

*(Note to be removed later – Council made no changes to this article at the 7/16/19 meeting)*

## ARTICLE 11. OFF-STREET PARKING

- 11.1 APPLICABILITY
- 11.2 GENERAL REQUIREMENTS
- 11.3 LOCATION AND SETBACKS
- 11.4 REQUIRED OFF-STREET PARKING SPACES
- 11.5 DIMENSIONS OF OFF-STREET PARKING FACILITIES
- 11.6 DESIGN OF OFF-STREET PARKING FACILITIES
- 11.7 ACCESS AND DRIVEWAY DESIGN
- 11.8 SHARED PARKING
- 11.9 BICYCLE PARKING PROVISIONS
- 11.10 REQUIRED OFF-STREET LOADING SPACES
- 11.11 OUTDOOR STORAGE OF COMMERCIAL VEHICLES
- 11.12 OUTDOOR STORAGE OF RECREATIONAL VEHICLES

### 11.1 APPLICABILITY

#### A. General Applicability

1. These regulations are applicable in all zoning districts. If a district has specific off-street parking requirements, those requirements control.
2. The City of Knoxville Department of Engineering may require redesign of parking lots if a traffic safety hazard can be eased or eliminated. Loss of parking spaces resulting from the required redesign will be considered by the Department of Plans Review and Inspections in determining the minimum parking requirements.
3. If the recalculation of parking requirements under Section 11.4 results in parking spaces that exceed any maximums set forth in this Article, the excess parking spaces may continue to be used and are not required to comply with this Article.
4. All parking lots must meet the requirements of sections 11.2, 11.11, and 11.12.

#### B. Required Parking for Renovation of Existing Buildings and Change of Use

##### 1. Renovations Exceeding 50% of Value

When the renovation of existing building(s) exceeds 50% of the assessed or appraised value of the lot and building(s) being renovated (whichever is the greater of the two) the following apply:

###### a. With a Change of Use or New Addition

Required parking must be provided according to this Article.

###### b. Without a Change of Use or New Addition

Required parking must be provided according to all requirements of this Article except Sections 11.3, 11.5, 11.6, and 11.7. In such instances, nonconforming parking areas may be continued and counted towards the total parking requirements.

###### c. Exemption

Mixed-use non-residential multi-tenant structures and developments (no residential component) are not subject to Section 11.1.B.1.a if there is no addition to the principal building.

##### 2. Renovation Less Than 50% of Value.

When the renovation of existing building(s) is 50% or less of the assessed or appraised value of the lot and building(s) being renovated (whichever is the greater of the two) the following apply:

###### a. Including a Change of Use or New Addition

Required parking must be provided according to all requirements of this Article except Sections 11.3, 11.5, 11.6, and 11.7. In such instances, nonconforming parking areas may be continued and counted towards the total parking requirements.

**b. Without a Change of Use or New Addition**

Renovations without a change of use or new addition are subject to section 11.1.A.

**C. Expansion or Improvement of Existing Parking Lots**

1. When an existing parking lot is expanded, the expansion area must be designed and constructed in compliance with the standards of this Article and the landscape requirements of Sections 12.5 and 12.6.
2. When an existing parking lot is improved, the improved area must be designed and constructed in compliance with the standards of this Article and the landscape requirements of Sections 12.5 and 12.6. In addition, the following apply:
  - a. If the improvement area is less than 50% of the total parking area, landscape is required only for the improvement area.
  - b. If the improvement area is 50% or more of the total parking area, landscape is required for the entire parking lot.

**11.2 GENERAL REQUIREMENTS**

- A. The storage of merchandise, the storage of automobiles or other motor vehicles for sale, or the repair of automobiles or other motor vehicles on required off-street parking facilities is prohibited.
- B. Wherever parking is required by this Article, no building permit will be issued prior to approval of access to affected City streets and/or state highways by the appropriate City and/or state official.

**11.3 LOCATION AND SETBACKS**

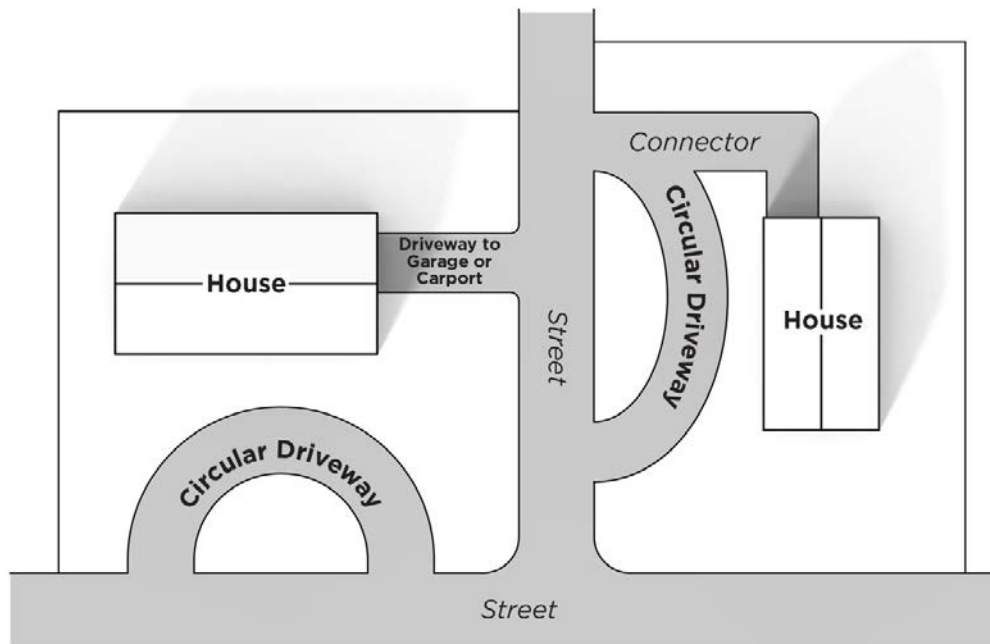
- A. Off-street parking for uses other than residential uses may be provided on a lot other than that on which the principal use is located if the required number of parking spaces for any land use cannot be provided on the same lot on which the principal use is located, according to the requirements of Section 11.8 below.
- B. Parking lots with common frontage on the same block with residentially zoned property and located on roads with less than four existing travel lanes must be setback 25 feet from the street line. However, this setback does not apply to multi-family dwellings.
- C. An interior side or rear setback is required in parking lots, as measured from the edge of parking lot to the lot line, as follows. Required site landscape per Article 12 may be located in this setback.
  1. Industrial districts abutting agricultural or residential districts: 20 feet
  2. Office or commercial districts abutting agricultural or residential districts: 20 feet
  3. Multi-family dwellings abutting agricultural or single-family districts: 10 feet
  4. Non-residential use in residential district: 10 feet
- D. For single-family and two-family dwellings, parking is prohibited in the front and corner side yard except as follows:
  1. On approved driveways and in approved parking spaces.
  2. A maximum of two vehicles with a current and properly displayed accessible/disabled parking license plate or placard/hang tag.
  3. Temporary loading or unloading.
  4. When construction, remodeling, maintenance, or repairs are being performed on the property, temporary front yard parking cannot exceed the period for which the permit is valid or as necessary to complete the work.
  5. Parking for isolated, non-recurring gatherings, parties, or visitors. This exception is not intended to provide permanent or semi-permanent parking for extra cars.

