

**Sec. 146-135. - Landscape requirements.**

- (a) Purpose. Landscaping is accepted as adding value to property and is in the interest of the general welfare of the city. Therefore, landscaping is hereafter required of new development.
- (b) Scope and enforcement.
- (1) The provisions of this section shall be administered by the landscape administrator. The standards and criteria contained within this section are deemed to be minimum standards and shall apply to all new construction or any existing development, which is altered by increasing the floor area by 30 percent or more of the originally approved floor area, either by a single expansion or by the cumulative effect of a series of expansions.
  - (2) All existing structures, which are a conversion or change in use requiring the expansion of or significant improvements to meet parking standards shall upgrade landscaping on the site and meet these requirements to the extent practical. The director of planning or his designee shall have the ability to waive landscape requirements on a case-by-case basis if unique circumstances exist on the property that make application of these regulations unduly burdensome on the applicant. These regulations may be waived only if there will be no adverse impact on current or future development and will have no adverse impact on the public health, safety, and general welfare.
  - (3) Uses within the MTC - McKinney Town Center zoning district shall be exempt from the landscape requirements set forth herein, unless it is determined by the landscape administrator that compliance with any of these standards is achievable and would contribute to the purpose and intent of the MTC - McKinney Town Center zoning district. See appendix G of the city zoning regulations chapter 146 for any additional landscaping requirements that may be specifically applicable to the MTC - McKinney Town Center zoning district.
  - (4) ~~Airport uses shall comply with the requirements of this section, but the standards may be modified if it is in keeping with the intent of a bird mitigation program for the city airport, in order to reduce conflicts between birds and aircraft.~~ Airfields (commonly known as the "air side" of an airport's perimeter boundary fence or wall) which accommodate fixed-wing aircrafts on a concrete runway with a length of at least 5,000 feet, allow for the operation of rotary-wing aircrafts, and is part of a publicly-owned, public use facility shall be exempt from the requirements of section 146-135(f) of this chapter.
  - (5) If at any time after the issuance of a certificate of occupancy, the approved landscaping is found to be in nonconformance to the standards and criteria as approved on the landscape plan, the chief building official shall issue notice to the owner, citing the violation and describing what action is required to comply with this section. The owner, tenant, and/or agent shall make reasonable progress within 30 days from date of said notice and shall have 90 days to completely restore the landscaping as required. A 30-day extension may be granted by the chief building official if a hardship due to extreme seasonal conditions can be demonstrated by the owner, tenant, and/or agent. If the landscaping is not restored within the allotted time, such person shall be held in violation of this chapter.
- (c) Permits.
- (1) No permits shall be issued for building, paving, grading, or construction until a detailed landscape plan is submitted and approved by the landscape administrator. Prior to the issuance of a certificate of occupancy for any building or structure, all screening and landscaping shall be in place in accordance with the landscape plan.
  - (2) If a certificate of occupancy is sought at a season of the year (June, July, and August), or during a stage 3 or stage 4 drought situation, as determined in the sole discretion of the city, and the landscape administrator determines it would be impractical to plant trees, shrubs or grass, or to lay turf, a temporary certificate of occupancy may be issued. All landscaping required by the landscape plan shall be installed within 120 days of the latter of the date of issuance of the temporary certificate of occupancy or the lifting of the stage 3 drought restrictions. Failure to

timely complete the installation and obtain the city's final acceptance of the landscaping required by the landscape plan shall be deemed to be a violation of this chapter and the temporary certificate of occupancy shall be revoked.

(d) Landscape plan.

