
Article 5: General Development Standards

Section 5.1. **Parking and Loading** *[11-16-2020]*

5.1.1. **APPLICABILITY**

A. **New Development**

All new development shall provide off-street parking and loading areas in accordance with the standards of this section.

B. **Existing Development**

1. Any change in use of existing development shall be accompanied by provision of any additional off-street parking and loading spaces required for the new use by this section, provided that additional off-street parking is not required if the change in use results in fewer than five additional parking spaces or less than a five percent increase in required parking spaces.
2. If any existing structure or use is expanded or enlarged (in terms of the number of dwelling units, guest rooms, floor area, or seats), any additional off-street parking and loading spaces that may be required shall be provided in accordance with the requirements of this section as applied only to the expanded or enlarged part of the structure or use.

5.1.2. **MINIMUM OFF-STREET PARKING STANDARDS**

A. **Minimum Number of Off-Street Parking Spaces**

Except as otherwise provided in Section 5.1.3, Alternative Parking Plans, new development or a change in use or expansion shall provide the minimum number of off-street parking spaces in accordance with Table 5.1.2.A: Minimum Off-Street Parking, based on the principal use or uses on the site. Interpretation of the off-street parking space standards for principal uses with variable parking demands or unlisted principal uses shall be in accordance with Section 5.1.2.B, Unlisted Uses, below.

Table 5.1.2.A: Minimum Off-Street Parking

sf = square feet of gross floor area, except where otherwise specified; du = dwelling unit; / = per

Use	Required Off-Street Parking
Agricultural Uses	
Agricultural and Forestry Uses, General	No minimum
Livestock Sales	No minimum
Stable	No minimum
Wholesale Nursery	No minimum
Residential Uses	
Household Living	
Dwelling, Dual-Unit Attached	2/du
Dwelling, Multi-Family	1.5/du with 1 bedroom; 2/du with 2+ bedrooms
Dwelling, Quadraplex	1.5/du with 1 bedroom; 2/du with 2+ bedrooms
Dwelling, Single-Family Detached	2/du
Dwelling, Triplex	1.5/du with 1 bedroom; 2/du with 2+ bedrooms
Dwelling, Row-Style	2/du
Dwelling, Two-Family (Duplex)	2/du
Live/Work or Caretaker Unit	2/du, in addition to parking provided for principal use
Mobile Home	2/du
Mobile Home, Doublewide	2/du
Mobile Home Park	2/du
Mobile Home Subdivision	2/du
Senior Living: Independent Living Retirement Community	1.5/du plus 2/1,000 sf nonresidential space
Group Living	
Family Care Home	2/du
Fraternity/Sorority Residence	1/single occupancy bedroom 2/double occupancy bedroom
Group Home	Maximum of 2 plus 1/every 4 beds plus 2 for resident supervisor(s)
Senior Living: Assisted Living Facility	1 per 3 beds

Table 5.1.2.A: Minimum Off-Street Parking

sf = square feet of gross floor area, except where otherwise specified; du = dwelling unit; / = per

Use	Required Off-Street Parking
Senior Living: Continuing Care Retirement Community	See Senior Living: Independent Living Retirement Community and Senior Living: Assisted Living Facility
Civic and Institutional	
Child and Adult Care	
Adult Day Care	1 per 4 clients (per design capacity or state permit)
Child Care Center	1 per 10 children (per design capacity or state permit)
Family Child Care Home	1 space in addition to the 2/du required for the residential use
Civic	
Animal Shelter	2/1,000 sf
Community Center	2.5/1,000 sf
Food Pantry	2.5/1,000 sf
Library	2.5/1,000 sf
Lodges, Fraternal, & Social Organizations	3/1,000 sf
Museum	2.5/1,000 sf
Religious Assembly	1 per 5 seats in largest assembly area
Communication and Information Facilities	
Amateur Radio Antennas (up to 90 ft.)	No minimum
Antenna & Towers less than 70 ft. in Height & Ancillary to the Principal Use	No minimum
Collocation, Wireless	No minimum
Non-Substantial Modification	No minimum
Other Wireless Communication Facilities including Wireless Support Structures & Substantial Modifications	No minimum
Educational Services	
Colleges, Universities, and Professional Schools	2/1,000 sf classroom and research space, plus 1 per 6 seats in largest assembly area
Elementary and Secondary Schools	Kindergarten, Nursery, Elementary, and Junior High School: 1 per 6 students per design capacity High School: 1 per 4 students design capacity
Vocation or Trade School	3/1,000 sf

Table 5.1.2.A: Minimum Off-Street Parking

sf = square feet of gross floor area, except where otherwise specified; du = dwelling unit; / = per

Use	Required Off-Street Parking
Government Services	
Emergency Services Facility	2.5/1,000 sf
Government Offices and Buildings	2.5/1,000 sf
Post Office	2.5/1,000 sf, plus 1 for each post office vehicle stored on site
Health Care Facilities	
Hospice	1 per 4 beds
Hospital	3.5/1,000 sf
Medical and Dental Office and Clinic	3.5/1,000 sf
Nursing and Rehabilitation Center	1 per 4 beds
Urgent Care Facility	3.5/1,000 sf
Recreation, Parks, and Open Space	
Boating Facility, Community	1 per boat slip
Boating Facility, Private Residential	No minimum
Cemetery	No minimum
Community Garden	No minimum
Golf Course	2 spaces per hole
Park and Recreation Area	No minimum
Transportation	
Airport and Terminal	No minimum
Bus and Taxi Terminal	No minimum
Heliport	No minimum
Marina, Commercial	1 per boat slip and 1 per 4 dry storage facilities
Marina, Commercial with Floating Structures	1 per boat slip, 1 per 4 dry storage facilities, and 2 per floating structure
Railroad Freight Depot	2/1,000 sf office facilities
Railroad Passenger Terminal	2/1,000 sf
Water Transportation Facilities	Study required
Utilities	
Electric Substation	No minimum
Solar Energy Collection Facility	2/1,000 sf office facilities

Table 5.1.2.A: Minimum Off-Street Parking

sf = square feet of gross floor area, except where otherwise specified; du = dwelling unit; / = per

Use	Required Off-Street Parking
Utility Lines, Structures, and/or Facilities; General	2/1,000 sf office facilities
Commercial Uses	
Amusement & Entertainment Uses	
Adult Entertainment Establishment	4/1,000 sf
Bar/Nightclub	6/1,000 sf seating area
Electronic Gaming Operation	The greater of: 10/1,000 sf or 1 per 2 terminals/computers
Event Center	5/1,000 sf
Indoor Recreation Establishment	Theaters or Indoor Stadiums: 1 per 5 seats All other uses: 4/1,000 sf
Outdoor Recreation Establishment	Stadium or Arena: 1 per 5 seats All other uses: 4/1,000 sf activity area
Animal Services	
Animal Grooming Service	4/1,000 sf
Equestrian Facility	No minimum
Kennel	4/1,000 sf
Veterinary Service	3/1,000 sf
Commercial Services	
Bank and/or Financial Institution	3/1,000 sf
Business Service Center	3/1,000 sf
Commercial Parking Lot or Facility	No minimum
Funeral Services	1 per 5 seats in assembly areas, plus 1 space per funeral vehicle
Mini-Warehouse/Self-Storage	0.5/1,000 sf rentable storage area
Off-Premises Advertising	No minimum
Repair Shop	3/1,000 sf
Food and Drink	
Commercial Kitchen, Catering	1.5/1,000 sf
Microbrewery/Microdistillery	8/1,000 sf seating area
Restaurant	6/1,000 sf seating area

Table 5.1.2.A: Minimum Off-Street Parking

sf = square feet of gross floor area, except where otherwise specified; du = dwelling unit; / = per

Use	Required Off-Street Parking
Lodging	
Bed and Breakfast Inn	1 per bedroom and 2/1,000 sf common indoor space
Campground/Recreational Vehicle (RV) Park	1 per campsite
Hotel or Motel	1 per bedroom and 2/1,000 sf common indoor space
Office	
Contractor Office	3/1,000 sf
Labor Organization	2.5/1,000 sf
Offices for Private Business and Professional Activities	2.5/1,000 sf
Personal Services	
Dry Cleaning/Laundry Plant	2.5/1,000 sf
Instructional Services and Studios	2.5/1,000 sf
Personal Services, General	2.5/1,000 sf
Retail Sales	
Auction House	2.5/1,000 sf
Convenience Store	2.5/1,000 sf
Food Market	2.5/1,000 sf
Grocery Store	2.5/1,000 sf
Oil or Gas Dealer, Retail	2.5/1,000 sf
Pharmacy	2.5/1,000 sf
Retail Nursery	2.5/1,000 sf
Retail Sales, Building and Construction Supplies	2/1,000 sf
Retail Sales, General	2.5/1,000 sf
Vehicle & Equipment Sales & Service	
Boat Dealer	3/1,000 sf indoor sales/leasing/office area
Car Wash	3 spaces for every one car the car wash can accommodate at one time
Equipment Rental and Leasing	2/1,000 sf
Farm Implement Sales	2/1,000 sf
Fuel Sales	1.5/1,000 sf
Mobile Home and Prefab Building Sales	2/1,000 sf
Transportation Vehicle Service and Storage Facility	2.5/1,000 sf indoor office space, plus 1 per repair bay
Vehicle Rentals	3/1,000 sf
Vehicle Sales	3/1,000 sf indoor sales/leasing/office area, plus 1 per repair bay

Table 5.1.2.A: Minimum Off-Street Parking

sf = square feet of gross floor area, except where otherwise specified; du = dwelling unit; / = per

Use	Required Off-Street Parking
Vehicle Service Station, Large Vehicles	2.5/1,000 sf indoor office/waiting area, plus 1 per repair bay
Vehicle Service Station, Minor	3/1,000 sf indoor office/waiting area, plus 1 per repair bay
Vehicle Service Station, Major	3/1,000 sf indoor office/waiting area, plus 1 per repair bay
Vehicle Towing Service and Towing Yard	2/1,000 sf
Industrial Uses	
Design & Technology Services	
Broadcasting and Production Studio	2.5/1,000 sf
Data Center	1.5/1,000 sf
Research and Development Facility	2.5/1,000 sf
Industry & Manufacturing	
Artisan Manufacturing	2.5/1,000 sf
311 Food Manufacturing	1.5/1,000 sf
312 Beverage & Tobacco Product Manufacturing	1.5/1,000 sf
313 Textile Mills	1.5/1,000 sf
314 Textile Product Mills	1.5/1,000 sf
315 Apparel Manufacturing	1.5/1,000 sf
316 Leather and Allied Product Manufacturing	1.5/1,000 sf
321 Wood Product Manufacturing	1.5/1,000 sf
322 Paper Manufacturing	1.5/1,000 sf
323 Printing & Related Support Activities	1.5/1,000 sf
325 Chemical Manufacturing	1.5/1,000 sf
326 Plastics & Rubber Products Manufacturing	1.5/1,000 sf
327 Nonmetallic Mineral Product Manufacturing	1.5/1,000 sf
331 Primary Metal Manufacturing	1.5/1,000 sf
332 Fabricated Metal Product Manufacturing	1.5/1,000 sf
333 Machinery Manufacturing	1.5/1,000 sf
334 Computer and Electronic Product Manufacturing	1.5/1,000 sf
335 Electrical Equipment, Appliance, and Component Manufacturing	1.5/1,000 sf
336 Transportation Equipment Manufacturing	1.5/1,000 sf
337 Furniture and Related Product Manufacturing	1.5/1,000 sf

Table 5.1.2.A: Minimum Off-Street Parking

sf = square feet of gross floor area, except where otherwise specified; du = dwelling unit; / = per

Use	Required Off-Street Parking
Intensive Industry	
Intensive Manufacturing & Processing	1.5/1,000 sf
Other Intensive Industrial Uses	No minimum
Warehousing, Storage, & Wholesale Sales and Distribution	
Dry Stack Boat Storage Facility, Stand-Alone	1 per 4 dry docks
Motor Freight Transportation Warehousing	2/1,000 sf
Recreational Vehicle and Boat Trailer Storage Lot	No minimum
Warehousing	1.5/1,000 sf
Wholesaling	1.5/1,000 sf
Wholesaling Seafood with Water Frontage	1.5/1,000 sf
Waste & Salvage	
Commercial Recycling Facility, Large Collection	1.5/1,000 sf
Commercial Recycling Facility, Processing	1.5/1,000 sf
Commercial Recycling Facility, Processing and Collection	1.5/1,000 sf
Commercial Recycling Facility, Small Collection	1 space
Landfill, Demolition	1.5/1,000 sf office space
Landfill, Landscape	1.5/1,000 sf office space
Junk Yards, Scrap Processing	1.5/1,000 sf
Septage, Sludge Disposal	1.5/1,000 sf office space

B. Unlisted Uses

An applicant proposing to develop a principal use that is unlisted in Table 5.1.2.A: Minimum Off-Street Parking, shall propose the amount of required parking by one of the three methods outlined in this subsection. On receiving the application proposing to develop a principal use not expressly listed in Table 5.1.2.A, the Planning Director shall:

1. Apply the minimum off-street parking space requirement specified in Table 5.1.2.A for the listed use that is deemed most similar to the proposed use;
2. Establish the minimum off-street parking space requirement by reference to standard parking resources published by the Institute for Transportation Engineers (ITE), Urban Land Institute (ULI), National Parking Association, or the American Planning Association; or
3. Require the applicant to conduct a parking demand study to demonstrate the appropriate minimum off-street parking space requirement. The study shall estimate parking demand based on the recommendations of the ITE, ULI, or another acceptable source of parking demand data. This demand

study shall include relevant data collected from uses or combinations of uses that are the same or comparable to the proposed use in terms of density, scale, bulk, area, type of activity, and location.

C. Mixed-Use Development

1. An applicant for a development containing more than one use may calculate reduced minimum parking requirements based on the potential to share parking between uses. The provisions of this subsection C shall not limit the opportunity for an applicant to reduce the minimum number of off-street parking spaces through approval of an alternative parking plan in accordance with Section 5.1.3, Alternative Parking Plans or other provisions of this Ordinance.
2. The following methodology shall be used to calculate the required parking:
 - a. The applicant shall determine the minimum parking required for each component use in the development in accordance with Table 5.1.2.A: Minimum Off-Street Parking.
 - b. The applicant shall apply the time-of-day demand factors for each component use in accordance with Table 5.1.2.C: Shared Parking Time-of-Day Parking Ratios.
 - c. The applicant shall calculate the sum of each column in the resulting table (rounding up all fractions). These sums represent the total estimated shared demand for each time period throughout a typical day.
 - d. The highest of the sums of the columns shall be used as the minimum amount of parking required for the development.

Table 5.1.2.C: Shared Parking Time-of-Day Parking Ratios

Use Classification, Category or Type	Weekday			Weekend		
	2 am to 7 am	7 am to 6 pm	6 pm to 2 am	2 am to 7 am	7 am to 6 pm	6 pm to 2 am
Residential	100%	60%	100%	100%	80%	100%
Child care center	0%	100%	40%	0%	80%	20%
Office	20%	100%	20%	5%	10%	0%
Hotel or motel	100%	60%	100%	100%	60%	100%
Personal services	20%	100%	40%	0%	60%	0%
Entertainment venues (e.g. theaters)	0%	40%	100%	0%	60%	100%
Retail sales	0%	100%	80%	0%	100%	60%
All other uses	100%	100%	100%	100%	100%	100%

5.1.3. ALTERNATIVE PARKING PLANS

The Planning Director may approve an alternate parking plan that proposes alternatives to providing the number of off-street parking spaces required on a site by Section 5.1.2, Minimum Off-Street Parking Standards, in accordance with the following methods and standards.

A. Parking Demand Study

An applicant may demonstrate that the appropriate minimum off-street parking space requirement for their project is different from the standards outlined in Section 5.1.2, Minimum Off-Street Parking Standards by conducting a parking demand study prepared by a professional engineer. Such a study must illustrate that the minimum parking requirements outlined in Table 5.1.2.A do not accurately apply to a specific development proposal and meet the following requirements:

1. The data submitted must include, at minimum, the size and type of the proposed development, the mix of uses, the anticipated rate of parking turnover, and the anticipated peak parking and traffic loads of all uses; and
2. The data must be obtained either from relevant studies published in referenced journals or other secondary source of comparable authority; or from primary studies of no fewer than 3 comparable developments within the regional or comparable market.

B. Shared Off-Site Parking

1. Location

- a. The lot in which the parking spaces are located shall be within 660 feet of the primary pedestrian entrances to the uses shared by the parking, measured by the actual distance via a pedestrian walkway from the shared parking area to the primary pedestrian entrances, not a straight-line, point-to-point distance.
- b. Shared parking spaces shall not be separated from the use they serve by an arterial street unless pedestrian access across the arterial street is provided by appropriate traffic controls (e.g. signalized crosswalk) or a separated pedestrian walkway (such as a bridge or tunnel).

2. Pedestrian Access

Adequate and safe pedestrian access shall be provided between the shared parking areas and the primary entrances to the uses served by the parking, by a walkway protected by a landscape buffer or by a curb separation and elevation from the street grade.

3. Signage

Signage complying with the standards of Section 5.6, Signs, shall be provided to the public to the shared parking spaces.

4. Jurisdiction

The alternative parking plan shall include justification of the feasibility of shared parking among the proposed uses. Such justification shall address, at a minimum, the size and type of the uses proposed to share off-street parking spaces, the composition of their tenants, the types and hours of their operations, the anticipated peak parking and traffic demands they generate, and the anticipated rate of turnover in parking space use. The methodology for mixed-use shared parking in Section 5.1.2.C, Mixed-Use Development, may be used to calculate the proposed reduction in required off-street parking.