6. Areas within a two-mile radius of Neyland Stadium during University of Tennessee-Knoxville home football games and areas within a one-mile radius of Chilhowee Park and Exposition Center during city-approved events.

E. For single-family and two-family dwellings, approved parking and driveway(s) in the front and corner side yard are limited to the following:

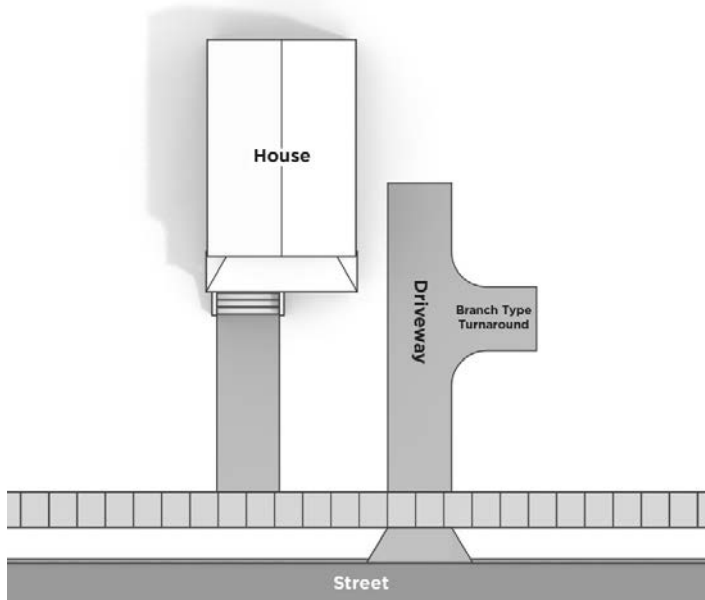
1. On lots with a carport or garage:
  - a. The driveway leading to a carport or enclosed garage, not to exceed the maximum width allowed, except for flares adequate to access the carport or garage.
  - b. A connector driveway may extend from a circular driveway to beyond the front wall of the structure. Connector driveways must comply with driveway width requirements.
2. On lots with no carport or garage:
  - a. With lot frontage of 75 feet or less, the driveway must be within ten feet of the side lot line.
  - b. For lot frontage greater than 75 feet, no driveway, other than a circular driveway, may be constructed in the area between the front wall of the principal structure and the front property line.
  - c. For lot frontage greater than 75 feet, a connector driveway may extend from a circular driveway to beyond the front wall of the principal structure. Connector driveways must comply with driveway width requirements.

**DRIVEWAYS**



3. In addition to any of the above, a branch type turnaround not to exceed 200 square feet is permitted on any lot where City engineering standards can be met.

**BRANCH TYPE TURNAROUND**



F. For the purpose of this section, lot frontage for any lot except a small lot of record that does not have 75 feet or greater frontage on any street, private right-of-way (joint permanent easement), or access easement, is measured at the front building line.

**11.4 REQUIRED OFF-STREET PARKING SPACES**

**A. General Application**

1. The minimum and maximum number of off-street vehicle parking spaces shall be determined in accordance with Table 11-2: Required Off-Street Parking, unless otherwise specified in the zoning district.
2. In determining the number of parking spaces, when the result contains a fraction, any fraction less than one-half is disregarded and any fraction of one-half or more is counted as one parking space.
3. Structured parking is not subject to the maximum number of parking spaces set forth in Table 11-2.
4. All parking lot elements required by the Americans with Disabilities Act (ADA) must be accessible. All off-street parking lots must have a number of accessible parking spaces as required by Table 11-3: Required Accessible Parking Spaces, or as amended by ADA:

Table 11-2: Required Off-Street Parking		
Use	Minimum Vehicle Parking Required	Maximum Vehicle Parking Allowed
Agriculture (Dwelling On-Premises)	2 per du	No limit
Airport	10 per 1,000sf GFA of terminal area	No limit
Alternative Correctional Facility	2 per 1,000sf GFA of office area	8 per 1,000sf GFA of office area
Amusement Facility – Indoor	4 per 1,000sf GFA <i>Bowling alley: 3 per lane</i> <i>Movie theater: 0.2 per seat</i>	5 per 1,000sf GFA <i>Bowling alley: 5 per lane</i> <i>Movie theater: 0.5 per seat</i>
Amusement Facility – Outdoor	Commercial recreation: 4 per 1,000sf GFA <i>Swimming pool, tennis court: 0.33 per person per design capacity</i>	Commercial recreation: 5 per 1,000sf GFA <i>Swimming pool, tennis court: 0.5 per person per design capacity</i>
Animal Care Facility – Large Animal	2.5 per 1,000sf GFA + 2 per 1,000sf GFA of pet boarding area	3.5 per 1,000sf GFA + 4 per 1,000sf GFA of pet boarding area

