UNIFIED DEVELOPMENT ORDINANCE

Greenville County, South Carolina



Article 5: Parking & Loading

PUBLIC REVIEW DRAFT | NOVEMBER 15, 2022

CONTENTS

ARTICLE 5: PARKING & LOADING	3
5.1 GENERAL PROVISIONS 5.1.1 PURPOSE	
5.1.2 APPLICABILITY	3
5.1.3 LOCATION OF REQUIRED PARKING SPACES	4
5.1.4 PARKING & STORAGE OF COMMERCIAL VEHICLES ON RESIDENTIAL LOTS	
5.2 PARKING RATIOS	5
5.2.1 USES WITH UNSPECIFIED PARKING RATIOS	5
5.2.2 MINIMUM PARKING	ε
5.2.3 MAXIMUM PARKING	12
5.2.4 INCENTIVES FOR PARKING REDUCTIONS	12
5.2.5 ADJUSTMENTS TO MINIMUM PARKING	14
5.2.6 CAMPUS PLAN	15
5.2.7 ELECTRIC VEHICLE INFRASTRUCTURE	16
5.3 OFF-STREET PARKING AREA DESIGN	16
5.3.1 APPLICABILITY	16
5.3.2 PARKING LOT LAYOUT & DESIGN	17
5.4 INTERIOR PARKING LOT LANDSCAPING	20
5.4.1 APPLICABILITY	
5.4.2 INTERIOR PLANTINGS REQUIRED	20
5.4.3 PLANTING MATERIAL SPECIFICATIONS	21
5.4.4 OWNER RESPONSIBILITIES & MAINTENANCE	22
5.5 VEHICLE QUEUING	22
5.5.1 PURPOSE	
5.5.2 APPLICABILITY	22
5.5.3 QUEUING LANE LOCATION & DESIGN	22
5.5.4 QUEUING LANE DIMENSIONS	23
5.6 OFF-STREET LOADING	24
5.6.1 PURPOSE	24
5.6.2 APPLICABILITY	24
5.6.3 MINIMUM NUMBER OF OFF-STREET LOADING BERTHS REQUIRED	24
5.6.4 DESIGN OF OFE STREET LOADING AREAS	25

ARTICLE 5: PARKING & LOADING

5.1 GENERAL PROVISIONS

5.1.1 PURPOSE

The intent of this Article is to establish minimum parking and loading standards. This Article offers flexible methods to meet demands of parking and loading. These standards seek to enhance walkability and promote the use of multimodal transportation options, mitigate excessive paved surfaces, and encourage sustainable development practices.

5.1.2 APPLICABILITY

- A. **Zoned Areas**. This Article applies throughout the zoned areas of unincorporated Greenville County.
- B. **Un-Zoned Areas**. This Article does not apply to un-zoned areas of the County, except where specified in Section 4.2: *Campgrounds*, Section 4.4: *Manufactured Home Parks*, Section 4.6: *Recreational Vehicle Parks*, and Section 11.14: *Traditional Neighborhood Development*.
- C. New Development, Expansion of Existing Structure, and Change of Use.¹
 - 1. Permanent off-street parking space in the amount specified by this Article shall be provided:
 - (a) At the time of the erection of any building;
 - (b) At the time any principal building is enlarged or increased in capacity by adding dwelling units, guest rooms, seats, or floor area; and
 - (c) Before conversion from one type of use occupancy to another.
 - 2. Such parking space may be provided in a parking garage or properly graded and improved surface parking lot.
 - 3. All portions of the required space that are paved shall be marked in accordance with the standards contained herein. Lines shall be visibly marked with paint.

¹ Carries forward a portion of the first paragraph of ZO Section 12:2 Off-Street Parking.

5.1.3 LOCATION OF REQUIRED PARKING SPACES

- A. **Generally.** Required parking spaces shall be located on the same lot on which the principal use is located, except as otherwise provided in this Article.
- B. **Parking Area to the Rear or Side of Buildings**. Required parking spaces shall be located to the rear or side, and not between the front of the building and the street, of the principal structure in the following districts:
 - 1. Neighborhood Commercial District (C-N); and
 - 2. Rural Village District (RU-V).

C. Remote Parking Spaces.²

- 1. If the off-street parking spaces required by this Article cannot be reasonably provided on the same lot on which the principal use is located, such space may be provided on any land within 400 feet of the principal use.
- 2. Such space shall be deemed required space associated with the permitted use and shall not hereafter be reduced or encroached upon in any manner.
- 3. It is further provided that the Zoning Administrator may require a plat, deed, or other documentation necessary to show that remote parking space is controlled by and available to the applicant prior to the granting of a Certificate of Occupancy.

5.1.4 PARKING & STORAGE OF COMMERCIAL VEHICLES ON RESIDENTIAL LOTS³

- A. Not more than one commercial vehicle may be parked outside of an enclosed building on a residential lot on a regular basis.
- B. Vehicles classified as Class 1, 2, 3 and 5 vehicles, as defined and classified by the Federal Highway Administration, are permitted on a residential lot.⁴
- C. Commercial vehicles used for hauling explosives, gasoline, or liquefied petroleum products are prohibited.

² Carries forward ZO Section 12:2.3 *Remote Parking Space*.

³ Carries forward ZO Section 9:5.2 *Commercial Vehicles* (Parking and Storage of Vehicles). ZO Section 9:5.1 *Travel or Camping Trailers* is carried forward in Article 4: *Use Regulations for Zoned and Un-Zoned Areas*.

