ESCONDIDO
City of Choice

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January 28, 2010

Mr. Simon Eching
California Department of Water Resources
Water Use and Efficiency Branch
Post Office Box 942836
Sacramento, CA 94236-0001

RE: Notice of Updated Water Efficient Landscape Ordinance
Escondido Case No. AZ09-0007

Dear Mr. Eching:

Pursuant to the Water Conservation in Landscaping Act of 2006, the City Council of the City of Escondido approved a new Water Efficient Landscape Ordinance on January 27, 2010. The ordinance updates the City's landscape regulations of Article 62 of the Escondido Zoning Code, to increase water savings in landscapes and further reduce water waste. Enclosed are copies of Ordinance 2010-01, the Water Efficient Landscape Regulations (Exhibit A), and the Findings (Exhibit B) made by the Council that the ordinance is at least as effective at conserving water as the state's updated model ordinance. A copy of the Council's staff report is also enclosed in support of the Findings. The confirmed agenda indicates the Council's vote. The second reading and adoption of Ordinance 2010-01 is anticipated to occur February 3, 2010, with the regulations becoming effective thirty days later.

Sincerely,

Rozanne Cherry

Rozanne Cherry
Principal Planner

Encl: City Council Staff Report of January 27, 2010
Ordinance 2010-01, with
Exhibit A
Exhibit B
Confirmed Agenda

Lori Holt Pfeiler, Mayor Dick Daniels, Mayor Pro Tem Marie Waldron Sam Abed Olga Diaz

ORDINANCE NO. 2010-01

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ESCONDIDO, CALIFORNIA, AMENDING ESCONDIDO ZONING CODE ARTICLE 62 AND ADOPTING WATER EFFICIENT LANDSCAPE REGULATIONS

Case # AZ09-0007

WHEREAS, the State of California adopted the Water Conservation in Landscaping Act, Government Code sections 65590 et seq. in 1990. In 1993 the City Council amended Article 62, Landscape Standards, to address the requirements of the State's 1990 Water Conservation in Landscaping Act; and

WHEREAS, in 2006 the State repealed the Water Conservation in Landscaping Act and adopted a new Water Conservation in Landscaping Act, Government Code sections 65591 et seq. The new Act requires the Department of Water Resources to update the previously adopted model efficient landscape ordinance that provides for greater efforts at water conservation and more efficient use of water in landscaping. The model ordinance is required to include provisions for: (1) water conservation by the appropriate use and groupings of plants that are well adapted to particular sites and local conditions, (2) a landscape water budget that establishes the maximum amount of water to be applied through the irrigation system, (3) automatic irrigation systems and irrigation schedules based on climatic conditions, terrains and soil types and other environmental conditions, (4) onsite soil assessment and soil management plans that include grading and drainage to promote healthy plant growth and prevent excessive erosion and runoff and (5) promoting the use of recycled water for landscaping when it is available and the use is consistent with State law; and

WHEREAS, Government Code section 65595 requires that on or before January 1, 2010, a local agency shall adopt a water efficient landscape ordinance that is at least as effective in conserving water as the updated model ordinance or adopt the model ordinance. If a local agency does not adopt a water efficient landscape ordinance by the deadline, the updated model ordinance shall apply within the local agency's jurisdiction and shall be enforced by the local agency; and

WHEREAS, the water efficient landscape regulations in the City Zoning Ordinance are not as effective in conserving water as the updated model ordinance and need to be replaced by more comprehensive regulations.

NOW, THEREFORE, the City Council of the City of Escondido, California, DOES HEREBY ORDAIN as follows:

SECTION 1. That proper notice of a public hearing has been given and a public hearing has been held before the City Council on this issue.

SECTION 2. That the City Council has reviewed and considered the Notice of Exemption prepared for this project and issued on January 19, 2010, in conformance with CEQA Section 15307, Action by Regulatory Agencies for Protection of Natural Resources, and has determined that all environmental issues have been addressed and no significant environmental impacts will result from approving this code amendment.

SECTION 3. That upon consideration of the Environmental Review; all material in the staff report (a copy of which is on file in the Planning Division); the Findings,

attached as Exhibit "B" and incorporated by this reference; and all public testimony presented at the hearing held on this project, this City Council finds the Zoning Code amendment is consistent with the General Plan and all applicable specific plans of the City of Escondido.

SECTION 4. That Article 62 of the Zoning Code is amended as set forth in Exhibit "A", which is attached and incorporated by this reference.

SECTION 5. SEPARABILITY. If any section, subsection sentence, clause, phrase or portion of this ordinance is held invalid or unconstitutional for any reason by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions.

SECTION 6. That as of the effective date of this ordinance, all ordinances or parts of ordinances in conflict herewith are hereby repealed.

SECTION 7. That the City Clerk is hereby directed to certify to the passage of this ordinance and to cause the same or a summary to be published one time within 15 days of its passage in a newspaper of general circulation, printed and published in the City of Escondido.

PROPOSED TEXT FOR ARTICLE 62

WATER EFFICIENT LANDSCAPE REGULATIONS

ARTICLE 62. WATER EFFICIENT LANDSCAPE REGULATIONS

SEC. 33-1320. PURPOSE

The State Legislature determined in the Water Conservation in Landscaping Act (the "Act"), Government Code sections 65591 et seq., that the State's water resources are in limited supply. The Legislature also recognized that while landscaping is essential to the quality of life in California, landscape design, installation, maintenance and management must be water efficient. The general purpose of this Article is to establish water use standards for landscaping in the City of Escondido that implement the 2006 development landscape design requirements established by the Act. Consistent with the Legislature's findings, the purpose of this ordinance is to:

(A) Promote the values and benefits of landscapes while recognizing the need to utilize water and other resources as efficiently as possible.

(B) Establish a structure for planning, designing, installing, maintaining, and managing water efficient landscapes in new construction.

(C) Promote the use, when available, of Tertiary Treated Recycled Water, for irrigating landscaping.

(D) Use water efficiently without waste by setting a Maximum Applied Water Allowance as an upper limit for water use and reduce water use for landscaping to the lowest practical amount.

(E) Encourage water users of existing landscapes to use water efficiently and without waste.

SEC. 33-1321. FINDINGS

This Article implements the Water Conservation in Landscaping Act. The requirements of this Article reduce water use associated with irrigation of outdoor landscaping by setting a maximum amount of water to be applied to landscaping, and by designing, installing and maintaining water efficient landscapes consistent with the water allowance.

SEC. 33-1322. DEFINITIONS

The following definitions shall apply to this Article:

Automatic Irrigation Controller shall mean an automatic timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers shall schedule irrigation events using either evapotranspiration (ETo) (weather-based) or soil moisture sensor data.

Backflow Prevention Device shall mean a safety device that restricts irrigation water from backing up into drinking water systems to prevent contamination of the water supply.

Building Permit shall mean a permit issued by the City of Escondido to engage in a certain type of construction on a specific location.

Certified Landscape Irrigation Auditor shall mean a person certified to perform landscape irrigation audits by an accredited academic institution, a professional trade organization, or other accredited certification program.

Developer shall mean a person who seeks or receives permits for or who undertakes land development activities' who is not a single-family homeowner. Developer includes a developer's partner, associate, employee, consultant, trustee or agent or any person who has any other business or financial relationship with the developer.