Table 11-2: Required Off-Street Parking		
Use	Minimum Vehicle Parking Required	Maximum Vehicle Parking Allowed
Animal Care Facility – Small Animal	2.5 per 1,000sf GFA + 2 per 1,000sf GFA of pet boarding area	3.5 per 1,000sf GFA + 4 per 1,000sf GFA of pet boarding area
Animal Breeder	2 spaces (in addition to dwelling requirements)	4 spaces (in addition to dwelling requirements)
Art Gallery	3 per 1,000sf display floor area	4 per 1,000sf display floor area
Arts and Fitness Studio	4 per 1,000sf GFA	5 per 1,000sf GFA
Bed and Breakfast	1 per guest room	1.25 per guest room
Body Modification Establishment	3 per 1,000sf GFA	5 per 1,000sf GFA
Broadcasting Facility - With or Without Antennae	3 per 1,000sf GFA of office area	8 per 1,000sf GFA of office area
Campground	1 per campsite	4 per campsite
Car Wash – With Employees	0.5 per employee on shift of greatest employment	1 per employee on shift of greatest employment
Cemetery	3 per 1,000sf of office and public assembly area	8 per 1,000sf of office and public assembly area
Community Center	0.25 per seat in main assembly area	0.5 per seat in main assembly area
Conservation Area	Determined by Dept. of Engineering	Determined by Dept. of Engineering
Country Club	Minimum required sum of uses on-site	Maximum allowed by sum of uses on-site
Cultural Facility	3 per 1,000sf display floor area	4 per 1,000sf display floor area
Day Care Center	0.67 per employee on shift of greatest employment + 0.125 off-street loading space per client	1 per employee on shift of greatest employment + 0.167 off-street loading space per client
Day Care Home	0.67 per employee on shift of greatest employment + 0.125 off-street loading space per client	1 per employee on shift of greatest employment + 0.167 off-street loading space per client
Domestic Violence Shelter	2 per 1,000sf GFA of office area	8 per 1,000sf GFA of office area
Drug/Alcohol Treatment Facility, Residential	1 per patient room	2.5 per patient room
Drug Treatment Clinic	4 per 1,000sf GFA	10 per 1,000sf GFA
Dwelling – Above the Ground Floor	0 to 1 bedroom: 1 per du + guest parking 2 bedrooms: 1.25 per du + guest parking 3 bedrooms: 1.5 per du + guest parking 4+ bedrooms: 2 per du + guest parking Housing development renting by bedroom: 0.67 per bedroom Guest parking (located in areas commonly accessible to all du): 0.2 per du	0 to 1 bedroom: 1.25 per du + guest parking 2 bedrooms: 1.75 per du + guest parking 3 bedrooms: 2.25 per du + guest parking 4+ bedrooms: 2.5 per du + guest parking Housing development renting by bedroom: 1.2 per bedroom Guest parking (located in areas commonly accessible to all du): 0.25 per du
Dwelling – Manufactured Home	2 per du	No limit
Dwelling - Multi-Family	0 to 1 bedroom: 1 per du + guest parking 2 bedrooms: 1.25 per du + guest parking 3 bedrooms: 1.5 per du + guest parking 4+ bedrooms: 2 per du + guest parking Housing development renting by bedroom: 0.67 per bedroom Guest parking (located in areas commonly accessible to all du): 0.2 per du	0 to 1 bedroom: 1.25 per du + guest parking 2 bedrooms: 1.75 per du + guest parking 3 bedrooms: 2.25 per du + guest parking 4+ bedrooms: 2.5 per du + guest parking Housing development renting by bedroom: 1.2 per bedroom Guest parking (located in areas commonly accessible to all du): 0.25 per du
Dwelling - Townhouse	2 per du + 0.25 per du guest parking	No limit

Table 11-2: Required Off-Street Parking		
Use	Minimum Vehicle Parking Required	Maximum Vehicle Parking Allowed
Dwelling - Single-Family	2 per du	No limit
Dwelling - Two-Family	2 per du	No limit
Educational Facility - Primary	1 per classroom	2 per classroom
Educational Facility - Secondary	0.25 per student at maximum enrollment	0.5 per student at maximum enrollment
Educational Facility - University or College/Vocational	5 per 1,000sf GFA	6.5 per 1,000sf GFA
Eating and Drinking Establishment	No drive-through: 8 per 1,000sf GFA With drive-through: 6 per 1,000sf GFA	No drive-through: 16 per 1,000sf GFA With drive-through: 12 per 1,000sf GFA
Financial Institution	2.5 per 1,000sf GFA	5 per 1,000sf GFA
Financial Service, Alternative	2.5 per 1,000sf GFA	5 per 1,000sf GFA
Food Bank	3 per 1,000sf of office	8 per 1,000sf of office
Food Pantry	2 per 1,000sf GFA	8 per 1,000sf GFA
Food Truck Park	1 per mobile food unit	2 per mobile food unit
Fraternity/Sorority	0.33 per resident at maximum occupancy	0.5 per resident at maximum occupancy
Funeral Home	0.33 per person at design capacity	0.67 per person at design capacity
Garden, Market	1 per employee on shift of greatest employment	2 per employee on shift of greatest employment
Gas Station	4 per 1,000sf GFA of any retail component  Gas station with retail & restaurant: 4 per 1,000sf GFA	8 per 1,000sf GFA of any retail component  Gas station with retail & restaurant: 10 per 1,000sf GFA
Golf Course/Driving Range	3 per hole	6 per hole
Government Office/Facility	3 per 1,000sf GFA	8 per 1,000sf GFA
Greenhouse/Nursery – Retail	1 per 1,000sf GFA + 1 per 1,000sf outdoor sales area	2 per 1,000sf GFA + 2 per 1,000sf outdoor sales area
Group Home	2 per 1,000sf GFA of office area	8 per 1,000sf GFA of office area
Halfway House	2 per 1,000sf GFA of office area	8 per 1,000sf GFA of office area
Healthcare Institution	3.25 per bed	5.75 per bed
Heavy Retail, Rental, and Service	1 per 1,000sf GFA + 1 per 1,000sf outdoor sales area <i>Auto, truck, manufactured home, boat, outdoor equipment sales: 3.5 per 1,000sf of office sales &amp; waiting area</i> <i>Building material sales: 1 per 1,000sf GFA + 1 per 1,000sf outdoor sales area</i> <i>Home improvement superstore: 2.5 per 1,000sf GFA</i>	2 per 1,000sf GFA + 2 per 1,000sf outdoor sales area <i>Auto, truck, manufactured home, boat, outdoor equipment sales: 5 per 1,000sf of office sales &amp; waiting area</i> <i>Building material sales: 2 per 1,000sf GFA + 2 per 1,000sf outdoor sales area</i> <i>Home improvement superstore: 4 per 1,000sf GFA</i>
Homeless Shelter	2 per 1,000sf GFA of office area	8 per 1,000sf GFA of office area
Hotel	1 per lodging unit	1.25 per lodging unit
Impound Lot	1 per 1,000sf GFA + 1 per 5,000sf outdoor storage area	2 per 1,000sf GFA + 2 per 5,000sf outdoor storage area
Independent Living Facility	0.65 per unit + guest parking (located in areas commonly accessible to all du): 0.2 per du	1 per unit + guest parking (located in areas commonly accessible to all du): 0.25 per du
Industrial – Craft	2 per 1,000sf GFA	6 per 1,000sf GFA
Industrial – General	0.9 per 1,000sf GFA	6 per 1,000sf GFA
Industrial – Heavy	0.75 per employee at the largest shift	1 per employee at the largest shift

