comply with the following standards.
 - (a) The barbed wire portion of the fence shall be at least six feet above grade.
 - (b) The barbed wire portion of the fence shall be limited to a maximum of three strands of barbed wire and a maximum height of 12 inches above the other portions of the fence.
 - (c) The barbed wire portion of the fence shall be in-line with the fence or slant inward away from the lot line.
 - (d) The barbed wire shall be included in the overall height of the fence.
3. In addition to the standards in subsection (2) above, barbed wire fencing in a residential district shall comply with the following additional standards:
 - (a) It shall be approved in accordance with Section 5.9.7, Security Exemption Plan; and
 - (b) It shall be no closer to a lot line than the greater of:
 - (1) The front and side building setbacks; or
 - (2) Fifteen feet.

C. Prohibited Materials

The following fence types or materials are prohibited:

1. Fences constructed primarily of razor or concertina wire, except for correctional institutions;;
2. Above ground fences that carry electrical current, except as used for the purposes of enclosing livestock or domestic animals in the AGR district (nothing shall prohibit below-ground electrical fences intended for the keeping of pets);
3. Fences or walls made of debris, junk, rolled plastic, sheet metal, plywood, or waste

¹⁵¹ These are new standards for the City's consideration.

materials, unless such materials have been recycled and reprocessed, for marketing to the general public, as building materials designed to resemble new building materials (e.g., picket fencing made from recycled plastic and fiber).

5.9.6. FINISHED SIDE¹⁵²

When a fence is located within 15 feet of a public street, it shall be configured so that the finished side of the fence faces the street right-of-way. For the purposes of this section, the finished side does not include any supporting members or bracing.

5.9.7. SECURITY EXEMPTION PLAN¹⁵³

A. General

A landowner of a residential use in need of heightened security may submit to the Planning and Development Director a security exemption plan prepared in accordance with these standards.

B. Need for Safety or Security

The Planning and Development Director may approve or approve with conditions, a security exemption plan, based upon the need for additional security as shown by significant law enforcement activity in the immediate vicinity in the recent past related to property crimes, crimes against the person, or sale or possession of illegal drugs or alcohol.

C. Allowed Exemptions

A fence taller than those permitted by this section or the use of barbed wire in accordance with Section 5.9.5.B, Barbed Wire, may be allowed for as part of a security exemption plan security reasons.

D. Conditions of Approval

To mitigate potential adverse impacts, the Planning and Development Director may attach conditions to the approval which may include, but are not limited to the location and duration of the security fencing.

5.9.8. MAINTENANCE

Fences shall be maintained in a safe manner plumb (vertical) to the ground. Fences not maintained in a safe manner through neglect, lack of repair, manner of construction, method of placement, or otherwise shall be repaired, replaced, or demolished.

¹⁵² This is a new standard.

¹⁵³ These are new standards.

5.10. OPEN SPACE

5.10.1. PURPOSE AND INTENT

The purpose of this section is to:

- A.** Establish the standards under which development shall set aside a portion of the development area as open space;
- B.** Distinguish between the characteristics, requirements, and appropriate locations for open space; and
- C.** Establish minimum ownership and maintenance standards related to open space.

5.10.2. APPLICABILITY

The open space standards of this section apply to the following types of developments:

- A. Outside Core City**
 - 1.** Single-family detached residential subdivisions in the R-7, RM-16, and RM-26 districts greater than five acres in area;
 - 2.** Major single-family attached residential developments greater than five acres in area;
 - 3.** All multi-family developments;
 - 4.** Development in a PD-P district;
- B. Inside Core City**
 - 1.** Except in the CB, MS, and MX districts, major single-family attached residential developments with 30 or more dwelling units;
 - 2.** Except in the CB, MS, and MX districts, multi-family developments with 30 or more dwelling units; and
 - 3.** Development in a PD-CC district.

5.10.3. MINIMUM OPEN SPACE AMOUNT

- A.** Table 5.10.3, Minimum Open Space Amount, sets out the minimum open space requirements for development subject to the standards in this section.

TABLE 5.10.3: MINIMUM OPEN SPACE AMOUNT	
TYPE OF DEVELOPMENT	MINIMUM OPEN SPACE REQUIREMENT
Single-family detached residential subdivisions of more than five acres in area in the R-7 district	850 sf/dwelling unit
Major single-family attached residential development of more than five acres	435 sf/unit
Multi-family development	Less than three acres in area
	Three or more acres in area
	250 sf/unit
	435 sf/unit

TABLE 5.10.3: MINIMUM OPEN SPACE AMOUNT

TYPE OF DEVELOPMENT		MINIMUM OPEN SPACE REQUIREMENT
Development in a PD-P district	Residential area with less than five units per acre	20% of area
	Residential area units with five to 16 units an acre	15% of area
	Residential area with 16 or more units an acre	10% of area
	Nonresidential development	10% of gross floor area
Development in a PD-CC district		5% of development area

- B.** The amount of open space to be provided may be modified in accordance with Section 2.5.15, Type I/Type II Administrative Adjustment.

5.10.4. OPEN SPACE STANDARDS

A. Features Counted as Open Space

The following features within a development shall be credited towards the open space requirements:

- 1.** Environmentally-sensitive lands including water features (drainageways, lakes, streams, etc.), wetlands, floodplains, and protected stream buffers, provided no more than 50 percent of a development’s total open space may be located in environmentally-sensitive lands;
- 2.** Landscaping areas, including areas containing required landscaping and tree protection areas credited toward landscaping requirements;
- 3.** Pedestrian amenities.
- 4.** Stormwater management lands, including retention and detention ponds, and bio-retention devices that are designed and improved with pedestrian amenities;
- 5.** Farm and forestry lands within the boundary of the development;
- 6.** Park lands, trails, and greenways, both public and private;
- 7.** Active recreation areas, including pools, playgrounds and structures, play courts, athletic fields, trails, and clubhouses;
- 8.** Passive recreation areas, including gardens, open fields, and meadows; and
- 9.** Urban features, including plazas, fountains, courtyards, roof gardens, pedestrian areas, indoor atriums open to public, and public sidewalks at least six feet in width with pedestrian amenities.

B. Not Counted as Open Space

The following areas shall not be counted as open space set-asides:

- 1.** Private yards;
- 2.** Street right-of-way or private street common area;
- 3.** Vehicular use areas, including parking spaces, drive aisles, and private drives;
- 4.** Land covered by buildings not designated for active recreational use; and

5. Outdoor storage areas.

C. Design

Except for environmentally-sensitive lands, landscaping, farmland, forestry lands, and urban features, credited open space shall meet the following design standards:

1. Access

Open space shall be accessible by residents and users of the development by means of a street, private drive, or an all-weather walkway within a common area or easement a minimum of 20 feet in width.

2. Configuration

- (a) Open space shall be at least 24 feet in width and 1,000 square feet in area.
- (b) Urban features credited towards the requirements in this section shall maintain a minimum width of 24 feet and a minimum area of at least 600 square feet.

D. Multi-family Development

To the maximum extent practicable, multi-family developments with 30 or more dwelling units shall provide an active recreational area as a part of the total credited open space.

E. Multi-Phase Developments

Open space shall be provided for each phase of a phased development in a cumulative amount sufficient to satisfy the open space requirements for the subject phase of development and all preceding phases of development.

F. Incentives for Active Recreational Features

Land associated with a path, trail, greenway, or other allowable active recreational feature located within an environmentally-sensitive area may be counted towards the requirements in Table 5.10.3, Minimum Open Space Amount, above and beyond the maximum amount specified in Section 5.10.4.A, Features Counted as Open Space

G. Ownership and Maintenance

Open space areas shall be owned and maintained in accordance with Section 7.3, Homeowners' or Property Owners' Association.

5.11. DEVELOPMENT TYPES

A. Purpose and Intent

The standards in this section are intended to establish additional design and development standards for certain types of development that poses unique characteristics of use, configuration, or both. More specifically, these standards are intended to:

1. Recognize that some forms of development are unique and require additional standards not typically applied to other forms of development;
2. Promote a strong sense of place and pedestrian-friendly development through visual design interest and human-scale site design;
3. Accommodate greater housing choice and options within infill and redevelopment contexts in the Core City area;
4. Address the impacts and compatibility of large-scale retail developments; and
5. Establish requirements for appropriate retail development in street intersection contexts.

B. Development Types Distinguished

The following development types are hereby established:

1. Multiple lot development;
2. Pocket neighborhoods;
3. Large retail;
4. Corner retail; and
5. Conservation subdivision.

C. Applicability

When an applicant indicates, or the Planning and Development Director finds that a proposed development is consistent with one or more of the development types in this section, the standards in this section shall be applied.

D. Time of Review

Review of proposed development to ensure compliance with the standards of this section shall occur during review of a site plan, group development plan, preliminary plat, or building permit, as appropriate.

E. Compliance with This Ordinance

Development types listed in this section shall comply with the appropriate standards in this section as well as all other applicable standards in this Ordinance.

F. Conflict

In the event of a conflict between the applicable standards in this section and other standards in this Ordinance, the standards in this section shall control.

5.11.2. MULTIPLE LOT DEVELOPMENT

The purpose of this section is to allow a unified designed and functioning development with multiple lots, pursuant to a preliminary plat approved in accordance with Section 2.5.11, Preliminary Plat, and a final plat in accordance with Section 2.5.7, Final Plat, provided the development complies with the standards of this section.

A. Applicability

To qualify as a multiple lot development, the development must:

1. Contain two or more nonresidential uses designed to function as a unified development; and
2. Contain all of the following:
 - (a) Common private drives;
 - (b) Common off-street parking;
 - (c) A common signage plan; and
 - (d) A common landscape plan.

B. Common Features

1. An approved multiple lot development shall be treated as a single zone lot for the purposes of providing required off-street parking, required landscape yards, required street access, compliance with zoning district dimensional standards, and compliance with signage standards.
2. Compliance with the off-street parking and street access requirements are met by considering the development as a whole and not on an individual lot basis.
3. Compliance with the landscaping standards are met if the required perimeter landscape yards are provided along the multiple lot development perimeter and all parking lot landscaping requirements are met.

C. Establishment

The establishment of a multiple lot development occurs through the approval of a preliminary plat and a final plat.

1. The preliminary plat shall illustrate that the development will have common private drives and common parking.
2. Prior to the approval of a final plat, the proposed development must have approved common signage and common landscape plans.
3. The final plat must be recorded displaying a prominent note identifying it as a multiple lot development and explaining that the property must be developed with common private drives and off-street parking and be subject to a common signage plan and common landscaping plan. The note shall further state that should the property cease to conform to the definition of a multiple lot development, the property will then be in violation of this Ordinance and shall be retrofitted with conventional parking and landscaping, even if doing so requires the removal of previously installed improvements.

5.11.3. POCKET NEIGHBORHOOD ¹⁵⁴

A pocket neighborhood shall comply with the following standards:

A. Where Located

It may only be located in the Core City area.

B. Site Configuration

1. Development size

¹⁵⁴ This is a new development type that is intended as a means of providing additional housing options in established neighborhoods already served by infrastructure. A pocket neighborhood is a small group of single-family homes built in close proximity to one another around a small green or open area. This approach is well-suited to small, vacant, infill sites in established neighborhoods, or as a means of adding density to an underutilized lot along a transportation corridor.

It shall be located on a parcel of land at least one-third (1/3) of an acre and no greater than four acres in area.

2. Allowable Uses

It shall be allowed only the following uses: detached single-family dwellings and commonly associated accessory uses. Accessory uses may include common open space, a common building for the purposes of storage or recreation, outdoor recreational features, and garages.

3. Number of Dwellings

It shall include at least four dwellings but no more than 12 dwellings. In no instance shall the gross density of the development exceed the density of the underlying base zoning district.

4. Common Open Space

- (a) It shall include common open space that comprises at least 40 percent of the total site and includes improved pedestrian walkways that provide pedestrian access to each dwelling, shared parking areas, common buildings, and the public sidewalk network. The common open space shall include a central green or lawn area fronting the dwellings, a shared surface off-street parking area located away from the dwellings and common area, and a perimeter buffer area that incorporates landscaping materials, existing vegetation, or other features to buffer the pocket neighborhood from adjacent development.
- (b) The central green or lawn area shall include at least 375 square feet of area for each dwelling in the development.
- (c) A common building located within the common open space area may be included as an accessory use, but in no instance shall the common building exceed 1,500 square feet or serve as a permanent dwelling unit.

5. Lot Frontage

- (a) At least 60 percent of the individual building lots shall front the common open space area, not a street or alley.
- (b) Up to 40 percent of the lots may front a street. Homes on street-facing lots shall include a front porch and shall not include an attached garage.

6. Surface Parking

- (a) Pocket neighborhoods are exempt from the parking standards in Table 5.3.3.B, Table of Minimum Off-Street Parking Standards.
- (b) The pocket neighborhood shall include a shared parking area that accommodates resident and guest parking.
- (c) Surface parking areas shall include at least one parking space for each dwelling unit plus one designated guest parking space for every four dwelling units.
- (d) Provision of resident parking spaces within a shared parking area is not required in cases where resident parking is provided through individual driveways or by parking spaces along alleys.
- (e) In no instance shall parking areas be more than 300 linear feet from the dwelling it serves.

7. Detached Shared Garages

Detached garages serving more than one dwelling shall be accessed via a private drive or alley. A garage shall not exceed five car bays or include individual garage doors wider than 12 feet each.

8. Storage Space

Each individual dwelling shall have at least 40 square feet of covered storage space outside the heated floor area. Storage space may be located on an individual lot or on common land adjacent to a common building.

9. Perimeter Landscape Yard

A pocket neighborhood shall incorporate a Type B perimeter landscape yard along all lot lines shared with existing single-family detached dwellings.

10. Private Drives

Vehicular entryways into pocket neighborhoods and accessways serving off-street parking areas and individual dwelling lots shall be configured as private drives.

C. Individual Lot Configuration

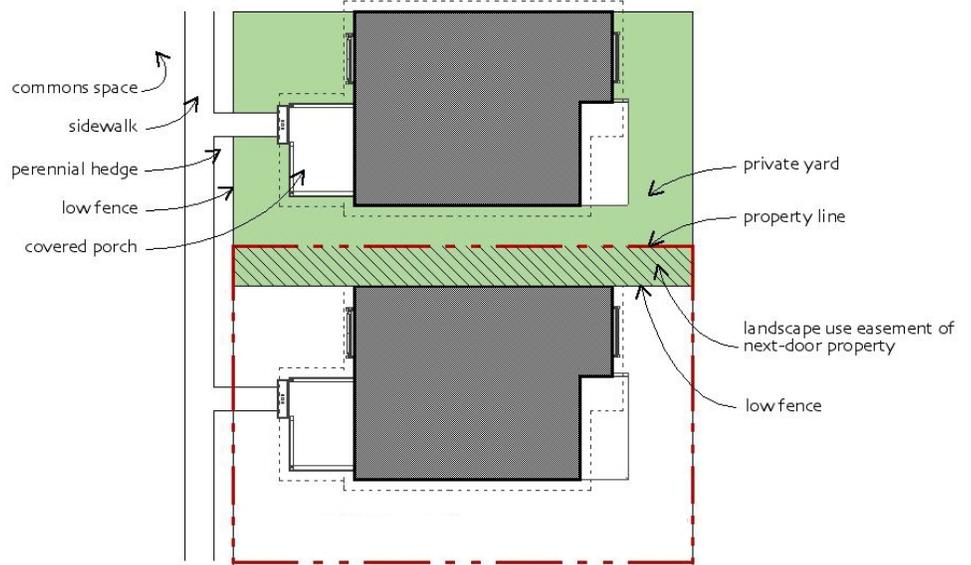
Table 5.11.3, Pocket Neighborhood Lots, sets out the dimensional requirements for individual lots.

TABLE 5.11.3: POCKET NEIGHBORHOOD LOTS	
FEATURE	REQUIREMENT
Minimum lot size (sq ft)	None
Maximum lot coverage (%)	75
Minimum lot width (ft)	20
Minimum front setback (ft)	10 from open space; zoning district requirement from street [1]
Minimum side setback (ft)	3 one side; 15 other side [1]
Minimum rear setback (ft)	None [2]
NOTES:	
[1] Porch steps, ramps, fences, and walkways may encroach into the front setback in accordance with Section 10.2, Rules of Measurement, but no other structures shall be permitted to encroach into the required setback.	
[2] When an individual lot includes a driveway, the minimum rear setback shall be 20 feet.	

1. Use or Access Easement

Any lot abutting another lot used for residential purposes in a pocket neighborhood shall be subject to a use easement on one side that extends from the lot line to the exterior wall of the dwelling (see Figure 5.1.1.D.1, Use Easement). The purpose for the use easement is to ensure each dwelling has a private outdoor space.

FIGURE 5.1.1.D.1: USE EASEMENT



2. Dwelling Unit Configuration

(a) Maximum Height

A dwelling unit shall not exceed one-and-one-half stories, or 24 feet, above grade.

(b) Dwelling Size

- (1) A dwelling unit shall be at least 600 square feet in floor area, but not more than 2,000 square feet in floor area.
- (2) At least two dwellings in a pocket neighborhood shall maintain a total square footage that differs by at least 200 square feet in floor area from the average square footage of all other dwellings. Nothing shall prohibit a configuration where all dwellings are different sizes.

(c) Front Porch

A dwelling unit shall incorporate a covered front porch of at least ten feet in width and six feet in depth. The front porch shall be located primarily to one side of the entryway door in order to provide space suitable for the placement of furniture on the porch.

(d) Windows

- (1) The front façade shall incorporate a sufficient amount of windows to facilitate observation of the common area from within the dwelling.
- (2) Windows on the side of the dwelling facing a side yard subject to a use easement held by an adjoining landowner shall remain opaque or be located above eye level to ensure privacy in the side yard of the abutting dwelling unit (see Figure 5.1.1.D.2, Window Placement).

FIGURE 5.1.1.D.2: WINDOW PLACEMENT

Open side of house with windows facing the private yard



Closed side of the house – skylights bring light into the interior without peering at the neighbor

- (3) A window placement on an exterior wall shall not be configured in a manner that allows direct sight into another dwelling located 30 feet away or less.

(e) **Fences**

- (1) Pocket neighborhoods are exempted from the standards in Section 5.9, Fences.
- (2) Fences within front yards or side yards forward of the front façade plane shall not exceed three feet in height. Fences in rear yards or side yards behind the front façade plane shall not exceed six feet in height.
- (3) In no instance shall a fence be placed within a use or access easement.

(f) **Homeowner's Association**

A pocket neighborhood shall include a homeowner(s) or property owner(s) association that maintains control of common areas and takes responsibility for maintenance of common features in the neighborhood. Association documents shall be submitted to and reviewed by the city prior to approval of the development.

5.11.4. LARGE RETAIL

A. Applicability

These standards shall apply outside the Core City to all new commercial uses in the Commercial Use classification in Table 4.1.9, Principal Use Table that are:

1. More than 50,000 square feet gross floor area on the ground floor for a single tenant;
2. More than 150,000 square feet on the ground floor serving multiple tenants, including outparcels.

B. Development Standards

Development subject to the requirements of this section shall comply with the following standards.

1. Generally

- (a) Facades that face a street, parking lots on the interior of the site, or other areas that are interior to the site shall have articulation along at least 60 percent of the ground floor façade, in accordance with Section 5.11.4.B.3(a), Façade Articulation. This requirement includes the façade of the building that functions as the rear, yet faces a street (see Figure 5.11.4.B, Façade Facing a Street).

FIGURE 5.11.4.B, FAÇADE FACING A STREET

- (b) The building façade containing the primary entrance shall be considered the primary façade.
- (c) Minimum street setbacks may be reduced to 10 feet if the development meets all required and recommended standards of this section.

2. Site Standards

(a) Compliance with Multiple Lot Development Standards

Large retail development configured as a multiple building development shall comply with the standards in Section 5.11.2, Multiple Lot Development, in addition to the standards for a large retail development type.

(b) Building Location and Orientation

(1) Street Corner Location

Buildings placed at a street corner should be designed to address both street frontages in an “L” configuration.

(2) Multi-building Development

- (i) Buildings should be located and configured so as to enclose parking areas.
- (ii) Buildings should include a consistent level of architectural styling and facade articulation on facades facing streets, internal drives, parking lots, or pedestrian amenities.

(c) Pedestrian Areas

A portion of the spaces between or along the frontages of the buildings should include pedestrian areas such as small plazas, patios, or central gathering spaces with pedestrian amenities. The pedestrian amenities include but are not limited to: seating, outdoor play areas, bicycle racks, kiosks, water features, public art, freestanding structures such as a clock tower, or similar amenities.

(d) Loading Docks and Loading Bays

Loading docks and loading bays shall:

- (1) Be located towards the rear of buildings, or located internally within multi-building developments;
- (2) Not face or be adjacent to streets, to the maximum extent practicable; and
- (3) Meet the minimum requirements of Section 5.5, Screening.

(e) Accessory Buildings

Accessory buildings shall comply with the standards in Section 4.6, Accessory Structures and Uses, and use the same materials and architectural styling as the principal building they serve.

3. Building Standards

(a) Façade Articulation

Walls requiring articulation must use two or more of the following features:

- (1) Recessed or display windows;
- (2) Offset surfaces, niches, insets, projections, or bas relief with a minimum depth of four inches;
- (3) Window indentations that incorporate different building material, texture, or color;
- (4) Awnings, canopies, arcades, or overhangs with a minimum projection of four feet from the building wall along with an awning or overhang;
- (5) Differentiated piers, columns, or pilasters;
- (6) Textured materials;
- (7) Roofline changes, coupled with correspondingly aligned wall offset or façade material changes, changes in the roof planes, or changes in the height of a parapet wall; or
- (8) Changes in wall plane (such as projections or recesses) with an offset or depth of at least one foot and a width of at least ten feet, located a minimum of every 30 feet.

(b) Façade Materials

- (1) Where two or more materials are proposed to be combined on a facade, the heavier and more massive elements should be located below the lighter elements (e.g., brick shall be located below stucco). Heavier materials can also be placed as a detail on the corner of a building or along cornices or windows.
- (2) Primary facade materials shall not change at outside corners, and shall continue around the corner to a logical point of conclusion such as a window or change in façade plane.
- (3) The following materials shall be prohibited:
 - (i) Corrugated metal siding; and
 - (ii) Exposed smooth-finished concrete block;

(c) Windows

When provided, windows shall meet the following:

- (1) A ground-level window shall be visually permeable between a height of three feet and eight feet above the walkway grade.
- (2) Reflective or tinted glass that obstructs views into the building shall not be used to meet the façade articulation requirements.

(d) Primary Entrances

The primary entrance shall be clearly defined and incorporate the following features:

(1) For All Development

- (i) Overhangs, awnings, canopies, or other projections of at least eight feet, from the building wall;
- (ii) Windows within or beside entry doors that allow entrants to see into the building.

(2) For Single Tenant Building

Distinctive roof forms, towers, gables, roof ridges, peaks, or other features that differ in height by three feet or more from the balance of the roof;

(e) Roof Form

- (1)** Flat roofs shall incorporate parapet walls with three-dimensional cornice treatments designed to screen the roof and roof-mounted equipment from view from the primary street fronting the building, to the maximum extent practicable. All parapet walls visible from a street shall be finished and be the same or similar in color and material to the building.
- (2)** For sloped roofs, roof-mounted equipment and other roof penetrations should be located and screened to have a minimal visual impact as seen from the street or existing residential uses.
- (3)** In cases where complete screening is not practicable, all roof-mounted equipment and other roof penetrations shall be camouflaged through the use of paint or architectural techniques to minimize its appearance.
- (4)** Within developments with multiple buildings, building heights shall be varied to avoid the appearance of an elongated building mass. This can be achieved by stair-stepping building heights or by varying roof forms.
- (5)** Green roofs, which use vegetation to improve stormwater quality and reduce runoff, are permitted as an alternative to the roof forms described in this subsection.

5.11.5. CORNER RETAIL

[Placeholder]

5.11.6. CONSERVATION SUBDIVISION¹⁵⁵

A. Purpose and Intent

The purpose and intent of this section is to provide landowners in the AGR and R-3 districts a development option that provides additional development flexibility to build on smaller lots when additional open space set-asides are provided, and the development is designed and located in a way that protects the agricultural activities or natural and historic features on the site. This is done in order to:

1. Conserve Open Land

¹⁵⁵ This is a new section described on Pages 2-43 and 2-44 of the Code Assessment. The conservation subdivision procedure allows deviations in the lot area and setback standards, and requires a certain percentage of the development to be set aside as a permanent open space set-aside. Typically, the open space set-aside area is used to protect sensitive natural features on the site, preserve scenic views from roadways adjoining the site, or as land to be used for agricultural purposes. The conservation subdivision standards are available for use in the RU district, and include a provision for densities to be increased by a small percentage (from one unit per acre up to a maximum of two units per acre) as the amount of open space is increased from 50 percent of the total site area upwards to 70 percent of the total site area, as set out in Section 3.3.2 of the proposed standards. The standards are also available in the R-3 district, where densities can increase from three units an acre upwards to 5 units an acre, based on the amount of open space set-aside provided.

Conserve open land, including those areas containing productive agricultural soils, unique and sensitive natural features such as floodplains, wetlands, river and stream corridors, areas with mature hardwood trees, and watersheds;

2. Retain and Protect Natural Resources

Retain and protect existing environmental, natural, and cultural resources;

3. Link Open Spaces

Create a linked network of open lands;

4. Promote Rural Character

Promote existing rural character within the AGR and R-3 districts; and

5. Provide Reasonable Use of Land

Provide reasonable economic use of the land.

B. Applicability

This conservation subdivision option shall be used for single-family detached subdivisions of four or more lots in the AGR and R-3 districts.

C. Procedure

Development utilizing the conservation subdivision option shall be approved as a preliminary plat in accordance with the procedures and standards in Section 2.5.11, Preliminary Plat, after approval of a conservation and development plan in accordance with this section.

1. Conservation and Development Plan

Prior to review of an application for preliminary plat for a conservation subdivision, an applicant shall have a conservation and development plan for the land reviewed and approved, or approved with conditions by the Planning and Development Director in accordance with this section and the standards of Section 5.11.6.D, Conservation Subdivision Standards, and Section 5.11.6.E, Delineation of Conservation Areas and Development Areas.

2. Conservation and Development Plan Requirements

(a) Step 1—Site Analysis Map

The applicant shall prepare a site analysis map that provides information about existing site conditions and context, and that comprehensively analyzes existing conditions both on the land proposed for the development site and on land within 500 feet of the site, and submit the site analysis map to the Planning and Development Director. It is the intent of this section that the information required to be presented in the site analysis map be produced primarily from existing sources, maps, and data.

(b) Step 2—Site Inspection

After receipt of the site analysis map, the Planning and Development Director shall schedule a site inspection of the land with the applicant. The applicant or the applicant's representative shall attend the site inspection with a Planning and Development Department staff member. The purpose of this site visit is to:

- (1)** Familiarize the staff with the existing site conditions and natural and historic features of the site;
- (2)** Identify potential site development issues; and
- (3)** Provide an opportunity to discuss site development concepts,

including the general layout of conservation areas and potential locations for proposed structures, utilities, streets, and other development features. Comments made by the staff during the site inspection shall be interpreted as being only suggestive. No official decision on the conservation and development plan shall be made during the site inspection.

(c) Step 3—Conservation and Development Areas Map

Based on the site analysis map and the information obtained during the site inspection, the applicant shall prepare a conservation and development areas map that depicts proposed primary conservation areas, secondary conservation areas, and development areas, in accordance with Section 5.11.6.E, Delineation of Conservation Areas and Development Areas.

(d) Step 4—Conservation and Development Plan

Based on the site analysis map, the information obtained during the site inspection, and the conservation and development areas map, the applicant shall prepare and submit to the Planning and Development Director a conservation and development plan. The conservation and development plan shall include the following:

- (1)** A site analysis map;
- (2)** A conservation and development areas map; and
- (3)** A preliminary site improvements plan, showing proposed site development, including utilities, streets, other development features, buffers (if applicable), and lot lines located in the proposed development area(s).

3. Review of Conservation and Development Plan

The Planning and Development Director shall review the conservation and development plan in accordance with the procedures and requirements of Section 5.11.6.D, Conservation Subdivision Standards, and Section 5.11.6.E, Delineation of Conservation Areas and Development Areas.

4. Review and Approval of Conservation Subdivision

Following review and approval or approval with conditions of the conservation and development plan by the Planning and Development Director, the application for a preliminary plat of the conservation subdivision shall be submitted and reviewed in accordance with Section 2.5.11, Preliminary Plat.

D. Conservation Subdivision Standards

A conservation subdivision shall comply with the following standards:

1. Location

Conservation subdivisions shall be limited to the AGR and R-3 districts.

2. Minimum Project Size

Conservations subdivisions shall be at least ten acres in area.

3. Required Conservation Area

The amount of the conservation area may vary in the AGR or R-3 districts in accordance with the dimensional standards in Section 3.5.2, [Agricultural/Rural \(AGR\)](#), and Section 3.3.2, Residential Single Family – 3 (R-3) as appropriate, but in no instance shall the conservation area occupy less than 50 percent of the total acreage of the conservation subdivision site.

4. **Maximum Residential Density**

A conservation subdivision shall be limited to the maximum density for a conservation subdivision in the district in which it is located.

5. **Dimensional Requirements**

Lots within a conservation subdivision are not required to meet the minimum dimensional requirements for the zoning district where located, but the conservation subdivision, as a whole, shall comply with the requirements in this section.

6. **Setbacks**

Lots in a conservation subdivision shall not be subject to minimum yard setback standards, except as required from streets, wetlands/surface waters, or other protected natural areas.

7. **Maximum Lot Coverage**

Conservation subdivisions shall ensure that development on a lot does not exceed a maximum lot coverage of 60 percent.

8. **Low Impact Design**

Conservation subdivisions shall incorporate low impact design features, in accordance with Section 6.2.7, Low Impact Design, where practicable.

E. **Delineation of Conservation Areas and Development Areas**

The conservation area and development area on the conservation and development areas map shall comply with the following standards:

1. **Primary Conservation Areas**

(a) **Features to be Preserved**

The following features shall be located and delineated on the conservation and development areas map, and shall be preserved in the following priority order as primary conservation areas:

- (1) Wetlands and wetland buffers;
- (2) Protected critical watershed areas;
- (3) Rivers and streams;
- (4) Riparian buffers;
- (5) Habitat utilized by endangered or threatened species; and
- (6) Steep slopes (slopes greater than 25 percent).

(b) **Amount to be Preserved**

All areas occupied by features comprising a primary conservation area shall be set aside and reserved for conservation purposes in accordance with the following standards:

(1) **Primary Conservation Area is Less than Minimum Required**

In cases where the geographic area occupied by all features comprising the primary conservation area is less than the minimum required conservation area, then all lands comprising the primary conservation area shall be set aside.

(2) Primary Conservation Area Exceeds the Minimum Required

- (i) In the event the geographic area of all features identified and prioritized as the primary conservation area results in a primary conservation area exceeding the conservation area requirement (for example, conservation of the first type of prioritized features constitute 47 percent of a site, and the next prioritized feature consists of five percent and the minimum required conservation area is 50 percent of the site area, the applicant may identify which portions of the features exceeding the 50 percent conservation area requirement will be designated for conversion to development area). To the maximum extent practicable, priority for retention shall be given to the highest quality portion of the features to be conserved.
- (ii) Development on lands made available for conversion to development area shall be in accordance with the standards in this Ordinance.

(c) Allowable Uses

Uses located within a primary conservation area shall be limited to:

- (1) Unpaved pedestrian trails, walkways, and boardwalks;
- (2) Above ground and below ground public utilities and associated easements, provided no feasible alternative exists;
- (3) Street or driveway crossings, provided such crossings do not violate this Ordinance, or other State or Federal laws; and
- (4) Stormwater management systems, where no practicable alternative exists.

2. Secondary Conservation Areas

(a) Features to be Preserved

In addition to primary conservation areas, the conservation and development areas map shall also identify secondary conservation areas, which shall be preserved in the following priority order:

- (1) Historic, archeological, and cultural resources;
- (2) Prime agricultural lands, including existing pastures (whether in use or otherwise);
- (3) Existing and mature woodland forests, natural fields, and meadows (especially those greater than five acres);
- (4) Scenic corridors and views; and
- (5) Areas that could serve to extend existing greenways, trails, parks, or recreation areas.

(b) Amount to be Preserved

All areas occupied by features comprising a secondary conservation area shall be set aside and reserved as a part of the conservation area in accordance with the following standards:

(1) Primary Conservation Area Occupies More than that Required

In the event that the geographic area set aside as the primary conservation area is more of the required conservation area, no

additional lands occupied by secondary conservation features shall be required to be included in the conservation area.

(2) Primary Conservation Area Occupies Less than that Required

In the event the geographic area set aside as the primary conservation area is less than the required conservation area, then lands containing secondary conservation features shall also be set aside as part of the conservation area in priority order.

(c) Allowable Uses

Uses located within a secondary conservation area shall be limited to:

- (1)** All uses allowed in a primary conservation area;
- (2)** Uses allowed in the Agricultural Use classification in Table 4.1.9, Principal Use Table;
- (3)** Individual or community water supply and septic systems;
- (4)** Stormwater management systems;
- (5)** Required drainage or other utility easements;
- (6)** Mitigation of development activities, including restoration of disturbed or degraded areas to enhance habitat and scenic value.

3. Ownership

(a) Landowner or Association

A conservation area shall be owned jointly or in common by the owners of the development or through a recognized homeowners or property owners association, which shall be established in accordance with Section 7.3, Homeowners' or Property Owners' Association.

(b) Nonprofit Organization

The landowners may decide to convey a conservation area to a nonprofit organization such as a land trust or land conservancy for management and maintenance if the City is provided adequate assurance the area will be properly managed and maintained.

(c) Dedicated to City or Other Public Agency

In some cases, certain lands designated as conservation areas, such as greenways, may be dedicated to the City, a nonprofit organization, or other public agency during the development review process, at the landowner's discretion. If offered by the landowner, the City Council shall determine whether that land is appropriate for dedication to the City or other public agency.

4. Development Areas

After identifying the primary and secondary conservation areas, the development area shall be identified. It is the area within which development may occur, and shall include the area within the site where:

- (a)** Any clearing or grading activities will take place;
- (b)** Ingress and egress will be located;
- (c)** Individual or community wells and septic systems may be located (if not located within the secondary conservation area);
- (d)** Streets, utilities, and other similar structures will be located; and
- (e)** All allowable uses may be located.

5.12. SUSTAINABILITY INCENTIVES

5.12.1. PURPOSE AND INTENT¹⁵⁶

The purpose of this section is to promote sustainable development practices as a means of protecting and conserving natural resources and ensuring a high quality of life for residents. More specifically, they are intended to provide incentives that ensure new development conserves energy, conserves water, and promotes a healthy landscape.

5.12.2. APPLICABILITY

The incentives included in this section are available to all new development in the City.

5.12.3. PROCEDURE

- A.** Development seeking to use incentives shall include a written request with the development application that demonstrates how compliance with these standards will be achieved.
- B.** Development may include a sufficient number of sustainable development practices to take advantage of more than one type of incentive, but in no instance shall the amount of an incentive be increased or decreased (as appropriate) beyond the maximum listed in this section.
- C.** Review for compliance with this section, and granting of requests in accordance with this section shall occur during review of a site plan, group development plan, preliminary plat, PD master plan, use permit, or building permit, as appropriate. The decision-making body responsible for review of the development application shall also be responsible for the review of sustainable development incentive request.
- D.** The incentive shall be based on the number of sustainable development practices provided, in accordance with Table 5.12.3, Sustainable Development Incentives, and Section 5.12.4, Sustainable Development Features. To obtain the right to a particular incentive, development shall provide the minimum number of associated sustainable development features from schedule A and schedule B in Table 5.12.3. An applicant may select the kinds of sustainable development features provided to comply with Table 5.12.3.
- E.** The ability to take advantage of a sustainable development incentive requires new development to include sustainability features from both schedule A and schedule B in Table 5.12.3. The applicant may choose which features to include as long as the minimum number of features from each of the schedules is provided. Generally, items in schedule A are typically to be more expensive than items in Schedule B, though this will depend upon the proposed development, site conditions, type of uses proposed, and many other features.

TABLE 5.12.3: SUSTAINABLE DEVELOPMENT INCENTIVES

TYPE OF INCENTIVE	MINIMUM NUMBER OF SUSTAINABLE DEVELOPMENT FEATURES TO BE PROVIDED	
	FROM	FROM

¹⁵⁶ These standards are described on Pages 2-54 and 2-55 of the Code Assessment. They consist of a series of incentives (such as additional density or building height) that are made available to applicants who choose to include sustainable development practices in development.

	SCHEDULE A	SCHEDULE B
A density bonus of up to two additional dwelling units per acre beyond the maximum allowed in the base zoning district in the Core City or one additional dwelling unit per acre outside the Core City	3	4
An increase in the maximum allowable height by up to two stories or 20 feet beyond the maximum allowed in the zoning district in the Core City	2	3
An increase in the maximum allowable height by up to one story or 10 feet beyond the maximum allowed in the zoning district outside the Core City	2	3
A reduction from the minimum parking space requirements by 10 percent	2	2
An increase in the maximum allowable sign area or maximum height for wall or freestanding signs by 10 percent	1	3

5.12.4. MENU OF SUSTAINABLE DEVELOPMENT FEATURES

One or more of the sustainable development features in Table 5.12.4, Sustainable Development Features, may be offered by an applicant for proposed development in accordance with Table 5.12.3, Sustainable Development Incentives.

