

ORDINANCE NO. 2918-10

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SUNNYVALE AMENDING SECTIONS 19.12.130 (“L”) OF CHAPTER 19.12 (DEFINITIONS), 19.28.110 (LANDSCAPING AND OPEN SPACE) OF CHAPTER 19.28 (DOWNTOWN SPECIFIC PLAN DISTRICT), AND 19.98.020 (APPLICATIONS) OF CHAPTER 19.98 (GENERAL PROCEDURES); ADDING CHAPTER 19.37 (LANDSCAPING, IRRIGATION AND USEABLE OPEN SPACE) TO ARTICLE 4 (GENERAL DEVELOPMENT STANDARDS) OF TITLE 19 (ZONING); AND REPEALING SECTION 19.38.070 (LANDSCAPING, IRRIGATION AND USABLE OPEN SPACE) OF CHAPTER 19.38 OF ARTICLE 4 (GENERAL DEVELOPMENT STANDARDS) OF TITLE 19 (ZONING) OF THE SUNNYVALE MUNICIPAL CODE TO CLARIFY REQUIREMENTS AND ESTABLISH WATER-EFFICIENT LANDSCAPE REGULATIONS PURSUANT TO STATE LAW

WHEREAS, the adoption and enforcement of this Ordinance is necessary to manage the City of Sunnyvale’s potable water supply in the short and long-term and to avoid or minimize the effects of drought and shortage within the City. This Ordinance is essential to ensure a reliable and sustainable minimum supply of water for the public health, safety and welfare.

WHEREAS, the California Water Conservation in Landscaping Act has been implemented by a statewide Landscape Task Force, which was overseen by the California Urban Water Conservation Council, to create a Model Water-Efficient Landscape Ordinance (Model Ordinance) that local agencies may adopt. The Water Conservation in Landscaping Act was amended pursuant to AB 2717 (Chapter 682, Stats. 2004) and AB 1881 (Chapter 559, Stats. 2006) to update the Model Ordinance;

WHEREAS, AB 1881 requires cities and counties to adopt the updated Model Ordinance or an equivalent document which is “at least as effective as” the Model Ordinance in conserving water. In the event cities and counties do not take such action, the State’s Model Ordinance will be deemed to be automatically adopted by statute;

WHEREAS, the City of Sunnyvale has developed this Landscaping, Irrigation and Useable Open Space Ordinance to meet the requirements and guidelines of the Model Ordinance and to address the unique physical characteristics, including average landscaped areas, within the City of Sunnyvale’s jurisdiction, in order to ensure that this Ordinance will be “at least as effective as” the Model Ordinance in conserving water;

WHEREAS, although this Landscaping, Irrigation and Useable Open Space Ordinance is more streamlined and simplified than the Model Ordinance, the Council finds that it is “at least as effective as” the Model Ordinance for the following reasons: this Ordinance applies to more accounts than the Model Ordinance does because it lowers the size threshold for applicable landscaped areas from 2,500 square feet to 1,000 square feet for multi-family residential and non-residential projects, and, in the case of single-family residences, from 5,000 square feet to 2,500 square feet, to better reflect the typical landscaped areas located within the region; and

(2) this Ordinance includes a default turf restriction of 25% of the irrigated area and requires that at least 80% of the non-turf landscape areas be native plants, low-water using plants, or no-water using plants (unless the applicant elects to perform a water budget). The Model Ordinance does not contain any such default turf restrictions or specified plant requirements;

WHEREAS, although this Ordinance is more streamlined and simplified than the Model Ordinance, the Council further finds that it is “at least as effective as” the Model Ordinance because this Ordinance includes water budget parameters and values and landscaping requirements that are consistent with the Model Ordinance. By using the same water budget parameters as the Model Ordinance (e.g., plant factors, irrigation efficiency), this Ordinance will be as effective as the Model Ordinance in developing landscaping water budgets. By using the same landscaping parameters as the Model Ordinance for, among other things, slope restrictions and width restrictions for turf, irrigation times, and minimum mulch requirements, this Ordinance will be at least as effective as the Model Ordinance in achieving water savings;

WHEREAS, Article X, Section 2 of the California Constitution and Section 100 of the California Water Code declare that the general welfare requires water resources be put to beneficial use, waste or unreasonable use or unreasonable method of use of water be prevented, and conservation of water be fully exercised with a view to the reasonable and beneficial use thereof;

WHEREAS, current supply and demand projections for the Bay Area Water Supply and Conservation Agency (“BAWSCA”) member agencies indicate that, in the absence of increased water conservation, water demands will exceed available water supplies in 2015 and implementation of water conserving ordinances is one mechanism by which agencies can reduce future water demands and remain within existing supplies;