5. Shared Parking Agreement

- a.** An approved shared parking arrangement shall be enforced through written agreement among all the owners or long-term lessees of lands containing the uses proposed to share off-street parking spaces.
- b.** The agreement shall provide all parties the right to joint use of the shared parking area and shall ensure that as long as the off-site parking is needed to comply with this Ordinance, land containing either the off-site parking area or the served use will not be transferred except in conjunction with the transfer of land containing the other.
- c.** The agreement shall state that no party can cancel the agreement without first sending notice via certified mail to the Planning Director, at least 30 days prior to the termination of the agreement.
- d.** The agreement shall be submitted to the Planning Director for review and approval before execution.
- e.** An attested copy of an approved and executed agreement shall be recorded with the Register of Deeds before issuance of a building permit for any use to be served by the shared parking area.
- f.** The agreement shall be considered a restriction running with the land and shall bind the heirs, successors, and assigns of the landowner.
- g.** A violation of the agreement shall constitute a violation of this Ordinance, which may be enforced in accordance with Article 12: Violations and Enforcement.
- h.** No use served by the shared parking arrangement may be continued if the shared parking becomes available to the use permanently or for longer than 30 days, unless substitute off-street parking spaces are provided in accordance with this section.

C. Remote Parking

If the off-street parking required by this section cannot be reasonably provided on the same lot on which the principal use is located, the parking may be provided off-site, provided an alternative parking plan that complies with the standards of Subsection B.1 through B.5 above are met for the off-site parking.

D. Deferred Parking

An alternative parking plan may propose to defer construction of up to 25 percent of the number of off-street parking spaces required by Table 5.1.2.A: Minimum Off-Street Parking, in accordance with the following standards:

1. Justification

The alternative parking plan shall include a study demonstrating that because of the location, nature, or mix of uses, there is a reasonable probability the number of parking spaces actually needed to serve the development is less than the minimum required by Table 5.1.2.A: Minimum Off-Street Parking.

2. Reserve Parking Plan

The alternative parking plan shall include a reserve parking plan identifying the amount of off-street parking being deferred and the location of the area to be reserved for future parking, if future parking is needed.

3. Parking Demand Study

- a.** The alternative parking plan shall provide assurance that within 24 months after the initial certificate of occupancy is issued for the proposed development, an off-street parking demand study evaluating the adequacy of the existing parking spaces in meeting the off-street parking demand generated by the development will be submitted to the Planning Director. However, if the Planning Director determines that additional time beyond 24 months is needed to determine whether the supply of parking is adequate to meet demand, the Planning Director has discretion to delay the preparation of the parking study for up to 24 additional months.
- b.** If the Planning Director determines that the study demonstrates the existing parking is adequate, then construction of the remaining number of parking spaces shall not be required. If the Planning Director determines the study indicates additional parking is needed, such parking shall be provided consistent with the reserve parking plan and the standards of this section.

4. Use of Reserve Areas

Areas reserved for future parking shall be brought to the finished grade and landscaped with an appropriate ground cover. These

areas shall not be used for structures, storage, loading, or other purposes except for temporary overflow parking, provided such use is sufficiently infrequent to ensure maintenance of its ground cover in a healthy condition. [05-03-2021]

E. Valet and Tandem Parking

An alternative parking plan may propose to use valet and tandem parking to meet a portion of the minimum number of off-street parking spaces required for commercial uses in accordance with the following standards:

1. Number of Valet or Tandem Spaces

A maximum of 35 percent of the total number of parking spaces provided may be designated for valet or tandem spaces except for restaurants, where up to 50 percent of spaces may be designated for valet parking, and hotels, where up to 60 percent of parking spaces may be designated for valet parking.

2. Drop-Off and Pick-Up Areas

The development shall provide a designated drop-off and pick-up area. The drop-off and pick-up area may be located adjacent to the building served, but shall not be located in a fire lane or where its use would impede vehicular and/or pedestrian circulation, cause queuing in a public street, or impede an internal drive aisle serving the development. Drop-off and pick-up areas shall not be allowed to use sidewalks for any stationing of vehicles.

3. Valet or Tandem Parking Agreement

- a.** Valet or tandem parking may be established and managed only in accordance with a valet or tandem parking agreement. The agreement shall be for a minimum of 10 years, and include provisions ensuring that a valet parking attendant will be on duty during hours of operation of the uses served by the valet parking.
- b.** The agreement shall be submitted to the Planning Director for review and approval before execution.
- c.** An attested copy of an approved and executed agreement shall be recorded with the Register of Deeds before issuance of a building permit for any use to be served by the valet or tandem parking.
- d.** The agreement shall be considered a restriction running with the land and shall bind the heirs, successors, and assigns of the landowner.
- e.** A violation of the agreement shall constitute a violation of this Ordinance, which may be enforced in accordance with Article 12: Violation and Enforcement.
- f.** No use served by valet or tandem parking may be continued if the valet or tandem service becomes unavailable permanently or for more than 30 days, unless substitute off-

street parking spaces are provided in accordance with this section.

F. Water Vehicle Parking

Water vehicle parking may be used to meet up to ten percent of the required off-street parking requirements for commercial establishments located on or along navigable waters. If water vehicle spaces are provided, a minimum of two boat slips shall be required. Water vehicle parking is exempt from the requirements in Sections 5.1.4.A and 5.1.4.B below.

5.1.4. OFF-STREET PARKING DESIGN STANDARDS

A. Surfacing

1. Except as provided in subsections 2 and 3 below, off-street parking and loading areas for all uses other than single-family detached, two-family, and dual unit dwellings shall be surfaced with asphalt, concrete, brick, stone, pavers, or an equivalent hard, dustless, and bonded surface material. Use of surfacing that includes recycled materials (e.g. glass, rubber, used asphalt, brick, block, and concrete) is encouraged. These surfaces shall be maintained in a smooth, well-graded, clean, orderly, and dust-free condition.
2. Intermittent, temporary, or overflow parking spaces, along with parking areas for Agricultural and Recreation, Parks, and Open Space uses are exempt from the surfacing requirements outlined in subsection 1 along as parking areas are brought to the finished grade and landscaped with an appropriate ground cover maintained in a healthy condition or gravel maintained in a dust-free condition.
3. The use of pervious or semi-pervious parking lot surfacing materials, including, but not limited to pervious asphalt and concrete, open joint pavers, and reinforced grass/gravel/shell grids may be approved for off-street parking and loading areas, provided such surfacing is subject to an on-going maintenance program (e.g., sweeping, annual vacuuming). Any pervious or semi-pervious surfacing used for aisles within or driveways to parking and loading areas shall be certified as capable of accommodating anticipated traffic loading stresses and maintenance impacts.

B. Design Standards

1. Required off-street parking area for three or more automobiles shall have individual spaces marked, and shall be designed, maintained, and regulated so that no parking or maneuvering incidental to parking shall be on any public street, walk, or alley, so that any automobile may be parked and unparked without moving another, except as required for valet and tandem parking in accordance with Section 5.1.3.E, Valet and Tandem Parking.
2. All parking, loading, and service areas shall be separated from abutting walkways, sidewalks, streets, and required landscaped areas by curbing or other suitable protective devices to ensure vehicles do not intrude into these areas.
3. Off-street parking areas serving nonresidential uses or mixed-use development shall be set back a minimum of eight feet from any street right-of-way line (public or private), access easement, or passageway.

4. Parking lots shall be landscaped in accordance with Section 5.4.5, Parking Lots.
5. Parking lot illumination shall comply with Section 5.5, Exterior Lighting.
6. One-way and two-way accessways into required parking facilities shall be identified by directional arrows. Any two-way accessway located at any angle other than 90 degrees to a street shall be marked with a traffic separation stripe running the length of the access. This requirement does not apply to parking lot drive aisles.
7. All automotive vehicle parking spaces and aisles shall comply with the standards in Table 5.1.4.B: Dimensional Standards for Parking Spaces and Aisles.

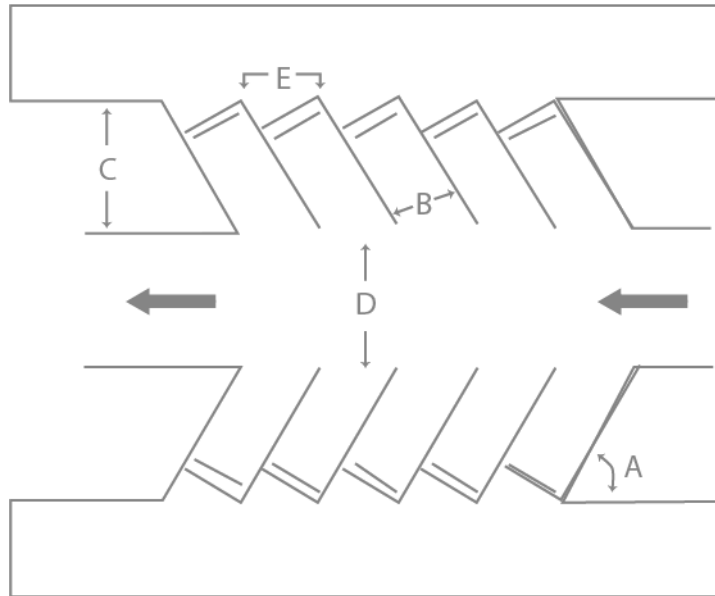
Table 5.1.4.B: Dimensional Standards for Parking Spaces and Aisles [1] [2]				
Parking Angle (degrees)	Stall Width (ft.)	Stall Depth Perpendicular to Curb (ft.)	Aisle Width [3] One-way/Two-way	Stall Length Along Curb (ft.)
A	B	C	D	E
0	8	8	20/22	22
45	9	19	20/22	13
60	9	20	20/22	10.5
90	9	18	22/22	9

[1] Refer to Figure 5.1.4.B below for illustrations showing how dimensions for parking spaces and aisles in various configurations are measured.

[2] Dimensional standards may be modified by the Planning Director for ramped, elevated parking structures to ensure adequate room for parking and maneuvering vehicles is provided.

[3] One-way aisle width may be reduced to a minimum of 11 ft. for 0 degree angled parking; 12 ft. for 45 degree angled parking; and 15 ft. for 60 degree angled parking if not designed to be used for fire access and approved by New Hanover County Fire Services.

Figure 5.1.4.B: Measurement of Parking Space and Aisle Dimensions



8. The dimensions of parking spaces may be reduced in accordance with the following:
 - a. Up to 25 percent of parking spaces may be designated for compact vehicles. Such spaces shall have a minimum width of eight feet and a minimum length of 16 feet, and shall be identified by proper signage.
 - b. Parking spaces used for tandem parking (See Section 5.1.4.E, Valet or Tandem Parking) may be reduced to a width of eight feet and a length of 18 feet.
 - c. Elevated parking structures (i.e., parking garages) may be permitted in residential districts with a special use permit issued in accordance with Section 10.3.5: Special Use Permit. They are permitted by-right in the B-1, CB, B-2, O&I, and AC districts.

C. Water Vehicle Parking

1. Water vehicle parking spaces shall have a minimum width of 10 feet and a minimum length of 16 feet, and shall be identified by proper signage.
2. Space adjacent to a floating dock shall have a minimum length of 16 feet.

5.1.5. LOADING AREAS

A. Minimum Number of Off-Street Loading Berths

1. Any new development involving the routine vehicular delivery or shipping of goods, supplies, or equipment to or from the development shall provide a sufficient number of off-street loading berths to accommodate the delivery and shipping operations of the development's uses in a safe and convenient manner.

2. The minimum number of loading berths for different principal uses are set forth in Table 5.1.5: Minimum Number of Off-Street Loading Berths; for proposed uses not listed in Table 5.1.5, the requirement for a use most similar to the proposed use shall apply.
3. The Planning Director may approve a reduction to the number of loading berths required for the use if the applicant demonstrates that the appropriate minimum loading berth requirement for their project is different from the standards outlined in Table 5.1.5, Minimum Number of Off-Street Loading Berths by submitting relevant data obtained either from relevant studies published in referenced journals or other secondary source of comparable authority; or from primary studies of no fewer than 3 comparable developments within the regional or comparable market.

Table 5.1.5: Minimum Number of Off-Street Loading Berths

Principal Use Classification/Category	Size (dwelling units or gross floor area)	Minimum Number of Loading Berths
Non-Industrial Uses		
Household Living Uses (Multi-family only) and Group Living Uses	Between 100 and 300 dwelling units, and	1
	Each additional 200 dwelling units or major fraction thereof	Add 1
Health Care Uses, Commercial Services Uses, Office Uses, Personal Services Uses, and Visitor Accommodations uses (Hotel or Motel only)	At least 10,000 up to 100,000 sf, and	1
	Each additional 100,000 sf or major fraction thereof	Add 1
Commercial Uses not listed elsewhere	At least 2,000 but less than 20,000 sf	1
	At least 20,000 but less than 60,000 sf	2
	Each additional 60,000 sf or major fraction thereof	Add 1
Industrial Uses		
All Industrial Uses	Up to 25,000 sf	1
	At least 25,000 but less than 40,000 sf	2
	At least 40,000 but less than 100,000 sf	3
	At least 100,000 but less than 160,000 sf	4
	At least 160,000 but less than 240,000 sf	5
	At least 240,000 but less than 320,000 sf	6
	At least 320,000 but less than 400,000 sf, and	7

Table 5.1.5: Minimum Number of Off-Street Loading Berths

Principal Use Classification/Category	Size (dwelling units or gross floor area)	Minimum Number of Loading Berths
	Each additional 90,000 sf or major fraction thereof	Add 1

B. Dimensional Standards

1. Each loading berth shall be of sufficient size to accommodate the types of vehicles likely to use the loading area.
2. The minimum loading berth size that presumptively satisfies loading berth needs is at least 12 feet wide and 45 feet long in general industrial, distribution, or warehousing uses, with at least 15 feet vertical clearance. For all other uses, a berth as short as 33 feet may be allowed.
3. The Planning Director may require a larger loading berth or allow a smaller loading berth on determining that the characteristics of the particular development warrant such increase or reduction.

C. Location of Loading Areas

1. To the maximum extent practicable, loading areas should be located to the rear of the use they serve.
2. Loading areas should be located adjacent to the building's loading doors, in an area that promotes their practical use.
3. Loading areas should be located and designed so vehicles using them can maneuver safely and conveniently to them from a public street and complete loading entirely within the site, without obstructing or interfering with any parking space, parking lot aisle, or public right-of-way, unless approved as part of a Master Development Plan or conditional rezoning (e.g., for a mixed-use development project with internal streets).

Section 5.2. Traffic, Access, and Connectivity

5.2.1. VISIBILITY AT INTERSECTIONS IN RESIDENTIAL DISTRICTS

On a corner lot in any residential district, nothing shall be erected, placed, planted or allowed to grow in such a manner as materially to impede vision between a height of three and ten feet above the finished grades of the intersecting streets in the area bounded by the street rights-of-way of such corner lots and a line joining points along said streets rights-of-way, 50 feet from the point of intersection.

5.2.2. DEVELOPMENT ADJACENT TO ROAD, RIGHT-OF-WAY, OR EASEMENT

- A.** Unless exempted in accordance with B, below, every structure erected or moved shall be located on a lot adjacent to a road constructed in accordance with applicable county standards in place at the time, or to a right-of-way or easement which was platted and recorded prior to 1969.
- B.** The following are exempt from the requirements of this subsection:
 - 1. Lots of record established prior to October 6, 1969 that comply with the lot area standards of the district in which they are located;
 - 2. Structures that are to be used in conjunction with a bona fide farming operation; and
 - 3. Building lots having access over a private driveway or easement at least 30 feet in width to a road, provided the driveway or easement is an easement appurtenant to three or fewer lots and the easement is solely owned by a lot owner, or held in common by three or fewer lot owners.

5.2.3. NCDOT DRIVEWAY PERMIT REQUIRED

No building permit for any structure shall be issued which requires NCDOT approval for a Driveway Permit until NCDOT has issued the permit approval. Evidence of approval shall accompany the application for building permit.

5.2.4. TRAFFIC IMPACT WORKSHEET

Before a nonresidential project is submitted for site plan review, the applicant shall prepare a Traffic Impact Worksheet to the Planning Director for verification.

- A.** Where the worksheet indicates traffic generation of 100 peak hour trips or more based upon the most current edition of the Institute of Traffic Engineers (ITE) Trip Generation Manual, the applicant shall be required to perform a Traffic Impact Analysis (TIA).
- B.** If a TIA is required to be submitted, the applicant or the applicant's Traffic Engineer shall request a pre-application conference with the Planning Director, the MPO Coordinator, and an NCDOT Traffic Engineer to determine the scope of the TIA. (Electronic communication among parties may be utilized to facilitate the scoping process, when necessary.)
- C.** All TIAs shall be prepared by a licensed Traffic Engineer that has relevant professional experience to perform the analysis required for the TIA. Upon completion, the TIA shall be signed and sealed by the licensed and qualified Traffic Engineer and submitted to the Planning Director for review. (To the extent applicable, general guidance and standards for traffic impact analyses is outlined in

“Traffic Impact Study Standards” originally approved by the County Commissioners on May 20, 2002.)