TABLE 5.12.4: SUSTAINABLE DEVELOPMENT FEATURES

SCHEDULE	TYPE OF FEATURE	DOCUMENTATION OF COMPLIANCE
ENERGY CONSERVATION		
A	Use of solar photovoltaic panels, geothermal, or small wind energy facilities to provide up to 50 percent of the development’s energy needs	Indication on site plan and proof from the local energy provider
AA [1]	Use of solar photovoltaic panels, geothermal, or small wind energy facilities to provide up to 75 percent of the development’s energy needs	
AAA [2]	Use of solar photovoltaic panels, geothermal, or small wind energy facilities to provide up to 100 percent of the development’s energy needs	
A	Use of only solar or tankless water heating systems throughout the structure	Inclusion on construction drawings
A	Use of a white roof or roofing materials with minimum reflectivity rating of 60 percent or more	Provision of materials sample and manufacturer’s certification statement (statement not required for white roofs)
BB [1]	Use of central air conditioners that are Energy Star qualified	Provision of manufacturer’s certification statement
B	Provision of skylights in an amount necessary to ensure natural lighting is provided to at least 15 percent of the habitable rooms in the structure	Indication on site plans
B	Roof eaves or overhangs of three feet or more on southern or western elevations	
B	Structure design that can accommodate the installation and operation of solar photovoltaic panels or solar thermal heating devices (including appropriate wiring and water transport systems)	Inclusion on construction drawings

Chapter 5: Development Standards

Section 5.12 Sustainability Incentives

Subsection 5.12.4 Menu of Sustainable Development Features

TABLE 5.12.4: SUSTAINABLE DEVELOPMENT FEATURES

SCHEDULE	TYPE OF FEATURE	DOCUMENTATION OF COMPLIANCE
B	Inclusion of shade features (e.g., awnings, louvers, shutters, etc.) to shade all windows and doors on the southern building facade	Indication on site plans
B	Configuration of new buildings with one axis at least 1.5 times longer than the other, and the long axis oriented in an east-west configuration for solar access	
B	30 percent of the building lots on a plat are oriented for unobstructed solar access	
LEED CERTIFICATION		
AAA [2]	Construction of the principal structure to meet or exceed LEED Platinum certification standards	Provision of Green Building Certification Institute's verification of project compliance (may be provided within one year following occupancy)
AA [1]	Construction of the principal structure to meet or exceed LEED Gold certification standards	
BBB [2]	Construction of the principal structure to meet or exceed LEED Silver certification standards	
BB [1]	Construction of the principal structure to meet or exceed LEED Bronze certification standards	
WATER CONSERVATION AND QUALITY PROTECTION		
AAA [2]	Configuration of the principal structure's roof so that at least 75 percent of the roof is a "green" roof intended to capture and hold rain water	Indication on site plan
AA [1]	Configuration of the principal structure's roof so that at least 50 percent of the roof is a "green" roof intended to capture and hold rain water	
A	Inclusion of rain water capture and re-use devices such as cisterns, rain filters, and underground storage basins with a minimum storage capacity of 500 gallons	Inclusion on construction drawings
A	Provision of rain gardens or other appropriate stormwater infiltration system(s) of at least 500 square feet in area	Indication on site plan
A	Provision of open space set-asides at a rate 200 percent or more beyond the minimum required	
B	Provision of rain gardens or other appropriate stormwater infiltration BMP systems of at least 100 square feet in area	
B	Removal of all lawn or turf in favor of living ground cover or mulch	
B	Use of xeriscape landscaping techniques without irrigation	
B	Provision of 150-foot undisturbed buffers adjacent to/surrounding all wetlands or surface waters	
B	Use of permeable surfacing on 50 percent or more of the vehicular use area	
BUILDING CONFIGURATION		
A	Construction of principle structure in accordance with Barrier Free Design Standards (ANSI A1171.1)	Inclusion on construction drawings
A	Up to 50 percent of the residential units are constructed in accordance with universal design principles	
AA [1]	All residential units are constructed in accordance with universal design principles	
A	Construction of the principal structure to a design wind speed	Signed attestation from a

TABLE 5.12.4: SUSTAINABLE DEVELOPMENT FEATURES

SCHEDULE	TYPE OF FEATURE	DOCUMENTATION OF COMPLIANCE
	standard of 150 mph	qualified NC licensed engineer
A	Inclusion of underground parking or parking structures sufficient to accommodate 51 percent or more of the off-street parking requirements	Indication on site plan
B	Provision of on-site transit facilities (e.g., designated park-and-ride parking spaces, bus shelters, or similar features)	
B	Inclusion of showering and dressing facilities in nonresidential developments for employees using alternative forms of transportation	Inclusion on construction drawings
B	Provision of at least one enclosed recycling station per building suitable for storage and collection of recyclable generated on-site	Indication on site plan
B	Provision of an indoor atrium with plantings and seating areas that is open to the general public	
SITE CONFIGURATION		
A	Providing double the amount of required open space	Indication on site plan
A	Dedicating the land necessary to provide a greenway link across the development	
AA [1]	Dedicating land and constructing a greenway across the development	
B	Providing space and facilities for a community garden	
B	Providing a public gathering area with a plaza, fountain, and shaded outdoor seating	

NOTES:

[1] Credited as provision of two schedule features

[2] Credited as provision of three schedule features

5.12.5. FAILURE TO INSTALL OR MAINTAIN SUSTAINABLE DEVELOPMENT PRACTICES

The failure to install or maintain approved sustainable development features is a violation of this Ordinance, shall render the subject development nonconforming, and may result in revocation of the development permit or approvals.

CHAPTER 6: ENVIRONMENTAL STANDARDS

6.1.	Public Tree Protection	6-1
6.1.1.	Applicability.....	6-1
6.1.2.	Tree Maintenance And Protection.....	6-1
6.1.3.	Tree Planting, Pruning and Removal.....	6-2
6.1.4.	Guidelines and Standards for Tree Planting, Pruning and Removal	6-2
6.1.5.	Appeals.....	6-3
6.2.	Watershed Protection.....	6-4
6.2.1.	Purpose and Intent	6-4
6.2.2.	Applicability.....	6-4
6.2.3.	Exemptions	6-4
6.2.4.	How to Use This Section.....	6-6
6.2.5.	Incorporation of Watershed Map	6-6
6.2.6.	Protection of Fragile Areas.....	6-7
6.2.7.	Low Impact Design	6-15
6.2.8.	General Standards and Restrictions	6-16
6.2.9.	General Watershed Area and Watershed Critical Area Established	6-23
6.2.10.	Standards Applicable in the GWA	6-25
6.2.11.	Standards Applicable in the WCA.....	6-26
6.2.12.	Individual Water Supply Watersheds	6-28
6.2.13.	Watershed Accounting	6-30
6.3.	Soil Erosion and Sedimentation.....	6-32
6.3.1.	Applicability.....	6-32
6.3.2.	Soil Erosion and Sedimentation Control Plan.....	6-32
6.3.3.	Basic Control Objectives	6-35
6.3.4.	Mandatory Standards for Land-Disturbing Activity.....	6-36
6.3.5.	Design and Performance Standards	6-37
6.3.6.	Stormwater Outlet Protection.....	6-38
6.3.7.	Borrow and Waste Areas	6-39
6.3.8.	Access and Haul Roads.....	6-39
6.3.9.	Operations in Lakes or Natural Watercourses	6-40
6.3.10.	Responsibility for Maintenance.....	6-40
6.3.11.	Additional Measures	6-40
6.3.12.	Existing Uncovered Areas	6-40
6.3.13.	Restoration after Non-Compliance	6-41
6.4.	Flood Damage Prevention	6-42
6.4.1.	General.....	6-42
6.4.2.	Application, Permit, and Certification Requirements	6-42
6.4.3.	Provisions for Flood Hazard Reduction	6-44

Commentary

KEY CHANGES FROM CURRENT ORDINANCE:

- This Chapter consolidates the various environmental standards with the City's public tree standards. There are no substantive changes in these provisions.
- The public tree certificate procedure provisions are located in Chapter 2: Administration.
- The land-disturbance permit procedure provisions are located in Chapter 2: Administration.
- The floodplain development permit procedure provisions are located in Chapter 2: Administration.

CHAPTER 6: ENVIRONMENTAL STANDARDS

6.1. PUBLIC TREE PROTECTION¹⁵⁷

6.1.1. APPLICABILITY

A. General

The requirements of this section shall apply only to City-owned or controlled land (land leased by the City, or land the City controls through public rights-of-way and easements for public purposes such as streets, the construction and maintenance of public utilities, the provision of pedestrian access across private land, the development and maintenance of greenways and open space, or the protection of water quality).

B. Rights of City

The City and the Urban Forestry Committee (UFC), as an agent of the City, is authorized to plant, prune, maintain and remove any tree, plant, or shrub on City-owned or controlled land if it is determined necessary to ensure the public health and safety, to preserve and enhance the symmetry and beauty of public land, or to protect public improvements and utilities.

6.1.2. TREE MAINTENANCE AND PROTECTION

A. Removal or Damage to Tree Without Prior Authorization

1. General

It is a violation of this Ordinance for a person to take any of the following actions to a tree on City-owned or controlled land without prior authorization from the UFC:

- (a) Remove a tree;
- (b) Attach a rope, wire, nail, or sign to a tree;
- (c) Apply a liquid or solid substance to a tree that is harmful and could damage or destroy the tree; or
- (d) Deposit, place, store or maintain a stone, brick, sand, concrete or other impervious materials which may impede the free passage of water, air, or fertilizer to the roots of a tree.

2. Tree Topping

- (a) It is a violation of this Ordinance for any person or City department (including a utility), to top a tree on City-owned or controlled land without a Public Tree Certificate in accordance with Section 2.5.12, Public Tree [Certificate](#). For the purposes of this section, topping is defined as the severe pruning of tree limbs larger than three inches in diameter within the tree's crown to such a degree it removes the normal canopy of or disfigures the tree.
- (b) The topping of trees shall be approved only in cases where the tree is severely damaged by storm or other natural cause or where the UFC determines other pruning practices impractical (such as the pruning of trees directly under overhead utility lines).

B. Removal of Damaged or Infested Trees

¹⁵⁷ As described on Page 3-17 of the Code Assessment, this section carries forward the standards in Section 9-7-31 through 35 from the current ordinance with no substantive modifications.

The UFC may cause to be removed a tree or part of a tree that is in an unsafe condition, significantly damaged due to severe weather or other natural conditions, or is infested with disease, injurious fungus, insects, or other pests.

C. Protection During Construction

A tree on City-owned or controlled land shall be protected during any construction or excavation consistent with the City's *Guidelines and Standard Practices for Trees*.

6.1.3. TREE PLANTING, PRUNING AND REMOVAL

A. Public Tree Certificate Required

Unless exempted in accordance with subsection (B) below, a person or City department seeking to plant, prune, or remove trees on City-owned or controlled land shall receive approval of a public tree certificate in accordance with Section 2.5.12, Public Tree [Certificate](#). In reviewing the application the UFC shall ensure that the intended activities meet the expectations of the urban forestry program and are consistent with the City's adopted *Guidelines and Standard Practices for Trees*.

B. Exemptions

The following development is exempt from the requirement to receive a public tree certificate, as long as the tree pruning and removal is consistent with the City's *Guidelines and Standard Practices for Trees*.

1. Public and private utilities (water, sewer, electrical, gas, telecommunications, cable, etc.) in public rights-of-way or in dedicated utility easements on City-owned or controlled land that they maintain
2. City departments that prune trees to maintain traffic visibility, pedestrian activity, and other similar public safety matters.
3. Exemptions specified in the City's *Guidelines and Standard Practices for Trees*, and exemptions that are deemed by the UFC to be necessary and practical for ensuring the public health, safety, and general welfare.

C. Pruning and Removal Allowed

1. The UFC shall allow pruning or removal of trees on City-owned or controlled land in accordance with the City's adopted *Guidelines and Standard Practices for Trees* only when:
 - (a) There is significant tree damage resulting from severe weather;
 - (b) Fire or other emergency conditions;
 - (c) Where immediate removal of such tree(s) is necessary to protect the health and safety of the public, restore order, or remove obstructions blocking access to streets and land; or
 - (d) Where otherwise authorized in the *Guidelines and Standard Practices for Trees*
2. Authorization to prune or remove trees on City-owned or controlled land shall be implemented for a specified period of time or for specified emergency situations as stated in the City's standards and practices.

6.1.4. GUIDELINES AND STANDARDS FOR TREE PLANTING, PRUNING AND REMOVAL

To implement the requirements of this section, the UFC shall develop, adopt and maintain guidelines and specifications for tree plantings, and standards and practices for tree conservation

and maintenance. The guidelines and standards shall, at a minimum, include provisions concerning certificates, plantings, spacing, care, maintenance, and removal. All tree planting, pruning and removal on City-owned or controlled land shall be consistent with the City's standards.

6.1.5. APPEALS

An appeal to a denial by the UFC may be taken by the applicant within 30 days of the decision by filing a notice of appeal with the BOA in accordance with the procedures of Section 2.4.2, Appeal.

6.2. WATERSHED PROTECTION¹⁵⁸

6.2.1. PURPOSE AND INTENT

These watershed protection standards are established in accordance with the requirements in the North Carolina General Statutes Sections 143-214.5 through 143-214.7 related to water supply watershed protection. They are intended to regulate residential density and impervious surface cover in water supply watershed drainage areas to control non-point source water pollution and protect drinking water quality.

6.2.2. APPLICABILITY

A. Authority

The City Council is authorized to adopt these provisions in accordance with North Carolina General Statutes Sections 143-214.5, 143-214.6 and 143-214.7, Section 160-A-314, the rules promulgated by the North Carolina Environmental Management Commission, and all other relevant laws of the State of North Carolina.

B. Location

1. The standards in this section apply to all land within the City of High Point's zoning jurisdiction, including both water supply watersheds and non-water supply watersheds.
2. National Pollutant Discharge Elimination System (NPDES) Phase II stormwater regulations also apply jurisdiction-wide and are overlaid by districts that regulate development in water supply watersheds, including the separate General Watershed Areas (GWA) and Watershed Critical Areas (WCA) of Oak Hollow Lake, City Lake, Oakdale Reservoir, Randleman Lake, and the Uwharrie (Lake Reese) and Lake Thom-A-Lex watersheds.

C. Activities Covered

1. Except for the activities in Section 6.2.3, Exemptions, the standards in this section apply to all land disturbance, paving, gravel placement, and construction of buildings or other structures in the City's planning jurisdiction.
2. All activities subject to these provisions shall comply with the procedural, design, and construction requirements of this section.

6.2.3. EXEMPTIONS

A. General

The following activities are exempt from the requirements of this section; however, this exemption shall not be construed to permit uses prohibited in the underlying zoning district, or uses prohibited by this section.

1. Development on a lot of record less than 20,000 square feet in area existing on July 1, 1993 in all watersheds except in the Randleman Lake Watershed.
2. Development on a lot of record less than 20,000 square feet in area existing on

¹⁵⁸ As described on Page 3-17 of the Code Assessment, this section carries forward the standards in Section 9-7-1 through 9-7-5 of the current ordinance with minor formatting changes for added clarity but with no other substantive changes. Based on input from City staff, the provisions in Sections 9-7-6 through 9-7-10 of the current ordinance are included here instead of relocated to the overlay district standards in Chapter 3: Zoning Districts as described in the Code Assessment.

January 1, 2000 in the Randleman Lake Watershed.

3. Development on a lot of record less than 40,000 square feet in area existing on January 1, 2000 in the Downtown Area, which is shown on the High Point Watershed Map.
4. Development of one single-family dwelling and its accessory structure(s) on:
 - (a) A lot located outside (WCA) Tier 1 within the Oak Hollow Lake, City Lake, and Oakdale Reservoir Watersheds; or
 - (b) A lot located outside (WCA) Tiers 1 and 2 within the Randleman Lake Watershed.
5. Development of a duplex dwelling and its accessory structure(s) on a lot in the Oak Hollow Lake, City Lake, and Oakdale Reservoir Watersheds provided a sedimentation and erosion control plan is not required and it is located outside (WCA) Tiers 1 and 2.
6. Development on a lot in a non-water supply watershed that disturbs less than an acre.
7. Replacement of an existing built-upon area on a lot developed with a like or lesser amount of new built-upon area at the same location, or at a different location on the same lot if the Engineering Services Director determines that equal or improved water quality will result.
8. Development existing on July 1, 1993 in all water supply watersheds except Randleman Lake Watershed where the effective date is January 1, 2000.
9. Development existing in all non-water supply watersheds, as of July 1, 2007.

B. Exemption to the Plan Submission Requirements of This Section

The development of a small accessory building, structure, or small amount of other built-upon area on a lot is exempt from the plan submission requirements of this section, provided:

1. The development is nonresidential or multi-family;
2. The total built-upon area is no greater than 600 square feet;
3. Less than one acre of land is disturbed;
4. The built-upon area or land disturbance is not within a required surface water buffer;
5. The exemption is not proposed on a lot subject to a watershed development plan on file with the Planning and Development Department; and
6. The exemption is applied to a lot no more than once after July 1, 1993, in all watersheds except Randleman Lake Watershed, or after January 1, 2000 in the Randleman Lake Watershed.

C. Compliance with Previously Approved Plans

Any restrictions upon building location, drainageways, pavement, or other built-upon area, percentage of impervious surface area, location of built-upon area, or any other matter appearing on any previously approved watershed development plan covering the subject land shall be complied with unless and until replaced by an approved revised watershed development plan meeting the requirements of this section.

D. Activities Regulated by Other Governmental Agencies

1. Agriculture

The Guilford Soil and Water Conservation District is the designated agency responsible for implementing the provisions of this section pertaining to agriculture.

2. Silviculture

The City of High Point is the designated management agency responsible for implementing the provisions of this section pertaining to silviculture activities.

3. Transportation

The NCDOT shall comply with the practices outlined in its document entitled "*Best Management Practices for the Protection of Surface Waters*," which is incorporated herein by reference.

4. Hazardous Materials

- (a) The City of High Point Fire Marshall and the Guilford County Local Emergency Planning Committee are the designated management agencies responsible for implementing the provisions of this section pertaining to hazardous materials.
- (b) An inventory of all hazardous materials used and stored in the watershed shall be maintained.
- (c) A spill/failure containment plan and appropriate safeguards against contamination are required.
- (d) Waste minimization and appropriate recycling of materials is encouraged.
- (e) Land in the WSO where oil or other hazardous substances are stored shall comply with the following requirements:
 - (1) The Superfund Amendments and Reauthorization Act (SARA) Section 302 Extremely Hazardous Substances (42 USC 11000 et seq.); and
 - (2) Section 311 of the Clean Water Act (CWA), as amended (33 USC 1251 et seq.).

6.2.4. HOW TO USE THIS SECTION

The following general steps should be followed to determine the applicability of the watershed protection requirements to a specific parcel of land:

- A.** Identify the location of the land on the Watershed Map;
- B.** Determine if the land, development, or activity is exempted (see Section 6.2.3, Exemptions);
- C.** Identify fragile areas or development limitations (i.e., surface waters, steep slopes, etc.) on the land;
- D.** Classify the development as high or low density as established in Table 6.2.6.C, Minimum Surface Water Buffer Width Requirements;
- E.** Based on the development density or built-upon area, determine the method of stormwater control required and surface water buffers; and
- F.** Comply with the requirements of the *High Point Stormwater Best Management Practices Design Manual*.

6.2.5. INCORPORATION OF WATERSHED MAP

A. Incorporation of Watershed Map

- 1.** This subsection incorporates by reference the High Point Watershed Map, dated July 1, 1993, and any amendments, showing the WSO, Downtown Area, the Randleman Lake Credit Area, the Richland Creek Sub-basin and the Business 85/Riverdale Sub-basin within the City's existing and future jurisdiction (planning jurisdiction) of the following water supply watersheds:

- (a) Oak Hollow Lake, City Lake, Randleman Lake, and Oakdale Reservoir (Jamestown), which are classified as WS-IV Critical Water Supply Watersheds by the North Carolina Environmental Management Commission (EMC);
 - (b) Uwharrie (Lake Reese) and Lake-Thom-A-Lex, which are classified as WS-III Water Supply Watersheds by the EMC.
2. The remaining part of the jurisdiction is the non-water supply watershed that is subject to the National Pollutant Discharge Elimination System Phase II requirements, which apply jurisdiction-wide.

B. Incorporation of the WSO District on the Official Zoning Map

The boundaries of the WSO are adopted on the Official Zoning Map and incorporated herein by reference.

6.2.6. PROTECTION OF FRAGILE AREAS

A. Land Disturbance Minimization

1. Sedimentation and Erosion Control

A sedimentation and erosion control plan shall be required in accordance with Section 6.3 of this Ordinance.

2. Development on the Best Soils and Terrain

Development on the best soils and terrain of a site is encouraged. Hydric soils and those soils that are highly erodible should be avoided.

3. Low Impact Design

Low Impact Design in accordance with Section 6.2.7, Low Impact Design, is encouraged.

4. Conservation Subdivision Development

The location of development on soils and terrain most suited to protecting water quality is greatly encouraged by conservation subdivision (see Section 5.11.6, Conservation Subdivision).

5. Density Shifting

The location of development on soils and terrain most suited to protecting the water quality of water supply reservoirs is encouraged (see Section 6.2.11.G, Density Shifting).

B. Floodplain Protection

Development in special flood hazard areas shall comply with the requirements of Section 6.4, Flood Damage Prevention.

C. Surface Water Buffers

1. Applicability

- (a) This subsection applies to all development and activities with the exception of activities conducted under the authority of North Carolina, the United States, multiple jurisdictions or local units of government, and forest harvesting and agricultural activities.

- (b) The NC Division of Water Quality shall administer the requirements of Rule 15A NCAC 02B .0250 and .0295 (Randleman Lake Water Supply Watershed: Protection and Maintenance of Existing Riparian Buffers and Mitigation

Program Requirements for Protection and Maintenance of Riparian Buffers, respectively) for these jurisdictions and activities.

2. Perennial and Intermittent Surface Water Buffers Required

- (a) A surface water buffer shall be maintained with a minimum width as specified in Table 6.2.3.C, Minimum Surface Water Buffer Width Requirements, measured landward from the normal water level for lakes and ponds and from the top of the bank of each side for perennial and intermittent streams.
- (b) Wetlands adjacent to surface waters or within 50 feet of surface waters shall be considered as part of the surface water buffer but are regulated pursuant to 15A NCAC 02H .0506.
- (c) These surface waters are indicated on any of the following maps or if there is site-specific evidence that indicates the presence of waters not shown on any of these maps:
 - (1) The most recent version of either the United States Geological Survey 1:24,000 scale (7.5 minute quadrangle) topographic maps; or
 - (2) The hard copy Soil Survey maps developed by the USDA Natural Resource Conservation Service; or
 - (3) A map approved by the Geographic Information Coordinating Council and by the NC Environmental Management Commission.
- (d) Where the specific origination point of a perennial or an intermittent stream is in question, parties subject to this section shall request the Engineering Services Director to make a determination in accordance with Rule 15A NCAC 2B 0250(4)(b).

6.2.6.C: MINIMUM SURFACE WATER BUFFER WIDTH REQUIREMENTS

WATER CLASSIFICATION	MINIMUM BUFFER WIDTH				
	LOW DENSITY DEVELOPMENT [1]		HIGH DENSITY DEVELOPMENT [2]		
	ZONE 1 (FEET)	ZONE 2 (FEET)	ZONE 1 (FEET)	ZONE 2 (FEET)	ZONE 3 (FEET)
Perennial Surface Waters (Streams, Lakes and Ponds)	50		100		
	30	20 [3]	30	20 [3]	50
Intermittent Surface Waters (Streams, Lakes and Ponds)	50		50		
	30	20 [3]	30	20 [3]	n/a

NOTES:

[1] Low Density Development is development that is equal to or less than two dwelling units per acre or 24 percent built-upon area in all watersheds except Randleman Lake. Low Density Development in the Randleman Lake watershed is development that is equal to or less than one dwelling unit per acre or 12 percent built-upon area

[2] High Density Development is development that is greater than two dwelling units per acre or 24

6.2.6.C: MINIMUM SURFACE WATER BUFFER WIDTH REQUIREMENTS

WATER CLASSIFICATION	MINIMUM BUFFER WIDTH	
	LOW DENSITY DEVELOPMENT [1]	HIGH DENSITY DEVELOPMENT [2]
percent built-upon area in all watersheds except Randleman Lake. High density development in the Randleman Lake watershed is development that is greater than one dwelling unit per acre or 12 percent built-upon area [3] Additional buffer requirements apply where surface waters abut moderate to steep slopes in accordance with Section 6.2.6.D, Slope and Buffer Protection		

3. Exemption Based on On-site Determination

- (a) When a landowner or other affected party believes that the maps have inaccurately depicted surface waters, the landowner or affected party may submit a stream determination request to the Engineering Services Director.
- (b) Upon request, the Engineering Services Director shall make an on-site determination.
- (c) The Engineering Services Director may also accept the results of site assessments made by other qualified parties.
- (d) Any disputes over on-site determinations shall be referred to the Director of the N.C. Division of Water Quality (DWQ), in writing.
- (e) A determination by the Director of the DWQ as to the accuracy or application of the maps is subject to review as provided in Articles 3 and 4 of N.C.G.S. 150B. Surface waters that appear on the maps shall not be subject to these buffer requirements if a site evaluation reveals any of the following cases:
 - (1) Ditches and manmade conveyances, to include manmade stormwater conveyances, other than modified natural streams, unless the ditch or manmade conveyance delivers untreated stormwater runoff from an adjacent source directly to an intermittent or perennial stream;
 - (2) Areas mapped as intermittent streams, perennial streams, lakes, ponds or estuaries on the most recent versions of the United States Geological Survey 1:24,000 scale (7.5 minute quadrangle) topographic maps, hard-copy soil survey maps, or other EMC approved stream maps where no perennial water body, intermittent water body, lake, pond or estuary actually exists on the ground;
 - (3) Ephemeral streams; or
 - (4) Ponds and lakes created for animal watering, irrigation or other agricultural uses that are not part of a natural drainage way that is classified in accordance with 15A NCAC 02B .0100. Ponds are part of the natural drainage way when they are hydrologically connected (i.e., the pond is fed by an intermittent or perennial stream) or when they have a direct discharge point to an intermittent or perennial stream.

4. Exemptions for Existing Development and Activities

Existing development that was present within a surface water buffer on the effective date the surface water buffer requirements were established is allowed to

continue and is exempt from the requirements of Section 6.2.6.C, Surface Water Buffers, to the extent specified below:

- (a) The exemption of existing development and uses includes but is not limited to existing agriculture, buildings, facilities, ground mounted equipment, utility lines, on-site sanitary sewage systems, maintained lawns and uses any of which involve either specific, periodic management of vegetation or displacement of vegetation by structures or regular activity.
- (b) Only the portion of the buffer that contains the footprint of the existing development is exempt.
- (c) Activities necessary to maintain existing development are allowed provided the site remains similarly vegetated, no impervious surface is added within Zone 1 or 2 of the surface water buffer where it did not previously exist, and diffuse flow is maintained.
- (d) Grading and revegetating of Zone 2 is allowed for existing development upon review and approval of the TRC provided the health of the vegetation in Zone 1 is not compromised, the ground is stabilized, and the existing diffuse flow is maintained.
- (e) In addition, projects or development specified in 15A NCAC 02B .250 (6)(b) may be determined to be exempted in accordance with the requirements of that section.
- (f) The exemption to the buffer requirements shall cease when the existing development or use changes to another permissible or non-exempt use. Any new development or use shall be subject to the surface water requirements.

5. New Development and Activities

N.C. Administrative Code Section 15A NCAC 02B .0250(9) (as provided in the *Development Guidebook*) lists potential new development and activities within the buffer and categorizes them as exempt, allowable, or allowable with mitigation. All development and activities not categorized as exempt, allowable or allowable with mitigation are considered prohibited and may not proceed within the surface water buffer or outside the buffer if the development or activity would impact the buffer, unless a variance is granted in accordance with Section 2.4.17, Watershed Variance. Watershed development plan approval, as provided for in Section 6.2.6.C.9, Watershed Plan Approval, is required for all new development and activity that is not prohibited. Such an approved plan shall constitute written authorization for uses that are allowable or allowable with mitigation and a statement to that effect shall be included on the approved plan. The requirements for each category are as follows:

(a) Exempt Development

Development and activities designated as exempt are permissible without authorization by the TRC provided that they adhere to the limitations of the activity as defined in the *Development Guidebook*. In addition, exempt development and activities shall be designed, constructed, and maintained to minimize soil disturbance and to provide the maximum water quality protection practicable, including construction, monitoring and maintenance activities.

(b) Allowable Development

Development and activities designated as allowable may proceed provided that there are no practical alternatives to the requested development or activity in accordance with Section 6.2.6.C.10, Determination of No Practical

Alternatives. This includes construction, monitoring, and maintenance activities.

(c) Development Allowable with Mitigation

Development and activities designated as allowable with mitigation may proceed provided that there are no practical alternatives to the requested development or activity in accordance with Section 6.2.6.C.10, Determination of No Practical Alternatives, and an appropriate mitigation strategy is approved in accordance with Section 6.2.6.C.11, Mitigation.

6. Surface Water Buffer Zones

(a) Location

Required surface water buffers consist of two or three zones depending on the density of development and stream classification, as shown in Table 6.2.6.C, Minimum Surface Water Buffer Width Requirements.

(1) Zone 1

Zone 1 shall be the first 30 feet landward from the top of the stream bank normal water level of other water bodies on all sides of the surface water measured horizontally on a line perpendicular to a vertical line marking the top of the bank.

(2) Zone 2

Zone 2 shall begin at the outer edge of Zone 1 and extend landward a minimum of 20 feet as measured horizontally on a line perpendicular to the surface water. The combined width of Zones 1 and 2 shall be 50 feet on all sides of the surface water.

(3) Zone 3

Zone 3 shall begin at the outer edge of Zone 2 and extend landward 50 feet as measured horizontally on a line perpendicular to the surface water.

(4) Additional Buffers

- (i)** Refer to Section 6.2.6.D, Slope and Buffer Protection, for additional surface water buffers to protect steep slopes bordering streams.
- (ii)** Such additional buffers would be added to Zone 2.

(b) Standards

Zones 1 and 2 shall be undisturbed except as allowed in this section. Zone 3 can be disturbed but must remain vegetated in accordance with these standards.

(1) Development in Zones 1 and 2

- (i)** New development or land disturbing activities shall not be allowed in Zones 1 or 2 of the surface water buffer, except as allowed in NC Administrative Code Section 15A NCAC 02B .0250(9) (as provided in the *Development Guidebook*).
- (ii)** Activities that cross the stream shall be constructed as close to 90 degrees relative to the stream as practicable.
- (iii)** Allowed activities shall minimize built-upon surface area, divert runoff away from surface waters and protect water quality to the maximum extent practical through the use of

Best Management Practices.

- (iv) Grading and revegetating for activities in Zone 2 is allowed providing that the health of the vegetation in Zone 1 is not compromised.

(2) Diffuse Flow Requirements in Zones 1 and 2

The following diffuse flow requirements must be met:

- (i) Diffuse flow must be maintained to the maximum extent practical through dispersing concentrated flow and re-establishment of vegetation to maintain the effectiveness of the surface water buffer.
- (ii) Concentrated runoff from the new ditches or manmade conveyances must be dispersed into diffuse flow before the runoff enters Zone 2 of the surface water buffer. Existing ditches and manmade conveyances are exempt from this requirement; however, care shall be taken to minimize pollutant loading through these existing ditches and manmade conveyances from fertilizer application or erosion.
- (iii) Periodic corrective action to restore diffuse flow shall be taken by the landowner if necessary to impede the formation of erosion gullies that allow concentrated flow to bypass treatment in the surface water buffer.
- (iv) Diffuse flow of runoff shall be maintained in the riparian buffer by dispersing concentrated flow and reestablishing vegetation in new ditches.
- (v) Concentrated runoff from new ditches or manmade conveyances shall be converted to diffuse flow at non-erosive velocities before the runoff enters Zone 2 of the riparian buffer.
- (vi) Periodic corrective action to restore diffuse flow in new ditches or manmade conveyances shall be taken if necessary to impede the formation of erosion gullies; and
- (vii) No new stormwater conveyances are allowed through the buffers except for those specified in the *Development Guidebook*, addressing stormwater management ponds, drainage ditches, roadside ditches and stormwater conveyances.

(3) Zone 3

- (i) Zone 3 is required for all high density development.
- (ii) Zone 3 may be disturbed, but it must remain vegetated.
- (iii) New development shall not be allowed in Zone 3 of the surface water buffer, except those developments and activities allowed in Zones 1 and 2 where the TRC makes a no practical alternatives determination.
- (iv) Allowed activities shall minimize built-upon surface area, divert runoff away from surface waters and protect water quality to the maximum extent practical through the use of best management practices.

7. Channelization

Channelization of perennial or intermittent streams shall be prohibited, except for access crossings, erosion control devices and runoff control devices.

8. New Lots in the Surface Water Buffer

To the extent practical, no new single-family or duplex residential lots shall be created which are entirely or partly contained within the surface water buffer.

9. Watershed Plan Approval

The TRC shall approve a watershed development plan only if the plan proposes to avoid impacts to surface water buffers defined in Section 6.2.6.C, Surface Water Buffers, or where the plan proposes to impact such buffers, it demonstrates that the applicant has done the following, as applicable:

- (a) Determined the activity is exempt from requirements of this section;
- (b) Received a determination of no practical alternatives for activities in Zone 3 on the approved watershed development plan from the TRC pursuant to Section 6.2.6.C.10, Determination of No Practical Alternatives;
- (c) Received approval of a mitigation plan pursuant to Section 6.2.6.C.11, Mitigation, of this Ordinance; or
- (d) Received a variance pursuant to Section 2.4.17, Watershed Variance.

10. Determination of No Practical Alternatives

- (a) Applicants undertaking development or activities designated as allowable or allowable with mitigation shall submit a watershed development plan with a request for a no practical alternatives determination to the TRC. The applicant shall certify that the project meets all the following criteria for a determination of no practical alternatives:
 - (1) The basic project purpose cannot be practically accomplished in a manner that would better minimize disturbance, preserve aquatic life and habitat and protect water quality;
 - (2) The use cannot practically be reduced in a size or density, reconfigured or redesigned to better minimize disturbance, preserve aquatic life and habitat and protect water quality; and
 - (3) Best management practices shall be used if necessary to minimize disturbance, preserve aquatic life and habitat and protect water quality.
- (b) The applicant shall submit a watershed development plan containing at least the following information on a form supplied by the Planning and Development Department in support of their assertion of no practical alternatives determination:
 - (1) An explanation of why this plan for the development or activity cannot be practically accomplished, reduced or reconfigured to better minimize disturbance to the riparian buffer, preserve aquatic life and habitat and protect water quality; and
 - (2) Plans for any best management practices proposed to be used to control the impacts associated with the development or activity.
- (c) Within 60 days of a submission that addresses subsection (b) above, the TRC shall review the entire project and make a finding of fact as to whether the criteria in subsection (a) of this section have been met. A determination of no practical alternatives shall result in issuance of a certification of the approved watershed development plan. Failure to act within 60 days shall be construed as a finding of no practical alternatives and a certification on the watershed development plan shall be issued to the applicant unless one of the following occurs:
 - (1) The applicant agrees, in writing, to a longer period;

- (2) The TRC determines that the applicant has failed to furnish requested information necessary to make a decision;
 - (3) The final decision is to be made pursuant to a public hearing; or
 - (4) The applicant refuses access to its records or premises for the purpose of gathering information necessary for the TRC to make a decision.
- (d) The TRC may attach conditions to the determination of no practical alternatives that support the purpose, spirit and intent of this Ordinance.

11. Mitigation

Mitigation in accordance with the requirements of 15A NCAC 02B .0295 shall apply to persons who wish to impact a surface water buffer when one of the following applies:

- (a) A person has received authorization pursuant to Section 6.2.6.C.10, Determination of No Practical Alternatives, of this section for a proposed development or activity that is designed as allowable with mitigation; or
- (b) A person has received a variance pursuant to Section 2.4.17, Watershed Variance, of this Ordinance and is required to perform mitigation as a condition of a variance approval.

12. Surface Water Buffer Variances

Variances pertain to prohibited uses or activities in the surface water buffer. There are two types of variances from the surface water buffer requirements of this section. They are:

- (a) A major variance, which is a variance that pertains to activities that impact any portion of Zone 1.
- (b) A minor variance, which is a variance that pertains to activities that impact any portion of Zone 2 of a surface water buffer.

13. Appeals

An appeal of determinations of no practical alternatives by the TRC shall comply with Section 2.4.17, Watershed Variance. An appeal pursuant to the requirements of Section 6.2.6.C, Surface Water Buffers, which applies to activities conducted under the authority of the State, the United States, multiple jurisdictions or local units of government, forest harvesting and agricultural activities, shall be referred to the Director of the NCDWQ for review, as provided for in North Carolina General Statutes Chapter 150B Articles 3 and 4.

D. Slope and Buffer Protection

1. Purpose

The purpose of this provision is to limit the loss of soil, reduce soil erosion, minimize excess stormwater runoff, lessen the degradation of surface waters, and protect the buffers so established to protect surface waters. To this end, an addition to the surface water buffer requirements of Section 6.2.6.C, Surface Water Buffers, shall be required when intermittent and perennial surface waters abut moderate to steep slopes.

2. Application

- (a) Such addition to the surface water buffer requirements shall only apply where that portion of the surface water is adjacent to moderate to steep slope areas.
- (b) For slopes with a value of 15 percent or less, no additional buffering is

required.

- (c) For slopes of greater than 15 percent up to 25 percent, an additional 15-foot wide undisturbed buffer shall be required.
- (d) For slopes greater than 25 percent, an additional 30 feet of undisturbed buffer shall be required.
- (e) These calculations shall be made from each side of the surface water bank.
- (f) Such additional buffer required by this section shall extend Zone 2 of the surface water buffer.
- (g) In the case where Zone 3 is required, the extension of the Zone 2 surface water buffer may be offset by an identical decrease in width in Zone 3.

3. Determination

- (a) The determination of whether such moderate to steep slope areas exist adjacent to a surface water shall be made by making 100 foot long perpendicular measurements at intervals, not greater than 50 feet in length, or at intervals as otherwise determined by the TRC, along the entire length of the surface water as measured from the top of bank.
- (b) These measurements shall be based on the most recent topographic survey of land that utilizes the smallest contour interval.
- (c) Applicants should consult the *Development Guidebook* for specific calculations, instructions, and illustrations.

E. Additional Protection in Watershed Critical Areas

Due to the proximity of Watershed Critical Areas to water supply reservoirs, fragile areas including steep slopes near perennial and intermittent streams, wetlands and drainage areas merit additional protection as prescribed in Section 3.14.9, Watershed Overlay (WSO) District.

6.2.7. LOW IMPACT DESIGN

A. Goals

The primary goals of low impact design are to lower the impact of development on receiving waters, to encourage environmentally sensitive development, to help build communities based on environmental stewardship, and to reduce construction and maintenance costs of the stormwater infrastructure. The use of low impact design shall address these goals through the objectives found in subsection (B) below.

B. Objectives

1. Preserve Fragile Areas and Open Space

Preserve fragile areas through the following:

- (a) Avoiding riparian areas, wetlands, steep slopes, high infiltration and hydric soils;
- (b) Maximizing open space and common area through cluster development where appropriate; and
- (c) Maintaining open space in a natural condition by reforestation where clearing has occurred.

