

Chapter 29-4 Form and Development Controls⁵²⁵

29-4.1 Dimensional Summary Table

(a) General Dimensional Standards

The following Tables 4.1-1 to 4.1-3 state the dimensional standards for residential, mixed use, and special purpose districts contained in Article 2 (Zoning Districts). In case of a conflict between the dimensions shown in this Section 4.1 and the dimensions shown for individual zone districts in Article 2, the provisions of this Section 4.1 shall apply. In each table, a blank cell indicates that there is no standard for that dimension or measurement. (See Section 29-4.6(c) (Stream Buffer Standards), for additional required building setbacks from stream corridors. See Section 29-4(b)(2) (Solar Orientation Density Bonus) and Section 29-4.1(b)(3) (Rural Cluster Density Bonus), for additional information related to dimensional standard reductions and bonuses.)⁵²⁶

Table 4.1-1: Dimensional Standards for Residential Districts					
Standard	District				
	R-1	R-2 [1]		R-MF [2]⁵²⁷	R-MH⁵²⁸
		Current	Cottage		
Lots					
Minimum Lot Area (sq. ft.)					
One-Family Dwelling	7,000	5,000	3,000	5,000 ⁵²⁹	3,750 ⁵³⁰
One-Family Attached Dwelling		5,000	3,000	5,000	
Two-Family Dwelling		7,000 ⁵³¹		7,000	
Multiple Family Dwelling				2,500 per du ⁵³²	
Sorority or Fraternity					

⁵²⁵ This section includes existing development controls in Chapter 29 (Zoning), Chapter 25 (Subdivision), Chapter 23 (Signage), and most of Chapter 12A (Land Preservation). Minimum dwelling unit floor area requirements were deleted in order to allow market flexibility, and because building codes address safe levels of building occupancy. Chapter 12A sections included are the definitions in Article 1 (General), Article III (Tree Preservation and Landscaping Requirements), Article IV (Erosion Control Requirements) Article V (Stormwater Management), and Article X (Stream Buffer Requirements). . The following articles have not been incorporated and will remain in 12A: Article VII (Clean Fill), Article VIII (Stormwater Utility), and Article IX (Detection and Elimination of Illicit Stormwater Discharges, which includes Nuisances) because they are better regulated by Public Works.

⁵²⁶ Cross-reference to density bonus provisions added since Module 3.

⁵²⁷ In response to multiple public comments since prior draft, table has been revised to retain R-3 standards as basic development standards in R-MF, and to treat pre-existing R-4 developments as conforming

⁵²⁸ Module 1 commits to reducing min. manufactured home size and widths.

⁵²⁹ Reduced from 7,000 sf to match R-2 standard.

⁵³⁰ Reduced from current 4,050 sf to promote efficient land use and affordability.

⁵³¹ This lot size permits duplexes, but not attached single-family homes under the current definition of “Dwelling, single-family attached” which requires a side lot separating the attached homes.

⁵³² Current code requires 2,500 sq. ft. in R-3 and 1,500 sq. ft. for R-4. In response to multiple public comments, compromise of 2,000 sq. ft. included in prior draft was replaced by existing R-3 standard. The transitional standards in Section 29-4.5(f) protect adjacent R-1 districts through height and buffering controls.

Table 4.1-1: Dimensional Standards for Residential Districts					
Standard	District				
	R-1	R-2 [1]		R-MF [2] ⁵²⁷	R-MH ⁵²⁸
		Current	Cottage		
CRCC				No min, but max density 17du/ac	
Lot area if no public or community sewer [5]	15,000 ⁵³³	15,000	15,000		
Minimum Lot Width (ft.)	60	60	35	60	45
Maximum size of contiguous parcel (ac.)			1		
Minimum Setbacks (ft.)					
Front Yard					
Front Yard Depth	25	25	10	25	20
Front lot line to garage depth (if applicable)	25 ⁵³⁴	25	20		
Side Yard					
Side Yard	6	6	6	10	10
Side Yard – Corner Lot Street Side⁵³⁵	25	25	10	15	
Distance between mobile dwelling units					20
Rear Yard	Lesser of 30% lot depth or 25	Lesser of 25% lot depth or 25	10	25	10
Maximum Height (ft.)					
Primary Residential Building See also Sec 29-4.9 Neighborhood Protection Standards	35[3]	35[3]	35	30 ⁵³⁶	35
Primary Non-residential Building [4]⁵³⁷ See also Sec 29-4.9 Neighborhood Protection Standards	75	75	75	75	

⁵³³ New standard to address a gap in current ordinance.

⁵³⁴ New standard to regulate detached garages.

⁵³⁵ Standards for R-1, R-2, and R-MF added since prior draft to clarify that second frontages on corner lots are subject to front yard setback requirements.

⁵³⁶ Current code has 35 ft. for R-3 and 45 ft. for R-4. Revised from 45 and 35ft. in prior draft in response to public comments.

⁵³⁷ Current code applies this to “public and semi-public buildings”. A Primary Non-residential Building is a new term in the Code definitions.

Table 4.1-1: Dimensional Standards for Residential Districts

Standard	District				
	R-1	R-2 [1]		R-MF [2] ⁵²⁷	R-MH ⁵²⁸
		Current	Cottage		
[1] All R-2 lands are subject to Current Standards until they request application of the Cottage Standards, and that request is approved under Sec. 29.4(l).					
[2] Multifamily structures constructed before January 1, 2014, with building height up to 45 ft. and lot area of at least 1,500 sq. ft. per dwelling unit are conforming structures. ⁵³⁸					
[3] Or 45 ft. if two side yards at least 15 ft. in width are provided.					
[4] Provided that each building setback is increased one (1) foot above the zone district residential building minimum for each one (1) foot of additional building height above the residential building maximum.					
[5] The minimum lot area for on-site septic is subject to Health Department approval based, in part, on distances between the lot and existing public sewer mains. This lot area could be greater, conditional, or denied on a case-by-case basis.					

Table 4.1-2: Dimensional Standards for Mixed Use Districts⁵³⁹

Standard	District						
	M-OF	M-N [1]		M-C [2]		M-BP	M-DT
		Current	Pedestrian	Current	Transit		
Lots							See Section 29-4.2 for M-DT Dimensional Standards
Minimum Lot Area (sq. ft.)							
Lot Area							
Lot Width at Building Line							
Building Setbacks (ft.)							
Front Yard							
General	Min. 25	Min. 25	Min. 0 Max. 10 [3]	Min. 25	Min. 0 Max. 10 [3]	Min. 15	
From Arterial and Collector Streets						Min. 25	
Side Yard							
General⁵⁴⁰	Min. 0	Min. 0	Min. 0	Min. 0	Min. 0	Min. 0	
Corner Lot Street Side	Min. 15	Min. 15	Min. 0	Min. 15	Min. 10	Min. 20	
Adjacent to R District⁵⁴¹	Min. 10	Min. 10	Min. 10	Min. 20	Min. 20	Min. 20	
Corner Lot Frontage on Arterial or Collector Street						Min. 25	
Corner Lot Frontage on Other Streets						Min. 20	
Rear Yard							
General	Min. 25	Min. 0	Min. 0	Min. 0	Min. 0	Min. 0	
Adjacent to R District⁵⁴²		Min. 10	Min. 10	Min. 20	Min. 20	Min. 20	
Maximum Height (ft.)							
Primary Building See also Sec 29-4.9 Neighborhood Protection Standards	45 ⁵⁴³	35	35	45	55	45	

⁵³⁸ New provisions. In response to multiple public comment, R-MF standards match current R-3 standards, but prior R-4 properties are made conforming.

⁵³⁹ M-N Pedestrian and M-C Transit standards are new. Other changes as noted.

⁵⁴⁰ Although the minimum general side yard setbacks are all 0 ft., this line item is included for consistency with the other categories in this table.

⁵⁴¹ M-C and B-P side yards increased from 10 to 20 feet to provide additional buffering for R districts.

⁵⁴² M-C and B-P rear yards increased from 10 to 20 feet to provide additional buffering for R districts.

⁵⁴³ Provision allowing O-P heights to increase to 75 ft. with additional setbacks was not carried over. Office districts are generally located near residential areas, where additional height is a potential issue.

Table 4.1-2: Dimensional Standards for Mixed Use Districts⁵³⁹

Standard	District						
	M-OF	M-N [1]		M-C [2]		M-BP	M-DT
		Current	Pedestrian	Current	Transit		
[1] All M-N lands are subject to Current Standards until they request application of the Pedestrian Standards and that request is approved under Sec 29-5.4(l). [2] All M-C lands are subject to Current Standards until they request application of the Transit Standards, and that request is approved under Sec. 29-5.4(l). [3] 75% of building frontage width must be located between minimum and maximum setback distances.							

Table 4.1-3: Dimensional Standards for Special Districts

Standard	District		
	IG ⁵⁴⁴	A ⁵⁴⁵	O ⁵⁴⁶
Lots			
Minimum Lot Area (ac.)		2.5	2.5
Minimum Lot Area For Non-Agricultural Uses (sq. ft.)			
Minimum Lot Width at Building Line (ft.)			
Minimum Setbacks (ft.)			
Front Yard	25	25	25
Side Yard – General	0	25	25
Side Yard – Adjacent to R District	20 ⁵⁴⁷		
Rear Yard – General	10	25	25
Rear Yard – Adjacent to R District	20 ⁵⁴⁸		
Maximum Height (ft.)			
Primary Building See also Sec 29-4.9 Neighborhood Protection Standards		35	35

(b) Special Dimensional Standards or Measurements⁵⁴⁹

(1) Median Front Yard for Multiple Lots⁵⁵⁰

- (i) In the R-1, R-2, and R-MF districts, where the nearest lots on either side of a residential lot have been developed with residential structures, the median of the front yards of

⁵⁴⁴ As noted in Module 1, minimum project size of 22,000 sf and minimum lot width of 100 ft. from current M-C district were not carried over. Minimum front setback of 30 ft., rear setback of 30 ft., and side setbacks of 15 ft. from the current M-C district were also not carried over.

⁵⁴⁵ Minimum building floor area of 650 sf and min. lot area of 7,000 sf for non-agricultural uses has been deleted.

⁵⁴⁶ O is a new district, and all dimensional standards are new.

⁵⁴⁷ Increased from 10 feet in current code to improve protection for residential areas.

⁵⁴⁸ New standard.

⁵⁴⁹ Carries forward and reorganizes (with more heading) special dimensional standards in current Sec. 29-26 (Height and Area Exceptions).

⁵⁵⁰ Current Sec. 29-26(b)(1); wording clarified.

such residential buildings shall establish the minimum front yard depth for the subject lot.⁵⁵¹

- (ii) Where a recorded plat has been filed showing a setback line that otherwise complies with the requirements of this chapter, but is less than the established setback for the block as provided above, the setback line shown on the plat shall apply.

(2) Solar Orientation Density Bonus

- (i) A subdivision in the R-1 or R-2 zone districts in which at least seventy-five (75) percent of lots are created on blocks where the longer dimension of the block is oriented within fifteen (15) degrees of true east-west in order to increase potential solar gain, the maximum number of single-family or two-family lots permitted on the parcel under Table 4.3-1 shall be increased by ten (10) percent above the number of lots permitted, and the minimum size and width of each lot shall be reduced by fifteen (15) percent below the minimum lot size and width required, if streets had not been so aligned.⁵⁵²
- (ii) In a subdivision that meets the requirements of subsection (i) the minimum lot size and lot width in the R-1 or R-2 zone districts shall be adjusted to allow the parcel to contain ten (10) percent more lots than if the streets had not been so aligned.

(3) Rural Cluster Density Bonus

- (i) A subdivision in the R-1 or R-2 zone districts that preserves at least fifty (50) percent of the gross land area of the parcel in open space protected from future development shall be allowed to include ten (10) percent more residential lots than if such land had not been designated for protection.
- (ii) In order to earn a density bonus, the lands protected from development shall meet the following requirements:
 - (A) The calculation of protected open space shall not include any lands designated as floodway or flood fringe in the FP-O Floodplain overlay;
 - (B) The protected lands shall include any lands designated as sensitive lands on the Land Analysis Map required by Section 29-4.3(b)(1) to the greatest degree practicable;
 - (C) The protected lands shall be designed to be contiguous to any protected lands on adjacent subdivided lands to the greatest degree practicable;
 - (D) The applicant shall record in the real property records of Boone County a restrictive covenant, in a form acceptable to the City Counsel, preventing future development of the protected lands in perpetuity, and demonstrating that a homeowners association or other entity has accepted responsibility for maintenance and management of the protected lands and has legal authority to collect funds from homeowners or others adequate to pay the expenses of such maintenance and management.

⁵⁵¹ Replaced R-3 and R-4 with R-MF. Revised to simplify process by requiring alignment with nearest two occupied structures, rather than calculation of median setback on the entire lot.

⁵⁵² New provision to increase solar gain potential. Revised since Module 3 to confirm that minimum lot sizes and widths may decrease to allow the bonus lots to be accommodated.

- (iii) In a clustered subdivision that meets the requirements of this Section 29-4.1(b)(3), the minimum lot size and lot width in the R-1 or R-2 zone shall be adjusted to allow the parcel to contain ten (10) percent more lots than if fifty (50) percent of the gross land area had not been protected from development.
- (iv) This density bonus may not be combined with the Solar Access Density Bonus in Section 29-4.1(b)(2).

(4) Rear Yards⁵⁵³

- (i) No rear yard shall be required in any nonresidential district on any lot of which the rear lot line adjoins a railway right-of-way or which has a rear railway track connection.
- (ii) In computing the depth of a rear yard for any building where such yard abuts an alley, one-half of such alley may be assumed to be a portion of the rear yard.
- (iii) Standards in Subsections (i) and (ii) do not apply in the M-DT district, which has separate provisions for measuring building rear setbacks.

(5) Official Plan⁵⁵⁴

Where a line on the Major Roadway Plan (MRP) indicates that street widening has been planned and programmed for capital investment within five (5) years, right-of-way shall be reserved for future widening or opening of a street upon which a lot abuts, and the depth or width of a yard shall be measured from the MRP line to the nearest line of the building.⁵⁵⁵

(6) Detached Accessory Structure⁵⁵⁶

- (i) In any residential district, a detached customary accessory structure shall not:
 - (A) Exceed twenty-four (24) feet in height;
 - (B) Be higher than the main building; or
 - (C) Occupy more than thirty (30) percent of a rear yard.
- (ii) A detached accessory structure may be connected with the main building by a breezeway,⁵⁵⁷ open on each side, not more than six (6) feet wide inside, the roof of which is not more than twelve (12) feet high at its highest point, and is not an extension of the roof of the main building.

(7) Higher Education Institution Buildings⁵⁵⁸

Buildings constructed on the campus of an institution of higher learning, and that have been included as part of a development plan approved by the Council, need not comply with the yard requirements of the district in which they are located, but shall comply with the following requirements:

⁵⁵³ Current Sec. 29-26(b)(7-8).

⁵⁵⁴ Current Sec. 29-26(b)(2).

⁵⁵⁵ Clarification made since Module 3 to qualify when ROW needs to be dedicated for future roadways.

⁵⁵⁶ Current Sec. 29-26(b)(6). Revised to align with defined term – “customary accessory structure”.

⁵⁵⁷ Clarification made since Module 3.

⁵⁵⁸ Current Sec. 29-26(b)(9)

- (i) Minimum distance between the building and a street line is twenty-five (25) feet,⁵⁵⁹ and
- (ii) Minimum distance to a property line other than a street is fifteen (15) feet for buildings thirty-five (35) feet or less in height, and five (5) additional feet for each additional ten (10) feet or part thereof in height.

(c) Exceptions and Encroachments⁵⁶⁰

(1) Height⁵⁶¹

Table 4.1-4 identifies exceptions to those height limits shown in Section 4.1(a) and (b) above.

Table 4.1 – 4: Height Exceptions		
Structure, Feature, or Use	Maximum Height (ft.)	Conditions or Limits
Elementary/Secondary Schools in R-MF district⁵⁶²	100	
<ul style="list-style-type: none"> ▪ Parapet walls ▪ False mansards ▪ Flagpoles ▪ Chimneys ▪ Finial cooling towers ▪ Elevator bulkheads ▪ Penthouses ▪ Stacks ▪ Cupolas ▪ Antennas ▪ Spires, and ▪ Rooftop solar energy equipment⁵⁶³ ▪ Rooftop HVAC equipment screened by parapet wall⁵⁶⁴ 	6 feet above maximum height limit of zone district	
Rooftop or yard mounted WECS equipment in B-P or IG district⁵⁶⁵	30 ft. above maximum height limit in	

⁵⁵⁹ Additional text reading “except that where there is a building existing at the time of the passage of this section, with less than a twenty-foot setback on the same side of the street and within one hundred (100) feet on either side of the proposed building, such building may be located not less than twenty (20) feet from the street line”, was not carried forward; standard nonconformity provisions should apply.

⁵⁶⁰ Carries forward additional height and yard exceptions in Sec. 29-26 in tabular form, allowing for the elimination of unnecessary text and better readability.

⁵⁶¹ Current Sec. 29-26(a)(Height) with noted revisions.

⁵⁶² Text stating that there are no additional setbacks has been deleted.

⁵⁶³ Rooftop solar energy equipment has been added to this list.

⁵⁶⁴ New provision.

⁵⁶⁵ WECS have been added to this table.

Table 4.1 – 4: Height Exceptions		
Structure, Feature, or Use	Maximum Height (ft.)	Conditions or Limits
	zone district	
Agricultural uses (e.g. silos, windmills, barns, etc.) in A-1	75 feet	
Radio and television antenna (private, noncommercial) in Residential districts⁵⁶⁶	45 feet	Must not be located in front yard, and must comply with all other applicable laws and ordinances.

(2) Yard Areas⁵⁶⁷

Table 4.1-5 identifies exceptions and encroachments to required yard areas. Except for permitted exceptions in the table, every part of a required yard or court shall be open and unobstructed from its lowest point to the sky.

Table 4.1-5: Yard Area Exceptions ⁵⁶⁸				
Structure, Feature, or Use		Yard Encroachment (maximum)		Conditions or Limits
Building sills, belt courses, cornices, chimneys, buttresses, ornamental features, eaves, and rain barrels⁵⁶⁹		2 ft. into a yard		
Canopies or open porches⁵⁷⁰		6 feet into front or rear yard		Roof area limited to 60 sf or less; Porch cannot be enclosed
Driveways⁵⁷¹	Single- and Two-Family Residential	Up to a 2-car garage	Permitted to a maximum width of 20 ft. in any front, rear, side, or corner side yard	Single- and two-family residential driveways shall maintain a setback of 5 ft. from the side property line and shall not occupy more than 50% of the lot width.
		3-car garage	Permitted to a maximum	

⁵⁶⁶ Sec. 29-26(a)(6).

⁵⁶⁷ Carries forward the yard exceptions in current Sec. 29-26(b).

⁵⁶⁸ Revised since Module 3 to delete unnecessary reference to terrace garages.

⁵⁶⁹ Current Sec. 29-26(b)(3). Reference to rain barrels added.

⁵⁷⁰ Current Sec. 29-26(b)(3). Reference to rear yards added.

⁵⁷¹ Driveway standards revised since Modules 2 and 3 based on public and staff comments. 20 foot maximum driveway width has been tailored based on the size and occupancy of residential units. Current maximum width for a 3-car driveway is 30 ft. and for a shared duplex driveway is 40 ft. Current maximum multi-family, commercial, and mixed-use driveway widths (for a two-way driveway) were reduced from 42 to 36 feet to encourage walkability.

Table 4.1-5: Yard Area Exceptions ⁵⁶⁸				
Structure, Feature, or Use		Yard Encroachment (maximum)		Conditions or Limits
			width of 28 ft. in any front, rear, side, or corner side yard	
		Shared duplex driveway	Permitted to a maximum width of 36 ft. in any front, rear, side, or corner side yard	
	Multi-Family, Commercial, and Mixed-Use	Permitted to a maximum width of 24 ft. (one-way, in or out), and 36 ft. (combined, in and out) in any front, rear, side, or corner side yard		Multi-family, commercial, and mixed-use driveways shall maintain a setback of 10 ft. from any side property line adjacent to a Residential district, or as determined by the required driveway radius.
Lot boundary fences, walls, and retaining walls⁵⁷²		Permitted up to lot line		May not encroach on public right-of-way or adjacent property without consent of owner
Open fire escape⁵⁷³		Into side yard, by no more than ½ the side yard width		Cannot extend more than 4 feet from the building
Open paved terraces⁵⁷⁴		10 feet into front or rear yard		
Solar or geothermal energy equipment⁵⁷⁵		Permitted in a side or rear yard		Not within 2 feet of a side or rear property line

29-4.2 M – DT Form-based Controls⁵⁷⁶

The M-DT district places a primary emphasis on physical form and placemaking—to encourage a mixed-use, pedestrian-oriented district—with a secondary focus on land uses. Property frontages

⁵⁷² Added since Module 2.

⁵⁷³ Current Sec. 29-26(b)(4).

⁵⁷⁴ Current Sec. 29-26(b)(3).

⁵⁷⁵ Solar energy limit of 2 feet encroachment into yards replaced by limit of 2 feet from property line. Geothermal energy reference added.

⁵⁷⁶ New form-based controls prepared by Ferrell-Madden for the M-DT district, which replaces the current C-2 district.

and Facades are part of the public realm, literally forming the walls of the Street-Space and are therefore subject to more regulation than the other portions of the private property. The private, interior portions of the lots are less controlled to allow residents and operators to use these spaces as environments unseen by the public and allow residents to have Private Open Space, gardens and courtyards. The principal regulatory sections of the M-DT district are the Regulating Plan, the Building Form Standards, and the Urban Space Standards, described below.

(a) Purpose and Intent

(1) The Regulating Plan

The Regulating Plan is the key to applying M-DT regulations to individual properties in the District. It provides a public space master plan with specific information on development parameters for each parcel and shows how each lot relates to the Street-Space and the surrounding neighborhood. The Regulating Plan also identifies additional regulations and/or opportunities for lots in specific locations, as well as place-specific exceptions to the Building Form Standards.

(2) The Building Form Standards

The Building Form Standards (BFS) establish basic parameters governing building form for different locations shown on the Regulating Plan in order to shape the Street-Space through the siting and form controls on buildings. Their secondary intent is to ensure that the buildings cooperate to form a functioning, sustainable, Block structure throughout the District. They describe the buildable envelope (in three dimensions) and certain permitted or required building elements that define the form and mixed-use character of the District. The Building Form Standards establish both the boundaries within which things may be done and specific things that must be done. The street frontage designated on the Regulating Plan determines the applicable Building Form Standard for a building site.⁵⁷⁷

(3) The Urban Space Standards

The Urban Space Standards establish those rules and standards for the Street-Space and Squares and Greens within the M-DT district that are the responsibility of the developer. They establish an environment that encourages and facilitates pedestrian activity and “walkable” streets that are comfortable, efficient, safe, and interesting, and ensure the coherence of the Street-Space.

(b) Using the M-DT District Form Standards

This section describes how to apply the requirements of the M-DT district to specific properties.

- (1) Look at the Zoning map and determine if property in question is located within the M-DT District. If it is not, then Section 29-4.2 is not applicable.

⁵⁷⁷ The distribution of Building Form Standard frontages was determined by the physical context, diversity of allowed/required uses, the 2010 Downtown Urban Design Charrette plan and study of the existing conditions.

- (2) Look at the Regulating Plan in Section 29-4.2(c) and find the property in question. Note the color of the Street-Space fronting the lot—and then look at the “key” box to determine which Building Form Standard frontage applies to the property. Note the Required Building Line and the Parking Setback Line.
- (3) Find the applicable individual Building Form Standard in Section 29-4.2(e). The individual Building Form Standard frontage will tell you the parameters for development on the lot in terms of height, siting, elements, and use.
- (4) Additional regulations applicable to all properties in the M-DT district are located in Sections 29-4.2(d)(General Building Form Standards) and (f)(Urban Space Standards).

Land uses, parking requirements, and signage standards, that apply to the M-DT district are found in Chapter 3 and in Sections 4.3 through 4.10 of this Code.

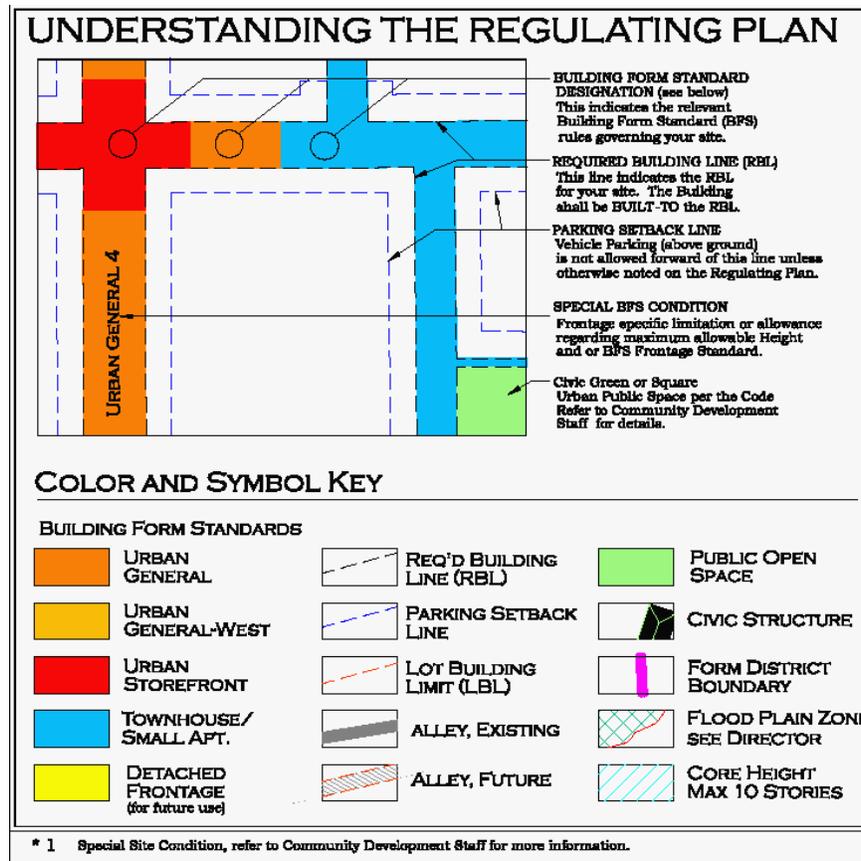
(c) The Regulating Plan

The Regulating Plan makes the M-DT standards place-specific, by describing where each Building Form Standard applies and by defining the public spaces. The Regulating Plan also identifies the items below, as illustrated in the Plan and Key that follow:

- The boundaries for the district;
- Existing and proposed streets and Alleys;
- The Required Building Lines, Parking Setback Lines, and Lot Building Limits.

(1) Understanding the Regulating Plan

The following images of the M-DT District Regulating Plan and Key are for illustrative purposes only. A full-scale version of the adopted Regulating Plan can be found at: [website to be inserted]. Contact the Community Development Department for further information about the M-DT district and Regulating Plan.



(2) Streets, Blocks and Alleys on the Regulating Plan

- (i) Street connectivity and the pedestrian-oriented public realm are fundamental characteristics of the M-DT district.⁵⁷⁸ When a property is developed or redeveloped:
- (A) For large-scale projects (involving the majority of a Block or more), the Regulating Plan may require the addition of new streets to create a smaller block pattern.
 - (B) No streets shown on the Regulating Plan may be removed without a replacement street being constructed in a location that maintains overall street connectivity in that area.
 - (C) While the street infrastructure may not be constructed or reconstructed until some point in the future, the Required Building Line and other regulations of the Regulating Plan shall apply to each affected property.
 - (D) New Alleys or Pedestrian Pathways required by the Regulating Plan shall be public or publically accessible.
 - (E) All lots shall share a frontage line with a Street-Space.⁵⁷⁹

⁵⁷⁸ Street and Alley configurations shown on the Regulating Plan may or may not be immediately constructed. Recommended Street Types for the M-DT are shown in Appendix A.

⁵⁷⁹ Street-Space includes more than just the street. For example, a lot could front on a park, green, or square.

- (ii) Block size is a key component of walkability. For existing Block Faces of greater than three hundred fifty (350) feet in length at the time of redevelopment:
 - (A) The Block Face must be interrupted by an Alley, Common Drive, or Pedestrian Pathway providing through-access to another Street-Space, Alley, Common Drive or designated Conservation Line.
 - (B) Individual lots with up to one hundred fifty (150) feet of street frontage are exempt from the requirement to interrupt the Block Face
 - (C) Individual lots with over one hundred fifty (150) feet of street frontage shall meet the requirement within their lot, unless already satisfied within that Block Face.
- (iii) Curb Cuts detract from the pedestrian realm and should be limited or removed to the extent possible during redevelopment.
 - (A) For lots with an Alley accessible to service vehicles, existing curb cuts shall be eliminated or vacated at the time of redevelopment unless the Director determines that they are necessary to protect public safety or avoid traffic congestion, or because Alley access will not serve the functional needs of the property.
 - (B) For lots without Alley access, existing curb cuts may be maintained or relocated.
 - (C) Where a parking structure is provided with at least thirty (30) percent of its spaces publically available, existing curb cuts may be relocated or maintained to provide access to the structure, even if the parcel has Alley access.
- (iv) Alleys are a key component of M-DT District connectivity and service infrastructure.
 - (A) Alleys or Common Drives must provide automobile and service access to the rear of all lots, except where the City has regulated alley access, where lots abut non-developable lots, or where a lot has streets on three sides and the absence of an Alley or Common Drive would not deprive an adjacent neighbor of rear lot access.⁵⁸⁰
 - (B) New Alleys require an amendment to the Regulating Plan.
 - (C) For new Alleys or Common Drives, public access, public utility, and drainage shall be dedicated through an irrevocable easement.
 - (D) Alleys may be incorporated into (rear) parking lots as standard drive aisles if cross-access to all abutting properties is maintained.
 - (E) Where an Alley does not exist but is identified on the Regulating Plan, and it is not feasible to construct the Alley at the time of redevelopment, no permanent structure shall be constructed on the proposed Alley right-of-way.

(3) Regulating Plan Amendments

Any amendment or change to the Regulating Plan shall require the adoption of a revised Regulating Plan through the same procedures used for an amendment to the Zoning Map as described in Chapter 5 (Procedures and Enforcement) of this Code.

(d) General Building Form Standards

⁵⁸⁰ Revised since Module 3 to recognize cases where the City does not allow alley use for vehicle access.

The Building Forms detailed in this section establish the standards and parameters for new development and redevelopment within the M-DT District. The following standards apply to all Building Form Standard frontages, unless expressly stated otherwise within an individual Building Form Standard or otherwise designated on the Regulating Plan.

(1) Transitions

When the Building Form Standard designation shown on the Regulating Plan changes along a property’s Required Building Line, that property owner has the option of applying either Building Form Standard for a maximum additional distance of fifty (50) feet along that Required Building Line.

(2) Façade Composition⁵⁸¹

“Façade composition” is the arrangement and proportion of façade materials and elements (windows, doors, columns, pilasters, bays). “Vertical” indicates the composition from the sidewalk level to the parapet or eaves. “Complete and discrete” distinguishes one part of the Façade from another to break down the perceived scale of large buildings and provide a better pedestrian experience.

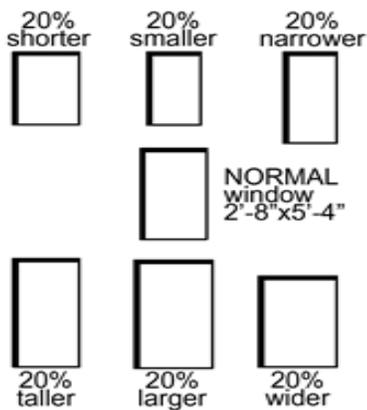


Figure 4.2-1: Fenestration Proportions: Minimum differences to achieve subsection (B)

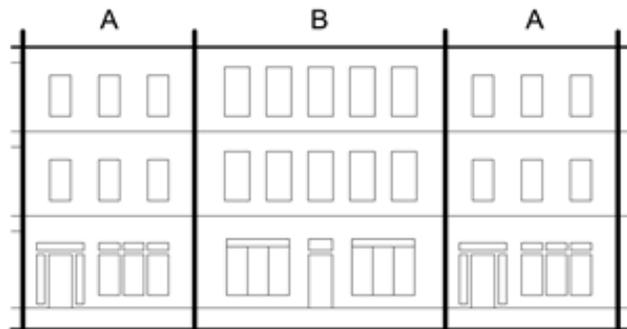


Figure 4.2-2: Different Vertical Façade Bay Compositions within a Block Face- “A” and “B” have: different number of bays; different Ground Story window and door configurations; and different Upper Story window sizes and spacing.

- (i) Along each Block Face, Façades along the Required Building Line shall be broken down into Complete and Discrete Vertical Façade Compositions to maintain and/or create a pedestrian-scale for the Street-Space., The maximum average length of individual Façade Compositions along a Required Building Line (generally running parallel to the fronting sidewalk) for each Building Form Standard is specified in the Elements section of the Individual Building Form Standard Frontage standards.⁵⁸²

⁵⁸¹ Since Module 3, text and drawing captions have been revised to clarify intent.

⁵⁸² Note that these are average distances, not absolute intervals. A longer Façade composition may be presented, as long as smaller compositions appear within the same Block Face in order to achieve the above-stated average. This requirement may be satisfied for large footprint uses, such as large groceries and department stores, through the use of liner shops.

- (ii) To achieve a Complete and Discrete Vertical Façade Composition along a street frontage requires, at a minimum, subsection (A) below and at least two additional items from subsections (B) through (E) below:
 - (A) Clearly different Ground Story Façade configuration (either materials or Fenestration proportions and spacing or both) from one Vertical Façade Composition to the next.
 - (B) Fenestration proportions differing between one Vertical Façade Composition to the next of at least twenty (20) percent in height or width or height:width ratio (See Figure 4.2-1).
 - (C) At least two (2) different bay configurations (See Figure 4.2-2).
 - (D) Change in wall material (changes in paint color are insufficient).
 - (E) Change in total Fenestration percentage (minimum difference 12 percent; ground floor Façades are not included).
- (iii) Each Façade composition shall include a functioning street entry door.
- (iv) Individual infill projects on lots with street frontage of less than one hundred (100) feet on a Block Face are exempted from the overall Façade composition requirement for that Block Face, but shall still include a functioning street entry.
- (v) Where glass is used to meet the fenestration requirements, it shall have a light transmission at the Ground Story at least ninety (90) percent and for the upper stories at least seventy-five (75) percent, unless otherwise required by the building or energy conservation code.⁵⁸³

(3) Building Size

The maximum ground floor footprint for each building, but not including parking structures that comply with this Code, is twenty-five thousand (25,000) gross square feet.⁵⁸⁴ The construction of larger buildings shall require an Adjustment of Form-based Controls as described in Section 19-5.4(e).

(4) Neighborhood Transitions⁵⁸⁵

For any Urban General, Urban Storefront, and Urban General-West frontage sites, the following rules apply.

- (i) Where a site shares a Common Lot Line with an R-3 lot that is limited to a single-family detached residential structure due to lot size:

⁵⁸³ Window transparency is fundamental to a healthy urban Street-Space Reflective, rather than clear, windows are effectively a blank wall and deaden the street.

⁵⁸⁴ The maximum building footprint limits the scale of individual buildings in M-DT and maintains the pedestrian scale along the street frontage. A typical Downtown Columbia block is approximately 72,000 square feet. This standard will allow a building that is 100x250 feet, or approximately one third of block. The new portion of City Hall has a footprint of just over 10,000 square feet. A typical supermarket ranges from 50-75,000 square feet.

⁵⁸⁵ Depending on the final adopted M-DT Regulating Plan, the Neighborhood Transitions standards may be deleted.

- (A) There shall be at least a twenty (20) foot setback from the Common Lot Line. Common Drives and Alleys are allowed in this setback area. (See Figure 4.2-3).
- (B) Notwithstanding any minimum height requirement, within fifty (50) feet of the Common Lot Line, and within eighty (80) feet of any Required Building Line, the structure shall have a maximum height of thirty (30) feet. (See Figure 4.2-4).

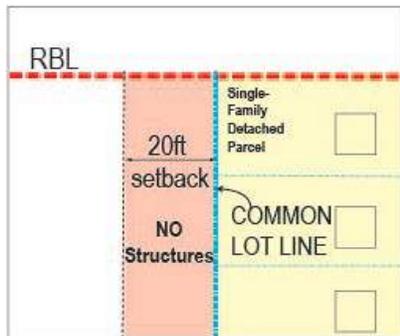


Figure 4.2-3: Common Lot Line Setback

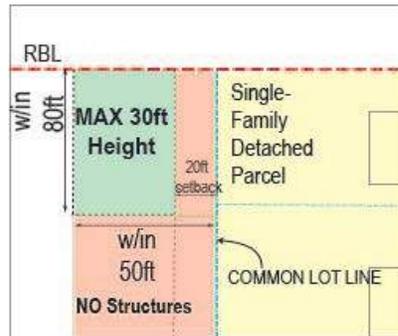


Figure 4.2-4: Common Lot Line & Height

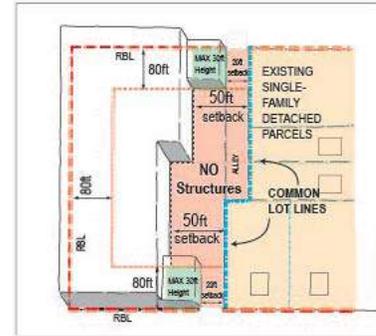


Figure 4.2-5: Buildable Envelope Limitations (Illustrative Intent)

- (C) Farther than eighty (80) feet from any Required Building Line, there shall be an additional thirty (30) foot setback -- for a total setback of fifty (50) feet -- from the Common Lot Line for all structures. Surface parking and Common Drives and Alleys are allowed in this setback area. (See Figure 4.2-4).

(ii) Where a site shares a Common Lot Line with (or sits across an Alley from) a single-family residential property, a garden wall, four (4) to six (6) feet in height, shall be constructed within one (1) foot of the Common Lot Line or Alley. Trees from the Street Tree List shall be planted, on maximum thirty (30) foot centers, within ten (10) feet of this wall. Required tree planting numbers and locations may be adjusted to accommodate any required fire access.

(5) Height⁵⁸⁶

- (i) The height of all buildings is measured in Stories, with a Building Height limit in feet, measured from the average fronting sidewalk elevation to the top of the wall plate, unless otherwise designated in this Section 29-4.2.⁵⁸⁷
- (ii) The minimum Façade height that is required at the Required Building Line is shown on the individual Building Form Standard.

⁵⁸⁶ Since Module, provision that Attic Story is not included in building height has been removed. Building height measures are now the same throughout the City.

⁵⁸⁷ This method of measuring building height in both stories and feet provides an absolute maximum height in feet, while also encouraging varied floor-to-floor heights and roof types without increasing maximum density. This allows for more generous clear heights and accommodates unique designs such as grand lobbies, loft spaces, penthouse configurations, and habitable attic stories. This measurement applies to the M-DT district only, and may be adjusted for closer alignment with height measurement rules in other districts in the final adoption draft.

- (iii) English basement units do not count against the building story height limit but do count against the Building Height measurement.
- (iv) If a parking structure is constructed after the adoption of this Section 29-4.2 and any portion of the parking structure is located within thirty (30) feet of a building constructed pursuant to this Section 29-4.2, no portion of the parking structure shall exceed the building's primary roof ridge or parapet height.
- (v) At least eighty (80) percent of each Story must meet the minimum Clear Height prescribed in the Individual Building Form Standard.
- (vi) The Ground Story finished floor elevation requirements shall be measured:
 - (A) From the average exterior sidewalk elevation at the Required Building Line, and
 - (B) Within thirty (30) feet of any Required Building Line.