Table 11-2: Required Off-Street Parking		
Use	Minimum Vehicle Parking Required	Maximum Vehicle Parking Allowed
Industrial Design	3 per 1,000sf GFA	8 per 1,000sf GFA
Pre-School/Kindergarten	1 per classroom	2 per classroom
Live Performance Venue	0.2 per seat	0.5 per seat
Live/Work	1 per du + 2 per 1,000sf GFA	2 per du + 6 per 1,000sf GFA
Lodge/Meeting Hall	5 per 1,000sf GFA	6.5 per 1,000sf GFA
Marina	0.5 per boat slip + requirements for other uses included in development	1 per boat slip + allowances for other uses included in development
Medical/Dental Office/Clinic	4 per 1,000sf GFA	10 per 1,000sf GFA
Micro-Brewery/Distillery/Winery	2 per 1,000sf GFA	6 per 1,000sf GFA
Nightclub	8 per 1,000sf GFA	16 per 1,000sf GFA
Office	3 per 1,000sf GFA <i>Call center: 4.5 per 1,000sf GFA</i>	8 per 1,000sf GFA <i>Call center: 12 per 1,000sf GFA</i>
Personal Service Establishment	3 per 1,000sf GFA	6 per 1,000sf GFA
Place of Worship	0.25 per seat in the main assembly	0.5 per seat in the main assembly
Public Park	Determined by Dept. of Engineering	Determined by Dept. of Engineering
Public Safety Facility	Determined by Dept. of Engineering	Determined by Dept. of Engineering
Public Works Facility	Determined by Dept. of Engineering	Determined by Dept. of Engineering
Reception Facility	8 per 1,000sf GFA	16 per 1,000sf GFA
Research and Development	2 per 1,000sf GFA	6 per 1,000sf GFA
Residential Care Facility	0.2 per bed + 1 per employee on shift of greatest employment	0.33 per bed + 1 per employee on shift of greatest employment
Retail Goods Establishment	3 per 1,000sf GFA <i>Appliance, carpeting, furniture sales: 2.5 per 1,000sf gross sales area</i>	6 per 1,000sf GFA <i>Appliance, carpeting, furniture sales: 3.5 per 1,000sf gross sales area</i>
Retail Liquor Stores	3 per 1,000sf GFA	6 per 1,000sf GFA
Salvage Yard	3 per 1,000sf office area	4 per 1,000sf office area
Self-Storage Facility: Enclosed	5 spaces adjacent to office/entry + 0.02 per unit	7 spaces adjacent to office/entry + 0.033 per unit
Self-Storage Facility: Outdoor	5 spaces adjacent to office/entry	7 spaces adjacent to office/entry
Social Service Center	3 per 1,000sf GFA	8 per 1,000sf GFA
Solar Farm	2 spaces	Determined by Dept. of Engineering
Vehicle Dealership – Enclosed (Does not include vehicles on display)	2 per 1,000sf of indoor sales and display area + 4 per service bay	4 per 1,000sf of indoor sales and display area + 6 per service bay
Vehicle Dealership – With Outdoor Storage/Display (Does not include vehicles on display)	2 per 1,000sf of indoor sales and display area + 4 per service bay	4 per 1,000sf of indoor sales and display area + 6 per service bay
Vehicle Operation Facility (Does not include vehicles stored)	3 per 1,000sf office area	4 per 1,000sf office area
Vehicle Rental – Enclosed (Does not include vehicles stored for rental)	3 per 1,000sf office area	4 per 1,000sf office area
Vehicle Rental – With Outdoor Storage/Display (Does not include vehicles stored for rental)	3 per 1,000sf office area	4 per 1,000sf office area
Vehicle Repair/Service– Major	2 per bay	4 per bay
Vehicle Repair/Service – Minor	2 per bay	4 per bay
Warehouse and Distribution	0.5 per 1,000sf GFA	2 per 1,000sf GFA
Wholesale Establishment	0.5 per 1,000sf GFA	2 per 1,000sf GFA
Wind Energy System	2 spaces	Determined by Dept. of Engineering



Table 11-3: Required Accessible Parking Spaces		
Total Parking Spaces Provided	Minimum Number of Accessible Parking Spaces Required	
	Van	Total (Van + Car)
1 to 25	1	1
26 to 50	1	2
51 to 75	1	3
76 to 100	1	4
101 to 150	1	5
151 to 200	1	6
201 to 300	2	7
301 to 400	2	8
401 to 500	2	9
501 to 1000	1 for every 6 accessible spaces	2% of total provided parking spaces
1001 and over	1 for every 6 accessible spaces	20, plus 1 for each 100, or fraction thereof, over 1000

**B. Exemptions and Flexibilities**

1. The DK District is exempt from required parking. If parking is provided, then the maximum number of spaces applies in all subdistricts.
2. Minimum vehicle parking reductions apply in the following districts. Bicycle parking requirements may not be reduced.
  - a. Required minimum vehicle parking may be reduced by 40% in the C-N District.
  - b. Required minimum vehicle parking may be reduced by 20% in the C-G-2 and C-G-3 District.
3. Off-street parking requirements in any district may be reduced up to 30% from the minimum requirements in Table 11-2, provided the development is located within one-fourth of a mile of a transit route. A Knoxville Area Transit approved shelter may be required on or within one-fourth of a mile of the development site. Bicycle parking requirements may not be reduced. This reduction cannot be coupled with any other parking reduction, such as the reductions offered in items 1 and 2 above.
4. Parking lots may exceed the maximum number of spaces in Table 11-2 by up to 20% provided that the spaces exceeding the maximum number and the access aisles accessing those spaces are constructed of pervious materials approved by the Department of Engineering. Parking spaces exceeding the identified maximum may be approved by the Department of Engineering upon submittal of a parking study justifying the need for additional spaces, and the approval of the parking study by Department of Engineering. All excess spaces and their access ways must be constructed of pervious materials. Pervious paving materials may not be required for excess parking on sites with brownfield agreements upon approval by the Department of Engineering.
5. Upon approval by the Department of Engineering of a parking study for the proposed use(s), the minimum number of parking spaces in Table 11-2 may be reduced.