2. Minimize Land Disturbance and Built-Up Area

Design development to provide the following:

- (a) Efficient layout to reduce overall length of streets;
- (b) Shared parking and drives where possible to further reduce built-up area;

- and
- (c) Use of multiple best management practices such as bio-retention cells and infiltration areas to minimize impact.
- (d) Step floor elevations to fit terrain and avoid slab-on-grade construction to minimize land disturbance.

3. Protect Water Resources

Use proper site design techniques to replicate pre-existing hydrologic site conditions by placing water quality control devices close to the source. Techniques may include the following:

- (a) Designing driveways and parking areas with vegetated swales and/or sheet flow into infiltration areas; and
- (b) Using grass swales instead of curb and gutter to increase water filtration.

C. Process

The low impact design process is established in the City of High Point *Stormwater Best Management Practices Design Manual*.

6.2.8. GENERAL STANDARDS AND RESTRICTIONS

A. Density and Intensity

1. Low Density Development Calculation

- (a) For low density development, density is measured in dwelling units per acre for single-family and duplex residential developments.
- (b) For recreational facilities, such as golf courses and tennis and swim clubs lying within a residential development, impacts shall be determined by measuring the built-upon area on the lot or common area and dividing by 3,000 square feet to obtain a dwelling unit equivalency number.
- (c) Upon approval of a modification by the TRC, low density developments may utilize either the density standard, built-upon area standard, or combination thereof pursuant to Table 6.2.8.A.1, Minimum Stormwater Controls Required in the General Watershed Area and in Non-water Supply Watersheds.
- (d) For all other residential and nonresidential development, the built-upon area measure shall apply.

2. High Density Development Calculation

For all high density development the built-upon area measure shall apply.

3. Density and Built-Upon Area Calculations

- (a) For the purpose of calculating density, acres shall be gross acres.
- (b) As an alternative, single-family or duplex residential developments dividing four or fewer lots and not constructing streets may use 20,000 square-foot lots where the maximum density is two dwelling units per acre and 40,000 square-foot lots where the maximum density is one dwelling unit per acre.
- (c) If single-family or duplex dwellings are intermingled within a development with other uses, then the built-upon area measurement shall apply.
- (d) When sections of the same development are devoted to single-family or duplex residential development and other sections are devoted to other uses, then the developer may apply the appropriate measurement to the different sections or may use the built-upon area measurement for the entire development.
- (e) Single-family or duplex residential development using the built-upon area

- (f) measurement shall assume 3,000 square feet of built-upon area per lot.
- (f) The built-upon area maximum shall apply to the entire development, including streets, buildings, drives, and other impervious surfaces.
- (g) The maximum built-upon area allowed shall be allocated throughout the development.
- (h) In single-family and duplex residential developments, the allocation to each lot shall be uniform.
- (i) In all other developments, the allocation may vary among lots.
- (j) In all cases, the recorded plat shall clearly state each lot's allocation and restrictive covenants shall record these allocations.

TABLE 6.2.8.A.1: MINIMUM STORMWATER CONTROLS REQUIRED IN THE GENERAL WATERSHED AREA AND IN NON-WATER SUPPLY WATERSHEDS

WATERSHED	DENSITY/BUILT-UPON AREA [1]		MINIMUM STORMWATER CONTROL REQUIRED
	RESIDENTIAL	MULTIFAMILY AND NONRESIDENTIAL	
All watersheds EXCEPT Randleman Lake	≤ 1 du/2 acre	≤ 6% built-upon area	None
	≤ 2 du/acre [2]	≤ 24% built-upon area ²	Alternate measures [3]
	> 2 du/acre	> 24% built-upon area	Engineered stormwater controls [4]
Randleman Lake	≤ 1 du/2 acre	≤ 6% built-upon area	None
	≤ 1 du/acre	≤ 12% built-upon area	Alternate measures [3]
	> 1 du/acre	> 12% built-upon area	Engineered stormwater controls [4]

NOTES:

[1] Single-family and duplex development utilizing the low density option shall use the density standards except as approved by modification pursuant to Section 6.2.8.A.1, Low Density Development Calculation. Single-family and duplex development exceeding the density limits shall use the built-upon area standards. Multi-family residential and nonresidential development shall use the built-upon area standards.

[2] May be increased to three dwelling units per gross acre or 36 percent built-upon area for developments without a curb and gutter street system.

[3] Alternate measures shall be in accordance with Section 6.2.8.B.2, Alternate Measures. Low Density Development is development that is equal to or less than two dwelling units per acre or 24 percent built-upon area (bua) in all watersheds except Randleman Lake. Low Density Development in the Randleman Lake watershed is development that is equal to or less than one dwelling unit per acre or 12 percent built-upon area.

[4] Engineered Stormwater Control in accordance with high density development is development that is greater than two dwelling units per acre or 24 percent bua in all watersheds except Randleman Lake. High Density Development in the Randleman Lake watershed is development that is greater than one dwelling unit per acre or 12 percent bua.

TABLE 6.2.8.A.2: MINIMUM STORMWATER CONTROLS REQUIRED IN THE WATERSHED CRITICAL AREA

WATERSHED	DENSITY/BUILT-UPON AREA		MINIMUM STORMWATER CONTROL REQUIRED
	RESIDENTIAL	MULTIFAMILY AND NONRESIDENTIAL	
ALL water supply watersheds EXCEPT Randleman Lake	≤ 1 du/2 acre	≤ 6% built-upon area	None
	≤ 2 du/acre	≤ 24% built-upon area	Alternate measures [1]
	n/a	> 24% built-upon area	Engineered stormwater controls [2]
Randleman Lake	≤ 1 du/2 acre	≤ 6% built-upon area	None
	> 1 du/2 acre [3]	> 6% built-upon area [3]	Engineered stormwater controls [2]

NOTES:

[1] Alternate measures in accordance with Section 6.2.8.B.2, Alternate Measures.

[2] Engineered stormwater controls in accordance with Section 6.2.8.B.3, Engineered Stormwater Controls for High Density Development.

[3] In Tier 4, residential development > 1du/2 acres and < 1du/acre may use alternate measures in accordance with Section 6.2.8.B.2, Alternate Measures, in lieu of engineered stormwater controls. Multifamily and nonresidential development > 6 percent and < 12 percent built-upon area may do the same.

B. Methods of Stormwater Control

1. Vegetated Conveyances for Low Density Development

Stormwater runoff shall be transported from the development by vegetated conveyances to the maximum extent practical, as determined by the TRC.

2. Alternate Measures

As required by Table 6.2.8.A.1 and Table 6.2.8.A.2., the following stormwater management facilities are considered alternate measures that may be allowed provided that they meet the standards of the City of High Point *Stormwater Best Management Practices Design Manual*:

- (a) Extended dry pond;
- (b) Infiltration trench;
- (c) Natural infiltration area;
- (d) Participation in a public or private regional runoff control program, in compliance with Section 6.2.8.C, Participation in a Regional Stormwater Control Program;
- (e) Low impact design; and
- (f) Any best management practices approved by the Engineering Services Director that complies with the performance standards of control of the first one-half inch of rainfall.

3. Engineered Stormwater Controls for High Density Development

In accordance with Table 6.2.8.A.1 and Table 6.2.8.A.2, stormwater management facilities, such as wet detention ponds, meeting the performance standards of control of the first one inch of rainfall and removal of 85 percent of total suspended solids (TSS) shall be used to control stormwater runoff in compliance with the City

of High Point *Stormwater Best Management Practices Design Manual*. In-lieu of an on-site engineered stormwater control, developments may participate in a regional stormwater control program in compliance with the requirements of Section 6.2.8.C, Participation in a Regional Stormwater Control Program.

C. Participation in a Regional Stormwater Control Program

1. Public Regional Stormwater Control Program

(a) Where Permitted

- (1) Where a regional stormwater control program has been established by one or more local governments, or by an authority operating on behalf of one or more local governments, a development may participate in the program in-lieu of any certification of stormwater control required by this section, provided that:
 - (i) The development is within an area covered by a public regional stormwater control program;
 - (ii) Stormwater from the development drains to an existing or funded public regional engineered stormwater control structure which is proposed to be built and is part of the program;
 - (iii) Participation is in the form of contribution of funds, contribution of land, contribution of engineered stormwater control structure construction work, or a combination of these, the total value of which shall be in accordance with a fee schedule adopted by the City or in accordance with an intergovernmental agreement; and
 - (iv) The TRC finds that the watershed development plan is in compliance with all other applicable requirements of this Ordinance.
- (2) Developments participating in a public regional stormwater control program are encouraged to maintain pre-development hydrology at the project site.

(b) Use of Contributions

Each contribution from a development participating in a public regional engineered stormwater control structure program shall be used for acquisition, engineering, construction and/or maintenance of one or more such structures in the same watershed in which development lies. The use of contributions for these purposes does not preclude the use or imposition of other revenue sources for these purposes.

2. Private Regional Stormwater Control Program

(a) Where Permitted

- (1) Participation in a private regional engineered stormwater control program is permitted where a private off-site stormwater control program has been established by one or more property owners and approved by the TRC. A development may participate in the program in-lieu of any certification of runoff control required by this section, provided that:
 - (i) The development is within an area covered by an off-site engineered stormwater control structure;
 - (ii) Runoff from the development drains to an existing

- engineered stormwater control structure;
 - (iii) The parties agree to share the cost of any required maintenance and/or construction;
 - (iv) The agreement runs with the property;
 - (v) The agreement is recorded with the appropriate county Register of Deeds in accordance with Section 6.2.8.D.3, Recordation of Improvements;
 - (vi) The Engineering Services Director finds that the watershed development plan is in compliance with all other applicable requirements of this Ordinance.
- (2) Developments participating in a private regional stormwater control program are encouraged to maintain pre-development hydrology at the project site.

D. Improvements

1. Design of Improvements

- (a) The design of all stormwater management facilities shall be performed by a North Carolina registered professional engineer, approved by the TRC, and meet or exceed the standards of the *City of High Point Stormwater Best Management Practices Design Manual*.
- (b) The TRC shall require that a stormwater management facility be positioned on a site such that water quality protection is improved.

2. Construction of Improvements

- (a) The construction of all stormwater management facilities as shown on an approved watershed development plan shall be completed and have received final approval prior to any plat recordation, or said improvements shall be guaranteed by a surety in accordance with Section 7.2, Financial Guarantees.
- (b) The construction of all stormwater management facilities as shown on an approved watershed development plan shall be completed and have received final approval prior to the issuance of a certificate of occupancy.
- (c) If a building permit is not required for a site, then any required stormwater management facility shall be completed prior to installation of any built-upon area on the site.

3. Recordation of Improvements

All stormwater management facilities and associated access/maintenance easement(s) shall be recorded on a plat, and a mechanism to ensure their maintenance shall be established and recorded concurrent with or prior to plat recordation.

4. Engineer’s Certificate of Completion Required

An engineer’s Certification of Completion for stormwater management facilities as set out in the *City’s Development Guidebook* shall be submitted prior to issuance of any building certificate of occupancy.

5. Operation and Maintenance Agreement

- (a) Maintenance responsibility for stormwater management facilities and their access shall be vested with a responsible party by means of a legally binding and enforceable operation and maintenance agreement that is executed as a condition of plan approval, as provided for in Section 6.2.8.D.3, Recordation of Improvements.

- (b)** The agreement must be approved by the Engineering Services Director and shall be binding on all subsequent owners of the site, portions of the site, and lots or parcels served by the stormwater management facilities.
- (c)** In the case of participation in a regional runoff control program in accordance with Section 6.2.8, General Standards and Restrictions, a binding contract or agreement shall be required for participation.
- (d)** The operation and maintenance agreement shall be referenced on the final plat and shall be recorded with the appropriate county Register of Deeds upon final plat approval.
- (e)** If no subdivision plat is recorded for the site, then the operation and maintenance agreement shall be recorded with the appropriate county Register of Deeds so as to appear in the chain of title of all subsequent purchasers under generally accepted searching principles.
- (f)** The operation and maintenance agreement shall require the owner or owners' association to maintain, repair and, if necessary, reconstruct the stormwater management facilities, and shall state the terms, conditions, and schedule of maintenance for such.
- (g)** The owner of each stormwater management facility installed pursuant to this Ordinance shall maintain and operate it so as to preserve and continue its function in controlling water quality and quantity in accordance with the function for which it was designed.
- (h)** The operation and maintenance agreement shall refer the property owner or owners' association to the City of High Point for specific maintenance requirements of stormwater management facilities. In addition, it shall grant to the City a right of entry in the event that the Engineering Services Director has reason to believe it has become necessary to inspect, monitor, maintain, repair, or reconstruct the stormwater management facilities. In no case shall the right of entry, of itself, confer an obligation on the City to assume responsibility for maintenance of the stormwater management facilities.
- (i)** The Engineering Services Director shall have the responsibility to inspect the engineered stormwater control structures annually, as required by NC Environmental Management Commission, to record the results on forms approved or supplied by the NCDWQ, to inspect any other stormwater management facilities as deemed necessary, and to notify the responsible property owner or owners' association when maintenance or repairs are required.
- (j)** All required repairs and maintenance shall be performed within 90 days after such notice. In case of failure by the responsible party to perform the required maintenance or repairs within the stated period, the City may perform such maintenance or repairs and recover all costs attendant thereto from the landowner or owners' association.
- (k)** For all stormwater management facilities required pursuant to this Ordinance that are owned by a private property owner or an owners' association, the required operation and maintenance agreement shall include all of the following provisions:
 - (1)** Acknowledgment that the owner or owners' association shall continuously operate and maintain the stormwater management facilities.
 - (2)** Establishment of an escrow account, which can be spent solely for sediment removal, structural, biological, or vegetative replacement, major repair, or reconstruction of the stormwater management

facilities. If stormwater management facilities are not performing adequately or as intended or are not properly maintained, the City, in its sole discretion, may remedy the situation, and in such instances the City shall be fully reimbursed from the escrow account.

- (3) Escrowed funds may be spent by the landowner or owners' association for sediment removal, structural, biological or vegetative replacement, major repair, and reconstruction of the stormwater management facilities.
- (4) Granting to the City a right of entry to inspect, monitor, maintain, repair, and reconstruct stormwater management facilities.
- (5) Allowing the City to recover from the landowner or owners' association and its members any and all costs the City expends to maintain or repair the stormwater management facilities or to correct any operational deficiencies.
- (6) Failure to pay the City all of its expended costs, after 45 days written notice, shall constitute a breach of the agreement.
- (7) In case of a deficiency, the City shall thereafter be entitled to bring an action against the owner or owners' association and its members to pay, or foreclose upon the lien hereby authorized by the agreement against the property, or both. Interest, collection costs, and attorney fees shall be added to the recovery.
- (8) A statement that this agreement shall not obligate the City to maintain or repair any stormwater management facility, and the City shall not be liable to any person for the condition or operation of stormwater management facilities.
- (9) A statement that this agreement shall not in any way diminish, limit, or restrict the right of the City to enforce any of its ordinances as authorized by law.
- (10) A provision indemnifying and holding harmless the City for any costs and injuries arising from or related to the stormwater management facilities, unless the City has agreed in writing to assume the maintenance responsibility and has accepted dedication of any and all rights necessary to carry out that maintenance.

6. Inspection Program

- (a) Inspections and inspection programs by the City may be conducted or established on any reasonable basis, including but not limited to routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; and joint inspections with other agencies inspecting under environmental or safety laws.
- (b) Inspections may include, but are not limited to:
 - (1) Reviewing maintenance and repair records;
 - (2) Sampling discharges, surface water, groundwater, and material or water in stormwater management facilities; and
 - (3) Evaluating the condition of stormwater management facilities.
- (c) If the owner or occupant of any land refuses to permit such inspection, the Engineering Services Director shall proceed to obtain an administrative search warrant pursuant to North Carolina General Statutes Section 15-27.2, as amended.
- (d) No person shall obstruct, hamper or interfere with the Engineering Services Director while carrying out the Director's official duties.

E. Watershed Development Plan

Subsection 6.2.9 General Watershed Area and Watershed Critical Area Established

1. Plan Required

A watershed development plan prepared by a North Carolina registered professional engineer in accordance with the requirements of this section shall be submitted to the Engineering Services Director for all development.

2. Construction Plans a Part of Watershed Development Plan

The construction plans for required runoff control structure(s) shall be approved as part of the watershed development plan, and prior to issuance of any building or land disturbance permit on a site. For subdivisions, construction plans shall be submitted in accordance with Section 2.5.11, Preliminary Plat.

3. Master Watershed Development Plan

- (a) Where authorized by the TRC, a master watershed development plan may be approved for certain large-scale nonresidential and multi-family developments, in-lieu of a watershed development plan with the required construction plans.
- (b) Where authorized, the master watershed development plan shall be approved by the TRC prior to the recordation of any plat, or issuance of any grading or building permits for the total site.
- (c) Prior to the approval of any site plans or group development plans, grading permit, or building permit for any development site included on a given master watershed development plan, a site-specific watershed development plan shall be approved subject to the requirements of this section.

4. Plan Approval

The TRC shall approve any watershed development plan that is in conformance with the requirements of this section.

5. Approved Plan a Prerequisite

A watershed development plan shall be approved prior to the recordation of any plat, or issuance of any grading permit or building permit for the site. The Engineering Services Director is not authorized to issue any permits for development on any land unless a watershed development plan is approved, if one is required.

6. Engineered Stormwater Controls and Alternate Measures

When a permanent engineered stormwater control structure or alternate measure, including participation in a regional stormwater control program, is required for a development to comply with the requirements of this section, a North Carolina registered professional engineer shall prepare the plan with the Engineer's Certification of Runoff Control as set out in the City's *Development Guidebook* affixed, signed, sealed, and dated.

6.2.9. GENERAL WATERSHED AREA AND WATERSHED CRITICAL AREA ESTABLISHED¹⁵⁹

The standards in this section shall apply to lands within an individual WSO district in addition to the standards in Section 6.2.8, General Standards and Restrictions.

¹⁵⁹These standards carry forward the provisions in Sections 9-7-6 through 9-7-10 with no substantive revisions.

A. District Components

Each WSO district is divided into two sub districts: the General Watershed Area (GWA), and the Watershed Critical Area (WCA).

1. General Watershed Area (GWA)

The General Watershed Area (GWA) component includes all land draining into a designated water supply reservoir within the city’s jurisdiction, but outside the Watershed Critical Area Overlay component. For the purposes of this section, the following constitute the designated water supply reservoirs:

- (a) Oak Hollow Lake;
- (b) City Lake;
- (c) Oakdale Reservoir (Jamestown);
- (d) Randleman Lake;
- (e) Uwharrie (Lake Reese); and
- (f) Lake Thom-A-Lex.

2. Watershed Critical Area (WCA)

(a) Location

- (1) The Watershed Critical Area (WCA) component covers the portion of the WSO subarea adjacent to a designated water supply intake or reservoir where risk associated with pollution is greater than from the remaining portions of the watershed.
- (2) The WCA component boundary extends either a minimum of 2,750 feet outward from the normal pool elevation of the reservoir in which the intake is located or to the ridgeline of designated water supply reservoir basins, whichever is closer to the normal pool elevation.
- (3) In the case of major streams feeding the water supply reservoir (i.e., East and West Forks of the Deep River and Hiatt Branch), the WCA subarea boundary extends to the nearest identifiable major feature which crosses the stream, and which is at least 2,750 feet upstream of the reservoir measured horizontally, except for the West Fork of the Deep River upstream from Oak Hollow Lake, where the major identifiable feature shall be defined as Sandy Ridge Road. The identifiable major feature may be a street, railroad, easement, or other means of travel, which can be used by emergency personnel to respond to spills.

(b) Tiers

Each WCA is comprised of four separate tiers, which are designated as follows:

(1) Tier 1

Tier 1 consists of those lands within 200 feet measured horizontally from the pool elevation of the designated reservoir, which is 803 feet above mean sea level for Oak Hollow Lake, 756 feet above mean sea level for City Lake, 716 feet above mean sea level for Oakdale Reservoir, and 682 feet above mean sea level for Randleman Lake.

(2) Tier 2

Tier 2 consists of those lands lying within an area bounded by Tier 1 and a line parallel to and 750 feet in distance from the normal pool elevation.

(3) Tier 3

Tier 3 consists of those lands lying within an area bounded by Tier 2 and a line parallel to and 2,750 feet, measured horizontally from the normal pool elevation, or to the boundary of the WCA, whichever comes first, for all WCAs except the Randleman Lake WCA. Randleman Lake's WCA consists of those lands lying within an area bounded by Tier 2 and a line parallel to and 3,000 feet measured horizontally from the normal pool elevation, or to the boundary of the WCA, whichever comes first, except that Tier 3 along Richland Creek consists of those lands lying within an area bounded by Tier 2 and a line parallel to and 2,640 feet (1/2 mile) measured horizontally from the normal pool elevation or to the boundary of the WCA, whichever comes first.

(4) Tier 4

Tier 4 consists of those lands lying in the area between the boundary of Tier 3 and the WCA boundary.

B. District Boundaries

The district boundaries for each WSO are shown on the City of High Point Watershed Map, which is incorporated herein by reference. WSO boundaries shall be determined in accordance with Section 3.1.5, Official Zoning Map, and Section 2.5.4, Determination.

6.2.10. STANDARDS APPLICABLE IN THE GWA¹⁶⁰**A. Prohibited Uses**

The following uses and activities are prohibited in a GWA:

1. All hazardous or toxic substance generators or handlers as defined in this Ordinance; and
2. Establishment of a new public or private major landfill or expansion of an existing private major landfill.

B. Built-Upon Area Limitations**1. Limits in Oak Hollow Lake, City Lake, and Oakdale Reservoir Watersheds**

Oak Hollow Lake, City Lake, and Oakdale Reservoir are classified as WS IV CW water supply watersheds, and development in the GWA shall not exceed 70 percent built-upon area.

2. Limits in Randleman Lake Watershed

Randleman Lake is classified as a WS IV CW water supply watershed, and development in the Randleman Lake GWA shall not exceed 50 percent built-upon area, except as provided below:

- (a)** In the Randleman Lake Downtown Area, as shown on the City of High Point

¹⁶⁰ This section carries forward the standards in Section 9-7-7 of the current ordinance with no substantive changes.

Subsection 6.2.11 Standards Applicable in the WCA

- Watershed Map, development shall not exceed 90 percent built-upon area.
- (b) In the Randleman Lake Credit Area, which is in the Deep River 1 sub-basin as shown on the City of High Point Watershed Map, nonresidential development shall not exceed 70 percent on parcels totaling a maximum of 2,357 acres.
 - (c) Allocation shall be made on a first come, first served basis. An allocation shall be assigned when a building permit for the site is issued, site plan is approved, or the preliminary subdivision plat for a development is approved. Expiration of a building permit, site plan approval, or preliminary plat approval shall terminate the allocation identified in this subsection.

3. Limits in the Uwharrie (Lake Reese) and Lake Thom-A-Lex Watersheds

Uwharrie (Lake Reese) and Lake Thom-A-Lex are classified as WS III water supply watersheds, and development in the GWA shall not exceed 50 percent built-upon area, except as otherwise as provided below:

- (a) Ten percent of the City's portion of the Uwharrie (Lake Reese) Watershed and the Lake Thom-A-Lex Watershed may be developed with new nonresidential development at up to 70 percent built-upon area.
- (b) Allocation shall be made on a first come, first served basis. An allocation shall be assigned when a building permit for the site is issued, site plan is approved, or the preliminary subdivision plat for a development is approved. Expiration of a building permit, site plan approval, or preliminary plat approval shall terminate the allocation identified in this Subsection.

6.2.11. STANDARDS APPLICABLE IN THE WCA¹⁶¹

A. Prohibited Uses

In addition to the limitations in Table 4.1.9, Principal Use Table, the following uses are prohibited in a WCA:

- 1. Any use that employs, sells, or relates to petroleum, petroleum-based products, or equipment that uses petroleum;
- 2. Any use that involves or relates to chemicals, fertilizer, pesticides, explosives, or phosphorous;
- 3. Any use that involves or relates to the manufacture of paper, rubber, concrete, metals, or textiles;
- 4. Any use that relates to the collection, processing, or storage of refuse or waste products;
- 5. Any use that relates to or involves livestock or animal-related products or services; and
- 6. Any use that involves or relates to commercial, physical, or biological research.

B. Containment Structures

Storage tanks for fuels and chemicals and associated pumping and piping allowed in the WCA shall have a spill containment system approved by the Planning and Development Director and the Fire Marshall and shall comply with the following:

- 1. Containment systems shall be of sufficient volume to contain 100 percent of all the

¹⁶¹ This section carries forward the standards in Section 9-7-8 with no substantive changes except that the spill reduction provisions in Section 9-7-8(b) are replaced with new language that refers to the Principal Use Table in Chapter 4.

tank(s) contents stored in the area and shall have a leak detection system.

2. Tanks and containment structures shall not be placed closer than 1,000 feet to the normal pool elevation of the applicable reservoir.
3. Except when abutting an LI or HI zoning district, a containment system shall be a minimum of 50 feet from the lot line.
4. Provisions shall be made to remove stormwater without removal of the product except for mistable materials.
5. Contaminated water may not be discharged to the sewer system without a permit or to a water body or to a water-course.

C. Underground Storage Tanks

Except for the replacement of existing tanks, underground storage tanks for fuels and chemicals are prohibited in the WCA.

D. Point Source Discharges

1. No new wastewater treatment plants of any kind or expansion of any existing private wastewater facilities shall be permitted in the WCA.
2. Industrial pre-treatment facilities that prepare wastewater for discharge into a public sewer system shall be permitted in the WCA.

E. Slopes Greater than 15 Percent and Wetlands

1. Slopes greater than 15 percent lying adjacent to natural drainageways, intermittent streams, perennial streams, and wetlands shall remain in a natural and undisturbed condition except for road crossings, utilities, erosion control devices, and runoff control devices.
2. Dedication of these areas to the City as drainageway and open space may be required when authorized by Section 7.1.6.G, Drainage, or any other provision in this Ordinance.
3. Where dedication is not required, a water quality conservation easement shall be recorded over wetlands and slopes greater than 15 percent.
4. Where a water quality conservation easement serves to bring two or more lots into compliance with WCA requirements, the TRC may require that the wetlands and slopes covered by such easements be held as common area by an owners' association.
5. The natural ground cover and natural tree canopy within a water quality conservation easement shall be preserved except when removal is authorized by the Public Services Department as part of the following:
 - (a) Construction or maintenance of a public utility by the City or a designee;
 - (b) Construction or maintenance of soil erosion and sedimentation control structures by the developer of the land, in accordance with Section 2.5.10, Land Disturbance Permit. After these structures are no longer needed, they shall be removed and the water quality conservation easement restored to a natural state;
 - (c) Normal maintenance by mechanical means for the removal of dead, diseased, deformed, poisonous, or noxious vegetation and pests harmful to health; and
 - (d) Mowing of utility areas.
6. Nothing in this subsection shall supersede the surface water buffer requirements of Section 6.2.6.C, Surface Water Buffers.

F. Drainage

1. Drainage within the WCA shall be provided by means of open channels, unless it is determined by the TRC that better water quality protection is provided by alternative means.
2. Drainageways shall have protected channels or remain in a natural, undisturbed state, except for road crossings, utilities, erosion control devices, runoff control devices, and desirable artificial stream bank stabilization.
3. No new development shall be allowed in a drainageway except that water dependent structures and public projects such as greenways may be allowed where no practicable alternative exists. Where these activities are allowed, they shall minimize built-upon surface area and maximize the utilization of Best Management Practices (BMP's).
4. Perennial and intermittent streams, lakes and ponds shall be protected as specified in Section 6.2.6.C, Surface Water Buffers.

G. Density Shifting

1. The location of development on soils and terrain most suited to protecting the water quality of water supply reservoirs is encouraged in the WCA by density shifting. The overall density of a development utilizing density shifting shall meet the applicable WCA density and stormwater control requirements, except as modified by this sub-section. Built-upon areas within such developments shall be designed and sited to minimize stormwater runoff impact to the receiving waters, and the remainder of the tract should remain in an undisturbed or natural state.
2. Density shifting is utilized in developments having lot sizes in accordance with the minimum area permitted by the underlying zoning district or in approved conservation subdivisions. Through density shifting, developments may increase the maximum permitted residential densities otherwise established in this Ordinance if the development rights attached to acreage located within a tier are transferred within the same tract to an adjacent tier located farther from the water supply reservoir. Such transfer shall permit an additional number of dwelling units in the receiving tier. This addition is calculated by adding the density or dwelling units transferred from the adjacent tier to the density or dwelling units permitted in the receiving tier. The dwelling units permitted by acreage transfer from an adjacent tier shall be in addition to the number of dwelling units otherwise permitted in the receiving tier, but in no case shall the density allowed by the underlying zoning district be exceeded.

H. Public Sanitary Sewer Required

Except for development in the Randleman Lake WCA constructed under the low density option, all new development in a WCA shall be served by public sanitary sewer.

6.2.12. INDIVIDUAL WATER SUPPLY WATERSHEDS¹⁶²

A. Oak Hollow Lake

1. GWA Built-Upon Area Limits

Development in Oak Hollow Lake GWA shall not exceed 70 percent built-upon area.

2. WCA Density and Built-Upon Area Limits

Density and built-upon area in the Oak Hollow Lake WCA shall be as follows:

¹⁶² NOTE TO STAFF: This section carries forward the standards in Section 9-7-9 of the current ordinance, but the standards related to the GWA repeat the provisions already set out in Section 6.2.10. Additional discussion is needed about the possibility of simply cross-referencing these standards in Section 6.2.10.

- (a) Tier 1: None, except for public water dependent structures.
- (b) Tier 2: One dwelling unit per acre.
- (c) Tier 3: Two dwelling units per acre or 35 percent built-upon area.
- (d) Tier 4: Two dwelling units per acre or 50 percent built-upon area.

B. City Lake

1. GWA Built-Upon Area Limits

Development in City Lake GWA shall not exceed 70 percent built-upon area.

2. WCA Density and Built-Upon Area Limits

Density and built-upon area in the City Lake WCA shall be as follows:

- (a) Tier 1: None, except for public water dependent structures.
- (b) Tier 2: One dwelling unit per acre.
- (c) Tier 3: Two dwelling units per acre or 35 percent built-upon area.
- (d) Tier 4: Two dwelling units per acre or 50 percent built-upon area.

C. Oakdale Reservoir

1. GWA Built-Upon Area Limits

Development in Oakdale Reservoir GWA shall not exceed 70 percent built-upon area.

2. WCA Density and Built-Upon Area Limits

Density and Built-Upon Area in Oakdale Reservoir WCA shall be as follows:

- (a) Tier 1: None, except for public water dependent structures.
- (b) Tier 2: One dwelling unit per acre.
- (c) Tier 3: Two dwelling units per acre or 35 percent built-upon area.
- (d) Tier 4: Oakdale Reservoir does not have a Tier 4.

D. Randleman Lake

1. GWA Built-Upon Area Limits

Development in the Randleman Lake GWA shall not exceed 50 percent built-upon area, except as otherwise provided below:

- (a) In the Randleman Lake Downtown Area, as shown on the High Point Watershed Map, development shall not exceed 90 percent built-upon area.
- (b) In the Randleman Lake Credit Area, as shown on the High Point Watershed Map, nonresidential development shall not exceed 70 percent on parcels totaling a maximum of 2,357 acres.
- (c) Allocation shall be made on a first come, first served basis. An allocation shall be assigned when a building permit for the site is issued, site plan is approved, or the preliminary subdivision plat for a development is approved. Expiration of a building permit, site plan approval, or preliminary plat approval shall terminate the allocation.

2. WCA Density and Built-Upon Area Limits

Density and built-upon area in the Randleman Lake WCA shall be as follows:

- (a) Tier 1: None, except for public water dependent structures.
- (b) Tier 2: One dwelling unit per 5 acres or 2.5 percent built-upon area.
- (c) Tier 3: One dwelling unit per 3 acres or 4 percent built-upon area, except that up to 30 percent built-upon area shall be permitted in accordance with Section 6.2.12.D.3, WCA High Density Option.

- (d) Tier 4: One dwelling unit per acre or 12 percent built-upon area, except that up to 40 percent built-upon area shall be permitted in accordance with Section 6.2.12.D.3, WCA High Density Option.

3. WCA High Density Option

Built-upon area in the Randleman Lake WCA may be increased in the following sub-basins using the high density option, provided:

- (a) In Tier 3 of the Richland Creek sub-basin, a total of 255 acres may be developed with nonresidential development under the high density option at 30 percent built-upon area.
- (b) In the Business 85/Riverdale Road sub-basin, a total of 482 acres may be developed with nonresidential development under the high density option at 30 percent built-upon area in Tier 3 and 40 percent built-upon area in Tier 4. However, of that total 482 acres in the Business 85/Riverdale Road sub-basin, only a maximum of 284 acres shall be developed in Tier 3.
- (c) Allocation shall be made on a first come, first served basis. An allocation shall be assigned when a building permit for the site is issued, site plan is approved, or the preliminary subdivision plat for a development is approved. Expiration of a building permit, site plan approval, or preliminary plat approval shall terminate the allocation.

E. Uwharrie (Lake Reece)

Development in a WS-III GWA shall not exceed 50 percent built-upon area, except as otherwise provided below:

- 1. Ten percent of the City’s portion of the Uwharrie (Lake Reese) Watershed, as delineated on July 1, 1993, may be developed with new nonresidential development at up to 70 percent built-upon area.
- 2. Allocation shall be made on a first come, first served basis. An allocation shall be assigned when a building permit for the site is issued, site plan is approved, or the preliminary subdivision plat for a development is approved. Expiration of a building permit, site plan approval, or preliminary plat approval shall terminate the allocation.

F. Lake Thom-A-Lex

Development in a WS-III GWA shall not exceed 50 percent built-upon area, except as otherwise provided below:

- 1. Ten percent of the City’s portion of the Lake Thom-A-Lex Watershed, may be developed with new nonresidential development at up to 70 percent built-upon area.
- 2. Allocation shall be made on a first come, first served basis. An allocation shall be assigned when a building permit for the site is issued, site plan is approved, or the preliminary subdivision plat for a development is approved. Expiration of a building permit, site plan approval, or preliminary plat approval shall terminate the allocation.

6.2.13. WATERSHED ACCOUNTING

A. Randleman Lake GWA Built-Upon Area Limits

The Planning and Development Director shall keep records on the City’s use of the provision allowing land in the Randleman Lake GWA to be developed with a maximum of 70 percent built-upon area. Records for the watershed shall include the total area of the GWA, total acres eligible to be developed under this provision, total acres approved for

development under this provision, and individual records for each project with the following information: location, number of developed acres, type of land use and stormwater management plan.

B. Randleman Lake WCA Built-Upon Area Limits

- 1.** The Planning and Development Director shall keep records on the City's use of the provision allowing land in the Richland Creek sub-basin and the Business 85 Riverdale Road sub-basin of the Randleman Lake WCA to be developed with a maximum of 30 percent built-upon area in Tier 3 and 40 percent built-upon area in Tier 4. High density nonresidential development shall be limited in the WCA to these two sub-basins of the Randleman Lake Watershed, as shown on the High Point Watershed Map.
- 2.** Records for the watershed shall include the total area of the WCA, total area of Tiers 3 and 4 of the WCA within the two sub-basins, total acres eligible to be developed in Tiers 3 and 4 under this provision, total acres approved for development under this provision, and individual records for each project with the following information: location, number of developed acres, type of land use and stormwater management plan.

C. 10/70 Provision

- 1.** The Planning and Development Director shall keep records on the City's use of the provision allowing a maximum of 10 percent of the GWA of the Uwharrie (Lake Reese) Watershed and the Lake Thom-A-Lex Watershed to be developed with a maximum of 70 percent built-upon area. Records for the watershed shall include the total area of the watershed's GWA, total acres eligible to be developed under this provision, total acres approved for development under this provision, and individual records for each project with the following information: location, number of developed acres, type of land use and stormwater management plan.
- 2.** Development under this provision requires engineered stormwater controls.

D. Record Keeping

The Planning and Development Director shall keep a record of all watershed variances, stream determinations and determinations of no practical alternatives. This record shall be submitted for each calendar year to the North Carolina Division of Water Quality on or before January 1 of the following year and shall provide a description of each project receiving a variance, stream determination or determination of no practical alternatives and the reasons for granting them.

6.3. SOIL EROSION AND SEDIMENTATION¹⁶³

6.3.1. APPLICABILITY

A. General

1. Unless exempted by this section, no person shall initiate any land-disturbing activity without a soil erosion and sedimentation control plan and a land disturbance permit in accordance with Section 2.5.10, Land Disturbance Permit, if the land-disturbing activity:
 - (a) Exceeds one acre (lands under one ownership or diverse lands being developed as a unit shall be aggregated);
 - (b) Is located on highly erodible soils with a "k" factor greater than 0.36;
 - (c) Includes a water quality pond or retention structure in a watershed, or drains into a water quality pond or retention structure in any part of a watershed;
 - (d) Is located in a Tier 1 or Tier 2 portion of a WCA;
 - (e) Is located in an existing uncovered area requiring extensive soil erosion control measures in accordance with Subsection 6.3.12, Existing Uncovered Areas; or
 - (f) Requires extensive erosion control measures.

B. Protection of Property

A person conducting land-disturbing activity shall take all reasonable measures to protect all public and private property from damage caused by such activity.

6.3.2. SOIL EROSION AND SEDIMENTATION CONTROL PLAN

Land-disturbing activities subject to the standards in this section shall require prior approval of a soil erosion and sediment control plan prepared in accordance with the following standards.

A. Preparation of Plan

1. The soil erosion and sedimentation control plan shall be prepared by, and shall bear the seal and signature of a registered professional engineer, architect, landscape architect, certified professional in erosion and sedimentation control (CPESC), or a registered surveyor to the extent permitted by North Carolina law, at a scale not less than one inch equals 100 feet.
2. The plan shall be filed with the Engineering Services Director, and the applicable Soil and Water Conservation District, 30 days prior to the commencement of the proposed activity.
3. Plans submitted for sites less than one acre do not require a seal and signature of a registered professional engineer, architect, landscape architect, certified professional in erosion and sedimentation control (CPESC), or registered surveyor.

B. Submission of Plan

1. A person conducting land-disturbing activity that proposes to disturb or uncover one or more acres shall submit an erosion control plan with the Engineering Services Director, at least 30 days prior to beginning such activity and shall keep

¹⁶³ As described on Page 3-17 of the Code Assessment, this section carries forward Sections 9-7-11 of the current ordinance with no substantive changes.

another copy of the plan on file at the job site.