Director shall mean the Director of Community Development for the City of Escondido or anyone whom the Director has designated or hired to administer or enforce this Article.

Discretionary Permit shall mean any permit requiring a decision making body to exercise judgment prior to its approval, conditional approval, or denial.

Estimated Total Water Use ("ETWU") shall mean the estimated total water use in gallons per year for a landscaped area.

ET Adjustment Factor ("ETAF") shall mean a factor that when applied to reference ETo, adjusts for plant water requirements and irrigation efficiency, two major influences on the amount of water that is required for a healthy landscape.

Evapotranspiration ("ETo") shall mean the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time period. ETo is expressed in inches per day, month, or year and is an estimate of the ETo of a large field of four-inches to seven-inch tall, cool season turf that is well watered. Reference ETo is used as the basis of determining the MAWA so that regional differences in climate can be accommodated.

Grading shall mean any importation, excavation, movement, loosening, or compaction of soil or rock.

Hardscape shall mean any durable surface material, pervious, or non-pervious.

Homeowner-Provided Landscaping shall mean landscaping installed either by a private individual for a single-family residence or installed by a licensed contractor hired by a homeowner.

Hydrozone shall mean a portion of the landscape area having plants with similar water needs. A Hydrozone may be irrigated or non-irrigated.

Invasive Species shall mean species of plants not historically found in California that spread outside cultivated areas and may damage environmental or economic resources.

Irrigation Audit shall mean an inspection which includes an in depth evaluation of the performance of an irrigation system conducted by a Certified Landscape Irrigation Auditor. An irrigation audit may include, but is not limited to, inspection, system tune up, system test with distribution uniformity or emission uniformity, reporting overspray or runoff that causes overland flow and preparation of an irrigation schedule.

Irrigation Efficiency shall mean the measurement of the amount of water beneficially used divided by the water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices.

Landscaped Area shall mean an area with outdoor plants, turf and other vegetation. A landscaped area includes a water feature either in an area with vegetation or that stands alone. A landscaped area may also include design features adjacent to an area with vegetation when allowed under Section 33-1328. A landscaped area does not include the footprint of a building, decks, patio, sidewalk, driveway, parking lot or other Hardscape that does not meet the criteria in Section 33-1328. A landscaped area also does not include an area without irrigation designated for non-development such as designated open space or area with existing native vegetation.

Landscape Design Manual shall mean the manual, prepared or designated by the Director that establishes specific design criteria and guidance to implement the requirements of this Article.

Licensed shall mean licensed by the State of California.

"Low Head Drainage shall mean a sprinkler head or other irrigation device that continues to emit water after the water to the zone in which the device is located has shut off.

Low Volume Irrigation shall mean the application of irrigation water at low pressure through a system of tubing or lateral lines and low volume emitters such as drip lines or bubblers.

Mass Grading shall mean the movement of soil per Article 55.

Maximum Applied Water Allowance ("MAWA") shall mean the maximum allowed annual water use for a specific landscaped area based on the square footage of the area, the ETAF and the Reference ETo.

Mulch shall mean an organic material such as leaves, bark, straw, compost, or inorganic mineral materials such as rocks, gravel or decomposed granite left loose and applied to the soil surface to reduce evaporation, suppress weeds, moderate soil temperature, or prevent soil erosion.

Overspray shall mean the water from irrigation that is delivered outside an area targeted for the irrigation and makes contact with a surface not intended to be irrigated.

Pervious shall mean any surface or material that allows the passage of water through the material and into underlying soil.

Plant Factor shall mean a factor when multiplied by the ETo, estimates the amount of water a plant needs.

Public Water Purveyor" means a public utility, municipal water district, municipal irrigation district, or municipality that delivers water to customers.

Recycled Water shall mean wastewater that has been treated at the highest level required by the California Department of Health Services for water not intended for human consumption.

"Reference Evapotranspiration" shall mean a standard measurement of environmental parameters which affect the water use of plants. Reference ETo is used as the basis of determining the MAWA so that regional differences in climate can be accommodated.

Runoff shall mean water that is not absorbed by the soil or landscape to which it is applied and flows from the landscaped area.

Special landscaped area shall mean an area of the landscape dedicated to edible plants, an area irrigated with recycled water, or an area dedicated as turf area within a park, sports field, or golf course where turf provides a passive or active recreational surface.

Subsurface Irrigation shall mean an irrigation device with a delivery line and water emitters installed below the soil surface that slowly and frequently emit small amounts of water into the soil to irrigate plant roots.

Transitional Area shall mean a portion of a landscaped area that is adjacent to a natural or undisturbed area and is designated to ensure that the natural area remains unaffected by plantings and irrigation installed on the property.

"Tertiary Treated Recycled Water" shall mean water that has been through three levels of treatment including filtration and disinfection.

Turf shall mean a groundcover surface of mowed grass.

Water Feature shall mean a design element where open water performs an aesthetic or recreational function. A water feature includes a pond, lake, waterfall, fountain, artificial streams, spa and swimming pool. Constructed wetlands used for on-site wastewater treatment or stormwater best management practices are not water features; and, therefore, are not subject to the water budget calculation.

WUCOLS shall mean Water Use Classification of Landscape Species and refers to the Department of Water Resources 1999 publication or the most current version.

SEC. 33-1323. APPLICABILITY

(A) This Article and the requirement to obtain an outdoor water use authorization as part of the permitting process shall apply to the following projects which require a Building Permit or a Discretionary Permit:

(1) A project for an industrial, commercial, institutional, or multi-family residential use where the landscaped area is greater than or equal to 2,500 square feet.

(2) Developer installed residential and common area landscapes where the total landscaped area for the development is greater than or equal to 2,500 square feet.

(3) A new single-family residence with homeowner provided landscaping where the landscaped area is greater than or equal to 5,000 square feet.

(4) A model home that includes a landscaped area.

(5) A public agency project that contains a landscaped area 2,500 square feet or more.

(6) A rehabilitated landscape for an existing industrial, commercial, institutional, public agency, or multifamily use where a Building Permit or Discretionary Permit is being issued and the applicant is installing or modifying 2,500 square feet or more of landscaping.

(7) A cemetery under limited requirements in Section 33-1329.

(8) A new single-family residence with homeowner provided landscaping, where the landscape area is less than 5,000 square feet, under limited requirements in Section 33-1327.

(B) This Article and the requirements hereof shall not apply to the following:

(1) A registered local, State or federal historical site.

(2) An ecological restoration project that does not require a permanent irrigation system.

(3) A mined land reclamation project that does not require a permanent irrigation system.

(4) A botanical garden or arboretum, open to the public.

(5) Any single-family residence that is being rebuilt after it was destroyed due to a natural disaster, such as a fire, earthquake, hurricane or tornado.

SEC. 33-1324. LANDSCAPE APPROVAL AND MODIFCATION OF OUTDOOR WATER USE AUTHORIZATION

(A) No person shall install landscaping for a project subject to this Article without the review and approval required by this Article.

(B) A person constructing a project subject to the requirements of this Article shall obtain approval for the landscaped area as follows:

(1) A person applying for a Building Permit for a single-family residence shall obtain an approval of the landscaping from the Director as part of the permitting process.