- D.** The Planning Director, in collaboration with the MPO Coordinator and NCDOT, shall determine whether the TIA and proposed mitigation (if appropriate) complies with the requirements of this section, or whether additional analysis or mitigation is necessary based on identifiable cumulative impacts or special public safety situations. The collaboration shall follow procedures already established by the MPO for communication with all parties.
- E.** The Planning Director shall notify the applicant with comments within 30 days of receipt of the final TIA.
- F.** Once the mitigation measures are agreed upon by the MPO, NCDOT and County, the Wilmington MPO will prepare a memorandum approving the TIA, identifying the transportation improvements necessary to accommodate the proposed development. Mitigation measures required as part of the TIA acceptance shall be included in the final site plan submitted for review.
- G.** An applicant may appeal a final decision on the mitigation required by a TIA to the Board of Adjustment, by filing an appeal request within 10 working days of a final decision, to the Board of Adjustment, in the form of a letter stating the reasons for appeal and including documentation in support of the appeal. In hearing disputes, the Board of Adjustment may request an independent study by an outside source, chosen by the County and paid for by the applicant, to resolve questions of traffic impact and appropriate mitigation.

Section 5.3. Tree Retention

[11-16-2020]

5.3.1. APPLICABILITY

The standards of this section shall apply to all lands and development under the County's zoning jurisdiction except the following:

- A.** Properties that are taxed on the basis of present-use value as forestland in accordance with Article 12, Chapter 105, N.C.G.S., or that are otherwise exempt under state law;
- B.** Forestry activity that is conducted in accordance with a forest management plan that is prepared or approved by a forester registered in accordance with Chapter 89B, N.C.G.S.;
- C.** Any lot of record that is less than one acre in area and located in a residential zoning district;
- D.** Any residential lot that is less than one acre and shown on an approved preliminary plan; and
- E.** Residential subdivisions of five or fewer lots unless they are subject to an Additional Dwelling Allowance special use permit or MDP Master Plan; and
- F.** Trees that are subject to the requirements of this section, but that are demonstrated to be dead, dying, or diseased by greater than 50 percent, as a result of natural factors.

5.3.2. FORESTRY AND PROPERTY CLEARING

- A.** A letter of exemption for timber harvest or other exempted forestry activity shall be issued by the Planning Director prior to the removal of any documented, significant, or specimen trees subject to the requirements of this section, based on proof of exemption in accordance with N.C.G.S. 160D-921.
- B.** While exempted forestry activities are not subject to the tree retention requirements of this section, failure to obtain an exemption to a tree removal permit prior to any timber harvest or other property clearing activity will result in the denial of a building permit, site plan approval, or subdivision approval for a period of three years, regardless of any change in ownership, if the harvest results in the removal of all or substantially all documented, significant, or specimen trees from the tract. The denial period shall be increased to five years in situations where removal of all or substantially all regulated trees was a willful violation of these County regulations.

5.3.3. TREE INVENTORY

Trees existing on a site at the time of development that are required to be retained or replaced in accordance with this section shall be inventoried by a cover type survey conducted by point sampling, fixed plot sampling, field survey or other method approved by the Planning Director. Areas that will not be disturbed shall be delineated as such and do not require inventorying individual trees.

5.3.4. TREE RETENTION STANDARDS

A. Identification of Regulated Trees

Three types of trees are regulated or protected by this section. They are Documented Trees, Significant Trees, and Specimen Trees. This categorization of trees is based on the tree species and existing minimum Diameter at Breast Height (DBH) of the trees. Documented Trees, Significant Trees, and Specimen Trees regulated or protected by this section are identified in Table 5.3.4.A: Regulated Trees.

Table 5.3.4.A: Regulated Trees	
Regulated Tree Type	Minimum Diameter at Breast Height (DBH)
Documented Trees	
Dogwoods and American Hollies	4 inches
Long Leaf Pine, Pond Cypress, Bald Cypress, and Hardwoods*	8 inches
Other Conifers	12 inches
Significant Trees	
Dogwoods, Magnolias, Native Flowering Trees, and American Hollies	8 inches
Long Leaf Pine, Pond Cypress, Bald Cypress, and Hardwoods*	18 inches
Other Conifers	24 inches
Specimen Trees	
Live Oaks, Pond Cypress, and Bald Cypress	36 inches

* Only includes Sweetgums when they are located within required vegetative buffer areas or required open space set-asides

- B.** The Planning Director may permit or require a reduction in required street yards, landscape islands, foundation plantings, setbacks, or other dimensional, parking, or landscaping standards for the purpose of retaining significant or specimen trees.
- C.** A minimum of 15 trees at least two inches DBH or two caliper inches, as applicable, shall be retained or planted on a parcel where development occurs in accordance with Section 5.4, Landscaping and Buffering.
- D.** Regulated trees within a 50-foot perimeter of the property must be retained and protected during non-exempt tree harvests. All significant trees shall be retained.
- E.** If existing trees and shrubs on the site where a transitional buffer is required meets at least 50 percent of the required opacity standards, then those trees and shrubs shall be retained for use in buffering and supplemented as needed with plantings, fences, and/or berms to meet the required standards of Section 5.4.3, Transitional

Buffer Standards. In all cases, existing trees (unless invasive) greater than eight inches DBH shall not be removed from a 20-foot buffer strip, unless the Planning Director determines removal of such trees is necessary for the installation of utilities or other required essential improvements. The retention requirements in this section shall not apply to existing trees or shrubs identified as invasive species, as defined in this Ordinance.

5.3.5. TREE REMOVAL PERMITS

- A.** Unless a waiver, exemption, or exception applies in accordance with Section 5.3.1, Applicability or Section 10.3.9.B.2, Waivers, Exemptions, and Exceptions, no person, directly or indirectly, shall remove any regulated tree identified in Section 5.3.4, Tree Retention Standards, from public or private property without first obtaining a tree removal permit in accordance with Section 10.3.9, Tree Removal Permit.
- B.** Unless a waiver, exemption, or exception applies in accordance with Section 10.3.9.B.2, Waivers, Exemptions, and Exceptions, a tree removal permit is required before any clearing, grading, or other authorizations may be issued, including building permits.
- C.** The removal of any specimen tree is prohibited on any parcel unless exempt according to Section 10.3.11, Variance – Zoning and Subdivision. If a specimen tree is removed without a permit, the penalty for this violation shall be twice the mitigation fee.

5.3.6. TREE PROTECTION DURING CONSTRUCTION

- A.** Existing trees retained on the site to comply with the standards of this section shall be identified on the required landscape plan. An undisturbed area with a porous surface shall be reserved around each tree as determined by the tree's drip ring of its natural canopy.
- B.** Prior to any clearing, grading, or construction activity, approved tree protection fencing, such as safety barrier fencing, a wooden slat snow fence or wire fence, shall be installed around protected trees or tree stands located in construction areas or other site areas that will be disturbed by construction activities. The fencing shall be a minimum of four feet in height and be of durable construction. Tree protective fencing shall remain in place through completion of construction activities.
- C.** No construction workers, tools, materials, or vehicles are permitted within the tree protection fencing.
- D.** If an existing tree retained to comply with the standards of this section is destroyed, substantially damaged, or dies as a result of negligence on the part of the property owner within three years after completion of construction, then replacement trees shall be planted on the site with a total diameter equal to twice the diameter of the retained tree. A minimum growing area of 144 square feet shall be provided for each replacement tree. If the Planning Director determines it is infeasible or for replacement tree(s) to be accommodated on the site, then a payment may be made to the County's Tree Improvement Fund equivalent to the pricing standards in the County fee schedule.

5.3.7. MITIGATION

- A.** When Significant Trees are authorized for removal by a tree removal permit or Specimen Trees are authorized for removal by a variance, they shall be replaced at a rate of 2.0 times the caliper inches at DBH removed, except as provided in subsection D below and Section 5.3.8, Optional Incentives for Retaining Trees.
- B.** Each replacement tree shall be a minimum of 2-inch caliper size at time of planting.
- C.** Replacement trees should reflect the type (e.g., hardwood, flowering, evergreen, deciduous, canopy, understory, etc.) of tree being removed to the maximum extent practicable based on the compatibility of the species with proposed buildings and infrastructure, existing environmental conditions, and diversity of tree species.
- D.** If the Planning Director determines it is infeasible for a portion or all of the replacement tree(s) to be accommodated on the site, the Planning Director may direct that an in-lieu fee be paid to the County's Tree Improvement Fund. The mitigation fee as set forth in the County's fee schedule shall be charged for every inch at DBH of Significant Tree removed and two times every inch at DBH of Specimen Tree removed.
- E.** Significant Trees and Specimen Trees that are removed by spading and planted elsewhere on the site are exempt from mitigation. Significant Trees and Specimen Trees that are removed by spading and accepted by the County for planting on property at a location designated by the County Manager are exempt from mitigation. Any tree that has been transplanted for the purpose of this section and becomes diseased or dies within three years of transplanting shall be replanted by the party requesting the exemption with a tree of the same species and size or mitigated pursuant to this article.

5.3.8. OPTIONAL INCENTIVES FOR RETAINING TREES

- A.** The retention of existing trees on a site is encouraged. As an incentive to encourage the retention of as many existing trees and existing tree stands on a site as possible, the following credits may be applied to all existing non-invasive trees in good health and condition that are retained on a site to protect tree canopy, native species, and existing natural habitat and as long as the applicable standards of this section are fully met.
 - 1.** One parking space from the minimum number of parking spaces required by Table 5.1.2.A: Minimum Off-Street Parking, may be credited for every three existing Documented Trees or two existing Significant Trees retained on a site, up to a maximum of a 15 percent reduction of the parking requirements.
 - 2.** Retention of existing unregulated or Documented Trees a minimum of 2 inches DBH counts for mitigation of the removal of Significant Trees with every inch at DBH retained counting for one mitigation inch.
 - 3.** Retention of existing native species unregulated or Documented Trees a minimum of 2 inches DBH counts for the mitigation of Significant Trees or Specimen Trees removed with an approved variance, with every inch at DBH retained counting for one mitigation inch for Specimen Trees and 1.5 mitigation inch for Significant Trees.

4. Retention of existing trees growing in mature native forests, as determined by a certified arborist or a North Carolina licensed forester, counts for mitigation of the removal of Significant Trees or Specimen Trees removed with an approved variance, with every aggregate inch at DBH counting for one mitigation inch for Specimen Trees and 1.5 mitigation inch for Significant Trees.
 5. Retention of existing trees growing in stands or natural clusters, as determined by a certified arborist or North Carolina licensed forester, counts for the mitigation of Significant Trees or Specimen Trees removed with an approved variance, with every aggregate inch at DBH retained counting for one mitigation inch for Specimen Trees, 1.5 mitigation inch for Significant Trees if primarily composed of native species, and 1.0 mitigation inch for Significant Trees if primarily non-native species.
- B. If a retained documented tree or significant tree or tree retained for mitigation purposes dies within three years of the date of construction on the site, it shall be replaced in accordance with Section 5.3.7, Mitigation.

5.3.9. REMOVAL OF HAZARDOUS TREES

- A. The Planning Director may cause or order removal of any tree or part of a tree, on public or private property, that is in an unsafe condition, damaging to sewers or other public improvement facilities, or infested by an injurious fungus, disease, insect, or other pest.
- B. The Planning Director may cause or order necessary treatment for any tree on public or private property that is infested by any injurious fungus, disease, insect, or other pest when such action is determined necessary to prevent the spread of any such injurious conditions or pest and to prevent danger to persons or property, or to vegetation planted on adjacent property.
- C. No foliage shall be allowed to extend from public or private property into any portion of a street right-of-way below a height of eight feet above the grade of the sidewalk at the property line or, if no sidewalk grade has been established, as measured from the center of the roadway. The Planning Director may cause or order corrective action to prevent any such condition from existing.

Section 5.4. Landscaping and Buffering

[11-16-2020]

5.4.1. APPLICABILITY

- A. Except where expressly exempted, these standards shall apply to all development within the County's planning jurisdiction except for single family residences being constructed on lots of two acres or less.
- B. In cases of expansions to existing principal structures or uses, all newly developed portions of the site shall be subject to the full landscaping requirements of this section. Landscaping upgrades for previously developed portions of the site, up to the maximum landscaping required, shall be provided in accordance with Table 5.4.1.B: Landscaping Upgrade Standards.

Table 5.4.1.B: Landscaping Upgrade Standards

Expansion	Total Trees Required	Street Yard Area	Interior Parking Lot Landscaping	Transitional Buffer Yard
10 and up to 25 percent increase in gross floor area or vehicle use area, OR Between 5 and 20 new parking spaces required		50 percent of the required width for new construction	4 percent of parking lot area	A 6-10 ft. tall fence or 50 percent of width required for new construction
Greater than 25 and up to 50 percent increase in gross floor area, OR Over 10,000 square feet increase in gross floor area, OR 21 up to 50 new parking spaces required	15 per acre	Full width to the extent practicable but in no case less than 50 percent of the required width for new construction	6 percent of parking lot area if possible, but no less than 4 percent	A 6-10 ft. tall fence or 50 percent of width required for new construction
Greater than 50 percent increase in gross floor area or vehicular use area, OR Over 20,000 sq. ft. increase in gross floor area, OR More than 50 new parking spaces required	15 per acre	Full width required for new construction	8 percent of parking lot area	Full width as required for new construction

- C. When a subdivision of previously developed property occurs and a building permit for new construction is obtained for any newly created parcel within two years of the date that the final subdivision plat was approved, all parcels of the original tract shall comply with the provisions outlined in Table 5.4.1.AB for expansions.
- D. For consecutive expansions occurring within any two-year period, the amount of the expansions shall be summed, and the maximum landscaping required for the total extent of the expansions shall be provided.
- E. Notwithstanding the above requirements, expansions to existing structures of uses amounting to no more than a total of 500 square feet of gross floor area over a two-year period shall be exempt from the street yard and interior parking lot landscaping standards.

5.4.2. GENERAL STANDARDS

- A. All plant materials and their spacing requirements, which are to be planted to meet the opacity and height requirements of this section, shall be either selected from the manual “Tree and Plant Materials for Landscaping” manual prepared by the County Planning and Land Use Department and incorporated herein by reference (it is available in the County Planning and Land Use Department), or approved by the New Hanover County Agricultural Extension Service. Unless otherwise specified, any canopy tree planted to meet the requirements of this section shall be a minimum of 2-inch caliper in size at the time of planting and any understory tree planted to meet the requirements of this section shall be a minimum of 8 feet in height at time of planting. *[05-03-2021]*
- B. A minimum of 15 trees of at least two inches DBH or two caliper inches, as applicable, shall be retained or planted on a parcel where development occurs for each acre or proportionate area disturbed by the development. Trees retained on the parcel in accordance with Section 5.3, Tree Retention shall count toward this requirement.
- C. Existing vegetation in good health and condition that meets all applicable standards of this section may be used to satisfy any planting requirements of this section, provided the vegetation and any trees are protected before and during development, in accordance with Section 5.3.6, Tree Protection During Construction.
- D. Up to 15 percent of the area to be landscaped may be covered with surfaces specifically intended to afford intensive use and enjoyment by employees or the public (such as walking paths, benches, and table pads, etc.).
- E. Unobstructed visibility shall be maintained at all driveways and roadway intersections, at elevations between three and seven feet of the pavement level within the driveway or roadway’s sight triangle, or any area required by the NCDOT.
- F. It is encouraged that stormwater management systems be integrated into the landscaping plan.
- G. No certificate of occupancy for any construction or renovation shall be issued until one of the following conditions is met:
 - 1. The required landscaping is completed in accordance with the approved plan;
 - 2. A bond or certified check, in an amount submitted by the developer and certified by the County Commissioners to be acceptable, is posted and is available to the County; or
 - 3. An irrevocable letter of credit or deposit of funds in escrow, in an amount submitted by the developer and certified by the County Commissioners to be acceptable, is issued by a bank in a form approved by the County Attorney.
- H. No surety or portion thereof, as provided for in this section, shall be released until all landscaping is installed, inspected, and approved.

5.4.3. TRANSITIONAL BUFFER STANDARDS

A. Transitional buffers are intended to protect adjoining land uses, particularly residential, from the noise, heat, dust, lights, threats to privacy, and aesthetic impacts of more intensive land uses.

B. Required Width of Plantings

1. Buffer Types

The width of a transitional buffer and the required quantity and type of plantings varies based on the nature of the proposed adjacent uses. Table 5.4.3.B.1: Required Transitional Buffers, establishes the type of buffer that is required between two adjacent land uses. Each buffer type is described in Table 5.4.3.B.2: Landscape Buffer Types.

Table 5.4.3.B.1: Required Transitional Buffers		
Proposed Use	Existing Adjacent Use or Zoning District	
	Single-Family Detached or Two-Family (Duplex) Dwelling Units; Undeveloped Land in RA, AR, R-20S, R-20, R-15, R-10, R-7, or R-5 Zoning Districts	All other residential uses; RMF Zoning Districts
Single-Family Detached or Two-Family (Duplex) Dwelling Units	N/A	N/A
All Other Residential Uses	Type A: Opaque Buffer	N/A
Civic & Institutional and Commercial Uses	Type A: Opaque Buffer	N/A
Industrial Uses	Type A: Opaque Buffer	Type B: Aesthetic Buffer

2. Minimum Width and Plantings

- a. The standards for each buffer type are described in Table 5.4.3.B.2: Landscape Buffer Types.
- b. The width of the required buffer in particular locations may be reduced by up to 50 percent as long as the total area of landscape buffer that is provided is the same as if the width of the buffer were not reduced, and the Planning Director determines that the amount of screening where the width is reduced will be sufficient to accomplish the purposes of Section 5.4.3.