**C. Mixed-Use Multi-Tenant Structure Requirements**

A mixed-use multi-tenant structure is not subject to the individual use calculations for required vehicle parking in Table 11-2. Minimum and maximum parking is calculated as follows:

1. Non-residential gross floor area - minimum parking required: 3 per 1,000sf GFA
2. Non-residential gross floor area - maximum parking allowed: 8 per 1,000sf GFA
3. Residential units: requirements for “dwelling – above the ground floor” per Table 11-2



**11.5 DIMENSIONS OF OFF-STREET PARKING FACILITIES**

Off-street parking facilities must be laid out in accordance with the following regulations:

**A. Accessible Spaces**

1. Accessible vehicle spaces must be at least eight feet wide with an adjacent pedestrian access aisle of at least five feet in width.
2. Van accessible spaces must be either:
  - a. At least 11 feet wide with an adjacent pedestrian access aisle of at least five feet in width.
  - b. At least eight feet wide with an adjacent pedestrian access aisle of at least eight feet in width.

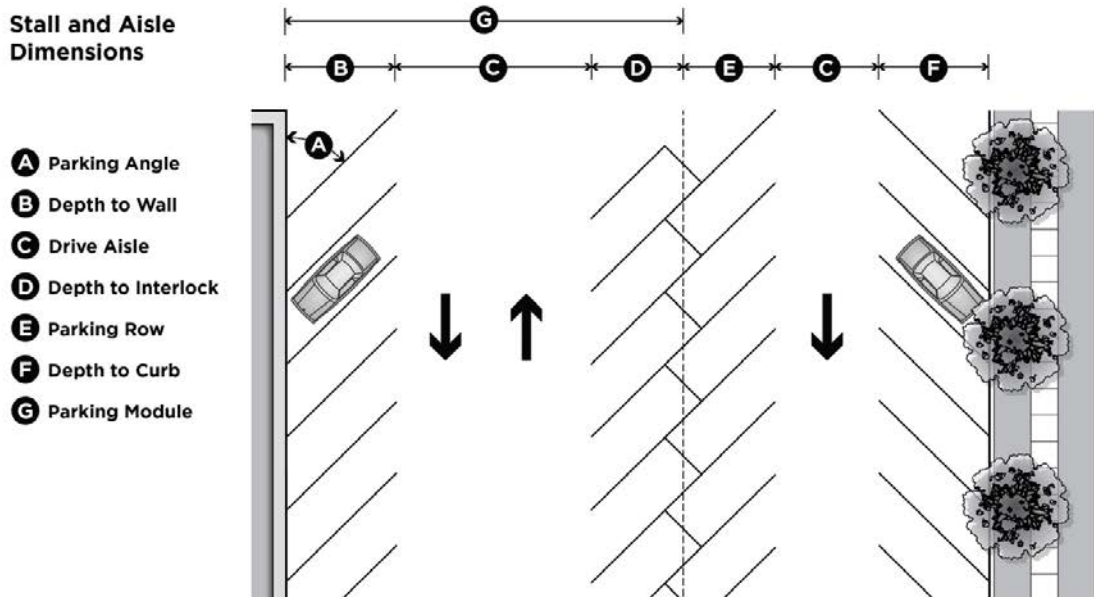
**B. Stall and Aisle Dimensions**

1. The minimum dimensions for parking stalls and aisles is specified in Table 11-6: Minimum Stall and Aisle Dimensions. Maximum dimensions are the minimum value plus four feet.

Parking Angle	Minimum Depth to Wall or Interlock (feet)	Minimum Depth to Curb (feet)	Minimum Stall Width (feet)	Minimum Aisle Width (feet)	
				One-Way	Two-Way
45 degrees	16.5	15.0	9.0	15	26
60 degrees	18.0	16.5	9.0	18	26
75 degrees	18.5	17.5	9.0	22	26
90 degrees	17.5	15.5	9.0	26	26
Parallel	22.5	20.5	9.0	15	25

2. Up to 20% of the total number of parking spaces provided may be designed for compact vehicles. Where possible, these spaces must be clustered together and marked with signs restricting their use to compact vehicles. Compact spaces with a parking angle of 90 degrees must have the following minimum dimensions: eight feet in width, 13.5 feet in depth to curb, and 15.5 feet in depth to a wall or interlock.

**STALL AND AISLE DIMENSIONS**



**C. Pedestrian Access Aisles**

Pedestrian access aisles must be hatched and include a painted “No Parking” designation.

**D. Encroachments**

Columns, light poles, and/or other protrusions may encroach into a parking module up to a maximum of one foot for modules with parking on one side or a maximum of two feet for modules with parking on two sides, one-foot protrusion into each parking row. The protrusions cannot affect more than 25% of the spaces.

**E. Structured Parking**

Structured parking must comply with the following requirements:

1. Parking spaces must comply with Table 11-6. The City of Knoxville Department of Engineering may approve adjustments to the dimensions while maintaining safety and function.
2. Stairways, elevators, or other provisions must separate vehicular and pedestrian movements between the various levels of parking structures.
3. The maximum approach, departure, and ramp angles are subject to the review and approval of the Department of Engineering.
4. A minimum nine-foot clearance must be maintained on all levels containing accessible spaces and on all levels providing ingress to and egress from the accessible spaces. A minimum seven-foot clearance must be maintained throughout the remainder of the structured parking.

