Watsonville, CA Municipal Code

# **Chapter 14-40.125 WATER-EFFICIENT LANDSCAPE STANDARDS AND REQUIREMENTS**

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### Purpose. In furtherance of the requirements of the Water Conservation in Landscaping Act of 1990 (Article 10.8 (commencing with Section 65590) of Chapter 3 of Division 1 of Title 7 of the Government Code), the purposes of this chapter shall be to:

### Promote the value and benefit of abundant landscaping while recognizing the need to utilize water and other resources as efficiently as possible; and

### Establish criteria and standards for the design, installation and maintenance of water-efficient landscapes in new development projects.

### Applicability.

### Except as stated in Subsection 14-40.125(b)(2), the requirements of this chapter apply to the following categories of development projects:

### Category I. Individual single-family homes and those development projects which are subject to ministerial permit review and approval;

### Category II. New development projects, except for individual single-family homes, which require a discretionary permit review and approval;

### Category III. Commercial or industrial projects on parcels of 20,000 square feet or more, and new residential projects or subdivisions of five or more units.

### The following types of projects shall be exempt from the requirements of this chapter:

### Additions and alterations to existing single-family homes;

### Alterations and remodeling of existing multi-unit projects which do not increase the number of residential units;

### Development on registered historical sites;

### Projects that do not require a permanent irrigation system.

### Definitions. The following definitions are applicable within this chapter:

### "Anti-drain valve" or "check valve" means a valve located under a sprinkler head to hold water in the system so it minimizes drainage from the lower elevation sprinkler heads.

### "Application rate" means the depth of water applied to a given area, usually measured in inches per hour.

### "Automatic controller" means a mechanical or solid state timer, capable of operating valve stations to set the days and length of time of a water application.

### "Backflow prevention device" means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.

### "Emitter" means drip irrigation fittings that deliver water slowly from the system to the soil.

### "Establishment period" means the first year after installing the plant in the landscape.

### "Hydrozone" means a portion of the landscaped area having plants with similar water needs that are served by a valve or set of valves with the same irrigation schedule.

### "Infiltration rate" means the rate of water entry into the soil expressed as a depth of water per unit of time (inches per hours).

### "Irrigation efficiency" means the measurement of the amount of water beneficially used, which is the amount of water stored in the root zone, divided by the amount of water applied. Irrigation efficiency is derived from measurement and estimates of irrigation system characteristics and management practices.

### "Mulch" means any organic material such as leaves, bark or straw which is applied to the soil surface to reduce evaporation and erosion.

### "Overspray" means the water which is delivered outside of planted areas, wetting pavements, walks, structures or other planted areas.

### "Rain sensing device" means a system which automatically shuts off the irrigation system when it rains.

### "Runoff" means water which is not absorbed by the soil or landscape to which it is applied and flows from the area and across property lines.

### "Station" means planted area served by one valve or by a set of valves that operated simultaneously.

### "Water conservation concept statement" means a one-page checklist and a narrative summary of the project.

### Requirements and procedures. The following requirements and procedures shall apply to landscape planting:

### All development which is subject to the provisions of this chapter shall comply with the requirements and standards stated in this chapter for the applicable category of development projects. The basic landscape requirement stated in Category I shall apply to all projects. Larger or more complex projects, where the potential for water savings is greater, shall be subject to the additional requirements for Categories II or III as described in this chapter.

### Where a project is subject to review and approval by the planning commission, the commission shall evaluate the project for compliance with the standards of this chapter prior to approval of any discretionary permit.

### Where a project is subject to review and approval by administrative officials, the Zoning Administrator shall determine conformance with the standards of this chapter prior to approval of the administrative planning permit. Decisions of the Zoning Administrator may be appealed by any interested person pursuant to the provisions of Chapter 14-10, Part 11: Appeals.

### All development projects shall conform to the standards of this chapter prior to issuance of a building permit.

### Submittal requirements. The following materials shall be submitted as part of an application for any development project that is subject to the requirements of this chapter:

### All projects (including Category I): a basic landscape documentation package consisting of the following elements, which are described in 14-40.125(d), shall be required for all projects which are subject to this chapter:

### Water conservation checklist;

### Landscape design plan, including plant list;

### Irrigation design plan;

### Certificate of substantial compliance.

### Requirements for Category II projects in addition to those listed in Subsection 14-40.125(e)(1):

### Planting notes and water conservation concept statement describing the water conservation measures taken and how the landscape design meets the aesthetic and functional requirements of the site and of the proposed land use, including landscape screening, solar access, climate modification and erosion control.