⁴ This Paragraph modernizes the current standard, which limits commercial vehicles parked on residential lots to those with a maximum of "2 tons rated capacity." According to the <u>Federal Highway Administration</u>, Class 1 vehicles include motorcycles; Class 2 includes passenger vehicles; Class 3 includes four-tire, single-unit vehicles; and Class 5 includes two-axle, six-tire, single unit vehicles. Class 4, proposed to be prohibited from parking on residential lots, includes busses.

5.2 PARKING RATIOS

5.2.1 USES WITH UNSPECIFIED PARKING RATIOS

- A. Although this Section does not specify a minimum number of parking spaces for the uses listed in Table 5.2.1-1: Land Uses With Unspecified Parking Ratios, the applicant shall provide sufficient parking to accommodate the use. Sufficient parking accommodates the maximum number of employees on a site at a given time and the number and frequency of customer or client visits.
- B. The uses listed in Table 5.2.1-1: *Land Uses With Unspecified Parking Ratios* are not subject to Subsection 5.2.3: *Maximum Parking*.

Table 5.2.1-1: Land Uses With Unspecified Parking Ratios
Land Use
Agricultural/Horticultural Production
Agricultural Processing, Storage, and Support Services
Amusement Parks, Theme Parks, Fairgrounds
Animal Production Facilities
Cemeteries
Equestrian Centers
Equine Stables
Farm Animals, Livestock, Barns, and Stables
Forestry and Logging Activities
Landscape Businesses
Nursing Care in Home
Outdoor Storage
Parking Facilities
Quarries
Recreation Areas, Neighborhood
Runways
Truck Terminals
Utilities, including Communication Towers; Public Utility Stations, Buildings, and Uses; Sewage Pump Stations;

Sewage Treatment Facilities; and Small Wireless Facilities

Table 5.2.1-1: Land Uses With Unspecified Parking Ratios

Land Use

Vehicle Storage Facilities, including Automobile, Boat, Motorcycle, and RV Storage

Waste Management Facilities, including Commercial Incinerators, Composting Facilities, Landfills, Recycling Collection and Processing Centers

5.2.2 MINIMUM PARKING⁵

A. **Purpose**. The purpose of this Subsection is to provide minimum ratios for on-site parking to accommodate traffic generated by the range of uses that might locate at a site over time. Sites within proximity to transit or in areas with well-developed street connectivity and established pedestrian facilities may have less demand for parking than areas that are not near centers and are much more dependent on vehicles to move long distances.

B. **Minimum Parking Ratios**.

- Generally.
 - (a) The minimum parking ratios established in Table 5.2.2-1: *Minimum Number of Parking Spaces Required by Land Use* apply to all land uses, except as provided in Subsection 5.2.1: *Uses With Unspecified Parking Ratios*, Paragraph 5.2.2.B.2: *Campus Uses*, and Paragraph 5.2.2.B.3: *Exceptions to Minimum Parking Ratios*.
 - (b) Except for residential uses, all uses must provide parking spaces for fleet and assembly area/use parking (if applicable for the use) as specified in Table 5.2.2-1: Minimum Number of Parking Spaces Required by Land Use under the subheading "Generally," in addition to the minimum parking required for the use.
 - (c) Uses that primarily involve assembly, such as special event facilities, religious institutions, arenas, stadiums, auditoriums, and concert halls, do not have separate parking ratios and are subject to the assembly area/use parking ratio specified in Table 5.2.2-1: *Minimum Number of Parking Spaces Required by Land Use* under the subheading "Generally."
- 2. Campus Uses. Uses developed in a campus-like setting, such as hospitals, universities, and religious institutions, are instead subject to the provisions in Section 5.2.6: Campus Plan.

⁵ This Section simplifies existing Table 12.1, significantly augments the listed land uses, and updates/modernizes existing ratios as needed.

- 3. Exceptions to Minimum Parking Ratios. The following provisions promote housing attainability, protect historical resources, and encourage sustainable development and longevity of existing building stock within Greenville County.
 - (a) Affordable Housing Exception. The minimum number of required parking spaces may be reduced to zero for residential units deed restricted as affordable housing pursuant to Subsection 2.3.6.E: Affordable Housing Incentives (Mixed Residential Districts).
 - (b) Historical Sites Exception. The minimum number of required parking spaces may be reduced to zero on sites located within an Historic Preservation Overlay, listed on the National Register of Historic Places, or designated as historic by the Greenville County Historic Preservation Commission. Historical sites that are tourist generators must sufficiently accommodate visitors without causing harm to the protected site.
 - (c) Centers. For sites located within the RU-V and C-N Districts, the first 1,500 square feet of commercial use is exempt from the minimum parking requirements.
- C. **On-Street Parking**. Improved on-street parking along the lot frontage may apply toward the minimum parking requirements for non-residential uses, if the right-of-way meets the minimum width required by **Article 12**: *Access & Connectivity*. ⁶
- D. Calculation of Required Number of Off-Street Parking Spaces.
 - In calculating the number of parking spaces required for any building, structure, development, or change in use, the total parking requirement is the sum of the individual parking ratios specified in Table 5.2.2-1: Minimum Number of Parking Spaces Required by Land Use for each category of use in the building, structure, or development.
 - 2. If the final calculation of the minimum number of required parking spaces includes a fraction, the number of required parking spaces is rounded up to the nearest whole number regardless of the fraction.
 - 3. If the final calculation of the maximum number of required parking spaces includes a fraction, the number of required parking spaces is rounded down to the nearest whole number regardless of the fraction.
- E. **Uses Not Listed**. Uses not listed in Table 5.2.2-1: *Minimum Number of Parking Spaces Required* by Land Use shall be the same as for the listed use deemed most similar to the proposed use by

⁶ This provision is new. Article 12: *Access & Connectivity* requires a wider right-of-way when on-street parking is incorporated into new streets.

the Zoning Administrator. The Zoning Administrator may consider documentation from the applicant of parking demand generation for the particular use.