WHEREAS, The Council finds and determines that this Ordinance is consistent with the provisions requiring reductions in outdoor water use for landscaping in the California Green Building Standards Code, as such provisions will be implemented in the coming years. Such requirements include the development of a water budget for landscaping irrigation in accordance with methodology outlined in either the Model Ordinance or pursuant to a locally adopted ordinance; and

WHEREAS, the State Legislature has identified the provision of a more reliable water supply and the protection, restoration and enhancement of the Delta ecosystem as a high priority for the state. Pursuant to this, in November 2009, the State Legislature passed Senate Bill 7 (7th Extraordinary Session) requiring certain urban water suppliers to reduce per capita urban water use by 20% by the year 2020. Accordingly, the Council finds that implementation of this Ordinance is consistent with the policies and goals established by the State Legislature in enacting SB 7 (7th Extraordinary Session).

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF SUNNYVALE DOES ORDAIN AS FOLLOWS:

SECTION 1. SECTION 19.12.130 AMENDED. Section 19.12.130 of Chapter 19.12 (Definitions) of Title 19 (Zoning) of the Sunnyvale Municipal Code is hereby amended to read as follows:

19.12.130. “L”

(1) “Landscaping” means the planting and maintenance of trees, ground cover, shrubs, vines, flowers, lawns or a combination thereof. The combination or design, in addition to natural plant materials, may include rock or stone and structural or decorative features including, but not limited to, fountains, reflecting pools, art work and benches, pedestrian walkways, bicycle parking, recreation facilities and outdoor eating areas.

(2) “Landscaped area” means a portion of a site planted with vegetation utilized for screening or ornamentation. Landscaped areas may include decorative rock or stone, provided that such materials are incidental and do not comprise more than thirty percent of the area. For purposes of computation of landscaped area as that term is used in this title, automobile parking areas, storage areas, vehicular ways and specifically permitted unenclosed uses shall not be considered as landscaping.

(3) – (16) [Text unchanged.]

SECTION 2. SECTION 19.28.110 AMENDED. Section 19.28.110 of Chapter 19.28 (Downtown Specific Plan District) of Title 19 (Zoning) of the Sunnyvale Municipal Code is hereby amended to read as follows:

19.28.110. Downtown Specific Plan—Landscaping and useable open space areas.

(a) Landscaping and useable open space standards apply whenever landscaping is installed on any unlandscaped lot or in connection with new construction, replacement or expansion in floor area of any structure in the downtown specific plan area.

(b) All public rights-of-way, private streets or driveways, easements, building and structure setbacks, plazas, pedestrian walkways and parking facilities shall provide landscaping as required and described in the downtown specific plan and shall meet the landscaping design requirements set forth in Chapter 19.37.

(c) Project landscaping shall be designed and planted to be consistent with the streetscape design themes and landscaping provisions set forth in the downtown specific plan streetscape design standards.

(d) Residential uses are required to provide useable open space, as defined in Chapter 19.37, with the following exceptions:

(1) Useable open space may be located in the front yard between the face of the building and the street for multi-family uses.

(2) Balconies with a minimum of six (6) feet in any dimension and a total of at least fifty (50) square feet qualify as useable open space.

(e) Minimum landscaped areas and usable open space areas shall meet the requirements set forth in Table 19.28.110.

**Table 19.28.110
Minimum Landscaped Areas and Useable Open Space Requirements for DSP**

| Type of Use | Landscaped Areas | Useable Open Space |
|--|--|--|
| Commercial Uses (Retail, Retail Service, Restaurant, Entertainment, etc.) or Office Uses | All areas not devoted to driveways and surface access zones such as aisles, parking and ramps shall be landscaped. | N/A |
| Office Uses | All areas not devoted to driveways and surface access zones such as aisles, parking and ramps shall be landscaped. | N/A |
| Low and Low-Medium Density Residential Uses | 20% of lot area | 500 sq. ft./unit. Lots with accessory units in DSP Blocks 8, 9, 10, 11, 12, and 17 are required to provide one thousand (1,000) sq. ft. of useable open space. |
| Medium, High and Very High Density Residential Uses | 20% of lot area | 50 sq. ft./unit |
| Surface Parking Lots | 20% of the parking lot area | N/A |
| Other uses not listed above | To be determined by the Director of Community Development | To be determined by the Director of Community Development |

SECTION 3. CHAPTER 19.37 ADDED. Chapter 19.37 (Landscaping, Irrigation and Useable Open Space) is hereby added to Title 19 (Zoning), Article 4 (General Development Standards) of the Sunnyvale Municipal Code to read as follows:

Chapter 19.37.