(6) Siting

- (i) Building Façades shall be built to the Required Building Line as stated in the Individual Building Form Standard.
- (ii) The building Façade shall be built to the Required Building Line within thirty (30) feet of a Block Corner, unless otherwise stated in the Individual Building Form Standards.
- (iii) The Required Building Line, which is shown on the Regulating Plan as an absolute line, allows an offset area (or depth) of twenty-four (24) inches beyond that line (into the Buildable Area) to allow for Façade articulation, unless otherwise stated in this Section 29-4.2. Portions of the Façade located within that twenty-four (24) inch zone comply with the Required Building Line.
- (iv) Buildings may only occupy that portion of the lot specified as the Buildable Area—the area behind the Required Building Line as designated by the individual Building Form Standards.
- (v) No part of any building may be located outside of the Buildable Area except overhanging eaves, awnings, shopfronts, bay windows, stoops, steps, or balconies. Handicapped ramps approved by the Director in order to comply with federal law may also extend beyond the Buildable Area. Stoops, steps, and ramps shall not be located within a required Clear Walkway. For appropriate commerce and retail uses, temporary displays or cafe seating may be placed in the Dooryard.
- (vi) No part of any building may be located outside of any designated Lot Building Limit.
- (vii) There is no required setback from Alleys or Common Drives except as stated on the Building Form Standards. On lots without Alley access, a minimum twenty-five (25) foot setback from the rear lot line shall apply.
- (viii) There are no side lot setbacks, except as specified in the Neighborhood Transitions (above) or in the Building Form Standards.
- (ix) The Parking Setback Line is generally twenty-four (24) feet behind the Required Building Line and extends as a vertical plane from the first floor level unless otherwise shown on

the Regulating Plan⁵⁸⁸ or otherwise stated in this Section 29-4.2. Vehicle parking shall be located behind the Parking Setback Line, except where parking is provided below grade, on-street, or otherwise indicated on the Regulating Plan.

- (x) All lots, including corner lots and through lots, shall satisfy the build-to requirements for all of their Required Building Line frontages, and the Dooryard and/or front yard requirements for each designated Building Form Standard, unless otherwise stated in this Section 29-4.2.
- (xi) Where a Street Wall is required in the Individual Building Form Standard, it shall be located along any Required Building Line frontage that is not otherwise occupied by a building.⁵⁸⁹

(7) Private or Public Open Area

Private or public open area must comply with standards in each Individual Building Form Standard Frontage (Section 29-4.2(e)) and in Section 29-4.4 (Landscaping and Screening).

(8) Balconies⁵⁹⁰

- (i) Balconies may not project within five (5) feet of a Common Lot Line.
- (ii) Where an Individual Building Form Standard includes Balconies as a method for achieving the required Private or Public Open Area, the Balcony:
 - (A) Shall be enclosed by balustrades, railings, or other means that block at least fifty-five (55) percent of the view through them;
 - (B) Shall not otherwise be enclosed above a height of forty-two (42) inches, except with insect screening and/or columns/posts supporting a roof or connecting with another Balcony above; and
 - (C) Shall be roofed.
- (iii) Balconies on new, renovated, or retrofitted construction may project into the public right-of-way only if:
 - (A) The improvement complies with section 24-2(c) of the City Code;
 - (B) The balcony projects only over a public sidewalk or an alley, provided that such projection does not cause a disruption to any City service or maintenance of the underlying public improvements. No balcony shall project over the travel lanes of any public street;

⁵⁸⁸ This standard is intended to prevent parking garages being exposed to the street at upper levels. As drafted, it applies throughout the M-DT District, but could be limited to key geographic locations via specific designations on the Regulating Plan, as stated above.

⁵⁸⁹ Street Walls are only required when a property is redeveloped. Street Walls are not completely opaque, as they are required to meet all fenestration requirements for the frontage in which they are located. The intent is that they maintain the built edge of the public realm and screen service areas. We expect that there will be very few Street Walls of more than minimal length (simply closing off small gaps between adjacent buildings.). This standard also provides a (small) disincentive for demolishing buildings to create more surface lots in the M-DT district.

⁵⁹⁰ Combines current Sec. 29-26(c) providing for balconies in the current C-2, and new form-based standards. Portions were relocated from Dimensional Standard section in prior draft.

- (C) The maximum projection and minimum height above the public sidewalk shall be governed by the Building Code of Columbia, Missouri, adopted in chapter 6 of the City Code; and

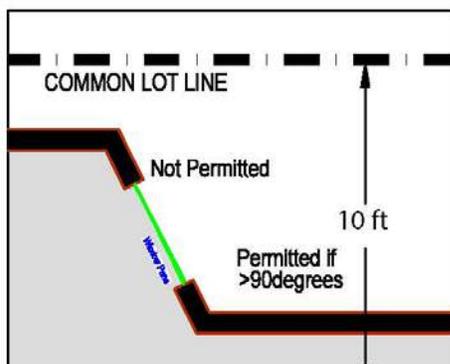
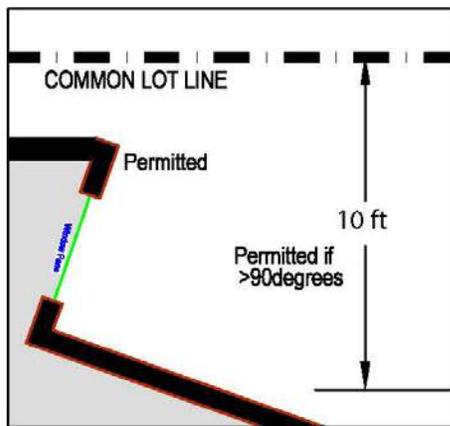
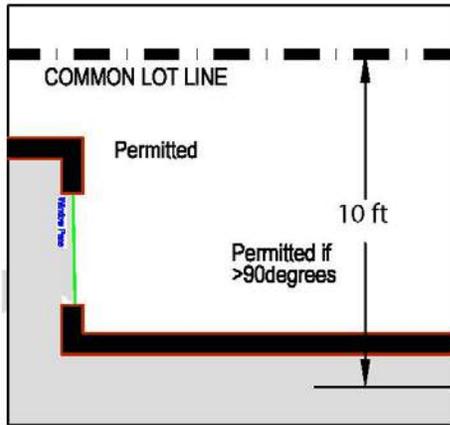


Figure 4.2-6: Relationship between a window and Common Lot Line.

- (D) The proposed balcony meets all applicable design standards contained in this Code and other ordinances passed by the Council.

(9) Other Building Elements

(i) Fenestration is regulated as a percentage of the Façade between floor levels. It is measured as glass area (including mullions and similar window frame elements with a dimension less than one inch) or as open area.

(ii) As illustrated in Figure 4.2-6, unless otherwise designated in the individual Building Form Standards or in the Building Code, no window within ten (10)⁵⁹¹ feet of a Common Lot Line may be at an angle of less than ninety (90) degrees from that Common Lot Line⁵⁹² unless:

(A) That view is contained within the lot (e.g. by a privacy fence/garden wall, opaque glass), or

(B) The sill (or other limit to transparency) is at least 6 feet above its finished floor level.

(iii) No part of any building may project forward of the Required Building Line except overhanging eaves, awnings, Shopfronts, Bay windows, stoops, steps, or balconies. Handicapped ramps approved by the Director in order to comply with federal law may also extend beyond the Buildable Area.

(iv) Ground Story awnings shall maintain a minimum horizontal clearance of one (1) foot from any point where the tree lawn meets the Clear Walkway.

(v) Bay Windows shall have an interior clear width of between four (4) and eight (8) feet at the Façade. Bay Windows shall project no more than forty-two (42) inches beyond the Façade.

(vi) Attic Stories are permitted within all Building Form Standard frontages.

⁵⁹¹ Reduced from 10 feet in Module 3.

⁵⁹² The intent of this standard is to prevent the construction of adjacent buildings looking directly into one another's windows across a common lot line within a prescribed distance. This does not violate "2nd means of egress" standards, which can be achieved in a variety of ways. It is limiting transparency and direct views.

- (A) On the Required Building Line/Facade side of the roof pitch, Attic Story windows may only be located in dormers and/or gable ends.
 - (B) Attic Story Dormers are permitted so long as they do not break the primary eave line, are individually less than fifteen (15) feet wide, and their collective width is not more than sixty (60) percent of the Required Building Line Facade length.
 - (C) The floor area of an Attic Story, measured as the floor area with a building code minimum Clear Height, may not occupy an area greater than seventy-five (75) percent of the floor area of the Story immediately below.
 - (D) Attic Stories meeting the above standards do not count against the maximum Building Height in feet or Stories.
- (vii) Where visible from the Street-Space, pitched roofs, exclusive of roofs behind parapet walls, shall be pitched between 4:12 and 12:12. Shed roofs, attached to the main structure, shall be pitched between 3:12 and 8:12.
 - (viii) English Basement Accessory Dwelling Units are permitted in Townhouse frontages and do not count against the maximum building height in Stories provided they have windows above grade and have direct street frontage access.
 - (ix) At least one functioning entry door shall be provided along each Ground Story Façade. No Ground Story Façade may include a section of greater than seventy-five (75) feet without a functioning entry door⁵⁹³, unless otherwise stated in the Building Form Standards.
 - (x) All required Front Porches shall be completely covered by a roof. Front Porches may be screened when all architectural elements (columns, railings, etc.) occur on the outside of the screen on the side facing the Street-Space. The Front Porch finished floor height shall be no more than eight (8) inches below the first interior finished floor level of the building to which it is attached. Front Porches shall not extend past the Dooryard into the Clear Walkway.
 - (xi) The Stoop finished floor height shall be no more than eight (8) inches below the first interior finished floor level of the building to which it is attached. Stoops shall not extend past the Dooryard into the Clear Walkway.
 - (xii) Privacy Fences may be constructed along Alleys and along Common Lot Lines, but shall not be constructed forward of the Required Building Line. Privacy Fences shall have a maximum height of seven (7) feet.

(10) Building Functions

Broad parameters for allowable uses for Ground Stories and upper Stories are identified in each Building Form Standard. Specific permitted use standards are provided in Chapter 29-3.

(11) Civic Buildings

When Civic Buildings are designated on the Regulating Plan, they are exempt from the Building Form Standards.

⁵⁹³ The intent of this standard is to encourage street activation. A building with 100 feet of street frontage with a single door in the center would meet this standard. It does not apply alongside and rear building elevations.

(e) Individual M-DT Building Form Standard Frontages

This Section describes the intent and the standards applicable to each Individual Building Frontage Type designated on the Regulating Plan. The four Individual Building Frontage Types are:

- Urban General/Urban Storefront
- Urban General – West
- Townhouse/Small Apartment
- Detached

Photos are provided to illustrate each frontage type and are advisory only. Where the statements of intent or photographs are inconsistent with the standards, the standards shall apply.

(1) Urban General/Urban Storefront Frontages

(i) Illustrations and Intent

Urban General is to be used for those properties fronting the orange Street-Spaces on the Regulating Plan. Urban Storefront is to be used for those properties fronting on the red colored Street-Spaces on the Regulating Plan.

Urban General is the basic urban street frontage, once common across the United States. The purpose of this frontage is to develop multi-story buildings placed directly at the sidewalk with one or more entrances and windows across the Façade. The uses range from commercial to residential, municipal to retail and restaurants—and combinations of all of the above. There could be several buildings lined up shoulder to shoulder, filling out a Block, or on smaller Blocks, a single building might fill the Block Face.



Small mixed-use buildings with individual Shopfronts.



Large mixed-use buildings with Shopfronts and vertical facade composition to provide pedestrian scale



Street-oriented residential buildings with small Dooryards.

Where Urban Storefront is designated on the Regulating Plan, the Urban General Building Form Standard shall apply, and the additional specific standards for Urban Storefronts set forth in this subsection shall also apply. The main distinction between Urban General and Urban Storefront is that the Urban Store Ground Story configuration shall be that of a Shopfront – with uses limited to retail, food and beverage, or personal service.

The Urban Storefront frontages are designated in the most intense areas of the M-DT District and it is anticipated that there will be significant pedestrian traffic along these Blocks. The photos illustrate the range of buildings that could be constructed under the Urban General and Urban Storefront frontages.

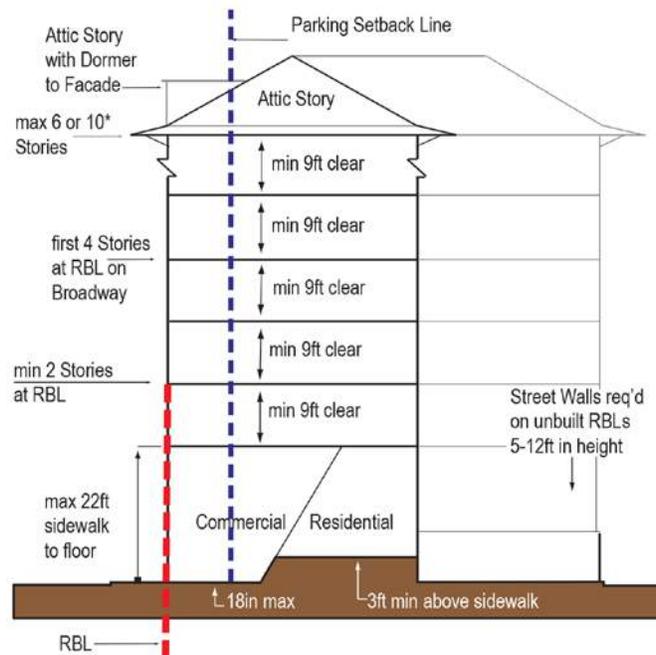


Transparent Ground Story Facades provide views between interior and exterior, enlivening the sidewalk.



Shopfronts line the Ground Story, with offices or residences above.



(ii) Height**Figure 4.2-7: Urban General/Urban Storefront Height Standards****(A) Building Height⁵⁹⁴**

The building shall be at least two (2) Stories in height at the Required Building Line, but no greater than six (6) or ten (10) stories, *as designated on the Regulating Plan, with a Building Height of seventy-two (72) or one hundred forty-two (142) feet respectively. For buildings on Broadway that are four (4) or more Stories, the first four (4) Stories shall be built to the Required Building Line.⁵⁹⁵

(B) Ground Story Height**1) Non-residential uses**

⁵⁹⁴ While the C-2 district currently has unlimited building height, the idea of limiting heights in M-DT serves multiple purposes. Tremendous building mass, and therefore leasable space, can be constructed by bringing buildings up to the street, maximizing lot coverage, and creating perimeter blocks. (Ten stories would be taller than anything in Downtown Columbia today.) In the near term, the expectation for significant large-scale development is limited, at best. Allowing an individual building of 15 or 20 stories (or taller) would absorb most, if not all, of the market for years to come, or encourage other property owners to simply “hold on to” their property, waiting for the “ideal” redevelopment opportunity to come along. Development of this sort has little or no synergistic effect for the City as a whole. (There are plenty of examples of this scenario around the country—office towers surrounded by parking lots.) It is healthier for Downtown Columbia to have multiple medium-scale redevelopment projects filling in underused blocks than a few monster towers surrounded by vacant properties. In addition, since the current market seems to primarily be “student housing”, the creation of high-rise student apartments would seem less than optimal when trying to maintain a downtown that serves the entire City, not just the colleges and university.

⁵⁹⁵ Note: Building walls help to create an “outdoor room”, ideally in proportion to the Street-Space width. The extra width of Broadway calls for greater height at the street to better define the pedestrian realm.

- i) The Ground Story finished floor elevation shall be no lower than the average fronting exterior sidewalk elevation; and no higher than eighteen (18) inches above the average fronting sidewalk elevation.
 - ii) The Ground Story shall have a Clear Height of at least fifteen (15) feet contiguous to the Required Building Line frontage for a minimum depth of twenty-five (25) feet.
- 2) Residential Units at the Required Building Line⁵⁹⁶
- i) The finished floor elevation shall be no less than three (3) feet.
 - ii) The Ground Story shall have a Clear Height of at least nine (9) feet.
 - iii) Main entrances and lobbies may be at grade, with transitions to meet the minimum finished floor elevation for the units within the building interior.

(C) Upper Story Height

The minimum Clear Height for each upper Story is nine (9) feet.

(D) Street Wall Height⁵⁹⁷

A Street Wall not less than five (5) feet in height or greater than twelve (12) feet in height shall be required along any Required Building Line frontage that is not otherwise occupied by a building or forecourt on the lot.

⁵⁹⁶ Elevating ground floor units that are adjacent to the Required Building Line serves at least two purposes—to provide privacy for those units directly at the public sidewalk and allow them to be “eyes on the street” as units with closed curtains cannot.

⁵⁹⁷ Street Walls are not completely opaque, as they are required to meet all fenestration requirements for the frontage in which they are located. The intent is that they maintain the built edge of the public realm and screen service areas from the same. The expectation is that there will be very few of them of more than minimal length (simply closing off small gaps between adjacent buildings.). The standards can be adjusted to provide greater variation (in height, etc.) between the different frontages—and in some communities, substantial fencing such as brick piers with wrought iron has been allowed to meet the requirement, particularly around surface parking lots. (This standard also provides a (small) disincentive for demolishing buildings to create more surface lots in the M-DT.)

(iii) Siting

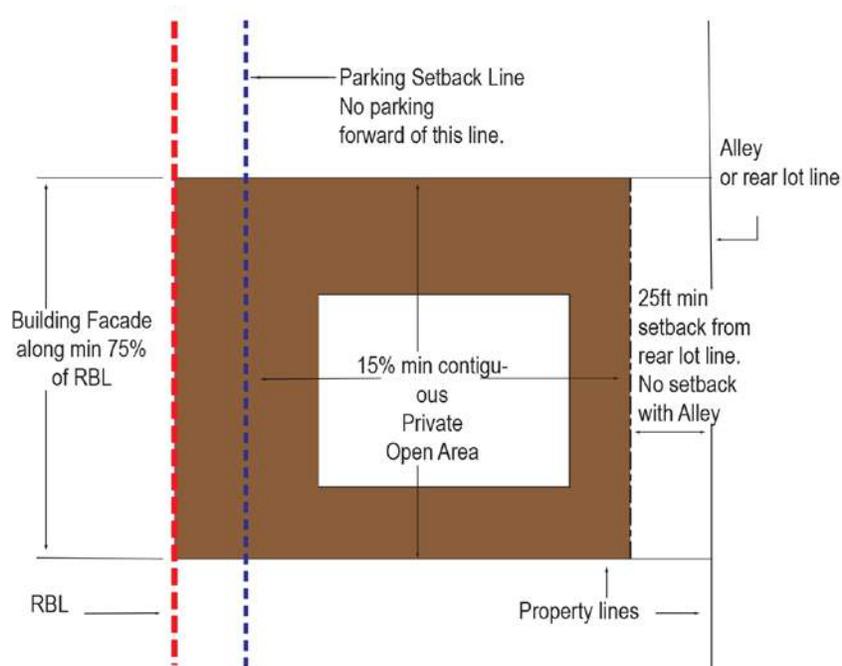


Figure 4.2-8: Urban General/Urban Storefront Siting Standards

(A) Façade

- 1) On each lot the building Façade shall be built to the Required Building Line for at least seventy-five (75) percent of the Required Building Line length.
- 2) A forecourt may be constructed along up to twenty-five (25) percent of the Required Building Line where:
 - i) The forecourt is surrounded on three (3) sides by the building;
 - ii) The surrounding elevations meet all Façade requirements; and
 - iii) The forecourt shall not provide automobile access other than for emergency services.
- 3) Within eight (8) feet of the Block Corner, the Ground Story Façade may be chamfered to form a corner entry.

(B) Buildable Area

The Buildable Area is shown in the diagram.

- 1) A Private or Public Open Area⁵⁹⁸ equal to at least fifteen (15) percent of the total Buildable Area shall be preserved on every lot. Up to thirty-three (33) percent of the required Private or Public Open Area may be satisfied through the Balconies of individual units or rooftops as follows:

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- i) Where located at grade, such Private or Public Open Area may be located anywhere behind the Parking Setback Line, but not within any required side or rear setbacks.
- ii) Where provided above the second Story but below a building's roof level, the Private or Public Open Area may be located forward of the Parking Setback Line (such as in a raised courtyard configuration) and shall open onto no more than one Street-Space and shall be set back at least thirty (30) feet from any Block Corner or Building Corner.
- iii) Where located on the building's roof level, the Private or Public Open Area may be located anywhere on the roof.⁵⁹⁹

(C) Garage and Parking

Openings in any Required Building Line for parking garage entries shall have a maximum Clear Height no greater than sixteen (16) feet and a clear width no greater than twenty-two (22) feet.

(iv) Elements

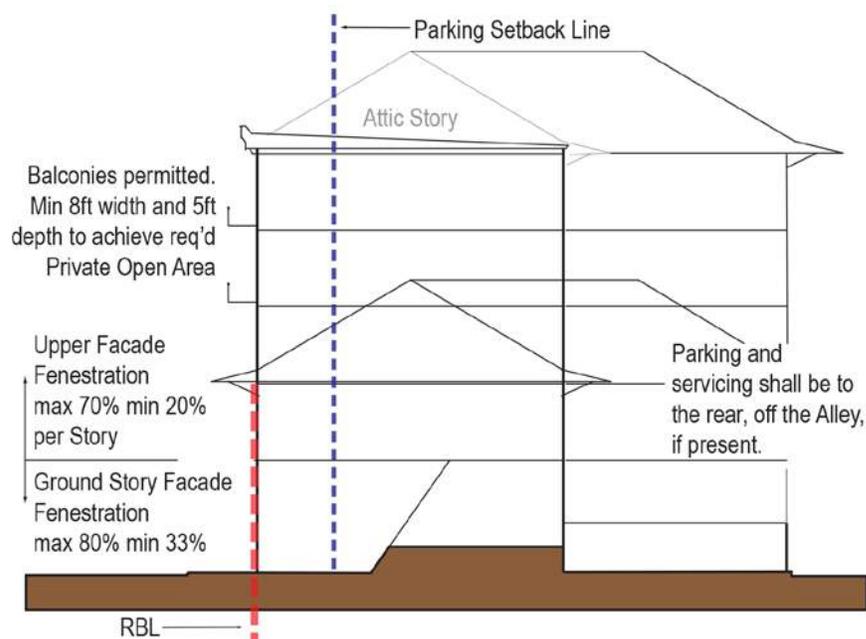


Figure 4.2-9: Urban General/Urban Storefront Element Standards

⁵⁹⁹ The requirement of a Private or Public Open Area is based on the expectation that the M-DT district is going to intensify and the people who live and work in these buildings will need access to some outdoor open spaces. (The intent is not to provide a public amenity, other than to break down the scale of the Façade configuration with balconies that are constructed to a minimum—aesthetic and usable space—standard.) This is a basic “quality of life” provision for urban dwellers. The percentage is relatively low and is typically “sold” as an amenity to perspective lessees. Since Module 3, requirement that a majority of required Private or Public Open Space be in one or two contiguous areas has been deleted.

(A) Fenestration

- 1) Blank lengths of wall exceeding twenty (20) linear feet are prohibited on all Required Building Lines.
- 2) For Urban General frontages, Ground Story Fenestration shall comprise between thirty-three (33) percent and eighty (80) percent of the Ground Story Façade.
- 3) For Urban Storefront:
 - i) Ground Story Fenestration shall comprise between fifty (50) percent and ninety (90) percent of the Ground Story Façade.
 - ii) Single panes of glass shall not be permitted larger than ten (10) feet in height by five (5) feet in width.
 - iii) Ground Story windows may not be made opaque by window treatments⁶⁰⁰ (excepting operable sunscreen devices within the conditioned space). A minimum of eighty (80) percent of the window surface shall allow a view into the building interior for a depth of at least fifteen (15) feet.
- 4) Upper Story Fenestration shall comprise between twenty (20) percent and seventy (70) percent of the Façade area per Story.

(B) Building Projections

Shopfronts may extend up to twenty-four (24) inches beyond the Façade or Required Building Line into the Dooryard, but may not project into the Clear Walkway.

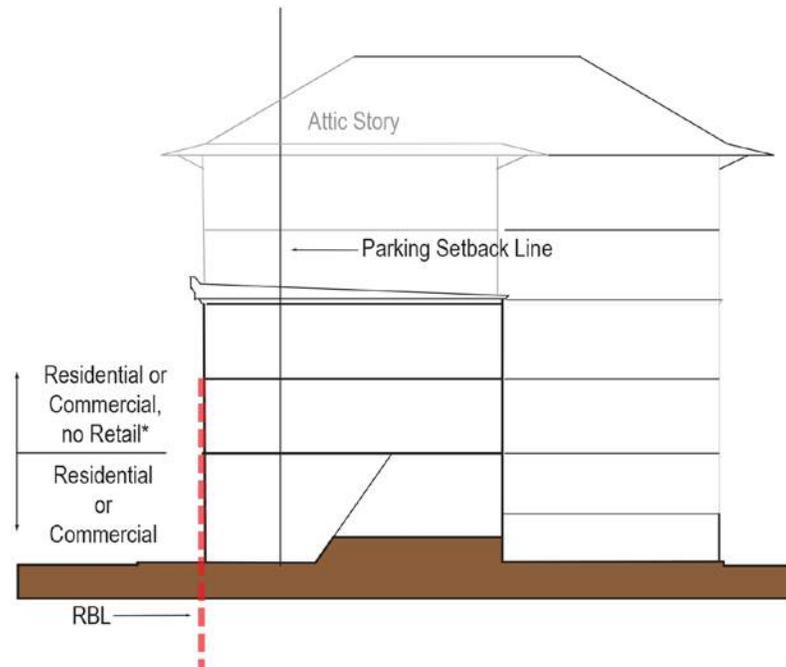
(C) Vertical Façade Composition

- 1) For Urban General – shall occur at no greater than the average street frontage length of seventy-five (75) feet per Block Face.
- 2) For Urban Storefront – shall occur at no greater than the average street frontage length of sixty (60) feet per Block Face.

(D) Street Walls

One access gate no wider than twenty-two (22) feet and one pedestrian entry gate no wider than five (5) feet shall be permitted within any required Street Wall.

⁶⁰⁰ The purpose of this standard is to insure that Urban Storefront windows are not made ineffectual by occupants who build shelving in front of them, paint the windows to obstruct views, or block them with plywood, etc., thereby deadening the Street-Space. (It is not intended to prevent the use of operable window shades, etc.).

(v) Use**Figure 4.2-10: Urban General/Urban Storefront Use Standards****(A) Ground Story**

The Ground Story may only house commercial, residential, public or institutional uses, as prescribed in Chapter 29-3. See height specifications above for specific requirements unique to each use.

(B) Upper Stories

- 1) The upper Stories may only house residential or commercial uses. *Rooftop Food and Beverage Services are only permitted in the locations designated for Core Height on the Regulating Plan. In all other locations, no food and beverage services or retail sales uses shall be allowed in upper Stories unless they are second Story extensions accessory to the Ground Story use.
- 2) No commercial use is permitted above a residential use.
- 3) Additional habitable space is permitted within the roof where the roof is configured as an Attic Story.

(2) Urban General – West Frontage⁶⁰¹

(i) Illustrations and Intent

This frontage is to be used in those portions of the Regulating Plan colored gold.

The Urban General-West frontage addresses the evolving area of west Downtown Columbia. Given Columbia’s emphasis on sustainability and multi-modal transportation issues, more compact, urban land-use patterns are appropriate for this area. This frontage fosters single and multi-story buildings, placed to the front of their lot, with windows and one or more entrances onto the sidewalk. The uses may range from commercial to residential, municipal to retail and restaurants. Several buildings could stand shoulder to shoulder along a Block Face, or a single building might fill a smaller block. Less intense than downtown, this frontage anticipates a gradual increase in pedestrian traffic over time. It provides improved pedestrian connectivity and transition to the adjacent neighborhoods. The photos illustrate the range of buildings that could be constructed under this frontage.



National chains can provide street-oriented buildings.



This frontage can accommodate large format, single use buildings or compact, mixed-use ones.

⁶⁰¹ The Urban General-West frontage creates a very flexible Building Form Standard for the area west of Providence



Street-oriented Civic building supports walkability.



Parking located to the side, with low Street Wall defining pedestrian realm.

(ii) Height

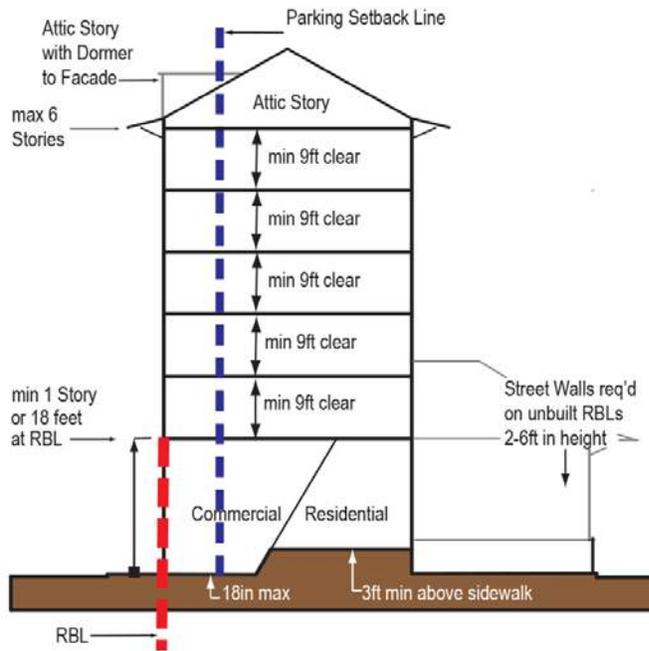


Figure 4.2-11: Urban General West Height Standards

(A) Building Height

The building shall be at least one (1)⁶⁰² Story and eighteen (18) feet in height at the Required Building Line, but no greater than six (6) Stories and seventy-eight (78) feet in height, unless otherwise designated on the Regulating Plan.

(B) Ground Story Height

1) Non-residential uses.

⁶⁰² Since Module 3, a minimum building height of 1 story rather than 2 has been clarified.

- i) The Ground Story finished floor elevation shall be no lower than the average fronting exterior sidewalk elevation and no higher than eighteen (18) inches above the average fronting sidewalk elevation.
- ii) The Ground Story shall have a clear height of at least twelve (12) feet contiguous to the Required Building Line frontage for a minimum depth of twenty-five (25) feet.

2) Residential Units at the Required Building Line

- i) The finished floor elevation shall be no less than three (3) feet.
- ii) The Ground Story shall have a Clear height of at least nine (9) feet.
- iii) Main entrances and lobbies may be at grade, with transitions to meet the minimum finished floor elevation for the units within the building interior.

(C) Upper Story Height

The minimum clear height for each upper Story is nine (9) feet.

(D) Street Wall Height

A Street Wall not less than two (2) feet in height or greater than six (6) feet in height shall be required along any Required Building Line frontage that abuts a surface parking lot.

(iii) Siting

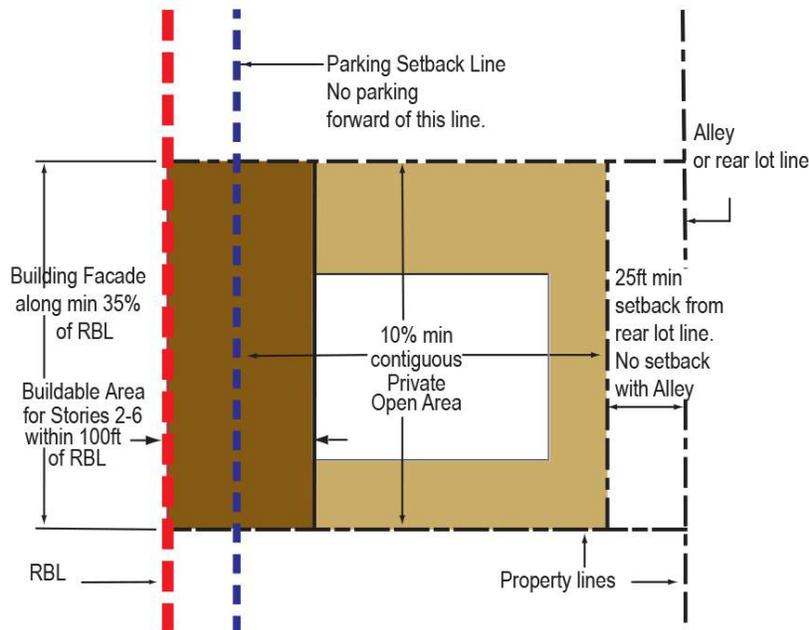


Figure 4.2-12: Urban General West Siting Standards

(A) Façade

- 1) On each lot the building Façade shall be built to the Required Building Line for at least thirty-five (35) percent of the Required Building Line length.
- 2) Within eight (8) feet of the Block Corner, the Ground Story Façade may be chamfered to form a corner entry.

(B) Buildable Area

The Buildable Area is delineated in the diagram.

- 1) The Ground Story may sit anywhere within the buildable area.
- 2) A second Story and above, shall only be within the Buildable Area within one hundred (100) feet of a Required Building Line.
- 3) Where private access drives are configured as recommended M-DT street types, a new Required Building Line shall be created.
- 4) A contiguous Private or Public Open Area equal to at least ten (10) percent of the total buildable area shall be preserved on every lot. At least sixty-seven (67) percent of the Private or Public Open Area shall comprise no more than two separate contiguous areas. Located at grade, such Private or Public Open Area may be located anywhere behind the Parking Setback Line, but not within any required side or rear setbacks.

(C) Garage and Parking

Openings in any Required Building Line for parking garage entries shall have a maximum clear height no greater than sixteen (16) feet and a clear width no greater than twenty-two (22) feet.

(iv) Elements

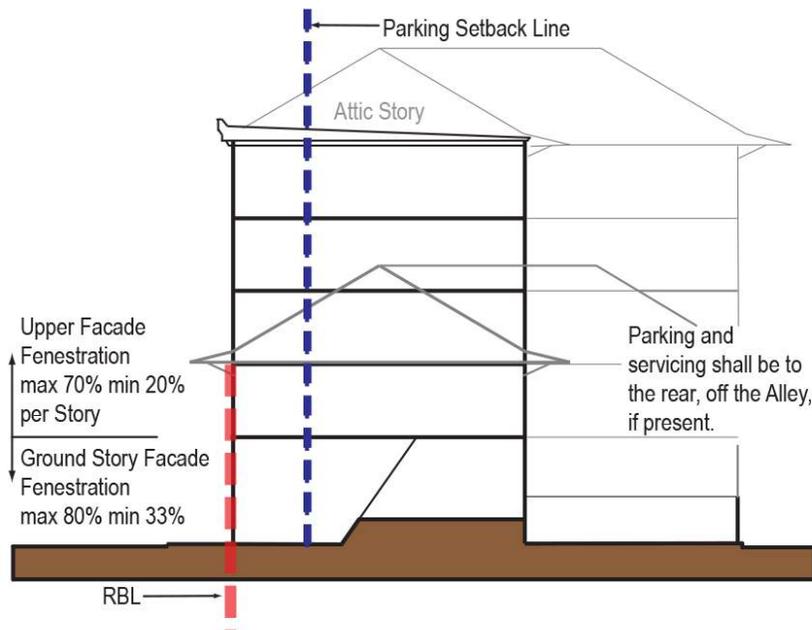


Figure 4.2-13: Urban General West Elements Standards

(A) Fenestration⁶⁰³

- 1) Blank lengths of wall exceeding thirty (30) linear feet are prohibited on all Required Building Lines.
- 2) Ground Story Fenestration shall comprise between thirty-three (33) percent and eighty (80) percent of the Ground Story Façade.
- 3) Upper Story Fenestration shall comprise between twenty (20) percent and seventy (70) percent of the Façade area per story.

(B) Vertical Façade Composition

No greater than the average street frontage length of seventy-five (75) feet per Block Face.

(C) Street Walls

One access gate no wider than twenty-two (22) feet and one pedestrian gate no wider than five (5) feet shall be permitted in any required Street Wall.

⁶⁰³ These standards only apply to the Façade. The minimum standards will assist in breaking down the scale of large footprint buildings along the street while also providing natural light into the interior.

(v) Uses

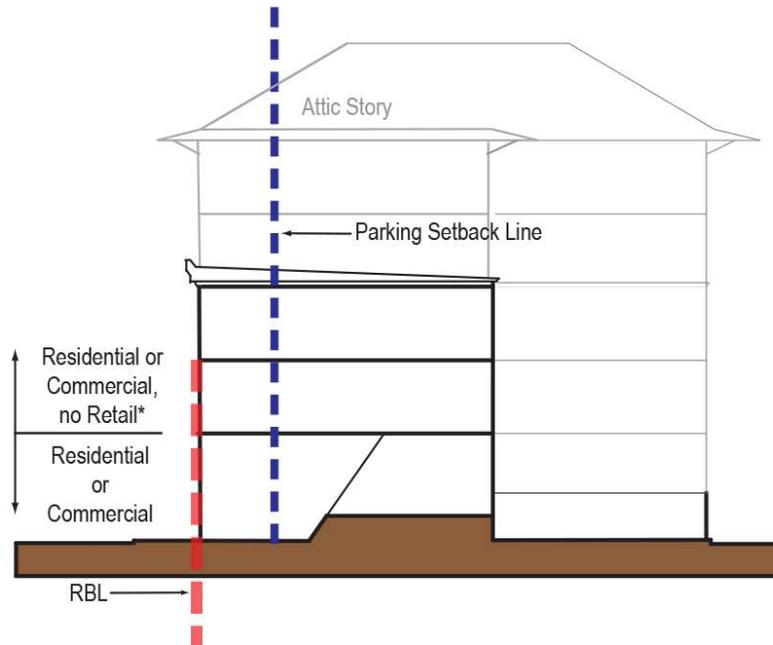


Figure 4.2-14: Urban General West Use Standards

(A) Ground Story

The Ground Story may only house commercial, residential, public or institutional uses, as prescribed in Chapter 29-3. See height specifications above for specific requirements unique to each use.

(B) Upper Stories

- 1) The upper Stories may only house residential or commercial uses. No food and beverage services or retail sales uses shall be allowed in upper Stories unless they are second Story extensions accessory the Ground Story use.
- 2) No commercial use is permitted above a residential use.
- 3) Additional habitable space is permitted within the roof where the roof is configured as an Attic Story.

(3) Townhouse/Small Apartment Frontage

(i) Illustrations and Intent

This frontage is to be used for those properties fronting a blue colored Street-Space on the Regulating Plan.

The Townhouse/Small Apartment frontage is of moderate intensity, often created by a series of smaller attached structures configured as single-family residential or stacked flats. This Building Form Standard has regular Street-Space entrances as frequently as eighteen (18) feet. The character and intensity of this frontage varies depending on the Street-Space and the location of the Required Building Line—the buildings may be placed up to the sidewalk with Stoops, or further back with small Dooryard gardens and/or Front Porches. Similar in scale to the townhouse and row house, a small apartment is of limited size and can also be used to transition from the more intense areas of the M-DT District to adjacent single-family neighborhoods. It is anticipated that the pedestrian activity along these frontages will vary considerably based on the time of day and week. This frontage accommodates office uses. The photos illustrate the range of buildings that could be constructed under the Townhouse/Small Apartment frontage.



This frontage accommodates a range of Townhouses and Small Apartments in a range of building scales and configurations -- but all are street oriented.