Table 5.4.3.B.2: Landscape Buffer Types

Buffer Type	Minimum Width and Plantings Required
Type A: Opaque Buffer	
Option 1: Vegetation Only	<p>The minimum buffer width shall be 50 percent of the minimum required setback as set forth in Article 3: Zoning Districts, or 20 feet, whichever is greater.**</p> <p>Planted materials shall be a minimum of six feet in height and provide approximately full opacity within one year of planting.*</p> <p>A minimum of three rows of planted material are required.</p>
Option 2: Combination Berm & Vegetation	<p>The minimum buffer width shall be 50 percent of the minimum required setback as set forth in Article 3: Zoning Districts, or 20 feet, whichever is greater.**</p> <p>The berm shall be constructed of compacted earth. The slope of the berm shall be stabilized with vegetation and shall be no steeper than 3:1. The height of the berm shall be six feet or less with a level or rounded area on top.</p> <p>The combined height of the berm and planted vegetation shall provide approximately full opacity to a minimum height of six feet within one year of planting. The height of the berm and vegetation shall be measured from the ground level at the nearest lot boundary line.*</p>
Option 3: Combination Fencing & Vegetation	<p>The minimum buffer width shall be 50 percent of the minimum required setback as set forth in Article 3: Zoning Districts, or 10 feet, whichever is greater.**</p> <p>Fencing shall be between 6 and 10 feet in height.</p> <p>Required planted materials shall be located between the fence and the common property line unless otherwise specified.</p> <p>If solid fencing is used, planted materials a minimum of three feet in height and providing a minimum of approximately 50 percent visual opacity at initial planting shall be required. Vegetation shall be planted between the fence and the nonresidential or attached structure if the required buffer is 15 ft. or less in width to accommodate regular maintenance.*</p> <p>If permeable fencing is used, a minimum of two rows of planted materials providing approximately full opacity within one year of planting are required.*</p>
Type B: Aesthetic Buffer	
Option 1: Vegetation Only	<p>Width: 20 ft. minimum</p> <p>Planted materials shall provide approximately 50 percent opacity within one year of planting.*</p> <p>A minimum of three rows of planted material, using a minimum of two plant species that will result in different heights at maturity, are required.</p>
Option 2: Combination Fencing & Vegetation	<p>Width: 10 ft. minimum</p> <p>Planted materials shall provide approximately 50% opacity within one year of planting.*</p> <p>Fencing shall be between 4 and 10 feet in height.</p> <p>Planted materials shall be planted between the fence and the industrial use with sufficient space to accommodate regular maintenance.</p> <p>If permeable fencing is used, at least one row of planted materials is required. Chain link or wire fencing cannot be used to meet the fencing requirement.</p>

Table 5.4.3.B.2: Landscape Buffer Types

Buffer Type	Minimum Width and Plantings Required
Type A: Opaque Buffer	

*Plants and spacing to achieve the height and opacity requirements of this buffer option are outlined in the "Tree and Plant Materials for Landscaping" manual.

**If the applicant increases the required buffer width, an equivalent reduction in a building's setback is allowed, except for interior side and rear setbacks from residential properties in the B-1, B-2, and O&I districts.

- c. If existing trees and shrubs in the location of a required transitional buffer meets at least 50 percent of the required opacity standards, then those trees and shrubs shall be retained for use in buffering and supplemented as needed with plantings, fences, and/or berms to meet the standards of this subsection. Existing trees greater than eight inches DBH shall not be removed from the required buffer area, unless the Planning Director determines removal of such trees is necessary for the installation of utilities or other required essential improvements. The retention requirements in this section shall not apply to existing trees or shrubs identified as invasive species, as defined in this Ordinance.

C. Activities and Development Within Buffer

No transitional buffer required by this section may contain any building or structure or extension of any building or mechanical system. This prohibition shall apply at the time of issuance of a certificate of occupancy and at any time thereafter, and shall include but not be limited to: porches, decks, patios, HVAC components, waste containers, storage buildings, or any other fixture or permanent structure. Development within the buffer yard shall be limited to the following:

- 1. Fences and walls;
- 2. Retaining walls; and
- 3. Sidewalks, trails, and bike paths, provided that required opacity is maintained in all locations except connections to off-site sidewalks, trails, or bike paths.

5.4.4. SCREENING

- A. The following uses shall be shielded from view from the property line of an existing residential use by means of a 100 percent opaque solid wall:
 - 1. Loading/unloading areas; and
 - 2. Heating/air conditioning units, excluding roof mounted units.
- B. The following uses shall be screened from view from the property line of an existing residential use by means of a solid fence:
 - 1. Dumpsters or other trash holding areas; and
 - 2. Outside storage areas.

- C. The following uses shall be screened from the view of any public right-of-way or adjacent property by vegetative materials, berms, fencing, walls, and/or any combination thereof to a height of at least eight feet:
1. The rear side (if no public access is provided) of a building where that side abuts a street right-of-way; and
 2. Any dumpster or trash receptacle storage area used in connection with any business establishment.

5.4.5. PARKING LOTS

- A. Landscaping in accordance with the standards in this section shall be required for all off-street parking lots with five or more spaces, or at least 2,500 square feet devoted to vehicular use. A landscaping plan shall be submitted in accordance with the requirements outlined in the Administrative Manual.
- B. Landscaping shall be required for parking lot perimeters in accordance with the specifications outlined in Table 5.4.5.B: Standards for Parking Lot Perimeter Landscaping, provided that where a perimeter landscaping strip overlays a required street yard or transitional buffer, the more stringent requirements shall apply.

Table 5.4.5.B: Standards for Parking Lot Perimeter Landscaping	
Applicability	<ul style="list-style-type: none"> • A landscaped strip shall be required along any side of a parking lot abutting another parking lot or land in a Residential zoning district .
Dimensional Standards	<ul style="list-style-type: none"> • The perimeter landscaping strip shall be a minimum of ten feet in width.
Plantings Required	<ul style="list-style-type: none"> • A minimum of one evergreen or deciduous tree for every 20 linear feet of planting strip on average, rounded to the highest whole number, shall be planted within the planting strip.
Design Alternatives	<ul style="list-style-type: none"> • When adjacent to another parking lot, the landscaping strip may be interrupted by driveway connections between parking lots. If adjacent parking lots are developed concurrently, then both properties can install a five-foot strip or footages adding up to ten feet, mutually agreed upon in writing by the two property owners. • A landscaped strip shall not be required between adjacent parking lots that share a double parking row split along the middle of a drive aisle. • A perimeter landscaped strip may be used as part of a transitional buffer required in accordance with Section 5.5.4

- C. Landscaping for parking lot interiors shall be in accordance with the requirements in Table 5.4.5.C: Standards for Parking Lot Interiors.

Table 5.4.5.C: Standards for Parking Lot Interiors	
Dimensional Standards	<ul style="list-style-type: none"> • Landscaped areas in the interior of parking lots shall be equal to eight percent of the total area to be used for parking, loading, automobile sales, driveways, internal drive aisles, and other vehicular or pedestrian use. • Landscaping islands, either separate from or protruding from perimeter landscaping strips, shall be a minimum of 12 feet in width measured from back of curb to back of curb.

Table 5.4.5.C: Standards for Parking Lot Interiors

<p>Plantings Required</p>	<ul style="list-style-type: none"> • One planted or existing tree shall be required for every 144 square feet rounded to the next lowest whole number of total interior landscaped area, with a minimum of one tree in each island. • At least 75 percent of trees required for interior landscaping shall be of a shade/canopy species. • The remainder of interior landscaped area shall be covered with appropriate mulching or vegetative groundcover, except for designated pedestrian walkways.
<p>Design Standards</p>	<ul style="list-style-type: none"> • No parking space shall be located more than 120 feet from a landscaped island. • All parking spaces shall be blocked or curbed to prevent vehicles from encroaching more than one foot into planting islands or landscaped yards or damaging adjacent fences or screens. • Depressions and curb cuts shall be allowed for water quality protection.
<p>Design Alternatives</p>	<ul style="list-style-type: none"> • The interior landscaping requirement for storage facilities can be met with landscaped islands on the ends of buildings and with protruding perimeter landscaping. • Interior landscaping within automobile sales lots may be distributed so that smaller understory trees are utilized toward the interior of the lot and shade trees are placed toward the perimeter. • For redevelopment of nonconforming parking facilities containing a total of 5-25 parking stalls, a perimeter landscaped strip a minimum width of ten feet may be provided in-lieu of interior landscaping. For every 40 linear feet, or fraction thereof, the perimeter strip shall contain a minimum of one canopy tree or three understory trees AND a continuous row of evergreen shrubs a minimum 18 inches in height at time of planting.

D. When a parking lot is within 50 feet of a right-of-way, and no other provisions of this Ordinance require a planted buffer, a low landscaped screen shall be installed along any portions of the parking lot along the right-of-way and be incorporated into the street yard to provide protection from the headlights of vehicles within the parking lot. The landscaped screen shall comply with the following standards:

1. The landscape screen shall consist of shrubbery, a grade change, a planted berm, or any combination thereof a minimum of three feet in height.
2. If the landscape screen is at least 15 feet in width, the landscape screen may be continuous and incorporated into the street yard landscaping area.
3. Depressions and curb cuts shall be allowed for water quality protection.

E. The Planning Director may waive all or part of the requirements of this section if:

1. The parking lot is limited to periodic or intermittent use as a vehicular parking lot for Religious Assemblies or Park and Recreation Areas, provided the parking lot is completely covered by grass or otherwise presents a landscaped effect.
2. The parking lot is a temporary parking lot for a period of no more than one year in length and it will not violate the purposes of this section and this Ordinance.

5.4.6. STREET YARD STANDARDS

- A.** Street yard landscaping is required for new construction of principal structures, expansions to existing structures, and changes of use whenever additional off-street parking is required, excluding the following uses:
1. General Agricultural and Forestry Uses;
 2. Residential development unless built to the commercial building code;
 3. Private Residential Boating Facilities;
 4. Cemeteries;
 5. Park and Recreation Areas with no structures or parking areas; and
 6. Utility lines.
- B.** Street yard area shall be required in accordance with the specifications outlined in Table 5.4.6.B, Street Yard Area Standards. The applicant may install the street yard in any configuration that provides the required amount of street yard square footage between the property line and any site improvements and that conforms with required street yard minimum and maximum widths. Street yards may be located within any required setback.

Table 5.4.6.B: Street Yard Area Standards	
Zoning District or Use	Required Area
B-2, CS, I-1, I-2, AC	<ul style="list-style-type: none"> 25 square feet for every linear foot of street yard frontage Minimum street yard width: 12.5 feet Maximum street yard width: 37.5 feet
B-1, CB, O&I, EDZD, UMXZ Districts Developments with Additional Dwelling Allowance or High-Density Development Special Use Permit [09-08-2020]	<ul style="list-style-type: none"> 18 square feet for every linear foot of street yard frontage Minimum street yard width: 9 feet Maximum street yard width: 27 feet
Non-Residential Uses in Residential Districts	<ul style="list-style-type: none"> 12 square feet for every linear foot of street yard frontage Minimum street yard width: 8 feet Maximum street yard width: 18 feet

Table 5.4.6.B: Street Yard Area Standards

Zoning District or Use	Required Area
	<ul style="list-style-type: none"> - The road fronting width of driveways are not included in the linear street frontage when determining the base street yard area. <i>[09-08-2020]</i> - The area of any walkways, sidewalks or other bicycle and pedestrian facilities, and transit amenities shall be subtracted from the base street yard area required above to get the total required street yard area. - Areas designated for stormwater functions, except piped areas, shall not be included in the required street yard area. - The applicant may choose to increase the required square footage per linear foot up to 25 percent to receive an equivalent reduction in the building's front yard setback. - The applicant may install the street yard in any configuration that provides the required amount of street yard square footage between the property line and any site improvements as long as it remains in compliance with the minimum and maximum widths outlined above.

- C. For every 600 square feet of street yard area on average, the following landscaping shall be provided:
 1. One canopy/shade tree or if overhead power lines are located above the street yard, three (3) understory trees; and
 2. Six shrubs, 12 inches in height at time of planting.
- D. Street yard landscaping shall be required along all street frontages. For sites with two or more street frontages, only the primary street frontage shall be required to contain the full amount of street yard as determined in Table 5.4.6.AB: Street Yard Area Standards. Secondary street frontages are required to contain 50 percent of the required street yard area.
- E. If there are existing trees of a minimum two inches DBH in the proposed street yard, the Planning Director may grant credit for those trees toward meeting tree preservation requirements. In addition, the Planning Director may require the saving of any regulated tree in the street yard area.
- F. On a case-by-case basis, the Planning Director may approve alternate planting materials or substitutions to street yard planting requirements where requirements would not be practical due to existing vegetation or other unique conditions. Such substitutions shall be determined to be in keeping with the purpose and intent of this section.
- G. For all lots of record two acres or less in size, if the Planning Director determines that the essential site improvements cannot be accommodated under these requirements, then the required street yard area may be reduced by one-half, but in no case shall it be reduced less than one-half.
- H. Walkways, sidewalks, or other bicycle and pedestrian facilities, fountains, walls or fences, and transit amenities shall be permitted within the street yard; however, parking areas shall not be permitted.

5.4.7. FOUNDATION PLANTINGS

- A. Foundation plantings located between the building face and the parking lot or drive aisle shall be required for all portions of buildings adjacent to parking lots or internal drive aisles.

- B.** The following minimum standards are required, though additional landscaping is encouraged:
 - 1. The foundation planting area shall be a minimum of 12 percent of the area of the building face adjacent to the parking area or internal drive; and
 - 2. The foundation planting area shall be planted as landscaped areas of sufficient variety, height, and size, with plantings listed in “Tree and Plant Materials for Landscaping.”
- C.** Exemptions from foundation plantings may be granted by the Planning Director when the following circumstances exist or when any of the following conditions are proposed on the site:
 - 1. For those portions of buildings that have drive-up services (e.g., pharmacies, banks, fast food restaurants, dry cleaners, photo shops, etc.); and
 - 2. On the rear side of a building when less than 10 percent of the total required parking is located in the rear of the building and the rear is not adjacent to any public right-of-way.

5.4.8. MAINTENANCE

- A.** All existing vegetation that is used to comply with the landscaping requirements, all required planted living material, and all required berms shall be maintained by the owner of the property on a continuing basis.
- B.** Any planted material that becomes damaged or diseased or dies shall be replaced by the owner within 60 days of the occurrence of such condition. If the Planning Director determines there are seasonal conditions that will not permit the timely replacement of the vegetation (e.g. too hot or too cold for successful replanting), the Planning Director may modify the requirement until a time certain when the replanting would be successful.
- C.** Artificial fencing and nonliving screening buffers shall be maintained, cleaned, and repaired by the owner of the property on a continuing basis. Such fencing shall be kept free of litter and advertising.

Section 5.5. Exterior Lighting

[09-08-2020]

5.5.1. PURPOSE AND INTENT

The purpose and intent of this section is to regulate exterior lighting to:

- A. Ensure all exterior lighting is designed and installed to maintain adequate lighting levels on site;
- B. Assure that excessive light spillage and glare are not directed at adjacent property, neighboring areas, or motorists;
- C. Provide certainty during the development review process; and
- D. Provide security for persons and property.

5.5.2. APPLICABILITY

A. General

Unless exempted by subsection B below, the standards in this section apply to:

- 1. All new non-residential, mixed-use, and multi-family development;
- 2. Any individual expansion of a building in a non-residential, mixed-use, or multi-family development if the expansion increases the building's floor area by 50 percent or more; and
- 3. Any expansion or alteration of a lighted outdoor area.

B. Exemptions

The following types of lighting are exempted from the standards of this section:

- 1. Lighting exempt under state or federal law;
- 2. FAA-mandated lighting associated with a utility tower or airport;
- 3. Lighting for public monuments and statuary;
- 4. Lighting solely for signage (for signage lighting standards see Section 5.6.3.D, Lighting);
- 5. Temporary lighting for circuses, fairs, carnivals, and theatrical and other performance areas, provided such lighting is discontinued upon completion of the event or performance;
- 6. Temporary lighting of construction sites, provided such lighting is discontinued upon completion of the construction activity;
- 7. Temporary lighting for emergency situations, provided such lighting is discontinued upon abatement of the emergency situation;
- 8. Security lighting controlled and activated by motion sensor devices for a duration of 15 minutes or less;
- 9. Underwater lighting in swimming pools, fountains, and other water features;
- 10. Holiday or festive lighting; and

11. Outdoor lighting fixtures that do not comply with provisions of this section on September 8, 2020.

5.5.3. TIME OF REVIEW

Information about the exterior lighting for the site that demonstrates compliance with the standards in this section shall be submitted in conjunction with an application for site plan approval (Section 10.3.6, Site Plan) or zoning compliance approval (Section 10.3.8, Zoning Compliance Approval), whichever comes first.