Table 5.2.2-1: Minimum Number of Parking Spaces Required by Land Use			
Land Use	Number of Parking Spaces Required (min)		
	ENERALLY		
Except for residential uses, all uses must provide parking spaces for fleet and assembly are parking (if applicable for the use) as specified under this subheading, in addition to the minim parking ratios under the subheadings that follow below.			
Fleet Vehicles	1 per fleet vehicle		
Assembly Areas and Uses (with fixed seating), unless otherwise listed ⁷	1 per 4 seats ¹		
Assembly Areas and Uses (without fixed seating), unless otherwise listed 8	1 per 30 sf of net assembly area		
ACC	ESSORY USES		
Accessory Dwelling Unit	1 per dwelling unit		
Agritourism	1 per each 4 customers/participants the use is designed to accommodate		
Caretaker/Watchman's Quarters	1 per dwelling unit		
Farm Labor Dwellings	0.5 per bedroom		
Farmstands (permanent)	1 per 250 sf of retail floor area but none required for stands less than 100 sf		
Home Occupations	See Section 3.4: Accessory Uses		
All Other Accessory Uses	None		
ACCOMMOD	DATIONS & LODGING		
Bed and Breakfast Establishments, Hotels, Motels ⁹	1 per each room to be rented		
Campgrounds and RV Parks	1 per campsite/RV site, plus 1 visitor space per 10 campsites/RV sites		
AGRICULTU	RE & HORTICULTURE		
Community Garden, Non-Commercial	al 1 per 10,000 sf of outdoor lot area		
Retail Sales of Agricultural Products	1 per 500 sf GFA		
Sales/Service of Agricultural Equipment			
ANIMAL-RELATED USES (NON-FARM)			
Animal Shelters, Kennels, Pet Day Care Facilities, and Pet Grooming, Training, Boarding (indoor) ¹⁰	1 per 1,000 sf GFA		

⁷ Carries forward current ratio for assembly areas (with seating).

⁸ Carries forward current ratio for assembly areas (without seats).

⁹ Carries forward current parking ratio for hotel, motel, or motor court. Proposes to delete the following text: "plus requirements for any other use associated with the establishment, such as offices, restaurants, and assembly uses," since that text is redundant to Section 5.2.1.B.1: *Minimum Parking Ratios; Generally*.

¹⁰ Corresponds with <u>LBCS</u> F2720.

Table 5.2.2-1: Minimum Numbe	r of Parking Spaces Required by Land Use	
Land Use	Number of Parking Spaces Required (min)	
Veterinary Hospitals and Veterinary Offices and Clinics	1 per 300 sf GFA	
ARTS, ENTERTA	INMENT, & RECREATION	
Adult Entertainment Establishments	1 per 250 sf GFA for the first 2,500 sf and 1 per 500 sf	
(Sexually Oriented Businesses)	thereafter	
Art Galleries, Artisan Workshops or Studios, Museums, Cultural Facilities	1 per studio/workshop space or 1 per practitioner occupying the site on a full-time basis; plus 1 per 1,000 sf of GFA of exhibit/gallery space	
Athletic Facilities, Fishing Lakes& Ponds, Go- Kart Facilities (Outdoor) Recreation & Amusements (Outdoor) ¹¹	Generally, 1 per each 2,000 sf of site area, unless otherwise listed below; 25 per football field or basketball court; 20 per diamond; 1 for each hole of miniature golf; and 1 per 100 sf of water surface area for pools	
Golf Courses, Driving Ranges ¹²	4 for each green, plus 1 for each driving tee on a driving range, plus requirements for any other associated use (such as retail, restaurant, or office)	
Indoor Recreation Facilities, Fitness Centers ¹³	1 per 200 sf GFA	
Marinas	1 for each boat slip	
Motor Sports Facilities, Racetracks	See <mark>Subsection 3.3.25</mark> : <i>Motor Sports Facilities, Racetracks</i>	
Shooting Ranges	1 per shooting lane	
Theaters, Drive-In	1 per each motor vehicle served	
BUSINESS, PROFESSIO	NAL, SCIENTIFIC, & TECHNICAL	
General and Professional Office (non- medical and non-government), unless otherwise listed ¹⁴	ss 3 per 1,000 sf GFA of building or tenant space	
Banks, Financial Institutions	1 per 300 sf GFA; plus 2 per walk-up ATM	
Business Incubator Centers	1 per 1,000 sf GFA of building or tenant space	
Data Centers, Communications & Information ¹⁵	1 per 500 sf GFA of building or tenant space for the first 3,000 sf and 1 per 2,500 sf GFA of building or tenant space thereafter	

¹¹ Carries forward current parking ratios for commercial recreation (outdoor), miniature golf, and community recreation area (with swimming pool).

¹² Carries forward current parking ratio for golf courses and driving ranges. Proposes to delete the following text: "plus requirements for any other associated use," since that text is redundant to Section 5.2.1.B.1: *Minimum Parking Ratios; Generally*.

¹³ Carries forward current parking ratio for commercial recreation (indoor).

¹⁴ Carries forward current parking ratio for office and professional building.

¹⁵ Carries forward current parking ratio for warehousing, flex space, and data center uses.

