

**TITLE 10  
CHAPTER 22  
WATER EFFICIENT LANDSCAPE STANDARDS**

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**10-22-1: Purpose**

The purpose of this Chapter is to promote the health, safety, and general welfare of the public by enhancing the development and open space areas with landscaping and vegetation while encouraging efficient use of water. More specifically this Chapter functions to:

- Preserve and enhance the aesthetic quality of neighborhoods and commercial areas;
- Maintain and strengthen a positive visual identity of the City;
- Enhance the appearance of parking lots visible from public streets;
- Enhance and protect property values;
- Lessen the impact of noise, dust, debris, heat, wind, and air;
- Promote water efficient landscaping to conserve water and reduce demand for current and future water resources;
- Provide shade, reduce the heat island effect (reflective heat from impervious surfaces), and lessen energy consumption;
- Buffer and screen undesirable uses and appearances from adjacent properties;
- Reduce the rate and volume of storm water runoff, and enhance the quality of storm water runoff;
- Act as a natural drainage system and lessen drainage problems; and
- Promote healthy outdoor recreational activities.

**10-22-2: Applicability**

The provisions of this chapter shall apply to all new and rehabilitated landscaping for:

- A. Public agency projects;
- B. Private commercial and industrial development projects;
- C. Developer-installed landscaping in multi-family and single-family residential projects;
- D. Homeowner provided landscape improvements within the front, side, and rear yards of new single and two-family dwellings;

- E. Homeowners of one and two-family dwellings upon which the property owners desire to replace lawn areas with water efficient landscaping within the front, side, or rear yards or adjacent park strip;
- F. Any existing multiple-family residential, commercial, or industrial site where a proposed building addition increases the footprint of buildings within the property boundary by 30% or more; and
- G. Property modifications resulting in the addition or removal of impervious surfaces exceeding 5,000 sq. feet.
- H. The required landscaping percentage shall be strictly followed; however, the Land Use Authority may reduce the percentage requirement through a landscape modification process. Exceptions shall be limited in their application and shall be based on the following criteria:
  - 1. There is a physical hardship associated with the property that results in a unique circumstance that does not apply to other similar properties;
  - 2. The proposed reduction in landscape area shall be mitigated through enhanced landscaping improvements and/or the provision of amenity areas that exceed the minimum standards of this chapter; and
  - 3. Exceptions shall not be granted for the sole reason of providing additional building area, increasing residential density on a property, or meeting the minimum off-street parking stall requirement.

### **10-22-3: Landscape Design Standards**

#### **A. Plant Selection.**

- 1. Plants shall be well-suited to the microclimate and soil conditions at the project site. Both native and locally-adapted plants are acceptable. Plants with similar water needs shall be grouped together as much as possible.
- 2. Areas with slopes greater than 25% shall be landscaped with deep-rooting, water-conserving plants for erosion control and soil stabilization and are not permitted to be planted with turf grass.
- 3. Park strips and other landscaped areas less than eight (8) feet wide may not be landscaped with sod/turf. Only water-conserving plants, which do not have a mass planting of any type of plant material which requires uniform overhead spray irrigation, may be used in a park strip
- 4. Shrubs and ornamental grasses shall be planted and maintained in groupings of at least three to increase the microclimate shade area above plant root zones, and to provide a pleasing and balanced aesthetic of plant material massing in the landscape. Groupings may consist of straight rows, grids or triangulation planting patterns.
- 5. Plants and trees specified for a project landscape plan shall be selected from the WBWCD recommended plant list and the recommended trees included in Title 7, Chapter 9, Community Forestry. These plant materials are suitable for the local climate with respect to temperature ranges and moderate to high drought tolerance. Additional plant species that can be demonstrated as suitable for the local climate and soil conditions, shall be permitted.
- 6. The typical plant bed width shall be a minimum of three feet; the minimum plant bed width shall be one and a half feet for ornamental grasses, perennials, and ground covers, and one foot for planters for climbing vines.
- 7. Plant beds may be substituted by planters or other similar streetscape amenities within The Core Subdistrict of the Town Center.

