Town of Vienna Zoning Code Review

Town Council Public Hearing
April 3, 2017

ARTICLE 16. - OFF-STREET PARKING AND LOADING AREAS

Including only substantive changes for the presentation

Key

<u>Underline</u>: Inserted (by formatting change, rearrangement)

<u>Cross out</u>: Eliminated (by formatting change, rearrangement)

Yellow Highlight: Content change

Green Highlight: Changes from 3/6, council work session and citizen input



Sec. 18-128. Area required for one parking space Dimensions of off-street parking spaces and aisles

For purposes of computation under this chapter, one automobile parking space shall be nine feet wide by 20 feet long, exclusive of adequate interior ingress and egress driveways. All off-street parking spaces and adjacent aisles provided in compliance with the requirements of this article for non-single family detached residential lots shall at least conform to the following minimum dimensions:

Sec. 18-128. Area required for one parking space Dimensions of off-street parking spaces

and aisles

A. Parking	B. Stall	C. Stall	D. Aisle Width,
Angle	Width	Length	One-way/Two-
(degrees)	<u>(in</u>	(in feet)	way (in feet)
	<u>feet)</u>		
0 (parallel)	8	<u>22</u>	16/22
<u>45</u>	9	<u>19</u>	16/20
<u>45</u> <u>60</u> 90	9	<u>20</u>	18/20
90	9	<u>18</u>	23/23



Comparison of Jurisdiction's Parking Stall and Aisle Dimensions

Jurisdiction	45° Stall Dimensions	One- way/Two- way 45° Aisle Width		One- way/two-way 60° Aisle Width	90° Stall Dimensions	One-way/two- way 90° Aisle Width	Parallel Stall Dimensions	One-way/two-way Parallel Aisle Width
Falls Church, VA	9' x 19'	16'/*	9' x 20'	16'/*	9' x 18'	23'/23'	8.5' x 18'	16'/22'
Fairfax County, VA	8.5' x 19'	15.5'/18'	8.5' x 20'	17'/19'	8.5' x 18'	23'/23'	8' x 22'	16'/20'
Arlington County, VA	8.5' x 17.5'	12'/*	8.5' x 19'	16'/*	8.5' x 18'	23'/23'	8' x 22'	12'/23'
City of Fairfax, VA	9' x 19'	12'/18'	9' x 20'	16'/20'	9' x 18'	23'/23'	10' x 20'	N/A
Alexandria, VA	8.5' x 19'	16'/20'	8.5' x 20'	16'/20'	9' x 18.5'	22'/22'	8' x 22'	12'/20'
Montgomery County, MD	12' x 26.5'	16'/20'	10' x 23'	18'/20'	8.5' x 18'	20'/20'	7' x 21'	10'/20'
Charlottesville, VA	8.5'x18'	12'/20'	8.5'x18'	16'/20'	8.5'x18'	20'/20'	8' x 20'	12'/19'
Prince William County, VA	9' x 19.1'	15'/*	9' x 20'	17'/*	9' x 18'	22'/22'	9' x 22'	12'/22'
Prince George's County, MD	9.5′ x 19′	13'/22'	9.5' x 19'	18'/22'	9.5' x 19'	22'/22'	8' x 22'	11'/22'
Leesburg, VA	8.5' x 18'	13'/21'	8.5' x 18'	18'/22'	8.5' x 18'	22'/22'	9' x 22'	N/A
Vienna Proposed	9' x 19'	16'/20'	9' x 20'	18'/20'	9' x 18'	23'/23'	8' x 22'	16'/22'
* Not permitted								

Key Discussion Points

Baseline Goal: min. not to lose buildable commercial square feet by revising the parking requirements

CURRENT CODE

- No Compact
 Space Allowed
- General Parking Size: 9'x20'
- Commercial:1sp:200 sf ratio

PROPOSED OPTIONS • Optional Compact Space (8'x16') w/ max. 25% **OPTION 1** • Commercial: 1sp:225sf ratio • No Optional Compact Space **OPTION 2** • Commercial: 1sp:250sf ratio • Reduce General Parking Width: 8.5' from 9' **OPTION 3** • Commercial: 1sp:250sf ratio

Sec. 18-128.1-Compact Parking Spaces

For purposes of computation under this chapter, one compact automobile parking space shall be 8 feet wide by 16 feet long. Of the total amount of required parking for a site, 25% of 90° parking spaces may be designated as compact parking spaces, preferably in close proximity to the primary entry. Proper signage must designate said compact parking spaces.