(ii) Height

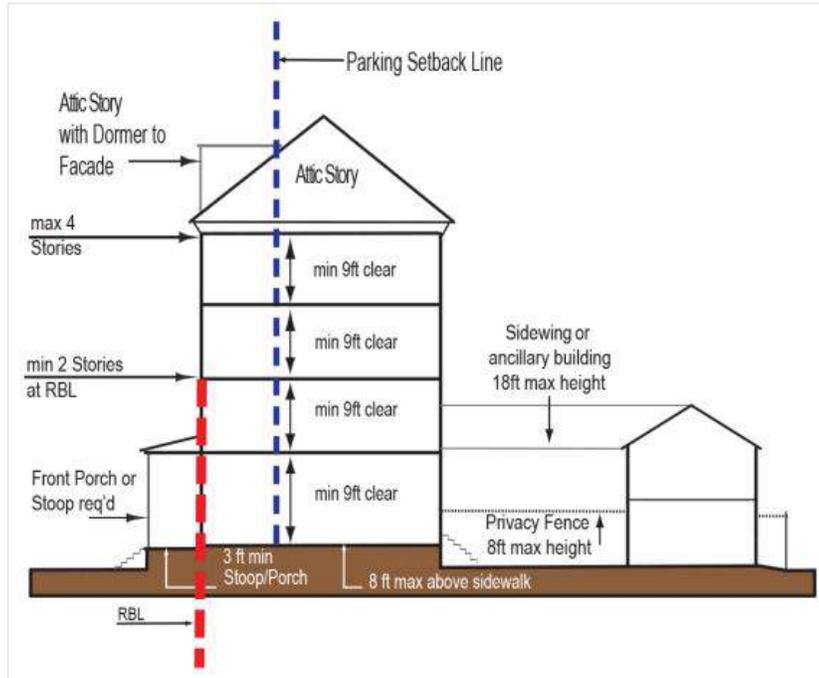


Figure 4.2-15: Townhouse/Small Apartment Height Standards

(A) Building Height

- 1) Each building shall be at least two (2) Stories high at the Required Building Line, but no more than four (4) stories with a building height of fifty-eight (58) feet, unless otherwise designated on the Regulating Plan.
- 2) A Sidewing or ancillary structure shall be no higher than eighteen (18) feet in height.

(B) Ground Story Height

- 1) The finished floor elevation shall be no less than three (3) feet and no more than eight (8) feet above the average exterior sidewalk elevation at the Required Building Line.⁶⁰⁴
- 2) At least eighty (80) percent of the Ground Story shall have an interior Clear Height of at least nine (9) feet.
- 3) Main entrances may be at grade, with transitions to meet the minimum finished floor elevation within the building interior.

(C) Upper Story Height

At least eighty (80) percent of each upper Story shall have an interior Clear Height of at least nine (9) feet.

⁶⁰⁴ This standard is to provide privacy for the Ground Story and allow for English Basement Accessory Units.

(D) English Basements

The finished floor level of an English Basement shall be no greater than five (5) feet below the average elevation of the fronting sidewalk.

(iii) Siting

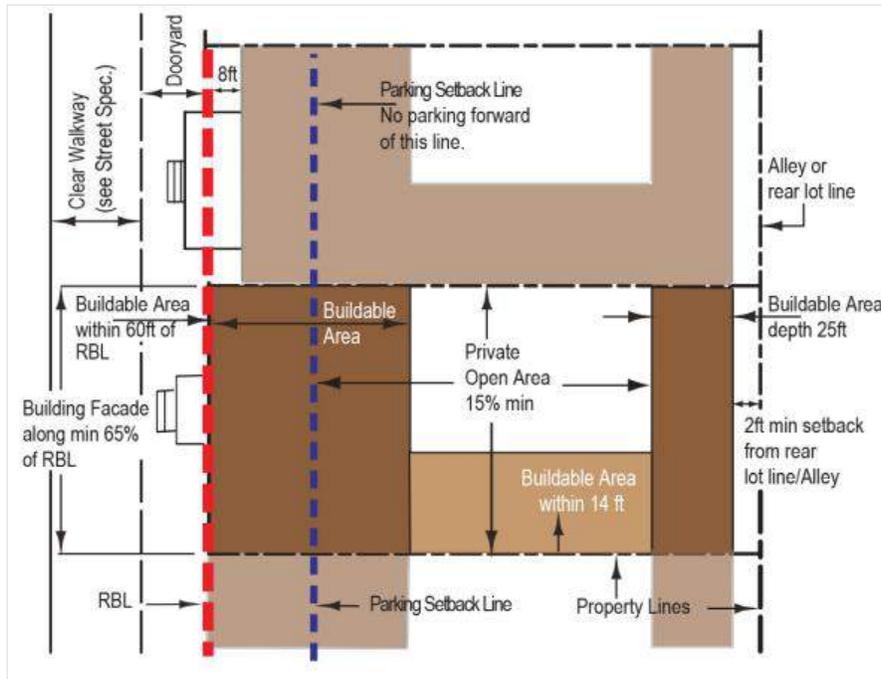


Figure 4.2-16: Townhouse/Small Apartment Siting Standards

(A) Façade

On each site, the Façade shall be built to:

- 1) The Required Building Line for at least sixty-five (65) percent of the Required Building Line length, or
- 2) A line an additional eight (8) feet behind the Required Building Line (only permitted to accommodate Front Porch depth—see Elements subsection for Front Porch requirements) with a width not less than sixty-five (65) of the Required Building Line.

(B) Buildable Area

The Buildable Area is as defined in the diagram above.

- 1) A Private or Public Open Area equal to at least fifteen (15) percent of the total Buildable Area shall be preserved on every lot which may be satisfied through

the Balconies of individual units, or rooftops, regulated in Section 29-4.2(d)(9).⁶⁰⁵

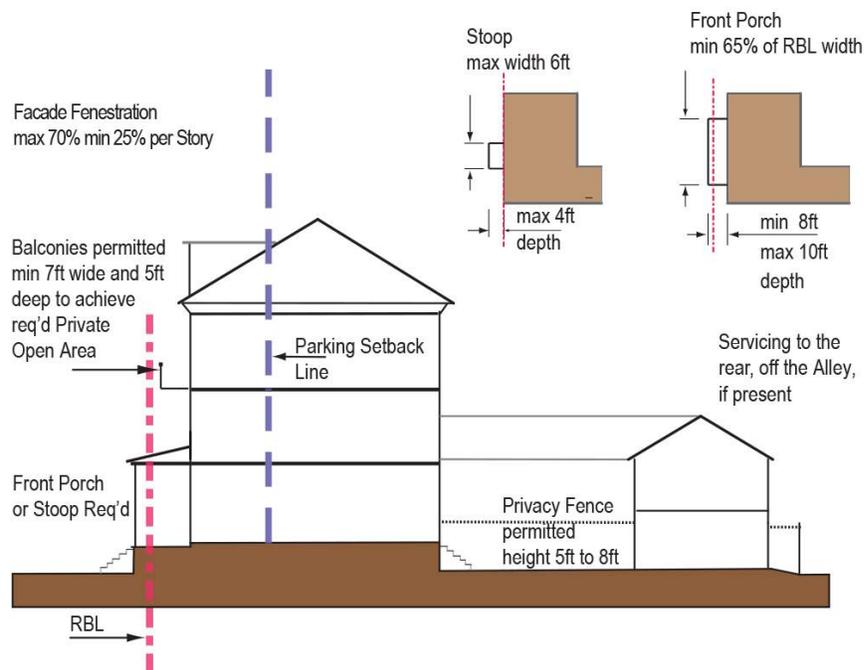
(C) Garage and Parking

- 1) Garage doors/entries are not permitted on any Required Building Line/Façade.
- 2) At-grade parking may be forward of the Parking Setback Line only when it is within a garage on a corner lot and the parking area’s Required Building Line frontage is less than twenty-five (25) feet.

(D) Frontage Widths

- 1) The minimum width for new townhouses is eighteen (18) feet.
- 2) Although there are no individual lot side setbacks, no individual small apartment building or set of townhouses may exceed one hundred (100) feet of street-space frontage. A gap of ten (10) to twenty (20) feet is required between each building.

(iv) Elements



⁶⁰⁵ Since Module 3, text has been simplified to remove distinction between how deep and shallow lots must meet this standard.

Figure 4.2-17: Townhouse/Small Apartment Elements Standards

(A) Fenestration

- 1) Blank lengths of wall exceeding fifteen (15) linear feet are prohibited on all Façades.
- 2) Fenestration shall comprise between twenty-five (25) percent and seventy (70) percent of the Façade.
- 3) Each townhouse and/or small apartment building shall include a functioning Street-Space entry.

(B) Vertical Façade Composition

No greater than the average street frontage length of seventy-five (75) feet per Block Face.

(C) Building Projections

- 1) Each townhouse shall include either:
 - i) A Stoop of not more than four (4) feet deep and six (6) feet wide (not including steps); or
 - ii) A Front Porch, between eight (8) and ten (10) feet deep that projects no more than two (2) feet forward of the Required Building Line, and has a width not less than sixty-five (65) percent of the Required Building Line.
- 2) A Small Apartment may be configured with a Stoop or Front Porch or with a main entrance at grade.

(v) Use

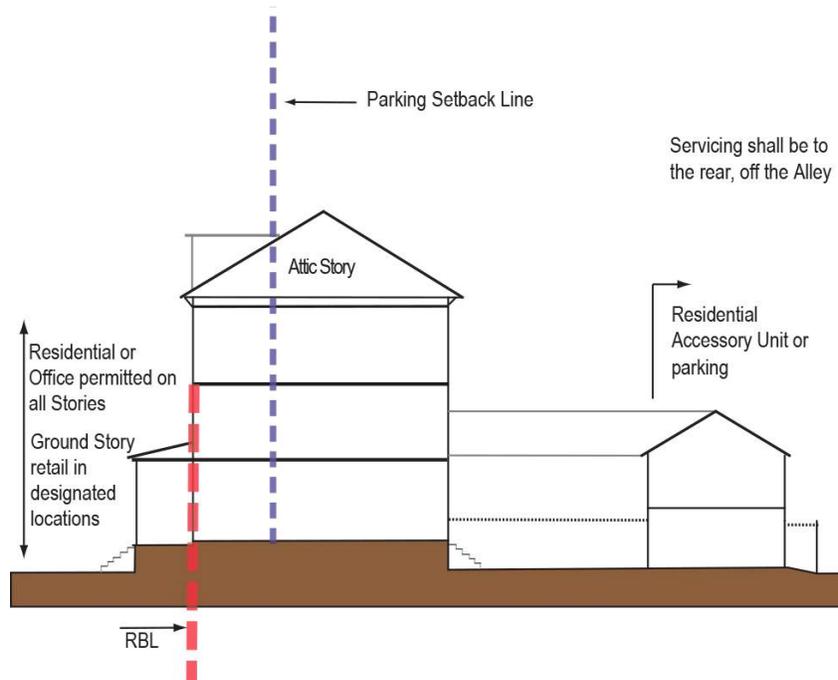


Figure 4.2-18: Townhouse/Small Apartment Use Standards

(A) All Stories

- 1) Only residential, guest accommodation, and office uses are permitted.
- 2) Individual townhouses shall have no more than two (2) residential units, including an accessory unit.
- 3) Additional habitable space is permitted within the roof where the roof is configured as an Attic Story.

(B) Ground Story Exceptions

Neighborhood serving retail is permitted on the Ground Story of buildings located at a Block Corner.⁶⁰⁶

(C) Accessory Dwelling Units in M-DT

- 1) English Basement Accessory Dwelling Units are only permitted in townhouses.
- 2) Only one (1) Accessory Dwelling Unit is permitted per townhouse.
- 3) On townhouse sites, an Accessory Dwelling Unit, with a maximum area of six hundred-fifty (650) square feet is permitted in the Buildable Area at the rear of the site or lot line.

⁶⁰⁶ This standard could include additional specific use standards in 29-3.3, such as square footage limitation, hours of operation, etc.

(4) Detached Frontage⁶⁰⁷

(i) Illustrations and Intent

This frontage is to be used for those properties fronting on a yellow colored Street-Space on the Regulating Plan.

The detached frontage is represented by the traditional single family house with small front, side, and rear yards along a tree-lined street. Structures are one (1) to two (2) stories in height with pitched roofs and Front Porches. Its purpose is to protect the scale and character of existing single family neighborhoods. The photos illustrate the range of buildings that could be constructed under the Detached frontage.



⁶⁰⁷ This frontage is not currently designated in the M-DT District; however, it could be available in the future for use in some areas abutting the District.

(ii) Height

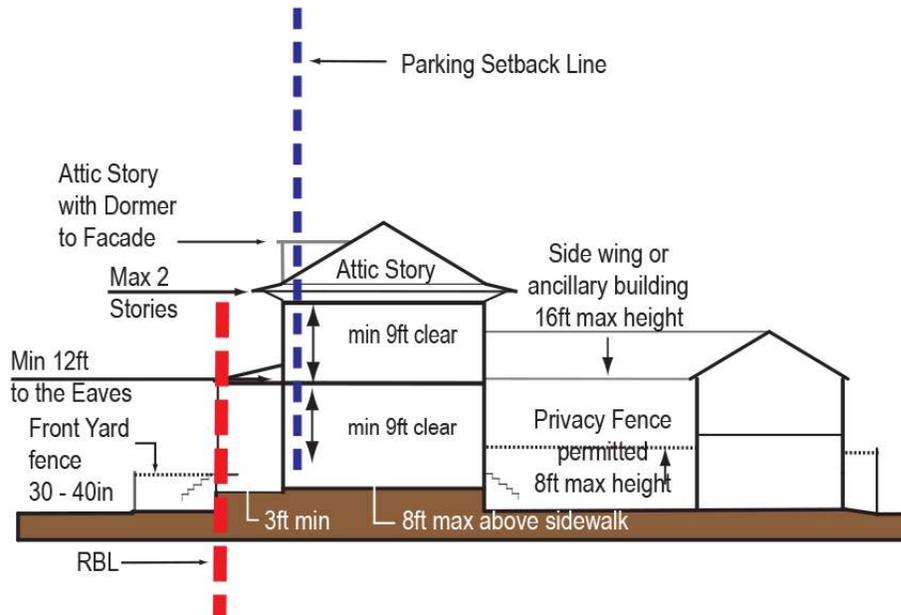


Figure 4.2-19: Detached Height Standards

(A) Building Height

- 1) Each building shall be at least twelve (12) feet at the Required Building Line, but no greater than two (2) stories with an ultimate building height of twenty-seven (27) feet.
- 2) A sidewing or ancillary structure shall be no higher than sixteen (16) feet.

(B) Ground Story Height

- 1) The finished floor elevation shall be no less than three (3) feet and no more than eight (8) feet above the average exterior sidewalk elevation at the Required Building Line.
- 2) At least eighty (80) percent of the first Story shall have an interior Clear Height of at least nine (9) feet.

(C) Upper Story Height

At least eighty (80) percent of each upper Story shall have an interior Clear Height of at least nine (9) feet.

(D) Front Yard Fence

Any Front Yard Fence has a minimum height of thirty (30) inches and a maximum height of forty (40) inches.

(iii) Siting

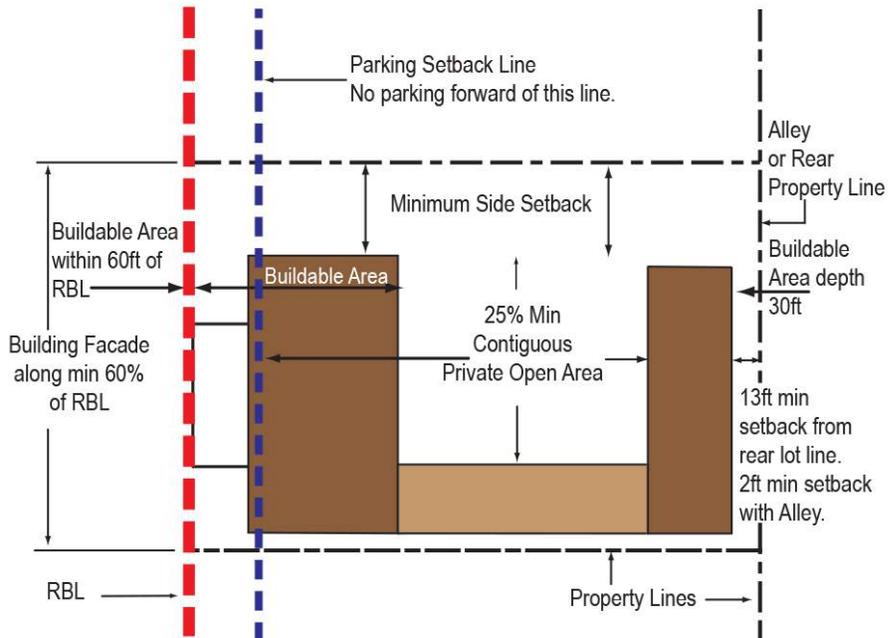


Figure 4.2-20: Detached Siting Standards

(A) Façade

- 1) On each lot the Façade shall be built parallel to the Required Building Line for at least sixty (60) percent of the building width. The Front Porch shall be built-to the Required Building Line.
- 2) For corner lots the minimum sixty (60) percent build-to shall include the frontage within twenty (20) feet of the Block Corner.

(B) Buildable Area

The Buildable Area is as defined in the diagram below.

A contiguous Private or Public Open Area equal to at least twenty-five (25) percent of the total Buildable Area shall be preserved on every lot. Such contiguous area shall be located at grade, anywhere behind the Parking Setback Line and not include any side or rear setbacks.

(C) Lot Size and Setbacks

- 1) All lots of record are buildable under this code.
- 2) Newly subdivided lots shall have a minimum width at the Required Building Line of thirty-two (32) feet, a maximum width of fifty-five (55) feet, and a minimum depth of eighty-five (85) feet.

- 3) The minimum side lot setbacks are five (5) feet or as otherwise designated on the Regulating Plan.

(D) Front Yard

The Front Yard/Dooryard shall not be paved excepting walkways.

(E) Garages, Parking and Alleys

- 1) Garage doors shall not be located on the Required Building Line/Façade.
- 2) There is a two (2) foot required setback from Alleys.

(iv) Elements

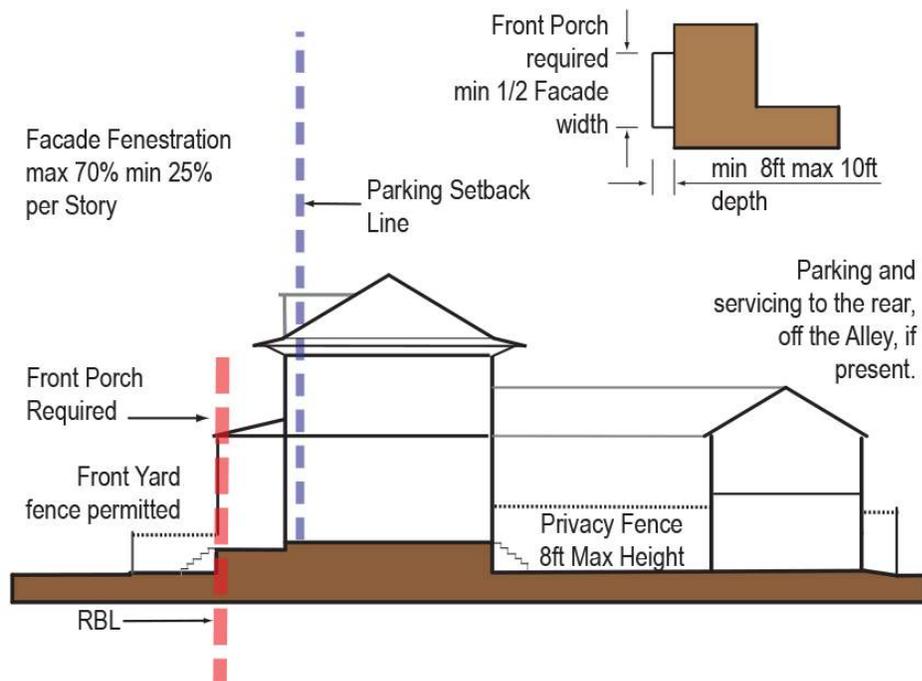


Figure 4.2-21: Detached Elements Standards

(A) Fenestration

- 1) Blank lengths of wall exceeding fifteen (15) linear feet are prohibited on all Façades.
- 2) Fenestration shall comprise at least twenty-five (25) percent, but not more than seventy (70) percent, of all Façades.
- 3) No window may face or direct views toward a Common Lot Line within ten (10) feet unless:
 - i) The view is contained within the lot (e.g. by a privacy fence/garden wall, opaque glass); or
 - ii) The windowsill is at least six (6) feet above the finished floor level.

(B) Building Projections

- 1) Each building Façade shall include a Front Porch at the Required Building Line, between eight (8) feet and ten (10) feet deep with a width not less than fifty (50) percent of the Façade width.
- 2) No part of any building except the Front Porch roof (overhanging eaves) and steps may encroach beyond the Required Building Line into the Dooryard.

(C) Doors/Entries

At least one (1) functioning entry door shall be provided along the Ground Story Façade of each building.

(D) Street Walls

There is no Street Wall requirement.

(E) Fences

- 1) Any Front Yard Fence shall be within one foot of the Clear Walkway/Dooryard line parallel to the Required Building Line and along Common Lot Lines to a point at least ten (10) feet behind the Required Building Line.
- 2) A privacy fence may be constructed along a Common Lot Line behind the Façade.

(v) Use

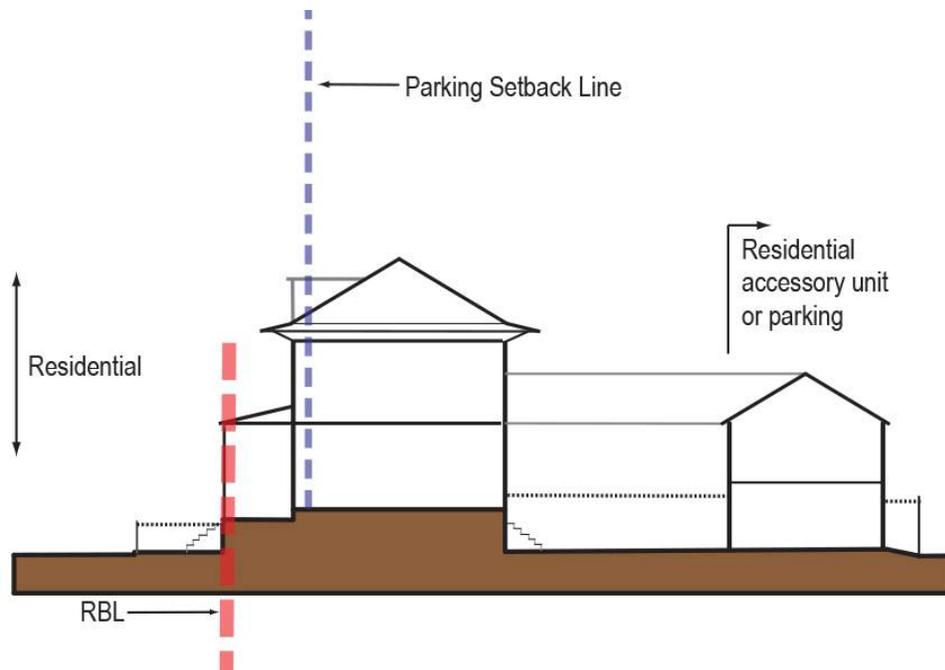


Figure 4.2-22: Detached Use Standards

(A) Ground Story

The Ground Story and any accessory unit shall only house residential uses.

(B) Upper Stories

- 1) The upper stories shall only house residential uses.
- 2) Additional habitable space is permitted within the roof where the roof is configured as an attic Story.

(C) Accessory Uses

Parking uses and Accessory Dwelling Units, with a maximum size of six hundred fifty (650) square feet are permitted in the Buildable Area at the rear of the lot.

(f) M-DT Urban Space Standards

The Urban Space Standards show the relationship between new development or redevelopment and the streets and other public (and publicly accessible) spaces in the M-DT District.

(1) Applicability

The Urban Space Standards apply to the area between building frontages and the curb line of existing or proposed streets in the M-DT district, and are intended to ensure the coherence and pedestrian-friendliness of the Street-Space. These standards are intended to supplement the City's existing street and public works standards. In case of a direct conflict between these standards and the City's street and public works standards, the existing street and public works standards shall apply.

(2) Street-Space Standards

(i) General Provisions

- (A) All plant material shall comply with Section 29-4.5 Landscaping and Screening.
- (B) Mechanical and electrical equipment including, but not limited to the following, may not be stored or located within any Street-Space:
 - 1) Air compressors,
 - 2) Pumps,
 - 3) Exterior water heaters,
 - 4) Water softeners,
 - 5) Private garbage cans (not including public sidewalk waste bins), and
 - 6) Storage tanks.
- (C) Water pumps for public fountains or irrigation not visible are not included in this prohibition and Temporary placement of private garbage cans within the Street-Space may be allowed to accommodate scheduled pick-up.

(ii) Street-Space Plantings

Invasive species, as identified by the Missouri Department of Conservation’s invasive species list, are prohibited within Dooryards and on all parcels in the M-DT District.

(iii) Street-Space Elements⁶⁰⁸

- (A) At the time of development, the developer is required to install streetlights and sidewalks, as illustrated in the Street Type Specifications, on the Street-Space frontage being developed.
- (B) Sidewalks not otherwise designated in the Regulating Plan or Street Type Specifications shall provide a minimum six-foot Clear Walkway and be constructed to meet all existing standards and specifications.
- (C) Street furniture is an element of the overall Street-Space design—not an afterthought. Street furnishings should be simple, functional, and durable.

(iv) On-Street Parking

- (A) On-street parking spaces fronting a development project shall count towards any parking requirements required under Section 29-4.4 (Parking and Loading).
- (B) The parking space/tree planting pattern may be interrupted by existing or new driveways designated in the Regulating Plan, streets, and Alleys, but spacing shall not exceed forty-five (45) feet on center except where necessary for transit stops and stations.

(v) Pedestrian Pathways

The area within a Pedestrian Pathway shall be a public access easement or public right-of-way. The easement width for these pathways must not be less than twenty (20) feet with a paved walkway not less than ten (10) feet wide providing an unobstructed view straight through its entire length, except where otherwise specified on the Regulating Plan.

(3) Street-Type Recommendations

The Street Type Recommendations located in Appendix A illustrate model configurations for the Street-Spaces within the M-DT. The plans and sections specify vehicular travel lane widths, curb radii, sidewalks, Dooryards, tree planting areas, and on-street parking configurations. Dooryards and Alleys are generally reserved for utility easements.

⁶⁰⁸ These requirements will vary depending on the size of development and the context and condition of the existing Street-Space.

29-4.3 Subdivision Standards⁶⁰⁹

(a) Applicability

- (1) The standards in this section 29-4.3 shall apply to land in all zone districts except the M-DT district whenever land is subdivided or re-subdivided to create or change the boundaries of parcels for development or redevelopment, unless this Code provides an exception.
- (2) In the M-DT zone district, all subdivisions shall comply with the requirements of the Regulating Plan and other applicable standards in Section 29-4, including but not limited to requirements for blocks, through connectivity, intersections, terminating streets, alleys, and sidewalks, and shall comply with the M-DT recommended street cross-sections in Appendix A to the greatest degree practicable. If the requirements of Section 29-4.2 conflict with the provisions of this Section 29-4.3, the provisions of Section 29-4.2 shall apply. If the provisions of Section 29-4.2 are silent on a topic addressed by this Section 29-4.3, the provisions of this Section 29-4.3 shall apply.⁶¹⁰

(b) Avoidance of Sensitive Areas⁶¹¹

Land shall be neither subdivided nor developed, except under appropriate special safeguards, where the commission finds that a proposed subdivision or development poses a potential or existing threat to the safety, health and general welfare of inhabitants of the land or surrounding areas due to flooding, improper drainage, steep slopes, rock formations, adverse earth formations, topography, utility easements or other adverse conditions. Portions of the proposed subdivision or development that cannot be prepared properly for the development shall be set aside for such use as shall not pose an undue hazard to life and property.⁶¹²

(1) Land Analysis Map

- (i) Each applicant for subdivision or re-subdivision of a land area of five (5) acres or more – either alone or contiguous with another subdivision by the same applicant, shall first prepare a Land Analysis Map identifying sensitive lands to be protected from development.
- (ii) The Land Analysis Map shall identify as sensitive lands to be protected from development all of the following:
 - (A) Stream corridors, which shall include all land from top-of-bank to top-of-bank of any waterway that exceeds two (2) feet in width at any time of year;

⁶⁰⁹ This section carries forward, with revisions as noted, the development standards in current Chapter 25 (Subdivisions). Sections that have been repealed, and some materials have been relocated to other sections of this new Chapter 29-4 for better integration with similar standards applicable to both subdivisions and other types of development approvals have been removed. Exceptions to allow development and redevelopment in the M-DT district to comply with the form-based controls in Section 29-4.2 have been included throughout this section. Environmental avoidance, clustering, rural street standards (curbless, swales).

⁶¹⁰ New provision to align with new form-based standards for the M-DT area.

⁶¹¹ New section to help implement “Columbia Imagined” by encouraging sustainable development practices. This text replaces the more general criteria in current Sec. 25-39 (Natural Features).

⁶¹² Inserted from current Sec. 25-38 (Character of the Land) since previous draft.

- (B) Steep slopes, which shall include all land with an average vertical slope of twenty-five (25) percent or more, measured from top-of-slope to foot-of-slope;
- (C) Any lands identified as Bentonite soils or designated by the state or a governmental agency as unsuitable for development;
- (D) Any lands designated as floodway or flood fringe in the FP-O Floodplain Overlay district; and
- (E) Any lands identified as habitat for species listed as threatened or endangered by the state or federal governments.

(2) Avoidance of Sensitive Lands

The applicant shall lay out the subdivision or re-subdivision so that:

- (i) No lot includes land designated as sensitive lands on the Land Analysis Map to the greatest degree practicable; and
- (ii) If any lot does include land such sensitive lands, the subdivision plat restricts construction of permanent structures to a designated a building envelope area on that lot that does not include any designated sensitive land areas; and
- (iii) Street crossings of sensitive land areas are minimized to the maximum extent practicable.

(3) Adjustment of Minimum Lot Sizes⁶¹³

If the avoidance of sensitive lands designated other than floodways and flood fringe areas results in the subdivision containing fewer buildable parcels than it would have if sensitive lands were not avoided, the applicant may adjust the minimum lot size or lot width of lots in the subdivision by up to twenty-five (25) percent in order to include as many lots as would have been possible if sensitive lands were not avoided. No adjustment of minimum lot sizes or widths shall be made for avoidance of floodway or flood fringe areas.

(c) Streets⁶¹⁴

(1) Street Improvements Generally⁶¹⁵

- (i) Streets and curbs and gutters shall be improved to comply with the standards in this Code, the adopted City street and storm sewer specifications and design standards, and all design standards and specifications promulgated by the Director of Public Works or adopted by the Council, in accordance with the final construction plans required to be approved prior to final plat approval.
- (ii) Notwithstanding any provisions of this Code or standards listed in subsection (i), if land is subdivided in the R-1 zone district or subdivided for single-family residential

⁶¹³ These adjustments will be reviewed through the regular subdivision approval process, as they are now.

⁶¹⁴ Carries forward current Article IV, except for Sec. 25-41 (Street names and numbers) and other technical street standards that have been relocated to Appendix A.

⁶¹⁵ Carries forward introductory paragraph in Current Sec. 25-42 with new provisions for green infrastructure.

development in a PD zone district, and the minimum size of each lot is two (2) acres or more in size:

- (A) The subdivision shall not be required to install sidewalks, curbs, or gutters, but may manage street-related stormwater through the use of bioswales or natural areas designed to allow infiltration of stormwater into the soil, rather than transmitting it to a piped stormwater system.
- (B) The Director of Public Works may approve alternative construction standards for road surfaces and lane widths to reflect anticipated low traffic volumes and preserve rural character while protecting traffic safety and emergency service access.

(2) Responsibility for Improvements Costs⁶¹⁶

The costs of required improvements shall be paid by the applicant, with the following exception. It is the policy of the City to participate in or contribute only to certain additional costs of construction of major thoroughfares over and above the normal costs of local standard streets, when streets are designated at higher standards by the City. Such participation, and its timing, is solely at the election of the Council, according to the needs of the community.

(3) Connectivity⁶¹⁷

(i) Streets

Streets shall comply with the following standards.⁶¹⁸

- (A) Local streets shall be designed to provide convenient and safe access to all properties and to permit efficient drainage and utility systems.
- (B) Through streets shall be designed as shown in the Figure 4.3-1. The street alignment shall be determined at the time of platting, but the plat shall include at least the connections number of direct connections between arterials or collectors as shown in these figures. If the provisions of Section 29-3(c)(1)(ii) regarding large lot residential development apply, then only the provisions of Figure 4-3.1 applicable to Arterial and Collector streets apply.

⁶¹⁶ Carries forward Current Sec. 25-42(1).

⁶¹⁷ New Section that carries forward Secs. 25-42(2)(Arrangement) and 25-42(3)(Blocks).

⁶¹⁸ New text to improve connectivity. Current text reading "streets shall be located properly with respect to extending existing and platted streets, to traffic generators, to population densities, and to the pattern of existing and proposed land uses" was deleted as too vague to give clear guidance as to desired patterns. Text reading "Local streets with connections to arterial and collector streets shall be designed to avoid cut-through traffic. Curvilinear streets are encouraged to minimize speeding and the amount of grading" were also deleted.

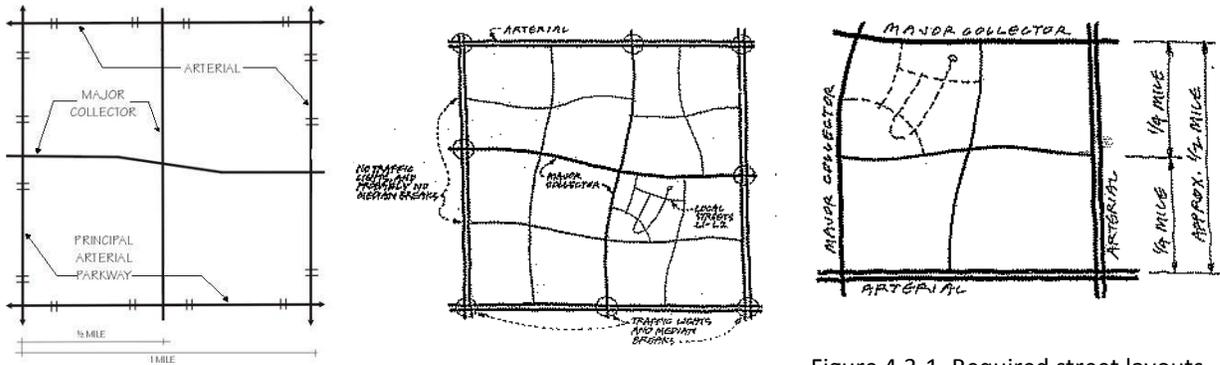


Figure 4.3-1. Required street layouts

- (C) As an alternative to complying with the through street requirements of subsection (B) above, the applicant may prepare connectivity index calculation that divides the number of street segments within the plat (i.e. sections of streets between intersecting streets) by the number of intersections within and at the boundaries of the plat to achieve a connectivity index of 1.65 or more. An example of a connectivity index calculation is shown in Figure 4.3-2 below.⁶¹⁹
- (D) Straight streets more than eight hundred (800) feet long shall be avoided to discourage speeding, unless approved by the Director because a shorter street is impracticable due to terrain or site constraints.
- (E) Individual local residential street segments should serve no more than fifty (50) dwelling units without additional street connections.

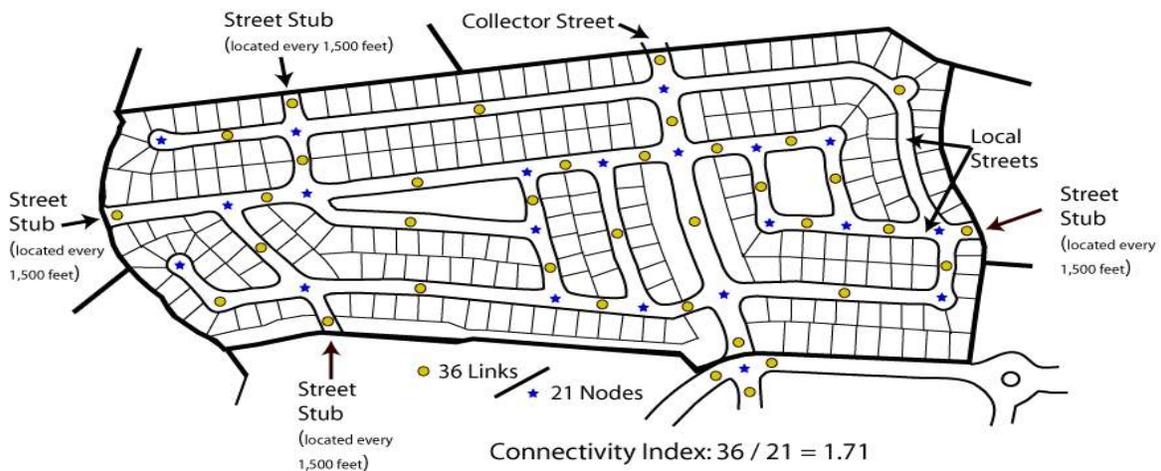


Figure 4.3-2 Connectivity Index

⁶¹⁹ Text reading: “Interconnection of adjacent subdivisions with compatible land uses shall be encouraged” was deleted.

- (F) Cul-de-sacs and loop (U-shaped) streets should not exceed three hundred (300) feet in length but may be appropriate to avoid steep slopes, major creeks, floodplains, wetlands and other sensitive environmental areas.⁶²⁰
- (G) Where a subdivision abuts or contains an existing arterial street or highway having limited access, the Commission may require the arrangement of residential lots with rear yards abutting the major street, or the provision of frontage roads, or other street design necessary to provide for adequate protection of residential properties, to afford separation of through and local traffic, and to provide for suitable access to the property involved.
- (H) When a new subdivision adjoins unplatted or undeveloped land, the new streets shall be carried to the boundaries of such land unless vehicular access is unnecessary or inappropriate due to existing or proposed development with incompatible traffic generation on the adjacent platted or unplatted lands. A temporary turnaround approved by the Director of Public Works shall be installed at this point, except when the terminus of the street is less than one hundred fifty (150) feet from an intersecting street right-of-way.⁶²¹
- (I) Where street connections to adjoining land are not provided and there is a need for non-vehicular public access to a school, park, trail or other area or use, the City may require the dedication and improvement of a green space access easement or green space trail easement to serve the needs of the proposed development. Whenever such public improvements are required and the landowner conveys fee title in lieu of an easement, the City shall accept ownership and maintenance.⁶²²
- (J) Permanent terminal streets shall not be longer than seven hundred fifty (750) feet, measured from the center of any cul-de-sac to the right-of-way line of the nearest through street from which it derives.⁶²³

(ii) Blocks⁶²⁴

Streets shall intersect at intervals not exceeding six hundred (600) feet or less than two hundred fifty (250) feet. Blocks shall have sufficient depth to provide for two (2) tiers of lots of appropriate depth. The Director may approve exceptions to this prescribed block depth when blocks are adjacent to major streets, railroads, waterways, or other environmentally constrained areas (e.g., steep slopes).

(4) Widths⁶²⁵

⁶²⁰ Revised to insert objective length standard.

⁶²¹ Distance revised from 300 ft. to 150 ft.

⁶²² Text reading "private drives may be allowed only to provide internal circulation within a single lot or parcel, except when approved in conjunction with a planned district" was deleted as obsolete.

⁶²³ Relocated since prior draft.

⁶²⁴ Revised from current standards of 1000 foot maximum and 400 foot minimum to encourage greater connectivity and walkability similar to the older platted areas of the City.

⁶²⁵ Current Sec. 25-43. Detailed street width requirements are being relocated to Appendix A or an administrative manual. Provision allowing a reduced residential street width (28 ft. rather than 30 ft.) has been deleted as obsolete because standard residential street width has already been revised to 28 ft. The "Local, nonresidential, central traffic zone" street type has been deleted because it was never defined. New M-DT street widths are

- (i) The right-of-way width required to be dedicated and the pavement width required to be constructed for streets shall comply with the standards in Appendix A for each street classification.
- (ii) Proposed subdivisions that include existing street rights-of-way narrower than required by Appendix A shall provide for dedication of appropriate additional width along one (1) or both sides of the street. Proposed subdivisions abutting only one (1) side of such streets shall provide for dedication of additional width to constitute one-half (½) of the right-of-way required.