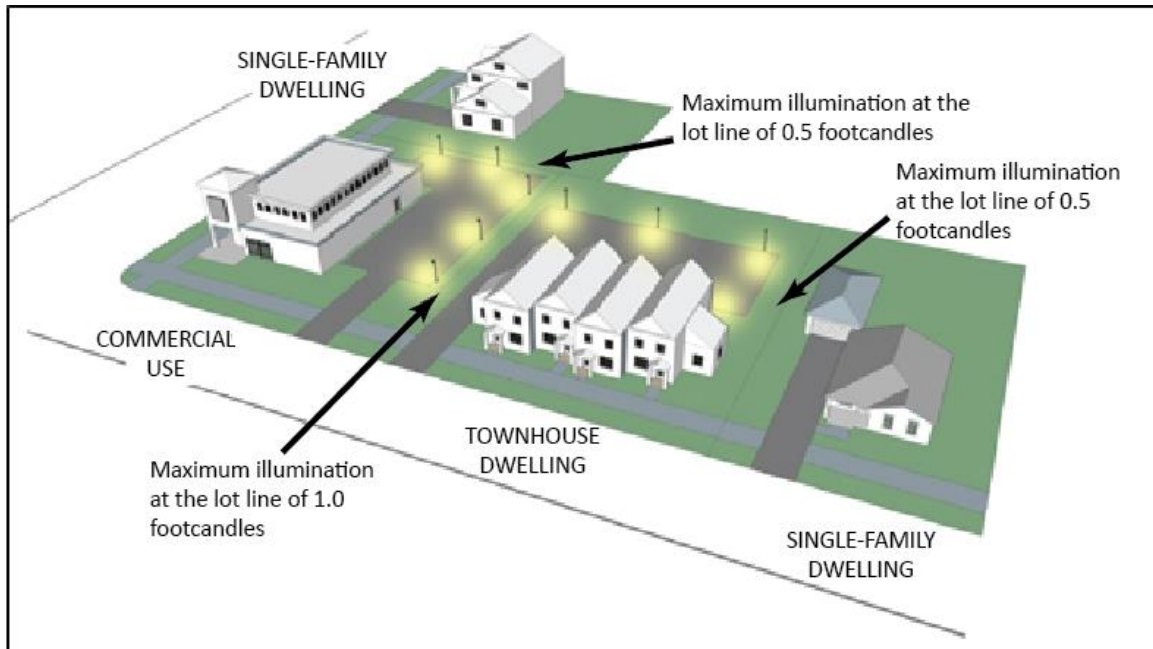
5.5.4. GENERAL STANDARDS

A. Maximum Illumination Levels

Except for street lighting, all exterior lighting and indoor lighting visible from outside shall be designed and located so that the maximum illumination measured in foot candles at ground level at a lot line (see Figure 5.5.4.B: Maximum Illumination Levels) shall not exceed the standards in Table 5.5.4.B: Maximum Illumination Levels.

Type of Use Abutting Lot Line	Maximum Illumination Level at Lot Line (Foot-Candles)
Single family detached, two-family (duplex), triplex, and quadraplex dwellings, or vacant land in the R-20S, R-20, R-15, and R-10 zoning districts	0.5
All other residential uses and vacant land in all other Residential districts	1.0
All other uses	2.0

Figure 5.5.4.B: Maximum Illumination Levels



5.5.5. PROHIBITED LIGHTING

The following lighting is prohibited:

- A. Light fixtures that imitate an official highway or traffic control light or sign;
- B. Light fixtures that have a flashing or intermittent pattern of illumination, except as permitted for signage in accordance with Section 5.6.2.D, Lighting;
- C. Exterior lighting in the Airport Residential (AR) district that does not comply with Section 3.2.5.E.1, Lighting;
- D. Exterior lighting in the Airport Commerce (AC) district that does not comply with Section 3.4.9.E.2, Lighting; and
- E. Searchlights, except when used by federal, state, or local authorities, or where they are used to illuminate alleys, parking garages, and working (maintenance) areas, so long as they are shielded and aimed so that they do not result in lighting on any adjacent lot or public right-of-way exceeding 2.0 foot candles.

5.5.6. EXEMPTIONS FOR SAFETY REASONS

- A.** Government facilities like parks, public safety facilities, and the like, as well as private development may submit a security plan to the Planning Director proposing exterior lighting that deviates from the standards in this section. The Planning Director shall submit the security plan to the Sheriff's Department for review and shall then approve or approve with condition the security plan and its proposed deviation from the standards, upon finding that:
 - 1.** The proposed deviation from the standards is necessary for the adequate protection of the subject land, development, or the public.
 - 2.** The condition, location, or use of the land, or the history of activity in the area, indicates the property or any materials stored or used on it are in significantly greater danger of theft or damage, or members of the public are at greater risk for harm than on surrounding property without the additional lighting; and
 - 3.** The proposed deviation from the standards is the minimum required and will not have a significant adverse effect on neighboring lands.
- B.** If the Planning Director finds the applicant fails to demonstrate compliance with subsection A above, the security plan and its proposed deviation from the standards shall be denied.

Section 5.6. Signs

5.6.1. PURPOSE

The purpose of this section is to coordinate the type, placement, and physical dimensions of signs within the different zoning districts; to recognize the commercial communication requirements of all sectors of the business community; to promote both renovation and proper maintenance of signs; and to guarantee equal treatment under the law through accurate record keeping and consistent enforcement. The general objectives of these standards are to promote the health, safety, welfare, convenience and enjoyment of the public, and in part, to achieve the following:

- A. Safety** - To promote the safety of persons and property by providing that signs:
 - 1. Do not create a hazard due to collapse, fire, decay, collision, or abandonment;
 - 2. Do not obstruct fire-fighting or police surveillance; and
 - 3. Do not create traffic hazards by confusing or distracting motorists, or by impairing the driver's ability to see pedestrians, obstacles, or other vehicles, or to read traffic signs.
- B. Communications Efficiency** - To promote the efficient transfer of information in sign messages by providing that:
 - 1. Those signs which provide messages and information most needed and sought by the public are given priorities;
 - 2. Businesses and services may identify themselves;
 - 3. Customers and other persons may effectively locate a business or service;
 - 4. No person or group is arbitrarily denied the use of the sight lines from the public right-of-way for communication purposes; and
 - 5. Persons exposed to signs are not overwhelmed by the number or size of messages presented, and are able to exercise freedom of choice to observe or ignore sign messages, according to the observer's purpose.
- C. Landscape Quality and Preservation** - To protect the public welfare and to enhance the appearance and economic value of the landscape by providing that signs:
 - 1. Do not interfere with scenic views;
 - 2. Do not create a nuisance to persons using the public rights-of-way;
 - 3. Do not constitute a nuisance to occupancy of adjacent and contiguous property by their brightness, size, height or movement;
 - 4. Are not detrimental to land or property values; and
 - 5. Contribute to the special character of particular areas of the community, helping to orient the observer within it.
- D. Outdoor Advertising Signs**
 - 1. Outdoor advertising signs are herein regulated for the purposes of regulating excess signage, encouraging the positive economic

development of the County, preserving and improving tourism views, promoting the safety of the traveling public, protecting existing property values in both residential and nonresidential areas, preventing the overcrowding of land, and protecting the aesthetics of the County.

2. The regulations are designed to prevent their over-concentration, improper placement, and excessive height, bulk, number and area. It is recognized that, unlike on-premise identification signs, which are in actuality a part of a business, outdoor advertising is a separate and distinct use of the public thoroughfare. With a view to this distinction, outdoor advertising signs are regulated differently from on-premise signs.

5.6.2. GENERAL PROVISIONS

A. Compliance with Building and Electrical Codes

All signs shall be constructed in accordance with the requirements of the local and state Building Code and the National Electrical Code.

1. Anchoring

- a. Signs shall be suspended by nonrigid attachments that will allow the sign to swing in a wind.
- b. All freestanding signs and outdoor advertising signs shall have self-supporting structures erected on or permanently attached to concrete foundations.
- c. All portable signs on display shall be braced or secured to prevent motion.

2. Wind Loads

Solid signs, and skeleton signs other than wall signs, shall be designed to withstand a wind load according to the North Carolina State Building Code.

3. Additional Construction Specifications

- a. No signs shall be erected, constructed, or maintained so as to obstruct any required exit, fire escape, window or door opening used as a means of egress.
- b. No sign shall be attached in any form, manner or shape which will interfere with any opening required for ventilation, except that signs may be erected in front of and may cover transom windows when not in violation of the provisions of Fire Prevention Codes.
- c. Signs shall be located in such a way as to maintain horizontal and vertical clearance of all overhead electrical conductors in accordance with the National Electrical Code specifications.

4. Maintenance and Removal

Should any sign become in danger of falling or is deemed otherwise unsafe in the opinion of the Building Safety Director, the owner, or the person or firm maintaining the same, shall upon written notice from the Building Safety Director, forthwith in the case of immediate danger and in any case within 10 days, secure the sign in a manner to be approved by the Building Safety Director in conformity with the provisions of the state building code, or remove the sign. If the sign is not removed, the Building Safety Director or his designated agent may initiate legal procedures to obtain the necessary court orders to remove such sign at the expense of the owner or lessee.

B. Abandoned Signs

Any on-premises sign relating to any business or other use shall be removed by the owner of the sign or property owner within 60 days after such business or activity has been vacated or terminated. If the sign has not been removed after the removal time has expired and after proper written notification is given, the Planning Director may initiate legal procedures to remove the sign(s) at the expense of the owner or lessee.

C. Sign Measurements

1. General - For the purpose of this section, the area, in square feet, of any sign shall be computed by the smallest square, triangle, rectangle, circle, or combination thereof, which will encompass the entire sign. In computing the sign area in square feet, standard mathematical formulas for known or common shapes will be used. In the case of irregular shapes, straight lines drawn closest to the extremities of the shape will be used.
2. Multiple Faces - Where a sign has two or more faces, the area of all faces shall be included in determining the area of the sign, except where two such faces are placed back-to-back and are at no point more than two feet from one another. The area of the sign shall be taken as the area of the larger face if the two faces are of unequal area; if the areas of the two faces are equal, then the area of one of the faces shall be taken as the area of the sign.

D. Lighting

Unless otherwise specified in this section, all signs may be illuminated. However, no sign regulated by this Ordinance may utilize:

1. An exposed incandescent lamp with an external reflector without a sunscreen or comparable diffusion;
2. An exposed incandescent lamp unless a screen is attached; or
3. A revolving beacon light.

E. Exemptions

This section shall not relate to building design, nor shall this section regulate official traffic signs, gravestones, lighting, or displays of a seasonal, religious, or traditional

nature (e.g., Christmas or Chanukah lights or decorations, Thanksgiving decorations, Halloween lights or decorations, etc.) which are not commercially-oriented, scoreboards on athletic fields, or any display or construction not defined as a sign. The regulations of this section shall not apply to any sign that is not visible from the perimeter of the subject property.

F. Permits Required

Unless otherwise specifically provided, a sign permit shall be obtained in accordance with Section 10.3.8, Zoning Compliance Approval, before commencing the construction, alteration, erection, addition to, or moving of any sign or outdoor advertising sign or part thereof.

G. Indemnifications and Insurance

1. All persons involved in the maintenance, installation, alteration, or relocation of signs near or upon any public right-of-way or property shall agree to hold harmless and indemnify the County, its officers, agents, and employees, against any and all claims of negligence resulting from such work insofar as this section has not specifically directed the placement of a sign.
2. No person may engage in the business of erecting, altering, relocating, constructing, or maintaining signs without a valid contractor's license and all required licenses on the state and federal level.
3. All persons involved in the installation, maintenance, relocation, or alteration of signs shall maintain all required insurance and shall file with the state a satisfactory certificate of insurance to indemnify the city, state, or County against any form of liability to a minimum of \$100,000.

H. Prohibited Signs

In all zoning districts the erection, construction, location or the use of any sign is prohibited as follows. Such signs, if deemed to create a public safety hazard by the Building Safety Director, may be removed immediately; otherwise, prohibited signs shall be removed as provided under Section 5.6.4.K. See Table 5.6.2.H: Permitted and Prohibited Signs, by Zoning Districts.

1. Signs in Public Right-of-Way. No sign shall be permitted on or protrude into a public right-of-way, street, or passageway, except as provided specifically for in this section.
2. Signs Attached to Public Property or Utility Structures. Except for signs installed by or with the approval of an appropriate governmental agency, no sign shall be attached to, hung, or painted on any curb stone, hydrant, lamppost, street trees, barricade, temporary walk, telephone pole, telegraph pole, electric light pole, or other utility pole, public fence, or on a fixture of a fire alarm or police call system within any public right-of-way. No detached sign shall be located closer than 10 feet in any direction from any power or transmission line. (NOTE: This does not include the supporting structure, e.g., the power pole.)
3. Signs Constituting Traffic Hazards. No sign shall be permitted whereby its location, nature or type constitutes or tends to constitute a hazard to the safe and efficient operation of vehicles upon any public right-of-way,

street, or passageway. No sign shall be permitted that would obstruct the line of sight of motorists or pedestrians at intersections, driveways, or along any public right-of-way, street, or passageway. No sign shall be permitted, as specified in Section 136-32.2, N.C.G.S., that would obstruct or resemble traffic signs or signals, or would tend to be confused with a flashing light of an emergency vehicle.

Table 5.6.2.H: Permitted and Prohibited Signs, by Zoning District

X= Prohibited P=Permitted

Sign Type	Residential District	O&I District	B-1, CB, UMXZ, and PD Districts	B-2 and SC Districts	CS, I-1 and AI Districts	I-2 District
Above Roof	X	X	X	X	X	X
Animated	X	X	X	X	X	X
Attached (Wall)	X	P	P	P	P	P
Awning	X	P	P	P	X	X
Banner	X	P	P	P	P	P
Balloons/Blimps	X	P	P	P	P	P
Construction	P	P	P	P	P	P
Directional	P	P	P	P	P	P
Flag	P	P	P	P	P	P
Flashing	X	X	X	X	X	X
Freestanding	P	P	P	P	P	P
Incidental	X	P	P	P	P	P
Integral	P	P	P	P	P	P
Pennant	X	X	X	X	X	X
Political	P	P	P	P	P	P
Portable	X	X	P	P	P	P
Projecting	X	X	X	X	X	X
Real Estate	P	P	P	P	P	P
Revolving	X	X	X	X	X	X
Sandwich Board	X	X	X	X	X	X
Spec. Purpose	X	X	X	X	X	X
Wind Device	X	X	X	X	X	X
Window	X	P	P	P	P	P

4. Signs Constituting Fire Hazards. No sign shall be permitted to prevent free ingress and egress from any door, window, or fire escape.
5. Signs Pertaining to Specified Activities or Containing "Vulgar" Words. No sign shall contain statements, words, or pictures which describe or display "specified anatomical areas" or "specified sexual activities," as defined in this Ordinance or which contain words which are classified as "vulgar" or "vulgar slang" in The New College Edition of the American Heritage Dictionary of the English Language.
6. Moving Signs. No sign shall be permitted containing or consisting of banners, posters, pennants, ribbons, balloons, streamers, or other similarly moving devices or ornamentation, except as specifically provided in this section.
7. Flashing Signs and Rotating Light Beams. No sign shall be permitted which contains or utilizes revolving or rotating beams of light of stroboscopes. No sign shall be erected which flashes, except for time and temperature signs.
8. Signs on Vehicles. No sign shall be placed on a vehicle or trailer which is parked or located for the primary purpose of displaying the sign (this does not apply to permitted portable signs, or to signs or lettering on buses, taxis, or vehicles operating during the normal course of business).
9. Floating Signs. Floating Signs are not permitted.

I. Signs Which do not Require a Permit

The following types of signs are exempted from the sign permit requirements, but must comply with all other requirements of this section.

1. Signs used by churches, synagogues, or civic organizations.
2. Construction Signs. One construction sign for each street frontage of a construction project, not to exceed 20 square feet in sign area in residential zoning districts or 35 square feet in sign area in all other zoning districts. Such signs may be erected ten days prior to beginning of construction and shall be removed within 30 days following completion of construction.
3. Directional/Information Signs. Four freestanding directional/information signs per lot, not to individually exceed three square feet in sign area or 30 inches in height.
4. Individual Political Signs. Non-illuminated political signs, not to individually exceed 12 square feet in sign area. Such signs shall be removed 30 days following the applicable election or referendum. Political signs may be placed only on private property and only with the permission of the property owner, provided that each candidate for political office, or the candidate's local representative in the case of statewide or national offices, shall apply for a general permit for all personal campaign signs, indicating that the candidate is aware of all regulations concerning political signs, that all supporters receiving the signs will be advised of these regulations and ordered to follow them, and that the signs shall be removed as required by these regulations.

5. Public signs or notices or any sign relating to an emergency.
6. Real Estate Signs. One non-illuminated real estate sign per street frontage, not to exceed 20 square feet in sign area. Such signs must be removed 30 days following rental, sale, or lease.
7. Incidental Signs not to exceed six square feet in aggregate sign area per occupancy
8. Residence signs, Nameplates, or street address numbers, not exceeding four square feet in area.
9. Signs used for bona-fide navigational aids.
10. Flags.
11. Off-Site Real Estate Signs. Off-site real estate signs which are generic signs with display content limited to a directional arrow and/or one descriptive phrase of "open house" or "home for sale," and allowed off the premises from where the real estate product is being offered that comply with the following requirements:
 - a. Be located on private property only with written permission of the applicable property owner. The property owner or real estate agent shall be subject to the applicable penalties for violation of these provisions.
 - b. Be no greater than four square feet in area.
 - c. Be no higher than three (feet, measured from the adjacent ground elevation to the uppermost portion of the sign.
 - d. Only locate one sign per intersection.
 - e. Not block any sight distances of any intersection.
 - f. Not be placed within a public or private road right-of-way.
 - g. Be freestanding.
 - h. Not be placed on trees, utility posts, traffic control signs, or other signs.
 - i. Not have lighting, movable elements, or flags.
 - j. Comply with the following allowable times of placement:
 1. A sign directing attention to a temporary sales office or model unit in a development of multiple lots or units offered for sale may remain in place seven days a week, for as long as the temporary sales office or model unit is on site.
 2. A sign directing attention to any property or properties other than a model unit or sales office as specified in paragraph (a), may remain in place from 4:00 p.m. on Friday to 8:00 a.m. on the following Monday. On the following specified holidays, signs may be posted after 4:00 p.m. the day prior to the actual holiday and must be removed by 8:00 a.m. the day following the holiday:
 - i. New Year's Day

- ii. Martin Luther King, Jr. Day
- iii. Good Friday (Friday before Easter)
- iv. Azalea Festival - Friday
- v. Memorial Day
- vi. Independence Day
- vii. Labor Day
- viii. Veteran's Day
- ix. Thanksgiving Day - Thursday and Friday
- x. Christmas Day

J. Signs Which Require a Permit

1. Subdivision Identification Signs

Two subdivision identification signs per entrance, not to exceed 35 square feet each in sign area. Identification signs may be located on privacy and freestanding walls. Unless otherwise specified, if the identification sign is located on a freestanding wall, the wall shall not exceed six feet in height, or the height of the subdivision privacy wall, whichever is greater.