**11.6 DESIGN OF OFF-STREET PARKING FACILITIES**

**A.** All areas devoted to off-street parking must be designed so that no vehicle is required to back into a public street or alley to obtain ingress or egress, except for the following:

1. Off-street residential parking for single-family, two-family, and townhouse dwellings when the lot is accessed from a local street or alley.
2. Egress directly from parking spaces to alleys may be allowed when the aisle width, including the alley width, meets the minimum aisle width specified in Table 11-6.

**B.** The maximum grade in a parking lot is 10%.

**C.** Surface drainage must be collected so as to preclude uncontrolled drainage onto the paved portion of street rights-of-way as verified by the Department of Engineering.

**D.** All areas devoted to permanent off-street parking must be surfaced and maintained as to control dust, rutting, erosion as a result of continuous use, and migration of surface materials. Parking spaces must be clearly delineated.

**E.** Vehicular and pedestrian signs must be MUTCD compliant and approved by the City of Knoxville Department of Engineering.

**F.** An accessible pathway must be provided from the accessible parking space(s) to the destination that the parking space(s) are intended to serve. The accessible pathway must be located along the shortest accessible route to the accessible door/entrance.

**G.** In an effort to reduce vehicle/pedestrian conflicts:

1. Parking lots serving a building and having more than one parking row between the fronting street and the building’s front entrance should have sidewalks or clearly defined and designated routes connecting the building’s main entrance or a central location to the parking lot.
2. A clearly defined and designated accessible route must connect a building’s main entrance or central location to a sidewalk in the right-of-way where the cost of providing this route does not exceed 20% of the parking lot improvement cost.

3. Landscaped islands and divider medians must be arranged so as to channel traffic and minimize vehicular and pedestrian conflicts within parking areas. A divider median must be provided at a minimum interval of one median per every six parking rows to channel traffic and minimize vehicular and pedestrian conflicts within interior parking lots.
4. Parking rows must be terminated at both ends with terminal islands.
5. Interior islands must have a minimum area of 120 square feet for each parking row that they interrupt. Islands may be combined for double-parking rows, resulting in an interior island with a minimum area of 240 square feet.
6. In the industrial districts and the DK District, terminal islands, interior islands, and divider medians are not required. This exemption does not apply to parking in industrial districts designated for employees and visitors where the principal building is over 40,000 square feet in gross floor area.

**H.** Terminal islands, interior islands, and divider medians are not required for structured parking facilities or for parking facilities less than 20,000 square feet.

**11.7 ACCESS AND DRIVEWAY DESIGN**

These regulations are applicable in zoning districts without access and driveway requirements specific to the zoning district. If the district specifically requires access and driveway design, those requirements control. The Department of Engineering is authorized to develop and implement such policies and procedures as may be necessary and desirable to control the design and construction of driveways that are consistent with this Code.

**A.** The number of driveways on a given street or access easement is based on the following:

1. Typical developments per Table 11-7: Maximum Number of Driveways for Lot Frontages

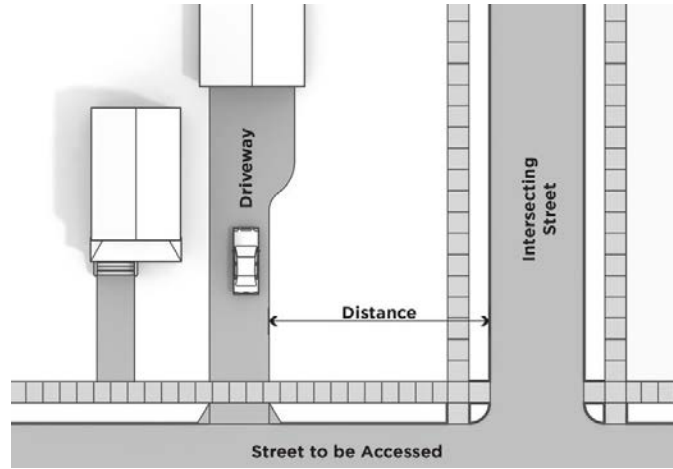
Lot Frontage	Maximum Number of Driveways
Less than 150 feet	1 For single-family dwellings with lot frontages of 100' or more, a circular driveway is allowed
150 feet – 450 feet	2
Greater than 450 feet – 600 feet	3
Greater than 600 feet – 750 feet	4
Greater than 750 feet	Determined by Department of Engineering

2. Gas stations and establishments where services are normally provided to customers without leaving their vehicles may have two driveways.
3. Projects required to prepare a Traffic Impact Study are considered individually based on the recommendation of the study and the approval of the Department of Engineering.
4. Boulevard driveways (with raised median separation), one way driveways, and right-in/right-out driveway pairs will be considered one driveway
5. The Department of Engineering may impose other access and driveway requirements as necessary based on specific site conditions.

**B.** The minimum distance between a driveway and the intersecting street is described in Table 11-8: Corner Clearance Requirements.

Classification of Intersecting Street	Classification of Street to be Accessed		
	Arterial	Collector	Local
Arterial	200'	150'	100'
Collector	150'	100'	50'
Local	100'	50'	50'

**CORNER CLEARANCE**



1. If the required distance cannot be met due to lot size or other constraint as verified by the Department of Engineering, the driveway must be located as far as possible from the intersecting street.
2. All driveways in a development must be separated by a minimum distance equal to the width of the wider driveway.
3. No curb cut may encroach on the frontage of adjacent property without the written consent of the owner for such encroachment, except where a joint use driveway with the adjacent property is established at the request of both owners.

C. Table 11-9: Driveway Width and Curb Cut Length Standards provides minimum and maximum driveway widths and curb cut lengths.