(2) A person applying for a Discretionary Permit described in Section 33-1323:

(a) Shall submit a landscape concept plan as required by the Discretionary Permit application. The concept plan shall include representation of the site features, proposed planting areas, and the proposed method and type of irrigation.

(b) Shall obtain approval for landscaping as part of the permitting process for each Building Permit for each project

segment that requires installation of a water meter or connection to an existing water meter.

(c) May use "typical" plans for Developer-installed landscaping for Single-family homes.

(D) A person may submit an application to modify the outdoor water use authorization required by this Article on a form provided by the Director.

(1) An applicant requesting modification of an authorization for a single family residence where the total landscaped area after modification is less than 5,000 square feet shall comply with section 33-1328.

(2) An applicant requesting modification of an authorization other than the type of project in subsection (1) above, shall comply with sections 33-1326 through 33-1326-4.

SEC. 33-1325. ADMINISTRATION, LANDSCAPE MANUAL AND FEES

(A) The Director shall administer and enforce this Article.

(B) The Director shall prepare a landscape design manual or may designate the current County of San Diego Landscape Design Manual as the Escondido Landscape Design Manual to provide guidance to applicants on how to comply with the requirements of this Article.

(C) An applicant for a project subject to this Article shall include with the application, all fees established by the City of Escondido to cover the *cost* to review an application, any required landscape documentation package, and any other documents the City *reviews* pursuant to the requirements of this Article.

SEC. 33-1326. LANDSCAPE DOCUMENTATION PACKAGE

(A) Except as provided in subsection (b) Building Permit applications for projects subject to Section 33-1323 shall include a landscape documentation package that complies with the provisions of this Article and with the Landscape Design Manual.

(B) An applicant for a Building Permit for a single family residence with a landscaped area less than 5,000 square feet is not required to submit a landscape documentation package with the permit application, but shall comply with Section 33-1327. An applicant for a permit for a cemetery is not required to submit a landscape documentation package, but shall comply with Section 33-1329.

(C) The landscape documentation package required by subsection (a) shall contain the following:

(1) A soil management report and plan that complies with Section 33-1326-1 that analyzes the soil within each landscaped area of the project and makes recommendations regarding soil additives.

(2) Planting and irrigation plans that comply with Section 33-1326-2 that describe the landscaping and irrigation for the project.

(3) A water efficient landscape worksheet that complies with Section 33-1326-3 that calculates the MAWA and the ETWU for the project.

(4) A grading design plan that complies with Section 33-1326-4 that describes the grading of the project. If the project applicant has submitted a grading plan with the application for the project, the Director may accept that grading plan in lieu of the grading design plan required by this subsection if the grading plan complies with Section 33-1326-4.

SEC. 33-1326-1. SOIL MANAGEMENT REPORT

(A) The soil management report required by Section 33-1326 shall be prepared by a licensed landscape architect, licensed civil engineer, licensed architect, or other landscape professional licensed by the state to do this work and shall contain the following information:

(1) An analysis of the soil for the proposed landscaped areas of the project that includes information about the soil texture, soil infiltration rate, pH, total soluble salts, sodium, and percent organic matter.

(2) Recommendations about soil amendments that may be necessary to foster plant growth and plant survival in the landscaped area using efficient irrigation techniques.

(B) When a project involves Mass Grading of a site the applicant shall submit the soil management report that complies with subsection (a) above with the certificate of completion required by Section 33-1335.

(C) The soil management report shall include information regarding proposed soil amendments and mulch:

(1) The report shall identify the type and amount of mulch for each area where mulch is applied. Mulch shall be used as follows:

(a) A minimum two-inch layer of mulch shall be applied on all exposed soil surfaces in each landscaped area except in turf areas, creeping or rooting ground covers or direct seeding applications where mulch is contraindicated.

(b) Stabilizing mulch shall be applied on slopes.

(c) The mulching portion of seed/mulch slurry in hydro-seeded applications shall comply with subsection (a) above.

(d) Highly flammable mulch material shall not be used.

(2) The report shall identify any soil amendments and their type and quantity.

SEC. 33-1326-2. PLANTING AND IRRIGATION PLANS

(A) The planting and irrigation plans required by Section 33-1326 shall be prepared by a licensed landscape architect, licensed civil engineer, licensed architect, or other landscape professional licensed by the state to do this work. The plans shall:

(1) Include the MAWA for the plans, including the calculations used to determine the MAWA. The calculations shall be based on the formula in Section 33-1326-6.

(2) Include the ETWU for the plans, including the calculations used to determine the ETWU. The calculations shall be based on the formula in Section 33-1326-7.

(3) Include a statement signed under penalty of perjury by the person who prepared the plan that provides, "I am familiar with the requirements for landscape and irrigation plans contained in the Escondido Water Efficient Landscape Regulations. I have prepared this plan in compliance with those regulations and the Landscape Design Manual. I certify that the plan implements those regulations to provide efficient use of water."

(4) Demonstrate compliance with best management practices required by Sections 22-19 et seq. (Stormwater Management and Discharge Control regulations).

(5) Address fire safety issues, demonstrate compliance with applicable requirements for defensible space around buildings and structures, and shall avoid the use of fire prone vegetation.

(B) The planting plan shall meet the following requirements:

(1) The plan shall include a list of all vegetation by common and botanical plant name, which exists in the proposed landscaped area. The plan shall state what vegetation will be retained and what will be removed. Existing invasive plant species shall be removed.

(2) The plan shall include a list of all vegetation by common and botanical plant name, which will be added to each landscaped area. No invasive plant species shall be added to a landscaped area. The plan shall include the total quantities by container size and species. If the applicant intends to plant seeds, the plan shall describe the seed mixes and applicable purity and germination specifications.

(3) The plan shall include a detailed description of each water feature that will be included in the landscaped area.

(4) The plan shall be accompanied by a drawing showing on a page or pages, the specific location of all vegetation, retained or planted, the plant spacing and plant size, natural features, water features, and Hardscape areas. The drawing shall include a legend listing the common and botanical plant name of each plant shown on the drawing.

(5) All plants shall be grouped in Hydrozones and the irrigation shall be designed to deliver water to hydrozones based on the moisture requirements of the plant grouping. A hydrozone may mix plants of very low and low water use , or of moderate and low water use, or mix plants of high water use with plants of moderate water use. No high water use plants shall be allowed in a very low or low water use hydrozone. The plan shall also demonstrate how the plant groupings accomplish the most efficient use of water.

(6) The plan shall identify areas permanently and solely dedicated to edible plants.

(7) The plan shall demonstrate that landscaping when installed and at maturity will be positioned to avoid obstructing motorists' views of pedestrian crossings, driveways, roadways and other vehicular travel ways. If the landscaping will require maintenance to avoid obstructing motorist's views, the plan shall describe the maintenance and the frequency of the proposed maintenance.

(8) The plan shall avoid the use of landscaping with known surface root problems adjacent to a paved area, unless the plan provides for installation of root control barriers or other appropriate devices to control surface roots.

(9) Plants in a transitional area shall consist of a combination of site adaptive and compatible native and/or non-native species. No invasive species shall be introduced or tolerated in a transitional area. The irrigation in a transitional area shall be designed so that no overspray or runoff shall enter an adjacent area that is not irrigated.

(10) On a project other than a single-family residence, the plan shall identify passive and active recreational areas.