2. If the Engineering Services Director, either upon review of such plan or on inspection of the job site, determines that a significant risk of accelerated erosion or off-site sedimentation exists, the Engineering Services Director shall require a revised plan.
3. Pending the preparation of the revised plan, work shall cease or shall continue under conditions outlined by the appropriate authority.

C. Financial Responsibility Statement

1. Soil erosion and sedimentation control plans shall be disapproved unless accompanied by an authorized statement of financial responsibility and ownership.
2. This statement shall be signed by the person financially responsible for the land-disturbing activity or his attorney in fact.
3. The statement shall include the mailing and street addresses of the principal place of business of the person financially responsible and landowner, or their registered agents.
4. If the person financially responsible is not a resident of North Carolina, a North Carolina agent must be designated in the statement for the purpose of receiving notice of compliance or non-compliance with the plan, the North Carolina Environmental Policy Act, this Ordinance, or rules or orders adopted or issued pursuant to this Ordinance.

D. Plan Requirements

The plan required by this section shall contain architectural and engineering drawings, maps, assumptions, calculations, and narrative statements as needed to adequately describe the proposed development of the land and the measures proposed to ensure compliance with the requirements of this section. Plan content may vary to meet the needs of specific site requirements. Detailed guidelines for plan preparation can be found in the *Development Guidebook*.

E. North Carolina Division of Water Quality Approval Required

The landowner or developer shall forward to the Director of the North Carolina Division of Water Quality, a plan for any land-disturbing activity that involves the utilization of ditches for the purpose of de-watering or lowering the water table of a tract. Written documentation of this plan submittal shall be provided to the Engineering Services Director prior to approval of an erosion and sedimentation control plan.

F. Conservation District Review

Within 20 days of receipt of any plan, the applicable Soil and Water Conservation District shall review it and submit its comments and recommendations to the Engineering Services Director. Failure of the Soil and Water Conservation District to submit its comments and recommendations within 20 days shall not delay final action on the plan.

G. Engineering Services Director Review

1. The Engineering Services Director shall review each complete plan submitted within 30 days of the date it is determined complete and notify the person submitting the plan that it is approved, approved with conditions, approved with performance reservations, or disapproved.
2. The Engineering Services Director shall condition approval of a draft erosion control plan upon the applicant's compliance with Federal and State water quality laws, regulations and rules.
3. Failure to approve or disapprove a soil erosion and sedimentation control plan within 30 days of the date it is determined to be complete shall result in its being

approved.

4. If the plan is disapproved, the reasons for the denial shall be stated in writing.
5. The Engineering Services Director shall approve or deny a revised soil erosion and sedimentation control plan within 15 days of receipt, or it shall be deemed approved.
6. If, following commencement of a land-disturbing activity pursuant to an approved plan, the Engineering Services Director determines that the plan is inadequate to meet the requirements of this Ordinance, the Engineering Services Director may require revisions as necessary for compliance.
7. A plan submitted for a land-disturbing activity for which an environmental document is required by the North Carolina Environmental Policy Act (North Carolina General Statutes Section 113A-1, et seq.) shall be deemed incomplete until a complete environmental document is available for review. The Engineering Services Director shall promptly notify the person submitting the plan that the 30 day time limit for review of the plan pursuant to this section shall not begin until a complete environmental document is available for review.

H. Grounds for Plan Denial

A soil erosion and sedimentation control plan shall be disapproved if:

1. It fails to adequately meet the basic control objectives or detail provisions of this Ordinance;
2. Implementation of the plan would result in a violation of rules adopted by the Environmental Management Commission to protect riparian buffers along surface waters; or
3. If its content is inadequate.

I. Other Denials

1. A soil erosion and sedimentation control plan shall be disapproved if there is a finding that an applicant, a parent, subsidiary, or other affiliate of the applicant:
 - (a) Is conducting or has conducted land-disturbing activity without an approved plan, or has received notice of violation of a plan previously approved by the North Carolina Sedimentation Control Commission or the Engineering Services Director and has not complied with the notice within the time specified in the notice;
 - (b) Has failed to pay a civil penalty assessed pursuant to the Environmental Policy Act or this Ordinance which is due and for which no appeal is pending;
 - (c) Has been convicted of a misdemeanor pursuant to North Carolina General Statutes Section 113A-64(b) or any criminal provision of this Ordinance; or
 - (d) Has failed to substantially comply with State rules adopted pursuant to the Act or regulations of this Ordinance.
2. For purposes of this subsection, an applicant's record may be considered for only the two years prior to the application date.

J. Application Amendments

An amendment to a soil erosion and sedimentation control plan may be submitted in written and/or graphic form and shall be reviewed in the same manner as the original application. Until such time as the amendment is approved, the land-disturbing activity shall not proceed except in accordance with the plan as originally approved.

K. Work Conducted from Approved Plan

A person engaged in land-disturbing activity who fails to file a plan in accordance with this Ordinance, or who conducts a land-disturbing activity except in accordance with provisions of an approved plan shall be deemed in violation of this Ordinance.

L. Plan Approval Required for Permit

If land-disturbing activity is subject to the requirements of this section, a building permit shall not be issued unless a soil erosion and sedimentation control plan is submitted to the Engineering Services Director, a land disturbance permit issued in accordance with Section 2.5.10, Land Disturbance Permit (if required), and initial soil erosion and sedimentation control devices are installed and are functioning properly.

M. Work Completed Before Final Subdivision Approval

A final plat approval or certificate of occupancy shall not be issued unless work at the site is completed in accordance with a valid land disturbance permit, or financial guarantee is approved and accepted as required by this Ordinance.

N. Financial Guarantee

The applicant for a land-disturbing permit to grade more than one acre may be required to file with the Engineering Services Director a financial guarantee to cover all costs of protection of the site according to requirements of this Ordinance. The guarantee shall remain in force until the work is completed in accordance with the land disturbance permit and the work is approved by the Engineering Services Director. Upon violation of this Ordinance, the financial guarantee shall be used to establish protective cover on the site, to control the velocity of runoff, and/or prevent off-site sedimentation. Any funds in excess of the cost of providing protective measures shall be refunded to the appropriate person.

6.3.3. BASIC CONTROL OBJECTIVES

A soil erosion and sedimentation control plan may be disapproved pursuant to Section 6.3.2.H, Grounds for Plan Denial, if the plan fails to address the following control objectives:

A. Identify Critical Areas

On-site areas which are subject to severe erosion, and off-site areas which are especially vulnerable to damage from erosion and/or sedimentation, are to be identified and receive special attention;

B. Limit Time of Exposure

All land-disturbing activity is to be planned and conducted to limit exposure to the shortest feasible time;

C. Limit Exposed Areas

All land-disturbing activity is to be planned and conducted to minimize the size of the area to be exposed at any one time;

D. Control Surface Water

Surface water runoff originating upgrade of exposed areas should be controlled to reduce erosion and sediment loss during the period of exposure;

E. Control Sedimentation

All land-disturbing activity is to be planned and conducted so as to prevent off-site sedimentation damage; and

F. Manage Stormwater Runoff

When the increase in the velocity of stormwater runoff resulting from a land-disturbing activity is sufficient to cause accelerated erosion of the receiving watercourse, plans are to

include measures to control the velocity at the point of discharge so as to minimize accelerated erosion of the site and increased sedimentation of the stream.

6.3.4. MANDATORY STANDARDS FOR LAND-DISTURBING ACTIVITY

Land-disturbing activity shall comply with the following requirements:

A. Undisturbed Buffer Zone Required

- 1.** Land-disturbing activity shall not be permitted in proximity to a lake or natural watercourse unless an undisturbed buffer zone 25 feet wide is provided, or a buffer zone is provided along the margin of the watercourse of sufficient width to confine visible siltation within the 25 percent of the buffer zone nearer the land-disturbing activity, provided that these standards shall not apply to a land-disturbing activity in connection with the construction of facilities to be located on, over, or under a lake or natural watercourse.
- 2.** Unless otherwise provided, the width of a buffer-zone is measured from the edge of the water to the nearest edge of the disturbed area, with the 25 percent of the strip nearer the land-disturbing activity containing natural or artificial means of confining visible siltation.
- 3.** Waters that have been classified as trout waters by the North Carolina Environmental Management Commission shall have an undisturbed buffer zone 25 feet wide, or of sufficient width to confine visible siltation within the 25 percent of the buffer zone nearest the land-disturbing activity, whichever is greater. Provided, however, that the Engineering services Director may approve plans which include land-disturbing activity along trout waters when the duration of the disturbance is temporary and the extent of the disturbance is minimal.
- 4.** The 25 foot minimum width factor for an undisturbed buffer zone adjacent to designated trout waters shall be measured horizontally from the top of the bank.
- 5.** Where a temporary and minimal disturbance is permitted, land-disturbing activities in the buffer zone adjacent to designated trout waters shall be limited to a maximum of ten percent of the total length of the buffer zone within the tract so that there is not more than 100 linear feet of disturbance in each 1000 linear feet of buffer zone. Larger areas may be disturbed with the written approval of DENR.
- 6.** Land-disturbing activity shall not be undertaken within a buffer zone adjacent to designated trout waters that will cause adverse temperature fluctuations in these waters, as established in 15 NCAC 2B.0211 "*Fresh Surface Water Classification and Standards*".

B. Fill Material

Unless a permit from the Public Services Director to operate a landfill is on file for the official site, acceptable fill material shall be free of organic or other degradable materials, masonry, concrete and brick in sizes exceeding 12 inches, and any materials which would cause the site to be regulated as a landfill by the State of North Carolina.

C. Graded Slopes and Fills

- 1.** The angle for graded slopes and fills shall be no greater than a two-to-one slope (horizontal to vertical) if they are to be stabilized with vegetative cover.
- 2.** Slopes or fills steeper than two-to-one must be protected by structures.
- 3.** In any event, slopes left exposed will, within 21 calendar days of completion of any phase of grading, be planted or otherwise provided with temporary or permanent ground cover, devices, or structures sufficient to restrain erosion.

D. Ground Cover

Whenever land-disturbing activity is undertaken on a tract, the person conducting the land-disturbing activity shall install such sedimentation and erosion control devices and practices as are sufficient to retain the sediment generated by the land-disturbing activity within the boundaries of the tract during construction upon and development of said tract, and shall plant or otherwise provide a permanent ground cover sufficient to restrain erosion after completion of construction or development. Except as provided in Section 6.3.5.B, High Quality Water Zones, of this Ordinance, provisions for a ground cover sufficient to restrain erosion must be accomplished within 15 working days or 30 calendar days following completion, whichever period is shorter.

6.3.5. DESIGN AND PERFORMANCE STANDARDS

A. Design for Ten-Year Storm

Except as provided in Section 6.3.5.B, High Quality Water Zones, erosion and sedimentation control measures, structures, and devices shall be so planned, designed, and constructed to provide protection from the calculated maximum peak rate of runoff from the ten-year storm. Runoff rates shall be calculated using the procedures in the USDA, Soil Conservation Service's "*National Engineering Field Manual for Conservation Practices*," or other acceptable calculation procedures.

B. High Quality Water Zones

In high quality water (HQW) zones, the following design standards shall apply:

1. Uncovered areas in HQW zones shall be limited at any time to a maximum total area within the boundaries of the tract of 20 acres. Only the portion of the land-disturbing activity within a HQW zone shall be governed by this section. Larger areas may be uncovered within the boundaries of the tract with the written approval of DENR.
2. Soil erosion and sedimentation control measures, structures, and devices within HQW zones shall be planned, designed, and constructed to provide protection from the runoff of the 25-year storm which produces the maximum peak rate of runoff as calculated according to procedures in the United States Department of Agriculture Soil Conservation Service's "*National Engineering Field Manual for Conservation Practices*" or according to procedures adopted by any other agency of this state or the United States or any generally recognized organization or association.
3. Sediment basins within HQW zones shall be designed and constructed so the basin will have a settling efficiency of at least 70 percent for the 40 micron (0.04 mm) size soil particle transported into the basin by the runoff of that two-year storm which produces the maximum peak rate of runoff as calculated according to procedures in the United States Department of Agriculture Soil Conservation Service's "*National Engineering Field Manual for Conservation Practices*" or according to procedures adopted by any other agency of this state or the United States or any generally recognized organization or association.
4. Newly constructed open channels in HQW zones shall be designed and constructed with side slopes no steeper than two horizontal to one vertical if a vegetative cover is used for stabilization unless soil conditions permit a steeper slope or where the slopes are stabilized by using mechanical devices, structural devices, or other acceptable ditch liners. In any event, the angle for side slopes shall be sufficient to restrain accelerated erosion.
5. Ground cover sufficient to restrain erosion must be provided for any portion of a land-disturbing activity in a HQW zone within 15 working days or 60 calendar days following completion of construction or development, whichever period is shorter.

C. Sedimentation Basins

Except as provided for in Section 6.3.5.B, High Quality Water Zones, above, all sedimentation basins shall be designed and constructed to have a settling efficiency of at least 70 percent for the 40 micron (0.04 mm) size soil particle.

6.3.6. STORMWATER OUTLET PROTECTION

A. Intent

Stream banks and channels downstream from any land-disturbing activity shall be protected from increased degradation by accelerated erosion caused by increased velocity of runoff from the land-disturbing activity.

B. Performance Standard

1. Land-disturbing activity shall be conducted so that the post-construction velocity of the ten-year storm runoff in the receiving natural watercourse to the discharge point does not exceed the greater of:
 - (a) The velocity established in Table 6.3.6, Maximum Permissible Velocity for Stormwater Discharges; or
 - (b) The velocity of the ten-year storm runoff in the receiving natural watercourse prior to development.
2. If condition B.1 above cannot be met, the receiving watercourse (and discharge point) shall be designed and constructed to withstand the expected velocity anywhere the velocity exceeds the "prior to development" velocity by ten percent.

TABLE 6.3.6: MAXIMUM PERMISSIBLE VELOCITY FOR STORMWATER DISCHARGES [1]

MATERIAL	MAXIMUM PERMISSIBLE VELOCITIES	
	FEET PER SECOND	METERS PER SECOND
Fine sand (noncolloidal)	2.5	0.8
Sandy loam (noncolloidal)	2.5	0.8
Silt loam (noncolloidal)	3.0	0.9
Ordinary firm loam	3.5	1.1
Fine gravel	5.0	1.5
Stiff clay (very colloidal)	5.0	1.5
Graded, loam to cobbles (noncolloidal)	5.0	1.5
Graded, silt to cobbles	5.5	1.7
Alluvial silts (noncolloidal)	3.5	1.1
Alluvial silts (colloidal)	5.0	1.5
Coarse gravel (noncolloidal)	6.0	1.8
Cobbles and shingles	5.5	1.7
Shales and hard pans	6.0	1.8

NOTES:
 [1] These standards are adapted from recommendations by Special Committee on Irrigation Research, American Society of Civil Engineers, 1926, for channels with straight alignment. For sinuous channels, multiply allowable velocity by 0.95 for

TABLE 6.3.6: MAXIMUM PERMISSIBLE VELOCITY FOR STORMWATER DISCHARGES [1]

MATERIAL	MAXIMUM PERMISSIBLE VELOCITIES	
	FEET PER SECOND	METERS PER SECOND
slightly sinuous, by 0.9 for moderately sinuous channels, and by 0.8 for highly sinuous channels		

C. Acceptable Management Measures

1. General

Measures applied alone or in combination to satisfy the intent of this section are acceptable if there are no objectionable secondary consequences. The N.C. Sedimentation Commission and the City recognize that the management of stormwater runoff to minimize or control downstream channel and bank erosion is a developing technology. Innovative techniques and ideas will be considered and may be used when shown to have the potential to produce successful results.

2. Stormwater Runoff Management Alternatives

Some alternatives are to:

- (a) Avoid increases to surface runoff volume and velocity by including measures to promote infiltration to compensate for increased runoff from areas rendered impervious;
- (b) Avoid increases in stormwater discharge velocities by using detention devices, vegetated or roughened swales, and waterways in-lieu of closed drains and high velocity paved sections;
- (c) Provide energy dissipaters at outlets of storm drainage facilities to reduce flow velocities to the point of discharge. These may range from simple rip-rapped sections to complex structures;
- (d) Protect watercourses subject to accelerated erosion by improving cross sections and/or providing erosion-resistant lining; or
- (e) Upgrade or replace the receiving device structure, or watercourse such that it will receive and conduct the flow to a point where it is no longer subject to degradation from the increased rate of flow or increased velocity.

D. Exceptions

This rule shall not apply where it can be demonstrated that stormwater discharge velocities will not create an erosion problem in the receiving watercourse.

6.3.7. BORROW AND WASTE AREAS

When the person conducting the land-disturbing activity is also the person conducting the borrow or waste disposal activity, areas from which borrow is obtained and which are not regulated by the provisions of the Mining Act of 1971, and waste areas for surplus materials other than landfills regulated by the Public Service Department, shall be considered as part of the land-disturbing activity where the borrow material is being used or from which the waste material originated. When the person conducting land-disturbing activity is not the person obtaining the borrow and/or disposing of the waste, these areas shall be considered a separate land-disturbing activity.

6.3.8. ACCESS AND HAUL ROADS

Temporary access and haul roads, other than existing public roads, constructed or used in connection with any land-disturbing activity shall be considered a part of such activity.

6.3.9. OPERATIONS IN LAKES OR NATURAL WATERCOURSES

- A.** Land-disturbing activity in connection with construction in, on, over, or under a lake or natural watercourse shall be planned and conducted in such a manner as to minimize the extent and duration of disturbance of the stream channel.
- B.** The relocation of a stream, where relocation is an essential part of the proposed activity, shall be planned and executed so as to minimize changes in the stream flow characteristics, except when justification for significant alteration to flow characteristic is provided.
- C.** The U.S. Army Corps of Engineers shall be notified by the developer of any planned operation in lakes or natural watercourses for possible issuance of Section 404 or other permits.

6.3.10. RESPONSIBILITY FOR MAINTENANCE

During the development of a site, the person conducting the land-disturbing activity shall install and maintain all temporary and permanent soil erosion and sedimentation control measures as required by the approved plan, by any provision of this Ordinance, the Act, or by any order adopted pursuant to this Ordinance or the North Carolina Sedimentation Pollution Control Act of 1973 (see Section 113A-50 of the North Carolina General Statutes). After site development, the landowner or person in possession or control of the land shall install and/or maintain all necessary permanent soil erosion and sedimentation control measures, except those measures installed within a road or street right-of-way or easement accepted for maintenance by a governmental agency.

6.3.11. ADDITIONAL MEASURES

Whenever the Engineering Services Director determines that significant sedimentation is occurring as a result of land-disturbing activity, despite application and maintenance of protective practices, the person conducting the land-distributing activity will be required to and shall take additional protective action.

6.3.12. EXISTING UNCOVERED AREAS

A. Applicability

All uncovered areas existing on _____ (*insert the effective date of this Ordinance*) which are the result of land-disturbing activity, which exceed one acre, which are subject to continued accelerated erosion, and which are causing off-site damage from sedimentation, shall be provided with a ground cover or other protective measures, structures, or devices sufficient to restrain accelerated erosion and control off-site sedimentation.

B. Notice of Violation

The Engineering Services Director will serve upon the landowner or other person in possession or control of the land, a written notice of violation by registered or certified mail, return receipt requested, or other means reasonably calculated to give actual notice. The notice will set forth the measures needed to comply and will state the time within which such measures must be completed. In determining the measures required and the time allowed for compliance, the Engineering Services Director shall take into consideration the economic feasibility, technology, and quantity of work required and shall set reasonably attainable time limits for compliance.

C. Requiring Erosion Control Plan

The Engineering Services Director reserves the right to require preparation and approval of a soil erosion and sedimentation control plan in any instance where extensive control measures are required.

D. Exemption

This rule shall not require ground cover on cleared land forming the future basin of a planned reservoir.

6.3.13. RESTORATION AFTER NON-COMPLIANCE

The Engineering Services Director may require a person who engaged in a land-disturbing activity and failed to retain sediment generated by the activity, as required by North Carolina General Statutes Section 113A-57 (3), to restore the waters and land affected by the failure to minimize the detrimental effects of the resulting pollution by sedimentation. This authority is in addition to any other civil or criminal penalty or injunctive relief authorized under this Ordinance.

6.4. FLOOD DAMAGE PREVENTION¹⁶⁴

6.4.1. GENERAL

A. Applicability

This section shall apply to development in all special flood hazard areas within the corporate limits and ETJ of the City of High Point.

B. Basis for Establishing Special Flood Hazard Areas

The special flood hazard areas are those areas identified under the Cooperating Technical State (CTS) agreement between the State of North Carolina and Federal Emergency Management Agency (FEMA) in its Flood Insurance Study (FIS) and its accompanying Flood Insurance Rate Maps (FIRM), for Guilford County dated June 18, 2007, or any subsequent revision of such maps, which are adopted by reference herein and declared to be a part of this Ordinance. Also declared to be a part of this section are the equivalent maps, studies and related information for Davidson, Forsyth and Randolph Counties as they apply to areas within the City of High Point and its ETJ.

C. Establishment of Floodplain Development Permit

A floodplain development permit is required prior to commencement of development within special flood hazard areas determined in accordance with the provisions of this section and Section 2.5.8, Floodplain Development Permit.

D. Warning and Disclaimer of Liability

The degree of flood protection required by this section is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur. Actual flood heights may be increased by man-made or natural causes. This section does not imply that land outside the Special Flood Hazard Areas or uses permitted within such areas will be free from flooding or flood damage. This section shall not create liability on the part of the City or any officer or employee of the City for any flood damages that result from reliance on this Ordinance or any administrative decision lawfully made hereunder.

6.4.2. APPLICATION, PERMIT, AND CERTIFICATION REQUIREMENTS¹⁶⁵

A. Application Requirements

An application for a floodplain development permit shall be prepared in accordance with the requirements in the *Development Guidebook*, the certification requirements in Section 6.4.2.B below, and submitted in accordance with the requirements of Section 2.5.8, Floodplain Development Permit.

B. Certification Requirements

Development subject to this section shall comply with the following requirements:

1. Elevation Certificates

(a) Before the Start of Construction

¹⁶⁴ As described on Page 3-17 of the Code Assessment, this section carries forward the standards in Section 9-7-16 of the current ordinance with no substantive modifications.

¹⁶⁵ The permit application requirements in Section 9-7-16(b)(1-2) of the current ordinance are relocated to the Development Guidebook.

Subsection 6.4.2 Application, Permit, and Certification Requirements

- (1) An elevation certificate (FEMA Form 81-31) is required prior to the actual start of any new construction.
- (2) Certification of the elevation of the reference level, in relation to mean sea level shall be submitted.
- (3) The Engineering Services Director shall review the certificate data submitted. Deficiencies shall be corrected by the applicant.
- (4) Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit.

(b) After Reference Level Established

- (1) An elevation certificate (FEMA Form 81-31) is required after the reference level is established.
- (2) Within seven calendar days of establishment of the reference level elevation, the applicant shall submit a certification of the elevation of the reference level, in relation to mean sea level.
- (3) Any work done within the seven day calendar period and prior to submission of the certification shall be at the applicant's risk.
- (4) The Engineering Services Director shall review the certificate data submitted. Deficiencies detected by such review shall be corrected by the applicant immediately and prior to further work being permitted to proceed.
- (5) Failure to submit the certification or failure to make required corrections shall be cause to issue a stop-work order for the project.

(c) Final As-Built Elevation Certificate

- (1) A final as-built elevation certificate (FEMA Form 81-31) is required after construction is completed and prior to issuance of a certificate of occupancy.
- (2) The permit holder shall submit a certification of final as-built construction of the elevation of the reference level and all attendant utilities to the Engineering Services Director.
- (3) The Engineering Services Director shall review the certificate data submitted. Deficiencies detected shall be corrected by the permit holder immediately and prior to issuance of a certificate of occupancy.
- (4) In some instances, another certification may be required to certify corrected as-built construction.
- (5) Failure to submit the certification or failure to make required corrections shall be cause to withhold the issuance of a certificate of occupancy.

2. Floodproofing Certificate

- (a) If non-residential floodproofing is used to meet the regulatory flood protection elevation requirements, a floodproofing certificate (FEMA Form 81-65), with supporting data, an operational plan, and an inspection and maintenance plan are required prior to the actual start of any new construction.
- (b) The applicant shall submit to the Engineering Services Director a certification of the floodproofed design elevation of the reference level and all attendant utilities, in relation to mean sea level.
- (c) Floodproofing certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same.
- (d) The Engineering Services Director shall review the certificate data, the

operational plan, and the inspection and maintenance plan. Deficiencies detected by the review shall be corrected by the applicant prior to floodplain development permit approval.

- (e) Failure to submit the certification or failure to make required corrections shall be cause to deny a floodplain development permit.
- (f) Failure to construct in accordance with the certified design shall be cause to withhold the issuance of a certificate of occupancy.

3. Manufactured Dwelling

If a manufactured dwelling is placed within Zone A, AO, AE, or A1-30 and the elevation of the chassis is more than 36 inches in height above grade, an engineered foundation certification is required in accordance with the provisions of Section 6.4.3.B, Specific Standards.

4. Watercourse Alteration

All the following items shall be submitted by a permit holder to the Engineering Services Director prior to issuance of a floodplain development permit if a watercourse is to be altered or relocated:

- (a) A description of the extent of watercourse alteration or relocation;
- (b) A professional engineer’s certified report on the effects of the proposed project on the flood-carrying capacity of the watercourse and the effects to properties located both upstream and downstream; and
- (c) A map showing the location of the proposed watercourse alteration or relocation.

5. Certification Exemptions

The following structures, if located within Zone A, AO, AE or A1-30, are exempt from the elevation/floodproofing certification requirements specified in this subsection:

- (a) Recreational vehicles meeting requirements of Section 6.4.3.B.5, Recreational Vehicles;
- (b) Temporary nonresidential structures meeting requirements of Section 6.4.3.B.6, Temporary Non-Residential Structures; and
- (c) Accessory Structures less than 150 square feet meeting requirements of Section 6.4.3.B.7, Accessory Structures.

6. Corrective Procedures

Violations of these standards shall be addressed in accordance with Section 9.6.13, [Flood Hazard Reduction Violations](#).

6.4.3. PROVISIONS FOR FLOOD HAZARD REDUCTION

A. General Standards

Compliance with the following standards shall be required within a special flood hazard area:

- 1. New construction and substantial improvements in special flood hazard areas shall:
 - (a) Be designed (or modified) and adequately anchored to prevent flotation, collapse, and lateral movement of the structure;
 - (b) Be constructed with materials and utility equipment resistant to flood damage;
 - (c) Be constructed by methods and practices that minimize flood damages;

- (d) Be designed so that electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities are configured to prevent water from entering or accumulating within the components during conditions of flooding to the regulatory flood protection elevation. These include, but are not limited to:
 - (1) HVAC equipment;
 - (2) Water softener units;
 - (3) Bath/kitchen fixtures;
 - (4) Ductwork;
 - (5) Electric/gas meter panels/boxes;
 - (6) Utility/cable boxes;
 - (7) Hot water heaters; and
 - (8) Electric outlets/switches;
 - (e) Be designed so that new and replacement water supply systems minimize or eliminate infiltration of floodwaters into the system;
 - (f) Be designed so that new and replacement sanitary sewage systems minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters;
 - (g) Be located and constructed to avoid impairment of on-site waste disposal systems or contamination from them during flooding;
2. Any alteration, repair, reconstruction, or improvements to a structure, which is in compliance with the provisions of this section, shall comply with the requirements of "new construction" as established in this section;
 3. Nothing in this section shall prevent the repair, reconstruction, or replacement of a building or structure existing on _____ (*insert the effective date of this Ordinance*) and located totally or partially within the floodway, non-encroachment area, or stream setback, provided there is no additional encroachment below the regulatory flood protection elevation in the floodway, non-encroachment area, or stream setback, and provided that such repair, reconstruction, or replacement meets all of the other requirements of this section;
 4. New solid waste disposal facilities and sites, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted in the special flood hazard area;
 5. A structure or tank for chemical or fuel storage incidental to an allowed use or to the operation of a water treatment plant or wastewater treatment facility may be located in a special flood hazard area only if the structure or tank is either elevated or floodproofed to at least the regulatory flood protection elevation and certified in accordance with the provisions of Section 6.4.2.B, Certification Requirements;
 6. Subdivision and other development applications shall:
 - (a) Be consistent with the need to minimize flood damage;
 - (b) Require public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;
 - (c) Require adequate drainage provided to reduce exposure to flood hazards; and
 - (d) Receive all necessary permits from those governmental agencies for which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.
 7. When a structure is partially located in a special flood hazard area, the entire structure shall meet the requirements for new construction and substantial improvement.

8. When a structure is located in multiple flood hazard zones or in a flood hazard risk zone with multiple base flood elevations, the provisions for the more restrictive flood hazard risk zone and the highest base flood elevation shall apply.

B. Specific Standards

In addition to the standards in Section 6.4.3.A, General Standards, development in all special flood hazard areas where base flood elevation (BFE) data has been provided, as set forth in Section 6.4.1.B, Basis for Establishing Special Flood Hazard Areas, or Section 6.4.3.C, Standards for Floodplains without Established Base Flood Elevations, shall be subject to the following:

1. Non-Residential Construction

- (a) New construction and substantial improvement of a nonresidential structure shall have the reference level, including basement, elevated no lower than the regulatory flood protection elevation, as established in this section.
- (b) A structures located in A, AE, AO, and A1-30 Zones may be floodproofed in-lieu of elevation, provided all areas of the structure, together with attendant utility and sanitary facilities, below the regulatory flood protection elevation are made watertight with walls substantially impermeable to the passage of water, using structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy.
- (c) For AO Zones, the floodproofing elevation shall be in accordance with Section 6.4.4.F, Standards for Areas of Shallow Flooding (Zone AO). A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the Engineering Services Director as set forth in Section 6.4.2.B, Certification Requirements, along with the operational and maintenance plans.

2. Manufactured Dwellings

- (a) New and replacement manufactured dwellings shall be elevated so that the reference level of the manufactured home is no lower than the regulatory flood protection elevation, as established in this section.
- (b) Manufactured homes shall be securely anchored to an adequately anchored foundation to resist flotation, collapse, and lateral movement, either by a certified engineered foundation system, or in accordance with the most current edition of the State of North Carolina Regulations for Manufactured Homes adopted by the Commissioner of Insurance pursuant to NCGS 143-143.15.
- (c) When the elevation would be met by an elevation of the chassis 36 inches or less above the grade at the site, the chassis shall be supported by reinforced piers or engineered foundation. When the elevation of the chassis is above 36 inches in height, an engineering certification is required.
- (d) All enclosures or skirting below the lowest floor shall meet the requirement of Section 6.4.3.B.3, Elevated Buildings.
- (e) An evacuation plan shall be developed for evacuation of residents of all new, substantially improved or substantially damaged manufactured home parks or subdivisions located within flood prone areas. This plan shall be filed with and approved by the Engineering Service Director and the local Emergency Management Coordinator.

3. Elevated Buildings

Fully enclosed areas associated with new construction and substantially improved structures that are below the lowest floor shall comply with the following:

- (a) Not be designed or used for human habitation, but only be used for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator). The interior portion of such enclosed area shall not be finished or partitioned into separate rooms, except to enclose storage areas.
- (b) Be constructed entirely of flood resistant materials at least to the regulatory flood protection elevation.
- (c) Include, in Zones A, AO, AE, and A1-30, flood openings to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings shall be certified by a professional engineer or architect or meet or exceed the following minimum design criteria:
 - (1) A minimum of two flood openings on different sides of each enclosed area subject to flooding;
 - (2) The total net area of all flood openings shall be at least one square inch for each square foot of enclosed area subject to flooding;
 - (3) If a building has more than one enclosed area, each enclosed area shall have flood openings to allow floodwaters to automatically enter and exit;
 - (4) The bottom of all required flood openings shall be no higher than one foot above the adjacent grade;
 - (5) Flood openings may be equipped with screens, louvers, or other coverings or devices, provided they permit the automatic flow of floodwaters in both directions; and
 - (6) Enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require flood openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires flood openings as outlined above.

4. Additions/Improvements

(a) Not a Substantial Improvement

- (1) In cases where an addition or improvement to a pre-FIRM structure does not constitute a substantial improvement, the addition or improvement shall be designed to minimize flood damages and shall not render the pre-FIRM structure any more nonconforming with respect to the standards in this section.
- (2) In cases where an addition and/or improvement to a post-FIRM structure does not constitute a substantial improvement to the existing structure, then only the additions or improvements shall comply with the standards for new construction.
- (3) Additions to post-FIRM structures with no modifications to the existing structure other than a standard door in a common wall shall require only the addition to comply with the standards for new construction.

(b) Substantial Improvements

In cases where an addition or improvement to a pre- or post-FIRM structure (whether in combination with interior modifications or not) do constitute a

substantial improvement, both the existing structure and the addition and/or improvements shall comply with the standards for new construction.

5. Recreational Vehicles

Recreational vehicles shall either:

- (a) Be on site for fewer than 180 consecutive days and be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities, and has no permanently attached additions); or
- (b) Meet all the requirements for new construction.

6. Temporary Non-Residential Structures¹⁶⁶

Temporary nonresidential structures shall not remain within the special flood hazard area for a time period exceeding three months. This time period may be renewed up to a maximum of one year.

7. Accessory Structures

- (a) An accessory structure shall comply with the following:
 - (1) Not be used for human habitation (including working, sleeping, living, cooking or restroom areas);
 - (2) Not be temperature-controlled;
 - (3) Be designed to have low flood damage potential;
 - (4) Be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;
 - (5) Be firmly anchored; and
 - (6) Incorporate flood openings to facilitate automatic equalization of hydrostatic flood forces below regulatory flood protection elevation, if necessary.
- (b) An accessory structure with a footprint less than 150 square feet that satisfies the criteria outlined above does not require an elevation or floodproofing certificate.
- (c) Elevation or floodproofing certifications are required for all other accessory structures in accordance with Section 6.4.2.B, Certification Requirements.

C. Standards for Floodplains without Established Base Flood Elevations

In addition to the standards in Section 6.4.3.A, General Standards, and Section 6.4.3.B, Specific Standards, development within the special flood hazard areas designated as Approximate Zone A and established in Section 6.4.1.B, Basis for Establishing Special Flood Hazard Areas, where no BFE is provided by FEMA, shall be subject to the following:

- 1. No encroachments, including fill, new construction, substantial improvements or new development shall be allowed within a distance of 20 feet each side from top of bank or five times the width of the stream, whichever is greater, unless certification with supporting technical data by a registered professional engineer is provided demonstrating that such encroachments will not result in any increase in flood levels during the occurrence of the base flood discharge; and
- 2. The BFE used in determining the regulatory flood protection elevation shall be determined based on the following criteria:
 - (a) When BFE data is available from other sources, all new construction and

¹⁶⁶ The application requirements will be relocated to the Development Guidebook.

substantial improvements within such areas shall also comply with all applicable provisions of this section and the Ordinance and shall be elevated or floodproofed.

- (b) All subdivision, manufactured home park, and other development proposals shall provide BFE data if development is greater than five acres or has more than 50 lots/manufactured home sites. The BFE data shall be adopted by reference in accordance with Section 6.4.1.B, Basis for Establishing Special Flood Hazard Areas, and utilized in implementing this section.
- (c) When BFE data is not available from a Federal, State, or other source as outlined above, the reference level shall be elevated to or above the regulatory flood protection elevation.

D. Standards for Riverine Floodplains with BFE, but Without Established Floodways or Non-Encroachment Areas

In addition to the standards in Section 6.4.3.A, General Standards, and Section 6.4.3.B, Specific Standards, development along rivers and streams where BFE data is provided by FEMA or is available from another source but neither floodway nor non-encroachment areas are identified for a special flood hazard area on the FIRM or in the FIS report, shall be subject to the following:

- 1. Until a regulatory floodway or non-encroachment area is designated, no encroachments, including fill, new construction, substantial improvements, or other development, shall be permitted unless certification with supporting technical data by a registered professional engineer is provided demonstrating that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

E. Floodways and Non-Encroachment Areas

In addition to the standards in Section 6.4.3.A, General Standards, and Section 6.4.3.B, Specific Standards, development proposed in floodways or non-encroachment areas established by Section 6.4.1.B, Basis for Establishing Special Flood Hazard Areas, shall be subject to the following:

- 1. No encroachments, including fill, new construction, substantial improvements and other developments shall be permitted unless:
 - (a) It is demonstrated that the proposed encroachment would not result in any increase in the flood levels during the occurrence of the base flood, based on hydrologic and hydraulic analyses performed in accordance with standard engineering practice and presented to the Engineering Services Director prior to issuance of floodplain development permit; or
 - (b) A conditional letter of map revision (CLOMR) is approved by FEMA.
 - (c) A letter of map revision (LOMR) must also be obtained upon completion of the proposed encroachment.
- 2. If (E.1) above is satisfied, development shall comply with all applicable flood hazard reduction provisions of this section.
- 3. No manufactured dwellings shall be permitted, except replacement manufactured dwellings in an existing manufactured dwelling park or subdivision, provided the following provisions are met:
 - (a) The anchoring and the elevation standards of Section 6.4.3.B.2, Manufactured Dwellings; and
 - (b) The no encroachment standard of (1) above.

F. Standards for Areas of Shallow Flooding (Zone AO)

In addition to the standards in Section 6.4.3.A, General Standards, and Section 6.4.3.B, Specific Standards, development located within the Special Flood Hazard Areas established in Section 6.4.1.B, Basis for Establishing Special Flood Hazard Areas, as shallow flooding areas shall comply with the following:

- 1.** The reference level shall be elevated at least as high as the depth number specified on the Flood Insurance Rate Map (FIRM), in feet, plus a freeboard of two feet, above the highest adjacent grade; or at least two feet above the highest adjacent grade if no depth number is specified;
- 2.** Nonresidential structures may, in-lieu of elevation, be floodproofed to the same level as required by subsection F.1 above so that the structure, together with attendant utility and sanitary facilities below that level shall be watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
- 3.** Certification is required in accordance with Section 6.4.2.B, Certification Requirements; and
- 4.** Adequate drainage paths shall be provided around structures on slopes, to guide floodwaters around and away from proposed structures.