Table 11-9: Driveway Width and Curb Cut Length Standards				
Lot Frontage (feet)	Driveway Dimensions		Length of Curb Cut	
	Min.	Max.	Min.	Max.
<b>Single-Family, Two-Family, &amp; Townhouse: By Lot Width</b>				
50 feet or less	10'	18'	15'	24'
> 50 - 74	10'	20'	15'	26'
Greater than 74	10'	25'	15'	32'
<i>A circular driveway can be no wider than 18'</i>				
<b>Other Development</b>				
Land Use: Uses serving a substantial number of large trucks (5/day or 25/week)	20'	40'	60'	90'
Land Use: All other	20'	30'	25'	60'

1. Gas stations may have driveways up to 40 feet wide.
2. Boulevard driveways (with raised median separation), one way driveways, and right-in/right-out driveway pairs are not subject to Table 11-9 and will be reviewed on a case-by-case basis by the Department of Engineering.
3. Access to cell towers, electrical substations, pump stations, etc., defer to the Department of Engineering's Utility Driveway standards.
4. Major traffic generators will be considered as individual cases and are not subject to Table 11-9. A major traffic generator is defined as any facility that is required by this Article to provide 400 or more parking spaces.
5. On state roads, adjustments to the dimensions in Table 11-9 may be granted based on Tennessee Department of Transportation specifications.

D. When a change in use, redevelopment, or alteration of any land or building makes any or all of the driveways unnecessary or noncompliant, the owner of the property must, at their expense, replace all necessary curbs, gutters, sidewalks, and landscape to a condition consistent with current City of Knoxville standards.

### 11.8 SHARED PARKING

The Director of the City of Knoxville Department of Plans Review and Inspections, or his/her designee, may consider and approve a shared parking plan for uses that are located near one another and that have different peak parking demands and operating hours. All off-site parking arrangements must comply with the following provisions at a minimum. Additional requirements may be imposed by the Director of the City of Knoxville Department of Plans Review and Inspections, or the Director of the City of Knoxville Department of Plans Review and Inspections may deny the shared parking plan for good cause.

- A. The uses will not overlap in hours of operation or in demand for the shared spaces.
- B. The person or entity requesting the shared parking must submit a shared parking study and site plan to the Department of Engineering for approval.
- C. The lot upon which the shared or off-site parking is located is no greater than 500 feet walking distance as measured from the boundary of the property on which the principal use is located to the boundary of the property where the shared parking is located.
- D. Any crossing of a roadway at grade with a classification higher than local roadway must be marked per the most recent edition of MUTCD.
- E. The off-site parking must be located on land owned by the owner(s) of the principal use it is intended to serve, or under lease or license to the owner(s) of the principal use it is intended to serve, in accordance with the following:
  - 1. If the shared parking accounts for 50% or less of the parking spaces required for the principal use that is unable to meet its requirements on-site, the shared parking agreement must be a parking license with a minimum term of two years. The shared parking license may be revocable and is not required to be recorded; however, a copy of the license must be provided to the City of Knoxville Department of Plans Review and Inspections after approval of parking plans and before issuance of building permit.
  - 2. If the shared parking accounts for more than 50% of the parking spaces required by the principal use that is unable to meet its requirements on-site, the shared parking agreement must be a lease agreement with a minimum term of five years. Such lease agreement is subject to approval by the City of Knoxville Law Department. Where such a lease is involved, a memorandum of lease must be recorded with the Register of Deeds of Knox County with copies furnished to the City of Knoxville City Law Director and City of Knoxville Department of Plans Review and Inspections after approval of parking plans and before issuance of building permit.
- F. Off-site parking must be in a zoning district that permits the principal use it will serve and off-site parking is not located in a residential district.
- G. The shared parking spaces must be maintained as long as the uses they serve are in operation.
- H. Accessible parking cannot be shared.

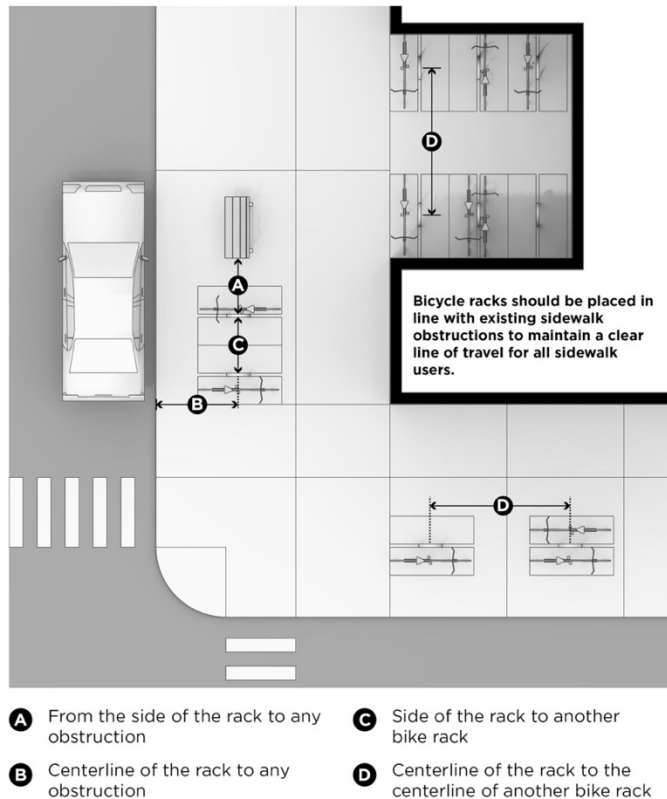
### 11.9 BICYCLE PARKING PROVISIONS

A. Bicycle parking must be provided for all uses where vehicular off-street parking is required and/or provided, with the exception of single-family and two-family dwellings. Bicycle parking must be provided for uses in the amount indicated in Table 11-10: Required Bicycle Parking. In determining the number of bicycle spaces, when the result contains a fraction, any fraction less than one-half is disregarded and any fraction of one-half or more is counted as one space.