Table 5.2.2-1: Minimum Number of Parking Spaces Required by Land Use			
Land Use	Number of Parking Spaces Required (min)		
EDU	JCATIONAL		
Day Care Centers, Adult/Child ¹⁶	1 per 250 sf GFA		
Schools - Colleges, Universities	1 per 1,000 sf GFA of non-residential academic space		
Schools - High School ¹⁷	7 per classroom		
Schools - Primary, Secondary ¹⁸	1 per classroom		
GOVER	NMENT & CIVIC		
	1 space per 750 sf GFA; or		
Community Centers ¹⁹	Per parking analysis		
	(see Section 3.3.12: Community Centers)		
Emergency Service, Fire, Police, & EMS Facilities	1 per 1,000 sf GFA		
Governmental Facilities and Operations, Libraries, Post Offices,	1 per 300 sf GFA		
HEALTHCARE			
Care Centers, Group Homes	1 per bedroom		
	1 per residential dwelling unit;		
Hospitals and Nursing Care Facilities ²⁰	1 per hospital bed;		
mospitals and Mursing Care racintles	1 per every 3 group care beds;		
	1 per every 5 nursing beds		
Medical Offices & Clinics ²¹	3 per exam room		
HEAVY COMIV	IERCIAL & INDUSTRIAL		
	1 per 500 sf GFA of building or tenant space for the		
Industrial (Service, Light, Heavy) ²²	first 3,000 sf, then 1 per 1,500 sf GFA of building or		
	tenant space thereafter		
	SIDENTIAL		
Residential, unless otherwise listed	1 per bedroom, dorm room, or guest room		
Manufactured Homes, Single Family			
Detached Dwellings, Single-Family Attached	2 per unit		
Dwellings (Townhouses), & Two-Family Dwellings (Duplexes) ²³			
	1 per hadroom er efficiency unit:		
Multi-Family Dwellings, Group Residential Developments ²⁴	1 per bedroom or efficiency unit; 1.5 per 2-bedroom unit;		
Developments	1.5 per 2-bearoom unit;		

¹⁶ Carries forward current parking ratio for adult/child day care center.

¹⁷ Carries forward current parking ratio for high school and expands to include public schools as well as private.

¹⁸ Carries forward current parking ratio for grade, elementary, and middle schools and expands to include public schools as well as private.

¹⁹ County Council adopted text amendments pertaining to community centers on September 20, 2022.

²⁰ Carries forward current parking ratios for hospital/assisted care/nursing facilities.

²¹ Carries forward current parking ratio for office medical or dental.

²² Carries forward current parking ratio for factory, industrial.

²³ Carries forward current parking ratio for single-family detached dwellings, townhouses, and duplexes.

²⁴ Carries forward current parking ratio for multi-family structures or group developments over four units.

Table 5.2.2-1: Minimum Numbe	r of Parking Spaces Required by Land Use
Land Use	Number of Parking Spaces Required (min)
	2 per 3 or more-bedroom unit;
	Visitor parking in a ratio of 10% of the total required
	parking for such development
Triplex Dwellings, Quadplex Dwellings ²⁵	1.5 per unit
RETAIL, SERVI	CE, FOOD & BEVERAGE
Retail, Service, and Food & Beverage Uses, unless otherwise listed ²⁶	3 per 1,000 sf GFA of building or tenant space
Bookstores	1 per 1,000 sf GFA
Restaurants ²⁷	1 per 100 sf GFA
Shopping Centers	5 per 1,000 sf GFA of building or tenant space
TEM	PORARY USES
All Temporary Uses	See Section 3.5: Temporary Uses
TRANSPORTATION,	WAREHOUSING, & STORAGE
Automobile Wrecking Facilities, Junkyards, Salvage Yards, and Scrap Processors	See Section 3.3.6: Automobile Wrecking Facilities, Junkyards, Salvage Yards, and Scrap Processors and Chapter 9, Article IV: Junkyards
Self-Storage Facilities	1 per 20 units, or 5 visitor spaces in the vicinity of leasing office for facilities providing a minimum 20-foot drive aisle width adjacent to all storage unit doors
Wholesaling, Warehousing, Flex Space, and Distribution Uses ²⁸	1 per 500 sf GFA of building or tenant space for the first 3,000 sf, then 1 per 2,500 sf GFA of building or tenant space thereafter
VEH	CLE-RELATED
Automobile Washes (Full Service) ²⁹	15 per wash unit
Automobile Washes (Other Than Full Service)	See Section 5.5: Vehicle Queuing
Gas Stations	1 per 200 sf GFA of retail area, in addition to space provided for vehicles being fueled
Automobile Service Facilities; Vehicle Repair, Service, Trim, or Upholstery Facilities ³⁰	See Section 5.5: Vehicle Queuing

²⁵ Carries forward current parking ratio for multi-family structures not over four units.

²⁶ Carries forward current parking ration for retail sales and group commercial.

²⁷ Modernizes the existing parking ratio for restaurants by basing on building square footage, rather than number of seats (which can change over time) and eliminating the additional parking requirement for "dance floors."

²⁸ Carries forward current parking ratio for warehousing, flex space, and data center uses.

²⁹ Carries forward current ratio for automobile wash (full service). Section 5.5: *Vehicle Queuing* includes requirements for queuing lanes for all types of automobile washes (automatic, full-service, and self-service).

³⁰ Carries forward current ratio for automobile repair/service facility.

Table 5.2.2-1: Minimum Number of Parking Spaces Required by Land Use		
Land Use	Number of Parking Spaces Required (min)	
Vehicle Sales & Rental, including	1 per 300 sf of indoor sales area, plus 1 per 5,000 sf	
Automobiles, Boats, and RVs	of outdoor display area	
WASTE MANAGEMENT		
Recycling Convenience Centers,	2 non containen	
Recycling Trailers	2 per container	
Key: min = minimum required du = dwelling unit sf = square feet GFA = gross floor area		

¹ Linear feet of bench seating per seat shall be determined by and consistent with the Building Code.