CHAPTER 7: SUBDIVISION STANDARDS

7.1.	Subdivisions.....	7-1
7.1.1.	Purpose and Intent	7-1
7.1.2.	Applicability.....	7-1
7.1.3.	Street and Utility Construction.....	7-2
7.1.4.	Dedication or Reservation of Right-of-Way.....	7-3
7.1.5.	Permanent Runoff Control Structures/Soil Erosion and Sedimentation Control Devices.....	7-4
7.1.6.	Subdivision Standards	7-5
6.	Development Entry Points.....	7-9
7.2.	Financial Guarantees	7-17
7.2.1.	Installation Statement and Financial Guarantees in-lieu of Completion	7-17
7.2.2.	Financial Guarantees (Performance Guarantee)	7-17
7.2.3.	Financial Guarantees (Maintenance Guarantee)	7-20
7.2.4.	As-Built Plans Required	7-21
7.2.5.	Improper Release of Financial Guarantees	7-21
7.2.6.	Oversized Improvements.....	Error!
	Bookmark not defined.	
7.3.	Homeowners' or Property Owners' Association	7-23
7.3.1.	Establishment.....	7-23
7.3.2.	Submission of Owners' Association Declaration.....	7-23
7.3.3.	Inspection and Approval of Improvements.....	7-25
7.4.	Greenway Dedication	7-26
7.4.1.	Required Greenway Dedication	7-26
7.4.2.	Greenway Easement Width.....	7-26
7.4.3.	Limitation on Dedication.....	7-26
7.4.4.	Density Credits	7-26
7.5.	Reservation of Public Land.....	7-27

Commentary

KEY CHANGES FROM CURRENT ORDINANCE:

- This Chapter includes the City's subdivision standards, which are largely carried forward except that are new street connectivity index requirements.
- The financial guarantees section replaces the current bonds/surety standards. The performance guarantee standards for public infrastructure are increased to 125percent, and there are requirements for incomplete private site features like landscaping or stormwater to provide a performance guarantee.
- There are new maintenance guarantee provisions for public infrastructure that ensure no cost to the City during the one-year warranty period following acceptance.
- There are new homeowner's association requirements for developments that include open space or commonly-held lands or infrastructure.
- The greenway dedication section requires dedication of land for a greenway if the development includes land indicated for inclusion as a greenway in the City's adopted policy guidance.
- .There is a new section on the reservation of land to be used for public purposes in cases where it is identified as appropriate or necessary for dedication to the public in the City's adopted policy guidance.

CHAPTER 7: SUBDIVISION STANDARDS

7.1. SUBDIVISIONS

7.1.1. PURPOSE AND INTENT¹⁶⁷

The purpose of this section is to establish standards for the subdivision of land in the City. More specifically, this section is intended to:

- A.** Provide for the orderly growth and development of the City.
- B.** Coordinate the provision of streets within and contiguous to proposed subdivisions with other existing or planned streets in the general area.
- C.** Provide for adequate drainage and flood control.
- D.** Provide for the adequate provision of public services and infrastructure.
- E.** Provide for adequate open space for light, air, and recreation.
- F.** Provide for the conservation and protection of natural and historical areas.
- G.** Provide for the acceptance of rights-of-way, easements, streets, curbs, gutters, sidewalks, bikeways, drainage facilities, water and sewer facilities, and other improvements dedicated to public use.
- H.** Provide for the installation of monuments establishing street and lot lines.

7.1.2. APPLICABILITY¹⁶⁸

A. General

No subdivision of land in the City's jurisdiction, as defined in Section 10.4, Definitions including group development, multiple lot development, and development of property declared under the N.C. Condominium Act (NCGS 47C-1 et. seq.), shall occur, and no lot or parcel created by such division of land may be sold or developed, unless the division is expressly exempted from this section or has received subdivision approval in accordance with Section 2.5.11, Preliminary Plat, Section 2.5.7, Final Plat, and the requirements of this chapter.

B. Exclusions

Divisions of land not considered a subdivision shall be subject to the standards in Section 2.5.6, Exclusion Map.

C. Minimum Standards

The standards in this section are the minimum standards applied to the subdivision of land under this Ordinance.

D. Dedication and Acceptance

1. Rights-of-Way and Easements

- (a)** The approval and recordation of a final plat constitutes dedication to and acceptance by the City of each public street, alley, or utility easement shown

¹⁶⁷ This subsection adds a purpose and intent subsection to the subdivision standards.

¹⁶⁸ This section builds on Section 9-6-3 of the current ordinance. Language is revised for clarity and a subsection is added that identifies exemptions to subdivision.

on the plat.

- (b) The approval and recordation of a final plat does not constitute acceptance by the City of maintenance responsibility within a right-of-way or easement.
- (c) Improvements within a right-of-way or easement, such as utility lines, street paving, drainage facilities, or sidewalks may be accepted for maintenance by the City Council or by the Engineering Services Director, who is authorized to inspect and, where appropriate, accept the dedication of such improvements.

2. Open Space

- (a) Land designated as public open space on a final plat shall be considered to be offered for dedication until such offer is accepted by the City. The offer may be accepted by the City through:
 - (1) Express action by the Engineering Services Director; or
 - (2) Conveyance of fee simple marketable title (unencumbered financially and environmentally) of the land to the City at the time of final plat recordation.
- (b) Until such offer of dedication is accepted by the City, land offered for dedication may be used for open space purposes by the landowner or by the owners' association. Land offered for dedication shall not be used for any purpose inconsistent with the proposed public use.

7.1.3. STREET AND UTILITY CONSTRUCTION¹⁶⁹

A. Required

Street and utility construction plan approval shall be required for all street, potable water, sanitary sewer, and storm sewer facilities before the street and utility improvements occur.

B. Preparation

Street and utility construction plans shall be prepared by a registered engineer licensed to practice in the state of North Carolina. They shall be prepared in accordance with the guidance in the *Development Guidebook*.

C. Construction Plans

- 1. Street and utility construction plans for all street, potable water, sanitary sewer, and storm sewer facilities shall be submitted to the City following preliminary plat review but shall not be reviewed until the street and utility network for the preliminary plat is found generally satisfactory by the TRC.
- 2. For each subdivision section, the street and utility construction plans shall include all improvements lying within or adjacent to that section as well as all water and sanitary sewer lines lying outside that section that are required to serve that section.
- 3. Street and utility construction plans shall not be approved until the preliminary plat is approved in accordance with Section 2.5.11, Preliminary Plat.

D. Statement of Required Improvements

The applicant shall submit a statement of required improvements which specifies the length of streets to be constructed and the diameter material and length of sanitary sewer and water lines and other required public improvements to be installed for the subdivision section. The statement shall include all public improvements for which the

¹⁶⁹ This section carries forward Section 9-6-8 of the current ordinance, with no substantive changes.

Subsection 7.1.4 Dedication or Reservation of Right-of-Way

developer/subdivider is responsible and the date when the improvements shall be completed.

E. Oversized Improvements

The City may require installation of oversized utilities or the extension of utilities to adjacent land when it is in the interest of future development. If the installation of oversized improvements is required, the City shall reimburse the developer for the oversizing at rates set by the City.

F. Approval Period

Street utility construction plan approval shall be valid for two years unless the TRC determines that materials or methods shown on the plan pose a threat to the public health or safety. Plan approval shall be extended in conjunction with the extension of preliminary plat approval, unless the TRC determines that materials or methods shown on the plan pose a threat to public health or safety. The extension shall expire concurrently with the expiration of the preliminary plat.

G. Inspection

Work performed in accordance with approved street and utility construction plans shall be inspected and approved by the City.

7.1.4. DEDICATION OR RESERVATION OF RIGHT-OF-WAY¹⁷⁰

A. Dedication of Right-Of-Way with Density Transfer

1. When land is proposed for subdivision or is being considered for approval as a conditional zoning district or special use and a portion of it is in a corridor for a street or highway shown on a plan established and adopted in accordance with North Carolina General Statutes Section 136-66.2, the City may provide for the dedication of right-of-way within that corridor pursuant to any applicable legal authority, and as allowed by state law if the City allows the applicant to transfer density credits attributed to the dedicated right-of-way.
2. When land is proposed for subdivision or is being considered for approval as a conditional zoning district, special use, or other permit or development approval under this Ordinance, the City may require the applicant to dedicate, for street or highway purposes, the right-of-way within a corridor for a street shown for improvement in the City's *Comprehensive Transportation Plan*. Right-of-way dedication shall not be required unless the TRC finds the dedication:
 - (a) Does not result in the deprivation of a reasonable use of the land; and
 - (b) Is either reasonably related to the traffic generated by the proposed development or the impact of the dedication is mitigated by measures provided in this Ordinance; or
3. If an applicant for subdivision, a conditional zoning district, special use, or other permit or development approval is not required, but elects to dedicate right-of-way within a corridor for a street shown for improvement on the City's *Comprehensive Transportation Plan*, the City may allow the applicant to transfer density credits attributable to the dedicated right-of-way to contiguous land that is part of a common development plan.

B. Acquisition Review for Proposed Construction within

¹⁷⁰ This section carries forward Section 9-3-8 of the current ordinance with no substantive changes. Language is edited to provide more clarity to the provisions, and certain public notification and related provisions required by NCGS 136-44.50 for the adoption of an Official Roadway Corridor Map is deleted from 7.1.4. C, Reservation of Right-of-Way through Roadway Corridor Official Maps.

Proposed Rights-of-Way

1. Development shall not be approved or constructed within future rights-of-way of any existing or future street identified in the City's *Comprehensive Transportation Plan* until the City is given an opportunity to purchase or otherwise acquire the street right-of-way.
2. When a development is proposed or a portion of a building is proposed to be altered (unless specifically ordered to do so by the City to assure the safety and health of the occupants of the building) that is within future right-of-way of an existing or future street identified in the City's *Comprehensive Transportation Plan* the landowner shall submit to the City Council a written proposal naming the price and terms upon which the owner will sell the land within the future right-of-way. The owner shall also notify the City's Transportation Department of the nature and estimated cost of the proposed building or portion thereof lying within the future right-of-way. Upon notification, the Transportation Director shall not issue a driveway permit until negotiations for acquisition of the right-of-way are completed or terminated.
3. The City shall then determine whether it will take the necessary steps to acquire the right-of-way prior to the construction or alteration of the proposed building. If the City fails within 60 days from the receipt of the notification to begin acquisition, or to institute condemnation proceedings, the owner may proceed to develop the land or erect the building or addition after obtaining any and all permits required by this Ordinance.

7.1.5. PERMANENT RUNOFF CONTROL STRUCTURES/SOIL EROSION AND SEDIMENTATION CONTROL DEVICES¹⁷¹

A. Soil Erosion and Sedimentation Control Devices

An approved soil erosion and sedimentation control device may be installed prior to approval of street and utility construction plans in accordance with the standards in this section.

B. Permanent Runoff Control Structures

1. Coordination with Streets and Utilities

Street and utility construction plans shall show the location of existing or proposed runoff control structures relative to the proposed improvements to avoid conflicts during and after construction.

2. Design and Construction

A runoff control structure shall be designed and installed in accordance with the requirements of Section 6.2, Watershed Protection, and this section.

3. Owners Association Required

When a permanent runoff control structure serves more than one lot within a subdivision, an owners' association shall be required for the purposes of ownership and maintenance responsibility (see Section 7.3, Homeowners' or Property Owners' Association).

4. Maintenance Responsibility

¹⁷¹ This section carries forward Section 9-6-9 of the current ordinance, with no substantive changes.

The owners association shall be responsible for maintaining the completed permanent runoff control structure(s). If the owners' association is dissolved or ceases to exist, all the owners of record at the time of required maintenance shall be jointly and severally liable for all costs related to the completed permanent runoff control structure(s).

5. Maintenance Note Required on Final Plat

When a subdivision contains a permanent runoff control structure to which paragraph (3) above is applicable, the final plat shall contain a prominent note with the full text of paragraph (4) above.

6. Timing of Completion

The permanent runoff control structure(s) shall be substantially completed and have full design volume available prior to the recordation of a final plat for the subdivision. This may require the cleanout and disposal of sediment from a pond.

7.1.6. SUBDIVISION STANDARDS

A. General

1. Design

- (a) Proposed subdivisions, including group developments, shall comply with this section, bear a reasonable relationship to the approved plans of the City, and be designed to promote development that is beneficial to the City.
- (b) The *Development Guidebook*, shall supplement the provisions of this Ordinance. It shall also be considered as a resource for both City and developer in determining the requirements of this Ordinance.

2. Development Name

The name of a proposed development shall not duplicate or be phonetically similar to an existing development name in the City or its ETJ unless the proposed development lies adjacent or in proximity to the existing development.

3. Reasonable Relationship

All required improvements, easements, and rights-of-way (other than required reservations) shall substantially benefit the development or bear a reasonable relationship to the need for public facilities attributable to the new development.

4. Off-Site Connections

When in the opinion of the TRC it is necessary to connect streets and/or utilities off-site to adjoining streets and/or utilities, the connections may be required in accordance with City policy.

B. Lot Dimensions and Standards

The size, shape, and orientation of lots shall be appropriate for the location of the proposed subdivision and for the type of development contemplated. Lots shall conform to the following standards.

1. Conformance to Other Regulations

A lot shall have sufficient area, dimensions, and street access to allow a principal building to be erected on it in compliance with the requirements of this Ordinance.

2. Lot Depth to Width Ratio

A lot shall not have a depth greater than four times its width, at the minimum front street setback.

3. Side Lot Line Configuration

Side lines of lots should be at or near right angles or radial to street lines.

4. Lot Lines and Drainage

Lot boundaries shall coincide with natural and pre-existing manmade drainageways, to the maximum extent practicable, to avoid disruption of established drainage patterns or lots that can be built upon only by altering such drainageways.

5. Lots Adjoining Public Open Space or Required Watershed Stream Buffer Areas

Single-family lots with public sewer service that abut a dedicated public drainageway, public open space areas, or a required watershed stream buffer when such buffer is in a common area, may have less area than the required minimum lot size required, provided the following standards are met:

- (a) No lot area shall be less than 60 percent of the minimum lot size for the zoning district or less than 4,000 square feet.
- (b) A note shall be placed on the Final Plat stating:
"The required area of Lots *_(insert lot #)_* through *_(insert lot #)_* has been reduced in accordance with Section 7.1.6.B.5 of the High Point Development Ordinance. All other dimensional requirements of this Ordinance shall apply."

6. Special Purpose Lots

Minimum lot dimensional standards shall not apply to lots for family or religious institution cemeteries, sewage lift stations, and similar utility uses. Such lots shall comply with the following:

- (a) A special-purpose lot shall be permitted only after the TRC has determined that the proposed lot has sufficient dimensions to accommodate the intended use and, where required by this Ordinance, landscape yards.
- (b) If the special-purpose lot does not have direct access to a public street, an easement for ingress and egress with a minimum width of ten feet shall be platted.
- (c) The subdivision to create the lot shall be approved in accordance with this chapter. The final plat shall label the lot as a special purpose lot.

7. Access Requirements

- (a) All lots shall be served by street access meeting the requirements of Chapter 5: Development Standards.
- (b) Except for multi-family developments, no lot used for a use type included in the Household Living Use Category in Table 4.2.4, Residential Use Classification, shall be permitted direct access to a major or minor thoroughfare street.
- (c) Lots and development in a conservation subdivision, planned development, group development, multiple lot development, and pocket neighborhood, with owners' associations in which permanent access is guaranteed by means of approved private streets and/or drives, shall have public street access in accordance with Chapter 5: Development Standards.

8. Flag Lots

Flag lots shall comply with the following standards:

- (a) A flag lot shall not have more than one single-family detached dwelling and an uninhabitable accessory structure;

- (b) The maximum flagpole length shall be 300 feet;
- (c) The minimum flagpole width shall be 25 feet;
- (d) The maximum lot area with public sewer shall be one acre;
- (e) The maximum lot area without public sewer shall be three acres. (Note: The flagpole portion of the lot shall not be used to calculate area, width, depth, coverage, and setbacks of the lot or to provide off-street parking);
- (f) Where public water is available, any building on the flag lot shall be within 500 feet of a fire hydrant. The distance shall be measured along the street, then along the flagpole, then in a straight line to the building location;
- (g) Where public sewer is available, an occupied building on the flag lot shall have a gravity service line, or the sewer pump requirement shall be noted on the plat; and
- (h) Use of a single driveway to serve an adjoining flag lot or to serve a flag lot and an adjoining conventional lot is encouraged. In the latter case, the preferred location for the driveway is on the flagpole portion of the flag lot, with the conventional lot granted an access easement over the flagpole.

9. Minimum Street Frontage

The minimum street frontage for a platted lot is 25 linear feet.

C. Streets

1. Dedication of Right-of-Way

Right-of-way for public streets shall be dedicated to the City in accordance with North Carolina General Statutes Section 160A, Article 19, Part 2, and other applicable state law. When dedication cannot be required, future street right-of-way indicated on the City's *Comprehensive Transportation Plan* shall be shown on the plat.

2. Conformance with the Comprehensive Transportation Plan

The location and design of streets shall be in conformance with the City's *Comprehensive Transportation Plan*. If conditions warrant, right-of-way widths and pavement widths in excess of the minimum street standards may be required.

3. Conformance with Adjoining Street Systems

The planned street layout of a proposed subdivision shall be compatible with existing or proposed streets and their classifications on adjoining or nearby tracts.

4. Internal Street Connectivity¹⁷²

(a) Minimum Connectivity Index Score Required

Except in the AGR and PNR districts and within the Core City, development shall achieve an internal street connectivity score in accordance with Table 7.1.6.C.1, Minimum Street Connectivity Index:

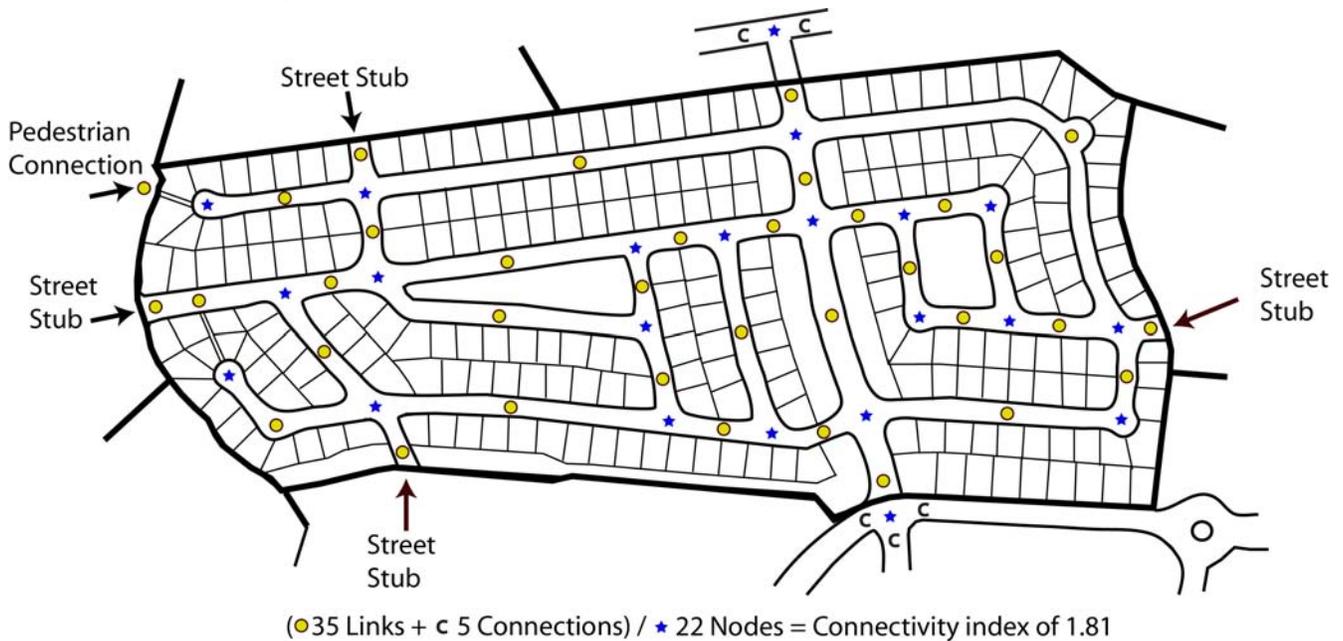
¹⁷² The street connectivity index is a measure of overall roadway connection within a development and the development's connection to the external street network. It allows cul-de-sacs and a modified grid street network while still ensuring a variety of transportation routes and a fine-grained street network that helps provide multiple transportation routes and limits congestion.

TABLE 7.1.6.C.1: MINIMUM STREET CONNECTIVITY INDEX	
DISTRICT WHERE DEVELOPMENT IS PROPOSED	MINIMUM CONNECTIVITY INDEX SCORE
R-3, R-5, R-7, EC, LI, HI	1.3
RM-5, RM-16, OI, TO, I, GB, RC, PD-P	1.4
RM-26, LB	1.5

(b) Connectivity Index Score Calculation

The connectivity index for a development is calculated by dividing its links by its nodes. Figure 7.1.6.C, Street Connectivity Index, below provides an example of how to calculate the connectivity index. Nodes (stars) exist at street intersections and cul-de-sac heads within the development. Links (circles) are stretches of road that connect intersections. Street stub-outs to adjacent lands are considered as links, but temporary dead-end streets internal to a development or alleys are not counted as links. Connections to existing off-site road links are marked with a "C", and are treated as links for the purposes of the connectivity index calculation. In the diagram, there are 35 links (circles), five off-site connections "C", and 22 nodes (stars); therefore the connectivity index is 1.81 [(35 + 5)/22=1.81].

FIGURE 7.1.6.C, STREET CONNECTIVITY



(c) Reduction in Minimum Index Score

The minimum connectivity index score may be reduced if the owner/developer demonstrates it is impossible to achieve due to topographic conditions, natural features, existing road configurations, or adjacent existing development patterns.

(d) Pedestrian Connections Required

- (1) A right-of-way 20 feet wide for pedestrian/bicycle access between a cul-de-sac head or street turnaround and the sidewalk system of the closest adjacent street or other pedestrian connection is required when the Planning and Development Director determines a proposed cul-de-sac or street turnaround creates an unreasonable impediment to pedestrian circulation.
- (2) The pedestrian connection shall count as a connection for the purpose of calculating the connectivity index.

5. Access to Adjoining Land

- (a) If the TRC determines access to adjoining land is necessary and appropriate for adequate traffic circulation in Core City areas, proposed streets shall be extended to the boundary of the site.
- (b) Development outside the Core City shall have the minimum number of street access points required in Table 7.1.6.C, Development Entry Points.

6. Development Entry Points¹⁷³

- (a) Unless exempted in accordance with subsection (c) below, all subdivisions shall provide access from the development to the street system outside the development in accordance with Table 7.1.6.C.2, Development Entry Points:

TABLE 7.1.6.C.2: DEVELOPMENT ENTRY POINTS	
DEVELOPMENT TYPE	MINIMUM NUMBER OF ENTRY POINTS
RESIDENTIAL USES (# OF UNITS)	
80 or fewer	1
81-160	2
161 or more	3
ALL OTHER USES (TOTAL ACRES)	
Less than 5 acres	1
5 – 20 acres	2
More than 20 acres	2 + 1 per every additional 20 acres

- (b) Nothing in this section shall limit the total number of streets providing access to the street system outside a development.
- (c) Development shall be exempted from these standards if it is demonstrated the following conditions apply:
 - (1) No other street access points can be located to the site due to existing lot configurations, absence of connecting streets, environmental, or topographic constraints;
 - (2) NCDOT will not authorize the required number of entrances; or
 - (3) Alternative access can be provided in a manner acceptable to the City that is supported by a transportation impact analysis.

¹⁷³ These are new standards mentioned on Page 2-45 of the Code Assessment. They are designed to ensure adequate mobility into and out of larger developments for the sake of safety and convenience.

7. Reserve Strips

A reserve strip adjoining street rights-of-way shall not be permitted under any condition to prevent access to adjacent land.

8. Street Classification

The final determination of the classification of streets in a proposed subdivision shall be made by the TRC.

9. Public Street Design Criteria

(a) General

- (1) Street design, right-of-way dedication, and paving of streets in and adjacent to a subdivision shall conform with the requirements of Table 7.1.6.C.3.

TABLE 7.1.6.C.3: PUBLIC STREET DESIGN STANDARDS

STREET CLASSIFICATION	ROW (FT) [1]	PAVEMENT WIDTH (FT) [1] [2]	STOPPING SIGHT DISTANCE (FT)	CENTERLINE RADIUS (FT)	TURNAROUND RADIUS: ROW / PAVEMENT (FT)
Major Thoroughfare	90-100	64-68	650	1530	n/a
Minor Thoroughfare					
five-lane	80	60	550	1240	n/a
four-lane	68	48	475	955	n/a
Collector	60	40	400	765	n/a
Sub Collector	56	32	250	440	n/a
Local Residential					
w/ribbon [3]	60	22	200	300	n/a
w/curb and gutter	50	26	200	300	n/a
Residential Cul-De-Sac					
w/ribbon [3]	60	22	200	300	50/40
w /curb and gutter	50	26	200	300	50/40
Local Industrial	60	40	325	575	60/50
Industrial Cul-De-Sac	60	40	325	575	60/50
Alley	28	18	80	80	n/a

NOTES:

[1] Additional width may be required under Section 7.1.6.C.2, Conformance with the Comprehensive Transportation Plan

[2] Dimensions in this column are from face-of-curb to face-of-curb, except for ribbon pavement

[3] Ribbon pavement allowed subject to the provisions of the City of High Point's *Standard Specifications and Details for Roads, Structures and Utilities*

- (2) Modifications to the street design standards may be approved by the Transportation Director due to special physical constraints. These streets shall be designed in accordance with the City's *Standard Specifications and Details for Roads, Structures, and Utilities*, or the NCDOT's *Subdivision Roads: Minimum Construction Standards*, as applicable.

- (3) Ribbon pavement streets may be allowed for local residential cul-de-sac streets in accordance with the general public street design standards in the City's *Standard Specifications and Details for Roads, Structures, and Utilities*.

(b) Street Intersections

A street intersection shall be as nearly at right angles as possible. Lot lines at a street intersection shall be a tangent connecting points on each right-of-way line, which are located a minimum distance of 20 feet back from the intersection of the two right-of-way lines in residential districts, and 50 feet in nonresidential districts.

(c) Streets Crossing Natural Areas

A street crossing a natural area, wetlands, or stream buffers shall cross at or as near to 90 degrees as possible, within topographic limits.

(d) Spacing Between Intersections

- (1) Offset intersections are not desirable and should be avoided.
- (2) Intersections that cannot be aligned should be separated in accordance with the design standards established by street classification.
- (3) The higher classification street shall determine the distance between intersections along that street.
- (4) In the event of unusual topography, a distance less than the design standard, but in no case less than 150 feet, may be approved by the TRC.

(e) Maximum Cul-de-sac Length

The maximum distance from an intersecting through street to the end of a cul-de-sac shall be 1,200 feet, except that a distance up to 1,600 feet may be approved in the WCA.

(f) Temporary Turnarounds

A street stubbed to adjoining land or to phase lines may be required to have temporary turnarounds at the end of the street sufficient to permit sanitation vehicles to turn around.

(g) Grades at Intersections

The grade on stop streets approaching an intersection shall not exceed five percent for a distance of 100 feet from the centerline of the intersection.

(h) Street Names

Street names, prefixes, suffixes and addresses shall conform to the guidelines and policies set forth in the City's *Street Name and Address Assignment Guidelines and Policies* located in the *Development Guidebook*.

10. Private Street Standards

(a) Where Allowed

Private streets are allowed in single-family sections of planned development districts, single-family attached developments, pocket neighborhoods, and multiple lot developments.

(b) Minimum Design and Construction

- (1) The minimum street design standards for private streets are the

same as for public streets.

- (2) The developer must furnish an engineer's seal and certification that a private street has been tested and certified for the subgrade, base, and asphalt.
- (3) Private streets shall be designed and constructed in accordance with the City's *Standard Specifications and Details for Roads*, or NCDOT's *Subdivision Roads: Minimum Construction Standards*, whichever is applicable.

(c) Owners' Association Required

An owners' association is required to own and maintain all private streets allowed under this Ordinance.

(d) Plats

All private streets must be shown as such on all plats.

(e) Through Streets

A through street in a residential area that connects two public streets shall not be a private street.

(f) Connections to Public Streets

All private streets connecting with public streets require driveway approvals from the City or NCDOT, as applicable.

11. Street and Traffic Control Signs

(a) Street Sign

- (1) The City shall erect a street name sign that complies with the *Manual on Uniform Traffic Control Devices* (MUTCD) standards at each of the following locations:
 - (i) Intersection of public streets; and
 - (ii) Intersection of a named private street or private drive with a public street. The developer shall pay a fee to the City for each sign required.
- (2) The developer shall erect a sign fabricated with retro reflective material in compliance with the MUTCD standards at each intersection along a private street or private drive. Nonstandard background and letter colors may be allowed for internal private street intersections, if approved by the Transportation Director.

(b) Traffic Control Signs

The developer shall provide traffic control signs that comply with the MUTCD standards, in locations designated by the City.

(c) Maintenance

Maintenance of a sign on a private street or drive is the responsibility of the owner or owners' association, as appropriate.

12. Directional Address Signs

- (a) Directional address signs shall be placed on private streets or private drives in a group development and multiple-lot development where the orientation of buildings obscures certain buildings from plain view from parking and access.
- (b) Directional address signs shall be placed where the multiple private streets

or private drives intersect, or along the street or drive at each primary entry to the obscured buildings.

- (c) Each directional address sign shall show the appropriate addresses or range of addresses and a directional arrow or location instructions as minimal direction information. Except for a logo, such signs shall bear no corporate or development advertising.

D. Block Length

A block shall not exceed a perimeter length of 6,000 feet, except that a perimeter length of up to 12,000 feet may be approved in the WCA. For the purposes of this section perimeter length is defined as the shortest perimeter measurement along the abutting street right-of-way lines.

E. Sidewalks

Sidewalks shall be configured in accordance with the standards and Section 5.7, Sidewalks.

F. Utilities

1. Public Water and Sewer Construction Requirements

Water and sewer lines, connections, and equipment shall be constructed in accordance with the City's *Standard Specifications and Details for Roads, Structures, and Utilities*, or the NCDOT's *Subdivision Roads: Minimum Construction Standards*, as appropriate.

2. Water and Sewer Connections

- (a) Connection of each lot to public water and sewer utilities shall be required if the proposed subdivision is within 300 feet of the nearest adequate line of a public system, and provided that no geographic or topographic factors would make such connection infeasible.
- (b) Where public sewer is not available, lots shall comply with applicable County Environmental Health Division regulations.
- (c) Approval of the applicable Environmental Health Division shall be obtained after preliminary plat approval.
- (d) The final plat shall show the certificate of approval from the applicable Environmental Health Division.

3. Underground Utilities

Electrical, community antenna, television, and telephone utility lines installed in subdivisions of 5 lots or more shall be underground, unless the TRC determines underground installation is inappropriate.

4. Utility Easements

(a) Width

- (1) To provide for electric, telephone, gas, and community antenna television services, conduits, and water and sewer lines within a subdivision, appropriate utility easements not to exceed 30 feet in width shall be provided.
- (2) The location of the easements shall be reviewed and approved by the TRC, with advice from utility providers, before final plat approval.

(b) No Buildings or Improvements within Easement

- (1) Utility easements shall be kept free and clear of any buildings or other improvements that would interfere with the proper maintenance or replacement of utilities.

- (2) The City shall not be liable for damages to any improvement located within the utility easement area caused by maintenance or replacement of utilities.

5. Electric Utilities

(a) Street Lights

A development in the City with public streets shall include public street lights. The street lights shall be maintained by the City.

(b) Electric Service

Development outside the City limits shall be provided electric service by the agency having jurisdiction in the area.

G. Drainage

1. General Requirements

- (a) This section applies to all watercourses that have a drainage basin greater than one and one-half acres. In addition, watercourses which are contained in areas of special flood hazard as shown on the FEMA panels are subject to the requirements of Section 6.4, Flood Damage Prevention. In case of a conflict between this section and Section 6.4, the stricter regulation applies.
- (b) Drainage within development affected by this section shall be designed using standard engineering practices including those described in the *City of High Point Storm Drainage System Design Manual*.
- (c) No fill, buildings or structures, except for water dependent structures, greenways, utility substations, utilities, roads or other related public improvements, shall be placed or constructed within the protected drainage areas specified in this section. Parking areas and associated drives may be constructed over enclosed subsurface drains.
- (d) Drainage within development affected by this section shall be handled in any of following systems:
 - (1) Enclosed subsurface;
 - (2) Open channel on private property; or
 - (3) Open channel in a drainageway dedicated to the City.

2. Determination of Drainage System

- (a) The developer shall determine the drainage system to be used for projects unless the drainage areas meet the standards in subsection (b) below.
- (b) The determination of the drainage system to be used shall be made by the TRC if:
 - (1) The area is identified on the *Bikeway, Greenway, and Trails Master Plan*; or
 - (2) The drainage basin is greater than 50 acres; or
 - (3) The site is located in the WSO district; or
 - (4) The watercourse is depicted as a perennial stream on the City of High Point Water Supply Watershed Map.
- (c) In determining the drainage system to be used, the following factors shall be considered:
 - (1) The type of development;
 - (2) The drainage system(s) employed by nearby development;
 - (3) The probability of creating a lengthy greenway or open space area to advance the purposes of the adopted *Bikeway, Greenway, and Trails*

Master Plan;

- (4) The probability of creating future maintenance problems;
- (5) The probability of erosion or flooding problems; and
- (6) The pipe size necessary to handle drainage .

3. Drainage Systems

(a) Enclosed Subsurface Drains (Storm Sewers)

- (1) Enclosed subsurface drainage systems shall be designed and constructed using standard engineering practices including those described in the *City of High Point Storm Drainage System Design Manual*.
- (2) Enclosed subsurface drainage systems on private property shall be protected as provided in Section 7.1.6.G.3(d), Protected Drainage .

(b) Open Channel on Private Land

- (1) If open channels on private land are used as a drainage system, they shall be designed using standard engineering practices including those described in the *City of High Point Storm Drainage System Design Manual*.
- (2) Open channel drainage systems on private land shall be protected as provided in Section 7.1.6.G.3(d), Protected Drainage .

(c) Open Channels in Drainageway and Open Space Areas Dedicated to the City of High Point

- (1) The TRC may require that a drainageway identified on the *Bikeway, Greenway, and Trails Master Plan* be dedicated to the City.
- (2) Drainageway and open space shall be dedicated by a recorded plat and shall be labeled "Dedicated to the City of High Point and the public for Drainageway, Greenway and Open Space."
- (3) The dedicated drainageway and open space area along any stream shall include the land between the natural 100-year flood contours.
- (4) The area to be dedicated may be reduced in width if the applicant demonstrates to the Engineering Services Director that sound engineering practices are being employed.
- (5) The dedicated drainageway and open space area shall have a minimum width of 60 feet.
- (6) In cases of topographic or other obstacles, additional width may be required to assure reasonable ease of maintenance.
- (7) Dedicated drainageway and open space shall have sufficient access to a publicly maintained street. If the TRC determines that suitable access is not provided, access shall be provided by a suitably located access easement not less than 20 feet in width.
- (8) Dedicated drainageway and open space may also be used for drainage, open space, greenways, bikeways, trails, other similar recreation activities, public utilities, and street crossings.
- (9) Drainageway and open space shall be left in its natural condition or graded to a cross section and stabilized with permanent vegetative cover approved by the City.
- (10) Single-family lots abutting land dedicated to the City as drainageway and open space may be reduced in accordance with Section 7.1.6.B, Lot Dimensions and Standards.

(d) Protected Drainage Easements

Subdivisions shall comply with the requirements in Section 6.3, Soil Erosion and Sedimentation, Section 6.4, Flood Damage Prevention, and the following standards:

- (1) Where a subdivision is traversed by a watercourse or drainageway, an easement shall be indicated on all plats of the subdivision. The easement shall substantially conform with the lines of the watercourse or drainageway, plus the additional width that is necessary to convey expected storm flows in accordance with the standards in the *City of High Point Storm Drainage System Design Manual*.
- (2) The size, design, and construction of drainage structures shall conform to the requirements in the *City of High Point Storm Drainage System Design Manual*.
- (3) The City shall not accept the responsibility to maintain any drainage easement or storm drainage structures, except for those within a public street right-of-way or traversing City-owned land.

H. Flood Damage Prevention

1. Minimize Flood Damage

A subdivision shall be designed to minimize flood damage;

2. Public Utilities

A subdivision shall have public utilities and facilities such as sanitary sewer, gas, electrical, and water systems located and constructed to minimize flood damage;

3. Drainage

A subdivision shall have adequate drainage to reduce exposure to flood hazards; and

4. Base Flood Elevation Data Required

- (a) Base flood elevation (BFE) data shall be provided for subdivision applications unless a licensed engineer certifies that the 100-year storm flow for streams in or near the subdivision, site, or group development is less than 500 cubic feet per second.
- (b) In special flood hazard areas designated by FEMA maps, BFE data shall be provided for development with more than 50 lots or five acres in area. (See Section 6.4, Flood Damage Prevention, for additional flood protection regulations.)

I. Sites for Public Uses

In the subdivision of land, due consideration shall be given by the subdivider to the reservation of suitable sites for schools and other public uses in accordance with North Carolina General Statutes Section 160 A-372.

J. Placement of Monuments

The *Standards of Practice for Land Surveying in North Carolina*, as adopted by the North Carolina State Board of Registration for Professional Engineers and Land Surveyors, shall apply when installing permanent monuments.

7.2. FINANCIAL GUARANTEES¹⁷⁴

7.2.1. INSTALLATION STATEMENT AND FINANCIAL GUARANTEES IN-LIEU OF COMPLETION

- A.** In-lieu of the completion, installation, and dedication of all required public improvements (streets, potable water, sanitary sewer, stormwater, electricity, and street lights) and private site improvements (parking, landscaping, screening, protected trees, fencing, stormwater management and sedimentation control) prior to approval of a final plat or issuance of a certificate of occupancy (as appropriate), a developer may submit:
 - 1.** An installation statement (statement of required improvements, as provided in the City of High Point's *Development Guidebook*), for which the developer is responsible, and the date when the improvements are to be completed; and
 - 2.** An acceptable financial guarantee for installation of public infrastructure in accordance with Section 7.2.2, Financial Guarantees (Performance Guarantee).
- B.** Regardless of whether public improvements are completed prior to approval of a final plat or certificate of occupancy (as appropriate), or made subject to an approved performance guarantee, an acceptable financial guarantee for the maintenance period following acceptance of the public infrastructure (maintenance guarantee) shall be submitted to the Engineering Services Director prior to approval of a final plat or certificate of occupancy (as appropriate), in accordance with Section 7.2.3, Financial Guarantees (Maintenance Guarantee).
- C.** The installation statement and financial guarantees shall not be accepted until after the construction plans and profiles for the development are approved, in accordance with Section 7.1.3, Street and Utility Construction, and a watershed development plan, if applicable, is approved in accordance with Section 6.2.8.E, Watershed Development Plan.
- D.** Once the installation statement and required financial guarantees are accepted by the City, the final plat or certificate of occupancy (as appropriate) may be approved if the proposed development complies with all other requirements of this Ordinance.