LANDSCAPING, IRRIGATION AND USEABLE OPEN SPACE

- 19.37.010. Purpose.**
- 19.37.020. Applicability.**
- 19.37.030. Definitions.**
- 19.37.040. Minimum landscaped area and useable open space.**
- 19.37.050. Water efficiency design requirements.**
- 19.37.060. General planting, soil management and water feature design requirements.**
- 19.37.070. Parking lot landscaping design requirements.**
- 19.37.080. Buffer landscaping design requirements.**
- 19.37.090. Frontage strip landscaping strip design requirements.**
- 19.37.100. Useable open space design requirements.**

- 19.37.110. Irrigation system design requirements.**
- 19.37.120. Landscaping and irrigation approval and maintenance.**
- 19.37.130. Landscaping irrigation audit and maintenance.**

19.37.010. Purpose.

The purpose of this chapter is to ensure that adequate landscaped areas and useable open space are provided where applicable for all zoning districts; to promote the conservation and efficient use of water and to prevent the waste of this valuable resource; and to promote water conservation as one component of sustainable building practices. This chapter shall be construed to assure consistency with the requirements of the Water Conservation in Landscaping Act of the California Government Code, or any successor statute, and any applicable implementing regulations, as they exist at the time of enactment or as later amended. In addition to compliance with the provisions in this chapter, projects shall comply with storm water management requirements set forth in Chapter 12.60.

19.37.020. Applicability.

All provisions of this chapter shall apply to the following landscaping projects:

(a) Individual Single-Family or Duplex Residential Projects. New landscaping installations equal to or greater than ~~2,500~~ 1,000 square feet in connection with construction of a new dwelling unit.

(b) All Other Projects. New landscaping installations or landscaping rehabilitation projects equal to or greater than 1,000 square feet.

(c) Exemptions. Landscaping and irrigation requirements shall not apply to:

(1) Projects that fall below the square footage thresholds stated in subsections (a) and (b);

(2) Individual single-family or duplex residential projects that are not in connection with construction of a new dwelling unit;

(3) Registered local, state or federal historical sites where landscaping establishes a historical landscaping style, as determined by the Heritage Preservation Commission, Planning Commission, or by any applicable public board or commission responsible for architectural review or historic preservation;

(4) Ecological restoration or mined-land reclamation projects that do not require a permanent irrigation system; or

(5) Community gardens, plant collections (as part of botanical gardens and arboretums open to the public), non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation), agricultural uses, commercial nurseries and sod farms.

19.37.030. Definitions.

The following terms and definitions pertain to the water-efficiency sections of this chapter:

(a) “Applied water” means the portion of water supplied by the irrigation system to the landscaped area.

(b) “Automatic irrigation controller” means an automatic timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers schedule irrigation events using either evapotranspiration (weather-based) or soil moisture data.

(c) “Certified professional” means a licensed landscape architect, a licensed landscape contractor, a licensed professional engineer, certified irrigation designer, or any other person authorized by the state to design a landscape or irrigation system, or a certified landscape irrigation auditor.

(d) “Conversion factor (0.62)” means the number that converts acre-inches per acre per year to gallons per square foot per year.

(e) “Drip irrigation” means any non-spray low volume irrigation system utilizing emission devices with a flow rate measured in gallons per hour. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

(f) “Estimated Total Water Use” (ETWU) means the total water used for the landscaped area as described in Section 19.37.050.

(g) “ET adjustment factor” (ETAF) means a factor of 0.7, that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscaped area. ETAF for a Special Landscaped Area shall not exceed 1.0.

(h) “Evapotranspiration rate” means the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time.

(i) “Hardscape” means any durable material (pervious and non-pervious) in a landscaped area, such as decks, patios or pedestrian walkways, and other non-irrigated elements which may include art work, benches, and bicycle parking.

(j) “Hydrozone” means a portion of the landscaped area having plants with similar water needs. A hydrozone may be irrigated or non-irrigated.

(k) “Irrigation audit” means an in-depth evaluation of the performance of an irrigation system. An irrigation audit includes, but is not limited to: inspection, system tune-up, system test with distribution uniformity or emission uniformity, correction of any overspray or runoff that causes overland flow, and preparation of an irrigation schedule.

(l) “Irrigation efficiency” (IE) means the measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. Required irrigation efficiency is described in Section 19.37.070.

(m) “Low-water use plant” means a plant species whose water needs are compatible with local climate and soil conditions. Species classified as “very low water use” and “low water use” by WUCOLS, having a regionally adjusted plant factor of 0.0 through 0.3, shall be considered low water use plants.

(n) “Maximum Applied Water Allowance” (MAWA) means the upper limit of annual applied water for the established landscaped area as specified in Section 19.37.050.