- B. **Tree Selection.** Tree species shall be selected based on growth characteristics and site conditions, including available space, overhead clearance, soil conditions, exposure, and desired color and appearance. Trees shall be selected as follows:
1. Broad canopy trees shall be selected where shade or screening of tall objects is desired;
  2. Low-growing trees shall be selected for spaces under utility wires;
  3. Select trees from which lower branches can be trimmed to maintain a healthy growth habit where vision clearance and natural surveillance is a concern;
  4. Narrow or columnar trees shall be selected where awnings or other building features limit growth, or where greater visibility is desired between buildings and the street for natural surveillance;
  5. Street trees shall be planted in accordance with Title 7, Chapter 9, Community Forestry for placement within existing and proposed park strips, and in sidewalk tree wells on streets without park strips. Tree placement shall provide canopy cover (shade) and avoid conflicts with existing trees, retaining walls, utilities, lighting, and other obstacles; and
  6. All new trees planted shall be irrigated by means of drip irrigation rings and not by overhead sprinklers.
- C. **Mulch.** After completion of all planting, all irrigated non-turf areas shall be covered with a minimum three (3) inch layer of mulch to retain water, inhibit weed growth, and moderate soil temperature. Non-porous material shall not be placed under the mulch. Permitted mulch:
1. All rock mulch must be angular or crushed, clean or washed landscape gravel, and be rocks size of two-inch minus;
  2. Pea gravel is prohibited for use in park strips;
  3. Rock mulch used in park strips adjacent to a public street with a slope of eight (8%) percent or greater shall be compacted;
  4. Bark and lava rock mulch are prohibited in park strips with slopes of eight (8%) percent or greater and due to weight and erosion concerns;
  5. The final grade of all mulch adjacent to a sidewalk or curb shall be level or slightly below the height of the sidewalk and curb to prevent erosion loss.
- D. **Soil Preparation.** Soil preparation will be suitable to provide healthy growing conditions for the plants and to encourage water infiltration and penetration. Soil preparation shall include scarifying the soil to a minimum depth of six (6) inches and amending the soil with organic material as per specific recommendations of the Landscape Designer/Landscape Architect based on the soil conditions.
1. Soil amendments (organic material) shall also be added and tilled into the soil to a minimum depth of six inches to increase organic content and improve water retention.
  2. Soil amendment type and quantity shall be recommended by the Landscape Architect (designer) based on a review of the soil conditions.
- E. **Turf Design**
1. Turf species are required to be drought tolerant.
  2. Turf grass shall not be installed in areas less than eight feet wide.
  3. Turf grass shall not be allowed in park strips, parking lot islands, and other planted bed landscape areas.
  4. Turf grass shall not be allowed on slopes with a grade over 25%.
  5. A minimum of 1 tree per 1,000 sq. ft. of turf area shall be planted within or adjacent to the turf area.
- F. **Park Strip Design** The intent of this section is to provide an assortment of allowed plant, organic and/or natural materials that allow for creative landscaping, maintain a healthy street tree canopy, and create an attractive pedestrian environment while encouraging water conservation.