Dimensions of Top Cars, SUVs, and Trucks Sold in 2015

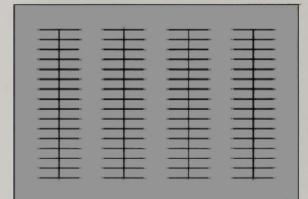
Best-Selling Cars, SUVs, and Trucks in 2015	Sales	Width excluding mirrors (in feet)*	Length (in feet)*	Area (in sq ft)	Utilization of Standard 9'x18' Space	Utilization of Compact 8' x 16' Space
Ford F-Series	780,354	6.7	17.4	116.0	71.6%	90.6%
Ram P/U	451,116	6.6	17.4	115.2	71.1%	90.0%
Chevrolet Silverado	600,544	6.7	17.1	114.2	70.5%	89.2%
GMC Sierra	224,139	6.7	17.1	114.2	70.5%	89.2%
Ford Explorer	249,251	6.6	16.4	108.0	66.7%	84.4%
Hyundai Sonata	213,303	6.1	15.9	97.4	60.1%	76.1%
Ford Fusion	300,170	6.1	16.0	97.1	59.9%	75.9%
Honda Accord	355,557	6.1	16.0	96.8	59.7%	75.6%
Nissan Altima	333,398	6.0	16.0	95.8	59.1%	74.8%
Toyota Camry	429,355	6.0	15.9	95.1	58.7%	74.3%
Chevrolet Equinox	277,589	6.0	15.7	94.6	58.4%	73.9%
Jeep Cherokee	220,260	6.1	15.2	92.5	57.1%	72.3%
Nissan Rogue	287,190	6.0	15.2	91.7	56.6%	71.6%
Toyota RAV4	315,412	6.1	15.0	90.7	56.0%	70.9%
Ford Escape	306,492	6.0	14.8	89.5	55.3%	70.0%
Honda CR-V	345,647	6.0	15.0	89.2	55.1%	69.7%
Chevrolet Cruze	226,602	5.9	15.1	88.9	54.9%	69.4%
<u>Toyota Corolla</u>	363,332	5.8	15.2	88.6	54.7%	69.2%
<u>Hyundai Elantra</u>	241,706	5.8	14.9	86.9	53.7%	67.9%
<u>Honda Civic</u>	335,384	5.8	15.0	86.0	53.1%	67.2%
	Average	6.1	15.8	97.4	60.1%	76.1%
*Based on 2015 mode	el					

Of the top 20 selling cars, trucks, and SUVs, 15 are able to fit into compact spaces.

Comparison of 3 Different Scenarios with Landscaping and Parking Ratios

Scenario 1

Scenario with 120 9'x18' Parking Spaces and 24,000 Square Feet of Commercial Area



24,000 Square Feet of Commercial Space

Required Parking = 24,000/200 = 120 Spaces

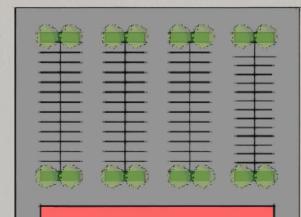
1 Space per 200 Square Feet



Difference of 14 Parking Spaces and 2,800 Square Feet of Commercial Space

Scenario 2

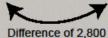
Scenario with 80 9'x18' Parking Spaces, 26 8'x16' Compact Parking Spaces, and 21,200 Square Feet of Commercial Area



21,200 Square Feet of Commercial Space

Required Parking = 21,200/200 = 106 Spaces

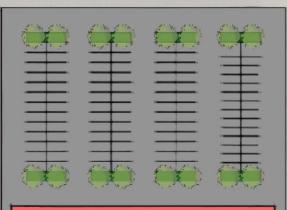
1 Space per 200 Square Feet



Square Feet of Commercial Space

Scenario 3

Scenario with 80 9'x18' Parking Spaces, 26 8'x16' Compact Parking Spaces, and 24,000 Square Feet of Commercial Area



24,000 Square Feet of Commercial Space

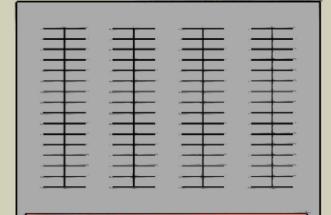
Modified Parking = 24,000/226 = 106 Spaces