- (1) A landscape plan shall be shown as part of the site plan as required in section 146-45. Prior to the issuance of a building permit, paving, grading, or construction permit for any new use, a landscape plan satisfying the criteria of these regulations any conditions of approval shall be approved by the landscape administrator. The landscape administrator shall review such plans and shall approve the same plans if they are in accordance with the criteria of these regulations and any conditions of approval. If the plans are not in accordance, they shall be disapproved and shall be accompanied by a written statement setting forth the changes necessary for compliance.
- (2) The landscape plans shall be prepared by a registered landscape architect, architect or engineer licensed by the State of Texas. For a project of one acre or less a landscape architect, architect or engineer shall not be required. The landscape administrator may approve a landscape plan prepared by a qualified professional if complete and accurate information is provided. The plan shall contain the minimum following information:
  - a. The minimum scale of one inch equals 40 feet or the same scale as the associated site plan;
  - b. The location, size, and species of all trees to be preserved, do not use tree stamps;
  - c. The location of all plant and landscaping material to be used, including plants, paving, benches, screens, fountains, statues, earthen berms, ponds (to include depth of water), or other landscape features (except that location of plants and landscaping materials may be generalized on a conceptual landscape plan);
  - d. The species, size, spacing, and quantities of all plant material to be used in a tabular form (except that conceptual landscape plans may provide general plant types in-lieu-of species);
  - e. An affidavit on the plan stating that all required landscape areas shall be provided with an automatic underground irrigation system with rain and freeze sensors, and said irrigation system shall be designed by a qualified professional and installed by a licensed irrigator.
  - f. The name, Texas license number, signature and seal of the person responsible for the preparation of the landscape plan;
  - g. The mark indicating north;
  - h. The date of the landscape plan, including any revision dates;
  - i. The planting details percentage of total site in permanent landscaping;
  - j. The percentage of street yard in permanent landscaping;
  - k. The dimensions of all landscape areas;
  - l. The number of required trees and number of trees provided; and
  - m. The location of all existing and planned overhead and underground utilities shall be shown on the landscape plan or on an accompanying utility plan drawn at the same scale, if necessary for clarity.
  - n. Additional information as deemed necessary to adequately evaluate the landscape plan.

(e) General standards.

- (1) The following criteria and standards shall apply to landscape materials and installation. For the purposes of this section, the term "caliper" shall be defined as the diameter measurement of a tree trunk.

- a. Required landscaped open areas shall be completely covered with living plant material.
- b. Plant materials shall conform to the standards of the approved plant lists for the city (see appendix A to this chapter). Grass seed, sod and other material shall be clean and reasonably free of weeds and noxious pest and insects.
- c. To promote prudent use of the city's water resources and reduce the need for additional water system infrastructure, additional water resources and water purification systems, and to help ensure viability of required plantings during periods of drought, required landscaping shall comply, where feasible, with the following requirements designed to reduce water usage:
  1. Required plant materials shall be selected from those identified as drought tolerant plants on the approved plant list for the city (see appendix A, section A-2 to this chapter).
  2. Where specific conditions reduce the likelihood that any of these plant materials will survive, other plants on the list may be substituted.
  3. Other plants not on the list may be substituted at the discretion of the landscape administrator. The applicant may be required to provide substantiation as to the hardiness, adaptability, and water demands of the plant when used in this area.
  4. For maximum reduction in water usage, drought tolerant plants should not be interspersed in plant massings with plants requiring higher water usage.
  5. Applicants should design irrigation systems and watering schedules which supply the appropriate amount of water without over-watering.
- d. Ornamental trees shall have a minimum spread of crown of greater than 15 feet at maturity. Ornamental trees having a minimum mature crown of less than 15 feet may be substituted by grouping the same so as to create the equivalent of 15 feet of crown width. Ornamental trees shall be a minimum of two inches in caliper as measured six inches above the ground and eight feet in height at the time of planting.
- e. Canopy trees shall have a minimum spread of crown of 25 feet at maturity. Canopy trees shall be a minimum of four inches in caliper as measured six inches above the ground and 12 feet in height at the time of planting.
- f. Shrubs acceptable for six-foot screening shall be a minimum of three feet in height when measured immediately after planting and shall be planted no further apart than three feet on center, unless otherwise approved by the director of planning, and maintained so as to form a continuous, unbroken, solid visual screen which will be six feet high within two years after time of planting.
- g. Shrubs not of the dwarf variety shall be a minimum of two feet in height when measured immediately after planting.
- h. Hedges, where installed for buffering purposes required by this section, shall be planted and maintained so as to form a continuous, unbroken, solid visual screen which will be three feet high within two years after time of planting.
- i. Landscaping, except required grass and low ground cover, shall not be located closer than three feet from the edge of any parking space.
- j. Evergreen vines not intended as ground cover shall be a minimum of two feet in height immediately after planting and may be used in conjunction with fences, screens, or walls to meet landscape screening and/or buffering requirements, as set forth herein and as approved by the director of planning.
- k. Grass areas shall be sodded, plugged, sprigged, hydro-mulched, or seeded, except that solid sod shall be used in swales, or when necessary to prevent erosion. Grass areas shall

be established with 100 percent coverage and 70 percent density with an approved perennial grass prior to the issuance of a certificate of occupancy.