(o) “Mulch” means any organic material such as leaves, bark, straw, compost, or inorganic mineral materials such as rocks, gravel, and decomposed granite left loose and applied to the soil surface for the beneficial purposes of reducing evaporation, suppressing weeds, moderating soil temperature, and preventing soil erosion.

(p) “Native plant” means a plant indigenous to a specific area of consideration. For the purposes of these guidelines, the term shall refer to plants indigenous to the coastal ranges of Central and Northern California, and more specifically to such plants that are suited to the ecology of the present or historic natural community(ies) of the project’s vicinity.

(q) “No-water using plant” means a plant species with water needs that are compatible with local climate and soil conditions such that regular supplemental irrigation is not required to sustain the plant after it has become established.

(r) “Plant factor” or “plant water use factor” is a factor, when multiplied by ETo (reference evapotranspiration), estimates the amount of water needed by plants. For purpose of calculation of the ETWU, use values from WUCOLS, or equivalent reference subject to approval by the director of community development.

(s) “Precipitation rate” means the rate of application of water measured in inches per hour.

(t) “Recreational area” means areas dedicated to active play such as parks, sports fields, and golf courses where turf provides a playing surface.

(u) “Reference evapotranspiration” or “ETo” means a standard measurement of environmental parameters which affect the water use of plants. For purposes of calculation of the MAWA and ETWU, as described in Section 19.37.050, use current reference evapotranspiration data, such as from the California Irrigation Management Information System (CIMIS), or other equivalent data, or soil moisture sensor data.

(v) “Runoff” means water which is not absorbed by the soil or landscaping to which it is applied and flows from the landscaped area.

(w) “Soil moisture sensing device” or “soil moisture sensor” means a device that measures the amount of water in the soil. The device may also suspend or initiate an irrigation event.

(x) “Special Landscaped Area” (SLA) means an area of the landscaping dedicated solely to edible plants, areas irrigated with recycled water, water features using recycled water, and areas dedicated to active play such as parks, sports fields, golf courses, and where turf provides a playing surface.

(y) “Turf” means a ground cover surface of mowed grass.

(z) “Water feature” means a design element where open water performs an aesthetic or recreational function. Water features include ponds, lakes, waterfalls, fountains, artificial streams, spas, and swimming pools (where water is artificially supplied).

(aa) “WUCOLS” means the Water Use Classification of Landscape Species published by the University of California Cooperative Extension, the Department of Water Resources and the Bureau of Reclamation, 2000.

19.37.040. Minimum landscaped area and useable open space.

(a) Minimum Landscaped Area. Table 19.37.040 describes the minimum landscaped area and useable open space required by zoning district. In addition to the minimum landscaped area, areas not used for buildings, parking lot areas, driveways or pedestrian walkways shall be landscaped unless the review authority determines that landscaping is not necessary to achieve the purposes of this chapter. For requirements specific to single family uses, see subsection (f).

(b) Landscaped Buffer Required. A landscaped buffer is required for any property with a non-residential use in a residential zoning district that abuts a residential use. It is also required for properties of any use in a nonresidential zoning district which abuts a residential zoning district. See Section 19.37.080 for buffer landscaping design requirements.

(c) Landscaped Frontage Strip Required. A fifteen-foot (15') wide landscaped frontage strip is required for all properties except those noted below in subsection (f). The frontage strip is measured from the inside edge of the public sidewalk, or if no sidewalk exists, from the curb. See Section 19.37.090 for frontage strip landscaping design requirements.

(d) Useable Open Space Required. Useable open space is required for all duplex and multifamily residential properties as described in Table 19.37.040. Useable open space areas that meet the definition of landscaping may contribute towards the minimum landscaped area of the site. See Section 19.37.100 for useable open space design requirements.

(e) Specific Plan, Precise Plan and other specialized plan areas. Minimum landscaped area and useable open space for properties within a specialized plan's prescribed area are described in their individual plans.

(f) Allowances and Limitations for Single-Family Uses and Single-Family Zoning Districts.

(1) Allowances for Single-Family Zoning Districts. Yards are not required to be landscaped in single-family zoning districts; however other provisions in Title 19 may apply.

(2) Limitation on Paved Areas in the R-0 and R-1 Zoning Districts. Not more than fifty (50) percent of the required front yard of any lot within an R-0 or R-1 zoning district shall be paved with asphalt, concrete cement, or any other impervious surface, except as may be required to meet off-street parking and access requirements of Chapter 19.46.

(3) Landscaped Frontage Strip for Single-Family Uses. A landscaped frontage strip is not required in any zoning district for single-family residential uses which have a frontage on a public street.