7.2.2. FINANCIAL GUARANTEES (PERFORMANCE GUARANTEE)

A. General

A performance guarantee, in accordance with the standards in this section, shall be required in the following circumstances:

- 1.** To ensure the completion of public infrastructure improvements (streets, potable

¹⁷⁴ As is discussed on p. 2-50 of the Code Assessment, Section 9-3-9 of the current ordinance establishes the sureties and improvement guarantee standards. These provisions apply to situations when an applicant is seeking approval of a final plat or occupation of a building prior to completion of all required public infrastructure. Generally, the standards require that applicants seeking a final plat or certificate of occupancy must post a guarantee of 115 percent of the public improvement costs if the required improvements are not completed by this time.

The current standards do not include a maintenance guarantee, nor do they apply to private site infrastructure like stormwater facilities or landscaping. As discussed in the Code Assessment, modern development ordinances seek performance guarantees of 150 percent or more of the infrastructure costs. Further, modern jurisdictions typically require a maintenance guarantee for public infrastructure for a one-year warranty period following the acceptance of public infrastructure. This fee is intended to deflect any costs the City may incur in making repairs to infrastructure during or shortly after the warranty period. In many cases, maintenance guarantees amount to around 25 percent of the infrastructure costs. In addition to these guarantees, more and more jurisdictions also require performance guarantees for private site improvements like stormwater management facilities or required landscaping that remains unfinished at the time the applicant seeks to obtain final plat or certificate of occupancy approval. All these issues are addressed in this section on Financial Guarantees.

Subsection 7.2.2 Financial Guarantees (Performance Guarantee)

water, sanitary sewer, stormwater, electricity, and street lights) that are required as part of an approved preliminary plat, site plan, or group development plan, but are not approved as complete before approval of a final plat or certificate of occupancy, as appropriate;

2. To ensure completion of private site improvements (parking, screening, landscaping, protected trees, fencing, stormwater management, and sedimentation control,) that are required as part of a preliminary plat, site plan, or group development plan, but are not installed before approval of a certificate of occupancy.

B. Term of Performance Guarantees¹⁷⁵

The term of the performance guarantee shall reflect any time limit for completing installation of required improvements that is included in the preliminary or final plat, site plan, or group development plan, as appropriate, but in any case, the term shall not exceed 18 months. The City Manager, for good cause shown, may grant up to one extension of time, for a time period not exceeding one year.

C. Form of Performance Guarantee¹⁷⁶

1. The performance guarantee shall be provided in one or more of the following forms:

(a) Cash, Irrevocable Letter of Credit, or Equivalent Security

- (1) The developer shall deposit cash, or other instrument readily convertible into cash at face value, such as an irrevocable letter of credit, either with the City or in escrow with a financial institution. The use of any instrument other than cash shall be subject to approval by the City Attorney.
- (2) If cash or other instrument is deposited in escrow with a financial institution, an agreement between the financial institution and the developer shall be filed with the City guaranteeing the following:
 - (i) That the escrow account shall be held in trust until released by the City and may not be used or pledged by the developer for any other matter during the term of the escrow; and
 - (ii) That in case of a failure on the part of the developer to complete or repair the improvements, the financial institution shall, upon notification by the City, immediately pay the funds deemed necessary by the City to complete or repair the improvements up to the full balance of the escrow account, or deliver to the City any other instruments fully endorsed or otherwise made payable in full to the City.

(b) Surety Bond

- (1) The developer shall obtain a surety bond from a surety bonding company authorized to issue surety bonds in North Carolina.
- (2) The bond shall be payable to the City and shall be in an amount as required by this subsection.

¹⁷⁵ This provision builds on Section 9-3-9 (b) of the current ordinance. It maintains the 18 month period for completion of a performance guarantee, but limits the City Manager to one extension of the time limit up to a period of one year (the current provision places no limits on the extensions that can be granted).

¹⁷⁶ This subsection carries forward the existing provisions of Section 9-3-9(d) of the current ordinance, with no substantive changes.

2. The performance guarantee shall distinguish between the portion of the guarantee provided for public improvements as well as the portion of the guarantee provided for private improvements, as appropriate.
3. The performance guarantee shall be conditioned on the performance of all work necessary to complete the installation of the required improvements within the term of the financial guarantee.

D. Amount of Performance Guarantee ¹⁷⁷

1. General

Performance guarantees shall be in an amount equal to 125 percent of the estimated cost of completing the installation of the required improvements, including the costs of materials, labor, and project management.

2. Estimated Costs

- (a) Estimated costs of completing installation of required public improvements shall be itemized by improvement type and certified by the developer's licensed professional engineer, and is subject to approval by the Engineering Services Director.
- (b) Estimated costs for completing costs of private site improvements shall be itemized and certified by the developer's contractor, and is subject to approval by the Engineering Services Director or the Planning and Development Director, as appropriate.

E. Release or Reduction of Performance Guarantees ¹⁷⁸

1. Requirements for Release or Reduction

The Planning and Development Director or Engineering Services Director, as appropriate, shall release or reduce a performance guarantee only after:

- (a) The owner or developer has submitted to the City a written request for a release or reduction of the performance guarantee that includes certification by the owner's or developer's engineer or contractor, whichever is appropriate, that installation of the guaranteed improvements has been completed in accordance with approved plans and specifications, and as-builts (if applicable);
- (b) City staff has performed an inspection of the improvements and certified in writing that installation of the guaranteed improvements is completed in accordance with approved plans and specifications;
- (c) The owner or developer has reimbursed the City for all costs associated with conducting any inspection that finds the guaranteed improvements have not been installed in accordance with approved plans and specifications; and
- (d) No release or reduction in performance guarantee amounts will be considered until more than 25 percent of the work is in place and approved.

2. Acceptance Shall be Documented

¹⁷⁷ This subsection changes the amount of the performance guarantee from 115 percent to 125 percent, as discussed in the Code Assessment (p. 2-50). It also spells out what needs to be included in the estimate of costs.

¹⁷⁸ This subsection provides more detailed direction about the release of performance guarantees than the provisions in the current ordinance. It carries forward the current requirement that a request to release all or a portion of a performance guarantee include certification of completion by an engineer or contractor (as appropriate), and submission of as-builts, and inspection by the City. It adds limitations to how the financial guarantee will be released: that a minimum of 25 percent of the improvements need to be completed before there is a release or reduction of any financial guarantee amount, that the guarantee will not be released below 50% for public improvements until all guaranteed public improvements are completed; and the guarantee will not be released below 75% for private site improvements until all guaranteed public improvements are completed.

The Planning and Development Director or Engineering Services Director, as appropriate, shall provide written notice of the City's final acceptance of the improvements subject to performance guarantees.

F. Default and Forfeiture of Performance Guarantees¹⁷⁹

1. Notice of Failure to Install or Complete Improvements

If the owner or developer fails to complete installation of the guaranteed improvements within the term of the financial guarantee (as may be extended), the Planning and Development Director or Engineering Services Director, as appropriate, shall give the owner or developer 30 days written notice of the default, by certified mail.

2. City Completion of Improvements

After the 30-day notice period expires, the City may draw on the guarantee and use the funds to perform work necessary to complete installation of the guaranteed improvements. After completing such work, the City shall provide a complete accounting of the expenditures to the owner or developer. In the event of a default triggering the use of the financial guarantee, the City shall not return any of the unused deposited cash funds or other security, which shall be retained for maintenance.

7.2.3. FINANCIAL GUARANTEES (MAINTENANCE GUARANTEE)¹⁸⁰

A. General

A maintenance guarantee in accordance with the standards in this section is required to ensure against defects in workmanship or materials in providing public infrastructure (streets, potable water, sanitary sewer, stormwater, electricity, and street lights) required as part of an approved preliminary plat, site plan, or group development plan, as appropriate.

B. Term of Maintenance Guarantee

The term of a maintenance guarantee shall be one year from the date of acceptance of the required public infrastructure improvements.

C. Form of Maintenance Guarantee

1. Where required, the owner or developer shall furnish a maintenance guarantee in any of the following acceptable forms:
 - (a) Cash deposit with the City;
 - (b) Certified check from a North Carolina lender based upon a cash deposit, in a form acceptable to the City Attorney;
 - (c) Irrevocable letter of credit from a North Carolina banking institution in a form acceptable to the City Attorney; or
 - (d) Surety bond from a North Carolina surety bonding company in a form

¹⁷⁹ This subsection builds on the forfeiture and default provisions of Sections 9-3-9 (e) and (f) of the current ordinance, but provides a more specific procedure. It carries forward the current requirement that the City will not return any unused guarantee if there is a default.

¹⁸⁰ NOTE: As discussed in the Code Assessment (p. 2-50), this is a new subsection that adds a requirement that maintenance guarantees be provided for public infrastructure (streets, potable water, sanitary sewer, stormwater, electricity, and street lights) to ensure against defects in workmanship or materials. The maintenance guarantee, which may be up to an amount of 25 percent of the cost of the improvement, is required to be in place for one year after acceptance of the improvements.

Additional discussion is needed regarding the City's desire to require some private site features (such as stormwater management devices or replacement landscaping provided following removal in violation) to post financial guarantees for maintenance.

acceptable to the City Attorney.

2. The maintenance guarantee shall be conditioned on the performance of all work necessary to maintain the required public infrastructure improvements during the term of the maintenance guarantee.
3. Maintenance guarantee shall provide that in case of the owner's or developer's failure to maintain and repair or replace the public infrastructure improvements, the City shall be able to immediately obtain the funds necessary to make necessary repairs or replacements.

D. Amount of Maintenance Guarantee

1. Maintenance guarantees shall be in an amount up to 25 percent of the full actual cost, including the costs of materials and labor, of installing the required public infrastructure improvements.
2. Actual costs for installing required public infrastructure improvements shall be itemized by improvement type and certified by the owner's or developer's licensed professional engineer or contractor, as appropriate.

E. Release of Maintenance Guarantee

The Engineering Services Director shall release a maintenance guarantee at the end of the term of the guarantee only after an inspection is conducted of the public infrastructure, and certified in writing that the guaranteed public infrastructure improvements have been maintained in accordance with approved plans and specifications.

F. Default and Forfeiture of Maintenance Guarantee

1. Notice of Failure to Maintain Improvements

If the owner or developer fails to maintain the guaranteed public infrastructure improvements during the term of the maintenance guarantee, the Engineering Services Director shall give the owner or developer 30 days written notice of the default by certified mail.

2. City Correction of Defects

After the 30-day notice period expires, the City shall present a plan to cure any defects within 30 days, and following such presentation, draw on the security and use the funds to perform work necessary to ensure the guaranteed public infrastructure complies with approved plans and specifications. After completing the work, the City shall provide a complete accounting of the expenditures to the owner or developer and, as applicable, refund all unused funds, without interest.

7.2.4. AS-BUILT PLANS REQUIRED¹⁸¹

Upon completion of a project, the developer shall certify to the Engineering Services Director that the completed project is in accordance with the approved plans and shall submit actual "as built" plans for all public improvements after final construction is completed. The plans shall show the final design specifications for all improvements and the field location, size, depth, and related measures, controls and devices, as installed. The designer shall certify, under seal, that the as-built design, measures, controls, and devices are in compliance with the approved plans and with the requirements of this Ordinance. A final inspection and approval by the Engineering Services Director shall occur before the release of the performance guarantees and maintenance guarantees.

7.2.5. IMPROPER RELEASE OF FINANCIAL GUARANTEES¹⁸²

¹⁸¹ This subsection is carried forward Section 9-3-9(c) from the current section, with no substantive changes.

Subsection 7.2.5 Improper Release of Financial Guarantees

If the City releases a financial guarantee through error, the error shall not release the developer from responsibility for the completion of all improvements required by this section and this Ordinance.

¹⁸² This provision is carried forward Section 9-3-9(g) from the current ordinance, with no substantive changes.

7.3. HOMEOWNERS' OR PROPERTY OWNERS' ASSOCIATION¹⁸³

7.3.1. ESTABLISHMENT

A. Creation

A homeowners' or property owners' association (owner's association) shall be established to fulfill requirements of the North Carolina Condominium Act, NC Planned Community Act, or to accept conveyance and maintenance of all common elements (common areas) within a development. The owners' association shall be in legal existence prior to the conveyance, lease-option, or other long-term transfer of control of any unit or lot in the development.

B. Conveyance

Where a development has common elements (common area) serving more than one dwelling unit or lot, these areas shall be conveyed to the owners' association, in which all owners of units or lots in the development shall be members. All areas other than public street rights-of-way, other areas dedicated to the City, and lots shall be designated as common elements. In a condominium development the common elements shall be platted in accordance with the North Carolina Condominium Act. In other development, the fee-simple title shall be conveyed by the subdivider or developer to the owners' association prior to the sale or development of the first lot.

C. Subdivision or Conveyance of Common Elements (Common Areas)

Common elements (common areas) shall not subsequently be subdivided or conveyed by the owners' association unless a revised preliminary plat and a revised final plat showing such subdivision or conveyance is approved in accordance with the procedures and standards of its original approval.

D. Minimize Number of Associations

Development, whether including different land uses, different types of housing, or simply different sections, shall hold the number of owners' associations to the minimum practicable. An association may establish different categories of membership, different budgets for the categories, and different rates of assessment when different kinds of services are provided to different categories. Smaller associations under an umbrella (master) association are allowed.

E. Owners' Association Not Required

A development involving only two units attached by a party wall (or two separate walls back-to-back) shall not be required to have common elements or an owners' association. Such development without an owners' association shall establish a binding agreement between owners to govern any party walls and to ensure reciprocal easement rights needed for maintenance.

7.3.2. SUBMISSION OF OWNERS' ASSOCIATION DECLARATION

After preliminary plat approval, and before final plat approval, it is recommended that the subdivider submit a draft of the declaration of the owners' association containing covenants, conditions and restrictions governing the owners' association, lots or units, and common elements to the Planning and Development Director for review and approval. Prior to or concurrently with the submission of the final

¹⁸³ This section carries forward Section 9-6-10 of the current ordinance, with no substantive changes

plat for review and approval, the subdivider shall submit a copy of the final declaration for review and approval. The declaration shall include provisions for the following:

A. Membership

Membership in the owners' association shall be mandatory for each original purchaser and each successive purchaser of a lot or unit. Provisions shall be made for the assimilation of owners in subsequent sections of the development.

B. Responsibilities of Owners' Association

The declaration shall state that the Association is responsible for:

1. Liability insurance and payment of premiums for liability insurance and local taxes;
2. Maintenance of all common elements including, but not limited to, stormwater management facilities, utilities, streets, drives, walks, and recreation facilities, at the time such common elements are transferred to the owners' association;
3. Establish and maintain an escrow account for the maintenance and repair of stormwater management facilities, as required in Section 6.2.8.D.5, Operation and Maintenance Agreement.
4. Payment of assessments for public and private improvements made to or for the benefit of the common elements.

C. Exterior Maintenance of Units

The owners' association shall be responsible for exterior maintenance of all attached units (whether they be dwelling units or nonresidential units); or each unit owner shall be made responsible, with the owners' association granted authority to perform such exterior maintenance in the event the unit owner fails to do so in a prompt and satisfactory manner, and to assess the cost of the maintenance against the unit.

D. Default by Owners' Association

1. Upon default by the owners' association in the payment to the jurisdiction entitled thereto of any assessments for public improvements or ad valorem taxes levied against the common areas, which default shall continue for a period of six months, each owner of a lot in the development shall become personally obligated to pay to the jurisdiction a portion of the taxes or assessments in an amount determined by dividing the total taxes and/or assessments due to the jurisdiction by the total number of lots in the development.
2. If the sum is not paid by the owner within 30 days following receipt of notice of the amount due, the sum shall become a continuing lien on the property of the owner, the owners' heirs, devisees, personal representatives, and assigns. The taxing or assessing jurisdiction may either bring an action at law against the owner personally obligated to pay the same, or may elect to foreclose the lien against the property of the owner.

E. Membership

The owners' association is empowered to levy assessments against the owners of lots or units within the development. Such assessments shall be for the payment of expenditures made by the owners' association for the items set forth in this section, and any assessments not paid by the owner against whom such assessments are made shall constitute a lien on the lot of the owner.

F. Easements

Easements over the common elements (common areas) for access, ingress, and egress from and to public streets and walkways, and easements for enjoyment of the common elements and for parking shall be granted to each lot or unit owner.

G. Maintenance and Restoration

Provisions for maintenance and restoration in the event of destruction or damage shall be established for common elements and party walls. It is recommended that the owners' association engage the services of a professional management company and that all inspections and repairs be conducted by qualified personnel.

H. Common Elements and Location

The common elements shall be listed and the location of common areas or commons elements shall be shown graphically as an attachment to the declaration of the Owners' Association.

7.3.3. INSPECTION AND APPROVAL OF IMPROVEMENTS

The City shall inspect and approve, where required by this Ordinance, all private improvements prior to transfer of maintenance responsibility to the owners' association.

7.4. GREENWAY DEDICATION

7.4.1. REQUIRED GREENWAY DEDICATION

Whenever a tract of land included within any proposed subdivision, including a group development plan, includes any part of a greenway designated on the *Bikeway, Greenway, and Trails Master Plan*, the greenway shall be platted and dedicated as a greenway easement.

7.4.2. GREENWAY EASEMENT WIDTH

The greenway required to be platted shall at a minimum, be the minimum standard width multiplied by the length of the boundary along the banks of the adjoining watercourse.

7.4.3. LIMITATION ON DEDICATION

No dedication shall be required for greenway lying outside of any floodplain or special flood hazard area, but such area may be reserved by TRC in accordance with Section 7.5, Reservation of Public Land, for possible City acquisition.

7.4.4. DENSITY CREDITS

Land that is dedicated in fee-simple interest to and accepted by the City of High Point for the expressed purpose of establishing a public greenway shall be credited toward the donating parcel, lot or tract area for the purpose of calculating the density of development and area coverage calculations though no longer part of the parcel. Dedicated land credits shall be transferred to subsequent holders if properly noted in transfer deeds.

7.5. RESERVATION OF PUBLIC LAND

- 7.5.1.** Where a proposed park, greenway (located outside of a floodplain or special flood hazard area), open space, school, fire station or other public use shown in the Adopted Policy Guidance in whole or in part is identified in a development, the TRC may require the reservation of the land for future use.
- 7.5.2.** The reservation shall continue in effect for a period of not more than one year from the date of approval of the preliminary plan or group development plan. This reservation period may be extended for an additional year upon submission of a letter to the City Council of intent to purchase by the appropriate governmental agency. Further extensions may be permitted upon mutual agreement between the landowner and the City Council, each of which shall not exceed two years.

CHAPTER 10: MEASUREMENT AND DEFINITIONS

10.1.	General Rules for Interpretation.....	10-1
10.2.	Rules of Measurement.....	10-3
10.2.1.	Purpose	10-3
10.2.2.	Measurement, Generally	10-3
10.2.3.	Lot Dimensions.....	10-4
10.2.4.	Setbacks	10-8
10.2.5.	Density and Intensity	10-11
10.2.6.	Height	10-12
10.2.7.	Slope and Elevation	10-13
10.2.8.	Sight Distance Easement	Error!
	Bookmark not defined.	
10.2.9.	Parking Space Computation	10-13
10.2.10.	Landscaping	10-14
10.2.11.	Signage	10-14
10.2.12.	Exterior Lighting	10-15
10.2.13.	Fences and Walls.....	10-15
10.3.	Abbreviations.....	10-16
10.4.	Definitions	10-18

KEY CHANGES FROM CURRENT ORDINANCE

Chapter 10, Measurement and Definitions, includes the rules of language construction, the rules of measurement, a table of abbreviations, and the definitions used in the ordinance. It also includes the end notes summarizing the zoning district changes. Each module includes additional provisions and definitions that are added to the chapter. Key changes from the current standards include:

- A consolidated rules of measurement section that specifies measurement-based definitions and related provisions with illustrations (to be added in the public hearing draft version).
- A summary of abbreviations used in this Ordinance.
- New definitions.

Footnotes are included in the document that identify, as appropriate, new code sections, changes in existing code provisions, changes based on recommendations from the Code Assessment, and changes made based on comments from UPDATE Advisory Committee members. These footnotes will remain in the draft version of the document but will be removed prior to its adoption.

CHAPTER 10: MEASUREMENT AND DEFINITIONS

10.1. GENERAL RULES FOR INTERPRETATION²²⁶

The following rules shall apply for construing or interpreting the terms and provisions of this Ordinance.

A. Meanings and Intent

1. All provisions, terms, phrases, and expressions contained in this Ordinance shall be interpreted in accordance with the general purposes set forth in Section 1.3, General Purpose and Intent, and the specific purpose statements set forth throughout this Ordinance.
2. When a specific section of these regulations gives a different meaning than the general definition provided in Section 10.4, Definitions, the specific section's meaning and application of the term shall control.
3. Terms that are not defined are subject to their common or customary meaning.

B. Headings, Illustrations, and Text

In the event of a conflict or inconsistency between the text of this Ordinance and any heading, caption, figure, illustration, table, or map, the text shall control. Graphics and other illustrations are provided for informational purposes only and should not be relied upon as a complete and accurate description of all applicable regulations or requirements.

C. Lists and Examples

Unless otherwise specifically indicated, lists of items or examples that use terms like "for example," "including," and "such as," or similar language are intended to provide examples and are not exhaustive lists of all possibilities.

D. Computation of Time

The time in which an act is to be done shall be computed by excluding the first day and including the last day. If a deadline or required date of action falls on a Saturday, Sunday, or holiday observed by the city, the deadline or required date of action shall be the next day that is not a Saturday, Sunday, or holiday observed by the city. References to days are calendar days unless otherwise stated.

E. References to this Ordinance

A reference to a chapter, section, subsection, or paragraph means a chapter, section, subsection, or paragraph of this Ordinance, unless otherwise specified.

F. References to Other Regulations/Publications

Whenever reference is made to a resolution, ordinance, statute, regulation, or document, it shall be construed as a reference to the most recent edition of such regulation, resolution, ordinance, statute, regulation, or document, unless otherwise specifically stated.

G. Delegation of Authority

Any act authorized by this Ordinance to be carried out by the Planning and Development Director, the Engineering Services Director, or the Public Services Director may be delegated by the Planning and Development Director, the Engineering Services Director, or the Public Services Director, as appropriate, to a professional-level subordinate.

²²⁶ This section replaces Section 9-1-8 in the current ordinance.

H. Technical and Non-Technical Terms

Words and phrases shall be construed according to the common and approved usage of the language, but technical words and phrases that may have acquired a peculiar and appropriate meaning in law shall be construed and understood according to such meaning.

I. Public Officials and Agencies

All public officials, bodies, and agencies to which references are made are those of the City of High Point, unless otherwise indicated.

J. Mandatory and Discretionary Terms

The words "shall," "must," and "will" are mandatory in nature, establishing an obligation or duty to comply with the particular provision. The words "may", "can", or "should" are permissive in nature.

K. Conjunctions

Unless the context clearly suggests the contrary, conjunctions shall be interpreted as follows:

1. "And" indicates that all connected items, conditions, provisions or events apply; and
2. "Or" indicates that one or more of the connected items, conditions, provisions, or events apply.

L. Tenses and Plurals

Words used in the present tense include the future tense. Words used in the singular number include the plural number and the plural number includes the singular number, unless the context of the particular usage clearly indicates otherwise. Words used in the masculine gender include the feminine gender, and vice versa.

M. Term Not Defined

If a term used in any chapter of this Ordinance is not defined, the Planning and Development Director is authorized to provide a definition in accordance with Section 2.5.4, Determination, based upon the definitions used in professionally accepted sources.

10.2. RULES OF MEASUREMENT²²⁷

The rules of measurement section includes terms that involve calculation and measurement. It groups terms together by subject area. Additional definitions of other terms are found in Section 10.4, Definitions.

10.2.1. PURPOSE

The purpose of this section is to clarify the rules of measurement and exemptions that apply to all principal, accessory, and temporary uses allowed in this Ordinance. These standards may be further modified by other sections in this Ordinance, or in accordance with Section 2.5.4, Determination.

10.2.2. MEASUREMENT, GENERALLY

A. Straight Lines

Unless otherwise stated in this Ordinance, distances specified in this Ordinance are to be measured as the length of an imaginary straight line joining two points.

B. Rounding

All calculations that result in part of a whole number shall be rounded up to the next highest whole number, unless otherwise provided in this section or elsewhere in this Ordinance.

C. Irregular Shapes

In cases where an irregular shape complicates the application of these standards, the Planning and Development Director shall determine the applicable dimensional, setback, or bulk standards.

D. Use Separation

1. Lot to Lot

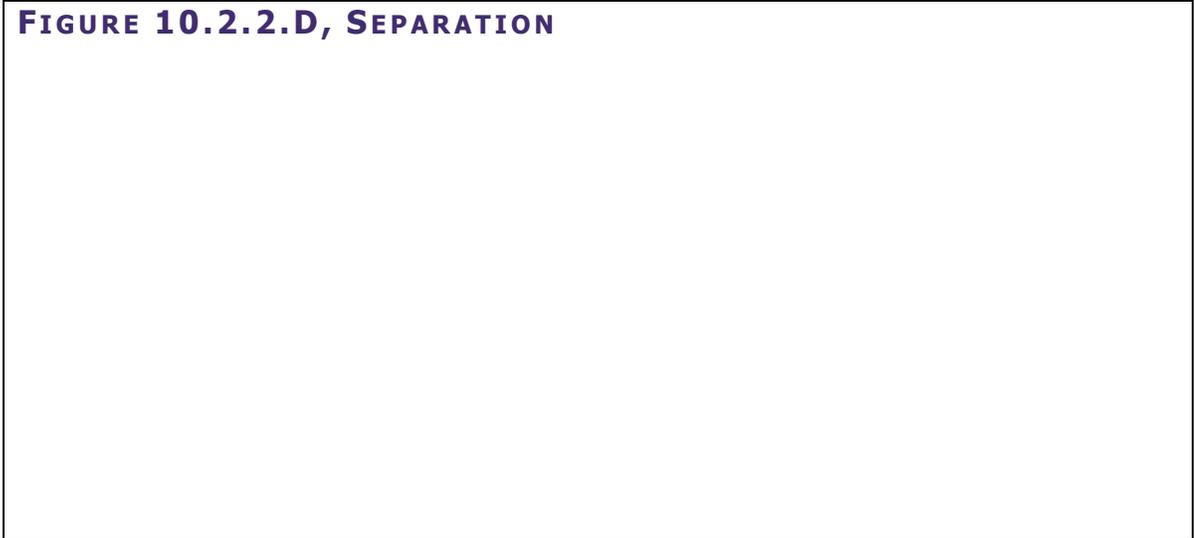
When the provisions of this Ordinance require separation between two or more lots, or a lot and another feature, separation shall be measured by drawing straight lines from the nearest point of one lot line to the nearest point of the lot line subject to the separation requirement.

2. Use Type to Use Type

When the provisions of this Ordinance require one use type to be separated from another use type, separation shall be measured by drawing straight lines from the nearest point of the wall of the existing or proposed principal structure to the nearest point of the wall of the existing or proposed structure subject to the separation requirement.

²²⁷ This is a new section that consolidates the standards related to how measurements are derived. It includes the standards from Section 9-1-7(c), Rounding of Numbers; Section 9-1-7(d), Density Calculations; and 9-5-2(b) General Rules. The section sets out the definitions for lots and setbacks, and explains how these features are determined. In addition, the section sets out the techniques for measuring height, contextual setbacks, parking space configuration, signs, and other measurement-related aspects. It also sets out the standards for how encroachments into required yards are addressed.

FIGURE 10.2.2.D, SEPARATION



10.2.3. LOT DIMENSIONS

A. Lot Lines²²⁸

1. Corner Side Lot Line

The corner side lot line is a side lot line that abuts a street or other right-of-way.

2. Front Lot Line

The front lot line is the line connecting the two side lot lines along the edge of the street that provides a lot's street address or that opposes the primary entrance of a building.

3. Rear Lot Line

The rear lot line is the line connecting the two side lot lines along the edge of the lot opposite from the front line.

4. Side Lot Line

The side lot line is the lot line connecting the front and rear lot lines regardless of whether it abuts a right-of-way or another lot line.

²²⁸ The section on lot line measurement is included to establish how different lot lines are determined.

FIGURE 10.2.3.A, LOT LINES**B. Lot Types****1. Conservation Subdivision Lot**

A building lot located within a conservation subdivision.

2. Corner Lot

A lot located at the intersection of two or more streets (other than alleys), regardless of whether or not such streets intersect at right angles.

3. Cul-de-Sac Lot

A lot located on the head or turnaround of a cul-de-sac with side lot lines on a tangent to the arc of the right-of-way.

4. Double Frontage Lot

A lot, other than a corner lot, with frontage on more than one street other than an alley.

5. Flag Lot

A lot, created by a subdivision, with less lot width than is required for a conventional lot. It is composed of a narrow "flagpole" strip extending from the street and a much wider "flag" section lying immediately behind a lot or lots having the required street frontage for a conventional lot. In the case of a flag lot, the lot line at the end of the flagpole lying generally parallel to the street to which the flagpole connects shall be considered to be the front lot line for setback purposes.

6. Interior Lot

A lot other than a corner lot with only one frontage on a street other than an alley.

7. Reverse Frontage Lot

A lot with a building or structure that is oriented in an opposing direction to the existing buildings or structures on adjacent lots.

8. Single-Family Attached (Townhouse) Lot

A parcel of land intended as a unit for transfer of ownership and lying underneath, or underneath and around, a single-family attached (townhouse) use.

9. Zone Lot

One or more lots of record in one undivided ownership with sufficient total area, area exclusive of easements and flood hazards, total dimensions, street access, and frontage to permit construction thereon of a principal building together with its required parking and planting yards.

FIGURE 10.2.3.B, LOT TYPES



C. Lot Measurements

1. Minimum Lot Area

(a) The minimum amount of required land area, measured horizontally, that must be included within the lines of a lot. Lands located within any private easements shall be included within the lot area. The following features shall not be included in calculating minimum lot area:

- (1) Public street rights-of-way;
- (2) Private street common area; and
- (3) The "pole" or "pan handle" portion of a flag lot.

(b) In the case of single-family attached and multi-family development, the district tables in Chapter 3: Zoning Districts set out a minimum development size for minimum lot area. The minimum development size is the land area necessary for at least three dwelling units. Beyond the first three units, the maximum density for the zoning district controls the maximum number of dwelling units per acre.

2. Average Lot Area

The total lot area of the lots, tracts, or land area along a single block face divided by the total number of lots along the same block face.

3. Lot Width

The distance between straight lines connecting front and rear lot lines at each side of the lot, measured at the inside edge of the front setback. On cul-de-sacs, lot width is measured at the front street setback line.

4. Street Frontage

The length of the lot line of a single zone lot abutting a public or private street right-of-way.

FIGURE 10.2.3.C, LOT MEASUREMENTS

D. Dimensional Standards in the Core City

1. Some forms of development in the Core City may take advantage of contextual setbacks. A contextual setback is a street, side, or rear setback of a distance that is between 75 percent and 125 percent of the average for the same kind of setbacks found among the existing structures along the same block face as the proposed development. For example, a proposed development in the Core City is proposed on a vacant lot. There are five homes, each on their own lot, along the same block face as the vacant lot. According to the zoning district where the lot is located, the street setback is 10 feet. Each of the five existing homes have a different setback from the street they face. Two are set back ten feet, two are set back five feet, and one is set back 15 feet from the street. To determine the average setback for the block face, an applicant adds up all the front setbacks on the block face ($10 + 10 + 5 + 5 + 15$) = 45. This sum is then divided by the number of homes along the block face to derive the average setback ($45 / 5 = 9$). The average setback for the block face is 9 feet. The proposed development has several options in terms of the setback requirement it will follow. The home could be set back by 10 feet and comply with the district standard. The home could be set back by 6.75 feet ($9 \times 75\%$). The home could be set back 10.125 feet ($9 \times 125\%$). Finally because the setback is a minimum setback, the home could be further than 10.125 feet from the street.
2. This is the same process used for contextual lot width, contextual lot area, contextual side or contextual rear setbacks as well.

FIGURE 10.<>, DETERMINATION OF DIMENSIONAL STANDARDS IN THE CORE CITY

10.2.4. SETBACKS

A setback is the horizontal distance from a lot line or street right-of-way line to the nearest part of the applicable building, structure, sign, or activity, measured perpendicularly to the line.

A. Perimeter Setback

Setbacks applied to single building developments and group developments. When applied to group developments it applies only to the outermost buildings along the perimeter of a development. A perimeter setback does not apply along streets.

B. Rear Setback

A setback from an interior lot line lying on the opposite side of the lot from the front street setback.

C. Side Setback

Any interior lot line setback other than a rear setback.

D. Street Setbacks

Any setback from a street right-of-way line.

1. Front Street Setback

Any setback from a street on which the building is addressed or primarily fronts. A through lot has two front street setbacks.

2. Maximum Street Setback

The maximum distance a building can be located from the street it fronts.

3. Minimum Street Setback

The minimum distance a building can be located from the street it fronts.

E. Side Street Setback

Any setback from a street other than the front street setback.

FIGURE 10.2.4.A, SETBACKS



F. Setbacks Following Government Acquisition of Land

Where land acquisition for a public purpose reduces the distance between an existing legally-established structure and an adjacent lot line to an amount less than the minimum required by the district, then the resulting distance shall be deemed the minimum setback for the lot.

G. Setback Encroachments²²⁹

Table 10.2.4.G, Allowable Encroachment into Setbacks, sets out the kinds of features that are permitted to encroach within a required setback, provided there is no interference with a sight distance easement.

TABLE 10.2.4.G: ALLOWABLE ENCROACHMENTS INTO SETBACKS	
FEATURE	ALLOWABLE ENCROACHMENT
Accessory structures other than those listed below	May be located in a required minimum side or rear setback, subject to the limitations in Section 4.6.4, Standards for Accessory Structures
Bay windows	May extend up to three feet into any required setback, if no more than nine feet wide, but in no case shall be closer than three feet to any lot line
Bus shelters and gatehouses	May be located in any required setback
Chimneys or fireplaces	May extend up to three feet into any required setback, but in no case shall be closer than three feet to any lot line
Flagpoles, mailboxes, lamp and address posts	May be located in any required setback
Fences or walls, ornamental entry columns, and gates	May be located in any required setback, subject to the limitations in Section 5.9, Fences
Handicapped ramps	May be located within any required setback

²²⁹ This is a table of new encroachment provisions for the city’s consideration. It is based on best practices in similar communities.

TABLE 10.2.4.G: ALLOWABLE ENCROACHMENTS INTO SETBACKS	
FEATURE	ALLOWABLE ENCROACHMENT
HVAC condensers, heat pumps, or other outdoor mechanical equipment	May be located within any required setback
Open balconies, fire escapes, or exterior stairways	May extend up to three feet into any required setback, but in no case shall be closer than three feet to any lot line
Pet shelters, play equipment, and outdoor furniture	May be located in any required setback
Roof eaves and overhangs, or awnings	May extend up to three feet into any required setback, but in no case shall be closer than three feet to any lot line
Signs, projecting or free-standing	May extend into or be located in any required setback in accordance with Section 5.6, Signage
Sills or entablatures	May extend up to 12 inches into any required setback
Uncovered porches, stoops, decks, patios, terraces, walkways, or driveways	May extend into or be located in any required setback, if less than 12 inches high
Vegetation and landscaping features such as retaining walls, fountains, ponds, ornamental ponds, trellises, arbors, and similar landscaping features	May be located in any required setback
Well houses and utility cabinets	May be located in any required setback
Canopies, awnings, and marquees attached to a building in the GB, CB, and MS districts	May extend into the street right-of-way if: - No portion is closer than 3 feet to the face of the curb; - No portion is less than 9 feet above grade; and - No portion requiring vertical support from the sidewalk is located above a sidewalk of less than 8 feet in width
Canopies attached to a building in the SC district	May extend into the street setback provided no portion of the canopy is closer than 10 feet to the street right-of-way line
Freestanding canopies	May be located in the street setback provided no portion is closer than 15 feet to the street right-of-way
Wall signs in the CB and MS districts	May project into the street right-of-way

FIGURE 10.2.4.B, ALLOWABLE ENCROACHMENTS**10.2.5. DENSITY AND INTENSITY****A. Maximum Density**

The maximum number of residential dwelling units permitted per acre of land area. Density is determined by dividing the number of dwelling units by the total amount of land area within a particular lot or tract.

B. Maximum Density Calculation

1. Land area that is dedicated to the City for drainageway and open space on the final plat may be included in the lot area for the purpose of determining the maximum number of dwelling units permitted.
2. When the developer dedicates and builds a new public street in or abutting a multi-family development, the street right-of-way may be included in the lot area for the purpose of determining the maximum number of dwelling units permitted.
3. When a single-family attached or multi-family development occupies both sides of a street for a minimum centerline distance of 400 feet, the entire development may be treated as a single zone lot for purposes of calculation of the maximum number of dwelling units permitted, provided that a final plat is recorded with a prominent note specifying that the property must remain in one ownership (except for individual units in townhome or condominium developments). This plat note is not required if the portion of the development on each side of the street independently meets all requirements of this Ordinance.

C. Density Equivalence²³⁰

1. When calculating the density for a life care use or private dormitory, two bedrooms in a life care or private dormitory shall be equivalent to one regular dwelling unit.
2. When calculating the density for single-room occupancy (SRO) residence, a rooming unit of less than 150 square feet shall be equivalent to one-half ($\frac{1}{2}$) a

²³⁰ This section carries forward the standards in section 9-1-7(d)92) of the current ordinance.

dwelling unit and a rooming unit of 150 square feet or more shall be equivalent to one dwelling unit.

D. Rounding

When computation of density results in a fraction, the fraction shall be rounded down to the next lowest whole number.

E. Built-Upon Area

1. The portion of a development that is covered by impervious or partially impervious cover including buildings, pavement, gravel (for pedestrian or vehicular facilities), recreation facilities like courts, but not wooden slat structures such as decks or boardwalks.
2. The water area of a swimming pool is not considered built-upon area.