2. Identification Signs

One identification sign per apartment or condominium complex entrance, not to exceed 35 square feet in sign area. Identification signs may be located on walls provided such walls do not exceed four feet in height and 75 square feet in area.

3. Freestanding Signs in Residential Areas

For permitted nonresidential uses, including churches and synagogues, one freestanding sign per frontage, not exceeding 35 square feet in sign area, and one marquee sign not to exceed 25 feet in sign area. All permitted freestanding signs shall have a maximum height limit of six feet and shall have a minimum setback of five feet from any property line. For permitted freestanding signs which are to be illuminated, such illumination must come from a light source which is external to the sign itself.

4. Principal Use Signs

a. Freestanding Signs

- 1. Primary. One primary freestanding sign per premises, in accordance with Table 5.6.2.J.4.a: Freestanding Sign Standards.

Table 5.6.2.J.4.a: Freestanding Sign Standards

Zoning District	Number of Lanes	Street Frontage (Feet) [1]	Front Setback (Min./Max.) (Feet) [2][3]	Maximum Primary Sign Height (Feet)	Maximum Aux. Sign Height (Feet)	Maximum Primary Sign Area (Square Feet)	Maximum Auxiliary Sign Area (Square Feet)
B-1, PD, CB <i>[09-08-2020]</i>	2	N/A	10 / 20	20	10	50	25
	4	< 100	10 / 20	20	N/A	50	N/A
		> 100	10 / 20	20	12	65	32
B-2, CS, I-1, I-2, AC, SC <i>[09-08-2020]</i>	2	< 100	10 / 20	20	N/A	65	N/A
		> 100	10 / 25	20	18	100	50
	4	< 100	10 / 25	20	N/A	100	N/A
		> 100	10 / 30	25	20	150	75
		> 300	10 / 30	30	20	175	90

NOTES:

- [1] Number of lanes refers to the ultimate number of lanes based upon existing roadway conditions or upon construction plans approved as part of the current NC DOT Transportation Improvement Program.
- [2] Notwithstanding the minimum and maximum front setback requirements indicated above, primary freestanding signs which do not exceed six feet in height and are less than 76 percent of the maximum sign area established above, may be located within five feet of the front property line and shall have no maximum front setback.
- [3] Front Setback refers to the setback from the front or corner side property lines.

2. Auxiliary. An additional (Auxiliary) freestanding sign shall be allowed for property having in excess of 100 linear feet of road frontage; one auxiliary freestanding sign shall be permitted for each 100 linear feet of road frontage. Auxiliary signs may contain up to 50 percent of the allowable area of primary freestanding signs or 20 square feet, whichever is greater. Auxiliary signs shall not be permitted within 50 feet of any other auxiliary or primary sign located on the same parcel of property. No more than two auxiliary freestanding signs shall be permitted on each road frontage for each parcel of property.
3. Carolina Beach Road. Freestanding signs along Carolina Beach Road shall comply with the provisions of this section except that only one freestanding ground sign not to exceed six feet in height and a maximum surface area of 150 square feet is permitted.
 - b. Wall Signs. Up to five wall signs per occupancy, in aggregate not to exceed 20 percent of the area of the wall to which the signs are attached, up to a maximum size of 250 square feet per each occupancy.
 - c. Under-Canopy Signs. One under-canopy sign per occupancy, not to exceed four square feet in sign area.
 - d. On-Premises Window Signs. Any principal building may install on-premises window signs, provided:

1. The area of such signs shall not exceed an aggregate area equal to 10 percent of the total ground floor glassed window area of the building.
 2. Such signs, if located inside the window, may be neon signs.
 3. Such signs are prohibited above the second floor occupancy.
- e. Special regulations and allowances for principal use signs:
1. Corner Lots. Where an occupancy is on a corner or has more than one main street frontage, an additional wall sign and an additional freestanding sign are allowed on the additional frontage, not to exceed the number and size limitations of other allowed wall and freestanding signs.
 2. Minimum Clearance. All freestanding, awning, marquee, and under-canopy signs shall have a minimum clearance of nine feet over any pedestrian use area.
 3. Awning Signs. Three awning signs per occupancy, not to exceed 20 percent of the surface area of an awning.
 4. Multi-Unit Signs. Multi-unit signs consist of three or more individual identification signs. These individual signs shall be designed to reflect a unified graphic appearance (e.g., size and material type), as determined by the Planning Director. Individual commercial logos are permitted on multi-unit signs so long as they do not constitute more than 25 percent of the area of the applicable individual occupancy identification sign.

5.6.3. TEMPORARY AND SPECIAL EVENT SIGNS

A. Balloons / Blimps

1. Allowed for special events with a permit for up to seven days of consecutive use, five times per calendar year per location, subject to the following conditions:
 - a. The balloon or blimp may not be more than 1,000 cubic feet in size, nor shall the total of the longitudinal and latitudinal dimensions of the device, measured along their axes, exceed 37 linear feet;
 - b. The balloon or blimp shall be securely anchored at a point within the applicable setback for buildings in the zoning district where the balloon or blimp is flown
 - c. The balloon or blimp may not be flown more than 50 feet in the air unless it is located at least 100 feet from any active public roadway; its height may thereafter be increased in proportion to its distance from the roadway, to a maximum of 100 feet. (Example: if the device is anchored 125 feet from a road, it may be flown at a height of 75 feet;
 - d. No balloon or blimp shall be flown in windy conditions (sustained winds of 25 m.p.h. or more) or inclement or stormy weather; all applicable state or federal regulations must be observed;

- e. No balloons or blimps may be flown within a one-mile radius of another such device; and
 - f. No device authorized by this section may consist of more than one balloon or blimp, or have attached to it any streamers, banners, or other paraphernalia.
2. For purposes of this provision, a balloon or blimp may display advertising copy that is not specific to the premises or establishment where the special event is occurring, but may not be displayed at any other premises.
 3. "Special events," as used in this provision includes grand openings, special sales and other promotional activities. If, in the opinion of the Building Safety Director, any balloon or blimp is creating or contributing to a hazardous situation, the Director may direct that it be removed or that the manner of its display be altered to remove the hazard.

B. Banners

Banners are allowed for special events with a permit, for up to 30 days of consecutive use, two times per calendar year (separated by a minimum of 30 days). There shall be no more than two banners per occupancy, per permit. In the case of public parks, each group or activity will be considered a separate occupancy. Museums and cultural arts centers are permitted continuous, year-round display of one banner and there is no time constraint imposed upon any one banner's display. A second banner may be permitted in compliance with the banner restrictions applied to other uses. For grand openings, or other special events, a banner may be used for no more than 30 days for one time per calendar year. These banners are allowed with a permit in the Commercial and Industrial districts.

C. Flags

Flags are allowed as specified in Table 5.6.3.C: Flag Standards by Zoning District. Ground-mounted flagpoles shall not exceed height limits established in Table 5.6.3.C. Roof-mounted flagpoles shall not exceed the maximum height permitted in each zoning district for roof-mounted antennae. No more than two flags shall be permitted per each flagpole, not to exceed the cumulative area established in Table 5.6.3.C. The United States, North Carolina, city and county flags are exempt from all restrictions of this article.

Table 5.6.3.C: Flag Standards by Zoning District				
Zoning District	Parcel Size	Number of Flagpoles	Maximum Area	Maximum Height
Commercial and Industrial	Less than one acre	Three	80 square feet	35 feet
	One to three acres	Five	200 square feet	50 feet
	Three to ten acres	Ten	200 square feet	50 feet
	More than ten acres	Ten	800 square feet	80 feet
All Other	N/A	one	80 square feet	35 feet

D. Pennants

Pennants are prohibited except as navigational aids, or if used by a religious activity or by an educational or charitable organization (see Flags).

E. Portable Signs

Portable signs are allowed with a permit for up to 30 days of consecutive use, two times a calendar year (separated by a minimum of 30 days), for parcels in the Commercial or Industrial districts. They are prohibited elsewhere. Portable signs cannot exceed 35 square feet in size and six feet in height, or be located within five feet of any property line. That shall not be over one portable sign per parcel. At the expiration of the permit period, the sign, which includes the lettering as well as the signage cabinet, shall be removed.

5.6.4. OUTDOOR ADVERTISING SIGNS

A. Where Permitted

Outdoor advertising signs and structures that comply with the provisions of this Ordinance shall be permitted in the I-1, I-2 and AC zoning districts, provided the specific outdoor advertising sign location is 400 feet or more from any Residential zoning district, place of worship, public park, or school. Outdoor advertising signs shall not be constructed within areas designated under the SHOD district. Outdoor advertising signs shall not be permitted in, upon, or over any navigable public waterway, marsh, or within 400 feet landward of the mean high water line.

B. Location, Setbacks, and Spacing of Outdoor Advertising Signs

1. Setbacks. Each outdoor advertising sign shall comply with the applicable setback requirements of the district in which it is located. In no case, however, shall an outdoor advertising sign be located less than 10 feet from any right-of-way or property line.
2. Corner Lots. No part of an outdoor advertising sign may be located within a triangular area formed by the street right-of-way lines and a line connecting them at points 50 feet from the right-of-way intersection.
3. Spacing of Outdoor Advertising Signs. No part of any outdoor advertising sign shall be located less than 1,000 feet from any part of another outdoor advertising sign.
4. Back of Outdoor Advertising Sign. The backs of all outdoor advertising signs shall be painted in a neutral color to blend with the surrounding area and to prevent the reflection of car lights and sunlight.

C. Single Outdoor Advertising Sign Structure

An outdoor advertising sign shall be considered as one sign structure when it is designed to be viewed from:

1. One direction and consists of a single face sign placed in such a manner to be viewed by one directional flow of traffic; or

2. Two directions and consists of two sign faces arranged either back-to-back or in a V-shape.
3. In no case shall there be more than one sign face per directional flow of traffic.

D. Area and Height Requirements for Outdoor Advertising Signs

1. No outdoor advertising sign facing streets with four or more traffic lanes may exceed 150 square feet; outdoor advertising signs facing streets with fewer than four traffic lanes may not exceed 75 square feet. The allowable sign area of outdoor advertising signs with equal size and shape for both double-faced (back-to-back) and V-type outdoor advertising signs is measured by computing the area of only one side of the outdoor advertising sign. Both sides of a double-faced or V-type outdoor advertising sign shall be of equal size. No point on either side shall be more than 15 feet from the nearest point of the other side.
2. No outdoor advertising sign or part thereof, including base, apron, supports, supporting structures, and trim, may exceed 30 feet in height. Rooftop outdoor advertising signs are prohibited.

E. Inspection of Outdoor Advertising Signs

The Building Safety Director shall inspect all outdoor advertising signs periodically to determine that the same are in a safe condition and meet the requirements set forth in this section.

F. Clearance for Overhead Electrical Conductors

Outdoor advertising signs shall be located in such a way that they maintain horizontal and vertical clearance of all overhead electrical conductors in accordance with National Electrical Code specifications, provided that no outdoor advertising sign, except official traffic signs, shall be installed closer than 10 feet horizontally or vertically from any conductor or public utility guy wire.

G. Illumination

All outdoor advertising sign illumination devices shall be in conformance with the North Carolina State Building Code, Volume IV, and all other state and local codes governing illumination. All illumination shall be designed to be contained to the sign area of the outdoor advertising sign.

H. Back of Sign

The backs of all outdoor advertising signs shall be painted in a neutral color to blend in with the surrounding area.

I. Trimming of Vegetation Prohibited

There shall be no trimming of vegetation on public property or rights-of-way to make any outdoor advertising sign more visible.

J. Maintenance

All outdoor advertising signs shall be maintained in a state of good repair. Whenever it shall appear to the Building Safety Director that any outdoor

advertising sign has been constructed or is being maintained in violation of the terms of this section or is unsafe or insecure, such outdoor advertising sign shall either be made to conform with all outdoor advertising sign regulations or shall be removed at the expense of the owner, within ten days after written notification thereof by the Building Safety Director.

K. Removal of Obsolete Outdoor Advertising Signs

Outdoor advertising sign messages which advertise a discontinued activity or use of a building or premise shall be removed within 60 days from the date the activity or use was terminated. Outdoor advertising signs advertising events such as shows, displays, festivals, circuses, fairs, athletic contests, dances, fund drives, elections, exhibits, meetings, conventions, and the like shall be removed within 30 days after the date of termination of such events.

Section 5.7. Conservation Resources

5.7.1. PURPOSE

The purpose of these conservation resources standards is to protect important environmental and cultural resources within the County. Protection of these resources is necessary to:

- A. Maintain the County's diverse and ecologically important natural systems;
- B. Preserve the County's estuarine systems important for finfishing and shellfishing;
- C. Provide open space; and
- D. Retain the County's archaeological and historical heritage.

5.7.2. APPLICABILITY

- A. Unless exempted by subsection C below, the development and improvement of a parcel of record existing on December 1, 1984, including the division of land, shall be subject to these performance controls, if the parcel is associated with any conservation resources identified in Table 5.7.2.A: Minimum Distinct Area of Conservation Resources, having a corresponding minimum distinct area identified in Table 5.7.2.A. A parcel is considered to be associated with a conservation resource if either the resource is contained partially or wholly on the parcel or if the resource is located next to a parcel such that the resource setback specified in Section 5.7.4, Additional Performance Controls, extends into the parcel.

Conservation Resource	Minimum Distinct Area (acres)
Swamp forest	2.5
Pocosin	2.5
Savannah	2.5
Natural ponds	0.1
Freshwater marsh	0.1
Brackish marsh	0.1
Primary nursery areas	0.1
Barrier island-beach complex (including dunes)	0.1
Maritime shrub thickets	1.0
Salt Marsh	0.1
Animal and Plant Natural Areas of Special Significance	No limit
Archeological/Historical Resources and Cemeteries	No limit

- B. The most recent officially adopted maps of, and information concerning, resources identified in subsection A above are available for review at the County Planning and Land Use Department. These maps serve as an initial resource to determine if a parcel is associated with conservation resources identified in subsection A above, but all conservation resources outlined above shall be identified on all required site plans, regardless of whether they are identified on County maps. *[05-03-2021]*

- C.** The following are exempt from the requirements of this article:
1. The development of one single family home detached structure, one residential duplex, or the location of two or fewer mobile homes on a parcel.
 2. Commercial, industrial, office or institutional development involving a land disturbance of less than one acre in area.
 3. The development or division of a parcel that meets both of the following conditions:
 - a. No part of the development or division shall be located within a distance equal to or less than the setback distance specified in Section 5.7.4, Additional Performance Controls, of any conservation resource or space existing on the parcel or on a contiguous parcel of record.
 - b. No part of the development or division shall be located on any portion of the parcel that is part of the upper drainage basin for any conservation resource or space on the parcel or within the specified setback on a contiguous parcel of record.

5.7.3. CONSERVATION SPACE GENERAL PERFORMANCE CONTROLS

The general performance controls for conservation space in this section apply to all development subject to this article.

A. Required Amounts of Conservation Space

1. Conservation space is defined as that portion of the conservation resource that shall be preserved, as determined by this section (5.7.3).
2. Conservation space may not be reserved provided the development or subdivision of the parcel meets the condition specified in Section 5.7.2.C.3.a.
3. If the development or subdivision does not meet the condition specified in Section 5.7.2.C.3.b, then, the development or subdivision shall meet applicable drainage and setback regulations specified in Section 5.7.3.F, Design Storm, and Section 5.7.4, Additional Performance Controls.
4. Conservation space shall not be required to be reserved for the conservation resources identified in Table 5.7.3.A.4: Conservation Resources Not Requiring Conservation Space, unless the total acreage of minimum distinct areas on the parcel of record exceeds the minimum identified in Table 5.7.3.A.4.

Table 5.7.3.A.4: Conservation Resources Not Requiring Conservation Space	
Conservation Resource	Total Aggregate Minimum Area (acres)
Swamp forest	5
Pocosin	5
Savanah	5

5. The required amount of conservation space shall be determined using Table 5.7.3.A.5: Work Table for Determining Required Conservation Space Developable Land, using the four steps set out below, which refers to the columns in Table 5.7.3.A.5.
 - a. Step One: List in column 2 the acreage of land occupied by each conservation resource named in column 1. If part of the parcel is occupied by more than one resource, list the acreage occupied only by the resource with the highest ranking. Rankings are listed in column 1 in parenthesis next to the resource name.
 - b. Step Two: Multiply each of the listed acreage in column 2 by factors listed in column 3. Place each answer in column 4.
 - c. Step Three: Add the acreage in column 4 to determine total minimum conservation space required.
 - d. Step Four: Subtract the total minimum conservation space from the total gross parcel to determine the maximum amount of developable land.
6. The total amount of conservation space that shall be reserved shall be equal to or exceed the total minimum conservation space calculated in step three in subsection A above. The total minimum conservation space shall be allocated to and reserved for conservation resource areas in acreage equal to or exceeding the minimum acreage calculated for the resources in column 4 of Table 5.7.3.A.5: Work Table for Determining Required Conservation Space Developable Land.