TABLE 19.37.040

Minimum Landscaped Area and Useable Open Space by Zoning District

| Zoning District | Useable Open Space | Other Landscaped Area | Parking Lot Landscaped Area | Total Landscaped Area |
|------------------------|---------------------------|------------------------------|------------------------------------|------------------------------|
| R-0 | N/A | N/A | N/A | N/A |
| R-1 | N/A | N/A | N/A | N/A |
| R-1.5 | N/A | N/A | N/A | N/A |

| Zoning District | Useable Open Space | Other Landscaped Area | Parking Lot Landscaped Area | Total Landscaped Area |
|-----------------|-------------------------------|-----------------------|-----------------------------|--|
| R-1.7/PD | N/A | N/A | N/A | N/A |
| R-2 | 500 sq. ft./unit ¹ | 850 sq. ft./unit | 20% of the parking lot area | Total minimum landscaped area is the combination of the minimum parking lot landscaped area and other landscaped area. In no case shall this total be less than 20% of the lot area. |
| R-3 | 400 sq. ft./unit | 425 sq. ft./unit | | |
| R-4 | 380 sq. ft./unit | 375 sq. ft./unit | | |
| R-5 | 380 sq. ft./unit | 375 sq. ft./unit | | |
| C-1 | N/A | 12.5% of floor area | | |
| C-2 | N/A | 12.5% of floor area | | |
| C-3 | N/A | 12.5% of floor area | | |
| C-4 | N/A | 12.5% of floor area | | |
| O | N/A | 10% of lot area | | |
| P-F | N/A | 10% of lot area | | |
| M-S | N/A | 10% of floor area | | |
| M-3 | N/A | 10% of floor area | | |

¹ One thousand (1,000) sq. ft. of usable open space is required for a property with an accessory living unit.

19.37.050. Water efficiency design requirements.

Water Efficiency in Design. Landscaped areas shall be designed to achieve water efficiency. Landscaping design and plant selection may be based on one of two options. Regardless of which option is selected, all other criteria described in this chapter shall apply. The options include:

(a) Option 1 – Turf Limitation and Minimum Area with Water-Conserving Plants. Turf area shall not be more than twenty-five (25) percent of the landscaped area, and native, low-water use or no-water use plants shall be installed in at least eighty (80) percent of all non-turf landscaped areas.

(b) Option 2 – Water Budget Calculations. If the turf limitation option is not selected, a water budget calculation shall be prepared and shall adhere to the following requirements:

(1) The plant factor shall be obtained from WUCOLS or an equivalent reference subject to approval by the director of community development. For areas that mix plants with different water uses, the plant factor calculation is based on the proportion of the respective plant factors, or based on the plant factor of the higher-water using plant. The plant factor ranges from 0.0 to 0.3 for low-water use plants, from 0.4 to 0.6 for moderate-water use plants, and from 0.7 to 1.0 for high-water use plants.

(2) All water features shall be included in the high water use hydrozone.

(3) All Special Landscaped Areas (SLA) shall be identified and their water use included in the water budget calculations.

(4) The reference evapotranspiration adjustment factor (ETAF) for SLAs shall not exceed 1.0. The ETAF for all other landscaped areas shall not exceed 0.7.

(5) Maximum Applied Water Allowance (MAWA) shall be calculated using the equation below:

$$MAWA = (ET_o) (0.62) [(0.7 \times LA) + (0.3 \times SLA)]$$

Where:

- MAWA = Maximum Applied Water Allowance (gallons per year)
- ET_o = Reference Evapotranspiration (inches per year)
- 0.62 = Conversion Factor (to gallons)
- 0.7 = Reference Evapotranspiration Adjustment Factor (ETAF)
- LA = Planted landscaped area including SLA and not including hardscapes (square feet)
- 0.3 = Additional Water Allowance for SLA
- SLA = Special Landscaped Area (square feet)

(6) Estimated Total Water Use (ETWU) will be calculated using the equation below. The sum of the ETWU calculated for all hydrozones shall not exceed the MAWA.

$$ETWU = (ET_o)(0.62) \left(\frac{PF \times HA}{IE} + SLA \right)$$

Where:

- ETWU = Estimated Total Water Use per year (gallons)
- ET_o = Reference Evapotranspiration (inches)
- PF = Plant Factor from WUCOLS
- HA = Hydrozone Area [high, medium, and low water use areas] (square feet)
- SLA = Special Landscaped Area (square feet)
- 0.62 = Conversion Factor
- IE = Irrigation Efficiency (minimum 0.70)

19.37.060. General planting, soil management and water feature design requirements.

(a) Plant Material. In addition to the requirements below, plant selection and installation shall be done in accordance with accepted horticultural industry practices.

(1) Variety. Landscaping shall include trees, shrubs, vines, flowers ground covers or a combination thereof.