(5) Grades⁶²⁶

- (i) The grades of streets shall comply with the standards in Appendix A.
- (ii) Where it is impracticable to comply with these standards, a written approval to deviate therefrom must be obtained from the Director of Public Works, who shall make a determination as to whether a deviation is consistent with protection of public and traffic safety.

(6) Curves⁶²⁷

Curves shall comply with the design criteria in Appendix A unless the Director of Public Works determines that a more restrictive requirement is necessary to safeguard the public health, safety and general welfare from potentially hazardous street design.

(7) Intersections⁶²⁸

Intersections shall comply the standards in Appendix A unless the Director of Public Works determines that a more restrictive requirement is necessary to safeguard the public health, safety and general welfare from potentially hazardous street design.⁶²⁹

(8) Alleys⁶³⁰

- (i) Residential alleys shall be permitted in all Residential districts.⁶³¹
- (ii) Nonresidential alleys shall be provided in Mixed Use and Special districts when off-street loading and parking are not otherwise provided.
- (iii) The right-of-way width of an alley shall be twenty (20) feet and the pavement width shall be sixteen (16) feet, except in the M-DT district, where alley improvements and new alleys should be designed in accordance with the M-DT Alley cross-section in Appendix A, when feasible.

shown in Appendix A. New streets in M-DT are not likely, but improvements to existing streets should be designed and built in accordance with the recommended street types when practicable.

⁶²⁶ Current Sec. 25-44. Standards to guide the director's decision were added. Existing table containing street grade design standards will be relocated to Appendix A.

⁶²⁷ Current Sec. 25-45 relocated to Appendix A.

⁶²⁸ Current Sec. 25-46 relocated to Appendix A or an Administrative Manual.

⁶²⁹ Prohibition on more than two streets coming together was deleted. Creative and environmentally sensitive site design may require this to happen, and traffic circles are increasingly use.

⁶³⁰ New section that includes alley standards from existing Sec. 25-47.

⁶³¹ Revised from residential areas to residential districts.

- (iv) When alleys intersect, the intersection right-of-way lines shall be rounded by a curve with a radius of five (5) feet in length.

(d) Sidewalks⁶³²

(1) Applicability

- (i) The following standards apply to any subdivision that receives final plat approval after the effective date of this Code and any subdivision platted before 2001 that is less than twenty (25) percent built-out. Any subdivision platted before 2001 and built-out by twenty-five (25) percent or more shall complete construction in accordance with the sidewalk standards in place at the time of final plat approval.⁶³³
- (ii) Undeveloped lots shown on subdivision plats that received final approval before January 1, 2001 shall install sidewalks in compliance with the City street and storm sewer specifications and design standards now applicable or later issued by the Director of Public Works or adopted by the Council, along their respective street frontage(s), unless otherwise specified in this Chapter.

(2) Standard Requirements⁶³⁴

- (i) No permit shall be issued for the construction of a new building on property located on an arterial or collector street in a zone district that permits commercial, office, institutional, or multifamily uses unless:
 - (A) A sidewalk exists adjacent to the property along the arterial or collector street; or
 - (B) The plans for the building provide for the construction of such a sidewalk; or
 - (C) Otherwise specified as a note on the plat or in a performance contract between the developer and the City.⁶³⁵
- (ii) The requirements of subsection (i) do not apply to construction of accessory buildings.
- (iii) No certificate of occupancy shall be issued for any building described in subsection (i) if the building plans provide for construction of a sidewalk along an arterial or collector street unless the sidewalk has been constructed or the property owner has provided a bond, letter of credit or other instrument acceptable to the Director of Public Works

⁶³² Carries forward current Article VI (Sidewalks), with revisions as noted, to implement the 2013 sidewalk master plan, and reference additional sidewalk requirements contained in Chapter 24 (Public streets, sidewalks, and public spaces). Current Section 25-48 (Sidewalks generally, plats approved before Jan. 1, 2001) has been deleted because if these areas are replatted they would need to meet the new standards. Current Sec. 25-48.1 (Sidewalks generally, plats approved after Jan. 1, 2001) is broken down with additional headings for readability and Chapter 24 requirements have been incorporated. Provisions for waiver or variance of sidewalk standards by Council have been deleted, because these issues can be address by the Planning Commission in the same way it addresses other subdivision design issues.

⁶³³ New provision to balance the elimination of Sec. 24-48 (plats approved before Jan. 1, 2001) acknowledging that the City has some unbuilt subdivisions that should be treated differently than partially built subdivisions.

⁶³⁴ Integrates materials from this topic from Chapters 24 and 25. Provisions regarding sidewalks are obsolete and were deleted.

⁶³⁵ Provisions 1 and 2 are from chapter 24; provision 3 is from current Sec. 25-48.1(d).

guaranteeing construction of the sidewalk within six (6) months of issuance of the certificate of occupancy.

- (iv) Sidewalks are not required along streets classified as freeways.⁶³⁶
- (v) Sidewalks shall be required on both sides of expressways and frontage roads unless the Council determines that potential or existing pedestrian volumes do not necessitate sidewalks to safeguard the public health, safety and general welfare.⁶³⁷
- (vi) Sidewalks shall be constructed within all pedestrian easements and on both sides of all internal streets and on the abutting side of any adjacent street unless otherwise specified in this chapter.⁶³⁸
- (vii) A sidewalk shall not be required along a residential access street that is less than two hundred-fifty (250) feet in length and terminates in a cul-de-sac. Sidewalks shall be a minimum of five (5) feet in width along all other streets⁶³⁹.
- (viii) Where a final plat creates a common lot or a nonbuildable lot, a sidewalk shall be constructed along the portion of each street abutting the lot at the same time the abutting street is constructed. This subsection shall not apply to any subdivision that received final plat approval before January 1, 2006.⁶⁴⁰
- (ix) Sidewalks shall be constructed to comply with the standards contained in this Section 29-4.3(b)(2) and with the City design standards and specifications established by the Director of Public Works or adopted by the Council.
- (x) Whenever a permit is issued to construct, reconstruct, repair, alter or grade any sidewalk curb, curb cut, driveway or street, handicapped ramps shall be required to be installed in accordance with design standards included in the City's standard plan and specifications at all curb and driveway crossings to be constructed, reconstructed, repaired or altered; provided, that the Director of Public Works may waive said requirement if he determines that requirement of handicapped ramps is impractical under all the circumstances.
- (xi) The Council may require a sidewalk to be constructed to standards higher than the minimum standards of this section 29-4.3(d)(2) provided that the City compensate the property owner for the additional cost of constructing the sidewalk.⁶⁴¹

(e) Bike Lanes and Pedways⁶⁴²

Bicycle lanes and pedways shall be designed and constructed in accordance with Appendix A - "Design Standards for Streets, Sidewalks and Bikeways" and all applicable design standards and specifications promulgated by the Director of Public Works or adopted by Council.⁶⁴³

⁶³⁶ Current Sec. 25-50.

⁶³⁷ Current Sec. 25-51.

⁶³⁸ Part of Current Sec. 25-48.1(a).

⁶³⁹ Part of Current Sec. 25-48.1(a).

⁶⁴⁰ Similar provision allowing sidewalk construction one year after final plat approval has been deleted as inconsistent and unnecessary.

⁶⁴¹ Current sec. 25-48.1(b).

⁶⁴² Current Sec. 25-52.

(f) Lots⁶⁴⁴

(1) Lot Arrangement⁶⁴⁵

Lots shall be arranged to comply with building permit requirements of this Code as to minimum size and width in the zone district where the property is located, as well as access, relation to topography, provision of utility service, or other conditions specified in this Code or in other standards and specifications adopted by the City. Lots in subdivisions that qualify for the Solar Access Density Bonus in Section 29-4.1(b)(2) or the Cluster Subdivision Density Bonus in Section 29-4.1(b)(3), and lots that are organized to avoid sensitive lands as described in Section 29-4.3(b) shall comply with the minimum lot size and width in the zone districts where the lots are located, as adjusted by the provisions of those Sections of this Code.⁶⁴⁶

(i) Corner lots

Corner lots shall have sufficient width for compliance with front and side yard building setback requirements of the zoning ordinance.

(ii) Side lot lines

Side lot lines should generally be at right angles to straight streets and radial to curved streets.

(iii) Tier lots

The Commission may allow tier lots on previously unplatted land when the following criteria are met:

- (A) Tier lot design is the only feasible means to access lots due to extreme topographic conditions;
- (B) The stem of a tier lot, that is, the portion of the lot which connects its required yard area and its buildable area with its public access, shall not be less than twenty (20) feet nor more than fifty-nine (59) feet in width and not shorter than twenty-five (25) feet nor longer than two hundred fifty (250) feet in length and may not be included within any required yard area under the zoning ordinance.
- (C) The allowance of tier lots will not endanger the public health, safety and general welfare.

(iv) Frontage⁶⁴⁷

Except as otherwise provided and specifically authorized under this Code, all lots, tracts or parcels shall have actual frontage upon a street.⁶⁴⁸ In context sensitive

⁶⁴³ In accordance with § 2 of Ord. No. 18097, "A copy of Appendix A shall be on file in the office of planning and development and in the office of the City clerk" was also deleted as unnecessary.

⁶⁴⁴ Carries forward Article VII (Lots), with reorganization and rewording for clarity.

⁶⁴⁵ Current Sec. 25-53. The intent behind this provision is restated in subsection 2 (Lot access) below.

⁶⁴⁶ Revised to reflect new bonuses and sensitive lands avoidance.

⁶⁴⁷ Revised to allow for accessible rather than actual street frontage in context sensitive situations.

situations (e.g., topography, existing or proposed development patterns) where actual street frontage is not feasible, the Director may permit a lot with an irrevocable access easement suitable to the City counsel's office⁶⁴⁹ rather than actual street frontage, if the public health, safety, and general welfare is not compromised.

(v) Shape

Lots in Mixed Use or Special zone districts shall not be created with protrusions, extensions or stems of less than thirty (30) feet in width.⁶⁵⁰

(2) Lot Access⁶⁵¹

- (i) Each lot shall have access allowing vehicles, pedestrians, and bicycles to pass from a public street directly onto the lot, or from a public street to the lot over an irrevocable access easement suitable to the City counsel's office.⁶⁵²
- (ii) A maximum of thirty (30) lots or units shall permitted to be accessed from a single point of ingress/egress unless otherwise specified by the most current adopted edition of the International Fire Code or authorized by the City of Columbia Fire Department.⁶⁵³
- (iii) Private residential driveways are prohibited on arterial or collector streets unless the Director determines that no alternative access is practicable.⁶⁵⁴
- (iv) Streets that dead-end or "stub" into property that is adjacent to the property being subdivided shall not count as a second access until such time as the dead-end or "stub" street is connected to a through street and constructed to City standards.

(g) Public Improvements⁶⁵⁵

(1) Standards and Specifications⁶⁵⁶

All required public improvements, including but not limited to streets and utilities, shall be installed or constructed in accordance with the procedural requirements in Section 29-5 (Procedures and Enforcement), or in related public improvements standard specifications or

⁶⁴⁸ Current Sec. 25-54.

⁶⁴⁹ Since Module 3, reference to "major streets" replaced by "arterial or collector".

⁶⁵⁰ Current Sec. 25-54.2.

⁶⁵¹ Current Sec. 25-54.1 renamed and reorganized for readability.

⁶⁵² New provision.

⁶⁵³ New provision, per staff and fire department request, replacing existing table identifying maximum numbers of lots per access type for each zone district.

⁶⁵⁴ Since Module 3, reference to "accessible street frontage" replace by reference to easement for parallel structure with other similar sections of the Code. New provision that generally prohibits residential driveway access on major streets, rather than listing the streets on which this access is prohibited.

⁶⁵⁵ Carries forward provisions in Article VIII (Public Improvement) on design and construction of public improvements.

⁶⁵⁶ Carries forward Sec. 25-60 (a)(Improvements required) only. The other subsections have been relocated to Chapter 5 (Procedures and Enforcement).

policies established by the City department or other entity responsible for the design, operation, or maintenance of that type of improvement.⁶⁵⁷

(2) Drainage and Storm Sewers⁶⁵⁸

(i) Flood-prone areas

Any portion of land being subdivided that is located within the limits of maximum flooding of the one hundred (100) year flood, as determined by the Boone County Digital Flood Insurance Rate Map (DFIRM), released March 17, 2011, and amendments to that map on file with the Director of Public Works,⁶⁵⁹ shall be developed so as not to endanger the health, safety and general welfare of the inhabitants of the City,⁶⁶⁰ and in compliance with the provisions of this Code.

(ii) Storm sewers

Storm sewers with curbs and gutters shall be provided for lots unless the Director of Public Works approves open channels with design features, such as vegetated swales and check dams to reduce runoff velocity and allow infiltration. Sidewalks and pedways shall not be located between the street and open channel. Improvements shall conform to standards contained in the City street and storm sewer specifications and design standards, and the City storm drainage standards, and all applicable design standards and specifications promulgated by the Director of Public Works or adopted by the Council.

(iii) Driveways across drainage features

Driveways that cross drainageways or ditches, to connect to public streets, shall be constructed as required by the Director of Public Works to protect traffic safety and avoid traffic congestion.⁶⁶¹

(iv) Streets crossing streams

Streets that cross streams shall be designed and constructed to minimize the disruption to the stream channel and buffer zone. Streams should be crossed only when necessary to connect the street network.

(3) Utilities⁶⁶²

Utilities, including but not limited to water, sewer, natural gas, electric and telephone lines, and fire hydrants, shall be provided to lots in accordance with standards and specifications governing the construction and installation of such utilities adopted by Council or promulgated by the City departments or utility companies responsible for those utilities.

⁶⁵⁷ Existing provision revised to refer to procedural requirements because existing Sections 25-27 to 33 provide preliminary and final plat review procedures.

⁶⁵⁸ Current Sec. 25-55.

⁶⁵⁹ Revised to reference the latest DFIRM.

⁶⁶⁰ Reference to "inhabitants thereof" was changed to cover all City residents.

⁶⁶¹ Existing Sec. 25-55(c).

⁶⁶² Current Sec. 25-56.

Easements for public and private utilities shall be provided adjacent to all street right-of-way and in other locations in accordance with facility requirements and design standards. To the maximum extent feasible, utilities shall be located in designated easements and not in the street right-of-way.

29-4.4 Parking and Loading⁶⁶³

(a) Applicability⁶⁶⁴

(1) General Requirements

- (i) The standards of this Section 29-4.4 shall apply to all development and redevelopment, unless specifically excepted or modified by another provision of this Code.
- (ii) Required off-street parking areas in existence on November 19, 2001, shall not be reduced below, or if already less than, shall not be further reduced below, the requirements for such use as would be required for the use as a new use of a building, structure or premises under the provisions of this section.

(2) Exceptions⁶⁶⁵

(i) M-DT District⁶⁶⁶

- (A) Development and redevelopment in the M-DT district is exempt from the minimum parking requirements in Table 4.4-1.
- (B) Residential development and redevelopment in the M-DT district shall provide one-quarter of one (0.25) parking space per bedroom. This requirement can be satisfied on the site or within one-half (0.5) mile of the site.
- (C) If on-site parking is provided, it shall meet all other requirements of this Section 4.4 and may not be located forward to the Parking Setback Line pursuant to the Building Form Standards in Section 29-4.2.
- (D) On-street parking shall meet the on-street parking requirements in Section 29-4.2(f)(iv).

⁶⁶³ Carries forward current Sec. 29-30(Off-street parking and loading regulations) as base text, with substantial revisions as noted.

⁶⁶⁴ New subsection that carries forward the general applicability and exceptions in current Sec. (a)(General Requirements) separately. Existing Sec. (a)(7) providing penalties for parking on residential yards and Sec. (a)(8) allowing the director to issue temporary use permits for this parking have been relocated to Chapter 5 (Procedures and Enforcement). Temporary use parking areas have been covered in Chapter 3 (Permitted Uses).

⁶⁶⁵ Rewrites Current Sec. 29-30(2)(Exceptions to off-street parking and loading requirements). Planned district exceptions are also clarified. The existing code requires off-street/on-site parking for all development, except in existing C-2. Because of the introduction of the new MU districts, to implement Columbia Imagined, more exceptions to the off-street parking requirement are included.

⁶⁶⁶ New subsection that aligns with the interim C-2 ordinance parking requirement to address parking spillover into adjacent residential neighborhoods and references other parking requirements found in Sec. 29-4.2

(ii) Small Lots⁶⁶⁷

- (A) No off-street parking shall be required for any non-residential primary use on a lot in any Mixed Use District that is smaller than ten thousand (10,000) square feet where no portion of the front lot line is located within one hundred (100) feet of a Residential district.
- (B) No off-street parking shall be required for any building in any Mixed Use district that contains has a non-residential primary use, and contains less than ten thousand (10,000) square feet of gross floor area, provided no portion of the front lot line of the property containing that building is located within one hundred (100) feet of a Residential district.

(iii) Planned Development⁶⁶⁸

The off-street parking requirements of this section shall serve as the standard from which to request different parking requirements for a proposed use in a PD (Planned Development) district. Following approval of a PD district that is subject to an approved site plan with parking requirements that differ from those in this Section 29-4.4, the requirements of this Section shall not apply to property located in that district. If an approved planned zoning district site plan is silent on any aspect of parking addressed by this section, the provisions of this section shall apply to that aspect of parking.

(iv) Historic Properties⁶⁶⁹

- (A) No new on-site parking shall be required for the redevelopment of Historic Structures.
- (B) If an existing Historic Structure has on-site parking, this parking must be retained and conform with the City’s current parking improvement standards (e.g., be paved), unless the Director determines that compliance is impracticable or would compromise the historic character of the property or area.

(3) Residential Districts⁶⁷⁰

The following standards apply in all residential districts:

- (i) No garage other than a private garage shall be located nearer than twenty (20) feet to the front lot line or behind the building front, whichever is greater.⁶⁷¹

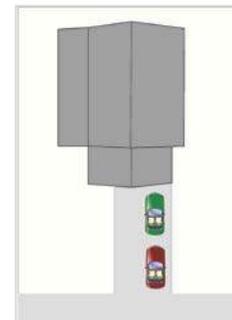


Figure 4.4-1: Tandem Parking

⁶⁶⁷ New subsection.

⁶⁶⁸ Section simplified to delete “phase-in” provisions related to adoption of ordinance in 2001, to clarify that these standards are the starting point for requesting modified parking standards in a planned district, and to clarify that standards in an approved planned development apply where they conflict with standards in this section.

⁶⁶⁹ New provision to promote historic preservation.

⁶⁷⁰ Current Sec. 29-30(6).

⁶⁷¹ Since Module 3, this text has replaced a 60 foot minimum garage setback requirement.

- (ii) Parking spaces for residential and non-residential uses, other than single-family and two-family dwellings, shall not be located in the required front yard.⁶⁷²
- (iii) Required parking spaces may be tandem spaces to serve one- and two-family dwellings only, as exhibited in the Figure 4.4-1 to the right.⁶⁷³

(4) Change in Permitted Use⁶⁷⁴

- (i) When the intensity of use of any legally established building, structure or premises is increased resulting in a net increase of gross floor area or any other unit of measurement specified herein for determining required parking areas, parking spaces and any other facilities as required herein shall be provided for such increase in intensity of use.
- (ii) Whenever the type of use of a building, structure or premises is changed to a new type of use permitted by this chapter, parking spaces and areas shall be provided as required by the provisions of this section for such new type of use.
- (iii) Notwithstanding the provisions of subsections (i) and (ii) above, a permitted use that does not meet the parking requirements of this section may be converted to another permitted use without full compliance with the required number of parking spaces provided:
 - (A) The amount of parking available is at least seventy-five (75) percent of the parking required for the new use in Table 4.4-1.
 - (B) The applicant provides the maximum number of parking spaces able to be accommodated on the site while complying with all other provisions of this Code and without being required to remove or partially remove an existing structure.

(b) Parking Requirements⁶⁷⁵

(1) Required Parking Spaces

The minimum and maximum off-street parking requirements for all uses allowed by this Code are listed in Table 4.4-1.

(2) Accessible Parking⁶⁷⁶

Within the requirements of Table 4.4-1, accessible parking shall be provided for all multi-family and non-residential uses as required by the Americans with Disabilities Act (ADA).

⁶⁷² Revised to clarify that this provision applies to all uses other than 1 and 2 family dwellings.

⁶⁷³ Simplified for clarity.

⁶⁷⁴ Subsections (i) and (ii) were relocated from general provisions of current parking regulations. Subsection (iii) inserts flexibility to promote reinvestment, reduce variance requests, and simplify administration.

⁶⁷⁵ Revises Current Sec. 29-30(b)(Parking Requirements) considerably, to reduce required off-street parking where possible. Existing Table 29-30(b)(1) has been carried forward, with the new uses identified in the Module 1 Permitted Use Table. The City's current parking requirements are listed in the second column and revised or new standards are provided in the third column for comparison purposes during the City's review of the proposed standards. Prior to Code adoption, the current standards column will be deleted.

⁶⁷⁶ New provision, per Detailed Outline, to ensure legal consistency with federal law.

Table 4.4 – 1: Minimum Required Off-Street Parking (and Maximum Permitted Off-Street Parking for Selected Uses)⁶⁷⁷ sf = square feet; gfa = gross floor area		
New Category	Current Standard	Proposed Standard
RESIDENTIAL USES		
Household Living		
Dwellings, One-Family Detached	2 spaces/dwelling	2 spaces/dwelling unit
Dwelling, One-Family Attached	2 spaces/dwelling unit	
Dwelling, Two-Family	2 spaces/unit for two-family units having up to 2 bedrooms; three spaces/unit in two-family units of 3 or more bedrooms	
Dwelling, Co-Housing Project		
Dwelling, Live-Work		1 space/dwelling unit
Dwelling, Multi-family	1.0 spaces/dwelling unit for "efficiency" apartment (i.e., units without a separate bedroom); 1.5 spaces/dwelling unit for 1 bedroom units; 2 spaces/dwelling unit for 2 bedroom units; 2.5 spaces/dwelling for 3 or more bedroom units; In addition to required parking for residents, 1 space/5 dwelling units will be required for visitor parking	1 space/dwelling unit containing 2 or fewer bedrooms; and 1.5 space/dwelling unit containing more than 2 bedrooms; and 1 space/10 dwelling units for visitor parking
Manufactured Home Park	2 space/dwelling unit	2 spaces/dwelling unit
Second Primary Dwelling Unit		1 space/dwelling unit
Group Living		
Boardinghouse	1 space/2 occupants the building is ultimately designed to accommodate	1 space/3 guests design capacity
Continuing Care Retirement Community	1 space/4 beds plus 1 space/employee ⁶⁷⁸	1 space/ 3 habitable units

⁶⁷⁷ Parking standards based on experience in other cities, and to remove employee-based standards and other standards that are hard track and enforce over time as employment varies.

⁶⁷⁸ Current standard for Nursing Homes and Residential Care Facilities

Table 4.4 – 1: Minimum Required Off-Street Parking (and Maximum Permitted Off-Street Parking for Selected Uses) ⁶⁷⁷ sf = square feet; gfa = gross floor area		
New Category	Current Standard	Proposed Standard
Dormitory/Fraternity/Sorority	1 space/2 occupants the building is ultimately designed to accommodate Community development director may reduce requirements for dorms by not more than 20% during such periods students are not permitted autos.	Dormitory: 1 space/ 1,000 sf gfa Fraternity/Sorority: 1 space/person capacity of permanent sleeping facilities.
Group Care Home, Large	1 space/unit ⁶⁷⁹	1 space/ 2 beds design capacity
Group Home, Small	1 space/unit ⁶⁸⁰	
Halfway House	1 space/2 occupants the building is designed to accommodate ⁶⁸¹	
Residential Care Facility	1 space/4 beds plus 1 space/employee	1 space/ 6 beds, but not less than 2 spaces ⁶⁸²
Temporary Shelter	1 space/employee plus 1 space/every 4 occupants the shelter is designed to accommodate	1 space per 4 occupants design capacity.
PUBLIC and INSTITUTIONAL USES⁶⁸³		
Adult and Child Care		
Adult Day Care Center Family Day Care Center	1 space/employee plus either of the following: 1) 2 parking spaces for the first 10 adults plus 1 parking space for every 10 additional adults, or fraction thereof, for whom care is provided; OR 2) A drive through facility with adequate "pullover" space out of the flow of driveway traffic for 2 additional vehicles. ⁶⁸⁴	1 space/ 800 sf gfa plus 2 additional spaces or "pull-over" space for 2 vehicles out of the flow of driveway traffic.

⁶⁷⁹ Current requirement for elderly and handicapped housing.

⁶⁸⁰ Current requirement for elderly and handicapped housing.

⁶⁸¹ Current requirement for boardinghouse or rooming house.

⁶⁸² Revised from 1 space/9 beds in prior draft in response to public comment.

⁶⁸³ Utilities and Communications uses have been eliminated from the parking chart because their parking requirements are covered by the Public Service Facility requirement (1 space/300 sf gfa) within this use category. The City did not have existing parking requirements for these uses.

⁶⁸⁴ Current day care facility standard modified to refer to adults rather than children.

Table 4.4 – 1: Minimum Required Off-Street Parking (and Maximum Permitted Off-Street Parking for Selected Uses)⁶⁷⁷ sf = square feet; gfa = gross floor area		
New Category	Current Standard	Proposed Standard
Community Service		
Assembly or Lodge Hall	1 space/4 seats or occupants ⁶⁸⁵ 1 space/200 sq. ft. of assembly area ⁶⁸⁶	1 space/200 sf gfa
Cemetery or Mausoleum		No requirement
Community/Recreation Center		1 space per 500 sf gfa
Elementary School	Elementary schools—1 space/employee plus 1 space/15 students; Middle schools and junior high schools—1 space/employee plus 1 space/10 students; Senior high school - 1 space/employee plus 1 space/4 students;	1 space / 10 seats in the auditorium or main assembly room, or 1 space/ classroom, whichever is greater
Secondary School (middle and high)	Middle schools and junior high schools—1 space/employee plus 1 space/10 students; Senior high school - 1 space/employee plus 1 space/4 students;	1 space / 6 seats in the main auditorium or 3 spaces/ classroom, whichever is greater.
Funeral Home or Mortuary	1 space/5 seats in largest chapel plus 1 space/employee plus 1 space for each facility vehicle	1 space/ 6 seats or per 200 sf gfa in main assembly area, whichever is greater
Higher Education Institution	1 space/5 classroom seats	1 space/ 500 sf gfa of office, research, and library area plus 1 space/ 200 sf gfa of auditorium space
Hospital	1 space/bed for first 100 beds; 1 space/2 beds for next 100 beds; 1 space/4 beds thereafter	1 space/ 500 sf gfa
Museum or Library	1 space/1,000 sq. ft.	1 space/ 1,000 sf gfa
Police or Fire Station		
Public Service Facility	1 space/300 sf ⁶⁸⁷	1 space/ 300 sf gfa

⁶⁸⁵ Auditorium or assembly hall requirement.

⁶⁸⁶ Lodge or private club requirement.

⁶⁸⁷ Current professional and business office requirement b/c Public Service Facility combines “government buildings and facilities” and “public administration buildings.”

Table 4.4 – 1: Minimum Required Off-Street Parking (and Maximum Permitted Off-Street Parking for Selected Uses)⁶⁷⁷ sf = square feet; gfa = gross floor area		
New Category	Current Standard	Proposed Standard
Public Park, Playground	1 space/5,000 sq. ft. of land area	Park/Playground: 1 space/5,000 sq. ft. of land area; Playfield (e.g., baseball, soccer): 20 spaces/field (min.)
Golf Course		1 space / 400 sq. ft. of clubhouse area or 6 spaces / hole, whichever is greater
Religious Institution	1 space/4 seats in sanctuary or other assembly area	1 space/ 6 seats or per 200 sf main assembly area, whichever is greater
Reuse of Place of Public Assembly		No requirement
COMMERCIAL and INDUSTRIAL USES		
Agricultural & Animal Related		
Agriculture		No requirement
Farmer’s Market		1 space/booth; host property parking may apply if farmer’s market does not leave host use deficient
Greenhouse or Plant Nursery		1 space/ 1,000 sf gfa
Pet Store or Pet Grooming		1 space/ 300 sf gfa
Urban Agriculture		No requirement
Veterinary Hospital	1 space/300 sq. ft.	1 space/ 400 sf gfa
Food & Beverage Service		
Bar or Nightclub	1 space/100 sq. ft.	1 space/ 150 sf gfa
Restaurant (no drive-through)	1 space/100 sq. ft.	1 space/ 150 sf gfa
Restaurant (with drive-through)	1 space/100 sq. ft.; Drive-throughs also required to have 4 stacking spaces/window	1 space/ 200 sf gfa Refer to Table 4.4-3 for drive-through stacking space requirements
Guest Accommodations		
Bed and Breakfast	1 space/guest room plus 2 parking spaces/dwelling unit	1 space/ manager + 1 space/ dwelling unit

Table 4.4 – 1: Minimum Required Off-Street Parking (and Maximum Permitted Off-Street Parking for Selected Uses)⁶⁷⁷ sf = square feet; gfa = gross floor area		
New Category	Current Standard	Proposed Standard
Hotel or motel	1 space/room plus 1 space/20 rooms (to accommodate motel/hotel staff) plus 75% of the normal spaces required for accessory uses (e.g. banquet rooms, meeting rooms, restaurants, etc.) if applicable.	2 spaces/ 3 guest rooms + 1 space/ 200 sf gfa in all accessory uses including restaurants and meeting rooms
Travel Trailer Park		1 space / 1,500 sf of land area
Office		
Commercial or Trade School	1 space/employee station plus 1 space/each 5 students except nursery schools which require 1 space/employee or teacher station	1 space/ 400 sf of enclosed floor space
Office	Banks - Walk-in facility: 1 space/250 sq. ft.; Drive-thru facility: 1 space/300 sq. ft. plus 3 stacking spaces for each drive-up window; Medical office: 1 space/each 200 sq. ft.; Office: 1 space/300 sq. ft.	1 space/ 300 sf gfa (General) ⁶⁸⁸ 1 space/ 200 sf gfa (Medical)
Research and Development Laboratory		1 space/ 600 sf gfa
Wholesale Sales Offices and Sample Room		1 space/ 600 sf gfa
Personal Services		
Personal Services, General	Barber and beauty shop: 2 spaces/chair or operator station; Dry cleaning/laundry: 1 space/300 sf	1 space/ 400 sf gfa
Self-service Storage Facilities	1 space/20 rental units plus 2 spaces for the "office"; Rows between storage buildings shall be designed to allow for simultaneous vehicle parking and passage.	1 space/ 20 storage units
Tree or Landscaping Service		1 space/ 1,000 sf gfa

⁶⁸⁸ Revised from 1/400 sf in prior draft per public comment.

Table 4.4 – 1: Minimum Required Off-Street Parking (and Maximum Permitted Off-Street Parking for Selected Uses)⁶⁷⁷ sf = square feet; gfa = gross floor area		
New Category	Current Standard	Proposed Standard
Recreation & Entertainment⁶⁸⁹		
Indoor Recreation or Entertainment Physical Fitness Center	5 spaces/lane; Other uses (bar, restaurant, etc.) figured separately at 75% of the parking required (Bowling Alley); 1 space/4 seats (Movie Theater); 1 space/300 sq. ft. (Indoor Recreation Facilities); 1 space/300 sq. ft. (Pool halls); 1 space/200 sq. ft. (Skating Rinks); 1 space/150 sq. ft. (Physical Fitness Center); 1 parking space for each 200 sq. ft. of water surface area; provided, however, additional spaces shall be required when pool amenities are included at the same rate as for outdoor swimming pools, as well as when the following other amenities are included: aerobics floor or cardiovascular room—1 space for each 100 sq. ft., weight room—1 space for each 150 sq. ft., lounge or office area—1 space for each 200 sq. ft., other useable activity areas—1 space for each 300 sq. ft.; and b. The number of parking spaces shall be reduced by 20% if use of at least 25% of the pool is regularly devoted to training or therapy. (Indoor Swimming Pools)	General: 1 space/ 400 sf gfa Indoor Theater: 1 space per each 6 seats design capacity
Indoor Entertainment, Adult		1 space/ 400 sf gfa

⁶⁸⁹ The “Private recreation facility” use included in Module 1 has been deleted from this Parking Table and the Permitted Use Table because it is covered by the indoor and outdoor recreation and entertainment categories.

Table 4.4 – 1: Minimum Required Off-Street Parking (and Maximum Permitted Off-Street Parking for Selected Uses)⁶⁷⁷ sf = square feet; gfa = gross floor area		
New Category	Current Standard	Proposed Standard
Outdoor Recreation or Entertainment	Driving Range: 1 space/tee box; Golf Course: 4 spaces/hole; Miniature Golf (1 space/hole); Parks & playgrounds (1 space/ 5,000 sf of land area); Rifle, pistol, and archery ranges: 1 space/station; Stadiums: 1 space/4 seats; Outdoor pools: 1 parking space for each 150 sq. ft. of water surface area; provided, however, additional spaces shall be required when the following amenities are included: water slide (10 feet or taller)—7 spaces for each slide; diving board—2 spaces for each board; zero depth entry—1 space for each 15 lineal feet; concession stand—3 spaces; tennis, basketball or volleyball court—2 spaces for each court; and b. The number of spaces shall be reduced by 20% if use of the pool is restricted to residents of the subdivision in which the pool is located or if use of at least 25% of the pool is regularly devoted to training or therapy; Tennis Courts: 2 spaces/court.	General: 1 space/ 5,000 sf of land area, or 1 space/ 3 person design capacity, whichever is less; Swimming Pools: 1 space / 200 sf of pool surface area
Theater, Drive-In		No requirement
Retail		
Alcoholic Beverage Sale	1 space/200 sq. ft.	1 space/ 300 sf gfa
Retail, General, Small Retail, Adult, Small	1 space/200 sq. ft. ⁶⁹⁰	1 space/ 300 sf gfa

⁶⁹⁰ Current requirement for apparel & accessory stores . . . , computer supply, convenience store, drug store, dry goods, fabric store, office supply, and sporting goods.

Table 4.4 – 1: Minimum Required Off-Street Parking (and Maximum Permitted Off-Street Parking for Selected Uses)⁶⁷⁷ sf = square feet; gfa = gross floor area		
New Category	Current Standard	Proposed Standard
Retail, General, Large Retail, Adult, Large	1 space/250 sq. ft. plus 1 space/1,000 sq. ft. of outdoor sales area (Building Materials, Hardware, Garden Supplies); 1 space/200 sq. ft. (Department Store) 1 space/400 sq. ft. (Furniture, Appliance, Home furnishings); First 200,000 sq. ft. of gross floor area (GFA)—1 space/250 sq. ft.; Over 200,000 sq. ft. of GFA—1 space/200 sq. ft. (Shopping Center); 1 space/200 sq. ft.(Supermarket, food and beverage).	1 space/ 400 sf gfa
Vehicles & Equipment		
Car Wash	4 stacking and drying spaces/stall	2 stacking/drying spaces/stall
Heavy Vehicle and Equipment Sales, Rental, and Servicing	1 space/400 sq. ft. of floor area plus 1 space/3,000 sq. ft. of open lot display area ⁶⁹¹ ; 1 space/employee plus 4 spaces/service bay; Inoperable vehicles shall not occupy required parking ⁶⁹²	1 space/ 1,000 sf gfa ⁶⁹³
Light Vehicle Sales or Rental	1 space/400 sq. ft. of floor area plus 1 space/3,000 sq. ft. of open lot display area ⁶⁹⁴ ; 1 space/200 sf. ⁶⁹⁵	1 space/ 500 sf gfa
Light Vehicle Service or Repair	1 space/200 sq. ft.; spaces at fuel pump islands will be counted toward this requirement ⁶⁹⁶	1 space/ 500 sf gfa
Parking Lot, Commercial		
Parking Structure, Commercial		

⁶⁹¹ Current requirement for auto, boat, truck, and mobile home sales and service.

⁶⁹² Current requirement for auto repair, major.

⁶⁹³ Heavy vehicle parking is revised to allow half the amount of light vehicle parking because heavy vehicle operations generally have fewer employees per vehicle.

⁶⁹⁴ Current requirement for auto, boat, truck, and mobile home sales and service.

⁶⁹⁵ Current requirement for auto accessory stores.

⁶⁹⁶ Current requirement for auto service stations and auto accessory stores.

Table 4.4 – 1: Minimum Required Off-Street Parking (and Maximum Permitted Off-Street Parking for Selected Uses)⁶⁷⁷ sf = square feet; gfa = gross floor area		
New Category	Current Standard	Proposed Standard
INDUSTRIAL USES⁶⁹⁷		
Commercial Services		
Heavy Commercial Services	The greater of 1 space/employee for the sum of the two largest consecutive shifts plus 1 space/vehicle used in the conduct of business OR 1 space/600 sq. ft. of floor area ⁶⁹⁸	1 space/ 750 sf gfa
Mechanical and Construction Contractors		1 space/ 1,000 sf gfa
Warehousing and Storage	Warehouse: 1 space/2,000 sf of floor area;	1 space/ 2,000 sf gfa
Wholesale Distribution	Wholesale distribution: 1 space/1,000 sf.	1 space/ 2,000 sf gfa
Manufacturing, Production, and Extraction		
Artisan Industry	The greater of 1 space/employee for the sum of the two largest consecutive shifts plus 1 space/vehicle used in the conduct of business OR 1 space/600 sq. ft. of floor area. ⁶⁹⁹	1 space/ 1,000 sf gfa
Bakery		
Heavy Industry		
Light Industry		
Machine Shop		
Mine or Quarry		No requirement
Transportation		
Airport		As determined by the Columbia Regional Airport management
Bus Barn or Lot		No requirement
Bus Station		
Rail or Truck Freight Terminal		
Waste & Salvage		
Sanitary Landfill		No requirement
Automobile Wrecking and Junk Yard		

⁶⁹⁷ The current code only provides one general requirement for manufacturing/industrial uses, which has been plugged into the current standards generally, if applicable.

⁶⁹⁸ Current requirement for Manufacturing/Industrial Uses.

⁶⁹⁹ Current requirement for Manufacturing/Industrial Uses.

Table 4.4 – 1: Minimum Required Off-Street Parking (and Maximum Permitted Off-Street Parking for Selected Uses)⁶⁷⁷ sf = square feet; gfa = gross floor area		
New Category	Current Standard	Proposed Standard
ACCESSORY USES		
Accessory Dwelling Units	1 space/ dwelling unit for accessory dwelling units having up to 2 bedrooms; 2 spaces/dwelling unit of accessory dwelling units having 3 or more bedrooms	1 space/ dwelling unit for accessory dwelling units having up to 2 bedrooms ⁷⁰⁰
Drive-Up/Through Facility	Drive-thru facility: 1 space/300 sq. ft. plus 3 stacking spaces for each drive-up window	No requirement. Refer to Table 4.4-3 for drive-through stacking space requirements
All other accessory uses ⁷⁰¹		No requirement
TEMPORARY USES		
Temporary Construction Yard or Office		2 spaces
Temporary Real Estate Sales/Leasing Office		2 spaces
All other temporary uses		No Requirement

(c) Other Parking Requirements⁷⁰²

For any uses not listed in Table 4.4-1, the required minimum number of off-street parking spaces shall be determined by the Director based on the anticipated use and anticipated neighborhood and traffic congestion impacts.

(d) Parking Alternatives⁷⁰³

The Director may approve applications containing alternatives to providing the number of off-street parking spaces required by Table 4.4-1, in accordance with the following standards.

(1) Transit Incentives⁷⁰⁴

- (i) The minimum number of off-street parking spaces required for any development or redevelopment of lands located within one-quarter (¼) mile of the major COMO

⁷⁰⁰ Corrected in response to public comment.

⁷⁰¹ All accessory uses without parking requirements have been consolidated into one category.

⁷⁰² Revises current Sec. 29-30(c) for clarity and removes the two parking space (min) requirement.

⁷⁰³ New section that groups existing alternative parking provisions together, with noted revisions for clarity.

⁷⁰⁴ Carries Current Sec. 29-30(d) forward with additional transit incentives to encourage development along the COMO Connect bus routes.