### Section/elevation view through the site showing the relationships between planting design, buildings and site improvements.

### Requirements for Category III projects in addition to the information listed in Subsections 14-40.125(e)(1) and 14-40.125(e)(2):

### The landscape and irrigation plans shall be prepared by a landscape architect or other qualified professional;

### Planting and irrigation details showing planting, irrigation, staking and other pertinent details which explain the landscape design and/or conservation measures; and

### A maintenance program describing general maintenance procedures, including: frequency and responsibilities for watering, replanting, pruning, irrigation equipment repair and programming, weed control and fertilizing.

### The basic landscape documentation package referenced in Subsection 14-40.125(e)(1) shall include:

### Water conservation checklist and concept statement: a cover sheet which serves as a checklist to verify that the elements of the landscape documentation package have been completed including a narrative summary of the project. Category I projects are not required to provide a water conservation concept statement.

### Landscape design plan showing: scale, north arrow, property boundaries, existing and proposed structures, streets and rights-of-way, major natural features such as creeks, barrancas and rock outcroppings, location, size, type (species) and quantity of proposed plants, existing trees to be removed or retained, noted by type, location, trunk diameter, height and overall condition and expected life span, data, in square feet and percentage of total site area, describing total paved area, designated hydrozones and area devoted to irrigated turf.

### Irrigation design plan showing: scale, north arrow, property boundaries, existing and proposed structures, streets and rights-of-way, utilities and easements, existing trees to remain, any other major natural features and the location, size and type of irrigation system components, including automatic controllers, main and lateral lines, sprinkler heads, emitters, backflow prevention devices and rain-sensing devices.

### Certification by a licensed landscape architect or contractor, certified irrigation designer or other licensed or certified professional in a landscape-related field that the proposed planting and irrigation has been designed to comply with the requirements of this chapter.

### Project completion and certification. After the project is completed, the person certifying shall conduct a final field observation and shall provide a certificate of substantial completion and compliance to the city. The certificate shall be on a form provided by the city and shall include a list of any observed deficiencies and recommended corrective measures.

### Landscape standards. The following landscape standards apply to all new development that is subject to the requirements of this chapter:

### Landscape Design Criteria.

### Irrigated Turf. Irrigated turf areas shall generally not exceed ten percent of the site's total area. The planning commission may allow a larger turf area where special water conservation measures are used, and where their primary purpose is for recreation rather than aesthetics, as in parks, playgrounds and private rear yards. If a project is exempt from planning commission review, the Zoning Administrator may allow a larger turf area using the same criteria.

### Turf Varieties. Water-conserving turf varieties or turf substitutes (groundcovers) shall be used where appropriate.

### Design of Turf Areas. Planter and turf areas shall be designed for maximum water efficiency and ease of maintenance. Turf shall not be used in narrow planters, raised beds and other relatively small planters as determined by the Zoning Administrator. Turf planting on slopes over fifteen percent causes excess irrigation runoff, and shall not be allowed.

### Surfacing Materials. Materials for landscape pathways, service areas or areas difficult to maintain shall use decorative paving and/or alternative ground covers such as pathway bark, crushed rock, wood chippings, concrete brick or wood pavers.

### Plant Selection. Plants shall be selected appropriately according to their suitability to the climatic, geologic and topographical conditions of the site. Protection and preservation of native plant species and natural areas shall be encouraged. See Section 14-40.125(g)(5)(ii) for planting selection requirements for bioretention facilities.

### Hydrozone Grouping of Plants. Plants having similar water-use characteristics shall be grouped together in distinct hydrozones and irrigated by a separate valve. See Section Section 14-40.125(g)(5)(iii) for irrigation and hydrozone grouping requirements for bioretention facilities.

### Emphasis on Drought-Tolerant Plants. Plant selection shall clearly emphasize the use of native, drought-tolerant and water-conserving plants.