(C) The Irrigation Plan shall meet the following requirements:

(1) The plan shall show the location, type and size of all components of the irrigation system that will provide water to the landscaped area, including the controller, water lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and Backflow Prevention Devices.

(2) The plan shall show the static water pressure at the point of connection to the public water supply and the flow rate in gallons, the application rate in inches per hour and the design operating pressure in pressure per square inch for each station.

(3) The irrigation system shall be designed to prevent runoff, overspray, low-head drainage and other similar conditions where irrigation water flows or sprays onto areas not intended for irrigation. The plan shall also demonstrate how grading and drainage techniques promote healthy plant growth and prevent erosion and runoff.

(4) The plan shall identify each area irrigated with recycled water.

(5) The plan shall provide that any slope greater than 25 percent will be irrigated with an irrigation system with a precipitation rate of .75 inches per hour or less to prevent runoff and erosion. As used in this Article, 25 percent grade means one foot of vertical elevation change for every four feet of horizontal length. An applicant may employ an alternative design if the plan demonstrates that no runoff or erosion will occur.

(6) The plan shall provide that all wiring and piping under a paved area that a vehicle may use, such as a parking area, driveway or roadway, will be installed inside a PVC conduit.

(7) The plan shall provide that irrigation piping and irrigation devices that deliver water, such as sprinkler heads, shall be installed below grade if they are within 24 inches of a vehicle or pedestrian use area. The Director may allow on-grade piping where landform constraints make below grade piping infeasible.

(8) The plan shall provide that only low volume or subsurface irrigation shall be used to irrigate any vegetation within 24 inches of an impermeable surface unless the adjacent impermeable surfaces are designed and constructed to cause water to drain entirely into a landscaped area.

(9) The irrigation system shall provide for the installation of a manual shutoff valve as close as possible to the water supply. Additional manual shutoff valves shall be installed between each zone of the irrigation system and the water supply.

(10) The irrigation system shall provide that irrigation for any landscaped area will be regulated by an Automatic Irrigation Controller.

(11) The irrigation system shall be designed with a landscape irrigation efficiency necessary to meet the MAWA.

(12) The plan shall describe each Automatic Irrigation Controller the system uses to regulate the irrigation schedule and whether it is a weather based system or moisture detection system. The plan shall depict the location of electrical service for the Automatic Irrigation Controller or describe the use of batteries or solar power that will power valves or a smart controller.

SEC. 33-1326-3. WATER EFFICIENT LANDSCAPE WORKSHEET

The water efficient landscape worksheet required by Section 33-1326 shall be prepared by a licensed landscape architect, licensed civil engineer, licensed architect, or other landscape professional licensed by the state to do this work and shall contain the following:

(A) A hydrozone information table that contains a list of each hydrozone in the landscaped area of the project and complies with the following requirements:

(1) For each hydrozone listed, the table shall identify the plant types and water features in the hydrozone, the irrigation methods used, the square footage and the percentage of the total landscaped area of the project that the hydrozone represents.

(2) The plant types shall be categorized as turf, high water use, moderate water use, low water use, or very low water use.

(B) Water budget calculations, which shall meet the following requirements:

(1) The plant factor used shall be from WUCOLS. The plant factor shall be 0.1 for very low water use plants, 0.3 for low water use plants, 0.5 for moderate water use plants and 0.8 for high water use plants. A plan that mixes plants in a hydrozone that require a different amount of water shall use the plant factor for the highest water using plant in the hydrozone.

(2) Temporarily irrigated areas shall be included in the very low and low water use hydrozones. Temporarily irrigated as used in this Article means the period of time when plantings only receive water until they become established.

(3) The surface area of a water feature, including swimming pools, shall be included in a high water use hydrozone.

(4) The calculations shall use the formula for the MAWA in Section 33-1326-6 and for the ETWU in Section 33-1326-7.

(5) Each special landscaped area shall be identified on the worksheet and the area's water use calculated using an ETAF of 1.0.

SEC. 33-1326-4. GRADING DESIGN PLAN

The grading design plan required by Section 33-1326 shall be prepared by a California licensed civil engineer, licensed landscape architect, licensed architect, or other landscape professional licensed by the state to do this work and shall comply with following requirements:

(A) The grading on the project site shall be designed for the efficient use of water by minimizing soil erosion, runoff and water waste, resulting from precipitation and irrigation.

(B) The plan shall show the finished configurations and elevations of each landscaped area including the height of graded slopes, the drainage pattern, pad elevations, finish grade and any stormwater retention improvements.

SEC. 33.1326-5. IRRIGATION SCHEDULE

The irrigation schedule required by Section 33-1326 shall be prepared by a licensed landscape architect, licensed civil engineer, licensed architect, or other landscape professional licensed by the state to do this work and provide the following information:

(A) A description of the automatic irrigation system that will be used for the project.

(B) The ETo data relied on to develop the irrigation schedule, including the source of the data.

(C) The time period when overhead irrigation will be scheduled and confirm that no overhead irrigation shall be used between 10:00 a.m. and 6:00 p.m.

(D) The parameters used for setting the irrigation system controller for watering times for:

(1) The plant establishment period.

(2) Established landscaping.

(3) Temporarily irrigated areas.

(4) Different seasons during the year.

(E) The consideration used for each station for the following factors:

(1) The days between irrigation.

(2) Station run time in minutes for each irrigation event, designed to avoid runoff.

(3) Number of cycle starts required for each irrigation event, designed to avoid runoff.

(4) Amount of water to be applied on a monthly basis.

(5) The root depth setting.

(6) The plant type setting.

(7) The soil type.

(8) The slope factor.

(9) The shade factor.

SEC. 33-1326-6. MAXIMUM APPLIED WATER USE

(A) A landscape project subject to this Article shall not exceed the MAWA. The MAWA for a landscape project shall be determined by the following calculation:

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

(B) The abbreviations used in the equation have the following meanings:

(1) MAWA = Maximum Applied Water Allowance in gallons per year.

(2) ETo = Evapotranspiration in inches per year.

(3) 0.62 = Conversion factor to gallons per square foot.

(4) 0.7= ET adjustment factor for plant factors and irrigation efficiency.

(5) LA = Landscaped area includes special landscaped area in square feet.

(6) 0.3 = the additional ET adjustment factor for a special landscaped area (1.0 - 0.7 = 0.3)

(7) SLA = Portion of the landscaped area identified as a special landscaped area in square feet.

(D) If a public water purveyor establishes a MAWA for a property that is lower than the MAWA established pursuant to this Section nothing in this Section shall be construed to prevent the water purveyor from enforcing its rules, regulations or ordinances.

SEC. 33-1326-7. ESTIMATED TOTAL WATER USE

(A) An applicant for a project subject to this Article shall calculate the ETWU for each landscaped area and the entire project using the following equation:

(1) ETWU = (ETo)(0.62)(PF x HA / IE + SLA)

(B) The abbreviations used in the equation have the following meanings:

(1) ETWU = Estimated total water use in gallons per year.

(2) ETo = Evapotranspiration in inches per year.

(3) 0.62 = Conversion factor to gallons per square foot.

(4) PF = Plant factor from WUCOLS

(5) HA = Hydrozone Area in square feet. Each HA shall be classified based upon the data included in the landscape and irrigation plan as high, medium, low water use, or very low water use.