5.2.3 MAXIMUM PARKING³¹

- A. **Purpose**. This Subsection is intended to mitigate negative impacts of excessive surface parking areas and promote sustainable development practices.
- B. **Maximum Number of Spaces**. A non-residential use³² shall not provide more than 150% of the minimum required number of parking spaces, unless the parking area above 150% is provided in conjunction with any one or more of the following techniques.
 - 1. Pervious concrete or grass over supporting plastic or concrete grids, bioretention areas, vegetative filter strips, or other low impact development (LID) techniques;
 - Solar canopy;
 - 3. Underground parking facility; or
 - 4. Structured parking.

5.2.4 INCENTIVES FOR PARKING REDUCTIONS

- A. **Purpose.** The following incentives are established to:
 - 1. Mitigate impacts related to surface parking;
 - 2. Encourage practices that help to implement the goals and objectives of the Comprehensive Plan; and

³¹ Sets a "soft" maximum cap on the required number of parking spaces and encourages use of sustainable practices.

³² The current working draft of Article 23: *Definitions & Acronyms* proposes to define "non-residential use" as "any use other than a residential use (e.g., commercial, retail, office, civic, or institutional use)" and "residential use" as "any use that includes only dwelling units and their customary accessory uses, but no other uses."

- 3. Promote sustainability, affordability, multi-modality, and protection of resources.
- B. **Incentives.** The incentives provided in this Section are cumulative up to a maximum 25% reduction in minimum parking requirements. The site plan or building permit application, as applicable, shall demonstrate compliance with all applicable criteria for the parking space reduction.
 - 1. Alternative Transportation Options. To promote reduction in vehicle miles traveled (VMT), an applicant may reduce the minimum number of required parking spaces up to 5% for each of the following programs where the following criteria are met.
 - (a) Car Sharing.
 - (1) The use is an office, industrial, or campus use with more than 20 parking spaces on site.
 - (2) Car-sharing spaces are located closest to the building entrance, but not closer than spaces reserved for ADA-accessible spaces.
 - (3) Signs are posted indicating spaces are reserved for car-share use during regular working hours.
 - (b) Expanded Bicycle Facilities.
 - (1) Showers, lockers, and changing facilities, of a size and at a location deemed appropriate by the Zoning Administrator, are provided and accessible to employees.
 - (2) Bicycle racks are provided within a secure area such as a bicycle rack room or locker.
 - Proximity to High-Frequency Transit. As specified in Subsection 12.6.3: Parking
 Reduction, to promote reduction in VMT, an applicant may reduce the minimum
 number of required parking spaces:
 - (a) By up to 10% if the following criteria are met:
 - (1) The property is located within a 1,320-foot walking distance of an operating transit stop or station providing both shade and seating; and
 - (2) A direct pedestrian pathway is provided from the public sidewalk to the building's main entrance; or
 - (b) By up to 15% if the development provides a new transit stop, in coordination with Greenlink.

- 3. Shuttle to Transit Facility. As specified in Subsection 12.6.3: Parking Reduction, with authorization of the Zoning Administrator, on a legal affidavit approved by the County Attorney and reauthorized on a bi-annual basis, Government & Civic and Business, Professional, Scientific, & Technical uses that provide regularly scheduled shuttle transit to and from a transit facility, such as a park and ride facility, may reduce the number of required off-street parking spaces by up to 5%.
- 4. *Proximity to Trails and Greenways*. To promote reduction in VMT, an applicant may reduce the minimum number of required parking spaces by up to 10% if the following criteria are met:
 - (a) The property has frontage along a trail or greenway, as designated in the Mobility and Thoroughfare Plan or other adopted plan or capital improvement program that identifies planned trail or greenway corridors; and
 - (b) A direct pedestrian pathway or entrance is provided from the trail or greenway to the building's main entrance.
- 5. Tree Preservation. To promote protection of natural resources, minimum parking may be reduced by one parking space for each tree 12 inches in diameter and larger that is preserved up to a maximum of 2 parking spaces or 10% of the total required, whichever is greater.³³

5.2.5 ADJUSTMENTS TO MINIMUM PARKING³⁴

- A. **Purpose.** The minimum off-street parking ratios are intended to encourage development that is economically viable, but are not intended to be so rigid as to require significantly more parking spaces than a particular use demands. Project conditions associated with individual sites may justify the use of alternative parking plans as provided in this Subsection.
- B. Administrative Adjustments.³⁵ In the event that the minimum parking requirements cannot be placed on the site in accordance with these regulations without the demolition of an existing structure or damage of significant trees on the site or in the public right-of-way to accommodate a parking area; or if written documentation that demonstrates fewer spaces than required are needed because of the nature of the business, hours of operation, or availability of adjacent parking, the Zoning Administrator may authorize up to a 25% reduction in the total number of parking spaces required on the site.

³³ This Paragraph may be revised in conjunction with development of the revised tree ordinance.

³⁴ Allows for reductions or increases to the minimum established parking ratios.

³⁵ This Section carries forward the paragraph following Table 12.1 in the current Zoning Ordinance, which allows for limited administrative adjustments to parking ratios.