1 Space per 226 Square Feet

Comparison of 3 Different Scenarios with Landscaping and Parking Ratios

Scenario 1

Scenario with 120 9'x18' Parking Spaces and 24,000 Square Feet of Commercial Area



24,000 Square Feet of Commercial Space

Required Parking = 24,000/200 = 120 Spaces

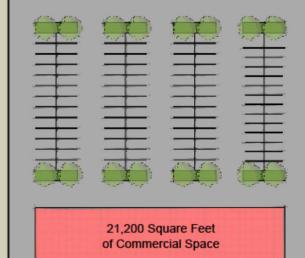
1 Space per 200 Square Feet



Difference of 14
Parking Spaces and
2,800 Square Feet
of Commercial
Space

Scenario 2

Scenario with **80** 9'x18' Parking Spaces, **26** 8'x16' Compact Parking Spaces, and 21,200 Square Feet of Commercial Area



Required Parking = 21,200/200 = 106 Spaces

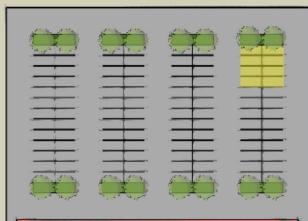
1 Space per 200 Square Feet

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Difference of 2,800 Square Feet of Commercial Space

Scenario 3

Scenario with 104 9'x18' Parking Spaces (only 96 are required) and 24,000 Square Feet of Commercial Area



24,000 Square Feet of Commercial Space

Modified Required Parking = 24,000/250 = 96 Spaces (104 Spaces Provided)

1 Space per 250 Square Feet



Scenario with 1 Space Required per 225 Square Feet of Commercial Space

Total Number of Spaces = 107 Spaces Regular 9'x18' Spaces = 80 Spaces Compact 8'x16' Spaces = 27 Spaces

Percent Compact Spaces: 25.2%

24,000 Square Feet of Commercial Space

Modified Required Parking = 24,000/225 = 107 Spaces

Alternative option on Compact Parking Space

: Reducing the regular space size from 9' width to 8.5' width

For example, for a row of 20 parking spaces see required linear feet for each scenario:

- 1. 20_9'x18' spaces 180 feet
- 2. 15 _9'x18' spaces, 5 8'x16' spaces 175 feet
- 3. 20 _8.5' x 18' spaces 170 feet

Jurisdiction	90° Stall Dimensions
Falls Church, VA	9' x 18'
Fairfax County, VA	8.5' x 18'
Arlington County, VA	8.5' x 18'
City of Fairfax, VA	9' x 18'
Alexandria, VA	9' x 18.5'
Montgomery County, MD	8.5' x 18'
Charlottesville, VA	8.5'x18'
Prince William County, VA	9' x 18'
Prince George's County, MD	9.5' x 19'
Leesburg, VA	8.5' x 18'

Sec. 18-130. - Requirements

Required off-street parking space or spaces are to be made available to and provided for the use of the occupant or occupants and, if applicable, patrons or customers of such uses. At the determination of the Zoning Administrator, adequate parking space to park vehicles belonging to and which are a part of the business activity within a building shall be provided and such space(s) shall be in addition to space requirements required by this chapter.

Sec. 18-130. – Requirements. (Residential)

<u>Use</u>	Minimum Required Off-street Parking Spaces	Notes/ Additional Requirements
Detached Single Family Dwellings	Each detached single-family residential dwelling unit constructed subsequent to the effective date of the ordinance from which this section is derived shall provide on the same lot, not less than 2 parking spaces. Acceptable off-street parking shall consist of driveways and garages or carports.	1 additional space for every bedroom over 3 bedrooms. Maximum requirement of 4 spaces. See Note 1 For the purposes of constructing future additions, alterations, extensions, renovations and restorations, no single- family residential structure in existence on the effective date of the ordinance from which this section is derived shall be deemed to be nonconforming due to lack of compliance herewith.
Townhouses and two-family dwelling	2 spaces per dwelling unit	Plus 1 space per 5 dwelling units for visitor parking See Note 1
Multiple family residential dwelling units (excluding townhouses), efficiency units	1 space per dwelling unit	See Note 1
Multiple family residential dwelling units (excluding townhouses), one bedrooms	1.5 spaces per dwelling unit	See Note 1
Multiple family residential dwelling units (excluding townhouses), two or more bedrooms	2 spaces per dwelling unit	See Note 1