(6) IE = Irrigation Efficiency of the irrigation method used in the hydrozone.

(7) SLA = Special landscaped area in square feet.

(C) The ETWU for a proposed project shall not exceed the MAWA.

SEC. 33-1327. ADJUSTMENT TO LANDSCAPED AREA FOR NON-VEGETATED AREA

Rock and stone or pervious design features, such as decomposed granite ground cover that are adjacent to a vegetated area may be included in the calculation of the MAWA and ETWU provided the features are integrated into the design of the landscape area and the primary purpose of the feature is decorative.

SEC. 33-1328. NEW SINGLE FAMILY RESIDENTIAL PROJECTS WITH LIMITED LANDSCAPING

An applicant for a Building Permit for a new single-family residence subject to this Article where the landscaped area of the project is less than 5,000 square feet shall, as a condition of obtaining a Building Permit, submit an application to establish a MAWA and/or a best landscape design practices checklist for the property on the form approved by the Director.

SEC. 33-1329. CEMETERIES

(A) A person submitting an application for a cemetery shall include the following:

(1) A concept plan, as described in Section 33-1324.

(2) A water efficient irrigation worksheet that calculated the MAWA for the project with the application that complies with Section 33-1326-3

(3) A landscape irrigation and maintenance schedule that complies with Section 33-1334.

SEC. 33-1330. REGULATIONS APPLICABLE TO USE OF TURF ON LANDSCAPED AREAS

The following regulations shall apply to the use of turf on a project subject to this Article:

(A) Only low volume or subsurface irrigation shall be used for turf in a landscaped area:

(1) On a slope greater than 25 percent grade where the toe of the slope is adjacent to an impermeable Hardscape; and,

(2) Where any dimension of the landscaped area is less than six feet wide.

(B) On a commercial, industrial, institutional or multi-family project, no turf shall be allowed on a center island median strip, on a parking lot island, or in a public right of way.

(C) A ball field, park, golf course, cemetery and other similar use shall be designed to limit turf in any portion of a landscaped area not essential for the operation of the facility.

(D) No turf shall be allowed in a landscaped area that cannot be efficiently irrigated, such as avoiding runoff or overspray.

SEC. 33-1331. PROJECTS WITH MODEL HOMES

A person who obtains a permit to construct a single-family residential development that contains a model home or homes shall provide a summary of this Article to each adult visitor that visits a model home. If an adult visitor is accompanied by one or more adults during the visit, only one set of written materials is required to be provided. Each model home shall provide an educational sign in the front yard of the model home visible and readable from the roadway that the home faces that states in capital black lettering at least two inches high on a white sign, "THIS MODEL HOME USES WATER EFFICIENT LANDSCAPING AND IRRIGATION."

SEC. 33-1332. RECYLED WATER

(A) A person who obtains a permit for a project that is subject to this Article shall use recycled water for irrigation when Tertiary Treated Recycled Water is available from the water purveyor who supplies water to the property for which the City issues a permit.

(B) A person using recycled water shall install a dual distribution system for water received from a public water purveyor. Pipes carrying recycled water shall be purple.

(C) A person who uses recycled water under this section shall be entitled to an ETAF of 1.0.

(D) This section does not excuse a person using recycled water from complying with all State and local laws and regulations related to recycled water use.

SEC. 33-1333. LANDSCAPING AND IRRIGATION INSTALLATION

A person issued a landscape approval for a project, other than a single-family residence where the landscaped area of the project is less than 5,000 square feet, shall install the approved landscaping and irrigation system before final inspection of the project.

SEC. 33-1334. LANDSCAPING AND IRRIGATION MAINTENANCE

(A) A property owner using water on property subject to a landscape approval other than a single-family residence with a total landscaped area less than 5,000 square feet, shall prepare a maintenance schedule for the landscaping and irrigation system on the project. The schedule shall provide for (1) routine inspection to guard against runoff and erosion and to detect plant or irrigation system failure, (2) replacement of dead, dying and diseased vegetation, (3) eradication of invasive species, (4) repairing the irrigation system and its components when necessary, (5) replenishing mulch, (6) soil amendment when necessary to support and maintain healthy plant growth,(7) fertilizing, pruning and weeding and maintaining turf areas, and (8) maintenance to avoid obstruction of motorists' view. The schedule shall also identify who will be responsible for maintenance.

(B) After approval of a landscape plan, the owner is required to:

(1) Maintain and operate the landscaping and irrigation system on the property consistent with the MAWA.

(2) Maintain the irrigation system to meet or exceed an irrigation efficiency necessary to meet MAWA.

(3) Replace broken or malfunctioning irrigation system components with components of the same materials and specifications, their equivalent or better.

(4) Ensure that when vegetation is replaced, replacement plantings are representative of the hydrozone from which the plants were removed and are typical of the water use requirements of the plants removed, provided that the replaced vegetation does not result in mixing high water use plants with low water use or very low water use plants in the same hydrozone.

SEC. 33-1335. CERTIFICATE OF COMPLETION

Prior to receiving final approval for completion of the project, each applicant, other than for a single family residence with a total landscaped area less than 5,000 square feet, shall submit a signed certificate of completion and final documentation for the project under penalty of perjury within 10 days after installation

(A) The certificate of completion shall:

(1) Be submitted on a form provided by the City.

(2) Include a statement verifying that the landscaping and irrigation were installed as allowed in the approved landscape and irrigation plan, all

approved soil amendments were implemented, the installed irrigation system is functioning as designed and approved, the irrigation control system was properly programmed in accordance with the irrigation schedule, and the person operating the system has received all required maintenance and irrigation plans.

(3) Be signed by the professional of record for the landscape design.

(B) The final submittal shall include:

(1) Irrigation schedule that complies with Section 33-1326-5, that describes the irrigation times and water usage for the project;

(2) A landscaping and irrigation system maintenance schedule that complies with Section 33-1334, and

(3) A soil management report that complies with Section 33-1326-1, if the applicant did not submit the report with the landscape documentation package.

(4) Final "as built" plans, submitted by the professional of record, where there have been significant changes to the landscape plan during the installation of landscaping or irrigation devices or irrigation system components.

SEC. 33-1336. WASTE WATER PREVENTION

(A) No person shall use water for irrigation that due to runoff, low head drainage, overspray or other similar condition, water flows onto adjacent property, non-irrigated areas, structures, walkways, roadways or other paved areas.

(B) No person whose landscape is subject to a landscape approval pursuant to this Article shall apply water to the landscape in excess of the MAWA.

(C) A person who violates subsections (a) or (b) above shall be subject to the administrative remedies procedures set forth in sections 1A-1 et seq. of this code.

(D) The City may also obtain an injunction against a person who continues to violate subsections (a) and (b) after receiving a notice of violation pursuant to section 1A-6.

SEC. 33-1337. CITY'S RIGHT TO INSPECT AND AUDIT OUTDOOR WATER USE

(A) Whenever the City has reasonable grounds to believe that a person is violating section 33-1336, the City may inspect the property and any irrigation system or water feature on the property. If a person refuses consent to an inspection, the City

may obtain an inspection warrant pursuant to Code of Civil Procedure sections 1822.50 et seq. No person shall interfere with a City inspector conducting an inspection authorized by this Article.