- I. Ground covers used in-lieu-of grass shall be planted in such a manner as to present a finished appearance and reasonably completed coverage within one year of planting.
  - (2) All required landscape areas shall be provided with an automatic underground irrigation system, except for required landscaping in single family or two-family developments. Any new irrigation system installed on or after September 1, 2007, must be equipped with rain and freeze sensors. Said irrigation system shall be designed by a qualified professional and installed by a licensed irrigator after receiving a permit, as may be required under the construction code. Irrigation systems shall comply with the city's water conservation ordinance as it exists or may be amended.
  - (3) Earthen berms shall have side slopes not to exceed 3:1 (three feet of horizontal distance for each one foot of height). All berms shall contain necessary drainage provisions, as may be required by the city engineer.
  - (4) No tree shall be planted closer than four feet to a right-of-way line nor closer than eight feet to a public utility line (water or sewer), unless no other alternative is available. Further, a landscape area in which trees are to be provided shall not conflict with a utility easement, unless no alternative is available.
  - (5) No tree that has a mature height of 25 feet or greater shall be planted beneath an existing or proposed overhead utility line. Where canopy trees are required adjacent to or underneath overhead utility lines, ornamental trees (a minimum of two inches in caliper as measured six inches above the ground) shall be provided instead of the required canopy trees.
  - (6) All landscape areas shall be protected by a monolithic curb or wheel stops and remain free of trash, litter, and car bumper overhangs.
- (f) Minimum landscaping requirements.
- (1) For all non-residential and multiple family parcels, at least 15 percent of the street yard shall be permanent landscape area. The term "street yard" shall be defined as the area between the front property line and the minimum front set back line.
  - (2) For all non-residential and multiple family parcels located at the intersection of two dedicated public streets (rights-of-way), a 30-foot landscape buffer shall be provided parallel to the corner clip right-of-way dedication, which can be counted toward the 15 percent requirement. See appendix E, illustration 19, for intersection landscaping.
  - (3) For all non-residential and multiple family parcels, a minimum of 10 percent of the entire site shall be devoted to living landscape, which shall include grass, ground cover, plants, shrubs, or trees.
  - (4) Landscape setbacks on thoroughfares shall comply with the following provisions:
    - a. Landscape setbacks on minor thoroughfares. For all non-residential and multiple family parcels, a minimum ten-foot landscape buffer adjacent to the right-of-way of any minor thoroughfare is required. If the lot is a corner lot, all frontages shall be required to observe the ten-foot buffer.
    - b. Landscape setbacks on major thoroughfares. For non-residential and multiple family parcels, a minimum 20-foot landscape buffer adjacent to the right-of-way of any major thoroughfare is required. If the lot is a corner lot, all frontages shall be required to observe the 20-foot buffer.
    - c. Landscape setback variances. If unique circumstances exist which prevent strict adherence with this requirement, the planning and zoning commission may consider a granting of a variance during the site plan approval process to reduce the minimum 20-foot landscape buffer to a minimum of ten feet; provided that site design considerations have

been incorporated to mitigate the impact of the variance. Unusual circumstances include, but are not limited to: insufficient lot depth or size of the existing lot, existing structures and drives, and floodplain and existing trees to be preserved. A variance may be granted if:

1. Unique circumstances exist on the property that makes application of this section unduly burdensome on the applicant;
2. The variance will have no adverse impact on current or future development;
3. The variance is in keeping with the spirit of the zoning regulations, and will have a minimal impact, if any, on the surrounding land uses; and
4. The variance will have no adverse impact on the public health, safety and general welfare.

A financial hardship shall not be considered a basis for the granting of a variance.