(2) Size at Time of Planting. Plant materials shall be sized and spaced to achieve immediate effect, in accordance with horticultural industry practices and at the discretion of the director of community development. Trees shall be of minimum fifteen (15) gallon size. Twenty-four (24) or thirty-six (36) inch box trees may be required at the discretion of the director of community development.

(3) Number of Trees. There shall be one (1) tree per one thousand (1,000) square feet of required landscaped area in addition to required street trees and parking lot trees.

(4) Turf. All turf areas shall be planted with tall fescue or similar turf requiring less water. Turf shall not be planted on slopes greater than ten (10) percent where the toe of the slope is adjacent to an impermeable hardscape.

(b) Grouping of Plants. Plants with similar water needs shall be grouped (also described as a hydrozone). Areas that mix plants with different water uses may be allowed if a water budget is performed.

(c) Soil Management.

(1) Mulch. A minimum two (2) inch layer of mulch shall be applied on all non-turf soil areas.

(2) Soil Amendments. Soil amendments, such as compost, shall be incorporated according to the soil conditions at the project site and based on what is appropriate for selected plans.

(3) Grading. If the project includes grading, the grading shall be designed to minimize soil erosion, runoff and water waste. The grading shall avoid soil compaction in planted landscaped areas.

(d) Water Features. Recirculating water systems shall be used for water features. Where available, recycled water shall be used for water features.

19.37.070. Parking lot landscaping design requirements.

(a) Parking Lot Shading. Trees shall be planted and maintained throughout the lot to ensure that at least fifty (50) percent of the parking area will be shaded within fifteen (15) years after the establishment of the lot.

(1) Solar Energy Systems as Shading. Up to twenty-five (25) percent of the fifty (50) percent parking lot shading requirement (twelve and one-half (12.5) percent of the total parking lot area) may be met with installation of solar energy systems rather than trees.

(2) Calculation of Shading. Shading shall be calculated by using the diameter of the tree crown at fifteen (15) years or the dimensions of any roofed area supporting the solar energy system within the parking lot area.

(3) Surfaces Subject to Shading Calculation. All surfacing on which a vehicle can drive is subject to shade calculation, including all parking stalls, vehicular drives within the property regardless of length, drive-through lanes, and all maneuvering areas regardless of depth. The following surface areas are exempt from shading requirements: truck loading areas in front of overhead doors, truck maneuvering and parking areas unconnected to and exclusive of any vehicle parking, surfaced areas not to be used for vehicle parking, driving or maneuvering, provided they are made inaccessible to vehicles by a barrier such as bollards or fencing, display, sales, service, or vehicular storage areas for automobile dealerships (required parking for auto dealerships is still subject to shading requirements), or surfaced areas existing prior to January 1, 2002.

(b) Ground Cover and Shrubs on Parking Islands. Parking islands shall contain living ground cover or shrubs with the trees, unless it can be shown that ground cover is incompatible with the tree. Where living ground cover is unsuitable, the director of community development may allow porous, nonliving ground cover such as pebbles or tanbark.

(c) Drainage Design. Landscaping islands and parking islands shall be designed to integrate parking lot and site drainage in order to reduce storm water runoff velocities and minimize non-point source pollution. When six-inch concrete curbs are installed, they shall have drainage “weep holes.”

(d) Wheel Stops. Concrete wheel stops shall be installed when landscaped areas are not adequately protected.

19.37.080. Buffer landscaping design requirements.

The following is a list of design requirements for buffer landscaping.

(a) Width. The buffer shall maintain a width of at least ten (10) feet.

(b) Landscaping. The buffer shall include a planted screen of approved trees and shrubs which shall be placed along the length of the buffer at intervals not to exceed twenty (20) feet, provided, however, that the director of community development may grant exceptions through a miscellaneous plan permit when warranted by conditions on the property.

(c) Wall Design. The buffer shall include a decorative masonry wall six (6) feet in height measured from the highest adjoining grade. When the adjacent non-residential building is two (2) stories or more in height, the decorative masonry wall shall be eight (8) feet measured from the highest adjoining grade. Where a residential use is permitted in a nonresidential zoning district, the wall shall be required on the residential property, unless a wall already exists.

(d) Specific Plan, Precise Plan and other specialized plan areas. Properties within a specialized plan’s prescribed area may be subject to additional buffer landscaping design requirements, as described in their individual plans.

19.37.090. Frontage strip landscaping design requirements.

(a) Width. The frontage strip shall be fifteen (15) feet wide along the entire street frontage measured from the inside edge of the public sidewalk, or if no sidewalk exists, from the curb.

(b) Landscaping allowances. Frontage strip landscaping may be crossed by walkways and access drives.