(B) The City may randomly audit outdoor water use on any property for which it issued a water use authorization pursuant to this Article to determine compliance with the authorization. A person who owns or occupies property subject to a water use authorization, shall be deemed to consent to the audit of outdoor water use if the person engages in outdoor water use on the property.

SEC 33-1338. ENFORCEMENT AND APPEAL

(A) The Director of Community Development shall administer and enforce the provisions of this Article. Any City authorized personnel or enforcement officer may exercise any enforcement powers as set forth in the code.

(B) The City may delegate to or enter into a contract with a local agency or other person to implement and administer any of the provisions of this Article on behalf of the City.

(C) A person whose application for a water use authorization or for modification of a water use authorization is denied may appeal the denial to the planning commission by making a written request for the appeal to the Director within 10 calendar days of the denial. The request for the appeal shall be accompanied by a filing fee, which shall be established by resolution of the city council. The planning commission shall consider the matter within 45 days after the appeal is filed. The 45-day period may be extended upon the written consent of the appellant. The planning commission, by a majority vote, may approve, modify, or disapprove the decision of the Director.

(D) Any interested party may appeal the decision of the planning commission to the city council within ten (10) calendar days following the date of the planning commission action. All appeals to the city council shall be in writing, shall be filed with the city clerk, and shall be accompanied by a filing fee, which shall be established by resolution of the city council. The appeal shall state the decision from which the appeal is taken, and shall contain a concise statement of the reasons for the appeal. Wherever possible, the council shall set all appeals of decisions of the planning commission for hearing before the council within thirty (30) days of the date the appeal is filed. By majority vote, the council may approve, modify or disapprove the decision of the planning commission.

SEC 33-1339. STANDARDS FOR LANDSCAPING

The following standards shall apply to the installation and maintenance of all landscaped areas to which this article applies:

(A) General

(1) Use of plant materials. A high percentage of water conserving plant materials shall be utilized in all designs. The use of turf is therefore discouraged. Areas approved for turf will require the use of lower water usage turf varieties. A higher percentage of turf may be allowed if it is an essential part of the development, such as athletic playing fields for schools or parks upon review of the landscape plans by the city.

(2) Turf species. Turf species should be limited to low to moderate water using varieties such as Bermuda grass, Buffalo grass, Bahia grass, Zoysia grass and Tall Fescue Hybrids, rather than bluegrass or ryegrass variety. Turf shall not be used in areas less than five (5) feet wide, medians, slopes 4:1 or greater, and when not visible from public or occupants view (i.e., behind fences).

(3) Plant lists. New landscaping should use water conserving plant materials that are native to the San Diego region or are adapted to a hot dry summer/cool winter climate. Non-native or adapted varieties that require large amounts of irrigation to survive the hot dry summer season are to be avoided.

(4) Quality of plants. All plant material shall conform to the requirements described in the latest edition of American Standards for Nursery Stock published by the American Association of Nurserymen.

(5) Landscape design. Existing vegetation should be incorporated into the landscape design where possible. (For removal of mature trees and sensitive biological habitat species refer to section 1068-1069).

(6) Rocky slopes. Requirements contained in this document may be varied for landscaping on slopes which are composed primarily of rocks or granite, as determined by the director. Justification of the request shall require a landscape architect's written statement and proposed alternatives for landscaping.

(7) Trash enclosure areas. Where required, as determined through a plot plan approval process, for industrial, commercial and multifamily residential projects, trash enclosure areas shall contain a minimum three (3) foot planting area at the base of the enclosure wall when the enclosure is visible from the street or surrounding properties. The landscaping in the planting area shall consist of vertical planting (vines, hedges) which will screen the enclosure and irrigation.

(B) Off-street parking areas. All off-street parking shall conform to Off-Street Parking Standards, sections 33-760 through 33-769. In addition, off-street parking areas

which include more than ten (10) parking spaces shall be landscaped to conform to the following:

(1) General.

(a) Planting in parking areas should consist of a mixture of deciduous and evergreen shade trees, groundcover, low shrubs and mulch to provide one hundred (100) percent coverage. Trees must be a minimum of fifteen (15) gallons and six (6) feet in height. No turf within the islands or the tree wells of the parking lot shall be allowed.

(b) All rows of parking spaces shall be provided with curbed terminal islands to protect parked vehicles and facilitate circulation. Wheel stops shall be provided for each parking space and placed eighteen (18) inches from the front of each parking space. Terminal islands shall be a minimum of five (5) feet wide and shall contain at least one (1) tree for each row of parking spaces for which the island is serving.

(2) Interior landscaping.

(a) A continuous curbed center island, not less than five (5) feet wide, shall be provided between each double row of parking spaces. Wheel stops may be excluded if the center island is expanded to eight (8) feet wide. The island shall incorporate a minimum of one (1) tree per four (4) opposing parking spaces and groundcover or shrub planting to provide one hundred (100) percent coverage within two (2) years of planting. Trees shall be provided with root control barriers; or

(b) Tree wells, four (4) feet by five (5) feet square minimum, resulting from the conversion of two (2) opposing full-size parking spaces to compact, shall be provided at a rate of one (1) tree per six (6) opposing parking spaces in conformance with sections 33-760 through 33-769; or

(c) Finger islands, a minimum of five (5) feet wide, parallel with the row of parking spaces, may be utilized for every four (4) abutting parking spaces. Each finger island shall contain at a minimum one (1) tree.

(3) Perimeter landscaping.

(a) Perimeter landscaping is located along interior boundary lines, not fronting along the street, and shall provide landscaping not less than five (5) feet wide and at least one (1) tree for each

thirty (30) linear feet of planting. Trees may be planted singly or in clusters; or

(b) Landscaping of front yard setbacks, where required, shall provide a minimum of one (1) tree for every thirty (30) feet of frontage with shrub planting and groundcover and shall provide a visual screen of three (3) to four (4) feet high within two (2) years of planting. Trees may be planted singly or in clusters; or

(c) Landscaping of front yard setbacks, where required, shall provide a minimum of one (1) tree for every thirty-five (35) linear feet of frontage with mounding three (3) feet to four (4) feet higher than the finished elevation of the parking lot, including groundcover, or turf (not to exceed twenty-five (25) percent of frontage landscaped area) and shrubs for one hundred (100) percent coverage, within two (2) years of planting. (See Figure 33-1326).

(D) Planting on slopes.

(1) All manufactured slopes over three (3) feet high shall be planted with an appropriate and attractive mix of trees, shrubs and groundcovers.

(2) Groundcover to provide one hundred (100) percent coverage within one (1) year of installation.

(E) Commercial/industrial developments.

(1) The following standards shall apply to all commercial and industrial zones. Specific standards may be developed for the downtown specific plan or an approved Area Plan.

(a) A landscape strip must be located on the subject property, adjacent to the public right-of-way, except when a setback is not required within the zone.

(b) Trees, shrubs, groundcover to provide one hundred (100) percent coverage of those areas not utilized for building, parking, storage or trash enclosure. Embellished pavement and inert materials may be used for up to twenty-five (25) percent of the required landscaping. Variations in these requirements may be specifically approved by the director.

(2) Perimeter planting area.

In addition to landscape requirements for parking areas (section 33-1326), required front yard, side yard and rear yard setbacks for industrial and

commercial uses shall be landscaped with trees, shrubs, and groundcovers.

(3) Loading areas.