C. Alternative Parking Plans.

- 1. Certain land uses have unique or variable parking demands that warrant flexibility in the required minimum number of parking spaces. If the administrative adjustment provided in Section 5.2.5.B. does not sufficiently address the needs for a particular use, an applicant may submit an alternative parking plan demonstrating a need for a further parking reduction.
- 2. The alternative parking plan shall be included with the site plan or building permit application, as applicable.
- 3. An applicant may submit an alternative parking plan that:
 - (a) Demonstrates the minimum parking ratio specified in Table 5.2.2-1: *Minimum Number of Parking Spaces Required by Land Use* for a use with unique or variable parking needs is not appropriate for the particular site;
 - (b) Demonstrates the administrative adjustment provided in Section 5.2.5.B. does not sufficiently address the needs for the use;
 - (c) Demonstrates the incentives for parking reductions provided in Section 5.2.4 do not sufficiently address the needs for the use or are not feasible for the particular use or site;
 - (d) Documents the total number of existing off-street parking spaces and the total number of new spaces, as applicable;
 - (e) Identifies the types of activities proposed to occur, along with the anticipated hours of operation and number of attendees for each activity; and
 - (f) Demonstrates the existing and/or proposed parking sufficiently meets the anticipated parking demands of the various activities and does not produce conflicts (e.g., between parking spaces and drop-off lanes); or
 - (g) Proposes an off-site parking plan to meet the needs of the proposed use, in accordance with Paragraph 5.1.3.C: *Remote Parking Spaces*.

5.2.6 CAMPUS PLAN

A. Uses associated with a campus-like setting have a greater degree of variability that make it impractical to assign a single parking ratio. Campus settings such as hospitals, colleges or universities, religious institutions, airports, and passenger terminals, as well as uses associated with emergency services, such as fire, EMS, and police stations might include synergistic variables above and beyond the minimum baseline considerations of this Article that contribute and influence the supply and demand of parking.

B. Factors might include Transportation Demand Management concepts, alternate forms of commuting, valet and tandem parking, or alternative methods of campus transport such as an on-site shuttle or bus. These types of campus settings shall consult with the Traffic Engineer and establish a comprehensive and campus-wide alternative parking plan for approval by the Zoning Administrator.

5.2.7 ELECTRIC VEHICLE INFRASTRUCTURE³⁶

- A. **Purpose**. This Subsection is intended to support electric vehicle readiness and require minimum infrastructure standards for electric vehicle charging needs.
- B. **Multi-Family and Non-Residential Development.** New parking areas for multi-family and non-residential development shall provide the electrical capacity necessary to accommodate hardwire installation of electric vehicle charging stations. The percentage of parking dedicated to electric vehicles shall be provided in the amount according to Table 5.2.7-1: *Minimum Number of Electric Vehicle Charging Stations Required*.

Table 5.2.7-1: Minimum Number of Electric Vehicle Charging Stations Required		
Number of Parking Spaces	Number of Spaces with EV Charging Stations	
0-50	None Required	
Over 50 spaces	10% or 40 stations, whichever is less	

C. Charging Station Requirements. Electric vehicle chargers shall not obstruct vehicular or pedestrian circulation and shall be located either within a parking lot island, mounted to a structure, or in an area protected by bollards, curbs, or other structure.

5.3 OFF-STREET PARKING AREA DESIGN

5.3.1 APPLICABILITY

This Section applies to all off-street parking except off-street parking for detached house dwellings, manufactured homes, , townhouse dwellings on adjoining individual lots, and duplex dwellings.

³⁶ New section added to require minimum baseline for electric vehicles.

5.3.2 PARKING LOT LAYOUT & DESIGN³⁷

- A. **Vehicular Circulation**. All off-street parking areas shall be designed so that all traffic related activities are confined to the site and vehicles can turn around within the area and enter the street, road, or highway in such a manner as to eliminate the necessity of backing into the street, road, or highway.
- B. **Stormwater Management**. All parking spaces shall drain into low-impact development features, such as bioretention cells and stormwater courtyards, which must be constructed in accordance with Article 14: *Low Impact Development*.
- C. **Alternative Parking Space Surfacing & Marking**.³⁸ The required parking areas for commercial buildings and multiplex dwellings may be constructed using pervious concrete, grass over supporting plastic/concrete grids, or any other pervious surface approved by the Land Development Division to help reduce the amount of impervious surface on the site. The alternative parking surface should be installed according to the manufacturer's installation instructions.
- D. **ADA Accessibility.**³⁹ The minimum required number of accessible parking spaces are the same as required by the current Building Code.
- E. Parking Space Access & Minimum Dimensions. 40
 - 1. Corner lots with frontage on arterial or major collector roads may only take access from the lower classified street.
 - 2. All parking space dimensions shall be provided according to Table 5.3.2-1: *Minimum Parking Space Dimension Requirements* and Figure 5.3.2-1: *Minimum Parking Space Dimensions*.
 - 3. In addition to the minimum parking space dimension requirements, at least one fire access lane must be provided and approved by the local fire district.

Table 5.3.2-1: Minimum Parking Space Dimension Requirements				
Angle of Parking (degrees)	Width of Stall (min)	Depth of Stall (min) ¹	Driveway Width (min) ²	Length of Curb per Car (min)
0	9 ft	23 ft	12 ft	23 ft

³⁷ This Section carries forward the provisions in ZO Section 12:2.4: *Design of Parking Area*.

³⁸ This section carries forward the provisions of ZO 12:2.6 Alternative Parking Surfaces.

³⁹ This section carries forward the provisions of ZO 12:2.7 *Additional Requirements for the Physically Disabled and/or Handicapped* with minor revisions.

⁴⁰ This section carries forward the provisions of ZO Table 12.2: *Minimum Parking Requirements (Dimensions)* and ZO 12:2.5 *Off-Street Parking Space Design Standard (See Parking Standards Diagram)*.