Connect connection points (Black, Gold, and Red lines) or transit center, may be reduced by twenty (20) percent.⁷⁰⁵ The most recent COMO connect map can be accessed on the City's website or at the Community Development Department.

- (ii) The minimum number of off-street parking spaces required for any development or redevelopment of lands zoned M-N (pedestrian) or M-C (transit), may be reduced by thirty (30) percent. This reduction may not be combined with the reductions in subsection (i) above.⁷⁰⁶
- (iii) Upon application of the owner, the parking requirement of a building or use may be reduced by five (5) percent for lots or tracts of two (2) acres or more located on a transit route that provide, at the owner's cost, transit pull-offs and transit rider shelters of a type and location acceptable to the City.⁷⁰⁷
- (iv) If an existing transit route, center, or zoning district is eliminated or changed in location, any development approved and built in conformance with this Section 29-4.4 shall not be deemed nonconforming in terms of required parking.⁷⁰⁸

(2) Shared Parking⁷⁰⁹

The Director may approve joint parking facilities for development or uses with different operating hours or different peak business periods, if the shared parking complies with the following standards:

(i) Location⁷¹⁰

Shared parking shall be located within six hundred (600) feet of the primary entrance of all uses served.

(ii) Reduction⁷¹¹

Where a joint parking facility meets the location requirement of this Section, the total off-site parking required for those uses may be reduced by the factors shown in Table 4.4-2. Total off-street parking required shall be the sum of the two parking requirements for the two uses divided by the factors for that combination of uses shown in Table 4.4-2. If more than two (2) uses share a parking lot or structure, the required parking shall be calculated by applying Table 4.4-2 to the two (2) uses with the largest parking requirements and then adding the required parking for the additional uses.

⁷⁰⁵ New provision.

⁷⁰⁶ New provision

⁷⁰⁷ Current Sec. 29-30(d).

⁷⁰⁸ New provision.

⁷⁰⁹ Carries forward current 29-30(e) with more objective standards. Current Sec. 29-30(f)(Location of Facilities) – which defines mixed use parking as the “sum of the individual requirements” was deleted.

⁷¹⁰ New provision.

⁷¹¹ New subsection to make current shared parking standard more objective.

Table 4.4-2: Shared Parking Reduction Factors					
Property Use	Residential	Public and Institutional	Food, Beverage, and Indoor Entertainment, Lodging, or Religious Assembly	Retail Sales and Personal Services	Office & Other Commercial
Residential					
Public and Institutional	1.1				
Food, Beverage, and Indoor Entertainment, Lodging or Religious Assembly	1.1	1.2			
Retail Sales and Personal Services	1.2	1.3	1.3		
Office & Other Commercial	1.3	1.5	1.7	1.2	

(iii) Additional Sharing Permitted⁷¹²

As an alternative to the parking reduction factors in Table 4.4-2, the Director may allow the following reductions in required parking:

- (A) Up to fifty (50) percent of the parking spaces required for food, beverage, and indoor entertainment uses located within six hundred (600) feet of a non-residential use that is not normally open, used, or operated during the same hours; and
- (B) Up to one hundred (100) percent of parking spaces required for religious assembly uses located within six hundred (600) feet of a non-residential use that is not normally open, used, or operated during the same hours.

(iv) Agreements⁷¹³

If the Director determines that there is significant doubt that shared parking facilities will remain available for the uses they serve, and the loss of those shared parking spaces would cause significant neighborhood impacts or traffic congestion, the Director may require a written agreement assuring the continued availability of the shared parking spaces for the uses they serve. If required by the Director, the

⁷¹² New provision to address community inquiries about the shared use of church parking lots.

⁷¹³ Clarifies existing Sec. 29-30(e)(3) and allows the Director to not require an agreement if risks of the loss of shared parking are not significant. Strict agreement requirements often result in property owners not using shared parking provisions and are difficult to enforce.

agreement shall be on a form approved by the City and shall be filed with the application for a building permit.

(3) Credit for Public Parking⁷¹⁴

Some or all of the required off-street parking spaces for a non-residential use may be waived by the Director if publicly owned off-street parking is located within a one thousand (1,000) foot walking distance from the main entrance of the proposed use, and the Director also determines that adequate parking spaces are available within the publicly owned parking area to accommodate the anticipated use.

(4) Credit for On-Street Parking⁷¹⁵

The Director may credit on-street parking spaces against required off-street parking requirements if the on-street spaces are located within two hundred (250) feet of an entry of the building in which the use is located, if the Director determines that those parking spaces are frequently available for residents, patrons, or employees of the proposed use and structure.

(5) Additional Parking Reductions⁷¹⁶

The Director may allow an additional reduction in the required number of parking spaces (less than what may be determined using the adjusted off-street parking calculations in subsections (1)-(4) above) if the applicant submits a parking demand study, prepared in accordance with the City's guidelines, by a qualified parking or traffic consultant, documenting the basis for granting a reduced number of spaces, and the Director determines the study accurately reflects the parking demand for the use or structure.

(e) Maximum Parking Limit⁷¹⁷

- (1) In the Mixed Use districts, no single building that contains more than fifty thousand (50,000) square feet of gross floor area, in which a single-user or multiple users operate a use listed in the Retail, Office, or Personal Service categories in Table 29-3.1 (Permitted Use Table), may provide on-site automobile parking in an amount greater than one hundred twenty-five (125) percent of the minimum amount required by Table 4.4-1.

In the M-DT districts, maximum on-site parking is limited to one hundred twenty-five (125) percent of the minimum amount required for the same use in other Mixed Use districts, even though those minimums do not apply to the M-DT district.

(f) Location and Use of Parking Facilities⁷¹⁸

(1) Location

⁷¹⁴ New subsection.

⁷¹⁵ New subsection.

⁷¹⁶ New subsection.

⁷¹⁷ New standard that applies the maximums to the M-DT district, even though the minimums do not apply there.

⁷¹⁸ Current Sec. 29-30(g) presented in two subsections and list form for clarity. Provision (g)(3) regarding ADA sidewalks has been relocated to parking design standards. New provisions are noted.

- (i) Off-street automobile parking facilities required by this section for all non-residential uses may be located either on the premises of the parking generator or within one thousand (1,000) feet of the non-residential use.
- (ii) In the M-N zone district, on-site parking for non-residential uses shall not be located closer to the primary street frontage of the lot than the front façade of the primary structure, except for one double-loaded row of parking, which may be located between the front building façade and the front lot line, if it is not located in a required front yard area. The option to include one (1) double-loaded row of parking in this location is not available on properties where the applicant has selected to use the “pedestrian” dimensional standards shown in Sections 29-2.2(b)(2) (M-N District) and 29-4.1 (Dimensional Standards).⁷¹⁹
- (iii) No portion of an off-street parking facility shall be located in a public street or sidewalk, parkway, alley, or other public right-of-way.⁷²⁰
- (iv) In a residential district, no paved driveway or outdoor parking area shall be permitted to cover more than thirty (30) percent of any front yard or rear yard area. The thirty (30) limit shall include areas included in driveways.⁷²¹

(2) Use

- (i) Land used for off-site parking for a non-residential use shall not be located in a residential zone district, unless that use is a Permitted Use or Conditional Use in that residential zone district.
- (ii) Off-street parking spaces shall not be used for the sale, repair, dismantling, or servicing of any vehicles, or equipment.⁷²²

(3) Use of Yards⁷²³

- (i) No vehicle shall be parked in a required front or side yard except on a permitted driveway. A permitted driveway is a driveway that leads to the front or rear of the building or to a permitted accessory building (garage) attached or detached from the principal structure and maintained in accordance with the City’s property maintenance standards.
- (ii) A permitted driveway may include a defined area for parking adjacent and attached to the driveway. The extension must be paved in a material similar to that of the rest of the driveway.
- (iii) Parking of vehicles in a direction perpendicular to the driveway is prohibited, except in the rear yard.
- (iv) In residential districts, rear yards may be used for open parking of automobiles, including trailers and similar type vehicles, on an approved dust-free surface, subject to

⁷¹⁹ New provision.

⁷²⁰ New provision.

⁷²¹ New provision.

⁷²² New provision. Since Module 3, wording revised to avoid conflict with outdoor sale provisions.

⁷²³ New subsection and all new provisions to address neighborhood concerns about cars parked on yards. Replaces provisions of Sec. 29-30(a)(7).

the use of a screening device not less than four feet nor more than six (6) feet in height.⁷²⁴

- (v) The Director may issue a temporary permit to allow parking that does not meet the requirements of subsections (i) through (iv) under Sec. 29-5.4 (g) (Temporary Parking Permits).⁷²⁵

(g) Parking Design Standards⁷²⁶

The design of required off-street and open parking areas and spaces shall meet the following standards:

(1) Residential Setback⁷²⁷

No parking shall be permitted within six (6) feet of an adjoining lot containing a single- or two-family use, except as otherwise provided by this Code.

(2) Grades, Drainage, and Curbs⁷²⁸

- (i) Parking areas shall be designed to assure positive drainage, but shall not exceed a slope of ten (10) percent;
- (ii) Approach driveways which do not serve directly abutting parking spaces may be designed to a slope of up to fifteen (15) percent, if accompanied by appropriate landing grades and vertical curves at points of transition;
- (iii) Storm drainage control and facilities shall be designed to satisfy the requirements of the storm drainage standards of the City.
- (iv) Curb islands or wheel stops may be installed for drainage control, and for vehicular channelization and lane control; provided, that in parking areas of more than one hundred (100) spaces, curbing or similar measures shall be required to assure safe and proper control of vehicular and pedestrian movements.
- (v) Parked vehicles shall be prevented from intruding on travel lanes, walkways, public streets, or adjacent properties by means of walls, curbs, wheel stops, or other means.

(3) Access⁷²⁹

- (i) Ingress and egress shall be only by way of paved driveways or openings meeting the City's adopted access location and design requirements.

⁷²⁴ Revised to address concern that vehicles parked on lawns contribute to soil erosion. Revised since Module 3 to avoid reference to International Property Maintenance Code and to remove requirement for a landscaped strip, since provisions of Section 29-4.5 (Landscaping and Screening) apply.

⁷²⁵ Added since previous draft to carry over flexibility from current Sec. 29-30(a)(7).

⁷²⁶ Current Sec. 29-30(h)(Improvement of Parking Areas) renamed and reorganized for clarity.

⁷²⁷ Current Sec. 29-30(h)(1). Revised to apply to uses in any district, not simply a residential district, adjacent to a single – or two – family dwelling, but no longer applies when the adjacent lot is in multifamily residential use. A similar provision has been included in Section 29-4.9(e)(1).

⁷²⁸ Current Sec. 29-30(h)(2) is renamed to include curbs. Curb provision from (h)(4) is relocated here.

⁷²⁹ Current Sec. 29-30(h)(3) broken down into a list. Wording revised for clarity.

- (ii) All parking areas of more than two hundred (200) spaces shall be served by more than one (1) standard entrance.
- (iii) Access driveways shall be free of objects that might interfere with the ability of drivers to see pedestrians and other vehicles.
- (iv) A driveway providing access to premises in commercial or industrial districts shall not be permitted through a residential district.⁷³⁰
- (v) The following additional standards apply in all Residential districts:⁷³¹
 - (A) No garage for any use other than a single- or two-family dwelling shall be located nearer than sixty (60) feet to the front lot line.⁷³²
 - (B) Required parking spaces may be provided in a tandem layout (i.e., one vehicle parked behind the other) to serve one- and two-family dwellings only; see Figure 4.4-1 above.⁷³³
 - (C) Parking spaces for all other uses in residential districts shall not be located in the required front yard.

(4) Parking Layout Dimensions⁷³⁴

All required parking spaces must comply with the minimum dimensions for spaces shown in the following Table 4.4-3 and Figure 4.4-2.⁷³⁵

Parking Angle (1)-degree	0°	20°	30°	40°	45°	50°	60°	70°	80°	90°
Curb Length Per Space (3)--ft.	23.0	24.9	17.0	13.0	12.0	11.3	9.8	9.4	9.0	8.5
Space Depth (4)--ft.	8.0	14.5	16.9	18.5	18.8	19.3	20.0	19.5	19.0	18.0
Access Aisle Width (5)--ft.	12.0 ^{[1] [2]}	12.0 ^[1]	12.0 ^[1]	12.0 ^[1]	13.0 ^[1]	15.0 ^[1]	18.0	20.0	22.0	24.0
Space Width (2)—ft.	8.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5

[1] Aisle width (D) shall not be less than 18 feet if the aisle is a designated fire lane.
[2] Aisle width (D) shall not be less than 22 feet for two-way traffic.

- (i) If the degree of angle of parking provided (i) is not listed, the aisle width required shall be the next largest angle of parking shown.

⁷³⁰ Current Sec. 29-27(a)(Accessory Uses).

⁷³¹ Current Sec. 29-30(a)(6)(Off-street parking and loading regulations). Current text limiting one parking space to the front yard or on the required side yard on the street side of a corner lot deleted as unnecessary.

⁷³² Reworded to exempt single- and two-family dwellings rather than “private garages”.

⁷³³ Wording simplified and refers to earlier graphic for clarity. Tandem parking is located within the original one car-width driveway, so text on parking “adjacent and parallel to” the driveway has been deleted. Tandem parking figure will be included in final integrated draft.

⁷³⁴ Current Sec. 29-30(k)(Dimensional elements of off-street parking layouts).

⁷³⁵ New graphic included to illustrate angled parking dimensions in table.

⁷³⁶ Current Table 29-30(l)(4).

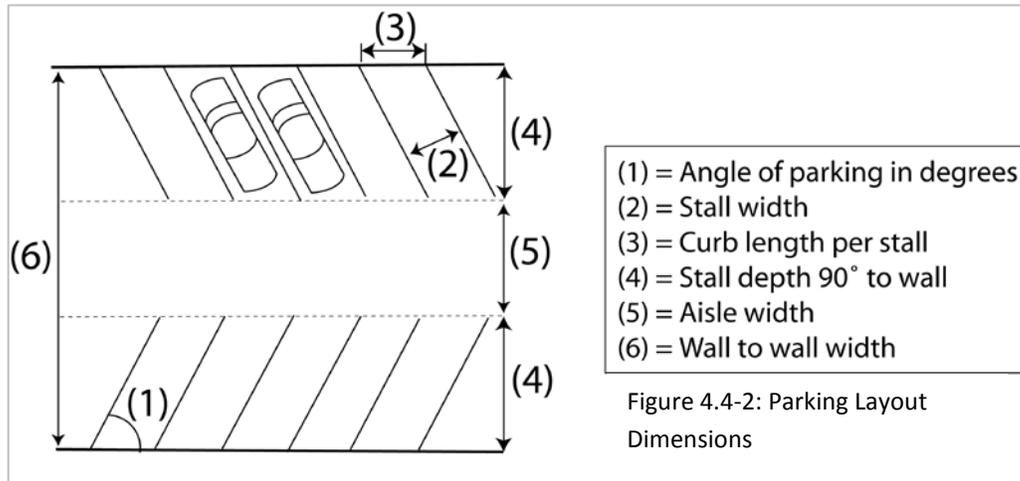


Figure 4.4-2: Parking Layout Dimensions

- (ii) If parking spaces are located only on one (1) side of an access aisle, the width of the access aisle may be reduced by twenty (20) percent but not less than twelve (12) feet wide or eighteen (18) feet wide if a designated fire lane.

(5) Surfacing⁷³⁷

- (i) All new and expanded vehicle parking and maneuvering areas must be paved with concrete, asphalt, or an alternate paving material as determined by the Director.
- (ii) Pervious or semi-pervious parking area surfacing materials may be approved alternatives, if the Director determines that they are appropriate for the City's climate and the durability required for their intended use. Permitted materials may include, but are not limited to grass, mulch, "grasscrete," ring and grid systems used in conjunction with grass seed or sod, permeable concrete or asphalt, porous or grid pavers, or recycle materials such as glass, rubber, used asphalt, brick, block, and concrete.⁷³⁸
- (iii) Vehicle storage areas may be surfaced with a permanent, dust-free pavement in lieu of concrete or asphalt pavement.
- (iv) Pavement cross-section shall be determined by the owner based on considerations of durability, subsurface conditions, and the type of vehicles using the parking area.
- (v) Interior driveways, fire lanes, and loading or maneuvering areas shall comply with applicable design and surfacing standards on file in the Community Development Department.
- (vi) Parking spaces shall be delineated and appropriate traffic flow indications given by use of reflectorized paint on the parking area pavement.⁷³⁹

⁷³⁷ Current Sec. 29-30(h)(4) renamed to surfacing because it covers pavement and markings, curb provisions have been relocated to grades and drainage section above. The maintenance provision has been deleted and relocated to new Section 29-4.11 (Operation and Maintenance Standards).

⁷³⁸ New provision to encourage the use of pervious paving materials.

⁷³⁹ Text simplified to avoid repetition, and some material relocated.

(6) Lighting⁷⁴⁰

Lights shall be required for all parking areas intended for night use. Lights shall be arranged or shielded to direct illumination away from residences and from public streets and other public areas in accordance with Section 29-4.7 (Exterior Lighting).

(7) Exceptions⁷⁴¹

Driveways and off-street parking for one-family and two-family dwellings in the R-1 and R-2 zone districts shall not be required to comply with the provisions of subsections (2), (4) and (6) above.

(h) Parking Garages⁷⁴²

All above ground portions of accessory or parking garages or portions of structures occupied by automobile parking shall meet the following standards:

- (1) The minimum setback for a parking structure shall be the same that is required for a principal structure.
- (2) The height of an accessory parking garage may not exceed the height of the principal building it is intended to serve.
- (3) Points of ingress and egress to the garage shall be clearly marked and shall be no closer than twenty-five (25) feet to an intersection or other curb cut.
- (4) All floors fronting a public street shall be level (not inclined).
- (5) At least thirty (30) percent of each façade facing a public street shall be designed to conceal the view of all parked cars below the hoodline and to conceal internal light sources when viewed from the public street.
- (6) Where a parking garage is subject to a front, side, or rear setback of ten (10) feet or more, a landscape strip at least four (4) feet wide shall be installed around the perimeter of the garage and comply with the landscape design requirements in Section 29-4.5(e)(2).
- (7) When a garage is open during the evening hours, all internal areas and all entrances shall be lit with fixtures providing at least two (2) footcandles of light at floor level.

(i) Drive-Through Vehicle Stacking⁷⁴³

The following standards apply to all properties with a drive-through facility.

⁷⁴⁰ Current Sec. 29-30(h)(5).

⁷⁴¹ Current Sec. 29-30(h)(7).

⁷⁴² New section to address community concerns over the lack of parking garage requirements.

⁷⁴³ New section to address staff requests for standards to review drive-through facilities. Stacking requirements have been removed from the required parking table and relocated here with new location and design requirements. Existing standards on spaces per window are unnecessarily complex and were not carried over.

(1) Stacking Space Requirements

Table 4.4-4: Drive-Through Stacking Space Requirements		
Activity	Minimum Stacking Spaces (per lane)	Measured From:
Bank, Financial Institution, or Automated Teller Machine (ATM)	3	Teller or Window
Restaurant/Retail Store	3 ⁷⁴⁴	Pick-Up Window
Full Service Vehicle Washing Establishment	3	Outside of Washing Bay
Self-Service or Automated Vehicle Washing Establishment	1	Outside of Washing Bay
Other	Determined by the Director based on anticipated need and avoidance of traffic congestion on adjacent streets	

(2) Location and Design of Stacking Lanes

- (i) Audible electronic devices such as loudspeakers, automobile service order devices, and similar instruments shall not be audible beyond the property line of the site.
- (ii) No service shall be rendered, deliveries made, or sales conducted within the required front yard or corner side yard; customers shall be served in vehicles through service windows or facility located on the non-corner sides and/or rear of the principal building.
- (iii) Drive-through stacking lanes shall have a minimum width of ten (10) feet.
- (iv) Stacking lanes shall be set back fifteen (15) feet from rights-of-way.

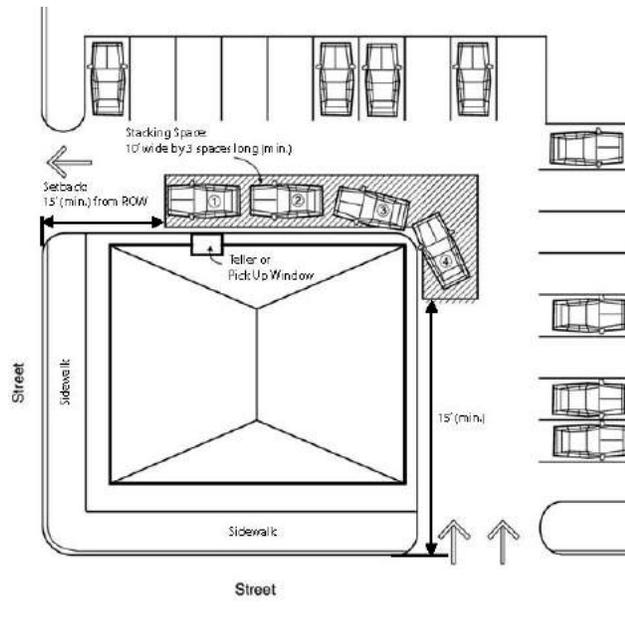


Figure 4.4-3: Stacking Lanes

⁷⁴⁴ Reduced from four required stacking spaces, per window.

(j) Off-Street Loading Requirements⁷⁴⁵

(1) Minimum Requirements for Off-Street Loading Space⁷⁴⁶

Off-street loading space shall be provided as set forth in Table 4.4-5 below, except as provided in subsection (2) below.

Table 4.4-5: Off-Street Loading Space Standards	
Type of Use or Facility	Off-Street Loading Requirement
Office or Lodging Personal services and repair Retail store (large)	1 space for each 50,000 sf of gross floor area in the structure, or part thereof, up to a maximum of 3 spaces
Building material sales Garden material sales Furniture and floor covering sales Industrial Services and Manufacturing Light vehicle sales, rental, storage, repair, or service Heavy vehicle and equipment sales, rental, storage, repair, or service Wholesaling	1 space for each 50,000 sf of gross floor area in the structure, or part thereof, up to a maximum of 2 spaces
Bus and Truck Terminals	Space sufficient to accommodate the maximum number of buses or trucks to be stored or loading/unloading at the terminal at any one time

(2) Existing Structures⁷⁴⁷

- (i) If the aggregate gross floor area of any existing building is increased by more than fifty (50) percent, off-street loading space shall be provided, in accordance with Table 4.4-5 above, to the extent required for the original gross floor area and its expansion. If the aggregate gross floor area of any existing building is increased by fifty (50) percent or less, then the new off-street loading space shall be provided to the extent required for the expansion only.
- (ii) Existing buildings greater than fifty (50) years old are exempt from this requirement⁷⁴⁸.

⁷⁴⁵ Revises existing Sec. 29-30(i)(Loading Space for Business and Industry) to include objective off-street loading space standards in table form and new design and use standards.

⁷⁴⁶ New standards.

⁷⁴⁷ New standard.

⁷⁴⁸ New provision to align with interim C-2 ordinance.

(3) Design and Use of Off-Street Loading Areas⁷⁴⁹

- (i) Off-street loading space shall be located on the same lot occupied by the use served and shall be accessible from a public street or alley.
- (ii) Off-street loading space shall not be occupied by or considered as any part of the required off-street parking areas.
- (iii) No portion of an off-street loading space shall be located within any fire lane required by City ordinance or within aisles, driveways, or maneuvering areas necessary to provide reasonable access to any parking space.
- (iv) Off-street loading space and the aisles or driveways leading to them shall not be used for the sale, repair, dismantling, or servicing of any vehicles, or equipment.⁷⁵⁰
- (v) Any off-street loading area located within one hundred (100) feet of the boundary of a residential zone district shall be screened from view from the district by a masonry wall at least eight (8) feet in height of a color matching one of the primary colors used on the primary façade of the building.

(4) M-DT District⁷⁵¹

In the M-DT District, the Director may alter or waive the requirements of this Section 29-4.4(j) (Off-street Loading Requirements) on a case-by-case basis if the applicant demonstrates that a specific standard is impractical or meaningless to achieve due to:

- (i) Existing development patterns;
- (ii) Existence of historic buildings in areas where loading would need to be located;
- (iii) Section 29-4.2 requirements that a building occupy the space where loading would need to be located; or
- (iv) Other site limitations or circumstances that make strict adherence to these standards impracticable.

(k) Bicycle Facilities⁷⁵²

Any parking lot or structure containing ten (10) or more parking spaces shall provide adequate and safe on-site bicycle parking facilities in accordance with the following standards:

(1) Required Bicycle Spaces

- (i) Bicycle parking facilities shall be designed to accommodate the number of bicycle parking spaces, based on vehicle spaces, set forth in Table 4.4-6 below:

⁷⁴⁹ New standards.

⁷⁵⁰ Since Module 3, text revised to avoid conflict with outdoor sale provisions. Change per staff comment

⁷⁵¹ New subsection to address M-DT site constraints related to off-street loading.

⁷⁵² Carries forward and reorganizes current Sec. 29-30(m).

Table 4.4-6: Required Bicycle Parking Spaces	
Vehicle Spaces	Required Bicycle Spaces
10 – 50	4
51 - 99	8
100 – 199	12
200 – 299	15
300 or more	5 percent of the number of vehicle spaces

(ii) For parking lots required by other provisions of this Code to have more than twenty-five (25) vehicle parking spaces, the required number of vehicle parking spaces may be reduced by one (1) space for each required bicycle parking space installed.

(2) Design

(i) Location

Bicycle parking facilities shall be:

- (A) Located near the main customer and employee entrances to the principle use;⁷⁵³
- (B) Clearly designated;
- (C) Safely separated from vehicle maneuvering areas, and
- (D) Located on the ground level when in a parking structure.

(ii) Minimum Dimensional Standards

Each bicycle parking space shall be at least:

- (A) Six (6) feet long;
- (B) Two (2) feet wide; and
- (C) Have a minimum overhead clearance of seven (7) feet.
- (D) If more than one (1) bicycle rack is used, a minimum five (5) foot wide access aisle is required beside or between each row of bicycle racks.

(iii) Materials

Bicycle parking facilities shall be surfaced with all-weather material and maintained in a safe and neat condition.

(iv) Security

Bicycle parking facilities shall be equipped with either a lockable enclosure (bicycle locker) or a permanent, secure, and stationary structure (bicycle rack) that supports the bicycle frame and to which the frame and both bicycle wheels can be locked (with removal of the front wheel) or where the frame and one (1) wheel can be locked (if both wheels remain on the bicycle).

⁷⁵³ Revised to add reference to customer entrances.

(l) Screening and Landscaping⁷⁵⁴

All parking facilities shall comply with the screening and landscaping requirements of Section 29-4.5.

(m) Permits and Certification⁷⁵⁵

- (1) Parking lots without an associated building permit shall be subject to separate permitting and inspecting during construction, as appropriate, and shall not be open for use until a certificate of completion has been issued by the Department.
- (2) Prior to authorizing use of any parking area established under this section, or issuance of occupancy certificates for any uses dependent thereon, the Director, shall inspect and certify the parking area to be in compliance with these standards.

(n) Delayed Construction of Required Parking⁷⁵⁶

Upon application of the owner, up to twenty (20) percent of the parking required under this section may remain unimproved until such time as the Director finds that it must be improved to adequately serve the parking demand. The Director may approve a delayed construction of required parking if all of the following requirements are met:

- (1) The initial occupancy of the premises will be adequately served by the lesser number of spaces.
- (2) A site plan clearly indicating the location, pattern, and circulation to and from the deferred parking spaces is approved.
- (3) The land area delineated for future parking is brought to finished grade and is landscaped.
- (4) The land area delineated for future parking shall not be used for building, storage, loading or other purposes.
- (5) The land area delineated for future parking shall not count toward the required landscaping for the site.

29-4.5 Landscaping and Screening⁷⁵⁷

(a) Purpose⁷⁵⁸

The intent of this section is to:

⁷⁵⁴ Current Sec. 29-30(n).

⁷⁵⁵ Combines and carries forward current Sections 29-30(j)(Permits) and 29-30(h)(6)(Certification).

⁷⁵⁶ Current Sec. 29-30(l) broken down into list form for readability.

⁷⁵⁷ Per the Detailed Outline, this section incorporates existing landscaping and screening provisions (and proposed amendments), in current Sec. 29-25 and scattered throughout the code, in the new organization proposed below. Relevant Land Preservation Act requirements (Ch. 12A) and proposed amendments to those requirements are also included, so cross-references to Ch. 12A have been deleted.

⁷⁵⁸ Current Sec. 29-25(a). Subsection 5 is new.

- (1) Establish healthy environmental conditions by providing shade, air purification, oxygen regeneration, groundwater recharge, storm water runoff retardation, erosion control, and noise, glare and heat abatement;
- (2) Provide visual buffering from streets, to buffer potentially incompatible land uses and to generally enhance the quality and appearance of a development site, and the City in total;
- (3) Encourage the preservation of existing trees and vegetation;
- (4) Supplement the land disturbance permit requirements;
- (5) Protect trees and vegetation that offer environmental, aesthetic, habitat, sustainability, and economic benefits to the City and its citizens.

(b) Applicability⁷⁵⁹

- (1) Provisions of this section shall apply to lots and parcels in any zone district that contain (i) more than ten thousand (10,000) square feet of lot area, and (ii) a primary structure with a primary use other than a single family detached, single-family attached, two-family residential, or live-work use when the following conditions occur after the effective date of this Code:⁷⁶⁰
 - (i) A new primary structure is constructed; or
 - (ii) The floor area in an existing primary structure is increased by more than twenty-five (25) percent; or
 - (iii) An existing primary structure is relocated on the lot or parcel; or
 - (iv) The primary structure is renovated or redeveloped (including but not limited to reconstruction after fire, flood, or other damage) for a use no more intense than existing previously, and the building footprint is increased by more than 10 (ten) percent;⁷⁶¹ or
 - (v) A new primary use parking lot containing ten (10) or more spaces is constructed; or⁷⁶²
 - (vi) An existing primary use parking lot containing twenty-five (25) or more spaces is redesigned or reconstructed with significant changes to the layout, location, or orientation, of parking spaces, driving aisles, and/or access drives.⁷⁶³
- (2) The tree preservation provisions of Section (g) apply to all development or redevelopment on lots and parcels that contain more than ten thousand (10,000) square feet of lot area,

⁷⁵⁹ Carries forward the intent of current Sec. 29-25(c) with considerable revisions to clearly convey that only single-family and two-family residential uses, the M-DT district, and expansions of less than 25% are generally exempt from these landscaping and screening requirements. This differs from current Sec. 29-25(e)(2) which requires additional landscaping for any expansion if less than 15% of the site is landscaped.

⁷⁶⁰ This provision exempts individual single- and two-family home construction from this section, but does not exempt development of a residential subdivision.

⁷⁶¹ Revised since Module 3 to remove reference to amount of damage, and to include 10% leeway for building footprint increases.

⁷⁶² Reduced from 25 parking spaces in Module 3.

⁷⁶³ Since Module 3, wording clarified to reference changes in location and orientation of parking facilities.

and to any new lot of record created after [insert effective date of this ordinance], regardless of the primary use of the property, in any zone district, except single-family or two-family residential structures on platted lots less than one acre in size.⁷⁶⁴

- (3) No provision of this Section 29-4.5 shall require landscaping to be installed, or a tree to be preserved, in a portion of a lot required to be occupied by a building pursuant to the Building Form Standards in Section 29-4.2. If there is a conflict between the requirements of Section 29-4.2 and the requirements of this Section 29-4.5, the Director may modify or waive the provisions of this Section 29-4.5 to allow the requirements of Section 29-4.2 to be met.

(c) General Provisions⁷⁶⁵

(1) Landscape Plan Required⁷⁶⁶

A landscaping plan, prepared in accordance with this Section, shall be required as part of all applications for development or redevelopment. Approval of a landscape plan shall be required prior to the issuance of a building permit, land disturbance permit,⁷⁶⁷ and prior to the development of any parking area or loading/unloading area and may be combined with other required application material. Landscaping plans may be amended during or after development with the approval of the Director, but in all cases must comply with the current landscaping requirements of this Ordinance.⁷⁶⁸ The landscape plan shall be presented on its own page, designed to scale, signed by an International Certified Arborist or licensed Professional Landscape Architect as recognized by the American Society of Landscape Architects⁷⁶⁹ and contain the following information:

- (i) The area of any climax forest areas on the site and those portions of the climax forest to be preserved. These areas may be determined by actual field measurement, measurement by planimeter, or automated software. (See Section 29-4.6(b)(2) for climax forest preservation requirements.).⁷⁷⁰
- (ii) A planting schedule detail containing common and botanical plant names, size, and graphical depiction.
- (iii) The size and location of any walls, earth berms, and fences.
- (iv) Provisions for watering, soil stabilization, plant protection and maintenance.
- (v) Location and description of any barriers to be erected to protect any vegetation from damage both during and after construction.

⁷⁶⁴ Revised since Module 3 to clarify that 1- and 2-family lots under 1 acre are not subject to these requirements.

⁷⁶⁵ New section (capturing existing provisions) that identifies basic information about landscaping requirements.

⁷⁶⁶ Carries forward existing Sec. 29-25(d), including proposed amendments to that section by the City Arborist, landscape/tree preservation requirements in Sec. 12A-49, and new language allowing the Director to waive the landscape plan requirement. This application list will be removed from the Code and listed in an administrative document or the City's web site.

⁷⁶⁷ Reference to land disturbance permit added since Module 3.

⁷⁶⁸ Sentence added from Sec. 12A-49 since first draft.

⁷⁶⁹ Revised since Module 3 to include licensed professional landscape architects.

⁷⁷⁰ Measurement rules revised since Module 3 for clarity.

- (vi) Zoning for the proposed development and adjacent properties.
- (vii) Calculations showing compliance with this Section 29-4.5.
- (viii) The methods used to remove trees, the areas of tree removal, and areas of trees being saved and showing the location of protective fencing. The areas to be preserved shall be shown on the plan along with State Plane Coordinates at all points of intersect.
- (ix) Aerial photograph conducted within one year of the application submittal date, or if no such aerial photography is available to the applicant, than an image from a public source such as Google Earth showing clearing limits, preservation area, protective fencing, and topography.⁷⁷¹

(2) Minimum Required Landscaping

- (i) In the M-DT district, the required “Private or Public Open Areas” must comply with the following standards:⁷⁷²
 - (A) Any ground level required Private or Public Open Area shall have at least one (1) tree per eight hundred (800) square feet, of at least two-and-one-half (2.5) inches in diameter at designated breast height (DBH) and at least ten (10) feet in overall height.
 - (B) Where new trees are planted to meet this requirement, they shall be no closer than five (5) feet to any common lot line.
 - (C) Urban General lots that are reusing existing structures with no ground level Private or Public Open Area are exempt from this requirement.
- (ii) In all other zone districts, a minimum of fifteen (15) percent of the total land area of any tract, parcel or lot shall be landscaped. Landscaping shall be installed to comply with the specific requirements for Street Frontage Landscaping, Property Edge Buffering, and Parking Lot Landscaping in this section 29-4.5, and the remainder (if any additional landscaping is needed to meet the fifteen (15) percent minimum) shall be reasonably distributed throughout the site.⁷⁷³

(3) Plant Materials⁷⁷⁴

Plant materials shall be from the City’s Guidelines for Landscaping and Screening or approved by City Arborist. All plant material shall be hardy to central Missouri (USDA hardiness Zone 5b), free of disease and insects, and conform to the American Standard for Nursery Stock of the American Association of Nurserymen. No one species of tree or shrub may make up more than fifty (50) percent of the total amount of landscape plant types. Invasive species, as identified by the Missouri Department of Conservation’s invasive species list, are prohibited. The use of plastic or other artificial plant materials is prohibited. Fifty

⁷⁷¹ Revised since Module 3 to allow alternate measures if aerial photography is not available.

⁷⁷² New requirement.

⁷⁷³ Current Sec. 29-25(e)(1). Wording revised to clarify that specific landscaping requirements must be met first.

⁷⁷⁴ New general provision.

(50) percent of all trees planted are required to be Large to Medium species and only thirty (30) percent of the Large to Medium trees can be of a single species.⁷⁷⁵

(4) Minimum Living Materials

In all areas where landscaping is required, a minimum of fifty (50) percent of the surface area shall be covered by living materials, rather than mulch, wood chips, bark, gravel, peat moss, or other non-living materials.

(5) Grading and Drainage⁷⁷⁶

All open areas shall be graded, properly drained, and maintained to encourage on-site water retention and percolation while minimizing ponding or standing water for periods of more than three days.

(6) Minimum Plant Sizes⁷⁷⁷

The minimum planting sizes for planting materials, at time of planting, shall be as indicated in Table 4.5-1 and in the City’s Guidelines for Landscaping and Screening:

Plant Type	Minimum Size
Large Deciduous Shade Tree – mature height greater than 45 ft.	Two inch caliper, measured six inches above the ground, as specified by the American Association of Nurserymen.
Medium Deciduous Shade Tree – mature height 30-45 ft.	Two inch caliper, measured six inches above the ground, as specified by the American Association of Nurserymen.
Small Deciduous Shade Tree – mature height 20-30 ft.	As specified by the American Association of Nurserymen, except for true dwarf species. ⁷⁷⁹
Ornamental Tree – mature height less than 20 ft.	Four feet in height, as specified by the American Association of Nurserymen, except for true dwarf species
Conifers	Six ft. in height
Shrubs	Five gallon container size
Ground Cover Plants (crowns, plugs, containers)	A species appropriate number to provide 50% surface coverage after two growing seasons
Grass Seeding or Sod	Seed mix shall be at least eighty percent pure live seed and 99% weed free. ⁷⁸⁰

⁷⁷⁵ Since Module 3, revised to provide that prohibition on more than 50% of trees from one species applies also to screening landscaping, and final sentence has been added.

⁷⁷⁶ New provision.

⁷⁷⁷ Carries forward existing Sec. 29-25(f)(1-8) in table form, including suggested amendments provided by the City Arborist, except that minimum planting sizes are required at time of planting rather than maturity.

⁷⁷⁸ Since Module 3, minor changes to text and numbers made at request of City Arborist.

⁷⁷⁹ Current code does not include a caliper size for small deciduous shade trees. Because the AAN does not identify a caliper size for deciduous trees greater than 20 ft., this measurement is not included.

(7) Plant Material Spacing⁷⁸¹

- (i) In the M-DT district, plant material spacing shall comply with this section and with the requirements of Section 29-4.2(f) (Urban Space Standards).
- (ii) In all other zone districts, plant materials shall not be placed closer than four feet from any fence line or property line unless required to comply with the provisions of subsection (e) (Property Edge Buffering). Where tree planting requirements are based on linear street frontage, areas occupied by driveways shall be included when calculating the number of trees required to be planted, and any trees that would otherwise be required in driveways shall be planted in other landscaped front yard areas unless prohibited by minimum spacing requirements for that species.

(8) Snow Storage Areas⁷⁸²

Areas required for snow storage and areas required for landscaping shall not overlap, except that snow may be stored on ground cover landscape areas (e.g., turf) that do not contain required landscape trees or other plantings.

(9) Screening of Outdoor Storage Areas⁷⁸³

All exterior storage areas, except those on single- and two-family lots, shall be enclosed by a permanent screen at least eight feet in height above the ground surface of the storage area, or of such additional height as necessary to screen the stored materials from public view, but non-vegetative screening materials shall not exceed a maximum height of twelve (12) feet. The required screening shall have a year round opacity of at least eighty (80) percent, and if landscaping is used, the eighty (80) percent opacity shall be achieved within four (4) full growing seasons. When a solid wall or any solid fence is used for screening, ornamental landscaping shall be placed between the fence and the adjacent property lines.⁷⁸⁴

(10) Screening of Rooftop Mechanical Equipment⁷⁸⁵

In all R-M and Mixed Use districts, rooftop mechanical equipment and appurtenances other than solar collectors located on the primary structure shall be screened on all sides with a structure equal to or exceeding the height of the mechanical equipment or appurtenance, measured from the rooftop. Screening enclosures shall use at least one of the predominant

⁷⁸⁰ Revised to address seed mix rather than coverage amount, which is hard to confirm at planting. Revised since Module 3 to require 80% live seed.