1. **Plant Coverage:** Live plant materials, not to exceed twenty two inches (22") in height, are allowed. Plants with heights up to thirty six inches (36") tall may be allowed as specimen or accent plants when not located within clear view areas (see section 10-1-31). These plants may not be planted in a manner that would create a visual barrier between the street and the sidewalk.
2. **At least thirty three percent (33%) or more of the park strip surface** must be covered with perennial or low growing shrub vegetation within three (3) years of planting or when planting has reached maturity, whichever comes first.
  - a. The addition of street trees chosen in accordance with Title 7, Chapter 9, Community Forestry shall be **credited towards required park strip plant coverage** as follows:
    - (1) **Small trees: 50 square feet**
    - (2) **Medium trees: 75 square feet**
    - (3) **Large trees: 100 square feet**
  - b. For lots with two (2) or more street frontages, this standard shall be applied separately to each adjacent park strip on each street frontage.
3. Plants which have thorns, spines, or other sharp, rigid parts are hazardous to pedestrians and bicyclists, and are difficult to walk across and are prohibited.
4. **Gravel, Rocks, And Boulders:** Because rock, gravel and other hard surface materials as a ground cover retain and emit heat during the summer months when water is scarce, they may not be used within a thirty six inch (36") radius (72 inch diameter) of any street tree, unless an operable irrigation system is provided. Otherwise, gravel, rocks, and boulders, may be used on portions of the park strip as permitted in this Chapter.
5. Boulders as an accent material are limited to thirty six inches (36") in height, and may not be arranged in a manner that creates a continuous visual obstruction. Any boulder raised above the curb height shall be set back from the curb by at least twenty four inches (24").
6. **Paving Materials:** Paving materials in park strips shall be limited to poured concrete, concrete pavers, brick pavers, or natural stone pavers, and **may be used only in portions of a park strip as a carriageway to provide for safe and convenient access across park strips to and from vehicles that may park at the curb.**
  - a. Carriageways shall be **not more than four feet (4')** in width and shall be located so as to provide the most direct route from the curb to the sidewalk.
7. **Retaining Walls, Fences And Other Similar Structural Encroachments:** Retaining walls, fences, steps, raised planter boxes and other similar structural encroachments in park strips are only permitted when specifically approved in an approved General Development Plan and have been reviewed by the engineering department pursuant to adopted standards and/or recognized engineering principles.

#### **10-22-4: IRRIGATION DESIGN STANDARDS:**

- A. Smart Automatic Irrigation Controller. Landscaped areas shall be provided with a WaterSense labeled smart irrigation controller which automatically adjusts the frequency and/or duration of irrigation events in response to changing weather conditions. All controllers shall be equipped with automatic rain delay or rain shut-off capabilities and shall be setup to operate in "smart" mode.
- B. Each valve shall irrigate a landscape with similar site, slope and soil conditions and plant materials with similar watering needs. Turf and non-turf areas shall be irrigated on separate valves. Drip emitters and sprinklers shall be placed on separate valves.

- C. Drip emitters or a bubbler shall be provided for each tree. Bubblers shall not exceed 1.5 gallons per minute per device. Bubblers for trees shall be placed on a separate valve unless specifically exempted by the City due to the limited number of trees on the project site.
- D. Drip irrigation or bubblers shall be used to irrigate plants in non-turf areas.
- E. Pop-up spray heads shall be at a minimum of four (4) inches in height to avoid blockage from lawn foliage.
- F. Sprinklers shall have matched precipitation rates with each control valve circuit.
- G. Sprinkler heads shall be attached to rigid lateral lines with flexible material (swing joints) to reduce potential for breakage.
- H. Check valves shall be required where elevation differences cause low-head drainage. Pressure compensating valves and sprinklers shall be required where a significant variation in water pressure occurs within the irrigation system due to elevation differences.
- I. Filters shall be required on all secondary water service connections. Filters shall have as a minimum a 30 mesh screen and shall be cleaned and maintained by the property owner on a regular basis.
- J. Drip irrigation lines require additional filtration at or after the zone valve at a minimum of 200 mesh and end flush valves are required as necessary for drip irrigation lines.
- K. Valves with spray or stream sprinklers shall be scheduled to operate in accordance with local water supplier restrictions to reduce water loss from wind, evaporation or other environmental conditions not suitable for irrigation.
- L. Program valves for multiple repeat cycles where necessary to reduce runoff, particularly on slopes and soils with slow infiltration rates.
- M. Meter Installation: Meters shall be specified by the City, or other water provider, for the particular installation and shall report instantaneous flow in gallons per minute (gpm) and totalized flow in gallons via encoded register output.