Table 5.3.2-1: Minimum Parking Space Dimension Requirements				
Angle of Parking (degrees)	Width of Stall (min)	Depth of Stall (min) ¹	Driveway Width (min) ²	Length of Curb per Car (min)
30	9 ft	17 ft, 4 in	11 ft	18 ft
45	9 ft	19 ft, 10 in	13 ft	12 ft, 9 in
60	9 ft	21 ft	18 ft	10 ft, 5 in
90	9ft³	20 ft	24 ft	9 ft

Key: min = minimum required | ft = feet | in = inches

¹In 90-degree parking stalls, the depth of the stall may be reduced to 18 feet where a grassed or landscaped median, with a minimum 2-foot width per row of parking stalls, has been provided for automobile overhang. Wheel-stops or curbing shall be provided to protect and delineate the median from the parking stalls.

²Minimum driveway widths shall be maintained to the point of intersection with the adjoining public or private right-of-way.

³Width of parallel parking stalls may be reduced to 7 feet, or as determined by the Zoning Administrator.

PARKING STANDARDS 10-5 18'- ď 12'-9 -13'-0" - 19-10 52'-8" 60'-0" 60° 45° HERRINGBONE SLASH NOTE: TURNING 12-0 " RADII: 15'-0" MIN.

Figure 5.3.2-1: Minimum Parking Space Dimensions

5.4 INTERIOR PARKING LOT LANDSCAPING⁴¹

5.4.1 APPLICABILITY

This Section applies to all new off-street parking lots with 60 or more parking spaces, except:

- A. Lots used for the express purpose of fleet, showcase, rental, leasing, or maintenance vehicle storage; and
- B. Parking structures (multi-level).

5.4.2 INTERIOR PLANTINGS REQUIRED

- A. In addition to the right-of-way and perimeter buffers required by Article 6: Buffers & Screening, all off-street parking lots subject to this Subsection shall provide and maintain landscaped planting areas within the interior of, and adjacent to, the parking lot.
- B. Interior planting islands shall have a minimum planting area of 8 feet wide by 18 feet long. An interior planting island that contains one or more shade trees shall provide at least 600 cubic feet of soil volume per tree.⁴²
- C. In addition to the required trees and shrubs, planting areas shall be grassed or covered with mulch.
- D. All planting areas shall be protected from vehicular intrusion by the installation of curbing, wheel stops.
- E. Each landscaped planting area shall contain trees and shrubs at the rates listed below rounded upward to the next whole number:
 - 1. One shade tree for every 15 parking spaces;⁴³ and
 - 2. One shrub for every 5 parking spaces.

⁴¹ This Section carries forward and reorganizes ZO Sections 12:4.2: *Interior Plantings*, 12:4.3: *Planting Material Specifications*, 12:4.6: *Exceptions*, and 12:4.7: *Owner Responsibilities and Maintenance*. ZO Sections 12:4.1: *Roadside Buffers*, 12:4.4: *Existing Trees*, and 12:4.5: *Protection of Existing Trees* are carried forward in Article 6: *Buffers & Screening* and Article 7: *Tree Preservation*.

⁴² Proposed here is to add a soil volume requirement. Sufficient soil volume is critical to root growth and the long-term health of the tree. The minimum proposed here (600 ft³) is generally recommended for small-sized trees. According to the U.S. EPA, it is generally accepted that a large-sized tree (16 inches diameter at breast height) needs at least 1,000 cubic feet of uncompacted soil" (Stormwater to Street Trees: Engineering Urban Forests for Stormwater Management).

⁴³ Proposed here is to require *shade* trees (rather than simply "trees") in parking lots to provide sufficient shading of paved areas.

- F. Trees and shrubs shall meet the specifications in Article 6: Buffers & Screening.
- G. Interior planting areas shall be designed within or adjacent to the parking area(s) as:
 - 1. Islands, located at the end of parking bays;
 - 2. Islands, located between parallel rows of parking spaces;
 - 3. Driveway medians, with a minimum width of 8 feet;
 - 4. Intermediate islands; or
 - 5. A combination of the above.
- H. Trees and shrubs must be planted within 20 feet of the parking area to satisfy the interior planting requirements.
- I. The design, size, and shape of the interior planting areas shall be at the discretion of the owner. However, no parking space shall be:
 - 1. Located farther than 90 feet from the trunk of a shade tree; or
 - 2. Separated from a shade tree by a building or other structure.
- J. When existing trees are preserved to meet the requirements of this Section, the new planting requirements may be reduced in accordance with Article 7: Tree Preservation. 44

5.4.3 PLANTING MATERIAL SPECIFICATIONS⁴⁵

- A. A minimum of 75% of trees planted to meet the requirements of this Section shall be shade trees, unless precluded by utilities.
- B. Shade trees shall have a minimum planting size of 2 inches DBH measured 18 inches above grade.
- C. Small trees and multi-stem trees shall have a minimum planting height of 6 feet.
- D. Evergreen shrubs shall have a minimum installed height of 12 inches and a minimum height of 30 inches within three years of installation.
- E. All shrubs inside the sight triangle at points of ingress and egress shall not exceed 36 inches in height.

⁴⁴ This Paragraph may be revised once Section 6.2: *Tree Preservation* is drafted.

⁴⁵ This section carries forward a portion of the provisions of ZO 12:4.3 Planting Material Specifications.

5.4.4 OWNER RESPONSIBILITIES & MAINTENANCE⁴⁶

The owner and their successors or assigns are responsible for maintaining all required plant material in good health. Any planted trees used to meet the provisions of this Section that die or become unhealthy must be replaced within one year with vegetation that conforms with the initial planting standards this Section.

5.5 VEHICLE QUEUING⁴⁷

5.5.1 PURPOSE

The vehicle queuing requirements are intended to limit the impact of new drive-through uses and services on adjacent roads.

5.5.2 APPLICABILITY

This Section applies to:

- A. Any use or operation with associated drive-through service; and
- B. Any parking lot with a gated entrance.