Table 5.7.3.A.5: Work Table for Determining Required Conservation Space Developable Land

1	2	3	4
Conservation Resource (Importance Value)	Acreage of Resource on Parcel (times)	Conservation Space Factor (equals)	Minimum Conservation Space
Swamp Forest, Minimum 5 acres (5)		.5	
Pocosin, Minimum 5 acres (5)		.5	
Savannah, Minimum 5 acres (3)		.5	
Natural Pond (8)		1.0	
Fresh Marsh, Minimum one acre (6)		.8	
Brackish Marsh (9)		1.0	
Primary Nursery Area (13)		1.0	
Barrier Island -Beach Complex (11)		.9	
Maritime Shrub Thickets (10)		.7	
Salt Marsh (12)		1.0	
Important Historical/ Archeological Site (7)		.9	
Animal & Plant Areas of Special Significance (10)		.9	
Cemeteries (13)		1.0	

TOTAL MINIMUM CONSERVATION SPACE _____

TOTAL PARCEL ACREAGE _____

MINUS TOTAL MINIMUM CONSERVATION SPACE _____

EQUALS MAXIMUM DEVELOPABLE LAND _____

B. Arrangement of Conservation Space

Conservation space shall be reserved in contiguous blocks or in close proximity to the greatest extent possible in order to prevent the scattering of such space and to increase effectiveness in their management.

C. Transfer of Conservation Space Requirements Between Resource Conservation Areas

In order to provide flexibility in site design, the minimum acreage of conservation space required in column 4 of Table 5.7.3.A.5: Work Table for Determining

Required Conservation Space Developable Land, for any one conservation resource area may be reduced by any desired amount provided, however, that the minimum conservation space required for a different conservation resource area with an equal or higher ranking is increased by an equal or higher amount. For instance, assume that a parcel has ten acres of swamp forest and fifteen acres of fresh marsh. According to the worktable, swamp forest has a conservation factor of .5 and fresh marsh as a conservation of .8. Therefore, at least 5 acres of swamp forest must be reserved as conservation space (10 acres x .5 = 5), and at least twelve acres of fresh marsh must be reserved (15 acres x .8 = 12.0 acres). If the developer, however, wishes to develop seven acres of swamp forest, he may transfer two acres of the conservation space requirement for swamp forest to the fresh marsh because fresh marsh has a higher importance value (6) than does swamp forest (5). As a result of the transfer, therefore, all fourteen acres of the fresh marsh would be required to be preserved as conservation space while only three acres of swamp forest would be required to be preserved.

D. Improvements

Conservation space shall not be cleared of vegetation, shall not have its natural drainage system significantly altered, and shall not be developed in any manner that would negatively impact the conservation resource, with the following exceptions:

1. Improvements that would either protect or enhance the enjoyment of the conservation resource. Such measures not causing significant impact include, but are not limited to, walkways, self-guided trails, protective fences, docks and boat ramps.
2. Access to other parts of the parcel. If a part of the parcel may be developed but is inaccessible due to the existence of a conservation resource area, a road and/or utilities may be constructed through the conservation resource area. The road and/or utilities, however, shall be designed to the greatest extent practical to minimize impact to the conservation resource.
3. Access to the waterfront. If the entire waterfront along a parcel is inaccessible due to the existence of required conservation space, a boat ramp, dock, or pier may be built for boating facilities in the conservation space, subject to relevant State and Federal permits. The facilities, however, shall be designed to the greatest extent practical to minimize impact to the conservation resource.

E. Methods of Conservation Space Preservation

Conservation space may be preserved by any of the following means:

1. Dedication of the conservation space or of a conservation easement in perpetuity to and acceptance by the County for use as parks, recreation areas, or other suitable public purposes.
2. Dedication for suitable public purpose of the conservation space or of a conservation easement in perpetuity to and acceptance by State or Federal agency or by a private, non-profit charitable organization qualified to accept such dedications in accordance with the Federal Internal Revenue Code.

3. The owner of the parcel on record may retain sole ownership of the conservation space provided the conservation space has not been used in calculating residential density. The conservation space shall not be subdivided.
4. The conservation space may become the property of a homeowner's association under the following conditions:
 - a. Such conservation space shall remain undivided and no lot or unit owner or any other person shall bring any action for partition or division of any part thereof except as provided in Chapter 47A (Unit Ownership Act) of the General Statutes. Each lot or unit owner's undivided interest shall be preserved through covenants running with the land. Title to such areas shall be encumbered for the perpetual benefit of the public generally or the private properties in the development, and all future use shall be consistent with the conservation space requirements.
 - b. All lots or units within the development shall have direct access to all conservation space as provided, by means of dedicated streets or walkways within the development or by the fact of physical contiguity to other public land or lands in common ownership of all residents. The developer shall not place age, race, creed, sex or economic restrictions (other than maintenance assessments) upon lot or unit owners for the use of said conservation space. Land which is restricted in any way so as to be for the use, benefit or enjoyment of a select group within the development shall not qualify as conservation space.
 - c. The Homeowner's Association or the non-profit organization shall be established before any lots are sold.
 - d. Membership shall be mandatory for each lot buyer, and any successive buyer.
 - e. The association shall provide for liability insurance, any taxes and the maintenance of all grounds and facilities.
 - f. Any sums levied by the association that remain unpaid shall become a lien upon the lot owner's property.

F. Design Storm

Stormwater runoff for the entire parcel will be managed by structures appropriately sized such that the peak rate of discharge from the site after completion of development for any storm up to and including the specified design storm, shall not exceed the peak rate of discharge from the site in its previous natural condition for the specified design storm. The design storm is specified as occurring once every ten years and lasting for 24 hours. Industrial, commercial, office or institutional development on a parcel one acre or less in size and with a maximum impervious to gross site area ratio of less than 0.2 shall be exempt from this control. Discharge of run-off from impervious surfaces for the entire parcel directly into natural water bodies shall not be allowed. Runoff shall be routed along vegetated swales, through filter media of vegetation, gravel, sand, or other media, or to detention

ponds for purposes of increasing percolation, settling and filtering out of non-point pollutants and decreasing discharge velocity.

G. Buffer Strip

Buffer strip, if required in accordance with Section 5.4, Landscaping and Buffering, shall not be extended through conservation space areas.

H. Historical and Archaeological Sites

1. If a developer wishes to develop an historical or archaeological site, the developer shall do one of the following:
 - a. Provide for a thorough site investigation by a professional historian or archaeologist, as appropriate, who shall prepare a written report with the following information:
 1. Description of site;
 2. Relevant historical documentation/back-ground research;
 3. Research design;
 4. Field studies as actually implemented including any deviation from the design and the reason for the deviation;
 5. All field observations;
 6. Analyses and results;
 7. Information on the location of original data in the form of field notes, photographs, and other materials;
 8. Proof that adequate creation of artifacts and records to ensure their preservation and access for further study will be provided;
 9. Recommendation for further study and preservation of the site, given anticipated development; and
 10. Evaluation of the potential of the site for inclusion in the National Register of Historic Places. If the site is evaluated to have historical or archaeological significance and is eligible for the National Register, every reasonable effort shall be made in the development to preserve it.
 - b. Give access rights for investigating the site and acquisition rights to artifacts to the Planning and Land Use Department or its designated agent for a period of at least 60 days between issuance of the building permit and any development of the property that would impact the site.
2. If a developer wishes to develop a site with an abandoned cemetery, or if an abandoned cemetery is discovered during the course of construction, the developer shall provide for the delineation of the abandoned cemetery by a qualified expert, subject to approval by the County.

5.7.4. ADDITIONAL PERFORMANCE CONTROLS

In addition to the general performance controls specified in Section 5.7.3, Conservation Space General Performance Controls, additional controls shall be required to protect certain conservation resources in certain zoning districts. Table 5.7.4: Additional Performance Controls, lists for each conservation resource and type of district (residential or non-residential and mixed use), the reference number of the group of additional controls that shall be required. Requirements for each group are set forth in subsections A through D, following the table. If the parcel being developed is associated with two or more conservation re-sources with conflicting performance controls, then the most restrictive controls shall apply. However, improvements as specified in Section 5.7.3.D, Improvements, may be permitted within the conservation space setbacks. Additionally, decks may be allowed to encroach into the conservation space setback up to six feet provided they are uncovered and constructed so that the floorboards are spaced to allow water to flow through directly to the ground. The ground below the deck shall be either left undisturbed or planted with ground cover or other vegetation.

Table 5.7.4: Additional Performance Controls

Conservation Resource	Required Performance Controls (Group number)	
	Residential Zoning Districts	Non-Residential and Mixed-Use Zoning Districts
Swamp Forest (Min 5 acres)	4	3
Pocosin (Minimum 5 acres)	4	3
Savannah (Min 5 acres)	4	3
Natural Pond	3	2
Fresh Marsh (Min 1 acre)	3	3
Brackish Marsh	2	1
Primary Nursery Area	2	1
Barrier Island-Beach Complex	2	1
Maritime Shrub Thickets	2	1
Salt Marsh	2	1
Animal and Plant (Natural) Areas of Special Significance	2	1

A. Group 1 Performance Controls

1. Conservation Space Setbacks

All structures and impervious surfaces shall be setback from the conservation space, if any, whether the space is located on the parcel or on an adjacent parcel, a distance of at least 100 feet.

2. Retention of Runoff

In addition to designing the site to control stormwater from a ten-year storm, on-site retention or percolation areas shall be required for the entire parcel sufficient to control, at a minimum, the first one inch of runoff that will originate from all impervious surfaces anticipated to be on the site upon final development. The specified amount of runoff from impervious surfaces shall be disposed of by percolation into the soil, evaporation, transpiration, or other methods of treatment or handling acceptable to the County Engineering Department.

B. Group 2 Performance Controls

1. Conservation Space Setbacks

All structures and impervious surfaces shall be setback from the conservation space, if any, whether the space is located on the parcel or on an adjacent parcel, a distance of at least 75 feet.

2. Retention of Runoff

In addition to designing the site to control stormwater from a ten-year storm, on-site retention or percolation areas shall be required for the entire parcel sufficient to control, at a minimum, the first 0.75 inch of runoff that will originate from all impervious surfaces anticipated to be on the site upon final development. The specified amount of runoff from impervious surfaces shall be disposed of by percolation into the soil, evaporation, transpiration, or other methods of treatment or handling acceptable to the County Engineering Department.

C. Group 3 Performance Controls

1. Conservation Space Setbacks

All structures and impervious surfaces shall be setback from the conservation space, if any, whether the space is located on the parcel or on an adjacent parcel, a distance of at least 50 feet.

2. Retention of Runoff

In addition to designing the site to control stormwater from a ten-year storm, on-site retention or percolation areas shall be required for the entire parcel sufficient to control, at a minimum, the first 0.5 inch of runoff that will originate from all impervious surfaces anticipated to be on the site upon final development. The specified amount of runoff from impervious surfaces shall be disposed of by percolation into the soil, evaporation, transpiration, or other methods of treatment or handling acceptable to the County Engineering Department.

D. Group 4 Performance Controls

1. Conservation Space Setbacks

All structures and impervious surfaces shall be setback from the conservation space, if any, whether the space is located on the parcel or on an adjacent parcel, a distance of at least 25 feet.

2. Retention of Runoff

In addition to designing the site to control stormwater from a ten-year storm, on-site retention or percolation areas shall be required for the entire parcel sufficient to control, at a minimum, the first 0.25 inch of runoff that will originate from all impervious surfaces anticipated to be on the site upon final development. The specified amount of runoff from impervious surfaces shall be disposed of by percolation into the soil, evaporation, transpiration, or other methods of treatment or handling acceptable to the County Engineering Department.

5.7.5. VEGETATED BUFFER CONTROLS FOR CONSERVATION

A. Purpose and Intent

1. The establishment of a buffer zone is based upon the stated goals in Policies 3.10 and 3.11 of the 1999 Wilmington-New Hanover County Comprehensive Plan. The buffer zones are intended to promote the comprehensive plan goals of high water quality in the creeks and sounds, to protect the public health, and to ensure the protection of the natural resources of New Hanover County.
2. A properly vegetated buffer is essential to filter and biologically process nutrient rich runoff, animal wastes, and sediment before it enters coastal creeks, canals, and rivers. Buffers also function to moderate water temperatures, maintain the desired dissolved oxygen levels in the water, and stabilize the soils immediately adjoining the stream. In urban environments, the function of a buffer is especially critical to the balance of the plant and animal life in fresh and saltwater creeks. Buffers are most effective when they contain native and naturalized plants appropriate in size, adaptability (salt tolerance, wind tolerance, etc.) and hardiness for the area. Plants requiring intensive or routine maintenance should be avoided in buffer areas.

B. Applicability

The development and improvement of property, including the subdivision of land, shall be subject to the performance controls in this section (5.7.4) if any the following conservation resources are associated with the parcel of record for which the development and improvement are proposed:

1. Salt marsh;
2. Brackish marsh;
3. Freshwater marsh; and
4. Primary nursery area.

C. Buffer Standards

1. Buffers shall extend 35 feet measured horizontally from the edge of the conservation resource and on a line perpendicular to and landward of the conservation resource.
2. The plant material in the buffer zone must be either retained in a natural, minimally disturbed condition, or properly managed in accordance with

the management standards presented in subsection 5 below. In cases where vegetation does not exist within the buffer, the County shall require restoration efforts which include, but are not limited to, replanting of the buffer zone with plant species as recommended in the "Reference Lists and Publications for Guidance in the Selection of Vegetated Buffer Plants".

3. Development activities within the buffer are limited to water dependent structures, except as otherwise provided in subsections 4 through 6 below, and Section 5.7.3.D, Improvements. Examples of water dependent structures include docks, piers, boat ramps, shoreline stabilization, navigation markers and access channels. In order to maintain the functional value of the buffer, excavation, grading, filing, or ditching is not permitted except as otherwise provided herein.
4. Passive public recreational facilities such as pervious trails and pathways, where owned by public entities or homeowners associations, may be permitted within the buffer.
5. In order to achieve the County goals to preserve, protect and restore water quality and natural resources, the buffer zone shall be vegetated and left in a natural, undisturbed condition, or managed in accordance with the intent of these goals. Management activities compatible with the intent of these goals include, but are not limited to the following:

a. Shoreline Access Paths

Pathways which provide access to the shoreline are permissible provided they are a maximum average of six feet in width and follow a path that minimizes erosion within the buffer zone. Pathways may be vegetated with grasses and mowed, or may be surfaces such as crushed stone, shell, or mulch. Elevated wooden walkways and stairs up to six feet in width may also be used, as long as there is spacing between boards and elevation of the walkway to provide for light penetration and rain water to drip through to allow for continued vegetation growth.

b. View Corridor

Selective tree removal, thinning, and pruning of natural vegetation within the buffer zone will be allowed to provide for site lines and vistas of the shoreline. Minimal alteration of the natural vegetation is preferred.

c. Safety and Welfare

Selective tree removal, thinning, and pruning of natural vegetation within the buffer zone will be allowed at the discretion of the landowner for safety and welfare concerns (e.g. removal of damaged tree in close proximity to a dwelling).

d. Shoreline Erosion Control

For necessary shoreline erosion control projects, trees and woody vegetation may be removed and the erosion control measure

employed in a manner which is consistent with the purpose and intent of this section. Areas cleared for erosion control measures may be required to be re-vegetated with plant species as recommended in the "Reference Lists and Publications for Guidance in the Selection of Vegetated Buffer Plants".

e. Habitat and Species Management

Management of natural vegetation within the buffer zone to enhance wildlife habitat, and control nuisance and non-native species may be allowed.

6. Buffers may be encroached by public roads, bridges, and utilities where no practical alternative exists to avoid encroachment. These structures should be designed consistent with the purpose and intent of this section.

Section 5.8. Open Space Requirements

[11-16-2020]

5.8.1. APPLICABILITY

A. General

Unless exempted in accordance with subsection B below, all new residential and mixed-use development shall comply with the standards in this section.

B. Exemptions

The following development is exempt from the standards in this section:

1. Single-family and two-family dwellings and mobile homes on individual lots of record or that are created as part of a minor or exempt subdivision.
2. Development where the total minimum open space set-aside required in accordance with this section, including all phases of development, would be 10,000 square feet or less and cannot be combined with designated open space areas, conservation areas, or parks located on adjacent property.

5.8.2. OPEN SPACE SET-ASIDE STANDARDS

Except in the EDZD district, all development subject to the standards in this section shall provide the following percent of gross site area as open space set-aside:

A. Residential Uses:

1. Conventional Subdivision: 10 percent
2. Performance Residential Project: 20 percent

B. Mixed-Use Developments: 15 percent




C. Multi-family Developments: 20 percent *[05-03-2021]*

5.8.3. AREAS COUNTED TOWARDS OPEN SPACE SET-ASIDE STANDARDS

A. General

The features and areas identified as counting towards open space set-asides in Table 5.8.4: Open Space Set-Aside Features, shall be credited towards compliance with the amount of open space set-aside requirements outlined in Section 5.8.2, Open Space Set-Aside Standards.