- (5) For all non-residential and multiple family parcels, developers shall be required to plant one canopy tree per 40 linear feet, or portion thereof, of street frontage. These required trees must be planted within the associated landscape setback along thoroughfares, unless otherwise approved by the director of planning. Trees may be grouped or clustered to facilitate site design.
- (6) Landscape areas within parking lots must be at least one parking space in size (162 square feet).
- (7) No landscape area counting toward minimum landscaping requirements shall be less than 25 square feet in area or less than five feet in width.
- (8) For all non-residential and multiple family parcels, internal landscape areas shall:
  - a. Have a landscaped area with at least one tree within 65 feet of every parking space; and
  - b. Have a minimum of one tree planted in the parking area for every 10 parking spaces within parking lots with more than 20 spaces.
- (9) Within parking lots, landscape areas with curbs and gutters must be provided to define parking areas and assist in clarifying appropriate circulation patterns.
- (10) A landscape island shall be located at the terminus of each parking row and shall include the following:
  - a. A minimum of one canopy tree at the terminus of each parking row;
  - b. A minimum of 50 percent of the island covered with living plant material; and
  - c. A maximum of 50 percent of the parking island covered with bark mulch or decomposed granite material.
- (11) All existing trees that are to be considered for credit shall be provided with a permeable surface (a surface that does not impede the absorption of water) within a minimum five-foot radius from the trunk of the tree. All new trees shall be provided with a permeable surface within a minimum 2½-foot radius from the trunk of the tree.
- (12) At least 75 percent of the frontage of parking lots, adjacent to a public right-of-way, within the street yard shall be screened from public streets with evergreen shrubs attaining a minimum height of three feet, an earthen berm of a minimum height of three feet, a low masonry wall of a minimum height of three feet, or a combination of the above with a minimum combined height of three feet. A wall used for parking lot screening should be accompanied with landscape planting in the form of low shrubs and groundcover to soften the appearance of the wall.
- (13) A minimum of 50 percent of the total trees required for the property shall be canopy trees as specified on the approved plant list (see appendix A to this chapter).

- (14) Necessary driveways from the public right-of-way shall be allowed through all required landscaping areas in accordance with city regulations. Shared drives shall be allowed through perimeter landscape areas.
- (15) For all non-residential and multiple family parcels, whenever an off-street parking area or vehicular use area abuts an adjacent property line, a perimeter landscape area of at least five feet shall be maintained between the edge of the parking area and the adjacent property line.
- (16) Whenever a non-residential use, mobile home use, or multiple family use is adjacent to a property used or zoned for single-family or duplex residential uses, the more intensive land use shall provide a landscaped area of at least ten feet in width along the common property line planted with one canopy tree for each 40 linear feet or portion thereof of adjacent exposure. These trees may not be clustered.
- (17) Multiple family residential uses shall provide a landscaped buffer of at least 20 feet in width along all property lines planted with one canopy tree for each 30 linear feet or portion thereof of adjacent exposure. The trees along the street frontage may be clustered, while the trees along all other property lines may not.
- (18) Evergreen shrubs (acceptable for six-foot screening) shall be provided around dumpster screening wall, and the plant materials must be a minimum of three feet in height at the time of planting, unless not visible from public right-of-way or a public use area.
- (19) For all single family and duplex parcels, builders shall be required to plant two canopy trees per lot, prior to obtaining a certificate of occupancy. At least one of the trees shall be located in the front yard. If a required canopy tree is within 12 feet of a building foundation an alternate planting location on site shall be approved by the landscape administrator. An existing quality tree of at least eight-inch caliper size located on the lot may be counted towards the requirement for a four-inch caliper tree, if appropriate tree protection measures have been followed.
- (20) For all commercial sites, developers shall install all required canopy trees per the approved landscape plan. If a required canopy tree is within 12 feet of a building foundation an alternate planting location on site shall be approved by the landscape administrator.
- (21) For all townhome parcels a minimum of 20 square feet of useable open space shall be required per townhome unit. This additional open space shall not include the parkland dedication requirement as outlined in section 142-152 of the subdivision ordinance, any required landscape areas as outlined in section 146-135, or any required spacing between buildings. Open space pockets shall be designed to be located over the entire site in order to break up density and serve the entire development. Open space pockets shall be required to be a minimum of 1,000 square feet and a maximum of 2,000 square feet for townhome developments over 50 units. The applicant may request an increase in the maximum allowed useable open space requirement with site plan approval.

(g) Tree preservation.

- (1) Any trees preserved on a site meeting the herein specifications may be credited toward meeting the tree requirement of any landscaping provision of this section for that area within which they are located, according to the following table:

Caliper of existing tree	Credit against tree requirement
6" to 8"	2 trees
9" to 15"	3 trees

16" to 30"	4 trees
31" to 46"	5 trees
47" or more	8 trees

For purposes of this section, caliper measurement shall be taken at a height of 4½ feet above the ground, and shall be rounded to the nearest whole number.