F. Gross Floor Area

The sum of the gross horizontal areas of the floors of a building measured from the exterior faces of the exterior walls or from the centerline of walls separating two buildings.

10.2.6. HEIGHT

A. Maximum Building Height

The vertical distance measured from the average elevation of the finished grade to the topmost section of the roof along the front facade.

B. Structure Height Restrictions

1. As required by Title 14 of the Code of Federal Regulations (CFR), Chapter 1, Part 77, and determined by the Federal Aviation Administration (FAA), no structure may be constructed or existing structure altered in a manner or at a height that constitutes a safety hazard to aerial navigation. Structures at or exceeding the following heights shall require FAA approval prior to construction:
 - (a) Any structure 50 feet and higher above ground level between 5,000 feet and under 10,000 feet of the closest runway;
 - (b) Any structure 100 feet and higher above ground level between 10,000 feet and 20,000 feet of the closest runway; and
 - (c) Any structure over 200 feet above ground level.
2. It is the responsibility of the applicant to obtain FAA approval from the Piedmont Triad International Airport Authority (PTIAA) and provide it to the Planning and Development Director.
3. No permit or plan approval shall be granted in the absence of FAA approval.
4. Lighting or electronic signals that interfere with air traffic communications or navigational aids are prohibited as determined by the FAA.

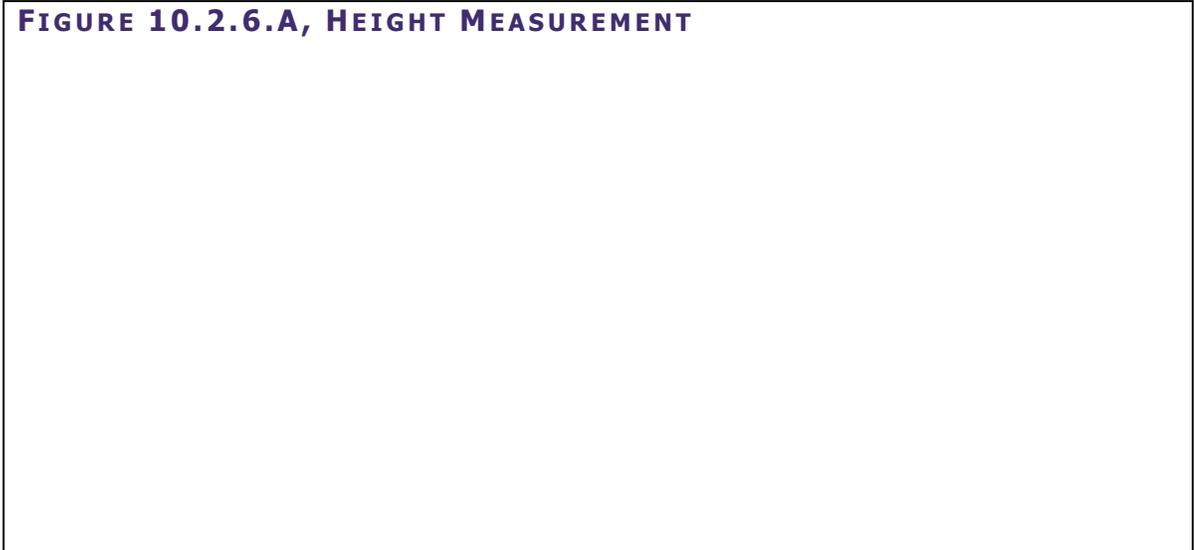
C. Exemptions to Height Requirements

Except as required in 10.2.6.B, Structure Height Restrictions, height limits shall not apply to bulk storage silos, grain elevators, barns, chimneys, elevator shafts, church spires, belfries, cupolas, domes, flagpoles, monuments, water towers, rooftop dish antennas, solar equipment, skylights, fire escapes or roof access stairways, mechanical equipment required to operate and maintain the building, derricks, conveyors, power transmission towers, or similar appurtenances, provided:

1. The appurtenance is not constructed for the purpose of providing additional floor area in the building; and

2. The appurtenance complies with the screening requirements for mechanical equipment and appurtenances in this Ordinance.

FIGURE 10.2.6.A, HEIGHT MEASUREMENT



10.2.7. SLOPE AND ELEVATION

A. Slope

The degree of deviation of the ground surface from a flat, horizontal elevation, usually expressed in percent or degrees of deviation from horizontal.

B. Base Flood Elevation

A determination of the water surface elevations of the base flood as published in the Flood Insurance Study. When the BFE has not been provided in a "Special Flood Hazard Area", it may be obtained from engineering studies available from a Federal, State, or other source using FEMA approved engineering methodologies. This elevation establishes the Regulatory Flood Protection Elevation.

C. Finished Grade

The established grade following grading, excavation, or other land-disturbing activity.

D. Natural Grade

The level of the ground elevation prior to the commencement of development or land-disturbing activity.

10.2.8. PARKING SPACE COMPUTATION

A. Rounding

When computation of the number of required parking spaces results in a fraction, the fraction shall be rounded down to the next whole number.

B. Multiple and Mixed Uses

Unless otherwise approved, development containing more than one principal use shall provide off-street parking in an amount equal to the total requirements of all individual uses, unless the Planning and Development Director determines that a lower standard

proposed as part of an alternative parking plan would be adequate because of differences in peak operating hours.

C. Seat Based Standards

Where the minimum number of off-street parking spaces is based on the number of seats, all computations shall be based on the design capacity of the areas used for seating.

D. Floor-Area Based Standards

Where the minimum number of off-street parking spaces is based on square feet of floor area, all computations shall be based on gross floor area. The square footage shall not include outdoor display or use area.

E. On-Street Parking

Except as otherwise specifically permitted, on-street parking on public or private streets shall not be used to satisfy the off-street parking standards of this Ordinance.

F. Driveways Used to Satisfy Requirements

Driveways may be used to satisfy minimum off-street parking standards for single-family detached, single-family attached, and duplex dwellings, provided sufficient space is available to satisfy the standards of this Ordinance.

10.2.9. LANDSCAPING

A. Setback Less than the Required Planting Area

1. In cases where the required building setback is less than the required planting area width, the building setback shall control, reducing the required planting area width only alongside the building.
2. The planting rate of the required planting area shall still apply.

B. Rounding

When computation of the amount of landscaping material to be provided results in a fraction, the minimum number of shrubs or trees to be provided shall be rounded upwards to the next highest whole number.

10.2.10. SIGNAGE²³¹

A. Area for Single-faced Signs

The area of a sign shall be computed by means of the smallest square, circle, rectangle, triangle or combination thereof which will encompass the extreme limits of the writing, representation, emblem, or other display, together with any material or color forming an integral part of the background of the display or used to differentiate the sign from the backdrop or structure against which it is placed, but not including any supporting framework, bracing, or decorative fence.

B. Area for Multi-faced Signs

For multi-faced signs, the sign area shall be computed by including all sign faces visible from any one point. When two identical sign faces are placed back to back so that both faces cannot be viewed from any point at the same time, and when such sign faces are part of the same sign structure and are not more than 42 inches apart, the sign area shall be computed by the measurement of one of the faces.

²³¹ These standards are taken from Section 9-5-16(h) of the current ordinance.

C. Height

Sign height shall be computed as the distance from the base of the sign at the finished grade or from the nearest adjacent street grade to which the sign is oriented and on which the lot has frontage, whichever is higher, to the top of the highest component of the sign. Finished grade shall be the grade after construction, exclusive of any filling, berming, mounding, or excavating solely for the purpose of locating the sign.

D. Lots with Multiple Frontages

Lots fronting on two or more streets are allowed the permitted sign area for each street frontage. The total sign area that is oriented toward a particular street, however, may not exceed the portion of the lot's total sign area that is derived from that street frontage or building frontage.

E. Wall Area (for the purposes of Sign Area Measurement)²³²

For the purposes of determining allowable sign area, a wall is the vertical exterior surface of a building, the area of which shall be determined as follows:

1. The area of all parallel vertical surfaces along a single building elevation regardless of offsets shall be counted as one wall.
2. The front of each unit of a multiple tenant commercial building shall be counted as a separate wall.
3. The area of an angled wall surface shall be counted as part of whichever adjoining wall surface it is most parallel with.
4. A 45 degree angled wall may be counted as part of the area of either adjoining wall, but not as a part of both.

10.2.11. EXTERIOR LIGHTING

- A. Light level measurements shall be made at the lot line of the land upon which light to be measured is being generated. If measurement on private property is not possible or practical, light level measurements may be made at the boundary of the public street right-of-way that adjoins the land.
- B. Measurements shall be made at finished grade (ground level), with the light-registering portion of the meter held parallel to the ground pointing up. The meter shall have cosine and color correction and have an accuracy tolerance of no greater than plus or minus five percent.
- C. Measurements shall be taken with a light meter that has been calibrated within two years.

10.2.12. FENCES²³³

Fence height shall be measured in accordance with the following standards:

- A. Fence height shall be measured at the highest point above grade (not including columns or fence posts) on the portion of the fence nearest an abutting or adjacent lot or street right-of-way.
- B. Columns or posts shall not exceed a height 18 inches above the built height of the fence.
- C. Any retaining wall or berm below a fence or wall shall be included within the fence height.
- D. Safety railings required by the NC State Building Code shall not be included in fence height measurements.

²³² These standards are from Text Amendment 13-05.

²³³ These standards carry forward the provisions in Section 9-4-14(f)(4) of the current ordinance.

10.3. ABBREVIATIONS

Table 10.3, Abbreviations, includes the abbreviations and their corresponding terms as used in this Ordinance.

TABLE 10.3: ABBREVIATIONS	
ABBREVIATION	ASSOCIATED TERM
ADA	Americans with Disabilities Act
ADU	Accessory Dwelling Unit
ANSI	American National Standards Institute
ARO	Airport Overlay District
ATM	Automatic Teller Machine
BFE	Base Flood Elevation
BMP	Best Management Practice
BOA	Board of Adjustment
bu	Built-upon area
CZ	Conditional Zoning
dB	Decibel
DENR	North Carolina Department of Environment and Natural Resources
DO	Development Ordinance
DWQ	North Carolina Department of Water Quality
EPA	Environmental Protection Agency
ETJ	Extraterritorial Jurisdiction
EV	Electric Vehicle
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FBFM	Flood Boundary and Floodway Map
FHBM	Flood Hazard Boundary Map
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
FTA	Federal Telecommunications Act of 1996
GCO	Gateway Corridor Overlay District
GWA	General Watershed Area
HPC	Historic Preservation Commission
HPDOT	High Point Transportation Department
HQW	High Quality Water
HUD	Federal Department of Housing and Urban Development
HVAC	Heating, Ventilation, and Air Conditioning

TABLE 10.3: ABBREVIATIONS

ABBREVIATION	ASSOCIATED TERM
kW	Kilowatt
LCID	Land Clearing and Inert Debris
Ldn	Day-Night Average Sound Level
Lf or LF	Linear Feet
LEED	Leadership in Energy and Environmental Design
LHO	Local Historic Overlay District
LOMA	Letter of Map Amendment
LOMR	Letter of Map Revision
LOMR-F	Letter of Map Revision Based on Fill
MHO	Manufactured Housing Overlay District
MW	Megawatt
NC	North Carolina
NCDCR	North Carolina Department of Cultural Resources
NCDOT	North Carolina Department of Transportation
NCO	Neighborhood Conservation Overlay District
NCGS	North Carolina General Statute
NFIP	National Flood Insurance Program
OS	Open Space
PD	Planned Development
PTIA	Piedmont Triad International Airport
P&Z	Planning and Zoning Commission
ROW	Right-of-way
SF or Sq. Ft.	Square Feet
SFHA	Special Flood Hazard Area
SR	Secondary Road in the North Carolina Secondary Road System
TIA	Traffic Impact Analysis
TRC	Technical Review Committee
UFC	Urban Forestry Committee
WEC	Wind Energy Conversion System
WCA	Watershed Critical Area
WSE	Water Surface Elevation
WSO	Watershed Protection Overlay District

10.4. DEFINITIONS

The following are definitions for terms used in this Ordinance that do not involve calculations or measurement (see Section 10.2, Rules of Measurement, for terms and definitions related to calculation or measurement).

ABUTTING	The condition of two parcels of land having a common property line or boundary, including cases where two or more parcels of land adjoin at a corner, but not including cases where parcels of land are separated by a street or alley.
ACCESS	The right or ability of pedestrians, vehicles, and boats to enter and leave property.
ACCESS EASEMENT	An easement which grants the right to cross land.
ACCESSORY BUILDING	A detached building, the use of which is customarily incidental to that of the principal building and which is located on the same lot as the principal building.
ACCESSORY DWELLING	A secondary dwelling unit established in conjunction with and clearly subordinate to a principal dwelling unit, whether part of the same structure as the principal dwelling unit, or as a detached structure on the same lot.
ACCESSORY STRUCTURE	A detached subordinate or incidental structure, the use of which is incidental to the principal structure and which is located on the same lot as the principal structure.
ACCESSORY USE	A use that is customarily incidental, appropriate, and subordinate to the principal use of land or buildings and located on the same lot.
ACTIVE RECREATION USE	Uses or structures intended for specific active recreational uses such as play grounds, ballfields, tennis courts and other similar uses typically located in open space set-aside areas or parks.
ADDITION	As used in flood damage prevention standards, an extension or increase in the floor area or height of a building or structure.
ADJACENT	A parcel of land or development that shares all or part of a common lot line or boundary with another parcel of land, or a parcel of land that would abut another parcel of land, but for the fact a street or right-of-way divides the parcels.
ADOPTED POLICY GUIDANCE	The combined future land-use policy guidance provided by the adopted <i>Community Growth Vision</i> , the comprehensive plan (also referred to as the <i>Land Use Plan</i>), area plans prepared for specific parts of the city, and system plans related to the city's infrastructure systems.
ADULT ENTERTAINMENT	The following definitions relate to adult entertainment uses:
a) Adult arcade (also known as "peep show")	A place to which the public is permitted or invited wherein coin-operated or slug-operated or electronically, electrically, or mechanically controlled still or motion picture machines, projectors, or other image-producing devices are maintained to show images to persons in booths or viewing rooms where the images so displayed depict or describe "specified sexual activities" or "specified anatomical areas."
b) Adult bookstore or adult video store	A commercial establishment which as one of its principal business purposes offers for sale or rental for any form of consideration any one or more of the following: 1) books, magazines, periodicals or other printed matter, or photographs, films, motion pictures, video cassettes or video reproductions, slides, or other visual representations that depict or describe "specified sexual activities" or "specified anatomical areas"; or 2) instruments, devices, or paraphernalia that are designed for use in connection with "specified sexual activities."
c) Adult cabaret	A nightclub, bar, restaurant, or other commercial establishment that regularly features, exhibits or displays as one of its principal business purposes: 1) persons who appear nude or semi-nude; or 2) live performances which are characterized by the exposure of "specified anatomical areas" or by "specified sexual activities"; or 3) films, motion pictures, video cassettes, slides, or other photographic reproductions which depict or describe "specified sexual activities" or "specified

		anatomical areas."
d) Adult motel		A hotel, motel or similar commercial establishment that: 1) offers accommodations to the public for any form of consideration; provides patrons with closed-circuit television transmissions, films, motion pictures, video cassettes, slides, or other photographic reproductions that depict or describe "specified sexual activities" or "specified anatomical areas" as one of its principal business purposes; or 2) offers a sleeping room for rent for a period of time that is less than 10 hours; or 3) allows a tenant or occupant of a sleeping room to sub-rent the room for a period of time that is less than 10 hours.
e) Adult motion picture theater		A commercial establishment where, for any form of consideration, films, motion pictures, video cassettes, slides, or similar photographic reproductions are regularly shown as one of its principal business purposes that depict or describe "specified sexual activities "or" specified anatomical areas."
f) Adult theater		A theater, concert hall, auditorium, or similar commercial establishment which regularly features, exhibits or displays, as one of its principal business purposes, persons who appear in a state of nudity or semi-nude, or live performances that expose or depict "specified anatomical areas "or" specified sexual activities."
g) Escort		A person who, for tips or any other form of consideration, agrees or offers to act as a date for another person, or who agrees or offers to privately model lingerie or to privately perform a striptease for another person.
h) Escort agency		A person or business that furnishes, offers to furnish, or advertises to furnish escorts as one of its principal business purposes, for a fee, tip, or other consideration.
i) Nude model studio		A place where a person who appears nude or semi-nude, or who displays "specified anatomical areas" is provided to be observed, sketched, drawn, painted, sculptured, photographed, or similarly depicted by other persons who pay money or any form of consideration for such right. Nude Model Studio shall not include a proprietary school licensed by the state of North Carolina or a college, junior college, or university supported entirely or in part by public taxation; a private college or university which maintains and operates educational programs in which credits are transferable to a college, junior college, or university supported entirely or partly by taxation; or in a structure: 1) that has no sign visible from the exterior of the structure and no other advertising that indicates a nude or semi-nude person is available for viewing; and 2) where in order to participate in a class a student must enroll at least three days in advance of the class; and 3) where no more than one nude or semi-nude model is on the premises at any one time.
j) Nude or a state of nudity		1) the appearance of a human anus, male genitals, or female genitals; or 2) a state of dress which fails to opaquely cover a human anus, male genitals, or female genitals.
k) Semi-nude		A state of dress in which clothing covers no more than the genitals, pubic region, and areola of the female breast, as well as portions of the body covered by supporting straps or devices.
l) Sexual encounter center		A business or commercial enterprise that, as one of its principal business purposes, offers for any form of consideration physical contact in the form of wrestling or tumbling between persons of the opposite sex, or activities between male and female persons and/or persons of the same sex when one or more of the persons is in a state of nudity or semi-nude.
m) Specified anatomical areas		Human genitals in a state of sexual arousal.
n) Specified sexual activities		Any of the following: 1) the fondling or other erotic touching of human genitals, pubic region,

	<p>buttocks, anus, or female breasts; or</p> <p>2) sex acts, normal or perverted, actual or simulated, including intercourse, oral copulation, or sodomy; or</p> <p>3) masturbation, actual or simulated; or</p> <p>4) excretory functions as part of or in connection with any of the activities set forth in 1. through 3. above.</p>
AFFECTED PARTY	Owners of land adjoining the land subject to an application and any other person who could suffer an adverse effect to a property interest from a proposed development.
AFFILIATE	A person that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control of another person.
AGGRIEVED PARTY	A person, with a legally recognized interest (i.e., fee simple ownership) and standing to appeal, that is injuriously affected by a decision from any decision-making body of the City, including any officer or agent of the City.
ALLEY	A roadway set aside primarily for vehicular service access to the back or side of lands otherwise abutting a street or open space.
ALTERNATIVE LANDSCAPE PLAN	A plan or other proposal to deviate from the basic landscaping or tree planting standards in this Ordinance.
ALTERNATIVE PARKING PLAN	A plan or other proposal to utilize one or more of the alternative parking provisions as a means of providing more off-street parking spaces than typically allowed, fewer spaces than required, or alternative surfacing materials.
APPLICANT	A person who has submitted a development application for review under applicable provisions of this Ordinance.
APPLICATION	The completed form or forms and all accompanying documents, exhibits, and fees required of an applicant by the appropriate City department or board as part of the development review processes.
ARBOR	A structure with an open roof system providing partial shading and which may also have non-opaque fencing on the outside perimeter.
ARCADE	A series of arches supported by piers or columns.
ARCH	A curved, semicircular opening in a wall.
ARCHITECTURAL LIGHTING	Exterior lighting that is designed to highlight structures, plantings, or significant architectural features in a direct or indirect fashion.
AREA OF SHALLOW FLOODING	A designated AO zone on the Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet where a clearly defined channel does not exist, the path of flooding is unpredictable and indeterminate, and velocity flow may be evident.
AS-BUILT PLANS	A set of engineering or site drawings that delineate the specific permitted development as actually constructed.
ASSESSED VALUE	The monetary price that a parcel of land, portion of land, improvement on land, or other commodity assigned by property appraiser's office for the purposes of taxation.
AUTHORIZED AGENT	A person with express written consent to act upon another's behalf.
AWNING	A plastic, canvas, or metal porch or shade supported by a frame and often foldable that is placed over a storefront, doorway, or window.
BASE FLOOD	The flood having a one percent chance of being equaled or exceeded in any given year.
BASE FLOOD ELEVATION	A determination of the water surface elevations of the base flood as published in the flood insurance study. The base flood elevation, when combined with the "freeboard", establishes the "regulatory flood protection elevation".
BASEMENT	As part of the flood damage prevention standards, an area of a building with a floor located below ground level on all sides.
BERM	An elongated earthen mound typically designed or constructed on a site to separate, screen, or buffer adjacent uses.
BEST MANAGEMENT	A structural or non-structural management-based practice used singularly or in

PRACTICE	combination to reduce nonpoint source inputs to receiving waters in order to achieve water quality protection goals.
BIO-RETENTION DEVICE	A stormwater infiltration device consisting of an excavated basin that is refilled with engineered soil and mulch that allows stormwater run-off to collect and percolate through the engineered soil where it is treated prior to infiltrating into the surrounding undisturbed soil. Also known as a rain garden or bio-cell.
BLOCK	The land lying within an area bounded on all sides by streets.
BLOCK FACE	A specific side of a block referenced in relationship to the setback, bulk, height, or uses on the block.
BLOCK LENGTH	The distance, measured along the right-of-way of each side of a street, between one intersecting through street (not a cul-de-sac or loop street) and the next intersecting through street.
BREAKAWAY WALL	A wall not part of the structural support of a building and intended to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system.
BREW PUB	An eating and drinking establishment that produces less than 15,000 barrels of malt beverage per year.
BORROW	Fill material which is required for on-site construction and is obtained from other locations.
BUFFER	An area of natural or planted vegetation adjoining or surrounding a use and unoccupied in its entirety by any building, structure, paving or portion of such use, for the purposes of screening and softening the effects of the use, no part of which buffer is used for recreation or parking.
BUFFER, PERIMETER LANDSCAPING	Vegetative material and structures (i.e., walls, fences) that are used to separate uses from each other as required by this Ordinance, including but not limited to the Type A Opaque, Type B Semi-Opaque, Type C intermittent, and Type D Basic.
BUILDING	A structure having a roof supported by walls or columns constructed or used for residence, business, industry, or other public or private purposes.
BUILDING ELEVATION	A fully dimensioned drawing of the exterior front, side or rear of a building showing architectural features such as windows, doors and roof lines, and which may also contain information regarding exterior materials, colors, and fixtures.
BUILDING MARKER	A sign indicating the name of a building and date and incidental information about its construction, which sign is cut into a masonry surface or made of bronze or other permanent material.
BUILDING MASS	The visual form of a building that includes the exterior walls, projections, recesses, roof features, and any attachments.
BY RIGHT	Land uses that are permitted in a zoning district without requiring special use review.
CALIPER	Measurement for determining the size of trees at time of planting. Caliper is the quantity in inches of the diameter of trees measured at six inches above the ground for trees four inches or less in trunk diameter and 12 inches above the ground for trees over four inches in trunk diameter.
CANOPY	A permanent structure other than an awning made of cloth, metal or other material attached or unattached to a building for the purpose of providing shelter to patrons or automobiles, or as a decorative feature on a building wall. A canopy is not a completely enclosed structure.
CANOPY TREE	A species of tree which normally grows to a mature height of 40 feet or more with a minimum mature crown width of 30 feet.
CHANGE OF USE	The change in the use of a structure or land. Change of use includes a change from one use type to another use type.
CHANNEL	A natural water-carrying trough cut vertically into low areas of the land surface by erosive action of concentrated flowing water or a ditch or canal excavated for the flow of water.
CHANNELIZATION	Any improvements or other construction activity which occurs within or in the vicinity

	of an existing natural drainageway or perennial stream which directs or relocates said waterway along some desired course, by increasing its depth or by the use of piping or any other manmade storm drainage structures.
CITIZEN INFORMATION MEETING	A meeting conducted by an applicant on a proposed development before an application for the development permit or approval is reviewed by the P & Z Commission.
CITY	The City of High Point, North Carolina.
COLLECTOR STREET	A street whose principal function is to carry traffic between cul-de-sac, local, and subcollector streets and streets of higher classification but which may also provide direct access to abutting lands.
COMMERCIAL MESSAGE	A sign wording, logo, or other representation that, directly or indirectly, names, advertises, or calls attention to a business, product, service, or other commercial activity.
CONDOMINIUM	A development containing individually owned dwelling units and jointly owned and shared areas and facilities that is subject to the North Carolina Unit Ownership Act (North Carolina General Statutes Section Ch. 47A) and/or the North Carolina Condominium Act (North Carolina General Statutes Section Ch. 47C).
CONNECTIVITY	The relative degree of connection between streets, sidewalks, or other means of travel.
CONSERVATION SUBDIVISION	The division of a tract of land into two or more lots, building sites, or other divisions along with additional land area set aside as open space for conservation and/or recreation purposes.
CONSTRUCTION	The erection of any building or structure or any preparations (including land disturbing activities) for the same.
CONTIGUOUS	Abutting directly or immediately adjacent to a boundary or separated only by a street, railroad, or public utility right-of-way.
CORE CITY	The area subject to the Core City Plan provisions and delineated on the Official Zoning Map.
CORNICE	Any horizontal member, structural or nonstructural, of any building, projecting outward from the exterior walls at the roof line, including eaves and other roof overhang.
CROSS-ACCESS	Vehicular access provided between the vehicular use areas of two or more development sites or parcels of land intended to allow travel between the sites without the use of a public or private street.
CROSSWALK	A right-of-way dedicated to public use which cuts across a block to facilitate pedestrian access to adjacent streets and properties.
CUL-DE-SAC STREET	A short local street having one end open to traffic and the other end permanently terminated by a vehicular turnaround.
CUPOLA	A domelike structure on top of a roof or dome, often used as a lookout or to admit light and air.
CUT-OFF FIXTURE	A cut-off light fixture that emits none of its light above the horizontal plane of the fixture (90 degrees) and no more than 10 percent of its emitted light between 80 degrees and 90 degrees.
CUT-OUT LETTER LIGHTING	Lighting so arranged that only the outlines of letters, numerals, or symbols are illuminated from an internal lighting source while the remainder of the sign is covered with nontransparent materials that prevent illumination.
DECK	A structure, without a roof, directly adjacent to a principal building which has an average elevation above finished grade.
DENSITY CREDIT	The potential for a portion of a development or subdivision, expressed in dwelling units or other measures of intensity, that may be transferred to other portions of the same lot, tract, or site that is part of a common development plan.
DETERMINATION	A final decision by a local jurisdiction's officer with the highest level of authority to make the determination, including those with authority to hear appeals.

DEVELOPER	A person engaging in land, site, or building development.
DEVELOPMENT	Any manmade change to improved or unimproved real estate, including but not limited to: buildings or other structures; mining; dredging; filling; grading; paving; excavation; drilling operations; or storage of equipment or materials.
DEVELOPMENT GUIDEBOOK	A <i>Development Guidebook</i> , or "user's guide," that explains to development applicants and the public how the review of development applications is conducted in High Point.
DIAMETER AT BREAST HEIGHT (DBH)	Measurement for determining the size of existing trees to be credited towards landscaping requirements or for violations of this Ordinance. DBH is the measurement of the diameter of an existing tree trunk taken at a height of four-and-one-half feet above the ground. Trees with multiple trunks should be treated as multiple trees and the DBH for each trunk added to aggregate diameter measurement.
DISABLED MOTOR VEHICLE	A motor vehicle that meets one of more of the following criteria: <ul style="list-style-type: none"> - It does not display a current license plate; - It is partially dismantled or wrecked; - It cannot be self-propelled or moved in the manner originally intended; or - It is more than four years old and appears to be worth less than \$500.00. Nothing in this definition shall be construed to apply to any vehicle in an enclosed building or vehicle on the premises of a business enterprise being operated in a lawful place and manner and the vehicle being necessary to the operation of the business enterprise, or to a vehicle in an appropriate storage place or depository maintained in a lawful place and manner by the City.
DISCHARGE POINT	The point at which stormwater runoff leaves a tract of land.
DITCH	A manmade, open drainageway into which surface water or groundwater from land, stormwater runoff, or floodwaters flows either continuously or intermittently.
DRAINAGEWAY	A natural or manmade channel that carries surface runoff from precipitation.
DRAINAGE EASEMENT	An easement which grants the right to maintain, relocate, or, utilize land within the easement for the improvement of drainage and stormwater flow.
DRIPLINE	A vertical line extending from the outermost portion of a tree's canopy to the ground.
DRIVEWAY	A private road or vehicular accessway providing access to parking areas, garages, dwellings, drive-up windows, or other similar features on up to two different lots.
DRIVE-THROUGH	A facility designed to enable a person to transact business while remaining in a motor vehicle.
DWELLING	A structure or portion thereof that is used exclusively for human habitation.
DWELLING UNIT	One or more rooms, designed, occupied, or intended for occupancy as separate living quarters, with cooking, sleeping, and sanitary facilities provided therein.
EASEMENT	A grant of one or more property rights by the property landowner to, or for use by, the public, a corporation, or other entity.
EAVE	The projecting lower edges of a roof that overhangs the wall of a building.
EGRESS	An exit from a building or site.
ELEVATION	The front, side, or rear of a structure.
ENCROACHMENT	As used in the flood damage prevention standards, the advance or infringement of uses, fill, excavation, buildings, structures or development into a special flood hazard area, which may impede or alter the area's flooding flow capacity.
EPHEMERAL STREAM	A feature that carries only stormwater in direct response to precipitation with water flowing only during and shortly after large precipitation events. An ephemeral stream may or may not have a well-defined channel, the aquatic bed is always above the water table and stormwater runoff is the primary source of water. An ephemeral stream typically lacks the biological, hydrological and physical characteristics commonly associated with the continuous or intermittent conveyance of water.
EROSION	The wearing away of land surface by the action of wind, water, gravity, or any

	combination thereof.
EROSION CONTROL MEASURE	A device which controls the soil material within the land area under responsible control of the person conducting a land-disturbing activity.
EXPANSION	An increase in the floor area of an existing structure or building, or the increase of area of a use.
EXTENSIVE EROSION CONTROL MEASURE	Erosion control devices that are designed by a registered professional engineer, architect, landscape architect, certified professional in erosion and sedimentation control (CPESC), or a registered surveyor to the extent permitted by North Carolina laws.
FACADE	The entire exterior wall of a building facing a lot line measured from the grade to the eave or highest point of a flat or mansard roof. Facades may be on the front, side, or rear elevation of the building.
FAMILY	One or more persons occupying a dwelling unit and living as a single household unit.
FENCE	A physical barrier or enclosure consisting of wood, stone, brick, block, wire, metal, or similar material used as a boundary or means of protection or confinement, but not including a hedge or vegetation.
FINANCIAL GUARANTEE	Cash or other guarantee provided by an applicant in-lieu of completion of public infrastructure or installation of required private site features prior to issuance of a building permit or other development approval.
FLOOD OR FLOODING	A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland waters or the unusual and rapid accumulation of runoff of surface waters from any source.
FLOOD INSURANCE	The insurance coverage provided under the National Flood Insurance Program.
FLOOD INSURANCE RATE MAP (FIRM)	The official map issued by the Federal Emergency Management Agency (FEMA) that depicts special flood hazard areas and risk premium zones applicable in the City.
FLOOD INSURANCE STUDY (FIS)	An examination, evaluation, and determination of flood hazards, corresponding water surface elevations (if appropriate), flood hazard risk zones, and other flood data in a community issued by the Federal Emergency Management Agency (FEMA). The flood insurance study report includes flood insurance rate maps (FIRMs) and flood boundary and floodway maps (FBFMs), if published.
FLOODPROOFING	Any combination of structural and nonstructural additions, changes or adjustments to structures which reduce or eliminate flood damage to land or development.
FLOODWAY	The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.
FLOODWAY FRINGE	The land located between the floodway and maximum elevation subject to inundation by the base flood.
FLOOD ZONE	A geographical area on the Flood Hazard Boundary Map or Flood Insurance Rate Map that reflects the severity or type of flooding in the area.
FLOOR	As used in the flood damage prevention standards, the top surface of an enclosed area in a building (including the basement), such as the top of the slab in concrete slab construction or the top of the wood flooring in wood frame construction.
FOOTCANDLE	A unit of measure of the intensity of light falling on a surface. One footcandle is equal to one lumen per square foot.
FREEBOARD	The height added to the BFE to account for unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, blockage of bridge openings, and the hydrological effect of urbanization of the watershed.
FRONT BUILDING LINE	The front façade of a building that is closest to the street it faces.
FRONT (OR PRIMARY) FACADE	The side or elevation of a structure that contains the structure's architectural front, or the portion of the structure facing the street from which the structure derives its street address.

Chapter 10: Measurement and Definitions

Full Cut-Off Lens Full Cut-Off Lens

FULL CUT-OFF LENS	An artificial outdoor lighting fixture designed to ensure that no light is directly emitted above a horizontal line parallel to the ground.
GABLE	A triangular area of an exterior wall formed by two sloping roofs.
GLARE	The effect produced within the visual field by a high intensity or insufficiently shielded light source that is significantly brighter than the level to which the eyes are adapted, causing annoyance, discomfort, or loss of visual performance or visibility of objects.
GLAZING	The portion of an exterior building surface occupied by glass or windows.
GOVERNING BODY	The City Council for the City of High Point.
GRADING	Excavating, filling (including hydraulic fill) or stockpiling of earth material, or any combination thereof, including the land in its excavated or filled condition.
GREEN ROOF	The roof of a building that is partially or completely covered with vegetation and a growing medium, planted over a waterproofing membrane. It may also include additional layers such as a root barrier and drainage and irrigation systems.
GREENWAY	Public open space owned and maintained by the City which has been designated on an officially adopted greenway or open space plan and developed in accordance with the adopted greenway or open space plan.
GROUND COVER	Any vegetation, masonry, paving, rip-rap, or other material or materials which render the soil surface stable against accelerated erosion.
GROUP DEVELOPMENT	A development in which, in-lieu of division of a tract of land into separate lots of record for separate principal buildings, a tract of land is divided into two or more principal building sites for the purpose of building development (whether immediate or future) and occupancy by separate families, firms, businesses, or other enterprises.
HAZARDOUS OR TOXIC SUBSTANCE GENERATOR	A use listed as a "Hazardous Waste Facility" by the North Carolina Department of Human Resources, Solid and Hazardous Waste Management Division, or a use included on the U.S. EPA's "Categorical Pretreatment List".
HAZARDOUS OR TOXIC SUBSTANCE HANDLER	A use engaged in the permanent or temporary storage, treatment, altering, reprocessing, transporting, and/or disposal of hazardous or toxic substances.
HISTORIC STRUCTURE	Any structure that is: 1) listed individually in the National Register of Historic Places (a listing maintained by the US Department of Interior) or preliminarily determined by the Secretary of Interior as meeting the requirements for individual listing on the National Register; 2) certified or preliminarily determined by the Secretary of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; 3) individually listed on a state inventory of historic places; 4) individually listed on a local inventory of historic places in communities with a Certified Local Government (CLG) Program; or 5) certified as contributing to the historic significance of a historic district designated by a community with a Certified Local Government (CLG) Program. Certified Local Government Programs are approved by the US Department of the Interior in cooperation with the North Carolina Department of Cultural Resources through the State Historic Preservation Officer as having met the requirements of the National Historic Preservation Act of 1966, as amended.
HOME OCCUPATION	An accessory use conducted entirely within a dwelling and carried on by its occupants.
HUMAN SCALE	Features of a building or built environment that are sized and configured in accordance with the typical human frame. Human-scale details and features are most often configured for observation and recognition by people who are walking.
IMPERVIOUS SURFACE	Improvements including street pavement, driveways, gravel areas, buildings, and other structures which cover the soil surface and prevent infiltration of water into the soil.
IMPROVEMENT	The construction of buildings and the establishment of basic services and amenities associated with development, including, but not limited to streets and sidewalks,

	parking areas, water and sewer systems, drainage system, property markers and monuments, recreation facilities (i.e., lakes, swimming pools, tennis courts, golf courses, riding stables, club houses, cabanas, marinas, docks and the like) and other similar construction or establishment.
INFILL	Development, redevelopment, and re-use of existing sites and buildings in the City's existing neighborhoods and commercial corridors.
INGRESS	Access or entry to a building or site.
INTERMITTENT STREAM	A well-defined channel that contains water for only part of the year, typically during winter and spring when the aquatic bed is below the water table and typically lacks the biological and hydrological characteristics commonly associated with the continuous conveyance of water.
JUST CAUSE	Legitimate cause; legal or lawful ground for action.
LAND CLEARING AND INERT DEBRIS (LCID) LANDFILL	A landfill limited to concrete, brick, concrete block, uncontaminated soil, rock, gravel, untreated wood, limbs, leaves and stumps. LCID does not include materials that have been painted or coated with sealants or finishes.
LAND DISTURBING ACTIVITY	Any movement of earth or substrate, manually or mechanically, including but not limited to any modification of existing grade by dredging, demolition, excavation or fill, grading, scraping, vegetation removal, landscaping, coring, well drilling, pile driving, undergrounding utility lines, trenching, bulldozing, sheeting, shoring and excavation for laying or removing foundations, pilings or other purposes.
LAND USE CLASS	A numeric value denoting the intensity of an individual use type for the purposes of determining applicable perimeter landscape yard requirements.
LANDOWNER	As applied to the standards related to vested rights, an owner of a legal or equitable interest in real property, including the heirs, devisees, successors, assigns, and personal representative of the owner.
LANDSCAPING	The improvement of a lot, parcel or tract of land with grass, shrubs, and trees. Landscaping may include pedestrian walks, flower beds, ornamental objects such as fountains, statuary, and objects designed and arranged to produce an aesthetically pleasing effect.
LANDSCAPING STRIP, PERIMETER	Vegetative material associated with the perimeter landscaping required for a vehicular use area.
LARGE RETAIL DEVELOPMENT	A retail establishment consisting of a single tenant in a single building of 60,000 square feet or more in area with 60 percent or more of the total floor area occupied by retail sales activities.
LARGE VEHICLE	A vehicle with a gross vehicle weight of 14,000 or more pounds, a recreational vehicle, or a school or church bus.
LOADING SPACE	Space logically and conveniently located for bulk pickups and deliveries, scaled to delivery vehicles, and not considered as part of the minimum required off-street surface parking.
LOCAL GOVERNMENT	Any county, incorporated municipality, or any combination of counties and/or incorporated municipalities acting through a joint program pursuant to the provisions of this Ordinance.
LOCAL STREET	A street whose primary function is to provide access to abutting lands.
LOCAL RESIDENTIAL STREET	A local street that provides access primarily to lots containing residential uses.
LOT	A legally described piece of contiguous land that has been or may be developed as a unit. This term is synonymous with "parcel."
LOT OF RECORD	A lot that exists and is described and defined as part of a recorded subdivision or a lot otherwise recorded at the Register of Deeds before the date of the city's adoption of subdivision regulations or subsequent to that date and in accordance with city subdivision regulations applicable at the time of recordation.
LOWEST FLOOR	As used in the flood damage prevention standards, the lowest floor of the lowest enclosed area (including basement) that is typically an unfinished or flood resistant enclosure that does not include habitable space.