⁷⁸¹ New provision.

⁷⁸² New provision.

⁷⁸³ New section that collects, reorganizes, and expands on existing fence and wall requirements embedded within landscaping requirements.

⁷⁸⁴ Based on current screening standards for exterior storage that applies to M-R, M-C, and M-P districts – now made generally applicable. Text simplified to avoid overlaps with general landscaping standards. M-C zone district requirement for approval of a screening plan was deleted as unnecessary – application requirements should not be listed in the Code but on an administrative document or on the City's web site.

⁷⁸⁵ Multi-family structure provision extended to all structures in R-M and Mixed Use districts in response to comment.

materials used in the façades of the primary structure and one of the predominant colors used in the primary structure.⁷⁸⁶

(11) Vision Clearance⁷⁸⁷

Landscaping and screening shall not be allowed to obstruct the view of motorists using any street, private driveway, parking aisles or the approach to any street intersection so as to constitute a traffic hazard or condition dangerous to the public safety upon any such street.

(12) City Right-of-Way⁷⁸⁸

Tree removal or planting in City rights-of-way shall be done only with the approval of the City.

(13) Installation Due to Season⁷⁸⁹

- (i) Landscaping of the site shall be completed within one planting season (spring to fall) of the completion of the exterior of the building, in accordance with building permit requirements.
- (ii) All landscaping work must be completed prior to the final inspection of a building or within one (1) year of issuance of the land disturbance permit, whichever occurs later. If completion of the work or building is at such time of the year that the landscaping cannot be completed, a performance bond or other acceptable financial instrument for completion of the work may be accepted to allow the issuance of a certificate of occupancy.⁷⁹⁰

(d) Street Frontage Landscaping⁷⁹¹

(i) Required Depth

All paved areas with more than forty (40) feet of length within fifteen (15) feet of a street right-of-way shall have at least a six (6) foot wide street yard landscaping strip within private yards separating parking areas from abutting street rights-of-way.⁷⁹²

⁷⁸⁶ Revised to require full screening rather than requiring measurement of visibility from 200 feet away in prior draft, in response to comment.

⁷⁸⁷ Current Sec. 29-25(e)(6).

⁷⁸⁸ New provision.

⁷⁸⁹ New provision.

⁷⁹⁰ Added from 12A-49(g) since previous draft.

⁷⁹¹ Current Sec. 29-25(e)(3), including proposed amendments, new headings, and broken apart for readability.

⁷⁹² Revised length of paved area requiring a landscaping strip from 50 ft. to 40 ft. per City Arborist's request.

(ii) Street Trees⁷⁹³

Street tree landscaping shall be installed as follows and in accordance with the City's Guidelines for Landscaping and Screening:

- (A) One (1) tree per forty (40) feet of street frontage.
- (B) Thirty (30) percent of the trees shall be large trees and thirty (30) percent shall be medium trees.
- (C) No more than thirty (30) percent of required trees may be from one (1) tree species.⁷⁹⁴
- (D) The medium and large trees shall be planted at least forty (40) feet on center.⁷⁹⁵
- (E) Street trees may be clustered and placed at uneven intervals, with approval from the City Arborist.⁷⁹⁶
- (F) If the public right-of-way does not contain street trees meeting this requirement, then the property owner must install both the required trees and landscaped buffer, which may require a strip more than six (6) feet wide.⁷⁹⁷

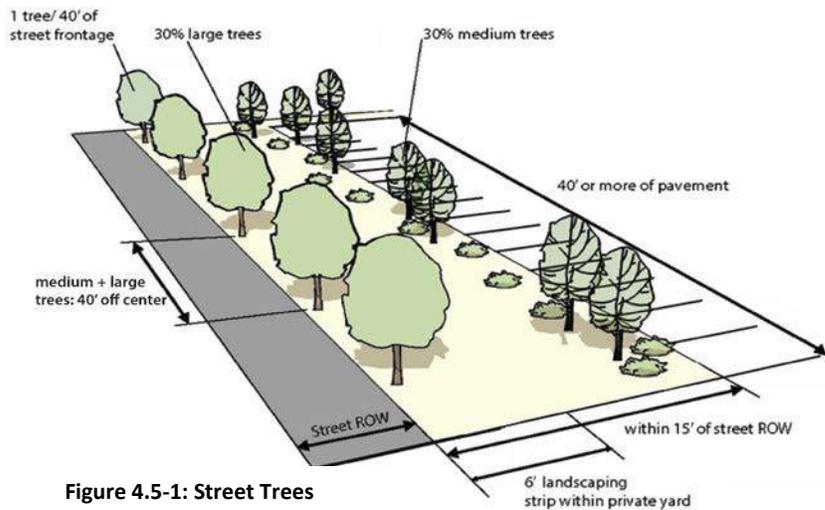


Figure 4.5-1: Street Trees

(iii) Driveways⁷⁹⁸

Street frontage landscaping may contain driveways.⁷⁹⁹

(iv) Attached Residences⁸⁰⁰

Lots that contain attached residences and which have side or rear property boundaries abutting collector or arterial street right-of-way shall have screening either along such boundaries or around any patios on the lot which are visible from the right-of-way. The screening shall consist of landscape materials, ornamental fences or walls in combination with plant materials, properly stabilized earthen berms, or a

⁷⁹³ Associated maintenance provision are included in Section 29-4.11 (Operation and Maintenance Standards) of this Chapter.

⁷⁹⁴ New provision.

⁷⁹⁵ New provision. Revised since Module 3 from 20 feet on center. Figure was revised to reflect change.

⁷⁹⁶ Requirement for Arborist approval is new.

⁷⁹⁷ Since Module 3, this provision was added to clarify responsibilities.

⁷⁹⁸ Combines two current provisions.

⁷⁹⁹ Current standard in Sec. 29-15(e)(3)(last sentence).

⁸⁰⁰ Existing section.

combination of these methods. Screening shall be so designed that at least fifty (50) percent opacity is achieved, viewed horizontally, in the space between one foot and five feet above grade at the screening line, at the time of installation; provided that where plant materials are used for screening, these shall be selected and placed to achieve the same objective within four full growing seasons following planting. Screening shall be placed on private property. All screening material, including plant material, shall be continuously maintained in good condition to the above standards.⁸⁰¹

(v) Sight Triangle⁸⁰²

Except in the M-DT district, on any corner space or lot on which a front or side yard is required, no wall, fence, sign, or other structure or no plant growth of a type which would interfere with traffic visibility across the corner shall be permitted or maintained higher than three (3) feet above the curb level, within fifteen (15) feet of the intersection of the street right-of-way lines.

(e) Property Edge Buffering⁸⁰³

(1) Buffering Required⁸⁰⁴

Where a property contains at least ten thousand (10,000) square feet of area or more than one thousand five hundred (1,500) square feet of paved area or any vehicle loading/ unloading areas, buffering shall be installed as required by Table 4.5-2.

- (i) To use this table, an applicant identifies the proposed use of his/her property in Row 3, across the top of the table, and then reads down Column 2 to identify the zoning or use of the adjacent property along each property line. The box at the intersection of Column 2 and Row 3 identifies the screening and buffering requirement for the applicant on that property line.
- (ii) Transitional screening shall not be required for urban agriculture and farmer’s markets.
 Different types of screening and buffering may be required on different property lines, as indicated in Table 4.5-2.

Table 4.5-2: Transitional Screening and Buffering⁸⁰⁵

Use of Subject Property							
Adjacent Zone District	Applicant’s Use	Single-Family	Multi-Family	Mixed-Use	Commercial	Industrial	

⁸⁰¹ Current Sec. 29-25(e)(8).

⁸⁰² Current standard from R-MH district made applicable Citywide outside M-DT district.

⁸⁰³ New Section to address community concerns about incompatible land uses, especially given the introduction of multiple mixed use districts. This new section incorporates and updates existing screening and buffering requirements in Sec. 29-25(e)(5).

⁸⁰⁴ New Section.

⁸⁰⁵ New and stronger buffering requirements than in current Sec. 29-25(e)(5).

Zone District	Structure Type	Res.	Non-Res.	Res.	Non-Res.	Vert.	Horiz.	1-3 Stories	3+ Stories	--
Single-Family	Residential	0	2	1	2	3	3	3	4	4
	Non-Residential	2	0	2	1	1	1	1	2	
Multi-Family	Residential	1	2	0	2	2	2	3	4	4
	Non-Residential	2	0	1	0	1	1	1	2	
Mixed-Use	Vertical	3	1	2	1	0	0	1	2	4
	Horizontal	3	1	2	1	0	0	0	1	
Commercial	1-3 Stories	3	1	3	1	1	0	0	0	4
	3+ Stories	4	2	4	2	2	1	0	0	4
Industrial	--	4	4	4	4	4	4	4	4	0

Level 0 does not require a screen or landscape buffer.
 Level 1 requires a six foot wide landscape buffer.⁸⁰⁶
 Level 2 requires a four-foot wide landscape buffer and a six foot tall screening device.⁸⁰⁷
 Level 3 requires a 10-foot wide landscape buffer and an eight-foot tall screening device.⁸⁰⁸
 Level 4 requires a 10-foot wide landscape buffer and an eight-foot tall screening device.⁸⁰⁹

(2) Landscape Buffer Location and Design⁸¹⁰

- (i) The required landscape buffer shall be installed on the applicant’s side of the screening device.
- (ii) It shall be designed so that at least eighty (80) percent opacity is achieved, viewed horizontally, in the space between one (1) foot and five (5) feet above grade at the screen line, at the time of installation.⁸¹¹
- (iii) The landscape buffer shall include the following plant mix:
 - (A) Four of the categories of planting material contained in Section 29-4.5(c)(6)⁸¹² and the Guidelines for Landscaping and Screening, or as approved by the City Arborist;
 - (B) One tree with a two inch caliper that is ten (10) feet in height at the time of installation for each two hundred (200) square feet of buffer area,⁸¹³ and
 - (C) Shrubs and flowering plants that cover a minimum of twenty-five (25) percent of the remaining area with a minimum of twenty-five (25) percent of that plant material being in flowering shrubs.

⁸⁰⁶ Revised from four to six feet.
⁸⁰⁷ Minimum height of screening revised from four to six feet.
⁸⁰⁸ Minimum height of screening revised from six to eight feet.
⁸⁰⁹ Minimum height of screening revised from six to eight feet.
⁸¹⁰ New section containing new and existing provisions.
⁸¹¹ Current provision in Sec. 29-25(e)(5).
⁸¹² Arborist’s proposed amendment to existing Sec. 29-25(e)(5).
⁸¹³ Minimum diameter reduced from 3 to 2 inches.

(3) Screen Location and Design⁸¹⁴

- (i) The screen shall be located along the property line of the applicant’s lot, and shall not extend into the established setback of the adjoining lot.
- (ii) The screen shall be constructed of wood, masonry, brick, stone, wrought iron, compact evergreen hedging, an earth berm, or some combination of those materials. Chain link fence and railroad ties are prohibited.
- (iii) The combined height of the screening methods identified in subsection (ii) above and their plantings shall not be less than four (4) feet.

(f) Parking Area Landscaping⁸¹⁵

- (1) All parking areas containing over one hundred (100) parking spaces shall include interior landscaping equal to at least ten (10) percent of the area occupied by parking spaces and interior vehicle circulation aisles (but not including access driveways between the public street and the edge of the parking area. Landscaping required to meet the requirements of sections (d)(Street Frontage Landscaping) or (e)(Property Edge Buffering) above shall not be used to satisfy this requirement.⁸¹⁶

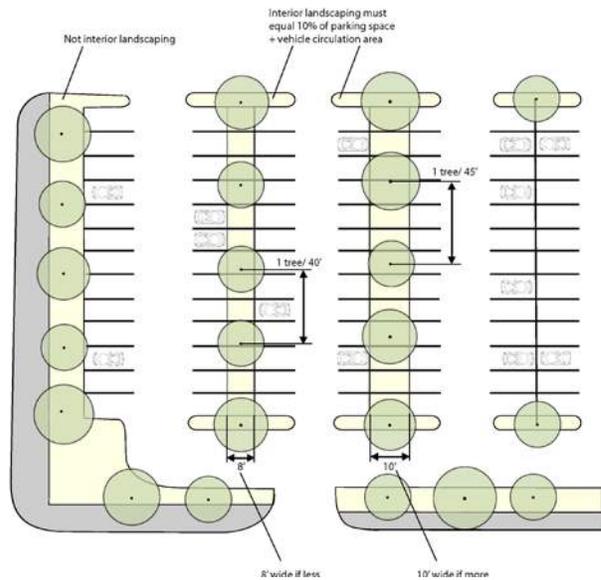


Figure 4.5-2: Interior Parking Area

- (2) Interior landscaped areas to meet the requirements of subsection (1) above shall be at least eight (8) feet in width, shall contain at least (1) one tree per forty (40) lineal feet of interior landscaped area or part thereof, and shall be designed lower than the paved area so that storm water from the paved parking areas shall flow into the landscaped areas. If curbs are used to prevent vehicle entry into these lowered landscaped areas, they shall have breaks to permit stormwater to enter the landscaped areas.⁸¹⁷
- (3) No parking areas shall contain more than one hundred fifty (150) spaces unless it is separated by

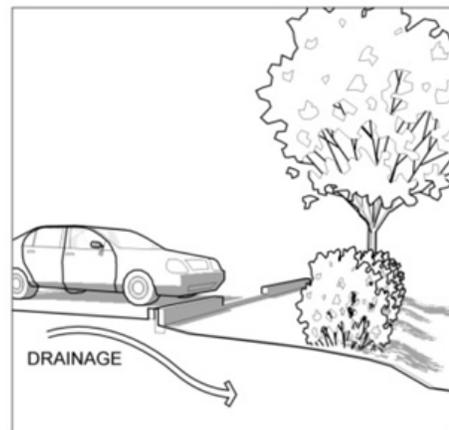


Figure 4.5-3: Parking Area Curb Breaks

⁸¹⁴ New section that incorporates and expands upon existing provisions in Sec. 29-25(e)(5) allowing for ornamental fences and walls in combination with planting materials, or berms, as screening devices.

⁸¹⁵ The provisions of current provisions in Sec. 29-25(e)(3)-(4) were not carried forward because subsection (d) above now addresses Street Frontage Landscaping for parking areas as well as other areas. Text revised for clarity.

⁸¹⁶ New provision.

⁸¹⁷ New provisions.

a landscaped area of at least ten (10) feet in width from other areas containing parking spaces. The ten (10) foot wide landscaped area shall contain four (4) of the categories of planting materials listed in Section 29-4.5(c)(6). In addition, trees shall be planted within the ten (10) foot wide landscaped area at the rate of one tree for each forty-five (45) lineal feet. Appropriately placed connections between parking areas are permitted.⁸¹⁸

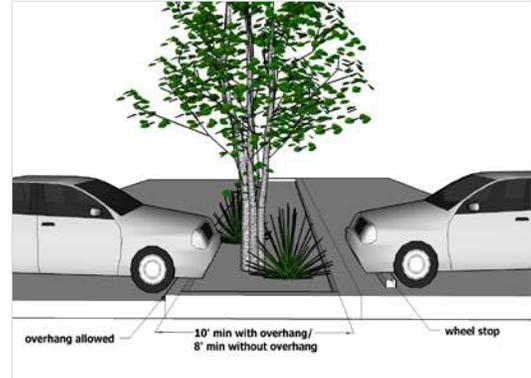


Figure 4.5-4: Interior Landscaped Area

- (4) In addition to the above, paved areas developed after August 19, 1991, exceeding four thousand (4,000) square feet in area, and additions exceeding four thousand (4,000) square feet in area to paved areas that were developed prior to August 19, 1991, shall contain a minimum of one (1) tree for every four thousand (4,000) square feet of paved area. If there is no area on the site where required trees can be installed so that they do not interfere with the loading and unloading of large vehicles, the required trees may be placed at the perimeter of the paved areas or in other suitable locations on the site.⁸¹⁹
- (5) Of the combined total number of trees required to be planted in the interior parking lot, no less than thirty (30) percent shall be of a species of medium shade trees, and no less than thirty (30) percent shall be of a species of large shade trees, no single tree species shall make up more than thirty (30) percent of the trees required to be planted in the interior of the parking area.⁸²⁰

(g) Preservation of Existing Landscaping⁸²¹

(1) Applicability⁸²²

These mature tree preservation standards shall apply to all development and redevelopment greater than one (1) acre and to all subdivisions approved after the effective date of this Code. They do not apply to the construction of a single-family detached, single-family attached, or two-family residential structure on platted lots less than one (1) acre in size (See also Section 29-4.6(b) (Clearing of Trees) for additional standards related to tree removal.)⁸²³

⁸¹⁸ Tree spacing revised from 50 to 45 feet. This now addresses breaking up of large parking areas, rather than the minimum landscaping standards.

⁸¹⁹ Provisions addressing tree species were deleted because that topic is addressed elsewhere in this section. The existing 4,500 sf thresholds have been reduced to 4,000 sf per staff's request.

⁸²⁰ Current Sec. 29-25(e)(7) including amendments proposed by City Arborist.

⁸²¹ New Section expands existing provision in current Sec. 29-25(e)(4), which says credits toward minimum tree requirements may be obtained for preserving existing trees, but does explain how the credit system works.

⁸²² New section.

⁸²³ Revised since Module 3 to clarify that requirements apply to single- and two-family lots larger than one acre.

(2) Credit for Preserving Existing Mature Trees ⁸²⁴

Applicants that preserve mature, healthy trees as part of development or redevelopment may obtain credits toward trees required by this Code. To obtain credit, the preserved trees must be on the same lot, at least five (5) inches in diameter breast height (DBH), and must be in healthy condition as determined by the City. Credit is not given for shrubs, or trees preserved as part of a stream buffer or otherwise undevelopable area. Credit for preserved trees shall be as shown in Table 4.5-3 and may be applied to reduce the number of trees required to be installed pursuant to this Section 4.5. Any preserved trees for which credit is given, and that are lost to damage or disease within two (2) years after the credit is awarded, shall be replaced by the property owner within six (6) months at a ratio of one (1) tree per one (1) inch of DBH lost. Replacement trees must be at least two (2) inch in caliper size. Other plantings that die within eighteen (18) months of preservation credit received shall be replaced in kind within six (6) months.⁸²⁵

Caliper of Preserved Tree (in.)	Reduction in Number of Required Trees
Over 12 in. DBH	3
Over 8 in. to 12 in. DBH	2
5 in. to 8 in. DBH	1

(3) Significant Trees ⁸²⁶

- (i) Significant trees shall be preserved during development or redevelopment to the maximum extent feasible. A “significant tree” means a tree that is not diseased, dying, or of a noxious invasive species and that is at least twenty-four (24) inches diameter at breast height (DBH) for a deciduous tree and eighteen (18) inches DBH for evergreens,.
- (ii) When a significant tree is removed, the property owner shall replace such tree(s) on the lot as follows:
 - (A) A significant deciduous tree that is removed shall be replaced by three (3) deciduous trees, each with a minimum size at planting of two (2) inches caliper.
 - (B) A significant evergreen tree that is removed shall be replaced by two (2) coniferous trees, each with a minimum height at planting of eight (8) feet.
 - (C) Replacement trees shall be maintained for at least three (3) years.

⁸²⁴ New section and table to clearly identify tree preservation credits that can be obtained. Last two sentences regarding tree and vegetation replacement have been carried over from Sec. 12A-49(f), including proposed amendments to this section. Clarifies that protection of trees in undevelopable areas does not earn credit. Title revised since Module 3 to clarify that this applies to trees and not vegetation.

⁸²⁵ Last sentence is new since Module 3.

⁸²⁶ New section.

(4) Tree and Vegetation Protection During and After Construction⁸²⁷

- (i) Tree protection shall be required prior to and during site disturbance and construction activities. No activities with the potential of causing damage to the root systems of trees shall be allowed within twenty (20) feet outside the drip line of the trees being preserved, protected or planted as part of the landscaping or tree preservation plan.⁸²⁸
- (ii) An orange construction fence or an equivalent shall be installed and “Tree Preservation – Keep Out” signs shall be posted every one hundred (100) feet along the perimeter of the tree preservation area, and the fencing and signs shall be maintained for the duration of all site disturbance and construction activities.⁸²⁹
- (iii) If site grading occurs within fifteen (15) feet of the Tree Preservation area, the perimeter of the area must be trenched to a minimum width of two (2) feet and a minimum depth of two (2) feet. Tree roots shall then be pruned by the property owner.⁸³⁰
- (iv) The tree and vegetation protection fencing shall be clearly shown on the project approval documents. No construction, grading, equipment or material storage, or any other activity shall be allowed within the fenced area. All tree and vegetation protection measures shall be inspected and approved by the City Arborist prior to start of any land disturbing activities.

(h) Alternatives and Adjustments⁸³¹

- (1) This section is not intended to prevent the use of a material or method of construction not prescribed specifically by this section, especially whenever a stream, natural rock formation or other physiographic condition exists; provided that any such alternate material or method has been approved in writing or in plan and its use authorized by the Director as providing at least equivalent quality, effectiveness, durability, hardness, and performance to the specific requirements of subsections (a) through (g) above.
- (2) The Director may modify the Property Edge Buffering standards of Section 29-4.5(e) by up to ten (10) percent (increase or decrease in width and height) if necessary to provide adequate buffering of impacts or to respond to specific site conditions.
- (3) The Director may modify the Property Edge Buffering standards of Section 29-4.5(e) if the Director determines that the design, height, location of uses, massing, and landscaping of the applicant’s project mitigates potential adverse impacts on surrounding properties.
- (4) The Director may modify the Street Frontage Landscaping standards of Section 29-4.5(d) for properties involving outdoor sales of vehicles or equipment if the Director determines that

⁸²⁷ New section that incorporates existing tree protection construction activity provisions contained in Sec. 12A-49(e). The first three provisions (i-iii) come from Ch.12A, but have been revised for clarity.

⁸²⁸ Current Section 12A-49(e). Protected distance outside drip line increased from 15 to 20 feet per staff request.

⁸²⁹ Proposed addition to Section 12A-49(e).

⁸³⁰ Proposed addition to Section 12A-49(e). Since Module 3, responsibility for pruning has been clarified.

⁸³¹ Subsection 1 is current Sec. 29-25(h). Subsection 4 replaces current Sec. 29-25(i), which is very complex for its limited applicability to only two specific uses. Subsections 2, 3 and 5 are new.

strict application of these standards will significantly reduce visibility of the goods being sold from the fronting public street.

- (5) Where the requirements of this section are applied to a redevelopment or reconstruction project, rather than a new development, the Director may authorize a reduction of minimum off-street parking requirements established in Section 29-4.4, by up to ten (10) percent, if necessary to accommodate street frontage landscaping required by subsection (d) above or the parking area landscaping required by subsection (f) above.

29-4.6 Stormwater and Natural Resources⁸³²

(a) Stormwater Management⁸³³

(1) Purpose⁸³⁴

The purpose of this Section 29-4.6(a) is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety and welfare of the public. This article is intended to meet that purpose through the following objectives:

- (i) Minimize increases in stormwater runoff from any development in order to reduce flooding, siltation and stream bank erosion and stream channel degradation;
- (ii) Minimize increases in non-point source pollution caused by stormwater runoff from development which would otherwise degrade local water quality;
- (iii) Minimize the total annual volume of surface water runoff which flows from any specific site during and following development to not exceed the predevelopment hydrologic regime to the maximum extent practicable; and
- (iv) Reduce stormwater runoff rates and volumes, soil erosion and non-point source pollution, wherever possible, through stormwater management controls and to ensure that these management controls are properly maintained and pose no threat to public safety.

(2) Applicability⁸³⁵

- (i) This Section 29-4.6(a) shall apply to all developments that alter the surface of the land with the following exceptions and exemptions:
 - (A) Attached and detached single-family residences, farmland and domestic gardens are exempt from the provisions of this Section.

⁸³²New section that integrates stormwater and natural resource protection development standards in Ch. 12A (Land Preservation) into the Code. Current code requires the design of “a drainage system . . . to minimize the possibility of soil erosion and flood damage” in all existing zoning districts, except for the residential districts and requires a stormwater management plan in accordance with Ch. 12A for planned district rezoning and development plan approval. Other than that, stormwater, drainage, and erosion control is not addressed in existing Code.

⁸³³ Current Ch. 12A, Article V. Legislative findings in 12A-85 were removed.

⁸³⁴ Current Sec. 12A-86.

⁸³⁵ Current Sec. 12A-87.

- (B) The following exceptions apply when the development of the site results in a land disturbance of less than one (1) acre and is not a part of a larger common plan of development or sale that would disturb one (1) acre or more:
 - 1) Lots within an approved preliminary plat or final plat used for single-family and two-family residences and land disturbance on an individual residential building lot;
 - 2) Land disturbances of less than ten thousand (10,000) square feet that do not create more than five hundred (500) square feet of additional impervious surface;
 - 3) Maintenance and repair of impervious surface, including gravel and stone impervious surfaces; and
 - 4) Redevelopment of a site less than one (1) acre.
- (ii) Partial exemptions available
 - (A) Redevelopment on a site of one (1) acre or more, or that is a highly impervious surface site, is eligible for partial exceptions from the requirements of this Section 29-4.6(a), as set out in the stormwater manual, if the redevelopment, or highly impervious surface site:
 - 1) Does not have an adverse impact on any mapped critical downstream location;
 - 2) Incorporates water quality protection; and
 - 3) Does not reduce any Best Management Practices (BMPs) or stormwater management controls that includes performance standards, effective level of service, and runoff rates and volumes; and
 - 4) Increases water quality and performance standards with each development over time.
 - (B) The Director of Public Works shall track, map, add and remove known critical downstream locations and make this information available to the public.
 - (C) The Director of Public Works shall set forth criteria in the stormwater manual that details the partial exemption under this subsection.
- (iii) Stormwater management shall be provided in accordance with the conceptual stormwater management plan in the previous PUD, O-P, C-P, M-P and M-R zone districts⁸³⁶ for which a conceptual stormwater management plan was approved before September 4, 2007, or land in any other zoning district for which a site plan was approved before September 4, 2007, unless a revision to the plan for the site is requested which adversely impacts the stormwater discharge from the site. An "adverse impact" is one that significantly increases the volume of stormwater discharge from the site, decreases the water quality of the stormwater discharge, or redirects the stormwater discharge in a manner that results in downstream stormwater drainage impacts that would not have occurred with the original plan. Approvals for stormwater plans in the previous PUD, O-P, C-P, M-P, and M-R districts approved before September 4, 2012 shall expire on January 1, 2016, for sites on which the planned work has not

⁸³⁶ Old district names remain because this clause only relates to approvals before the new Code is adopted.

commenced. Approval of all stormwater plans in the previous PUD, O-P, C-P, M-P, and M-R districts approved on or after September 4, 2012, shall expire seven (7) years after the date of approval if the planned work has not commenced. If work has commenced on a site under any of the approved stormwater plan scenarios indicated above, but development of the site is less than 25% complete one year after the start of construction, additional work is subject to any revisions to the stormwater standards in this Section during the remaining life of the approved stormwater plan.

(3) Required Plans⁸³⁷

(i) Stormwater management plan required

A stormwater management plan meeting all applicable requirements of the City is required for all development and redevelopment projects subject to this Section 29-4.6(a).⁸³⁸

(ii) Stormwater pollution prevention plan required⁸³⁹

If a proposed development includes activities with higher potential pollutant loadings, the Director of Public Works may require the developer to submit a stormwater pollution prevention plan. The Director of Public Works should be consulted before plan preparation if the applicant suspects additional stormwater management requirements would be necessary in order to address specific pollutants.

(4) Performance Standards⁸⁴⁰

The preparation of stormwater management plans shall comply with the following standards:

- (A) Best Management Practices (BMPs) shall be used to control the peak flow rates of stormwater discharge associated with specified design storms and to reduce the generation of stormwater runoff. These practices must use pervious areas to treat stormwater and to infiltrate stormwater runoff from driveways, sidewalks, roof tops and parking lots to the maximum extent practicable in order to improve water quality and reduce the quantity of stormwater runoff.
- (B) Annual groundwater recharge rates shall be maintained to the maximum extent practicable, by promoting infiltration by the use of structural and nonstructural methods. Annual recharge from the post-development sites should mimic the annual recharge from pre-development site conditions.
- (C) Structural stormwater facilities shall remove eighty (80) percent of the annual post-development total suspended solids load. It is presumed that facilities comply with this performance standard if they are:

⁸³⁷ This section alerts readers to the Sec. 12A-88 stormwater management plan and Sec. 12A-89 stormwater pollution prevention plan requirements. Plan requirements will be included in an administrative manual.

⁸³⁸ Revised since Module 2 draft. Specific application requirements have been deleted from the Ordinance and will appear in an administrative manual.

⁸³⁹ Current Sec. 12A-89.

⁸⁴⁰ Current Sec. 12A-90.

- 1) Sized to capture the prescribed water quality volume;
- 2) Designed in accordance with the specific requirements and level of service criteria set out in the Stormwater Management and Water Quality Manual; and
- 3) Constructed properly and maintained regularly.

(5) Stormwater Management and Water Quality Manual⁸⁴¹

- (i) The Council has approved the Stormwater Management and Water Quality Manual prepared by the public works department dated January, 2007. The Director of Public Works is authorized to revise the Water Quality Manual periodically as advances in stormwater control practices evolve. All such revisions must be consistent with the provisions of this Section 29-4.5(a).
- (ii) The Director of Public Works is authorized to allow alternate and equivalent best management practices when using the level of service method outlined in the Water Quality Manual. The director shall consider alternate designs of best management practices when it is fully demonstrated that the alternate designs are equal to or better than designs contained in the Water Quality Manual.
- (iii) Any person who constructs, reconstructs, alters or repairs a stormwater management facility for which a permit is required shall conduct such work in accordance with the Water Quality Manual.

(b) Clearing of Trees⁸⁴²

- (1) The mechanized clearing of trees, logging of trees or clear-cutting of trees by any means on tracts of land of one (1) acre or more shall be unlawful unless done in compliance with a land disturbance permit pursuant to Chapter 12A in the City's Code of Ordinances and Chapter 5 of this Ordinance.
- (2) A minimum of twenty-five (25) percent of any climax forest area on any tract of land, one (1) acre in size or greater, is subject to land preservation requirements and shall remain undeveloped as one (1) continuous stand of timber. When the tract of land includes a stream buffer, only twenty (20) percent of the required tree/land preservation shall be within the stream buffer. Trees retained will count toward screening requirements contained in Section 29-4.5 (Landscaping and Screening).⁸⁴³
- (3) When logging is to occur prior to approval of a tree preservation plan or on property not otherwise subject to land disturbance requirements, a logging plan demonstrating compliance with tree preservation requirements must be submitted to the City Arborist.⁸⁴⁴ This logging plan will include the area in square feet of forest land, the area in square feet of climax forest, and demonstrate that twenty-five (25) percent of the area of climax forest will be preserved after logging. Each logging operation on the same site will require a separate

⁸⁴¹ Current Sec. 12A-91.

⁸⁴² Provisions from current Sec. 12A-49.

⁸⁴³ Revised to indicate that this applies only to land areas one acre in size or greater and to require that no more than 20% of the required preservation area may be in stream corridors.

⁸⁴⁴ Revised from Director of Public Works.

land disturbance permit. Under no circumstance shall successive logging remove greater than seventy-five (75) percent of the climax forest present upon the site before logging.⁸⁴⁵

- (4) Tree protection shall be required prior to and during the activities associated with the land disturbance permit in accordance with administrative standards promulgated and enforced by the Director of Public Works, but under no circumstances shall activities with the potential of causing damage to the root systems of trees be allowed within the perimeter of the drip line of the trees being preserved, protected or planted as part of the landscaping plan.

(c) Stream Buffer Standards⁸⁴⁶

(1) Purpose⁸⁴⁷

The purpose of this Section 29-4.6(c) is to protect streams in the City by establishing minimum stream buffer requirements to assist in:

- (i) Restoring and maintaining the chemical, physical and biological integrity of streams;
- (ii) Removing pollutants delivered in urban stormwater;
- (iii) Reducing erosion and controlling sedimentation;
- (iv) Stabilizing stream banks;
- (v) Providing infiltration of stormwater runoff;
- (vi) Maintaining base flow of streams;
- (vii) Contributing organic matter needed by the aquatic ecosystem for food and energy;
- (viii) Providing tree canopy to shade streams and promote desirable aquatic organisms;
- (ix) Providing riparian wildlife habitat;
- (x) Furnishing scenic value and recreational opportunity;
- (xi) Protecting the public from flooding, property damage and loss; and
- (xii) Providing sustainable, natural vegetation.

(2) Applicability⁸⁴⁸

This Section 29-4.6(c) applies to all land in the City except the following:

- (i) Land used for agriculture or urban agriculture uses⁸⁴⁹ covered by an approved Natural Resources Conservation Services (NRCS) conservation plan that includes the application of Best Management Practices (BMPs).
- (ii) Land included in a preliminary or final plat approved before January 2, 2007.

⁸⁴⁵ Current Sec. 12A-49(c).

⁸⁴⁶ Like current Ch. 12A, this section applies to redevelopment, including redevelopment of the new M-DT.

⁸⁴⁷ Current Sec. 12A-231. Findings restated as purposes.

⁸⁴⁸ Current Sec. 12A-232.

⁸⁴⁹ Replaced "farming activities" with "agriculture and urban agriculture" to align with revised definitions.

- (iii) The portion of land for which a valid, unexpired building permit has been issued or for which application for a building permit is pending on January 2, 2007.
- (iv) Land used for surface mining operations that is operating in compliance with a state-approved surface mining permit.

(3) No Land Disturbance in Stream Buffer Before Plan Approved.⁸⁵⁰

It is unlawful for any person to clear, grade, disturb vegetation or build a structure on any land subject to this article that is located within one hundred (100) feet of a Type I Stream, fifty (50) feet of a Type II Stream or thirty (30) feet of a Type III Stream, as measured in section 12A-236(b), before the Director of Public Works has approved a stream buffer plan for the land, pursuant to Chapter 12A in the City’s Code of Ordinances in accordance with Chapter 5 of this Code.

(4) Design Standards for Stream Buffers⁸⁵¹

- (i) An adequate buffer for a stream system shall consist of a predominantly undisturbed strip of land extending along both sides of a stream and its adjacent wetlands, floodplains or slopes. The buffer width may be adjusted to include contiguous sensitive areas, such as steep slopes or erodible soils, where disturbance may adversely affect water quality, streams, wetlands, or other water bodies. Buffer design shall meet the standards in this subsection (4). Where the provisions of this section indicate that deviations from those standards are possible, the determination to approve a deviation shall be made by the Director of Public Works based on considerations of public safety and protection of the stream environment.⁸⁵²
- (ii) The buffer shall begin and be measured from the ordinary high water mark of the channel during base flows.
- (iii) The required base width for all stream buffers is shown in Table 4.6-1.

Table 4.6-1: Required Stream Buffer Width	
Waterway Type	Required Width (each side)
Type I	100 feet
Type II	50 feet
Type III	30 feet

- (iv) Stream buffer width shall be increased where there are steep slopes in close proximity to the stream that drain into the stream system as set forth in Table 4.6-2.

Table 4.6-2: Modifications to Stream Buffer	
Width Based on Slope	
Percent Slope	Width of Buffer

⁸⁵⁰ Current Sec. 12A-234. Measurements for determining stream type have not been carried over.

⁸⁵¹ Current Sec. 12A-236.

⁸⁵² Final sentence is new, to clarify who makes these decisions and based on what criteria.

Table 4.6-2: Modifications to Stream Buffer	
Width Based on Slope	
Percent Slope	Width of Buffer
0—14%	No Change
15%—25%	add 25 feet
Greater than 25%	add 50 feet

- (v) The stream buffer width may be relaxed and the buffer permitted to become narrower at some points as long as the average width of the buffer meets the minimum requirement. This averaging of the buffer may be used to allow for the presence of an existing structure or to recover a lost lot, as long as the streamside zone (Zone I) is not narrowed by the averaging.

(5) Stream Buffer Function, Vegetation and Uses⁸⁵³

- (i) The stream buffer shall be composed of two (2) distinct zones, each having its own function, allowed vegetation and permitted uses as set forth in this section and as summarized in Table 4.6-3. The streamside zone will begin and be measured as set forth in Section 29-4.6(c)(4)(ii) and extend away from the ordinary high water mark a distance as shown in Table 4.6-3. The outer zone will begin at the outside edge of the streamside zone and extend outward, away from the streamside zone the distances shown in Table 4.6-3.

Table 4.6-3: Stream Buffers							
Streamside Zone				Outer Zone			
	Type I Waterway	Type II Waterway	Type III Waterway		Type I Waterway	Type II Waterway	Type III Waterway
Width	50	25	15	Width	50	25	15
Vegetation	Indigenous Vegetation			Vegetation	Type I - Indigenous Vegetation Type II - Managed Lawns Permissible Type III - Managed Lawns Permissible		
Uses	Flood control, footpaths, road crossings, utility corridors			Uses	Biking/hiking paths, flood control, detention/retention structures, utility corridors, stormwater BMPs, residential yards, landscaped areas		
Function	Protect the physical and ecological integrity of the stream ecosystem			Function	Protect key components of the stream and filter and slow velocity of water runoff		

- (ii) The width of the streamside zone is set forth in Table 4.6-3. The normal width of the outer zone is set forth in Table 4.6-3 but will vary if the stream buffer is increased or decreased on an approved stream buffer plan.

⁸⁵³ Current Sec. 12A-237.

- (iii) The function of the streamside zone is to protect the physical, biological and ecological integrity of the stream ecosystem. The function of the outer zone is to prevent encroachment into the streamside zone and to filter runoff from residential and commercial development.
- (iv) Indigenous vegetation must be preserved in the streamside zone and in the outer zone of Type I Streams. Managed lawns are permitted in the outer zone of Type II and Type III Streams although landowners are encouraged to preserve or plant indigenous vegetation in order to increase the filtering capability of the buffering system.
- (v) The structures, practices and activities permitted in the streamside zone of the buffer are limited to the following:
 - (A) Roads and bridges;
 - (B) Utilities where no practical alternative exists;
 - (C) Paths and recreation trails (but use of the outer zone is preferred);
 - (D) Removal of diseased or dead trees, brush and trash;
 - (E) Removal of debris which could cause flooding;
 - (F) Selective (spot) spraying of noxious or other vegetation consistent with recommendations from the City arborist or the Missouri Department of Conservation;
 - (G) Water quality monitoring and stream gauging;
 - (H) Maintenance of City-approved bank stabilization measures;
 - (I) Maintenance of all City-approved improvements, including utilities.
- (vi) The following practices and activities are specifically prohibited within the streamside zone of the stream buffer, except by the City:
 - (A) Clearing of existing vegetation.
 - (B) Soil disturbance by grading, stripping, or other practices;
 - (C) Filling or dumping;
 - (D) Drainage by ditching, underdrains, or other systems;
 - (E) Use, storage, or application of pesticides, except as provided for in subsection (v)(F) above;
 - (F) Storage or operation of motorized vehicles, except for maintenance and emergency use approved by the City;
 - (G) Housing, grazing, or other maintenance of livestock.
- (vii) The structures, practices and activities permitted in the outer zone of the buffer are limited to the following:
 - (A) All uses permitted in the streamside zone;
 - (B) Flood control structures;
 - (C) Detention and retention structures;

- (D) Utility corridors;
 - (E) Stormwater BMPs;
 - (F) Managed lawns (Type II and III Streams only); and
 - (G) Landscaped areas.
- (viii) There shall be no septic systems, permanent structures or impervious cover, with the exception of foot paths, roads, bridges and utilities within the outer zone.
- (ix) The following activities are specifically prohibited within the outer zone of the stream buffer of Type I Streams, except by the City:
- (A) Clearing of existing vegetation;
 - (B) Soil disturbance by grading, stripping, or other practices.
 - (C) Filling or dumping.