- (2) Existing trees may receive credit if they are not on the city's approved plant material list but are approved by the landscape administrator; however, trees must be located within the landscape area to which credit is applied.
  - (3) Any tree preservation proposed shall designate the species, size, and general location of all trees on the conceptual or general landscape plan. The species, size, and exact location shall be shown on the landscape plan.
  - (4) During any construction or land development, the developer shall clearly mark all trees to be maintained and may be required to erect and maintain protective barriers around all such trees or groups of trees. The developer shall not allow the movement of heavy equipment or the storage of equipment, materials, debris, or fill to be placed within the drip line of any trees. This is not intended to prohibit the normal construction required within parking lots.
  - (5) During the construction stage of development, the developer shall not allow cleaning of equipment or material under the canopy of any tree or group of trees to remain. Neither shall the developer allow the disposal of any waste material such as, but not limited to, paint, oil, solvents, asphalt, concrete, mortar, etc., under the canopy of any tree or groups of trees to remain. No attachment or wires of any kind, other than those of a protective nature, shall be attached to any tree.
- (h) Sight distance and visibility.
- (1) Rigid compliance with these landscaping requirements shall not be such as to cause visibility obstructions and/or blind corners at intersections. Whenever an intersection of two or more streets or driveways occur, a triangular visibility area, as described below, shall be created. Landscaping within the triangular visibility area shall be designed to provide unobstructed cross visibility at a level between two feet and seven feet. Trees may be permitted in this area provided they are trimmed in such a manner that no limbs or foliage extend into the cross visibility area. The triangular areas shall comply with the sight triangle illustrations in this chapter (see appendix E, illustration 10).
  - (2) In the event other visibility obstructions are apparent in the proposed landscape plan, as determined by the landscape administrator, the requirements set forth herein may be modified to eliminate the conflict.
- (i) Maintenance.
- (1) The owner, tenant, and/or their agent, if any, shall be jointly and severally responsible for the maintenance of all landscaping. All required landscaping shall be maintained in a neat and orderly manner at all times. This shall include, but not be limited to:
    - a. Mowing (of grass of six inches or higher);
    - b. Edging;

- c. Pruning;
  - d. Fertilizing;
  - e. Watering;
  - f. Weeding; and
  - g. Other such activities common to the maintenance of landscaping.
- (2) Landscape areas shall be kept free of trash, litter, weeds, and other such material or plants not a part of the landscaping. All plant material shall be maintained in a healthy and growing condition as is appropriate for the season of the year.
- (3) Plant materials used to meet minimum required landscaping provisions which die or are removed for any reason shall be replaced with plant material of similar variety and size, within 90 days.
- a. Trees with a trunk diameter in excess of six inches measured six inches above the ground may be replaced with trees of similar variety having a minimum trunk diameter of four inches measured six inches above the ground.
  - b. If any tree, which was preserved and used as a credit toward landscaping requirements is later removed for any reason, it shall be replaced by the number of trees for which it was originally credited. Replacement trees shall have a minimum trunk diameter of four inches measured six inches above the ground.
  - c. A time extension may be granted by the landscape administrator if substantial evidence is presented to indicate abnormal circumstances beyond the control of the owner, tenant, or his agent.

Failure to maintain any landscape area in compliance with this section is considered a violation of this section and may be subject to penalties of section 146-194.

(Code 1982, § 41-211; Ord. No. 99-03-35, § 1K, 3-16-1999; Ord. No. 2000-01-03, § 1N, 1-4-2000; Ord. No. 2000-05-028, § 1C, 5-2-2000; Ord. No. 2000-05-29, § 1A, 5-2-2000; Ord. No. 2001-02-013, § 1B, 2-6-2001; Ord. No. 2002-08-084, § I.57, 8-20-2002; Ord. No. 2004-09-098, § III, 9-21-2004; Ord. No. 2006-10-116, § 141.211(3)(c), 10-3-2006; Ord. No. 2006-10-121, § VI, 10-17-2006; Ord. No. 2008-07-066, § 1, 7-14-2008; Ord. No. 2010-05-011, § 8, 5-17-2010; Ord. No. 2010-12-053, §§ 21—26, 12-7-2010; Ord. No. 2013-04-044, § 13, 4-22-2013; Ord. No. 2014-12-096, § 1, 12-1-2014)