Chapter 10: Measurement and Definitions**Lumen Lumen**

LUMEN	A quantitative unit measuring the amount of light emitted by a light source.
MAINTENANCE GUARANTEE	Cash or other guarantee provided by an applicant to ensure public infrastructure functions as intended following acceptance by the City.
MAJOR THOROUGHFARE STREET	An interstate, other freeway, expressway, or parkway links, or major street that provides for the expeditious movement of high volumes of traffic within and through urban areas.
MANSARD ROOF	A sloped roof or roof-like facade architecturally comparable to a building wall.
MANUFACTURED DWELLING	A dwelling that: 1) is composed of one or more components, each of which was substantially assembled in a manufacturing plant and designed to be transported to the home site on its own chassis; 2) is a minimum of 40 feet in length and eight feet in width; 3) is constructed in accordance with the National Manufactured Home Construction and Safety Standards; and 4) is not constructed in accordance with the standards of the North Carolina Uniform Residential Building Code for One-and Duplex Dwellings.
MARQUEE	A permanent roof-like structure projecting beyond a building or building wall generally designed and constructed to provide protection from the weather.
MAXIMUM EXTENT PRACTICABLE	No feasible or practical alternative exists, as determined by the county, and all possible efforts to comply with the standards or regulation to minimize potential harmful or adverse impacts have been undertaken by an applicant. Economic considerations may be taken into account but shall not be the overriding factor determining "maximum extent practicable."
MEAN SEA LEVEL	The National Geodetic Vertical Datum (NGVD) as corrected in 1929, the North American Vertical Datum (NAVD) as corrected in 1988, or other vertical control datum used as a reference for establishing varying elevations within the floodplain, to which base flood elevations on the FIRM are referenced.
MEMBRANE STRUCTURE	A structure, building, or tent composed of a membrane material, such as canvas, plastic, or other fabrics, that is supported by a rigid framework of metal, plastic, or other material.
MINOR THOROUGHFARE STREET	A street designed to collect traffic from collector, subcollector, and local streets and carry it to the major thoroughfare system.
MIXED-USE CENTER	A tract of land or structure developed for two or more different uses, such as, but not limited to, residential, office, retail, institutional, public, or entertainment. Such uses are functionally integrated and share vehicular use areas, ingress/egress, and pedestrian access.
MIXED-USE DEVELOPMENT	A tract of land or structure developed for two or more different uses, such as, but not limited to, residential, office, retail, institutional, public, or entertainment. Such uses are functionally integrated and share vehicular use areas, ingress/egress, and pedestrian access.
MOTOR VEHICLE	A vehicle required by the North Carolina Department of Motor Vehicles to be registered under North Carolina State Law.
MULTIPLE-LOT DEVELOPMENT	A development containing two or more lots, buildings, or businesses that is planned, organized, and managed to function as a single development.
NATURAL INFILTRATION AREAS	A type of stormwater management device that relies on vegetation, soil, or other natural matrix configured to allow stormwater runoff to enter, filter, and be re-released with fewer pollutants.
NEW CONSTRUCTION	As used in the flood damage prevention standards, structures for which the start of construction commenced on or after the effective date of the flood damage prevention standards.
NIT	As used in the signage standards, a measurement of a sign's luminance measured in the number of candela per square meter (cd/m ²).
NON-ENCROACHMENT AREA	As used in the flood damage prevention standards, the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than

	one foot as designated in the Flood Insurance Study report.
NONCONFORMING LOT	A lot of record that that was lawful at the date on which it was established, but does not conform to the current dimensional requirements of the zoning district in which it is located.
NONCONFORMING SITE FEATURE	A site feature which was lawful at the date on which it was established, but does not conform to the current standards and regulations of this Ordinance.
NONCONFORMING STRUCTURE	A structure that was lawful at the date on which it was established, but does not conform to current dimensional, elevation, location, or other requirements of this Ordinance.
NONCONFORMING USE	A use which was lawful at the date on which it was established, but is now not a permitted use of that parcel or structure under this Ordinance.
NONCONFORMITY	Any land use, development, structure, or site, including any lot of record, that was legally established, but that is not presently in full compliance with the provisions of this Ordinance.
NORTH CAROLINA SEDIMENTATION POLLUTION CONTROL ACT	North Carolina General Statutes Section 113A-50 et seq., and all rules and orders adopted pursuant to it.
NOTICE OF VIOLATION	An initial notice indicating a violation of this Ordinance not associated with a fine.
OFFICIAL ZONING MAP	The Official Zoning Map upon which the boundaries of various zoning districts are drawn and which is an integral part of this Ordinance.
OPACITY	A measurement indicating the degree of obscuration of light or visibility.
OPEN SPACE	Space suitable for passive recreation, gardens, or landscaping which may include areas left in their natural state, trails, ponds, stream banks, recreation areas, areas of excessive slopes, low-lying areas, marshland, environmentally-sensitive areas, required landscaping areas and some governmental facilities.
OPEN SPACE, ACTIVE	Space suitable for active forms of recreation, including athletic fields, playgrounds, swimming pools, courts, tracks, and similar uses that are well served by streets, parking facilities, spectator areas, restroom facilities, and exterior lighting where appropriate.
OPEN SPACE, COMMON	An open space area owned privately or in common for use by all members of the public.
OPEN SPACE, PASSIVE	Required open space areas designated for passive recreation uses including walking trails, pathways, gazebos, picnic areas, fountains and pools, plazas, and similar areas. Such areas may also include undisturbed natural vegetation.
OPEN SPACE, PRIVATE	Space on each building lot that is for the private use of inhabitants.
OPEN SPACE SET-ASIDE	Portion of a proposed development required for reservation as permanent open space.
ORDINANCE	A legislative enactment of the City of High Point, North Carolina.
OUTPARCEL	A subdivided or leased parcel within a group development, multiple-lot development, or shopping center.
OWNERS' ASSOCIATION	An organization of homeowners or property owners of lots or land in a particular subdivision, condominium, or planned development. The owners association is responsible for maintaining and enhancing the shared private infrastructure (e.g., stormwater, streets, and sidewalks) and common recreation.
PARAPET	A building façade that rises above the roof level, typically obscuring a gable or flat roof as well as any roof-mounted equipment.
PARCEL	See "Lot."
PARKING BAY	The parking module consisting of one row of parking spaces or stalls and the aisle from which motor vehicles enter and leave the spaces.
PARKING DEMAND	An analysis of the total number of parking spaces required in order to accommodate

STUDY	the maximum number of vehicles for parking purposes by a particular use or site at any given time, including the parking requirements for all employees, occupants, clients, and visitors.
PARKING LOT DRIVE AISLE	A vehicular accessway located within an off-street parking or vehicular use area which serves individual parking stalls and driveways.
PARKING SPACE, ACCESSIBLE	A space designated for the parking or temporary storage of one motor vehicle in addition to the space necessary for the ingress and egress from the vehicle by a disabled person and any equipment needed for that purpose.
PARKING SPACE, OFF-STREET	A space that is designated for the parking or temporary storage of one motor vehicle located outside of a dedicated street right-of-way, vehicular travel way, or parking aisle.
PARKING, DEFERRED	A portion of the required off-street parking associated with a use that is not installed at the time of construction, but delayed or deferred until a parking demand study can be completed to determine if the additional required parking is needed.
PARKING, OFF-SITE	An off-street parking area provided on a different parcel than the use it is intended to serve.
PARKING, ON-STREET	A location or area within the right-of-way of a public or private street that is reserved for the parking of vehicles. Such areas may or may not be formally designated with signage, striping, or parking meters.
PARKING, SHARED	Off-street parking facilities shared by two or more uses that are in close proximity to one another and the parking area, and that have different operational characteristics such that use of the parking facilities by one use will not generally overlap with the use of the parking area by the other use(s).
PARKING, TANDEM	A parking space within a group of two or more parking spaces arranged one behind the other.
PATIO	An area, usually paved, adjoining a building - used as an area for outdoor lounging, dining, or gathering.
PEDESTRIAN AMENITY	Seating, outdoor play areas, bicycle racks, kiosks, water features, public art, freestanding structures such as a clock tower or similar amenities, intended primarily for use by pedestrians.
PEDESTRIAN CONNECTION	Interconnected paved walkway that provides a pedestrian passage through blocks running from street to street, vehicular use areas, or other locations.
PEDESTRIAN-ORIENTATION	Development elements, such as density, building placement, street and path connections, and mixture of uses designed with pedestrians in mind and intended to encourage and promote pedestrian activity.
PENNANT	A lightweight plastic, fabric, or other material, whether or not containing a message of any kind, suspended from a rope, wire, or string, usually in series, designed to move in the wind.
PERENNIAL STREAM	A well-defined channel that contains water year round during a year of normal rainfall with the aquatic bed located below the water table for most of the year that typically exhibits the typical biological, hydrological, and physical characteristics commonly associated with the continuous conveyance of water.
PERSON	Any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, or public or private institution, utility, cooperative, interstate body, or other legal entity.
PERSON CONDUCTING LAND DISTURBING ACTIVITY	Any person who may be held responsible for a violation unless expressly provided otherwise by this Ordinance or any order adopted pursuant to this Ordinance or the North Carolina Environmental Protection Act.
PERSON RESPONSIBLE FOR LAND DISTURBING VIOLATION	As used in this Ordinance, and North Carolina General Statutes Section 113A-64, a developer or other person who has or holds himself out as having financial or operational control over the land-disturbing activity, the landowner or person in possession or control of the land when he has directly or indirectly allowed the land-disturbing activity or has benefited from it or he has failed to comply with any

	provision of this Ordinance or any order adopted pursuant to this Ordinance or the North Carolina Environmental Protection Act as imposes a duty upon him.
PHASED DEVELOPMENT PLAN	A plan submitted to the Planning and Development Department for the purpose of establishing a vested right for developments to be constructed in more than one phase and which contain less degree of certainty than a site specific development plan.
PILASTER	A rectangular column with a capital and base that is attached or affixed to a wall as an ornamental design feature.
PLANNED DEVELOPMENT	An area of land under unified ownership or control to be developed and improved as a single entity under a Planned Development Master Plan in accordance with this Ordinance.
PLANNING AND DEVELOPMENT DIRECTOR	The Planning and Development Director of the City of High Point or a designee.
PLANTING SEASON	The dormant time of the year for trees beginning with leaf drop and ending with bud break; generally late fall to early spring.
PLANTING STRIP	An area usually within or adjacent to a right-of-way or lot line that contains required vegetation.
PLAT	A surveyed map or plan for a parcel of land which is to be, or has been, subdivided.
PLAYBILL	A sign announcing entertainment offered or to be offered at a business location on the site where the sign is displayed.
PLAZA	An open space at the intersection of important streets or adjacent to important structures, set aside for civic purposes and commercial activity, which may include parking, consisting of durable pavement, and formal landscaping or tree plantings.
PORCH	A covered projection (can be glazed or screened) from the main wall of a building, with a separate roof, that is not used for livable space.
PORTICO	A large porch usually with a pediment usually associated with an entrance, supported by columns.
POST-FIRM	Construction or other development for which the "start of construction" occurred on or after the effective date of the initial Flood Insurance Rate Map.
PRE-FIRM	Construction or other development for which the "start of construction" occurred before the effective date of the initial Flood Insurance Rate Map.
PRIMARY DRIVE AISLE	The main aisle(s) that extends from the street right-of-way, or from the driveway entrance(s) serving a development along the front of the building it serves.
PRIMARY ENTRANCE	The place of ingress and egress to a building, parcel, or development used most frequently by the public.
PRINCIPAL BUILDING	A building in which is conducted the principal use(s) of the lot on which it is located or, in a group development, of the building site on which it is located. Any dwelling is considered a principal building unless it is an accessory dwelling.
PRINCIPAL BUILDING FAÇADE	The entire exterior wall of a building facing a lot line measured from the grade to the eave or the highest point of a flat or mansard roof. Facades may be on the front, side, or rear elevation of the building.
PRINCIPAL DWELLING	Any principal building or structure which is used and designed for human habitation including living, sleeping, cooking, and eating activities, excluding dormitories, hotels, motels, shelters for the homeless, or other structures designed for transient residents.
PRINCIPAL STRUCTURE	A structure in which is conducted the principal use(s) of the lot on which it is located.
PRIVATE DRIVE	A vehicular travelway not dedicated or offered for dedication as a public street, providing access to parking lots for two or more principal buildings.
PRIVATE STREET	A vehicular travelway not dedicated or offered for dedication as a public street but resembling a cul-de-sac or a local street by carrying traffic from a series of driveways to the public street system.

PROFESSIONAL-LEVEL SUBORDINATE	A professional-level staff member designated to fulfill the function of the Planning and Development Director or Engineering Services Director, as appropriate.
PROJECTING BAY	A space projecting outward from the main walls of a building and forming a bay in a room, often incorporating a window.
PROPERTY OWNER	See "Landowner."
PUBLIC HEARING, QUASI-JUDICIAL	A formal public hearing involving the legal rights of specific parties conducted by the City Council or the Board of Adjustment based on evidence and sworn testimony presented during the public hearing. Decisions made during such hearings are based upon and supported by the record developed at the hearing, and typically involve findings of fact made by the decision-making body.
PUBLIC INFRASTRUCTURE	Aspects of the public realm owned and maintained by the city or the state that serve the public at large, including streets, highways, sidewalks, curb and gutter, potable water distribution systems, sanitary sewer systems, stormwater drainage retention and conveyance features, street lights, on-street parking spaces, and similar aspects located within a public right-of-way or public easement.
PUBLIC STREET	A dedicated and accepted public right-of-way for vehicular traffic and street rights-of-way offered for dedication, but not yet accepted, in which the roadway design and construction have been approved under public standards for vehicular traffic.
PUBLIC TREE	A tree in the public right of way, in a park, or on land controlled by the City.
QUORUM	The minimum number of board or commission members that must be present in order to conduct official business or take official action.
RAIN GARDEN	A planted depression that allows rainwater runoff from impervious urban areas like roofs, driveways, walkways, parking lots, and compacted lawn areas the opportunity to be collected in a single location and absorbed.
RECREATIONAL VEHICLE	A vehicle that is built on a single chassis, designed to be self-propelled or permanently towable by a light duty vehicle (including a travel trailer), and designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
REDEVELOPMENT	Any proposed expansion, addition, reduction, or other alteration to an existing building, structure, or other constructed feature on a lot or site. Redevelopment also includes changes in use to existing buildings, as well as modifications to site features such as parking, signage, landscaping, grading, stormwater management devices, or changes to outdoor storage.
REFERENCE LEVEL	The top of the lowest floor for structures within special flood hazard areas designated as zone A1-A30, AE, A, A99 or AO.
REGULATORY FLOODPLAIN ELEVATION	The base flood elevation plus the freeboard. In special flood hazard areas where BFEs have been determined, this elevation is the BFE plus two feet of freeboard. In special flood hazard areas where no BFE has been established, this elevation is at least two feet above the highest adjacent grade.
RESERVATION	An obligation, shown on a subdivision or site plan, to keep land free from development and available for public acquisition for a stated period of time.
RETAINING WALL	A structure, either masonry, metal, or treated wood, designed to prevent the lateral displacement of soil, rock, fill, or other similar material.
RIGHT-OF-WAY	An area dedicated to public or private use for pedestrian and vehicular movement, which may also accommodate public utilities.
ROOF LINE	The top edge of the roof or the top of the parapet, whichever forms the top line of a building.
RURAL CHARACTER	Patterns of land use and development in which open space, the natural landscape, and vegetation predominate over the built environment.
SEDIMENT	Solid particulate matter, both mineral and organic, that is transported by water, air, gravity, or ice from its site of origin.

SEDIMENTATION	The process by which sediment resulting from accelerated erosion is transported off-site by land-disturbing activity.
SEVERE PRUNING	The pruning, cutting, or otherwise damaging of the natural form of a tree or shrub, whether existing or planted, such that a significant or noticeable portion of the crown system is removed (e.g., 25 percent of the crown removed from a tree, or the continued cutting/trimming of trees previously pruned illegally, or pruning of trees that must grow naturally to meet the landscaping requirements), and/or if more than one-third of the overall circumference of a tree is exposed by pruning cuts.
SHIELDED FIXTURE	A light fixture constructed and installed in such a manner that all light emitted by it, either directly from the lamp (bulb) or a diffusing element, or indirectly by reflection or refraction from any part of the fixture, is projected below the horizontal plane of the fixture.
SHRUB	A woody plant, smaller than a tree, consisting of several small stems emerging from the ground, or small branches near the ground. Shrubs may be deciduous or evergreen.
SIDEWALK	A paved area public right-of-way running parallel to the street for the purposes of pedestrian travel and to facilitate pedestrian access to adjacent streets and land.
SIGN	An object, device, display, or structure, or part thereof, which is used to advertise, identify, display, direct, or attract attention to an object, person, institution, organization, business, product, service, event, or location by any means, including but not limited to words, letters, pennants, banners, emblems, trademarks, trade names, insignias, numerals, figures, design, symbols, fixtures, colors, illumination, or projected images or any other attention directing device.
SIGN, A-FRAME	A sign not permanently attached to the ground or other permanent structure, that is displayed for a limited period of time, and is constructed in such a manner as to form an "A" or tent-like shape, hinged or not hinged at the top; each angular face held at an appropriate distance by a supporting member. Also known as a "menu board" or "sandwich board sign."
SIGN, ANIMATED	A sign which flashes, revolves, rotates, or swings by mechanical means or which uses a change of lighting to depict action or to create a special effect or scene.
SIGN, AWNING	Any sign which is a part of a fabric or other nonstructural awning.
SIGN, CANOPY	A sign which is a part of or attached to an awning, canopy or other fabric-like or plastic protective structure which is extended over a door, window, or entranceway.
SIGN, CHANGEABLE COPY	A sign which displays messages in which the copy may be arranged or rearranged by hand.
SIGN, CONSTRUCTION	A sign which identifies the architects, engineers, contractors, and other individuals or firms involved with construction of development, the name of the building or development, the intended purpose of the building or development, and/or the expected completion date.
SIGN, OFF-SITE DIRECTIONAL	A sign that indicates only the name and/or logo and direction to businesses, churches, hospitals, colleges, or similar campus uses.
SIGN, ELECTRONIC CHANGEABLE COPY	A sign or portion thereof that displays electronic, non-pictorial text information in which each alphanumeric character, graphic or symbol is defined by a small number of matrix elements using different combinations of light emitting diodes (LED's), fiber optics, light bulbs, or other illumination devices within the display area. Electronic changeable copy signs include computer programmable, microprocessor controlled electronic displays, and also include projected images or messages with these characteristics onto buildings or other objects. Electronic changeable copy signs do not include traffic control or other official signage.
SIGN, FLASHING	A type of animated sign which contains an intermittent, blinking, scintillating, or flashing light source, or which includes the illusion of intermittent or flashing light, or an externally mounted intermittent light source.
SIGN, FREESTANDING	A sign which is placed on or anchored in the ground with one or more supports that are not part of a building or other structure.

Chapter 10: Measurement and Definitions**Sign, Governmental Sign, Governmental**

SIGN, GOVERNMENTAL	A sign erected by or on behalf of a governmental body to post a legal notice, identify public property, convey public information, and direct or regulate pedestrian or vehicular traffic.
SIGN, GROUND SURFACE	A sign composed of manmade or organic materials displayed upon the surface of the ground.
SIGN, HISTORICAL OR MEMORIAL	A sign which commemorates a historical person, structure, place, or event or which denotes, honors, celebrates, or acknowledges an historical person, structure, place, or event.
SIGN, IDENTIFICATION	A sign used to display the name, address, logo or other identifying symbol of an individual, family, business, institution, service, or organization occupying the premises; the profession of the occupant; the name of the building on which the sign is attached; or directory information in group developments or buildings with multiple tenants.
SIGN, ILLUMINATED	A sign which has characters, letters, figures, designs or outline illuminated by electric lights or luminous tubes as a part of the sign.
SIGN, INSTRUCTIONAL	A sign that provides assistance, with respect to the premises on which it is maintained, for the direction, safety, or convenience of the public such as "entrance," "exit," "one way," "telephone," "parking," "no parking," and similar instructions.
SIGN, MARQUEE	A sign attached to, in any manner, or made a part of a marquee.
SIGN, MONUMENT	A monolithic sign in which the bottom of the sign is flush with the ground.
SIGN, NONCONFORMING	Any sign that was lawfully established, but does not meet the standards of this Ordinance.
SIGN, OFF-SITE	A sign which directs attention to a business, commodity, service, entertainment, or attraction sold, offered, or existing elsewhere than upon the lot where the sign is displayed.
SIGN, ON-SITE	A sign which directs attention to a business, commodity, service, entertainment, or attraction sold, offered, or existing on the same lot where the sign is displayed.
SIGN, OUTDOOR ADVERTISING (BILLBOARD)	A sign which directs attention to a business, commodity, service, entertainment, or attraction sold, offered, or existing elsewhere than the lot where the sign is displayed.
SIGN, POLITICAL	A sign used to advertise a political candidate, campaign, or position on a political issue.
SIGN, PORTABLE	A sign not permanently attached to the ground or other permanent structure, or a sign designed to be transported.
SIGN, PROJECTING	A sign end-mounted or otherwise attached to an exterior wall of a building which forms an angle with the wall.
SIGN, REAL ESTATE	A sign displayed for the purpose of offering for sale, lease, or rent the land on which the sign is erected, affixed, or otherwise established.
SIGN, ROOF	A sign erected and constructed wholly on and over the roof on a building, supported by the roof structure, and extending vertically above the highest portion of the roof.
SIGN, SUSPENDED	A sign which is suspended from the underside of a horizontal plan surface and is supported by the surface.
SIGN, TEMPORARY	A sign that is displayed for a limited period of time and/or is not permanently mounted.
SIGN, TEMPORARY OFF-SITE	A sign that is displayed in a location different than the principal use it is advertising, is not permanently mounted, and in place for only a limited period of time.
SIGN, VIDEO WALL	A sign consisting of multiple computer monitors, video projectors, or television sets tiled together contiguously or overlapped in order to form one large screen. Typical display technologies include LCD panels, LED arrays, DLP tiles, and rear projection screens. Such signs may display static text, images or photos; electronic changeable copy including the use of changing light to depict action or create special effects; video; or any combination thereof.

SIGN, WALL	A sign attached parallel to, painted on the wall surface of, or erected and confined within the limits of the outside wall, mansard roof structure, penthouse, or parapet of any building or structure, which is supported by a wall, building, or structure, but does not extend vertically above the highest portion of the roof, and which displays only one sign surface.
SIGN, WARNING	An on-site sign with no commercial message that displays information pertinent to the safety or legal responsibilities of the public such as signs warning of high voltage, "no trespassing," and similar directives.
SIGN, WINDOW	A sign which is painted on, affixed to, or designed to be visible through a window, excluding displays of merchandise.
SILTATION	Sediment transported from its point of origin within the site of a land-disturbing activity that is deposited on land or is in suspension in water.
SITE	A lot or lots occupied or planned for occupation by a structure or a set of structures.
SITE SPECIFIC DEVELOPMENT PLAN	A plan submitted to the City describing the type and intensity of use for a specific lot or site as well as site boundaries, significant topographical and other natural features, the approximate location of proposed buildings, structures, and other improvements, the approximate dimensions of proposed buildings, the approximate location of all existing and proposed infrastructure on the site (e.g., water, sewer, roads, and pedestrian walkways), and any other features determined by the City to be necessary in order to trigger a vested right.
SKETCH PLAN	A rough sketch or drawing of a proposed subdivision or site, showing streets, lots, and any other information of sufficient accuracy to be used for discussion of the street system and the proposed development pattern.
SMALL WIND ENERGY CONVERSION SYSTEM	A wind energy facility, constructed as an accessory use, consisting of a wind turbine, a tower, and associated control or conversion electronics, which has a rated capacity of not more than 100 kW per year and a maximum tower height of 120 feet or less.
SOIL AND WATER CONSERVATION DISTRICT	The Guilford Soil and Water Conservation District created pursuant to Chapter 139 of the North Carolina General Statutes.
SOIL EROSION AND SEDIMENTATION CONTROL PLAN	The graphic plan and narrative required as a prerequisite for a land disturbance permit that explains existing conditions, proposed grading, and measures undertaken to control accelerated soil erosion and sedimentation.
SPECIAL FLOOD HAZARD AREA	The land in the floodplain subject to a one percent or greater chance of being flooded in any given year.
SPECIAL PROMOTION	An advertising activity or circumstance of a business which is not part of its daily activities or normal routine and in which the display and/or sale of merchandise, ware, or other tangible items is the sole purpose for the promotion.
SQUARE	An open space that is defined by streets or adjacent buildings that is set aside for civic purposes, with landscaping consisting of paved walks, lawns, trees, and may contain civic buildings.
STACKING LANE	A portion of the vehicular use area on a site that is dedicated to the temporary storage or "standing" of vehicles engaged in drive-through use of the site or development. Parking or storage of vehicles is not permitted within the stacking/standing area.
START OF CONSTRUCTION	As used in the flood damage prevention standards, the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition or improvement was within six months of the permit date. The actual start means the first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that

Chapter 10: Measurement and Definitions**State State**

	alteration affects the external dimensions of the building.
STATE	The State of North Carolina.
STATE BUILDING CODE	The State Building Code for the State of North Carolina.
STATE HISTORIC PRESERVATION OFFICER	The State Historic Preservation Officer for the State of North Carolina.
STORM, 100 YEAR	The surface runoff resulting from a rainfall of an intensity expected to be equaled or exceeded, on average, once in 100 years.
STORM, 10 YEAR	The surface runoff resulting from a rainfall of an intensity expected to be equaled or exceeded, on average, once in 10 years.
STORM, 25 YEAR	The surface runoff resulting from a rainfall of an intensity expected to be equaled or exceeded, on average, once in 25 years.
STORMWATER OR STORMWATER RUNOFF	The direct runoff of water resulting from precipitation in any form.
STREAM	A watercourse that collects surface runoff.
STREET FRONTAGE	The length of lot abutting a public right-of-way or private street.
STREET NAME AND ADDRESS ASSIGNMENT GUIDELINES AND POLICIES	A set of guidelines and policies to provide the Planning and Zoning Commission with direction when naming and assign street names and addresses.
STREET RIGHT-OF-WAY	A strip of land whose legal title rests with the City or State and is occupied or intended to be occupied by a travelway for vehicles and is also available, with the consent of the appropriate governmental agency, for installation and maintenance of traffic control devices, traffic signs, street name signs, historical marker signs, water lines, sanitary sewer lines, storm sewer lines, gas lines, power lines, and communication lines.
STREET STUB	A nonpermanent dead end street intended to be extended in conjunction with development on adjacent lots or sites.
STREET TREE	A canopy tree planted or existing within or along either side of a street right-of-way.
STREET, INDUSTRIAL	An existing public or private street that serves as access to industrially zoned properties exclusively, or serves as access to properties that are developed with, or are planned to be developed with, wholesale, transportation, warehousing, utility, manufacturing or other industrial land uses.
STREET, RESIDENTIAL LOCAL	A low-traffic volume street used primarily to gain access to the residential lots that border it.
STREETSCAPE	An area within a public or private street right-of-way that may contain sidewalks, street furniture, landscaping, street trees, bus shelters, street lighting, building projections, and other features that create interest and interaction at the street level.
STREETYARD LANDSCAPING	Required landscaping placed proximate to and parallel with adjacent public streets fronting a lot.
STRUCTURE	Any material constructed, erected or placed in or upon the ground located outside the street right-of-way.
SUBCOLLECTOR STREET	A street whose principal function is to provide access to abutting lands but which is also designed to be used or is used to connect local streets with collector or higher classification streets.
SUBSTANTIAL IMPROVEMENT	Any repair, reconstruction, expansion, or improvement of a structure, the cost of which exceeds 50 percent of the assessed value of a structure as determined either before the expansion or improvement begins or before the damage occurred giving rise to the repair or reconstruction. Substantial improvement does not include, however, any repair or improvement required to bring the structure into compliance

	with existing state or county health, sanitary, safety, or building ordinance specifications necessary to ensure safe habitation of the structure.
SURFACE WATER BUFFER	A natural, vegetated, or revegetated area through which stormwater runoff flows in a diffuse manner so that the runoff does not become channelized and which provides for infiltration of the runoff and filtering of pollutants.
SUSTAINABLE DEVELOPMENT FEATURES	One or more development features voluntarily provided by an applicant or developer as a means of promoting sustainable development and/or taking advantage of available sustainable development practice incentives.
SUBDIVIDER	A person who subdivides land.
SUBDIVISION	<p>A division of a tract or parcel of land into two or more lots, building sites, or other divisions when any one or more of those divisions is created for the purpose of sale or building development (whether immediate or future) and includes all divisions of land involving the dedication of a new street or a change in existing streets. The following are not included within this definition and are not subject to any subdivision regulations in this Ordinance:</p> <ul style="list-style-type: none"> a. The combination or recombination of portions of previously subdivided and recorded lots if the total number of lots is not increased and the resultant lots are equal to or exceed the standards of this Ordinance. b. The division of land into parcels greater than ten acres if no street right-of-way dedication is involved. c. The public acquisition by purchase of strips of land for the widening or opening of streets. d. The division of a tract in single ownership, the entire area of which is not greater than two acres, into not more than three lots, where no street right-of-way dedication is involved and where the resultant lots are equal to or exceed the standards of this Ordinance.
TEMPORARY EVENT	An activity which is infrequent in occurrence and limited in duration, such as arts and craft shows, athletic events, community festivals, carnivals, fairs, circuses, concerts, conventions, exhibitions, trade shows, outdoor religious events, and other similar activities.
TENANT	A person who alone or jointly or severally with others occupies a building under a lease or holds a legal tenancy.
TRAFFIC CALMING DEVICE	A natural or constructed feature located within or adjacent to a street that is designed to reduce motorist speed or vehicle volumes, while at the same time increasing safety for pedestrians and non-motorized vehicles.
TRAFFIC IMPACT ANALYSIS	A study conducted to evaluate the capacity and safety impacts on the transportation system from a proposed development and identify necessary improvements or management strategies to mitigate negative impacts. Such studies shall be performed by a licensed professional engineer in accordance with the Traffic Impact Analysis Policy adopted by the City of High Point in this ordinance.
TRANSPORTATION DEMAND MANAGEMENT	The application of strategies and policies to reduce travel demand of single-occupancy private vehicles, or to redistribute this demand in space or in time.
UNDERSTORY TREE	A species of tree which normally grows to a mature height of 15 to 35 feet.
UTILITY EASEMENT	An easement which grants the right to install and maintain utilities including, but not limited to, water lines, sewer lines, storm sewer lines, electrical power lines, telephone lines, natural gas lines, and community antenna television systems.
VEGETATION, NATIVE	Any indigenous tree, shrub, ground cover or other plant adapted to the soil, climatic, and hydrographic conditions occurring on the site.
VEHICULAR USE AREA	Areas used for the parking and circulation of automobiles, trucks, and motorcycles. Vehicular use areas do not include individual driveways serving single-family detached residential development.
VEHICULAR USE AREA LANDSCAPING	Vegetative material, structures (walls or fences), berms, and associated ground cover located around the perimeter of a parking lot, or other vehicular use area.

VELOCITY	The average velocity of flow through the cross section of the main channel at the peak flow of the storm of interest. For the purposes of this definition, the cross section of the main channel is the area defined by the geometry of the channel plus the area of flow below the flood height defined by vertical lines at the main channel banks.
VESTED RIGHT	The right to undertake and complete the development and use of property under the terms and conditions of an approved site specific development plan or an approved phased development plan.
WALL PACK	An exterior lighting device that is flush-mounted on a vertical wall surface.
WALL, PARAPET	A low protective or decorative wall or railing along the edge of a raised structure such as a roof or balcony.
WATER DEPENDANT STRUCTURE	Structure which requires access or proximity to surface waters to fulfill its basic purpose, such as boat ramps, boat houses, docks, and bulkheads.
WATER QUALITY CONSERVATION EASEMENT	A permanent easement conveyed to the City for the protection of water quality in which no structures or land-disturbing activities are allowed.
WATER SUPPLY WATERSHED	The entire land area contributing surface drainage to a designated water supply reservoir.
WATER SURFACE ELEVATION	The height, in relation to mean sea level, of floods of various magnitudes and frequencies in the floodplains of riverine areas.
WATERSHED CRITICAL AREA	The area adjacent to a water supply intake or reservoir where risk associated with pollution is greater than from the remaining portions of the watershed. The critical area is defined as extending either one-half mile from the normal pool elevation of the reservoir in which the intake is located or to the ridge line of the watershed (whichever comes first); or one-half mile upstream from the intake located directly in the stream or river (run-of-the-river), or the ridge line of the watershed (whichever comes first).
WETLANDS	Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions.
WING WALL	Shorter walls that extend outwards from the front façade of a building used to divide the structure into different visual compartments, control pedestrian movement along the structure, or retain slopes.
WIRELESS TELECOM-MUNICATIONS FACILITY	The following definitions relate to wireless telecommunications facilities:
(a) Abandonment	Cessation of use of a wireless support structure for wireless telecommunication activity for at least the minimum period of time prescribed in Section <>
(b) Accessory equipment	Equipment serving or being used in conjunction with a wireless facility or wireless support structure. The term includes utility or transmission equipment, power supplies, generators, batteries, cables, equipment buildings, cabinets and storage sheds, shelters or similar structures.
(c) Antenna	Communications equipment that transmits and receives electromagnetic radio signals used in the provision of all types of wireless telecommunications services.
(d) Base station	A station at a specific site authorized to communicate with mobile stations, generally consisting of radio transceivers, antennae, coaxial cables, power supplies and other associated electronics.
(e) Collocation	The placement or installation of wireless facilities on existing structures, including electrical transmission towers, water towers, buildings and other structures including wireless support structures that are capable of supporting the attachment of such facilities in compliance with applicable codes and ordinances.
(f) Concealed wireless facility	A wireless facility that is integrated as an architectural feature of an existing structure or any new wireless support structure designed to camouflage or conceal

	(stealth wireless facility)	the presence of antennae or towers so the purpose of the facility or support structure is not readily apparent to a casual observer.
	(g) Electrical transmission tower	An electrical transmission structure used to support high voltage overhead power lines. The term shall not include any utility pole
	(h) Equipment compound	An area surrounding or near the base of a wireless support structure within which are located wireless facilities.
	(i) Existing structure	A wireless support structure, erected prior to the application for collocation or substantial modification under the wireless telecommunication facility provisions, that is capable of supporting the attachment of wireless facilities, including but not limited to electrical transmission towers, buildings and water towers. The term shall not include any utility pole.
	(j) Fall zone	The area in which a wireless support structure may be expected to fall in the event of a structural failure, as measured by engineering standards.
	(k) Monopole	A single, freestanding pole type structure supporting one or more antennae. The term shall not include any utility pole.
	(l) Ordinary maintenance	Ensuring that wireless facilities and wireless support structures are kept in good operating condition. Ordinary maintenance includes inspections, testing and modifications that maintain functional capacity and structural integrity. Examples are: strengthening a wireless support structure's foundation or the structure itself; replacing antennae of similar size, weight, shape and color; replacing equipment within an existing equipment compound; and relocating antennae to different height levels on an existing monopole or tower upon which it is currently located.
	(m) Replacement pole	A pole of equal proportions and of equal height – or such other height that would not constitute a substantial modification to an existing structure – in order to support wireless facilities or to accommodate collocation. A replacement pole requires the removal of the wireless support structure it replaces.
	(n) Substantial modification	The mounting of a proposed wireless facility or facilities on a wireless support structure which: (i) Increases the existing vertical height of the wireless support structure by the greater of; (a) more than ten percent, or (b) the height of one additional antenna array with separation from the nearest existing antenna not to exceed 20 feet, or (ii) Involves adding an appurtenance to the body of a wireless support structure that protrudes horizontally from the edge of the support structure more than 20 feet, or more than the width of the support structure at the level of the appurtenance, whichever is greater (except where necessary to shelter the antenna from inclement weather or to connect the antenna to the support structure via cable), or (iii) Increases the square footage of the existing equipment compound by more than 2,500 square feet, or (iv) Adds antennae that would increase the girth (width) of the support structure by more than 20 feet.
	(o) Temporary wireless communications facility	A portable, self-contained wireless facility that can be moved to a location and set up to provide wireless services on a temporary or emergency basis. Also known as a "COW" or "cell-on-wheels". A COW is normally vehicle mounted and contains a telescoping boom as the antenna support structure.
	(p) Tower	A general term used to describe wireless support structures other than for concealed wireless facilities. Includes lattice-type structures (guyed or freestanding) and monopoles that support one or more antenna.
	(q) Utility pole	A structure, usually a wooden or metal pole, owned and/or operated by a public utility, municipality, electric membership corporation or rural electric cooperative that is specifically for and used to carry lines, cables, or wires, primarily for local distribution, and/or to provide lighting.

	(r) Water tower or tank	A water storage tank, standpipe or elevated tank situated on a support structure, constructed for use as a reservoir or facility to store or deliver water.
	(s) Wireless facility	The set of equipment and network components, exclusive of the wireless support structure, necessary to provide wireless telecommunications services, including but not limited to; antennae, accessory equipment, transmitters, receivers, base stations, power supplies, and cabling.
	(t) Wireless support structure	A freestanding structure such as a monopole or lattice tower designed to support wireless facilities, or a building or other structure proposed for and capable of supporting such facilities.
XERISCAPE		A style of landscape design and type of vegetation requiring little or no irrigation or other maintenance.
ZONE LOT		One or more lots of record in one undivided ownership with sufficient total area, area exclusive of easements and flood hazards, total dimensions, street access, and frontage to permit construction thereon of a principal building together with its required parking and planting yards. In multi-family or single-family attached developments, the zone lot shall be considered to be the entire development.
ZONING MAP, OFFICIAL		See "Official Zoning Map".

INDEX