Loading areas for commercial and industrial uses shall incorporate landscaping to provide screening of the loading area from public rights-of-way, adjacent uses and pedestrian circulation.

(4) Buffer areas.

Where commercial or industrial use abuts a residential use a landscaped buffer area shall be provided. The buffer area shall be planted with a minimum of one (1) tree per every twenty-five (25) linear feet to the adjacent property. (This calculation establishes the number of required trees; tree placement does not have to be linear or equal spacing.) Shrubs and groundcover shall be planted to provide one hundred (100) percent coverage within two (2) years of planting. Where possible, vines shall be grown onto walls and fences to soften their appearance.

(E). Residential development.

(1) Single-family subdivisions.

(a) Front yard landscaping installed by the developer shall contain, at a minimum, one (1) tree (fifteen (15) gallon minimum and six (6) feet in height) per lot, placed in varying locations on each lot in addition to the required number of street trees.

(b) Common areas and recreation areas shall contain trees, shrubs, groundcovers, and/or turf (turf shall not exceed forty (40) percent of the landscaped area) to provide one hundred (100) percent coverage within two (2) years. Embellished pavement and inert materials may be used for up to twenty-five (25) percent of the required landscaping, may be specifically approved by the director.

(2) Multifamily.

Landscaped areas in multifamily projects shall contain, at a minimum, the Following:

(a) One (1) tree per dwelling unit shall be provided in the common landscaped area in addition to the required number of street trees.

(b) All areas not used for walkways, driveways, or other hard surface shall be landscaped with shrubs, groundcovers and turf. Turf areas shall not exceed forty (40) percent of total landscaped area and shall be located in areas where the turf is functional (i.e., play areas) unless specifically approved by the director.

(c) In addition to landscape requirements for parking areas, required front yard, side yard and rear yard setbacks shall be landscaped with trees, shrubs, groundcover and/or turf. Pavement shall be limited to pedestrian walkways.

(F). Medians and parkway planting standards (within the public right-of-way).

General.

New development or modifications to existing development requiring administrative or discretionary approval shall be required to landscape or bond for the landscaping of the parkway and/or median as determined by the city engineer and the director of parks and recreation.

(1) Medians.

(a) Embellished pavement (i.e., stamped concrete, brick, river rock set in mortar) shall be used for all areas within the median which measure five (5) feet wide or less. Additionally, embellished pavement may be used in conjunction with planting for a minimum of fifteen (15) percent and a maximum of thirty (30) percent of the area within the median, as determined by the director of parks and recreation.

(b) Topsoil provided for the median shall be suitable for plant growth and free of harmful substances or hazardous materials. Class "A" topsoil (as defined in Section 212-1.1.2 of the Standard Specification for Public Work Construction) shall be required for all medians and parkway planting areas.

(c) Medians shall be planted with trees which are a minimum of fifteen (15) gallon, six (6) feet high and a two (2) inch caliper; unless palms are used, which shall be a minimum of six (6) foot brown trunk height (BTH). Trees shall be at least three (3) feet from any median curb and not closer than twenty (20) feet from the nose of the median (the city engineer may require greater setbacks for specific situations).

(d) Shrubs shall be spaced to provide one hundred (100) percent coverage within (2) years.

(e) Groundcovers shall provide one hundred (100) percent coverage within one (1) year of planting unless mulches are used. Turf grass shall not be used in medians.

(2) Parkways.

(a) Landscaping within the street right-of-way shall be maintained by the adjacent property owner.

(b) Areas within or adjacent to the public right-of-way (not including medians) installed by the developer/property owner and which are maintained by the homeowner's association or the city through landscape maintenance districts shall conform to the following:

(i) Parkways located between the curb and the sidewalk shall be a minimum of six (6) feet wide unless altered by special engineering constraints as determined by the city engineer and shall contain trees as per the street requirements. Parkways may meander, thus reducing or increasing the minimum distance from the curb. The ground surface shall be planted with low spreading shrubs or groundcover to provide one hundred (100) percent coverage. Turf shall not be used unless specifically approved by the director or director of parks and recreation.

(ii) Parkways located between the sidewalks and the edge of development shall contain at a minimum one fifteen (15) gallon tree for every thirty (30) linear feet of frontage. (The calculation establishes the number of required trees; the trees are not required to be located linear or equally spaced.) Although not specifically required, planting areas of variable widths are encouraged, particularly for projects with frontages exceeding one hundred fifty (150) feet. Trees without invasive roots and root control barriers shall be required.

(iii) The ground surface shall contain shrubs, mulch, or groundcover to provide coverage within two (2) years. Turf shall not be used unless in areas wider than six (6) feet and approved by the director .If a wall or fence separates the development from the street, planting vines or espalier shrubs may be incorporated into the planting design.

(3) Standard specifications for landscaping and irrigation installation may be obtained from the parks and recreation department.

(G) Revegetation standards.

Revegetation of graded slopes and other disturbed areas adjacent to areas of native vegetation is required to provide visual and biological compatibility with the adjacent native plant materials (reference Article 55).

(1) Invasive, non-native plant materials are prohibited in revegetation areas and shall be removed.

(2) Permanent irrigation should be avoided where it is contiguous to existing native vegetation. The distance irrigation equipment is placed from natural vegetation shall be determined by the director on a case-by-case basis.

(3) All manufactured slope areas shall be covered, within thirty (30) days of completion of grading, with plant material straw mulch, jute netting or other approved material for erosion control (reference section 33-1062).

(4) Plantings shall consist of annuals, perennials, groundcovers, shrubs, and trees compatible with adjacent native vegetation, capable of surviving without permanent irrigation.

(H) Standards for irrigation systems.

(1) Temporary systems.

Aboveground irrigation systems may be utilized for temporary irrigation and must be removed when no longer operational. Installation shall comply with all applicable health and safety codes.

(a) Temporary irrigation systems, such as above-ground UV-resistant pipe irrigation, may be approved by the director for revegetated areas and transitional planting where the plant materials, once established, will not require irrigation.

(b) Unless otherwise approved by the director, temporary systems shall operate for a maximum of a two (2) year period.

(2) Slope irrigation.

(a) On-grade irrigation systems may be approved for slope areas planted in native vegetation and/or in areas of highly erosive or extremely rocky soils, and for temporary systems.

(b) Permanent on-grade systems shall be galvanized steel pipe, fittings and heads, and shall be secured to slopes.

(c) Ultra-violet resistant (UV) piping (i.e., brown line) may be used upon approval of the director. UV fittings, risers, as well as pipe stabilizers and stakes shall be required.

(3) Reclaimed water systems.

(a) Irrigation systems utilizing reclaimed water shall comply with City of Escondido design standards or industry standards.

(b) The percentages of allowed turf may be varied for projects which have an approved reclaimed water system at the time of approval of the landscape and irrigation plans.

(c) Dual piping irrigation systems shall be encouraged for large open landscaped areas such as playgrounds, golf courses, playing fields, etc. for the purpose of utilizing reclaimed water when available.

(l) Installation and maintenance standards.

(1) Planting installation.

(a) All trees shall be staked in accordance with the City of Escondido standard tree staking detail.

(b) Groundcover shall be planted in a triangular pattern spaced to ensure one hundred (100) percent coverage within one (1) year of installation.