(6) Additional Land Use Restriction Near Streams⁸⁵⁴

The following land uses and activities are potential water pollution hazards and must be set back from any stream or waterbody by the distance indicated in Table 4.6-4 below:

Table 4.6-4: Stream Setbacks	
Land Use	Setback (ft.)
Storage and use of hazardous substances	300
Above- or below-ground petroleum storage facilities	300
Drain fields from on-site sewage disposal and treatment systems	200
Raised septic systems	200
Salvage yards or automobile recyclers	600
Confined animal feedlot operations	500
Tilled land (for crops)	200

(7) Temporary Boundary Markers⁸⁵⁵

Temporary boundary markers shall be installed by the applicant before clearing and grading operations begin and shall be maintained throughout the development activities. The markers will be placed on the outside edge of the buffer zone before the start of any activity adjacent to the buffer zone. Markers shall be clearly visible and shall be spaced at a maximum of one hundred (100) feet. The markers shall be joined by marking tape or fencing.

⁸⁵⁴ Current Sec. 12A-238.

⁸⁵⁵ Current Sec. 12A-239.

(d) Erosion Control Requirements⁸⁵⁶

(1) Erosion Control Plan

A soil erosion control plan shall accompany all applications for land disturbance permits. The purpose of the plan is to clearly establish what measures will be taken to prevent erosion and off site sedimentation during and after development. The erosion control plan shall consist of two parts, a site grading and drainage plan and a narrative report describing the nature and scope of the work. The plan shall be prepared and certified by a registered professional engineer, licensed in the State of Missouri.

(2) Design

- (i) Erosion and sedimentation control measures must be designed to provide protection from the runoff from a ten (10) year return frequency, 24-hour duration storm.
- (ii) All surfaces must be stable and non-erosive within the lesser of thirty (30) working days or one hundred twenty (120) calendar days after completion of the work authorized by the land disturbance permit. When such work is associated with the construction of a building, no certificate of occupancy shall be issued until such surfaces are stable and non-erosive. If completion of the work or building is at such time of the year that stabilization with ground cover is not possible, a performance bond or other acceptable financial instrument for completion of the work may be accepted to allow the issuance of a certificate of occupancy.

(3) Stockpiles of Soil⁸⁵⁷

- (i) A single stockpile of soil shall not exceed forty (40) feet in height or three (3) acres in area.
- (ii) The maximum allowed height of a stockpile of soil is determined by the minimum distance from each of the categories in Table 4.6-5:

Table 4.6-5: Setbacks Based on Maximum Height of Stockpiled Soil				
Stockpile Height	Minimum Distance From			
	A Permitted Structure	An "Exterior"* Public Right-of-Way	An "Exterior"* Lot Line	Stream Buffer Outer Zone of Type I and II Streams
≥30 feet—40 feet	300 feet	200 feet	100 feet	100 feet
≥20 feet <30 feet	300 feet	150 feet	100 feet	100 feet
≥10 feet <20 feet	100 feet	100 feet	100 feet	100 feet
0 feet <10 feet	10 feet	10 feet	10 feet	10 feet

⁸⁵⁶ Current Sec.12A-66.

⁸⁵⁷ Current Sec. 12A-71.

[1] "Exterior" refers to the perimeter of the subdivision or development. The minimum distances in the chart do not apply to the internal roads and lot lines within a subdivision or development.

- (iii) The side slope of a stockpile of soil shall not exceed a 3:1 ratio.
- (iv) Stockpiles of soil are not permitted in a stream buffer.
- (v) Stockpiles of soil shall be temporarily seeded in accordance with the Erosion and Sediment Control Manual issued by the director. The working face of the stockpile, however, need not be seeded.
- (vi) Stockpiles of soil that meet the requirements of this section may remain in place for up to three (3) years after issuance of a land disturbance permit. For good cause, the director may extend this time limit for intervals of up to three (3) years. At least sixty (60) days before the time limit expires, the applicant for such an extension must submit a letter to the director explaining the reason for the requested extension. The letter must be accompanied by a list of the names and addresses of the owners of all land within lines drawn parallel to and one hundred eighty-five (185) feet from the boundaries of the property on which the stockpile is located. The applicant shall send a copy of the letter to each of the property owners. If the director grants an extension, the director shall notify each of the property owners of the decision and advise the property owners of their right to appeal the decision to the Board under article VI.
- (vii) When the time limit for a stockpile of soil has expired, and no extension has been granted, the property owner must either remove the stockpile or grade it to a slope of no greater than a 4:1 ratio and permanently seed it in accordance with the Erosion and Sediment Control Manual issued by the director.
- (viii) Subsections (i) through (v) shall not apply to stockpiles of soil existing on November 1, 2010; provided that all such stockpiles must be removed no later than November 1, 2013 unless an extension is granted under subsection (6).
- (ix) This section shall not apply to soil stockpiled in connection with any street construction project.

29-4.7 Exterior Lighting⁸⁵⁸

(a) Purpose

The purpose of this Section 29-4.7 is to enhance the attractiveness and livability of the community for its citizens, both during the day and at night without compromising the safety, security, and well-being of persons engaged in outdoor nighttime activities. It is the intent of this section to control the obtrusive aspects of excessive and careless outdoor lighting usage while preserving, protecting, and enhancing the lawful nighttime use and enjoyment of property. Intended outcomes include:

⁸⁵⁸ Carries forward Current Sec. 29-30.1(Outdoor lighting regulations), with revisions focused on energy efficiency, glare reduction, and community safety, as noted. Current Sec. 29-30.1(g)(3)(Maximum height for parking illumination in a planned district) was deleted as unnecessary, and a 500 foot distance requirement is excessive.

- (1) Insuring that parking areas, public gathering places, approaches to buildings, and other areas active at night have adequate outdoor illumination.
- (2) Minimizing the adverse impacts on public safety and comfort due to excessive glare.
- (3) Providing minimum and maximum light levels and establishing standards of lighting uniformity to enhance night vision and security.
- (4) Minimizing spillage of light on adjacent or nearby property.
- (5) Minimizing the effects of skyglow.
- (6) Encouraging energy conservation through the use of efficient lighting technologies.

(b) IESNA Standards and Interpretations

The standards in this Section 29-4.7 are based on the standards in the IESNA Lighting Handbook, 9th Edition and "Lighting for Exterior Environments: An IESNA Recommended Practice," RP-33-99 both published by the Illuminating Engineering Society of North America. These publications shall be used in interpreting undefined terms and unclear provisions of this section. When new editions of these publications are available, the Environment and Energy Commission shall prepare a report to the Council setting forth any recommended changes in the standards of this section.

(c) Conformance with Applicable Codes

All outdoor illuminating devices shall be installed in conformance with the provisions of this Section 29-4.7, the building code, the electrical code and Chapter 23 of the Columbia Code of Ordinances, as applicable and under appropriate permit and inspection.

(d) General Standards and Exceptions

- (1) This section applies to all new construction that includes outdoor lighting and to all replacement of outdoor lighting structures other than replacement of lighting fixtures, except that:
 - (i) Lighting structures installed lawfully before December 4, 2006, may continue in operation. Routine replacement and repair of lighting fixtures installed before December 4, 2006, shall be exempt from the requirements of this section.
 - (ii) Lighting installations in the M-BP or PD districts shown on development plans approved before December 4, 2006, shall comply with outdoor lighting standards adopted as part of those plans.
 - (iii) Additions to buildings, parking lots, and other site improvements approved before December 4, 2006, shall be exempt from the lighting plan submittal requirements of subsection (f) below, provided the addition does not increase either the size of a building or parking lot greater than fifty (50) percent of its existing gross floor area.
 - (iv) The addition of individual lighting structures shall not require submittal of a lighting plan pursuant to subsection (f) below provided the owner provides a certification that the

additional lighting structures conform to the design criteria of this section, or the property owner obtains a special exception as provided in section 29-31(g).

- (v) This section shall not apply to public street lighting.
 - (vi) Seasonal decorations that include illuminated displays are exempt from this section except that no light fixture that is part of a seasonal display shall be aimed or directed to create glare or light spillage.
 - (vii) This section shall not apply to the installation of an outdoor lighting structure if an application for a building permit involving the installation of that structure was received by the City on or before December 4, 2006.
- (2) All outdoor facilities intended for nighttime use (5:00 p.m. – 7:00 a.m.) shall be illuminated and such illumination shall be maintained in compliance with the standards of this section.⁸⁵⁹
- (3) Searchlights and similar spot light fixtures, such as moving, flashing, chasing and strobe lights used to attract attention to a place are prohibited.
- (4) For enhanced security, only light sources with a color rendering index (CRI) of greater than sixty (60) shall be used. See Table 4.7-1 for CRI range of lamps.

Table 4.7-1: Color Rendering Index Range of Lamps	
Lamp Type	Color Rendering Index (CRI)
Fluorescent	
Lite White	> 40
Warm White	> 50
Warm White Deluxe	> 70
Cool White	> 60
Cool White Deluxe	> 80
White	> 60
Daylight	> 70
T12 Rare Earth Phosphor	> 69 to > 80
T8 Rare Earth Phosphor	> 70 to > 90
Natural	> 80
Incandescent	> 80
Compact T4, T5	> 80
C50, C70, DSGN 50	> 90
Mercury Vapor	
Clear	15 - 25
Coated	40 to > 50
Metal Halide	
Clear or Coated	60 > 90
High Pressure Sodium	

⁸⁵⁹ Revised to clarify that nighttime use begins when it is dark outside, regardless of the time of day or season.

Table 4.7-1: Color Rendering Index Range of Lamps	
Lamp Type	Color Rendering Index (CRI)
Standard	> 20
Color Improved	> 60
High Color Rendering	> 80
Low Pressure Sodium	> 20

From "Lighting for Parking Facilities," Report 20 - 98 of the IESNA 1998. For lamp types not listed above, the Manufacture's CRI for the lamp can be used to determine if the lamp meets the standard of a CRI > 60.

- (5) Any light source or lamp that emits more than 900 lumens (13 watt compact fluorescent or 60 watt incandescent) shall be concealed or shielded with an IESNA full cut-off style fixture with an angle not exceeding 90 degrees to minimize the potential for glare and unnecessary diffusion on adjacent property.⁸⁶⁰

(e) Methods of Measurement⁸⁶¹

- (1) Unless otherwise specified, all footcandle values shall be measured horizontally and shall refer to maintained footcandles (initial values with a light loss ratio applied).
- (2) Light spillage thresholds shall be determined by horizontal footcandles measured at ground level at the property line.
- (3) Maximum height shall be measured as the vertical distance between the finished grade directly below a light fixture and the highest point on the light fixture.
- (4) A light loss ratio of seventy-two tenths (0.72) shall be used to calculate lighting plans.
- (5) Maximum-to-minimum is the highest horizontal illuminance point divided by the lowest horizontal illuminance point or area and should not be greater than the values shown.

(f) Photometric Lighting Plan Requirements⁸⁶²

All applications for building permits involving installation of outdoor lighting shall include the following information:

- (1) A photometric plan, prepared by a lighting engineer at a scale of no smaller than one (1) inch equals sixty (60) feet which consists of:
 - (i) An accurate site plan of the proposed development indicating the location of property lines, and all existing and proposed land improvements including but not limited to buildings, parking lots, aisles and driveways, streets, walkways, landscaped areas and accessory structures;

⁸⁶⁰ New provision.

⁸⁶¹ These technical details will be relocated to an administrative manual.

⁸⁶² These application requirements will be relocated to an administrative manual or the City's web site, with the exception of the Director's reliance on third-party certification of lighting plan compliance for issuance of permits.

- (ii) The estimated footcandles at ground level across the entire site, at minimum intervals of thirty (30) feet, including estimated footcandles at the property line;
 - (iii) Location and type of all lighting fixtures;
 - (iv) A table indicating the type, light source, wattage, output in lumens, light loss ratio, height of luminaires above grade and the maximum-to-minimum ratio. The maximum-to-minimum ratio shall be calculated using ninety-five (95) percent of the data point sources, excluding two and one-half (2.5) percent of the lowest values and two and one-half (2.5) percent of the highest values; and
 - (v) A certification by a lighting engineer that the lighting plan complies with the standards of this section. The Director may rely on this certification for issuance of appropriate construction and occupancy permits.
- (2) Manufacturer's catalogue specifications of all luminaires to be used, indicating the design, refractor (lens) type, cutoff angle (full, semi or non-cutoff), and any special features affecting the performance of the light.

(g) Parking Lot Lighting

The following standards apply to the illumination of parking lots:

(1) Minimum Lighting and Maximum Illuminance

- (i) During business hours, parking lots shall be uniformly illuminated such that vehicular license plates, addresses and directional, instructional or regulatory signs are plainly visible without blind spots or excessive distortion of color.
- (ii) The maximum footcandles allowed on adjacent property is one-half (0.5) for residential and two (2.0) for non-residential, and maximum illuminance shall comply with Table 4.7-2.

Table 4.7-2: Maintained Illuminance Values for Parking Lots

	Basic (footcandles)	Enhanced Security (footcandles)
Minimum horizontal illuminance	0.2 footcandles	0.5 footcandles
Maximum-to-minimum ratio	20:1	15:1
Minimum vertical illuminance	0.1 footcandles	0.25 footcandles
From "Lighting for Parking Facilities," IESNA, RP-20-98, p. 3.		

(2) Lighting Control

Lighting shall have automatic controls capable of turning off lighting when sufficient daylight is available or when the lighting is not required during nighttime hours. Lighting not designated for dusk-to-dawn operation shall be controlled by an astronomical time switch or time switch and photo sensor with the following exceptions:

- (i) Emergency lighting that is automatically off during normal building operation;

- (ii) Lighting that is specifically designated as required by a health or life safety statute, ordinance, or regulation; or
- (iii) Decorative gas lighting systems.

(3) Maximum Height ⁸⁶³

The height of the light structure shall not exceed twenty-eight (28) feet above grade, except as required by Section 29-4.9 (Neighborhood Protection Standards).⁸⁶⁴

(4) Building Mounted Lighting⁸⁶⁵

Areas of parking lots, circulation drives, loading areas and drive-thru lanes located near the perimeter of a building may be illuminated by building-mounted lights provided the design of the lights conform to the standards of Section 29-4.7(j) below and as documented in the lighting plan.

(h) Service Station Canopy and Apron Lighting

The following standards apply to gasoline service stations in addition to the parking lot lighting regulations in subsection (g).

(1) Minimizing Glare

To minimize glare, no drop, sag or convex lenses shall be used on lighting under the canopy unless the lenses are recessed within the canopy ceiling or shielded by appropriate glare shields. No lighting shall be mounted on building or canopy fasciae or rooftops unless the fixtures are full cutoff. The intent is to keep all the light under the canopy. This lighting shall be provided with low glare luminaires.

(2) Maximum Illuminance.

The maximum average illuminance levels are set forth in Table 4.7-3.

Area Description	Maximum Average Illuminance on Described Area (Footcandles)
Approach with dark surroundings	1.5
Driveway with dark surroundings	1.5
Pump island area with dark surroundings	5.0
Building facades with dark surroundings	2.0
Service areas with dark surroundings	2.0
Landscape highlights with dark surroundings	1.0
Approach with light surroundings	2.0

⁸⁶³ Existing subsections (iii) and (iv) allowing for PD district exceptions have been deleted because PD zoning generally allows heights to be negotiated anyway. Provisions allowing non-cutoff light fixtures to have lower heights was deleted because full cutoff fixtures are now required.

⁸⁶⁴ Exception and cross-reference added.

⁸⁶⁵ Carries forward existing subsection 29-30.1(g)(4).

Area Description	Maximum Average Illuminance on Described Area (Footcandles)
Driveway with light surroundings	2.0
Pump island area with light surroundings	10.0
Building facades with light surroundings	3.0
Service areas with light surroundings	3.0
Landscape highlights with light surroundings	2.0

From "Lighting for Exterior Environments: IESNA Recommended Practice," RP-33-99, p. 43.

(i) Outdoor Display Area Lighting

Illumination of outdoor display areas for sale of automobiles, recreational vehicles, and manufactured homes and other finished products customarily displayed outdoors shall be permitted in accordance with Table 4.7-4 and with the following:

- (1) Maximum height of light fixtures same as parking lots.
- (2) To minimize glare, no drop, sag or convex lenses shall be used on display-area lighting. Glare shields shall be used to eliminate visibility of the light source from the public roadway.
- (3) The maximum footcandles allowed on adjacent property is one-half (0.5) for residential and two (2.0) for non-residential, and maximum illuminance shall comply with Table 4.7-4.

Area	Maximum Illuminance on Pavement (Footcandles)	Maximum-to-Minimum Ratio
Adjacent to roadway	10—20	5:1
Other areas	5—10	10:1
Entrances	5—10	5:1
Driveways	2—3	10:1

From "Lighting for Exterior Environment: IESNA Recommended Practice," RP-33-99, p. 43

(j) Building Lighting

Building lighting shall comply with the following standards.

(1) Location and Direction

- (i) Building mounted lights shall be mounted and installed so that all light is directed downward, unless the lights are decorative lighting.
- (ii) Fixtures shall be full cutoff or semi-cutoff.
- (iii) No wall packs or similar lights shall be permitted unless the cutoff angle effectively eliminates visible glare from beyond the property lines.
- (iv) No light fixtures shall be mounted above the parapet or, for pitched roofs, above the eave except motion-detection security lighting, decorative lighting and accent lighting.

- (v) Functional lighting shall not exceed four hundred (400) watts of incandescent illuminance or the equivalent. Decorative or accent lighting shall not exceed one hundred (100) watts of incandescent illuminance or the equivalent.⁸⁶⁶
- (vi) The maximum footcandles allowed on adjacent property is one-half (0.5) for residential and two (2.0) for non-residential.
- (vii) If swivel mountings are used, lights may be raised a maximum of twenty (20) degrees from horizontal and may not be mounted above the buildings.
- (viii) The maximum average illuminance levels for floodlighting buildings and monuments are set forth in Table 4.7-5.

Table 4.7-5: Illuminance Levels for Floodlighting Buildings and Monuments	
Area Description	Maximum Average Illuminance (Vertical) (Footcandles)
Bright surroundings and light surfaces	5
Bright surroundings and medium light surfaces	7
Bright surroundings and dark surfaces	10
Dark surroundings and light surfaces	2
Dark surroundings and medium light surfaces	3
Dark surroundings and medium dark surfaces	4
Dark surroundings and dark surfaces	5

From "Lighting for Exterior Environments: IESNA Recommended Practice," RP-33-99, p. 30.

(2) Decorative Lighting

Decorative building lighting, in which the purpose is enhancement of building appearance, shall be permitted and may be directed toward the building, provided that all light is cast against the building surface.

- (i) Lighting fixtures shall be carefully located, aimed and shielded so that light is directed only onto the building facade. Lighting fixtures shall not be directed toward adjacent streets or roads.
- (ii) Lighting fixtures mounted on the building and designed to wash the facade with light are preferred.

(k) Landscape Lighting

Landscape lighting shall comply with the following standards:

- (1) Luminaires shall be mounted four (4) feet or lower to the ground.
- (2) The photometric plan shall show the location of all landscape lighting fixtures and the landscaping feature each fixture is to illuminate. The plan shall demonstrate that the

⁸⁶⁶ Equivalence language added.

installation shall not generate excessive light levels, cause glare, or direct light beyond the landscaping into the night sky.⁸⁶⁷

(l) Athletic Field and Outdoor Arena Lighting

The following standards apply to the illumination of athletic fields and outdoor arenas:

(1) Minimum and Maximum Lighting

Athletic fields, where nighttime activity is authorized, shall provide adequate illumination for the scheduled activities. The minimum and maximum light levels shall meet the standards for sports lighting set forth in "Sports and Recreational Area Lighting," RP-6-01, published by the Illuminating Engineering Society of North America. Lighting shall use cutoffs so that light is primarily aimed at and directed to the activity area.

(2) Fixture Height

Athletic field other than adult baseball fields and arena lighting fixtures shall not exceed seventy (70) feet above finished grade directly below the lighting fixture. Adult baseball field lighting fixtures shall not exceed eighty (80) feet above finished grade directly below the lighting fixture.

(3) Hours of Operation

Lighting, except for lights reasonably necessary for security purposes, shall be turned off within two (2) hours after the event or closure of the facility, or when required by other regulatory ordinance. Dusk to dawn lights for security purposes shall not emit visible glare from the perspective of adjacent properties, internal access aisles and public streets.

(4) Maximum Footcandles

The maximum footcandles allowed on adjacent property is one (1.0) footcandle on residential properties and four (4.0) footcandles on non-residential properties.

(m) Private Street Lighting

Private street lighting is permitted provided the fixtures, wattage and output, fixture height, and spacing are comparable to the public street lighting standards set forth in Chapter 27 (Utilities) Sections 27-146 through 27-151 (Street Lighting) of the City's Municipal Code.

(n) Security Lighting

Security lighting shall comply with the following standards:

- (1) All security lighting fixtures shall be shielded and aimed so that illumination is directed only to the designated area and not cast on other areas. Lighting shall not be directed above a horizontal plane through the top of the lighting fixture, and the fixture shall include shields

⁸⁶⁷ Photometric plan application details will be removed from the Code and put in an administrative manual or on the City's web site.

- that prevent the light source or lens from being visible from adjacent roadways and properties. The use of general floodlighting fixtures is prohibited.
- (2) The maximum footcandles allowed on adjacent property is one-half (0.5) for residential and two (2.0) for non-residential.

(o) Sign Lighting

Illumination of signs shall conform to Section 29-4.10 (Sign Standards) of this Code. Location of illuminated signs and any lighting fixtures external to the signs shall be included on a lighting plan.

29-4.8 Design Standards and Guidelines⁸⁶⁸

(a) Intent

The intent of this section is to:

- (1) Allow full development of properties consistent with the dimensional standards established in Chapter 2 and Section 29-4.1 while establishing baseline requirements for building and site features that will create stable residential neighborhoods, mixed use, commercial, and industrial areas.
- (2) Enhance the public realm.
- (3) Reduce conflicts between existing and new structures.
- (4) Encourage effective development of street frontages and other public elements that enable new projects to add value to existing communities.
- (5) Encourage creative and sustainable design responses to contemporary opportunities.
- (6) Improve the overall design quality of the City through the use of objective standards that can be administered by the Community Development Department without the need for individualized design review of projects.

(b) Applicability

- (1) The standards of this section shall apply to all new development in any zone district except:
 - (i) Development or redevelopment in the M-DT district.
 - (ii) Structures in which the principal use is one of the following use categories or subcategories as shown in Permitted Use Table 29-3.1.
 - (A) One-family Detached residential;

⁸⁶⁸ New section per the Detailed Outline to help Columbia encourage the quality and style of development it desires without applying form-based controls to all lots and blocks and use specific standards to all types of uses. In reviewing the new form-based standards in Section 29-4.2, the City should consider if any of those controls should apply to development outside of M-DT.

- (B) One-family Attached residential;
 - (C) Two-family residential;
 - (D) Park or Playground;
 - (E) Utilities;
 - (F) Parking Lot or Structure (primary use);
 - (G) Urban Agriculture;
 - (H) Farmer’s Market; or
 - (I) Heavy Commercial Service;
 - (J) Industrial (except Artisan Industrial.
- (iii) A change in the principal use of an existing structure that does not alter the exterior of the structure, or only affects the signage on the exterior of the structure.
- (2) In the case of a conflict between the design standards in this section and design standards applicable to a particular project because of its location in an overlay district listed in Section 29-2.3 (Overlay Zoning Districts), or because of a use-specific standard in Section 29-3.3 (Use-Specific Standards), the provisions of the overlay district or use-specific standard shall govern.

(c) Multi-Family Residential, Commercial, and Public and Institutional

(1) Entries

Each principal building shall have one or more operating entry doors facing and visible from an adjacent public street. The location of the entry on the building façade shall be emphasized by the use of different materials, wall articulation around the entry, or foundation plantings around the entry.

(2) Transparency

- (i) When the primary use of the ground floor frontage of a structure categorized as Food and Beverage Service, Office, Personal Services, or Retail in Table 29-3.1, a minimum of twenty (20) percent of each facade area that faces a public street shall be composed of transparent materials.
- (ii) At least one-half of this amount shall be provided so that the lowest edge of the transparent materials is no higher than four (4) feet above the street level.
- (iii) If the Director determines that transparent materials are not practical for security reasons or based on the nature of the permitted ground floor use, an alternative treatment providing equivalent or better visual interest may be approved.

(3) Wall Plane Articulation

When the primary use of the building is not categorized as Industrial in Table 29-3.1, each facade greater than one hundred (100) feet in length abutting a public street shall incorporate architectural features such as wall plane projections, recesses, or other building

material treatments and textures that visually interrupt the wall plane. No uninterrupted length of any facade shall exceed one hundred (100) horizontal feet.

(4) Roof Shape

- (i) When the primary use of the building is not categorized as Industrial in Table 29-3.1, and the building has a sloping roof, at least one projecting gable, hip feature, or other break in the horizontal line of the roof ridgeline shall be incorporated for each one hundred (100) lineal feet of roof.
- (ii) When the primary use of the building is not categorized as Industrial in Table 29-3.1 and the building has a flat roof, the design or height of the parapet shall include at least one change in setback or height of at least three feet along each one hundred (100) lineal feet of façade.

(5) Canopies and Awnings

All canopies and awnings shall be mounted with a minimum vertical clearance of seven (7) feet between sidewalk grade and the bottom edge of the canopy or awning.

(6) Loading Dock and Delivery Areas⁸⁶⁹

Loading dock doors and delivery areas shall be located at the rear of buildings to separate customer and employee traffic from loading and service vehicles, unless the Director determines that such location is impracticable given the function and operating needs of the building.

29-4.9 Neighborhood Protection Standards⁸⁷⁰

(a) Intent

This section is intended to preserve the residential neighborhood character of established homes within multi-family districts and adjacent to Mixed Use or Special zoning districts.

(b) Applicability

These standards apply:

- (1) To all lots in the R-MF district that contain a principle use other than a single- or two-family dwelling; and
- (2) To all lots located in any zone district other than the R-1 and R-2 districts that shares a side or rear lot line with a lot in the R-1 or R-2 district.

(c) Building Height⁸⁷¹

⁸⁶⁹ New standard in response to public comment.

⁸⁷⁰ New section.

⁸⁷¹ New standard. This replaces the current code requirements for a 10 foot side yard where O-1 & 2, C-1 & 3, and M-1 districts abut residential districts.

Buildings constructed after the effective date of this Code with a height greater than thirty (30) feet shall reduce the perceived height of the building when viewed from adjacent lots by using at least one (1) of the following techniques.

A transitions graphic will be included in the Final Integrated Draft.

- (1) "Stepping down" building height of any portion of the building within one hundred (100) feet of the side and rear lot lines to a maximum of thirty (30) feet.
- (2) Increasing the side yard and rear yard setbacks a minimum of ten (10) feet beyond that otherwise required in the zone district where the property is located.

(d) Screening and Buffering

The standards of Section 29-4.5(e) apply. In addition, when the standards of that Section require the construction of an opaque wall or fence, the following applies:

- (1) If the applicant's property is in the R-MF district, the required landscaping shall be installed on the side of the fence or wall facing towards the adjacent lot with a single- or two- family dwelling; and
- (2) If the applicant's property is in any other district except the R-1 or R-2 districts, the required landscaping shall be installed on the side of the fence or wall facing towards the R-1 or R-2 district.

(e) Parking, Loading, and Circulation⁸⁷²

- (1) No parking area, drive-through lane, or vehicle circulation driveway shall be located between a primary structure on a lot containing a use other than a single- or two-family use and any side property line abutting a lot containing a single- or two-family dwelling.⁸⁷³
- (2) If the context of a site makes subsection (1) above impractical, the Director may approve a parking lot design that locates a parking area, drive-through lane, vehicle circulation driveway, or a combination of these three site planning elements, in the area described in subsection (1) above, provided all of those three site planning elements are located at least six (6) feet from an adjacent lot containing a single- or two-family dwelling.

(f) Lighting Height⁸⁷⁴

The maximum height of any lighting pole within fifty (50) feet of the side or rear lot lines shall be 20 feet.⁸⁷⁵

⁸⁷² Carries forward and clarifies existing standards and introduces a new provision.

⁸⁷³ New provision. Sec. 29-30(h)(1) prohibiting parking within 6 feet of an adjoining lot in a residential district has been deleted because subsection (c) already adopts a larger setback standards. The Director may adjust the standards if compliance would make site development impracticable.

⁸⁷⁴ New section that is also referenced in Sec. 29-4.7(g)(3)(iii).

⁸⁷⁵ New provision.

29-4.10 Sign Standards⁸⁷⁶

(a) Purpose⁸⁷⁷

The purposes of these sign regulations are:

- (1) To allow the effective use of signs as a means of communication in the City;
- (2) To maintain and enhance the City's ability to attract sources of economic development and growth;
- (3) To improve pedestrian and traffic safety;
- (4) To minimize possible adverse effects of signs on nearby property;
- (5) To bring all signs into compliance with adopted regulations;
- (6) To enable the fair and consistent enforcement of these sign regulations.
- (7) To maintain and enhance the appearance of the community.
- (8) To comply with all applicable federal and state laws regarding the First Amendment and free speech.

(b) Applicability⁸⁷⁸

The standards of this Section 29-4.10 apply to the erection of any sign of any type within the City, unless specifically exempted or excluded by a provision of this Code. In addition to the provisions of this Section 29-4.10, all properties must comply with any sign regulations contained in any Use-specific Standard in Section 29-3.3 applicable to the property. In the event of a conflict between the standards of this Section 29-4.10 and the sign standards in any approved PD district, the standards in the approved PD district shall apply.

(c) Prohibited Signs⁸⁷⁹

- (1) No sign shall be erected in such a manner that it will or reasonably may be expected to interfere with, obstruct, confuse, distract or mislead traffic, or be considered obscene or a nuisance to the general public.
- (2) No person, except a public officer or an employee in the performance of a public duty, shall fasten any sign or notice of any kind on any curbstone, lamppost, street or sidewalk surface, pole, bridge or tree upon a public street, except for any banner attached to a City street light standard for which an attachment permit has been issued. This prohibition includes,

⁸⁷⁶Integrates Ch. 23 (Signs) of the City's municipal ordinance into this Code. Current sign development standards are integrated into this Chapter 29-4. Sign definitions have been included in Chapter 1. Changes are minimal and footnoted. While legal action challenging content-based sign regulations are rare and generally unsuccessful, these regulations have been generally reviewed for content-based material.

⁸⁷⁷ Current Sec. 23-0.5.

⁸⁷⁸ New section.

⁸⁷⁹ Current Sec. 23-2.

but is not limited to, advertisements and announcements of buildings or land for sale or rent, garage sales, private picnics and election campaign posters. This prohibition is not to be construed as prohibiting signs or notices indicating danger or aids to service or safety, or subdivision identification signs, to be erected with written permission from the Director.⁸⁸⁰

- (3) No signs painted on buildings, walls or fences shall be allowed.
- (4) No wind signs shall be allowed.
- (5) No freestanding, on-premises commercial sign, including the supporting structures, shall be allowed to remain on any property more than six (6) months after the business or uses advertised on the sign have been discontinued.
- (6) No sign shall be erected or maintained in a location or in such a manner that any portion of the sign will be within ten (10) feet, measured either horizontally, vertically or at any intermediate angle, of any electric power line wire carrying a voltage in excess of two hundred forty (240) volts, nor shall any sign be within ten (10) feet of a vertical line extended upward from such an electric power line wire.
- (7) No portable signs shall be allowed, except for sandwich board signs in the M-DT district.⁸⁸¹
- (8) No animated signs shall be allowed.
- (9) No off-premise signs or billboards shall be allowed, except as provided in Section 29-4.10(e)(2).⁸⁸²
- (10) No commercial signs shall be allowed except as provided for in this Section 29-4.10.
- (11) No commercial flags shall be allowed except that a business may display one flag no larger than forty (40) square feet which bears the symbol or trademark or name of the business. No further advertising shall be permitted on such flags.
- (12) No digital signs shall be allowed.

(d) Regulations Based on Use and Area

(1) Residential Use Signs⁸⁸³

(i) Table 4.10-1 sets forth signs standards for identification and sale, rental, or lease signs permitted for certain residential uses and land areas.

	Single- or Two- Family		Multiple-Family		Manufactured Home	Land
Type	ID	Sale/Rent	ID	Sale/Rent	ID	Sale/Lease
Maximum Number	1/each street frontage				See Section 29-4.10(f)(1)	1/lot
Maximum	4 sq. ft.	4 sq. ft.	15 sq. ft.	4 sq. ft.		Lots greater than 1

⁸⁸⁰ Existing language reorganized to clarify which signs are included in or exempt from the prohibition.

⁸⁸¹ Exception for sandwich board signs added, since the current Code allows these.

⁸⁸² Revised to prohibit off-premise signs other than billboards.

⁸⁸³ Current Sec. 23-11 standards have been organized into two tables for readability.

	Single- or Two- Family		Multiple-Family		Manufactured Home	Land
Type	ID	Sale/Rent	ID	Sale/Rent	ID	Sale/Lease
Area						acre: 12 sq. ft./acre; 32 sq. ft. (max) Lots less than 1 acre: 12 sq. ft.
Location	On premises					
Other						

(ii) Identification of Subdivision or Neighborhood Area

Identification signs for subdivisions and residential areas are regulated by Section 29-4.10(f)(1). This type of sign may be situated on private property adjacent to the entrance or, by special permission of the Council, may be located on median strips that divide public streets leading into the named subdivision area. If the sign is permitted to be located in the public right-of-way, the design and location of the sign shall first be approved by the Director and the following criteria shall be met:

- (A) Minimum setback at an intersection shall be twenty-five (25) feet.
- (B) Minimum width of an island on which a sign is to be located shall be eight (8) feet.
- (C) Location on the island or median strip shall be along the centerline of the median parallel to the entrance street.
- (D) Signs shall be designed and located so as not to interfere with the visibility of traffic at any location.

(iii) Table 4.10 – 2 sets forth standards for various general sign types allowed on all residential lots.

	Open House/Model Home	Solicitation	Garage Sale	Real Estate Sales Office (Temporary)
Type	Advertise open house	Prohibit solicitors, peddlers, hawkers, itinerant merchants, or transient vendors from entering private property	Advertise garage sale conducted on premises	Identify a temporary real estate sales office
Maximum Number	3/property	1/property	1/each street abutting the premises	1/property
Maximum Area	4 sq. ft./sign	1 sq. ft.	4 sq. ft./sign	6 sq. ft.
Maximum Height				4 ft.
Location	On or Off premises	On premises	On premises	On premises
Other	Signs are only permitted during the hours the home is open for viewing		Signs are only permitted during the time of the sale	

(2) Business Use Signs Outside the M-DT District⁸⁸⁴

The following standards apply to all signs that are related to a use that is not a residential use or an industrial use, as shown in Table 29-3.1 (Permitted Use Table) and that is not located in the M-DT district.

(i) Table 4.10–3 sets forth standards for wall, projecting, and roof signs for all business uses outside the M-DT district, with the exception of shopping centers, office buildings, theaters, automobile service stations, hotels and motels.⁸⁸⁵

Table 4.10 – 3: Business Use Signs Outside M-DT by Number & Type				
	Wall	Projecting	Roof	Freestanding
Sign Combinations	Each property may have 2 of the 4 signs in this table, but a business may not to have both a freestanding and a roof sign			
Number	Any combination of wall, canopy, or awning signs, not to exceed the maximum surface area	1	1	1 for each adjacent street R-O-W, per the regulations in Section 29-4.10(f)(1)
Maximum Area	<ul style="list-style-type: none"> ▪ See Section 29-4.10(f)(2) ▪ 1 rear entrance sign; 10 sq. ft. max size 		2 sq. ft./linear ft. of building frontage	
Location	On premises	<ul style="list-style-type: none"> ▪ On premises ▪ Not to exceed 8 ft. in projection from the building wall on each wall facing a street ▪ If a 1-story building, the sign may extend 10 ft. above the roof line or parapet of the building 	Roof of a 1- or 2-story building	
Other		Sign shall not extend above the roof line or parapet of the building, except for a one-story building	Sign shall not extend beyond the highest point of the roof on which it is located	

(ii) Table 4.10 – 4 sets forth standards for sale or lease, identification, and directional signs for all business uses outside of the M-DT district.

⁸⁸⁴ Groups current sections regulating business signs outside of the current C-2 District together.

⁸⁸⁵ Current Sec. 23-13 (Business uses outside the CBD) regulations have been organized into two tables for clarity and readability (Signs by Number and Type and Sale, Lease, etc. Signs).

	Sale or Lease		Development Identification	Directional ⁸⁸⁶
	Building	Land		
Type	Advertises office or commercial space for sale, rent, or lease	Advertises land for sale or rent	Identifies a commercial development, except for shopping centers (see Table 4.10-5)	
Maximum Number	1	1	1	1
Maximum Area	12 sq. ft.	<ul style="list-style-type: none"> ▪ Greater than one acre: 12 sq. ft./acre; 32 sq. ft. (max) ▪ Less than one acre: 12 sq. ft./acre (max) 	32 sq. ft.	32 sq. ft.
Maximum Height			6 ft.	3 ft. (measured from the grade immediately below the sign)
Location	On premises	On premises		On premises, at each automotive entrance and exit of any business, in any development, except ATMs regulated under Section 29-4.10(e)(9) ⁸⁸⁷

(iii) As an alternative to the signs permitted in subsections (i) through (ii) above, Table 4.10 – 5 sets forth standards for signs permitted if the property is a shopping center:

	Shopping Center	Each Separate Business		Businesses with a Rear or Side Entrance
		Wall, Canopy, Awning	Roof	
Maximum Number	1 freestanding master sign/adjacent street ROW			1 wall or awning sign/entrance
Maximum Surface Area	<ul style="list-style-type: none"> ▪ 64 sq. ft./ acre ▪ 288 sq. ft. or ½ sq. ft. in area/ linear ft. of adjacent street ROW the sign is oriented toward, whichever is greater 	<ul style="list-style-type: none"> ▪ Wall facing a street: See Section 29-4.10(f)(2) ▪ Wall facing main 	All signs located above any one wall: 4 sq. ft./ linear ft. of wall length occupied by the business	10 sq. ft./entrance

⁸⁸⁶ Relocated from Current Sec. 23-22 and grouped with the sign standards in Current Sec. 23-13 because provision applies to directional signs outside the current CBD.

⁸⁸⁷ Provision in current Sec. 23-22 revised to clarify that standard applies to all businesses except ATMs.

⁸⁸⁸ Combines current Section 23-14 (Shopping center signs) and Section 23-35(i)(Area, height and placement of freestanding shopping center signs). Revised to clarify that these sign types are alternatives to — not in addition to the other business use signs listed above. However, a shopping center that includes a multi-tenant building as well as single-use buildings on outlots or pad sites can use of both sets of standards.

	Shopping Center	Each Separate Business		Businesses with a Rear or Side Entrance
		Wall, Canopy, Awning	Roof	
		shopping center parking area: 64 sq. ft.		
Maximum Height	30 ft.			
Location	Adjacent street ROW	On premises	On premises and located above a wall	
Other	If adjacent street is an arterial street designated for collector street provisions then the freestanding sign must comply with Section 29-4.10(f)(1)		A roof sign shall not extend beyond the highest point of the roof on which it is located	

(3) Signs in M-DT District⁸⁸⁹

The Columbia M-DT is intended to be attractive, historic and pedestrian friendly. Accordingly, signs should be smaller in scale and fewer in number. This will enhance the attractiveness of the area, reduce visual clutter, increase property values and encourage tourism and other business.

(i) Applicability

This section regulates signs within the M-DT district, with the exception of theaters, which are subject to Section 29-4.10(e)(10).⁸⁹⁰

(ii) General Standards

(A) Table 4.10-6 sets forth standards for business signs permitted at different building levels within the M-DT.