Table 5.8.4: Open Space Set-Aside Features

Areas Counted as Common Open Space Set-Asides	Description	Design and Maintenance Requirements
Natural Features		
	<p>Lakes, rivers, streams, ponds, wetlands, other riparian areas, flood hazard areas, natural vegetation, and wildlife habitat areas (see Section 5.7, Conservation Resources; Section 5.3, Tree Retention; and Article 9:, Flood Damage Prevention)</p>	<ul style="list-style-type: none"> • Preservation of any existing natural features and flood hazard areas shall have highest priority for locating open space set-asides • Maintenance is limited to the minimum removal and avoidance of hazards, nuisances, and unhealthy conditions • Preservation of existing stands of long leaf pine or old growth forest as determined by a certified arborist will count as double the acreage for purposes of meeting the open space requirements in 5.8.2, Open Space Set-Aside Standards
Passive Recreation (Formal Plantings and Gardens)		
	<p>Formally planned and regularly maintained open areas that provide passive recreation opportunities, including arranged plantings, gardens, community gardens, green roofs, gazebos, and similar structures</p>	<ul style="list-style-type: none"> • Formal plantings and gardens shall have at least one direct access to a building or to a street, bikeway, or walkway accessible to the development's occupants and users
Required Landscape Areas		
	<p>All areas occupied by required landscape areas, tree protection areas, vegetative screening, and water quality buffers, except landscape areas within parking lots</p>	<ul style="list-style-type: none"> • See Section 5.4, Landscaping and Buffering

Stormwater Management Areas Treated as Site Amenities



The land area occupied by stormwater management facilities (including retention and detention ponds and other bioretention devices).

- Qualifying stormwater management facilities should be designed as much as practicable to support passive recreation uses by including gentle slopes (less than 3:1) and vegetative landscaping and should be accessible to the development's occupants.

Access Easements with Paths or Trails



Access easements that include paths or trails that are available for passive recreational activities such as walking, running, and biking

- Such access easements shall include at least one improved access from a street, sidewalk, or trail that includes signage designating the access point

Active Recreational Areas



Land occupied by areas and facilities used for active recreational purposes, such as ballfields, playgrounds, tennis courts, pools, jogging trails, and community buildings and clubhouses, and land dedicated for parks.

- Land shall be contiguous unless used to link or continue an existing or planned open space resource
- Areas shall have at least one direct access to a building or to a street, bikeway, or walkway accessible to the public or the development's occupants and users


Community Water Access



Piers, boardwalks, and/or land area associated with approved community boating facilities.

- All qualifying access areas shall be available to all residents of the development for use.

Squares, Forecourts, and Plazas

	<p>Open areas immediately in front of a building or framed by buildings or streets that provide gathering places, opportunities for outdoor dining, etc.</p>	<ul style="list-style-type: none"> • A square, forecourt, or plaza shall be at least 200 square feet, but no more than one acre, in area. • A square, forecourt, or plaza shall have at least one direct access to a principal building, or to a street, bikeway, or walkway accessible to the public or the development's occupants and users. • Surrounding principal buildings shall be oriented toward the square, forecourt, or plaza
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B. Not Counted as Open Space

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

1. Private yards and all areas within private residential lots;
2. Street rights-of-way or private access easements, including sidewalks located within those rights-of-way or easements;
3. Open parking areas and driveways;
4. Land covered by structures unless designated above in Table 5.8.4;
5. Designated outdoor storage areas;
6. Stormwater conveyance features (e.g., swales and drainage ditches) not incorporated into natural feature areas, landscaping, or passive recreation areas;
7. Parking lot interior landscaping.

C. Access

The developer shall not place age, religious, sex, or economic restrictions (other than maintenance assessments) upon lot or unit owners for the use of the open space. Land which is restricted in any way for the use, benefit, or enjoyment of a select group within the development shall not qualify as open space.

5.8.5. DESIGN STANDARDS

A. Location

Open space set-asides shall be located so they are readily accessible by occupants and users of the development. In residential subdivisions, open space set-asides shall be located within one-half mile of all residential lots, to the maximum extent practicable.

B. Accessibility

All lots or units created within the development shall have access to all open space and recreational facilities, as provided, by means of dedicated streets or walkways

within the development or by the fact of physical contiguity to other public lands in common ownership of all residents.

C. Configuration

1. Open space set-asides shall be integrated and contiguous, unless a different configuration is needed to continue an existing trail or accommodate preservation of natural features.
2. If the development site is adjacent to existing or planned public trails, parks, or other public open space area, the open space set-asides shall, to the maximum extent practicable, be located to adjoin, extend, and enlarge the trail, park, or other public open space area (see Figure 5.8.5.C: Example Open Space Set-Aside Configuration).
3. Pedestrian access to open space set-asides intended for recreation shall be provided from sidewalks or other pedestrianways within the development.

Figure 5.8.5.C: Example Open Space Set-Aside Configuration



D. Permitted Development within Open Space Set-Asides

Development within an open space set-aside shall be in accordance with the purposes and description of the type(s) of open space set-aside. Where appropriate, such development may include, but is not limited to, walking, jogging, and biking paths or trails; benches or other seating areas; meeting areas; tables, shelters, grills, and other picnic facilities; docks and other facilities for fishing; environmental education guides and exhibits; gazebos and other decorative structures; fountains or other water features; play structures for children; gardens or seasonal planting areas; pools; athletic fields and courts; and associated clubhouses.

E. Flexibility in Administration Authorized

1. The decision-making body is authorized to permit minor deviations from amount, size, location, and nature of open space set-aside standards whenever it is determined that: (i) the objectives underlying these standards can be met without strict adherence to them; and (ii) because of peculiarities in the developer's tract of land or the facilities proposed, it would be unreasonable to require strict adherence to these standards.

2. Whenever the decision-making body authorizes some deviation from the standards set forth in this section, the official record of action taken on the development application shall contain a statement of the reasons for allowing the deviation. *[05-03-2021]*

5.8.6. OWNERSHIP, MANAGEMENT, AND MAINTENANCE

A. General

Open space set-asides shall be managed and maintained as permanent open space through one or more of the following options:

1. Retention of open space set aside areas by the developer;
2. Conveyance of open space set-aside areas to a property owners' or homeowners' association established in accordance with the requirements of Section 6.3.4, Property Owners' Association (POA), that holds the land in common ownership and will be responsible for managing and maintain the land for its intended open space purposes.
3. Conveyance of open space set-aside areas to a third party beneficiary such as an environmental or civic organization that is organized for, capable of, and willing to accept responsibility for managing and maintain the land for its intended open space purposes in perpetuity;
4. Transfer to the County, for use as open space or other recreation area, provided the County consents to the transfer; or
5. Establishment of easements on those parts of individually-owned lots including open space set-aside areas that require the areas to be managed consistent with the land's intended open space purposes and prohibit any inconsistent future development, in perpetuity.

B. Responsibility

Responsibility for managing and maintaining open space set-asides rests with the owner of the land of the open space set-asides. Failure to maintain open space set-asides in accordance with this section and the approval or permit shall be a violation of this Ordinance. *[05-03-2021]*

5.8.7. PAYMENTS IN-LIEU OF DEDICATION

[05-03-2021]

- A. As part of a conditional rezoning, master development plan, special use permit, or major residential subdivision consideration, the decision-making body may authorize a payment in-lieu of dedication for all or a portion of the required open space when such is determined to be in the best interest of the citizens of the areas to be served. Criteria to be used in this determination shall include:
 1. The value the amount of land required to be retained as open space would provide to residents or the surrounding community;
 2. Any limits the shape, topography, or unique site constraints would place on the usability or community benefit of the open space;
 3. The impact of insurance and maintenance costs on the affordability of proposed residential units; and

4. The existing recreation and open space available for residents of the proposed development.
 - B. If the decision-making body authorizes the payment in-lieu of dedication, the amount of such payment shall be the product of the number of acres to be dedicated and the average fair market value of the land being subdivided at the time of the submission of the application. The fair market value of the land shall be determined based on the value of the land for property tax purposes and other relevant information.
 - C. All monies received by the County in accordance with this section shall only be in accordance with the provisions of NCGS 160D, Article 13, Part I. Open Space Acquisition to benefit the general area (northern unincorporated New Hanover County or southern unincorporated New Hanover County) where the proposed project is located.
 - D. If a payment in-lieu of dedication is authorized, such payment shall be made before final zoning compliance approval of single-property development or before the final plat approval of a subdivision. If a subdivision is developed in phases, a payment relating to each phase must be made prior to the recording of a final plat for each phase.

Section 5.9. Fire Hydrants

The construction or expansion of any commercial, office, institutional, or industrial project resulting in at least 25,000 square feet of floor space shall include adequate fire protection through the provision of at least one fire hydrant, provided the project has a water system meeting state requirements (see Section 2101 Title 10 - Chapter 10D N.C.A.C.) for fire hydrants. These hydrants shall be connected with the water system serving the project and shall be constructed to specifications established by the County Fire Marshall based on NFPA standards.

Section 5.10. Airport Height Restriction

5.10.1. AUTHORITY

This section is adopted pursuant to the authority conferred by G.S. 63-30--63-37.

5.10.2. FINDINGS

- A.** It is hereby found that an obstruction has the potential for endangering the lives and property of users of the Wilmington International Airport, and property or occupants of land in its vicinity; that an obstruction may affect existing and future instrument approach minimums of the Wilmington International Airport; and that an obstruction may reduce the size of areas available for landing, takeoff, and maneuvering of aircraft, thus tending to destroy or impair the utility of the Wilmington International Airport and the public investment therein. Accordingly, it is declared:
1. That the creation or establishment of an obstruction has the potential of being a public nuisance and may injure the region served by the Wilmington International Airport;
 2. That it is necessary in the interest of public health, public safety, and general welfare that the creation or establishment of obstructions that are a hazard to air navigation be prevented; and
 3. That the prevention of these obstructions should be accomplished, to the extent legally possible, by the exercise of authority invested in the County.
- B.** It is further declared that the prevention of the creation or establishment of hazards to air navigation; the elimination, removal, alteration, or mitigation, of hazards to air navigation; or the marking and lighting of obstructions are public purposes for which a political subdivisions may raise and expend public funds and acquire land or interests in land.

5.10.3. JURISDICTION

Pursuant to G.S. 63-31(d), New Hanover County exercises its statutory authority as owner of the Wilmington International Airport, and in order to protect the approaches of said airport, the jurisdiction of this section is extended to all areas depicted on the most recent officially adopted Wilmington International Airport Height Restriction Map, including areas within the City of Wilmington, Pender County, and Brunswick County. *[05-03-2021]*

5.10.4. NONCONFORMING USES, STRUCTURES, AND TREES

- A.** The regulations prescribed by this section (5.10) shall not be construed to require the removal, lowering, or other changes or alteration of any structure or tree not conforming to the regulations on July 7, 2003, or otherwise interfere with the continuance of any nonconforming use. Nothing contained herein shall require any change in the construction, alteration, or intended use of any structure, the construction or alteration of which was begun prior to July 7, 2003, and is diligently prosecuted.
- B.** Notwithstanding the subsection A above, the owner of any existing nonconforming structure or tree is hereby required to permit the installation, operation, and maintenance thereon of such markers and lights as shall be deemed necessary by

the airport authority to indicate to the operators of aircraft in the vicinity of the airport, the presence of such airport obstructions. Such markers and lights shall be installed, operated, and maintained at the expense of the Board of Commissioners of New Hanover County, State of North Carolina, or the Federal Aviation Administration.

- C. Notwithstanding any preceding provision of this section, if, by a determination of the FAA, the encroachment of any tree into regulated airspace is such that providing markers and lights is insufficient to protect the life and property of the flying public, New Hanover County shall institute steps to have such trees cut and removed at the expense of New Hanover County if requested in writing by the Airport Authority. If unsuccessful in obtaining the cooperation of the parties involved, the Airport Authority shall petition the County to institute the appropriate legal action as reasonably necessary, to insure the safety of the flying public in airspace regulated by this Ordinance.
- D. No permit shall be granted that would permit a nonconforming use, structure, or tree to become a greater hazard to air navigation than it was on the effective date of this ordinance or any amendments thereto or than it is when the application for a permit is made.
- E. Whenever the New Hanover County Building Inspector determines that a nonconforming tree or structure has been abandoned or more than 80 percent damaged, physically deteriorated, or decayed, no permit shall be granted that would allow such structure or tree to exceed the applicable height limit or otherwise deviate from the zoning regulations.

5.10.5. VARIANCES

- A. Applications for variances from the provisions of this section (5.10), shall be submitted and reviewed in accordance with Section 10.3.11, Variance – Zoning and Subdivision.
- B. Any variance granted in accordance with subsection A above, may be so conditioned as to require the owner of the structure or tree in question to install, operate, and maintain, at the owner's expense, such markings and lights as may be deemed advisable to effectuate the purpose of this Ordinance and reasonable in the circumstances. If deemed proper by the Board of Adjustment, this condition may be modified to require the owner to permit the New Hanover County Airport Authority, at its own expense, to install, operate, and maintain the necessary markings and lights.

5.10.6. AIRPORT ZONES

In order to ensure compliance with the provisions of this section, there are hereby created and established certain zones which include all of the land lying beneath the approach surfaces, transitional surfaces, horizontal surfaces, and conical surfaces as they apply to the Wilmington International Airport. Such zones are shown on the most recent officially adopted Wilmington International Airport Height Restriction Map. The map referred to in this section is on file in the office of the county clerk. An area located in more than one of the following zones is considered to be only in the zone with the more restrictive height limitation. The various zones are hereby established and defined as follows: *[05-03-2021]*

- A. Precision Instrument Runway Approach Zone - The inner edge of this approach zone coincides with the width of the primary surface and is 1,000 feet wide. The approach zone expands outward uniformly to width of 16,000 feet at a horizontal distance of 50,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.
- B. Transitional Zones - The transitional zones are the areas beneath the transitional surfaces.
- C. Horizontal Zone - The horizontal zone is established by swinging arcs of 10,000 feet radii from the center of each end of the primary surface of each runway and connecting the adjacent arcs by drawing lines tangent to those arcs. The horizontal zone does not include the approach and transitional zones.
- D. Conical Zone - The conical zone is established as the area that commences at the periphery of the horizontal zone and extends outward therefrom a horizontal distance of 4,000 feet.

5.10.7. AIRPORT ZONE HEIGHT LIMITS

A. General

1. Except as otherwise provided in this section (5.10), no structure shall be erected, altered or maintained, and no tree shall be allowed to grow in any zone created by this Ordinance to a height in excess of the applicable height limit herein established for such zone. Such applicable height limitations are hereby established for each of the zones in question in accordance with subsections B through E below.
2. Except as defined in Section 5.10.8, Use Restrictions, nothing in this section (5.10) shall be construed as prohibiting the construction or maintenance of any structure, or growth of any tree, to a height of 50 feet above the surface of the land. Such potential obstructions are to be resolved through the purchase of property in easement, or in fee simple. In addition to the height restrictions imposed by the imaginary surfaces, no structure or natural growth shall be erected, altered, allowed to grow, or be maintained within the areas defined in Section IV at such height as would result in the increase of any minimum flight altitude, vectoring altitude, ceiling, minimum descent altitude, or landing or take-off visibility minimum for any category of aircraft as established by the Federal Aviation Administration (FAA), unless approved by the New Hanover County Board of Commissioners or staff.

B. Precision Instrument Runway Approach Zone

Slopes 50 feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 10,000 feet along the extended runway centerline; thence slopes upward 40 feet horizontally for each foot vertically to an additional horizontal distance of 40,000 feet along the extended runway centerline. This applies to existing precision instrument Runway 35 and to existing Runways 6, 24, and 17 for a possible future precision instrument status.

Runway	End Length	Inner Width	Outer Width	Slope	
				(0 - 10,000')	(10,000' – 40,000')
Runway 6 Approach	50,000	1,000	16,000	50:1	40:1
Runway 24 Approach	50,000	1,000	16,000	50:1	40:1
Runway 17 Approach	50,000	1,000	16,000	50:1	40:1
Runway 35 Approach	50,000	1,000	16,000	50:1	40:1

C. Transitional Zones

Slope seven feet outward for each foot upward beginning at the sides of and at the same elevation as the primary surface and the approach surface, and extending to a height of 150 feet above the airport elevation which is 182 feet above mean sea level. Where the precision instrument runway approach zone projects beyond the conical zone, there are established height limits sloping seven feet outward for each foot upward beginning at the sides of and at the same elevation as the approach surface, and extending a horizontal distance of 5,000 feet measured at 90 degree angles to the extended runway centerline. In addition to the foregoing, there are established height limits sloping seven feet outward for each foot upward beginning at the sides of and at the same elevation as the approach surface, and extending to where they intersect the conical surface.

D. Horizontal Zone

Established at 150 feet above the airport elevation or at a height of 182 feet above mean sea level.

E. Conical Zone

Slopes 20 feet outward for each foot upward beginning at the periphery of the horizontal zone and at 150 feet above the airport elevation and extending to a height of 350 feet above the airport elevation.

5.10.8. USE RESTRICTIONS

Notwithstanding any other provisions of this section (5.10), no use may be made of land or water within any zone established by this section in such a manner as to:

- A. Create electrical interference with navigational signals or radio communication between the airport and aircraft;
- B. Make it difficult for flyers to distinguish between airport lights and others;
- C. Result in glare in the eyes of pilots using the airport;
- D. Impair visibility in the vicinity of the airport;
- E. Create bird strike hazards; or
- F. Otherwise in any way endanger or interfere with the landing, takeoff, or maneuvering of aircraft intending to use the airport.