5.5.3 QUEUING LANE LOCATION & DESIGN

- A. **Vehicle Queuing Lanes.** All vehicle queuing lanes shall:
 - 1. Be located entirely on the lot containing the use or operation subject to this Section;
 - 2. Not encroach into any public right-of-way;
 - 3. Be clearly marked; and
 - 4. Not interfere with or degrade the function of parking spaces, drive aisles, loading areas, internal circulation, driveway access, or fire lanes.
- B. **Pedestrian Crossing Areas.** Pedestrian areas that cross a vehicle queuing lane shall be clearly marked with a sign and painted, stamped, or constructed with alternative materials.

⁴⁶ This section carries forward the provisions of ZO 12:4.7 *Owner Responsibilities and Maintenance*.

⁴⁷ These provisions are new.

5.5.4 QUEUING LANE DIMENSIONS

- A. **Minimum Queuing Lane Width.** Vehicle queuing lanes shall be at least 9 feet in width, excluding curbs.⁴⁸
- B. Minimum Queuing Lane Length.
 - 1. The total minimum length of a queuing lane is specified by the number of vehicle spaces the lane must accommodate. Each vehicle space shall be at least 20 feet in length.⁴⁹
 - 2. All facilities subject to this Section shall provide a vehicle queuing lane or lanes that accommodate at least the minimum number of vehicle spaces specified in Table 5.5.4-1:

 Minimum Number of Vehicle Queuing Spaces Required.⁵⁰
 - 3. A queuing lane is measured as the linear distance between the queuing lane entrance and the drive-through service area/window or the gated entrance.

Table 5.5.4-1: Minimum Number of Vehicle Queuing Spaces Required		
Land Use	Number of Spaces (per queuing lane)	
ATM (Standalone)	3	
Bank (ATM or Teller Window)	4	
Car Wash (Automatic)	5	
Car Wash (Full Service)	8	
Car Wash (Self-Service)	2 per bay	
Parking Lot with Gated Entrance	3	
Pharmacy	6	
Restaurant, with One Drive-Through Lane	8	
Restaurant, with Two Drive-Through Lanes	4	

⁴⁸ This is the same width currently required for parking spaces in ZO 12:2.5 *Off-Street Parking Space Design Standard*. For reference, the Cities of Greenville and Mauldin require a minimum width of 8 feet.

⁴⁹ The Cities of Greenville and Mauldin require a minimum length of 20 feet.

⁵⁰ The proposed minimum number of vehicle spaces per queuing lane is generally consistent with the City of Greenville's requirements (see Zoning Ordinance Section 19-6.1.7) and the City of Mauldin's requirements (see Zoning Ordinance Section 6:1.1.5). Greenville and Mauldin both require 3 spaces for ATMs, 4 for banks, 6 for automatic car wash stalls, 3 for self-service car wash stalls, and 4 for restaurant drive-throughs from the order box to the pickup window. Greenville also specifies a minimum of 6 spaces for restaurant drive-through order boxes. Mauldin requires 4 spaces for pharmacies and for gasoline service stations (i.e., gas pump islands). Mauldin allows the Planning Director to determine whether and how many queuing spaces are needed for other uses. Greenville also allows a staff decision, but it must be based on a traffic study.

Table 5.5.4-1: Minimum Number of Vehicle Queuing Spaces Required		
Land Use	Number of Spaces (per queuing lane)	
Retail or Service (not otherwise listed)	3	
Vehicle Repair (Quick Service, such as oil changes)	3 per bay	

5.6 OFF-STREET LOADING51

5.6.1 PURPOSE

The purpose of this Section is to ensure new industrial, warehouse, office, and retail buildings have sufficient off-street space for the loading and unloading of vehicles.

5.6.2 APPLICABILITY

This Section applies to all buildings containing:

- A. Industrial uses;
- B. Wholesaling, warehousing, flex space, and distribution uses;
- C. Office uses; and
- D. Retail uses.

5.6.3 MINIMUM NUMBER OF OFF-STREET LOADING BERTHS REQUIRED

- A. The number of off-street loading berths required by this Section are considered as the absolute minimum, and the developer shall evaluate their own needs to determine if they are greater than the minimum specified by this Section.
- B. Table 5.6.3-1 specifies the minimum number of off-street loading berths required for industrial and wholesaling, warehousing, flex space, and distribution uses.
- C. Table 5.6.3-2 specifies the minimum number of off-street loading berths required for office and retail uses.

⁵¹ This Section carries forward and reorganizes ZO Section 12:3 *Off-Street Loading*.

Table 5.6.3-1: Number of Berths Required for Industrial and Warehousing Uses	
Gross Floor Area in Structure (sf)	Number of Berths (min)
0 to 25,000	1
25,001 to 40,000	2
40,001 to 100,000	3
100,001 to 160,000	4
160,001 to 240,000	5
240,001 to 320,000	6
320,001 to 400,000	7
more than 400,000	7 plus 1 per each additional 90,000 sf

Key: sf = square feet | min = minimum required

Table 5.6.3-2: Number of Berths Required for Office & Retail Uses	
Gross Floor Area in Structure (sf)	Number of Berths (min)
0 to 19,999	0
20,000 to 39,999	1
more than 40,000	2 plus 1 per each additional 20,000 sf

Key: sf = square feet | min = minimum required

5.6.4 DESIGN OF OFF-STREET LOADING AREAS

- A. An off-street loading berth shall have minimum plan dimensions of 12 feet by 60 feet and 14 feet overhead clearance with adequate means for ingress and egress.
- B. Off-street loading spaces shall be designed so that vehicles can maneuver for loading and unloading entirely within the property lines of the premises.