### Design of Planter Areas. Curbs, headerboards, pavers and other decorative materials should be used to define the edges of planters to reduce irrigation runoff into non-planted areas, and to define turf areas.

### Water Features. Water features shall be designed and maintained to use water efficiently. Pools, ponds, decorative fountains and other similar ornamental water features shall use recirculating water. Water features should be of a design, shape, and size that minimizes water loss through evaporation.

### Parking Lots. Parking lots should be adequately landscaped to avoid large, uninterrupted expanses of paving. See Section 14-40.125(g)(5) for landscaping requirements for parking areas.

### Mulching. Planted areas will have a two-inch-thick layer of mulch at planting to reduce soil moisture evaporation and discourage weed growth. See Section 14-40.125(g)(5)(v) for mulching requirements for bioretention facilities.

### Erosion Control. Erosion control measures shall be used on planted slopes of three-to-one or steeper. Where runoff and erosion are likely, planted slopes shall have material to reduce erosion and allow plants to become established.

### Required Landscaping Area.

### In all Residential zones (R-1, R-1P, RM-2, and RM-3), a minimum of 50% of the required front and side yard setbacks shall be landscaped in accordance with the design criteria in Subsection 14-40.125(g)(1). For parcels less than 50 feet in width, 50% of the front and one side yard setback shall be landscaped.

### In the IP-Industrial Park, IG-General Industrial, PF-Public Facilities, and N-Institutional zones, a minimum of 10% of the gross site area shall be dedicated to landscaping.

### In all Commercial zones (CA, CC, CT, CN, CNS, CO, and CV), a minimum of 15% of the gross site area shall be dedicated to landscaping.

### Planned developments permitted in accordance with the standards of Chapter 14-16, Part 25: PD-Planned Development District, shall dedicate a minimum of 20% of the total area of the development to landscaping, open space, or public recreational uses.

### Irrigation Design Criteria.

### Runoff and Overspray. Soil types and infiltration rates shall be considered when designing irrigation systems. All irrigation systems shall be designed to avoid runoff, low-head drainage, overspray or other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, roadways or structures. Proper irrigation equipment and schedules, including features such as repeat cycles, shall be used to closely match application rates to infiltration rates to minimize or eliminate runoff.

### Irrigation efficiency. Irrigation systems shall be designed, maintained, and managed using such techniques as low-precipitation heads, drip irrigation, moisture-sensors, check valves and other water-conserving techniques where appropriate.

### Temporary Irrigation. Temporary irrigation should be used for open space, hydroseeded areas, and newly installed bioretention facilities. These systems should be removed after the establishment period.

### Parking Area Landscape Design Standards

### Parking areas adjacent to public rights-of-way shall incorporate perimeter planter strips at least 5 feet in width located between the parking area and the street.

### A minimum of 10% of outdoor parking areas shall be maintained as landscaped area.

### Perimeter and interior landscaped areas shall include at least one 24-inch box tree per 5 parking spaces.

### Parking lots with more than 15 parking spaces shall include interior island features to accommodate additional trees. Islands shall be at least 6 feet wide in each direction and shall be provided approximately every 10 parking spaces.

### Design Standards for Bioretention Facilities

### Facility Sizing. Bioretention facilities shall be designed to manage stormwater from the drainage management area. Sizing shall be in accordance with the City’s stormwater permit and as codified elsewhere in the municipal code.

### Plant Selection. Plants used in bioretention facilities shall be selected for tolerance to both occasional flooding, as well as dry periods. Plants shall be non-invasive and should be native to the region whenever possible. A list of approved plant species is contained City of Watsonville Public Improvement Standards.

### Hydrozone Grouping and Irrigation. Installed plants within rain gardens and other bioretention facilities shall be grouped into hydrozones based on similar water usage. During plant establishment, temporary irrigation shall use separate valves for each hydrozone. All irrigation shall be removed from the bioretention facility at the end of plant establishment.

### Planter Edge and Curb Design. Because bioretention facilities are intended to receive and treat stormwater runoff, edge treatments shall be designed not to impede sheet flow from surrounding areas. See standard design details contained in City of Watsonville Public Improvement Standards.

### Mulching. Mulch application, quantity, and composition for bioretention facilities shall be governed by the design details contained in City of Watsonville Public Improvement Standards.