**10-22-5: LANDSCAPES IN NEW RESIDENTIAL DEVELOPMENTS:**

- A. Homebuilders and/or developers subdividing lots and/or constructing new single-family residential homes shall provide water-efficient landscaping to prospective home buyers, such as the Localscapes design style when the landscape is installed by the homebuilder/developer. The water-efficient landscaping option shall meet the Landscape Design Standards and Irrigation Design Standards of this ordinance, and any central open shape area consisting of plant material in mass requiring overhead spray irrigation shall not exceed 25% of the lot or 6,500 sq. ft., whichever is less.
- B. Homebuilders and/or developers who construct model homes for a designated subdivision shall install water-efficient landscaping, such as the Localscapes design style. The water-efficient landscaping option shall meet the Landscape Design Standards and Irrigation Design Standards of this ordinance, and any central open shape area consisting of plant material in mass requiring overhead spray irrigation shall not exceed 25% of lot or 6,500 sq. ft., whichever is less.
- C. New Construction homes shall have landscaping and irrigation plans approved by the City which meet the aforementioned requirements.
- D. Model homes shall include an informational brochure on water-efficient landscaping or Localscapes. Localscapes brochures can be obtained from the City.
- E. When buyers or owners are installing their own landscaping on new home construction, a time frame for landscaping to be completed shall be 12 months from the time of occupancy,

unless granted an extension by the City due to water availability, season, or drought conditions.

- F. All exceptions related to installation timeline, shall require the submission of an erosion control plan which meets the following requirements:
  - 1. All disturbed surfaces shall be protected by mulching, erosion mats, native seeding, and/or other effective means of soil protection;
  - 2. Silt fencing and/or vegetative buffers with native seed mix shall be provided at the lowest lot elevations.

**10-22-6: PROHIBITION ON RESTRICTIVE COVENANTS REQUIRING UNIFORM PLANT MATERIAL IRRIGATED WITH SPRAY IRRIGATION**

- A. Any Homeowners Association governing documents, such as bylaws, operating rules, covenants, conditions, and restrictions that govern the operation of a common interest development, are void and unenforceable if they:
  - 1. Require the use of any uniform plant material requiring overhead spray irrigation in landscape areas less than 8 feet wide or require any uniform plant material requiring overhead spray irrigation in other areas that exceed 40% of the landscaped area; or
  - 2. Prohibit, or include conditions that have the effect of prohibiting, the use of water-conserving plants as a group; or
  - 3. Have the effect of prohibiting or restricting compliance with this ordinance or other water conservation measures.

**10-22-7: LANDSCAPES IN COMMERCIAL, INDUSTRIAL, INSTITUTIONAL MIXED USE & MULTI-FAMILY DEVELOPMENTS:**

- A. Commercial, industrial and institutional landscapes shall meet the Landscape Design Standards and Irrigation Design Standards of this ordinance, and the turf area shall not exceed 5% of the total lot or 5,000 sq. ft, whichever is less.
- B. Mixed use and multi-family developments shall meet the Landscape Design Standards and Irrigation Design Standards of this ordinance, and the turf area shall not exceed 10% of the lot or 5,000 sq. ft, except within bona fide recreation areas designated and approved by the Planning Commission during site plan approval.

**10-22-8: DOCUMENTATION FOR COMMERCIAL, INDUSTRIAL, MULTI-FAMILY AND INSTITUTIONAL PROJECTS:**

Landscape Plan Documentation Package. For all commercial, industrial, multi-family and institutional projects, a Landscape Plan Documentation Package shall be submitted to and approved by the City prior to the issue of any permit. The Landscape Plan Documentation Package shall be prepared by a registered landscape architect or other qualified professional and shall consist of the following items:

- A. Project Data Sheet. The Project Data Sheet shall contain the following:
  - 1. Project name and address;
  - 2. Applicant or applicant agent's name, address, phone number, and email address;
  - 3. Landscape architect's name, address, phone number, and email address; and
  - 4. Landscape contractor's name, address, phone number and email address, if available at this time.