Comparison of Jurisdiction's Multi-family and Townhouse Parking Requirements

		Multi-	Townhouse		
Jurisdiction	Efficiency Unit, No Bedroom	One Bedroom	Two Bedrooms	Three or More Bedrooms	Per Unit
Falls Church, VA	1	1.5	2	2	2.5
Leesburg, VA	1.5	1.5	2	2.5	2 - 2.5
City of Fairfax, VA	2	2	2	2	2, plus 1 per 3 units for visitors
Fairfax County, VA	1.6	1.6	1.6	1.6	2.7
Arlington County, VA	1.125*	1.125*	1.125*	1.125*	2, plus 1/5 per unit for visitors
Prince William County, VA	1	1.5	2.2	2.2	2, plus .75 per unit for visitors
Manassas, VA	1.75**	1.75**	1.75**	1.75**	2.5
Charlottesville, VA	1	1	1	2	1
Winchester, VA	1	1	1	2	1
Montgomery County, MD	1	1.25	1.5	2	2
Average	1.3	1.4	1.6	1.9	
Vienna Existing	2	2	2	2+	2+
Vienna Proposed	1	1	2	2	2, plus 1 per 5 units for visitors
*For first 200 dwellings, 1 space	*For first 200 dwellings, 1 space for each additional unit				
**1.5 per unit for downtown					

Average Peak Period Parking Demand

Household Type	Average Peak Period Parking Demand
Single-Family Detaching Housing	1.83 Vehicles/Unit
Residential/Condominium Townhouse (Suburban)	1.46 Vehicles/Unit
Low/Mid-Rise Apartment (Suburban)	1.2 Vehicles/Unit
Low/Mid-Rise Apartment (Urban)	1.02 Vehicles/Unit

Source: ITE, Parking Generation, 3rd Edition

Sec. 18-130. – Requirements. (commercial, parking ratio)

<u>Use</u>	Minimum Required Off-street Parking Spaces	Notes/ Additional Requirements
Professional and real estate offices in RM-2 or T Zones	1 space per 200 square feet of area devoted to such use	Said parking space or spaces to be made available to and provided for the use of the occupant or occupants.
Commercial building (except as provided for in other uses listed)	1 space per 250 200 square feet of floor area on all floors	Floor area does not include stairs and elevators Said parking space or spaces shall be made available to and provided for the use of the occupants and visitors to such building.
<u>Banks</u>	1 space per 200 square feet of floor area plus sufficient space for 10 stacking spaces for first drive-through window and 5 spaces for each additional window	No such structure in existence on the effective date of the ordinance from which this section is derived shall be deemed to be nonconforming due to lack of compliance herewith See Note 2
Vehicle drive-through services	1 space per 200 square feet of total floor area plus sufficient area for 10 stacking spaces for the first bay and 5 stacking spaces for each additional bay	The bay area may be included in such calculations at rate of one bay to one parking space. All drive-through stacking aisles shall be designed so as not to impede pedestrian or vehicular circulation on the site or in any abutting right-of-way. No such structure in existence on the effective date of the ordinance from which this section is derived shall be deemed to be nonconforming due to lack of compliance herewith. See Note 2

Sec. 18-130. – Requirements. (commercial, on maximum shift)

<u>Use</u>	Minimum Required Off-street Parking Spaces	Notes/ Additional Requirements
Industrial buildings	1 space per 3 employees on maximum shift	Said parking space or spaces to be made available to and provided for the use of the occupant or occupants of such buildings.
<u>Furniture stores</u>	1 space per 500 square feet of floor area plus 1 space per employee on maximum shift	Said parking space or spaces to be made available to and provided for the use of the occupant or occupants and customers of such stores.
Swimming Pool	1 space per 6 persons legally allowed in pool at one time plus 1 space per employee on maximum shift	
<u>Tennis Club</u>	2 spaces per court plus 1 space per employee on maximum shift	

Sec. 18-130.1 – Accessible Parking Spaces

Accessible parking spaces shall be provided in offstreet parking facilities as required by the most recent American Disabilities Act (ADA) Standards for Accessible Design.

Sec. 18-131. - Location of parking facilities.