(c) Specific Plan, Precise Plan and other specialized plan areas. Properties within a specialized plan’s prescribed area may vary from these frontage strip design requirements, as described in their individual plans.

19.37.100. Useable open space design requirements.

(a) Function. Usable open space must be designed to be accessible to, and usable for outdoor living, recreation or utility use.

(b) Location. Usable open space may not be located in any required front yard area.

(c) Minimum Useable Open Space Dimensions and Area. Each useable open space area shall have at least a twelve (12) foot dimension in any direction and a minimum area of two hundred (200) sq. ft. except for:

(1) Private balconies must have a minimum of seven (7) feet in any direction and a minimum area of eighty (80) square feet.

(2) Roofs, decks or porches must have a minimum of ten (10) feet in any direction and a total of one hundred twenty (120) square feet.

(d) Private Open Space Required. In the R-4 and R-5 Zoning Districts, a minimum of eighty (80) sq. ft. per unit shall be designed as private usable open space.

(e) Specific Plan, Precise Plan and other specialized plan areas. Properties within a specialized plan's prescribed area may vary from these useable open space design requirements, as described in their individual plans.

19.37.110. Irrigation system design requirements.

(a) Irrigation System Required. All landscaped areas shall have a permanent irrigation system, except for single-family detached and duplex dwellings.

(b) Irrigation Efficiency. Irrigation systems shall be designed and maintained to meet or exceed an average landscaping irrigation efficiency of seventy (70) percent.

(c) Water Waste Prohibited. Water waste resulting from an inefficient irrigation system leading to runoff, low head drainage, overspray, or other similar conditions where water flows onto adjacent property, non-irrigated areas such as walkways, roadways or structures is prohibited.

(d) Hydrozone Irrigation. Systems shall be designed to meet the individual needs of each plant group. Valves and control circuits shall be separated based on the required rate and quantity of water used.

(1) Valves. Each valve shall irrigate a hydrozone with similar site, slope, sun exposure, soil conditions and plant materials with similar water use. Where feasible, trees shall be placed on separate valves from shrubs, groundcovers, and turf.

(2) Sprinkler Heads. Sprinkler heads and other emission devices shall be selected based on what is appropriate for the plant type within that hydrozone. Sprinkler heads must have matched precipitation rates within each circuit.

(e) Low Volume Irrigation. Bubbler or drip-type irrigation, or other low-flow, non-spray technology shall be provided for:

(1) Trees and shrubs.

(2) Mulched areas.

(3) Areas with slope greater than 10%, unless it can be demonstrated that no runoff or erosion will occur if other types of irrigation is used.

(4) Areas that are less than eight (8) feet wide in any direction.

(f) Overhead Sprinkler Irrigation. Overhead irrigation systems may be used for clustered shrub plantings. Areas within two (2) feet of a non-permeable surface may not be irrigated using overhead sprinkler irrigation unless it can be demonstrated that no runoff would occur, or the adjacent non-permeable surface is designed and constructed to drain entirely to landscaping.

(g) Irrigation Controllers and Sensors. All irrigation controllers must utilize either evapotranspiration or soil moisture sensor data and be capable of dual or multiple programming. Irrigation systems shall also incorporate sensors (rain, freeze, wind, etc.) that suspend or alter irrigation operation during unfavorable weather conditions.

(h) Screening of Devices. Irrigation controllers and backflow devices shall be screened from public view.

(i) Scheduling. Irrigation must be scheduled between 8:00 p.m. and 10:00 a.m.

19.37.120. Landscaping and irrigation approval.

(a) Permit Required. Except as otherwise provided in this chapter, no person shall install or modify any landscaped area described in Section 19.37.020 without first obtaining a miscellaneous plan permit for each such action, in accordance with the procedure described in Chapter 19.82.

(b) Landscaping and Irrigation Plans Required. Landscaping and irrigation plans shall be required for any modification or installation of new landscaping that falls within the thresholds stated in this chapter. The plans shall meet the information requirements determined by the director of community development to comply with the provisions of this chapter.

(1) Preparation by Certified Professional. Landscaping and irrigation plans shall be prepared by, and bear the signature of, a certified professional, except for new landscaping installations or landscaping rehabilitation projects with less than 2,500 square feet of landscaped area.

19.37.130. Landscaping irrigation audit and maintenance.

(a) Irrigation Audit Required. Prior to approval of occupancy by a building official, a landscaping irrigation audit shall be conducted and an irrigation audit report shall be submitted for projects with landscaping and irrigation plans approved after (*adoption date*).

(1) Audit by Certified Professional. The landscaping irrigation audit shall be conducted and the report shall be prepared by a certified professional, except for new landscaping installations or landscaping rehabilitation projects with less than 2,500 square feet of landscaped area.