	Awning	Projecting	Wall	Window
Aggregate Size Limitation	15% of the wall space of one building elevation. All signs identified in this Table and Table 4.10 - 7, except for Building Directories and Identification Signs, contribute to this aggregate amount.			
Lower Level				
Maximum Number	1/elevation			
Maximum Area	18 sq. ft.	8 sq. ft.	24 sq. ft.	18 sq. ft.
Placement		<ul style="list-style-type: none"> ▪ Shall not project more than 3 ft. from face of wall ▪ Bottom of sign 	<ul style="list-style-type: none"> ▪ No higher than the bottom of a second level window 	

⁸⁸⁹ Current Sec. 23.12 (CBD Business Signs) now in two tables. Redundant requirements on sign types, number, and areas have been consolidated in Table 4.10-6.

⁸⁹⁰ Text that the section addresses “business use of signs” was deleted, since this is a Mixed Use district.

Table 4.10 – 6: M-DT Business Signs by Building Level [1]				
	Awning	Projecting	Wall	Window
		must be at least 8 ft. from ground <ul style="list-style-type: none"> Top of sign must be no more than 12 ft. from ground 		
Street Level [2]				
Maximum Number	2/elevation			
Maximum Area	32 sq. ft.	8 sq. ft.	32 sq. ft.	32 sq. ft.
Placement		See lower level standards above	<ul style="list-style-type: none"> Below the bottom of the second level window on multi-story buildings 	
Second Level				
Maximum Number	1/elevation			
Maximum Area	18 sq. ft.	8 sq. ft.	<ul style="list-style-type: none"> Street Level: 24 sq. ft. Second Level: 18 sq. ft. 	18 sq. ft.
Placement			<ul style="list-style-type: none"> Street Level: No higher than the bottom of a second level window Second Level: No higher than the bottom of a third story window 	
Upper Level (Third level and above)				
Maximum Number	1/elevation			
Maximum Area	18 sq. ft.	Not allowed	Not allowed	18 sq. ft.
Other			<ul style="list-style-type: none"> If now higher level windows exist, placement may be 40 inches above finished floor level (max.) 	Signs spread across multiple windows will be counted as 1 sign
<p>[1] Single-use Building: A business that occupies an entire building with a frontage equal to or greater than 48 ft. may choose to install only 1 sign per elevation. In that case, the maximum size of the single sign is the lesser of 64 %t of the wall space of 1 elevation, provided all other criteria are met. Wall sign placement is not restricted to below the second story window sill.</p> <p>[2] Large Businesses: Street level tenants with 48 feet or more of frontage and located in multiple-tenant buildings may choose to install only 1 sign per elevation as an alternative to any 2 sign types. In that case, the maximum size of the single sign is the lesser of 48 sq. ft. or 15% of the wall space of 1 elevation, provided all other criteria are met. Wall signs must be placed no higher than the bottom of the second story window sill.</p>				

(B) Table 4.10-7 sets forth standards for other business signs permitted in the M-DT district.

Table 4.10 – 7: Other M-DT Business Signs					
	Building Directories	Building Identification	Mobile ⁸⁹¹	Directional	Signs Adjacent to Providence Road
Aggregate Size Limitation			15 % of the wall space of one building elevation. All signs identified in this Table, except Building Directories and Identification Signs, and Table 4.10 - 6 contribute to this aggregate amount.		
Maximum Number	1/Building Entrance	1/Building	1/street level entrance	1/automotive entrance and exit	Signs on any building

⁸⁹¹ Existing standard revised to refer to Mobile Signs rather than Sandwich Boards. Mobile Signs is a newly defined term that includes sandwich boards. This revised standard clarifies that mobile signs can only be attached to property owned by the business owner.

Table 4.10 – 7: Other M-DT Business Signs					
	Building Directories	Building Identification	Mobile ⁸⁹¹	Directional	Signs Adjacent to Providence Road
Maximum Area	6 sq. ft.	18 sq. ft.	8 sq. ft.	8 sq. ft.	elevations adjacent to Providence Road, except for City-owned property or vacant property greater than 150 ft. in depth between the building elevation and the road ROW are subject to the sign regulations outside of the M-DT district in Section 29-4.100.
Maximum Height				3 ft. (measured from grade immediately below sign)	
Location			<ul style="list-style-type: none"> ▪ On the sidewalk directly in front of the business; ▪ Provided that a straight, unobstructed pathway at least 60 inches wide is maintained on the sidewalk 		
Other			Shall not be attached to any property not owned by the business owner to whom the sign is permitted.		

(4) Industrial Use Signs⁸⁹²

(i) Freestanding Signs

One freestanding sign may be allowed per adjacent street right-of-way and further regulated by Section 29-4.10(f)(1).

(ii) Wall Signs

In addition to the freestanding sign permitted above, each business shall be allowed on-premises wall, canopy and awning signs not to exceed the maximum surface area allowed under Section 29-4.10(f)(2).

(iii) Sale or Lease of Land

For lots of one acre or larger, one (1) on-premises sign not exceeding twelve (12) square feet in sign surface area per acre, with a maximum sign surface area of thirty-two (32) square feet, is allowed to advertise land for sale or rent. For lots of less than one (1) acre in size, one sign of not exceeding twelve (12) square feet in sign area is allowed.

(iv) Sale or Lease of Building

One on-premises sign, not exceeding thirty-six (36) square feet in sign surface area, shall be allowed to advertise the sale, lease or rent of industrial space.

⁸⁹² Current Sec. 23-15.

(v) Industrial Parks

In industrial parks, one industrial park master sign, shall be allowed for each adjacent street right-of-way, in accordance with Section 29-4.10(f)(1).

(e) Regulations Based on Type of Sign⁸⁹³

(1) Banners⁸⁹⁴

(i) Special Business District

The Special Business District may attach banners to City street light standards located on public rights-of-way, or within public utility easements, adjacent to public rights-of-way, within an area defined as follows: bound on the north by Rogers Street, on the east by College Avenue, on the south by Elm Street and on the west by Providence Road. Attachment of the banners shall be done under the following conditions:

- (A) The message conveyed relates to cultural, civic or other City wide activities.
- (B) No banner can carry a political or nonsecular message.
- (C) The Columbia Special Business District, after executing an attachment agreement with the City, shall have the exclusive right to install banners on City street light standards in the above-described area. The attachment agreement shall set out requirements for the design of attachment brackets and installation, removal, maintenance, and responsibility for such attachment brackets and banners. Said requirements shall be set out in banner regulations promulgated by the City manager and reviewed annually and approved by the Council.
- (D) Banners shall conform to design specifications established by the Special Business District.

(ii) College, University, or Hospital

A college, university or hospital may attach banners to City street light standards located on public rights-of-way, or within public utility easements, adjacent to the campus of the college, university or hospital. Attachment of the banners shall be done under the following conditions:

- (A) The banners shall be limited to identifying the name of the college, university or hospital or conveying a message related to cultural, civic or City-wide activities.
- (B) No banner can carry a political or nonsecular message.
- (C) The college, university or hospital, after executing an attachment agreement with the City, shall have the exclusive right to install banners on the City street light standards described in the agreement. The attachment agreement shall set out requirements for the design of attachment brackets and installation, removal, maintenance, and responsibility for such attachment brackets and banners.

⁸⁹³ Consolidates all sign type regulations, with the exception of current Section 23-19 (Office Signs) which reiterates the requirements in existing Section 23-13(Business Signs – For uses outside the CBD) now Section 29-4.10(d)(2).

⁸⁹⁴ Current Sec. 23-8.5.

(iii) Library

Notwithstanding any other provisions of this Section 29-4.10, a public library may display banners subject to the following conditions:

(A) Attachment to City street light standards

Upon entering into an attachment agreement with the City, a public library may attach banners to City street light standards located on public rights-of-way, or within public utility easements, adjacent to the library premises, including library parking lots. The library, after executing the attachment agreement with the City, shall have the exclusive right to install banners on the City street light standards described in the agreement. The attachment agreement shall set out requirements for the design of attachment brackets and installation, removal, maintenance and responsibility for such attachment brackets and banners.

(B) Attachment to library light standards and sign poles

A public library may attach banners to library light standards and to library sign poles.

(C) Parking lot sign poles

Each library parking lot shall be allowed up to four (4) banner sign poles for each adjacent street right-of-way. The banners on the poles shall be the same height as the banners on the library light standards in the lot. The poles shall be located at least four (4) feet from the street right-of-way.

(D) Banner content

The banners shall be limited to identifying the name of the library or library facility or conveying a message related to a cultural, civic or City-wide activity. No banner can carry a political or nonsecular message.

(E) Banner number and size

There is no limit on the number of banners, however, banners shall not exceed sixteen (16) square feet in sign surface area per side or a total of thirty-two (32) square feet per banner.

(F) Banners other than for library identification

If a banner is for a purpose other than identifying the library or library facility, the banner shall not remain in place for more than thirty (30) days.

(2) Billboards⁸⁹⁵

(i) Locations⁸⁹⁶

⁸⁹⁵ Current Sec. 23-16. Subsections 1 and 2 have been combined to avoid repetition.

⁸⁹⁶ Simplifies current Sections 23-16(a)-(c).

Billboards shall be allowed in areas zoned M-N, M-C, M-DT, or a PD district permitting commercial uses, M-BP, or IG, provided that the location is within sixty (60) feet of the nearest edge of the right-of-way of:

- (A) Any interstate (I-70); or
- (B) Any freeway (U.S. 63); or
- (C) Any other highways where the City is mandated by law to allow billboards.

(ii) Regulations

All billboards shall comply with the following regulations:

- (A) Billboards shall be oriented toward traffic on the interstate, freeway or highway.
- (B) No billboard along any interstate shall be erected closer than two thousand (2,000) feet from another billboard. No billboard along any freeway shall be erected closer than four thousand (4,000) feet from another billboard. No billboard along any highway shall be erected closer than one thousand (1,000) feet from another billboard.
- (C) No billboard shall be erected closer than five hundred (500) feet from any area zoned R-1, R-2, R-MF, R-MH, A, a PD district that allows residential uses,⁸⁹⁷ or any equivalent county zoning.
- (D) No billboard shall be erected closer than five hundred (500) feet from any residential structure.
- (E) No billboard shall be erected closer than five hundred (500) feet from any religious institution, elementary/secondary school, or public park, playground or golf course.⁸⁹⁸
- (F) No billboard shall be erected closer than five hundred (500) feet from any historical site or historical district so designated by the federal, state or City government.
- (G) No billboard shall be erected closer than one hundred (100) feet from any on-premises freestanding sign.
- (H) No billboard shall be erected within five hundred (500) feet of an interchange or intersection at grade. The five hundred (500) feet shall be measured from the beginning or ending of the pavement widening at the exit from or entrance to the main traveled way.
- (I) The maximum height of a billboard along any interstate is forty-five (45) feet. The maximum height of a billboard along any freeway is thirty (30) feet. The maximum height of a billboard along any highway is twelve (12) feet.
- (J) The maximum surface area of a billboard along any interstate is two hundred eighty-eight (288) square feet. The maximum surface of a billboard along any freeway is one hundred twenty-eight (128) square feet. The maximum surface area of a billboard along any highway is seventy-two (72) square feet.

⁸⁹⁷ PUD replaced by “a PD that allows residential uses.”

⁸⁹⁸ New use names replace “church, school, or park.”

- (K) Billboards shall have only one sign surface area except that billboards may have two (2) sign surface areas if the surface areas are oriented in opposite directions. No V-shaped billboards are allowed.
- (L) External lighting of billboards, such as floodlights, thin line and gooseneck reflectors are permitted, provided the light source is directed upon the face of the sign and is effectively shielded so as to prevent beams or rays of light from being directed toward any residential structure or into any portion of the main traveled way of the interstate, freeway, or highway, and the lights are not of such intensity so as to interfere with the residential use of property or to cause glare, impair the vision of the driver of a motor vehicle, or otherwise interfere with a driver's operation of a motor vehicle.
- (M) No billboard shall have wind-actuated elements or any material that glistens or sparkles.
- (N) No billboard shall be erected closer than five hundred (500) feet from a City greenspace access easement, greenspace conservation easement or greenspace trail easement.
- (O) No billboard shall have any revolving, moving, flashing, blinking or animated characteristics.
- (P) No billboard shall have any electronic, digital, tri-vision or other changeable copy display.

(3) Civic Signs⁸⁹⁹

One on-premises freestanding sign shall be allowed for any religious institution or governmental entity per street block in accordance with Section 29-4.10(f)(1). One on-premises illuminated wall sign for each street frontage shall be allowed in accordance with Section 29-4.10(f)(2).

(4) Construction Signs⁹⁰⁰

One (1) on-premises unilluminated construction sign, a wall or freestanding sign, which may indicate the names of architects, engineers, builders, contractors, owners and financial institutions shall be allowed at the site of construction, provided such signs shall be erected only after the issuance of a City building permit and removed upon issuance of a certificate of occupancy by the City. The maximum height shall be eight (8) feet and the maximum size shall be sixty-four (64) square feet.

(5) Hotel Signs⁹⁰¹

Motels and hotels shall be allowed the following signs:

⁸⁹⁹ Current Sec. 23-17.

⁹⁰⁰ Current Sec. 23-20.

⁹⁰¹ Current Sec. 23-26.

(i) Wall Signs

Motels and hotels shall be allowed on-premises wall, canopy and awning signs on each wall facing a street, with the sign surface area not to exceed the maximum surface area allowed under Section 29-4.10(f)(2).

(ii) Projecting Sign

Except in the central business district, one on-premises projecting sign not to exceed eight (8) feet in projection from the building wall shall be allowed on each wall facing a street. In the case of a one-story building, such signs may extend ten (10) feet above the roof line or parapet of the building. In all other cases such signs shall not extend above the roof line or parapet of the building.

(iii) Freestanding Signs

One on-premise freestanding sign in accordance with Section 29-4.10(f) (except that only one shall be allowed).

(iv) Supplemental Signs

Supplemental signs, not to exceed three (3) for each street frontage, may be used to advertise additional facilities and services (restaurant, bar, night club, etc.) available at the motel or hotel. Such supplemental signs shall be wall signs and shall have a maximum sign surface area of one hundred (100) square feet per street frontage.

(v) Marquee Signs

Hotels with an entrance marquee shall be permitted one (1) marquee sign with a maximum sign surface area not to exceed two (2) square feet per linear foot of frontage for the marquee.

(6) Light Vehicle Service and Repair Signs⁹⁰²

Light vehicle service and repair establishments shall be allowed a total of three (3) of the following four (4) signs:

- (i) One freestanding sign, indicating the name, emblem or symbol of the company, in accordance with Section 29-4.10(f)(1).
- (ii) One on-premises freestanding sign, indicating services available, in accordance with Section 29-4.10(f)(1).
- (iii) On-premises wall, canopy and awning signs not exceeding the maximum surface area allowed under Section 29-4.10(f)(2).
- (iv) One on-premises roof sign not exceeding two (2) square feet in sign surface area per linear foot of building frontage. No roof sign shall extend beyond the highest point of the roof upon which it is located.

(7) Noncommercial Signs⁹⁰³

⁹⁰² Current Sec. 23-23. Name revised from Automobile Service Station to match Permitted Use Table.

Except as otherwise allowed or restricted in this Section 29-4.10, noncommercial signs are subject to the following restrictions:

- (i) They shall be ground or wall signs, except when placed in a location where other types of signs are allowed.
- (ii) They shall not exceed sixteen (16) square feet in sign surface area per premises; provided that any noncommercial sign may have a sign surface area as large as that of any allowable sign in the same location.
- (iii) They shall not exceed a maximum height of ten (10) feet; provided that any noncommercial sign may be as high as any allowable sign in the same location.
- (iv) The area and height limitations of this Section 29-4.10(e)(7) shall not apply to any noncommercial message placed on a structure that has existed as a nonconforming billboard.
- (v) Any structure that may be lawfully used for an on-premises commercial sign may be used for a noncommercial sign.
- (vi) The restrictions of this subsection (7) shall not apply to banners on the campus of any college, university or hospital.⁹⁰⁴

(8) Parking Lot Signs⁹⁰⁵

On-premises wall or freestanding signs designating the conditions of use or identity of an automobile parking area and not less than eighteen (18) inches by twenty-four (24) inches in dimension, nor greater than thirty-two (32) square feet in sign surface area, shall be allowed. Freestanding signs shall not be more than eight (8) feet in height, and shall be set back a minimum of ten (10) feet from the property line.

(9) Automatic Teller Machine (ATM) Signs⁹⁰⁶

(i) Directional Signs

One (1) on-premises sign, not exceeding eight (8) square feet in sign surface area, and not exceeding three (3) feet in height as measured from the grade immediately below the sign, shall be allowed at each automotive entrance and exit to the ATM.

(ii) Stand-alone Signs

A stand-alone automatic teller machine shall be allowed a total of seventy-five (75) square feet of wall or canopy sign surface area. The sign surface area shall be determined as the area of the basic geometric shape that encloses the message. Sign area for an automated teller machine located within the footprint of an occupied building shall be considered as part of the permitted wall sign surface area for the occupied building.

⁹⁰³ Current Sec. 23-18.

⁹⁰⁴ Revised to delete banner dimensional standards since banners are addressed in a subsection (e)(1) above and the two sets of regulations may be inconsistent.

⁹⁰⁵ Current Sec. 23-21.

⁹⁰⁶ Combines current sections 23-22(c)(regarding directional signs) and 23-24.1(regarding stand-alone signs).

(10) Theater Signs⁹⁰⁷

Notwithstanding any other provisions of this Section 29-4.10, theaters and drive-in theaters shall be allowed any two (2) of the following five (5) types of signs:

- (i) One marquee sign not to exceed two (2) square feet for every linear foot of building frontage.
- (ii) One wall sign not to exceed the maximum surface area allowed under Section 29-4.10(f)(2).
- (iii) One freestanding sign with a maximum of two hundred eighty-eight (288) square feet in area and thirty (30) feet in height. However, no sign shall be greater in area than thirty-two (32) square feet for each screen in the theater, plus thirty-two (32) square feet.
- (iv) Each establishment of one or two (2) stories may be allowed one on-premises roof sign for each wall facing a street. The maximum sign surface area shall be determined at the rate of two (2) square feet per linear foot of building frontage. No roof signs shall exceed the highest point of the roofs upon which they are located.
- (v) One awning sign not to exceed the maximum surface area allowed under Section 29-4.10(f)(2).

(11) Temporary Signs⁹⁰⁸

Temporary signs may be allowed subject to the following conditions:

- (i) A permit in accordance with Section 29-5.4(h) shall be required.
- (ii) Such signs shall not exceed thirty-two (32) square feet in size or four (4) feet in height.
- (iii) The sign setback requirements of this chapter shall apply.
- (iv) No person shall be allowed to display a temporary sign or signs on a parcel of land for more than fourteen (14) days in a calendar year.

(12) Time and Temperature Signs⁹⁰⁹

Time and temperature signs with a maximum sign surface area of thirty (30) square feet may be placed in any commercial or industrially zoned district, subject to all other restrictions on signs in the commercial or industrially zoned district in which they are placed.

(f) Area, Height and Placement Standards⁹¹⁰

(1) Freestanding Signs

- (i) Freestanding signs shall be regulated by the standards in Table 4.10-8 as modified by the provisions of subsection (f)(2) below, and by other regulation of this subsection (f).

Table 4.10-8: Free Standing Sign Regulations

⁹⁰⁷ Current Sec. 23-24.

⁹⁰⁸ Current Sec. 24-8.6.

⁹⁰⁹ Current Sec. 23-27.

⁹¹⁰ Current Sec. 23-25.

Street Class	R-1, R-2, and A-1	R-MF and R-MH	M-OF	M-N, M-C, M-BP	I-G
Local residential	For buildings originally designed and constructed for residential occupancy; only 1 sign per site. 16 sq. ft. max area, 4 ft. max ht. Must be a monument sign. All other buildings: 32 sq. ft. max. area, 6 ft. max. ht. Must be a monument sign.	For buildings originally designed and constructed for residential occupancy; only 1 sign per site. 16 sq. ft. max area, 4 ft. max ht. Must be a monument sign. All other buildings: 32 sq. ft. max. area, 6 ft. max. ht. Must be a monument sign.	32 sq. ft. max. area, 6 ft. max. ht.	32 sq. ft. max. area, 6 ft. max. ht.	32 sq. ft. max. area, 6 ft. max. ht.
Collector or local nonresidential	For buildings originally designed and constructed for residential occupancy; only one sign per site. 16 sq. ft. max area, 4 ft. max ht. Must be a monument sign. All other buildings: 32 sq. ft. max. area, 6 ft. max. ht. Must be a monument or pylon sign	For buildings originally designed and constructed for residential occupancy; only one sign per site. 16 sq. ft. max area, 4 ft. max ht. Must be a monument sign. All other buildings: 32 sq. ft. max. area, 6 ft. max. ht. Must be a monument or pylon sign	48 sq. ft. max. area, 10 ft. max. ft.	64 sq. ft. max. area, 12 ft. max. ht.	64 sq. ft. max. area, 12 ft. max. ht.
Arterial	32 sq. ft. max. area, 6 ft. max. ht. (Must be a monument or pylon sign)	32 sq. ft. max. area, 6 ft. max. ht. (Must be a monument or pylon sign)	64 sq. ft. max. area, 12 ft. max. ht.	64 sq. ft. max. area, 12 ft. max. ht., for each 1.25 ft. setback, add 3.55 sq. ft./128 max. and 1 ft. ht. to 30 ft. max.	64 sq. ft. max. area, 12 ft. max. ht., for each 1.25 ft. setback, add 3.55 sq. ft./ 128 max. and 1 ft. ht. to 30 ft. max.
Expressway	32 sq. ft. max. area, 6 ft. max. ht.	32 sq. ft. max. area, 6 ft. max. ht.	64 sq. ft. max. area, 12 ft. max. ht.	64 sq. ft. max. area, 12 ft. max. ht., for each 1.25 ft. setback, add 3.55 sq. ft./128 max. and 1 ft. ht. to 30 ft. max.	64 sq. ft. max. area, 12 ft. max. ht., for each 1.25 ft. setback, add 3.55 sq. ft./128 max. and 1 ft. ht. to 30 ft. max.
Interstate freeway	32 sq. ft. max. area, 6 ft. max. ft.	128 sq. ft. max. area, 12 ft. max. ht.	128 sq. ft. max area, 30 ft. max. ht.	128 sq. ft. max. area, 30 ft. max. ht., for each 2.00 ft. setback, add 10.65 sq. ft./288 max. and 1 ft. ht. to 45 ft. max.	128 sq. ft. max. area, 30 ft. max. ht., for each 2.00 ft. setback, add 10.65 sq. ft./288 max. and 1 ft. ht. to 45 ft. max.

(ii) Notwithstanding the existing street classifications, the area, height and placement of freestanding signs on property adjacent to the following arterial streets, because of their proximity to existing or planned residential neighborhoods and environmentally sensitive areas, shall be regulated by the collector street provisions of the Table 4.10-8.

(A) Stadium Boulevard (State Rt. E) north of Interstate 70

- (B) Creasy Springs Road
 - (C) Paris Road south of Business Loop 70
 - (D) Waco Road
 - (E) Mexico Gravel Road/Brown Station Road
 - (F) Ballenger Lane
 - (G) Clark Lane, east of Olympic Boulevard
 - (H) Broadway, east of Tenth Street and west of Sixth Street
 - (I) New Haven Road
 - (J) Old 63
 - (K) College Avenue
 - (L) Rangeline Street from Rogers Street to Business Loop 70
 - (M) Providence Road between Stewart Road and Stadium Boulevard; and, north of Bear Creek
 - (N) Nifong Boulevard, west of Monterey Drive and east of Buttonwood Drive
 - (O) Forum Boulevard
 - (P) West Boulevard
 - (Q) Scott Boulevard
 - (R) Chapel Hill Road
 - (S) Sinclair Street
 - (T) Old Plank Road.
 - (U) Vandiver Driver, east of Parker Street
- (iii) The area, height and placement of freestanding signs on property adjacent to the following collector and local, non-residential streets, because they serve established business areas or are near an interstate or expressway, shall be regulated by the arterial street provisions of the Table 4.10-8:
- (A) I-70 Drive Northwest from Stadium Boulevard to Garden Drive
 - (B) I-70 Drive Southwest
 - (C) I-70 Drive Southeast
 - (D) West Worley Street from eight hundred (800) ft. east of Bernadette Drive to one thousand five hundred (1,500) ft. west of Stadium Boulevard
 - (E) West Ash Street from eight hundred (800) ft. east of Bernadette Drive to one thousand five hundred (1,500) ft. west of Stadium Boulevard
 - (F) Bernadette Drive from Stadium Boulevard to West Worley Street
 - (G) Fairview Road between Bernadette Drive and Bernadette Place
 - (H) Bernadette Place

- (I) Knipp Street
 - (J) Hutchens Drive
 - (K) Beverly Drive
 - (L) Green Meadows Road from Providence Outer Roadway to one hundred fifty (150) feet west of Green Meadows Way
 - (M) Parkade Boulevard from Business Loop 70 to Interstate 70
 - (N) Garth Avenue from Business Loop 70 to Interstate 70
 - (O) Indiana Avenue
 - (P) Grand Avenue from Business Loop 70 to Dakota Avenue
 - (Q) Colorado Avenue
 - (R) Dakota Avenue
 - (S) Illinois Avenue
 - (T) Nebraska Avenue
 - (U) 7th Street from Business Loop 70 to Interstate 70
 - (V) Commerce Court
 - (W) Hathman Place
 - (X) Bowling Street, south of Business Loop 70
 - (Y) Belmont Street
 - (Z) Peach Tree Drive
- (iv) The interstate and freeway category in subsection (a) shall apply only to property within one hundred (100) feet of the right-of-way of Interstate 70 and U.S. 63 and property, either in whole or in part, within one thousand (1,000) feet of the mid-point of the intersections with Interstate 70 and U.S. 63.
- (v) Street classifications are defined by the Major Thoroughfare Plan of the City of Columbia and the Subdivision Regulations of the City of Columbia.
- (vi) Freestanding signs located on interior lots shall be set back from each side lot line a distance equal to twenty-five (25) percent of the lot width. On corner lots, the side setback shall be equal to twenty-five (25) percent of the lot width and applied only to the side lot line not adjacent to a street right-of-way.
- (vii) Freestanding signs shall, at a minimum, be set back ten (10) feet from the right-of-way line, except that freestanding signs located on through lots shall be set back from the right-of-way lines no more than one-half ($\frac{1}{2}$) the lot depth. Freestanding signs located on corner lots abutting three (3) or more street rights-of-way shall be set back from the front and rear lot lines no more than one-half ($\frac{1}{2}$) the lot depth.
- (viii) Where increased sign area and height are allowed by reason of increased setback, the setback shall be measured from the point of minimum setback.

- (ix) In any PD zoning district that allows non-residential uses,⁹¹¹ freestanding sign area, height, placement and number shall be subject to review and approval of development plans or final development plans. Specific regulations shall be recommended to and approved by the Council as part of a development plan or final development plan, or in the case of minor revisions, by the Commission or the Director Changes to specific sign regulations within a development plan shall only be approved through compliance with zoning ordinance procedures for review and approval of development plans and final development plans and changes to them.
- (x) Within M-DT, signage shall be regulated by the provisions of Section 29-4.10(d)(3).
- (xi) Freestanding sign regulations for R-1, R-2, R-MF and R-MH zoning districts found in Table 4.10-8 shall only be applicable to signs for identification of manufactured home parks and subdivisions or neighborhood areas regulated under Section 29-4.10(d)(1). Any non-residential uses allowed in the A, R-1, R-2, and R-MF districts shall be allowed freestanding signage in accordance with Table 4.10-8.

(2) On-premises Wall, Canopy and Awning Signs ⁹¹²

- (i) On-premises wall, canopy and awning signs shall be regulated by the following Table 4.10-9 of sign regulations in accordance with the more detailed regulations of this section:

Table 4.10-9: On Premise Wall, Canopy, and Awning Signs					
Street Class	R-1, R-2, and A-1	R-MF and R-MH	M-OF	M-N, M-C, M-DT, M-BP	I-G
Local Residential	32 sq. ft. max area	32 sq. ft. max area	32 sq. ft. max area	32 sq. ft. max area	32 sq. ft. max area
Collector or Local Non-Residential	32 sq. ft. max area	32 sq. ft. max area	48 sq. ft. max area	64 sq. ft. max area; except that if the business does not have a freestanding sign, for each 1.25 feet of setback, add 3.55 sq. ft. to a 128 sq. ft. max	64 sq. ft. max area; for each 1.25 setback add 3.55 sq. ft. to a 128 sq. ft. max area
Arterial	32 sq. ft. max area	32 sq. ft. max area	64 sq. ft. max area	64 sq. ft. max area; for each 1.25 ft. setback, add 3.55 sq. ft. to a 192 sq. ft. max area	64 sq. ft. max area; for each 1.25 ft. setback, add 3.55 sq. ft. to a 192 sq. ft. max area
Expressway	32 sq. ft. max area	32 sq. ft. max area	64 sq. ft. max area	64 sq. ft. max area; for each 1.25 ft. setback, add 3.55 sq. ft. to a 256 sq. ft. max area	64 sq. ft. max area; for each 1.25 ft. setback, add 3.55 sq. ft. to a 256 sq. ft. max area
Interstate Freeway	32 sq. ft. max area	128 sq. ft. max area	128 sq. ft. max area	128 sq. ft. max area; for each 2.00 ft. setback, add 10.65 sq. ft./ 288 max	128 sq. ft. max area; for each 2.00 ft. setback, add 10.65 sq. ft./ 288 max

⁹¹¹ Replaces “planned office, planned commercial, and planned industrial.”

⁹¹² Current Sec. 23-25.1.

- (ii) Arterial streets listed in Section 29-4.10(f)(1) shall be regulated by the collector street provisions of Table 4.10-9.
- (iii) Collector and local, non-residential streets listed in Section 29-4.10(f)(1) shall be regulated by the arterial street provisions of Table 4.10-2.
- (iv) The interstate and freeway category in Table 4.10-2 shall apply only to property within one hundred (100) feet of the right-of-way of Interstate 70 and U.S. 63 and property, either in whole or in part, within one thousand (1,000) feet of the midpoint of the intersections with Interstate 70 and U.S. 63.
- (v) Street classifications are defined by the Major Thoroughfare Plan of the City of Columbia and the Subdivision Regulations of the City of Columbia.
- (vi) Where increased sign area is allowed by reason of increased setback, the setback shall be measured from a point thirty-five (35) feet from the curb or, if there is no curb, then thirty-five (35) feet from the edge of the pavement.
- (vii) The surface area of any wall sign shall not exceed fifteen (15) percent of the area of the wall or twenty (20) percent of the area of the wall if the business does not have a freestanding sign.
- (viii) In any PD zoning district that allows nonresidential uses,⁹¹³ on-premises wall, canopy and awning sign surface area shall be subject to review and approval of development plans or final development plans. Specific regulations shall be recommended to and approved by the Council as part of a development plan or final development plan, or in the case of minor revisions, by the Commission or Director. Changes to specific sign regulations within a development plan shall only be approved through compliance with zoning ordinance procedures for review and approval of development plans and final development plans and changes to them.
- (ix) When an establishment has frontage on more than one street, the sign surface area for wall, canopy and awning signs shall be determined separately for each street.

29-4.11 Operation and Maintenance Standards⁹¹⁴

(a) Maintenance Requirement

(1) General⁹¹⁵

When the standards and procedures of this Code or by conditions attached to any permit, approval, or variance require that any building or site feature be constructed or installed, the property owner is responsible for maintaining those building or site features in good repair, and for replacing them if they are damaged or destroyed or, in the case of living materials, if they become diseased or die after installation. In addition, property owners shall be responsible for each of the additional maintenance, replacement, and operating standards set forth in this Section 29-4.11.

⁹¹³ Replaces “planned office, planned commercial, and planned industrial.”

⁹¹⁴ New section, per the Detailed Outline, that consolidates the maintenance and operating provisions relative to the building and site features to be built in accordance with these Form and Development Controls.

⁹¹⁵ New general provision.

(2) Landscape Maintenance⁹¹⁶

- (i) The trees, shrubs, fences, walls and other landscaping materials depicted on approved plans shall be considered as elements of the project in the same manner as parking, building materials and other elements. The property owner and any agents who are authorized to maintain the property shall be responsible for the continued maintenance of those items. Plant material that exhibits evidence of insect pest disease or damage shall be appropriately treated, and dead plants promptly removed and replaced within the next planting season. All landscaping will be subject to periodic inspection by the City to ensure compliance.
- (ii) Any trees required to be installed by this Ordinance that are lost to damage or disease within two (2) years after installation, shall be replaced by the property owner within six (6) months at a ratio of one (1) tree per one (1) inch of DBH lost. Replacement trees must be at least two (2) inch in caliper size. Shrubbery or other plantings that die within eighteen (18) months of installation shall be replaced in kind within six (6) months.

(3) Parking Area Maintenance⁹¹⁷

All surface parking areas and parking structures shall be maintained in clean and neat condition. Potholes, surface damage, and other hazardous conditions shall be promptly repaired, and litter and debris shall be removed on a regular basis.

(4) Sign Maintenance⁹¹⁸

- (i) Any private sign that has become damaged, dilapidated, or dangerous shall be immediately, or within the time frame mandated by the Director, repaired or removed. If the paint on any sign has checked, peeled, or flaked to the extent that the sign cannot be read in whole or in part, the sign shall be repainted or removed. Signs that contain messages that have become obsolete because of the termination of the use or business or product advertised, or for some other reason, shall have such message removed within sixty (60) days of its becoming obsolete.⁹¹⁹
- (ii) If maintenance to meet the standards in subsections (i) is neglected, the City shall notify the sign owner in writing of the type of maintenance required. If the maintenance is not provided within sixty (60) days, the City may revoke the permit and, confiscate the sign face, or take any other action authorized by Section 29-5.6 (Violations, Enforcement, and Penalties).

(5) Stormwater Management Facilities⁹²⁰

- (i) Maintenance of all stormwater management facilities shall be ensured through the creation of a formal maintenance covenant, which must be approved by the Director of

⁹¹⁶ Current Sec. 29-25(g)(3) and 12A-49(f). Second paragraph added since first draft.

⁹¹⁷ New section.

⁹¹⁸ New section.

⁹¹⁹ This new provision differs from Section 29-4.10(c)(5) above (requiring removal of a freestanding sign within 6 months after the business or uses advertised on the sign have been discontinued) because it relates to message removal (w/in 60 days), not sign removal.

⁹²⁰ Current Sec. 12A-95.

Public Works before final plat or plan approval and subsequently be recorded by the City with the Boone County Recorder of Deeds. The covenant will include a schedule for maintenance of the facilities to insure proper function of each stormwater management facility. The covenant shall also include a schedule for inspections of each facility to ensure proper function of each stormwater management facility between scheduled maintenance functions.

- (ii) The Director of Public Works, in lieu of a maintenance covenant, may accept dedication of stormwater management facilities for City maintenance based on specific criteria developed by the Director of Public Works and generally limited to those stormwater management facilities that serve multiple properties. Any stormwater management facility accepted by the City for maintenance must meet all the requirements of this Code and include adequate access easements for inspection and regular maintenance.
- (iii) All stormwater management facilities shall be inspected at least once each year, during the period beginning on March 1 and ending on May 31, to document maintenance and repair needs and to ensure compliance with this Code. The facilities should also be inspected after each heavy rainfall and any necessary maintenance should be performed such as removal of silt, litter and debris from all catch basins, inlets, pipes and outlet structures.
- (iv) All maintenance needs must be addressed in a timely manner. The inspection and maintenance schedule may be modified for each facility based on results of the initial inspection program as deemed necessary to be fully compliant with the purpose of this article.
- (v) The Director of Public Works may inspect any stormwater management facility as set forth in Section 12A-192. Inspections may involve full evaluation of the physical structure and condition of the facility; review of the prior inspection, repair and maintenance records; and sampling of the surface water, discharges and groundwater as deemed necessary.
- (vi) Persons responsible for the operation and maintenance of stormwater management facilities shall make records of the inspection, repair, maintenance and any modifications to the facilities and shall retain these records for a minimum of five years. These records shall be made available to the Director of Public Works during inspection of the facility or at any time upon request. Inspection and maintenance records shall be submitted to the director by June 1 of each year. Any failure to submit these records shall be unlawful and subject to the penalties of Section 12A-11 and Section 29-5.6.
- (vii) Failure to properly maintain a stormwater management facility is hereby declared a nuisance and may be abated under the procedures set forth in section 12A-202 and 29-5.6.

(b) Operating Standards

All structures, uses, and activities in all zone districts shall be used or occupied so as to avoid creating any dangerous, injurious, noxious or otherwise objectionable condition that would create adverse impacts on the residents, employees, or visitors on the property itself or on neighboring properties. Uses and activities that operate in violation of applicable state or federal statutes or this Code are presumed to be a violation of this Section 29-4.11(b). Property

owner responsibilities under this section shall include, but shall not be limited to, the following standards:

(1) Glare

Direct or reflected glare, including glare from exterior lighting, shall not be visible at the property line.

(2) Noise

All activities shall comply with state statutes and be conducted so as to avoid the creation of any noise that would create a public nuisance or a nuisance interfering with the use and enjoyment of adjacent properties. Any amplified sound equipment shall be mounted so as to direct sounds inward from properties, rather than outward towards property boundaries. Amplified sounds shall not be allowed to cross property lines unless a temporary use permit has been issued for that purpose in connection with a special event.

(3) Odors

All activities shall comply with state statutes and regulations. No operation shall cause or allow the emission of any odorous air contaminant that is a nuisance, hazard or exceeds applicable federal or state regulations. Detailed plans for the prevention of odors crossing property lines may be required before the issuance of a development or building permit.

(4) Smoke

All activities shall comply with state statutes and regulations. No operation shall discharged into the atmosphere any contaminant for which threshold limit values are listed for working atmosphere by the American Conference of Governmental Industrial Hygienists in such quantity that the concentration of the contaminant at ground level at any point beyond the boundary of the property shall at any time exceed the threshold limit established by such conference or by any state or federal law or regulation. Visible emissions of any kind at ground level past the lot line of the property on which the source of the emissions is located are prohibited.

(5) Vibration

No use or activity shall cause inherent and recurring generated vibration perceptible without instruments at any point along the property line. Temporary construction is excluded from this restriction.

(6) Hazardous Materials

All uses and activities shall comply with state statutes and regulations regarding the use, storage, handling, and transportation of flammable liquids, liquefied petroleum, gases, explosives, hazardous materials, hazardous wastes, toxic materials and solid wastes, as those terms are defined by applicable statutes, rules, regulations, or ordinances.

(7) Materials and Waste Handling

All materials or wastes that might cause fumes or dust or that constitute a fire hazard or that may be edible by or otherwise be attractive to rodents or insects shall be stored outdoors only in closed, impermeable trash containers that are screened in accordance with the requirements of this Code. Lubrication and fuel substances shall be prevented from leaking and/or draining onto the ground. All sewage and industrial wastes shall be treated and disposed of in compliance with the water quality standards applicable of the state and federal government.

(8) Electromagnetic Radiation

No use or activity shall create or operate an intentional source of electromagnetic radiation that does not comply with the then current regulations of the Federal Communications Commission regarding that type of electromagnetic radiation source. In case of governmental communications facilities, governmental agencies, and government owned plants, the regulations of the interdepartmental Radio Advisory Committee shall take precedence over the regulations of the Federal Communications Commission, regarding such sources of electromagnetic radiation.

(9) Nuclear Radiation

No use or activity shall cause radiation at any property line that violates any regulation of the United States Nuclear Regulatory Commission.

(10) Nuisance Prohibited

All structures and land uses within the City shall be constructed, used, operated, and maintained in such a manner so as to be free of nuisances, as defined in state law.