Table 11-10: Required Bicycle Parking		
Land Use Category	Total Required Motor Vehicle Parking Spaces (Minimum)	Required Number of Bicycle Parking Spaces
<b>Non-Residential</b> <i>Shopping centers and mixed-use multi-tenant structures are to be considered as a whole, not as individual tenants; bike racks must be spaced throughout the shopping center</i>	Less than 50	4
	51 - 100	8
	101 - 500	12
	501 – 1,000	16
	1,001 or more	16 for the first 1,000 + 8 for every 500 thereafter of vehicle parking spaces over 1,000
Land Use Category	Residential Dwelling Type	Required Number of Bicycle Parking Spaces
<b>Residential</b>	Single-family or two-family dwellings	0
	Multi-family or townhouse	0.25 per unit, or none if interior storage space is provided for each unit

- B.** In the DK District, bicycle parking is required. The number of bicycle parking spaces required is based on the minimum number of vehicle parking spaces that the proposed use(s) would be required to provide in Table 11-2.
- C.** One required vehicle parking space may be used as a space for providing required bicycle parking.
- D.** The required bicycle parking spaces must be located in a convenient and visible area within 50 feet of a principal entrance or other location approved by the Department of Engineering. Bicycle parking facilities must be sufficiently separated from motor vehicle parking areas to protect parked bicycles from damage by motor vehicles. The separation may be accomplished through grade separation, distance or physical barrier, such as curbs, wheel stops, poles or other similar features.
- E.** Users cannot be required to climb or descend stairs in order to access the bicycle parking facility unless there is a bicycle wheel trough parallel to the stairs.
- F.** Connections to bicycle networks may be required by the Department of Engineering.
- G.** Bicycle parking cannot impede pedestrian or accessible routes.
- H.** Bicycle parking spaces must include a rack which permits the locking of the bicycle frame and one wheel to a rack or fixture and must support a bicycle in a stable position without damage to the wheels, frame, or components. Racks must be securely anchored to prevent the racks from being removed from the location.
- I.** Bicycle racks must be installed according to the following minimum standards:
  - 1. Three feet from the side of the rack to any obstruction.
  - 2. Three feet forwards or backwards from the centerline of the rack to any obstruction.
  - 3. Four feet from the side of the rack to another bike rack.
  - 4. Ten feet forwards or backwards from the centerline of the rack to the centerline of another bike rack.
  - 5. Alternatives to these standards may be approved by the Department of Engineering.
- J.** Bicycle parking and access to bicycle parking must be constructed in accordance with the applicable standards of Section 11.6.D.

### BICYCLE RACK INSTALLATION



### 11.10 REQUIRED OFF-STREET LOADING SPACES

- A.** Off-street loading spaces must be provided for any use that distributes or receives materials or merchandise by trucks or other commercial vehicles in accordance with Table 11-12: Off-Street Loading Requirements. In the case of multi-tenant developments, required loading spaces are calculated on the basis of each individual tenant.
- B.** No structure is required to provide more than five loading spaces.
- C.** All multi-family dwellings, regardless of size, are required to provide a site plan that shows ingress/egress for moving trucks.
- D.** Off-street loading spaces must be designed as follows:
1. All required off-street loading spaces must be a minimum of 12 feet in width, a minimum of 35 feet in length, exclusive of aisle and maneuvering space, and have a minimum vertical clearance of 15 feet.
  2. All off-street loading spaces must be surfaced with a durable, all-weather material.
  3. Off-street loading facilities must be drained to eliminate standing water and prevent damage to abutting property and/or public streets and alleys.
  4. Each required off-street loading space must be designed with adequate means of vehicular access to a street or alley and in a manner that will minimize interference with traffic movement.



Table 11-12: Off-Street Loading Requirements	
Use Type	Number of Spaces Required
<b>Multi-Family Dwelling</b>	
Total of 50 dwelling units or more	1 loading space
<b>Commercial &amp; Institutional Use</b>	
20,000 - 100,000sf GFA	1 loading space
100,001 - 200,000sf GFA	2 loading spaces
Each additional 50,000sf of floor area (This applies only for each additional full 50,000sf over 200,000sf)	1 additional loading space
<b>Industrial Use</b>	
10,000 - 40,000sf GFA	1 loading space
40,001 - 100,000sf GFA	2 loading spaces
Each additional 50,000sf of floor area (This applies only for each additional full 50,000sf over 100,000sf)	1 additional loading space

**11.11 OUTDOOR STORAGE OF COMMERCIAL VEHICLES**

- A.** No commercial vehicle may be parked outdoors on a lot in a residential district, with the exception of:
  - 1. Vehicles engaged in loading or unloading or current work being done to the adjacent premises.
  - 2. Standard size vehicles owned and used for commercial purposes by the occupant of a dwelling or guest are allowed including, but not limited to, vans, sports utility vehicles (SUVs), standard passenger size livery vehicles, and pick-up trucks, provided that the vehicle is stored or parked in a permitted parking area.
  - 3. Permitted commercial vehicles may include the logo of the commercial business painted on or applied to the vehicle.
  
- B.** All other commercial vehicles including, but not limited to, semi-truck tractor units, with or without attached trailers, commercial trailers, box vans and box trucks, buses, tow trucks, construction vehicles, livery vehicles that exceed standard passenger vehicle size, such as limousines, or other large commercial vehicles are not permitted to be stored or parked outdoors overnight on a lot in a residential district.
  
- C.** For non-residential uses in all districts, commercial vehicles with the logo of the commercial business painted on or applied to the vehicle that are being operated and stored in the normal course of business, such as signs located on delivery trucks, promotional vehicles, moving vans, and rental trucks, are permitted to be stored on the lot in areas related to their use as vehicles, provided that the primary purpose of such vehicles is not the display of signs. All such vehicles must be in operable condition.

**11.12 OUTDOOR STORAGE OF RECREATIONAL VEHICLES**

- A.** No trailer licensed to transport either recreational vehicles or equipment or any recreational vehicle may be stored outdoors within the front or corner side yard, including within a residential driveway, for more than seven days.
  
- B.** Recreational vehicles must be located within the interior side yard behind the front building line or in the rear yard. If stored in the interior side or rear yard, the recreational vehicle must be located at least ten feet from any lot line and screened from view from any public right-of-way by a solid fence or wall. If the recreational vehicle is screened by an existing structure or landscape so that it is not visible from the public right-of-way, it is considered to meet these requirements. Temporary storage tents and tarps for recreational vehicles are not considered screening and do not meet these requirements.
  
- C.** No recreational vehicle may be used for permanent or temporary living, sleeping, or housekeeping purposes in any district and may not be hooked up to any public utilities. However, temporary connection to utilities is permitted for the maintenance of the recreational vehicle by the owner, such as dehumidification, battery damage prevention, and similar.

**D.** All recreational vehicles must be maintained in mobile condition. No recreational vehicle may be parked or stored in such manner as to create a dangerous or unsafe condition on the lot where it is parked or stored. If the recreational vehicle is parked or stored, whether loaded or not, so that it may tip or roll, it is considered to be a dangerous and unsafe condition.