(2) Audit Report Content. The irrigation audit report shall include, but not be limited to: inspection, system tune-up, system test with distribution uniformity, correction of any overspray or runoff that causes overland flow, and preparation of an irrigation schedule.

(b) Submittal of Landscaping Maintenance Schedule. Prior to the final inspection by the building official, a regular maintenance schedule shall be submitted to the director of community development for review and approval. The maintenance schedule shall include, but not be limited to, routine inspection; adjustment and repair of the irrigation system and its components; aerating and dethatching turf areas; replenishing mulch; fertilizing; pruning; weeding in all landscaped areas; and removing obstructions to irrigation spray heads or other emission devices. Landscaping shall be maintained in accordance with the approved maintenance schedule.

(c) General Maintenance. Landscaping shall be maintained in compliance with the approved landscaping plan, and shall be maintained in a neat, clean and healthful condition. Removed landscaping shall be replaced with specimen plants to match the approved landscaping plan.

SECTION 3. SECTION 19.38.070 REPEALED. Section 19.38.070 of Chapter 19.38 (Required Facilities) of Article 4 (General Development Standards) of Title 19 (Zoning) of the Sunnyvale Municipal Code is hereby repealed as follows:

19.38.070. Landscaping, irrigation and usable open space.
[Repealed May 11, 2010.]

SECTION 5. SECTION 19.98.020 AMENDED. Section 19.98.020 of Chapter 19.98 (General Procedures) of Title 19 (Zoning) of the Sunnyvale Municipal Code is hereby amended to read as follows:

19.98.020. Applications.

(a) Consideration of a permit or process is initiated by the filing of an application signed by the owner of the land to which the permit or process would be applicable. The application shall be filed with the director of community development on forms furnished for this purpose. The application shall be accompanied by the required fee, plans, elevations and other supporting data set forth in this section, or determined necessary by the director of community development.

(b) Design review and miscellaneous plan permit applications shall include:

(1) Written explanation of project;

(2) Site plan; All site plans shall show street and sidewalk locations (if applicable) in addition to property lines. The director of community development may require site plans with certified site elevation data;

(3) Architectural elevations of all sides of all buildings indicating exterior materials and colors. Where appropriate, a color and material board may be required. The director of community development may require a streetscape view showing the proposed home and one adjacent home on each side;

(4) Landscaping and irrigation plans for projects that include construction of a new single-family or duplex dwelling unit, or any modification or installation of new landscaping that falls within the thresholds stated in Chapter 19.37. The plans shall meet the information requirements determined by the director of community development to comply with the standards set forth in Chapter 19.37;

(5) Floor plans of all buildings.

(c) – (k) [Text unchanged.]

SECTION 6. CEQA EXEMPTION. The City Council finds, pursuant to Title 14 of the California Code of Regulations, Section 15061(b)(3), that this ordinance is exempt from the requirements of the California Environmental Quality Act (CEQA) in that it is not a Project which has the potential for causing a significant effect on the environment. In addition, this ordinance is an action being taken for enhanced protection of the environment that does not have the potential to cause significant effects on the environment. Consequently, it is categorically exempt in accordance with CEQA Guidelines Section 15307 as an action taken by a regulatory agency as authorized by California law to assure maintenance or protection of natural resources; and in accordance with CEQA Guidelines Section 15308 as an action taken by a regulatory

agency as authorized by California law to assure maintenance or protection of the environment. The Council therefore directs that the Planning Division may file a Notice of Exemption with the Santa Clara County Clerk in accordance with the Sunnyvale Guidelines for the implementation of CEQA adopted by Resolution No. 118-04.

SECTION 7. CONSTITUTIONALITY; SEVERABILITY. If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held to be invalid by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares that it would have passed this ordinance, and each section, subsection, sentence, clause and phrase thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared invalid.

SECTION 8. POSTING AND PUBLICATION. The City Clerk is directed to cause copies of this ordinance to be posted in three (3) prominent places in the City of Sunnyvale and to cause publication once in *The Sun*, the official newspaper for publication of legal notices of the City of Sunnyvale, of a notice setting forth the date of adoption, the title of this ordinance, and a list of places where copies of this ordinance are posted, within fifteen (15) days after adoption of this ordinance.

SECTION 9. EFFECTIVE DATE. This ordinance shall be in full force and effect thirty (30) days from and after the date of its adoption.

Introduced at a regular meeting of the City Council held on April 27, 2010, and adopted as an ordinance of the City of Sunnyvale at a regular meeting of the City Council held on _____, 2010, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

ATTEST:

APPROVED:

City Clerk
Date of Attestation: _____

Mayor

(SEAL)

APPROVED AS TO FORM AND LEGALITY:

David E. Kahn, City Attorney