(c) A minimum three (3) inch layer of mulch material shall be applied to all shrub and tree planted areas.

(2) Landscape maintenance.

(a) The property owner shall be responsible for the maintenance of landscape materials through regular routine maintenance to ensure that plant material is maintained in a flourishing manner. Dead or diseased plants must be replaced within ninety (90) days from when the director makes a determination that the plant must be replaced. Failure to do so constitutes a violation of this article. The property owner shall receive a written notice of noncompliance.

(b) The required three (3) inch depth of mulch areas shall be maintained at all times for all shrub and tree planted areas.

(c) Plants shall be selectively pruned in accordance with professional trimming standards to maintain their intended shapes and sizes, and to ensure due health of the species and safety of the public. Trimming, pruning and shaping of mature trees as permitted by section 33-1068.B, shall not involve topping, but may allow removing up to one-third (1/3) of the living crown during a single pruning in order to establish or maintain a crown ratio that is twice as high as the trunk, or as deemed appropriate by the director.

(d) Irrigation systems shall be consistently maintained and adjusted to eliminate water waste and ensure the healthy survival of the plant material.

(J). Street trees standards.

The following standards apply for tree selection location and planting of street trees within the city. The standards apply to the number of trees, not the specific spacing.

(1) Location of trees.

(a) Street trees shall be located within the public right-of-way (ROW) or within a five (5) foot additional width easement behind the ROW. Generally speaking, the tree will be located approximately three (3) to eight (8) feet behind the curb or sidewalk.

(b) Street trees shall be located and maintained to preserve a clear zone of at least ten (10) feet from fire hydrants, utility poles, overhead utility wires, street light luminaries, and aboveground utility structures such as transformer enclosures.

(c) Street trees shall be planted at least five (5) feet from underground utility such as water, storm drain, gas, electric and telephone, and eight (8) feet from any sewer lines.

(d) The tree shall be placed away from the intersection so as to allow for adequate site distance. The allowable site distance shall be determined by the city engineer.

(e) The tree shall not restrict bus loading or unloading.

(f) The tree shall be at least three (3) feet from any meter box.

(g) The tree shall be at least eight (8) feet from driveways.

(2) Number of trees.

In all commercial, industrial and residential development, there shall be a minimum of one (1) street tree for every thirty (30) linear feet of street frontage within or adjacent to the development.

(3) Additional requirements.

(a) The minimum size street tree shall be a fifteen (15) gallon, two (2) inch caliper and six (6) feet in height, in accordance with AAN standards.

(b) All trees shall be double-staked using treated lodgepole pine stakes and flexible rubber ties. Remove any nursery stakes. Trees located within six

(6) feet of pavement shall be provided with root barriers.

(c) All trees shall have a watering basin around the tree, except in turf areas, and shall receive deep watering to promote deep rooting until established or based on individual tree demands.

(d) Palms used as street trees shall be a minimum of six (6) foot brown trunk height (BTH). Single-stem trees such as palms which do not lend themselves to top trimming will not be permitted under utility wires.

(4) Street tree maintenance and replacement.

(a) Newly planted trees shall be watered until established and shall be maintained in a flourishing manner. Trees shall be replaced with a minimum fifteen (15) gallon size tree consistent with the suggested street tree list.

(b) All street trees shall be watered by the abutting owner in front of whose property such trees are planted.

(c) The planting, removal, trimming, pruning of trees in all public parks, parkways and street right-of-way within the City of Escondido shall be maintained by the director of parks and recreation.

(5) Removal of trees in public right-of-way.

(a) No person shall cut down, destroy or move a tree growing or located within any public street right-of-way or public park within the

city, without first obtaining a written permit from the director of parks and recreation. The director of parks and recreation may refer the application to another department, committee, or person for comments and recommendations.

An application for a permit shall contain the number, species, size and location of the tree or trees involved, a statement of the reason for the requested action and any other pertinent information. The following criteria shall be considered when granting a permit:

(i) The condition of the tree with respect to its health, public nuisance or public safety;

(ii) Consideration of whether the tree(s) removal is necessary and relocation and redesign cannot be avoided in order to construct public improvements and utilities;

(iii) Consideration of whether the removal is necessary to control erosion, soil retention or diversion or increased flow of surface water;

(iv) The effect of removal of the tree will have on historic value, scenic value, and general welfare of the city as a whole.

(b) The following replacement values shall be considered when granting a permit:

(i) Any tree authorized to be removed shall be replaced by the permittee with a tree conforming to the official street tree list on a one for one basis with a tree of a size and location approved by the director of parks and recreation.

(ii) Subject to physical condition of the tree, the species, size and the location, off-site relocation or replacement as determined by the director of parks and recreation as an alternative mitigation measure may be considered if on-site replacement or relocation is not feasible. Off-site replacement trees shall be placed on a city-owned property. Relocation of the tree to an on-site location shall be a consideration prior to off-site replacement or relocation.

(c) Emergencies.

(i) Trees that pose a safety, health hazard or public nuisance may be removed as determined by a peace official,

fireman, civil defense official or code enforcement officer in their official capacity.

(ii) Public utilities subject to the jurisdiction of the Public Utilities Commission of the state, without a permit, may take such action as may be necessary to comply with the safety regulations of the commission and as may be necessary to maintain a safe operation of their facilities.

FINDINGS

AZ 09-0007

The City Council makes the following findings:

1. The public health, safety and welfare would not be adversely affected by the proposed Zoning Code Amendment, since the amendment would not modify any permitted uses, is mandated by state law, and would update current regulations pertaining to landscaping and the more efficient use of water in the landscape.

2. The proposed Zoning Code Amendment would not be detrimental to properties since the regulations would prevent water waste from irrigation run-off and overspray, and promote the use of fire-wise, low-water use plant material appropriate for the project location.

3. The proposed amendment would be consistent with General Plan objectives and Community Design Policy C1.4.

4. This Ordinance sets forth water efficient landscape regulations for the City of Escondido that include provisions for: (1) water conservation by the appropriate use and groupings of plants that are well adapted to particular sites and local conditions, (2) a landscape water budget that establishes the maximum amount of water to be applied through the irrigation system, (3) automatic irrigation systems and irrigation schedules based on climatic conditions, terrains and soil types and other environmental conditions, (4) onsite soil assessment and soil management plans that include grading and drainage to promote healthy plant growth and prevent excessive erosion and runoff, and (5) promoting the use of recycled water for landscaping when it is available and the use is consistent with State law.

5. The regulations set forth in this Ordinance will increase landscape water use efficiency by: (1) establishing water budgets for applicable projects, (2) promoting installation and maintenance of efficient irrigation systems, and (3) encouraging use of plants that use water efficiently based on specific climate, soil type and site features.

6. The regulations set forth in this Ordinance will reduce water waste by: (1) requiring irrigation systems designed to prevent runoff, overspray and low-head drainage to keep irrigation water out of areas not intended for irrigation, (2) requiring manual shut off valves to quickly isolate damaged

irrigation zones, (3) requiring irrigation schedules based on specific site features, climatic conditions and plant needs, and (4) requiring owners to maintain the landscaping and irrigation so that it continues to operate consistent with the water budget.

7. This Ordinance is consistent with the findings and declarations the State Legislature made when adopting the new Water Conservation in Landscaping Act and is as effective as the State's updated model water efficient landscape ordinance.