- B. Planting Plan. A detailed planting plan shall be drawn at a scale that clearly identifies the following:
  - 1. Location of all plant materials, a legend with botanical and common names, and size of plant materials;
  - 2. Property lines and street names;
  - 3. Existing and proposed buildings, walls, fences, utilities, paved areas and other site improvements;
  - 4. Existing trees and plant materials to be removed or retained;
  - 5. Scale: graphic and written;
  - 6. Date of Design;
  - 7. Designation of a landscape zone, and
  - 8. Details and specifications for tree staking, soil preparation, and other planting work.
- C. Irrigation Plan. A detailed irrigation plan shall be drawn at the same scale as the planting plan and shall contain the following information:
  - 1. Layout of the irrigation system and a legend summarizing the type and size of all components of the system, including manufacturer name and model numbers;
  - 2. Static water pressure in pounds per square inch (psi) at the point of connection to the public water supply;
  - 3. Flow rate in gallons per minute and design operating pressure in psi for each valve and precipitation rate in inches per hour for each valve with sprinklers, and
  - 4. Installation details for irrigation components.
  - 5. Backflow preventor
- D. Grading Plan. A Grading Plan shall be drawn at the same scale as the Planting Plan and shall contain the following information:
  - 1. Property lines and street names, existing and proposed buildings, walls, fences, utilities, paved areas and other site improvements, and
  - 2. Existing and finished contour lines and spot elevations as necessary for the proposed site improvements.

**10-22-9: PLAN REVIEW, CONSTRUCTION INSPECTION, AND POST-CONSTRUCTION MONITORING FOR COMMERCIAL, INDUSTRIAL, MULTI-FAMILY, AND INSTITUTIONAL PROJECTS**

- A. As part of the Building Permit approval process, a copy of the Landscape Plan Documentation Package shall be submitted to the City for review and approval before construction begins.
- B. All installers and designers shall meet state and local license, insurance, and bonding requirements, and be able to show proof of such.
- C. During construction, site inspection of the landscaping may be performed by the applicable city departments and staff.
- D. Following construction and prior to issuing the approval for occupancy, an inspection shall be scheduled with the applicable city departments to verify compliance with the approved landscape plans. The Certificate of Substantial Completion shall be completed by the property owner, contractor or landscape architect and submitted to the City.

- E. The City reserves the right to perform site inspections at any time before, during or after the irrigation system and landscape installation, and to require corrective measures if requirements of this ordinance are not satisfied.
- F. Landscaping to be completed prior to occupancy for all commercial properties, unless granted an extension of time by the City due to water availability, season, or drought conditions, and shall be accompanied by a landscape bond to guarantee the installation.
- G. All exceptions related to landscape installation timeline, shall require the submission of an erosion control plan which meets the following requirements:
  - 1. All disturbed surfaces shall be protected by mulching, erosion mats, natives seeding, and/or other effective means of soil protection;
  - 2. Silt fencing and/or vegetative buffers with native seed mix shall be provided at the lowest lot elevations.

**10-22-10: PROHIBITED WATERING PRACTICES**

Regardless of the age of a development (commercial, industrial, office, or residential), water shall be properly used. Waste of water is prohibited.

**10-22-11: ENFORCEMENT, PENALTY FOR VIOLATIONS**

The provisions of these regulations shall be enforced in accordance with Title 12, Administrative Code Enforcement Hearing Program. As is required by Title 12, any consumer who violates any provisions of this Ordinance shall be issued a written notice of violation and may be subject to the penalties stated in Title 12. In addition to Title 12 penalties, the failure to correct violations as indicated in a notice of violation may result in the termination of water service to the customer.