There shall be no parking between the building setback line and the street line within the C-1, C-1A, C-2, and C-M zoning districts, and as set forth in section 18-101 for the CMP zoning district; nor within five feet of the side yard property lines within the RM-2, RTH, C-1, C-1A, C-2 and C-M zoning districts. All automobile parking areas for commercial and industrial uses shall be located on the site or conveniently near, and in no case more than 400 feet from the principal building or use to which such parking facilities are appurtenant. Any off-site parking will require a Town approved agreement with the property owner. This off-site parking agreement(s) shall include an illustration of off-site parking spaces.

Sec. 18-134. - Improvements applicable to parking areas and loading spaces

All private or public parking areas and loading spaces constructed, excluding regular maintenance, after the effective date of the original ordinance from which this section is derived shall be developed as follows:

D. Adjoining commercial surface parking facilities shall be required to provide and maintain a parking lot cross-access inter-parcel connection, with a width of at least 23 feet, and ingress/egress easement(s) between the parcels. In no circumstance shall a fence or other barrier(s) be permitted between commercial surface parking facilities.

Sec. 18-134. - Improvements applicable to parking areas and loading spaces (continued)

E. Surface Parking lot interior landscaping: Surface parking lots with more than 12 spaces in a row shall provide landscaping islands within the interior of the parking lot in accordance with the standards in this subsection,

1. Design: Landscaping islands shall be designed in accordance with the following standards:

a. Landscaping islands shall be located at the end of parking bays and have a minimum size of 162 square feet for single loaded parking bays, and a minimum size of 324 square feet for double-loaded bays.

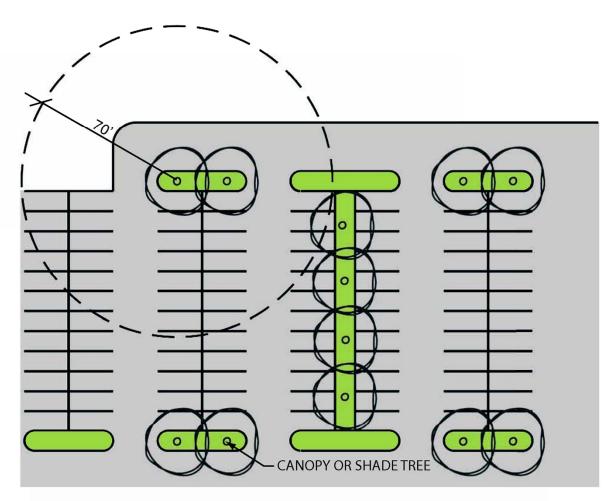
b. Off-street surface parking areas with 125 or more spaces shall be organized into a series of smaller modules visually separated by landscape strips that are located at least every six parking bays that are at least nine feet wide.

c. Canopy or shade trees, to be approved by the Town arborist, shall be distributed throughout the parking lot for the purpose of heat abatement. No parking space shall be separated from the trunk of a shade or canopy tree by more than 70 feet.

d. A ratio of one tree per eight parking spaces shall be provided.

Sec. 18-134. - Improvements applicable to parking areas and loading spaces (continued)

- 2. Planting area size: Each landscaping island shall contain sufficient area to accommodate the root growth of the plant material used. At a minimum, each landscaping island shall include 300 cubic feet of soil per tree to be located in the island. The size of the planting area, size of plant material at maturity, and placement of plant material shall allow for a two-and-one-half-foot bumper overhang from the face of the curb or edge of the island.
- 3. Planting rate: Each landscaping island shall contain at least four shrubs, planted in accordance with these standards. Nothing in these standards shall require a tree within a landscaping island unless it is needed to maintain compliance with the shading requirements in [subsection] (1.c.) above.
- 4. Exterior lighting: In cases where a landscaping island contains both trees and exterior parking lot lighting poles, the parking lot lighting poles shall not exceed eight feet in height in order to avoid conflicts between tree branches and the need to illuminate parking areas. Nothing in this section shall prevent the placement of parking lot lighting outside landscaping islands.
- 5. Protection of planting areas: Planting areas shall be protected from vehicle damage by the installation of curbing, wheel stops, or other comparable methods. This standard shall not prohibit the use of planting areas as stormwater management devices.
- F. Per Section 18-256 and 18-257, any request for modifications of the requirements applicable to parking areas and loading spaces listed under 18-134.B, 18-134.C, 18-134.D, and 18-134.E must be approved by council, after receiving recommendation from the planning commission.



70' MAXIMUM DISTANCE BETWEEN PARKING SPACE AND TREE TRUNK

1 CANOPY OR SHADE TREE REQUIRED PER 8 PARKING SPACES

