



City of La Quinta

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January 12, 2010

Attention: Simon Eching
Office of Water Use Efficiency
PO Box 942836
Sacramento, CA 94236-0001

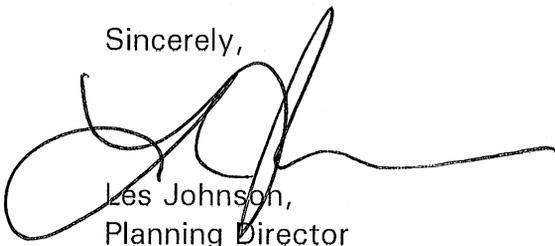
**RE: City of La Quinta Water-Efficient Landscaping Ordinance Adoption as per
Assembly Bill 1881**

Dear Mr. Eching:

This letter is to verify and confirm that the City Council of the City of La Quinta adopted Ordinance 476 on January 5, 2010, updating Section 8.13 of the La Quinta Municipal Code to conform to the provisions of Assembly Bill 1881 and the State Model Water-Efficient Landscaping Ordinance. As a result, the new landscaping and water use code provisions under Ordinance 476 will take full force and effect on February 5, 2010.

Attached with this letter you will find a certified copy of Ordinance 476 identifying the evidence and findings that the new ordinance meets the State's requirements and a final copy of Section 8.13, the Water-Efficient Landscaping chapter of the City of La Quinta Municipal Code. If you have any further questions concerning the City of La Quinta's compliance with Assembly Bill 1881, please contact me at (760) 777-7125.

Sincerely,



Les Johnson,
Planning Director

C: File



ORDINANCE NO. 476

**AN ORDINANCE OF THE CITY OF LA QUINTA,
CALIFORNIA, AMENDING THE LA QUINTA MUNICIPAL
CODE TITLE 8, CHAPTER 8.13, UPDATING THE CITY'S
WATER EFFICIENT LANDSCAPING ORDINANCE**

WHEREAS, on September 28, 2006, the Governor of the State of California, Arnold Schwarzenegger, signed Assembly Bill 1881, requiring that every city in California either adopt the State Model Water-Efficient Landscape Ordinance or a landscape ordinance which is at least as effective in conserving water; and

WHEREAS, the California Office of Administrative Law (OAL) approved an updated Model Water Efficient Landscape Ordinance (MWELO) on September 10, 2009; and

WHEREAS, the City Council of the City of La Quinta recognizes that the conservation of available water resources is essential to the future health and welfare of the community; and

WHEREAS, the City has, from time to time, made amendments to the Municipal Code to address important issues and changes in circumstances; and

WHEREAS, the Planning Commission of the City of La Quinta, California, reviewed this item at their meeting held on the 10th of November 2009, recommending approval of the proposed amendment to Title 8, Chapter 8.13, the City's Water Efficient Landscaping Ordinance; and

WHEREAS, the City Council considered the evidence at their meeting held on the 15th of December 2009, and finds that the reduction of water use in landscaping will contribute significantly to the conservation of our water resources without impacting the quality of landscaping prevalent in the City.

NOW THEREFORE, BE IT RESOLVED, that the City Council of the City of La Quinta does ordain as follows:

SECTION 1. Title 8, Chapter 8.13 of the City of La Quinta Municipal Code is amended as identified in the attached Exhibit 1.

SECTION 2. ENVIRONMENTAL. The Planning Department has determined that the Amendments to the Municipal Code are exempt pursuant to Section 15061(B)(3) and Section 15307 of the Guidelines for Implementation of the California Environmental Quality Act. The Ordinance will not have a negative effect on the

environment in that it will result in a reduction in the City's overall water usage while allowing for the continued high quality of development in the City.

SECTION 3. SEVERABILITY. The provisions of this Ordinance shall be severable, and if any clause, sentence, paragraph, subdivision, section, or part of this Ordinance shall be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair, or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, subdivision, section, or part thereof directly involved in the controversy in which such judgment shall have been rendered.

SECTION 4. LEGAL CONSTRUCTION. The provisions of this Ordinance shall be construed as necessary to effectively carry out its purposes, which are hereby found and declared to be in furtherance of the public health, safety, and welfare.

SECTION 5. EFFECTIVE DATE. This Ordinance shall take full force and effect and be in force 30 days after passage.

SECTION 6. POSTING: The City Clerk shall cause this Ordinance to be posted in at least three public places designated by resolution of the City Council, shall certify to the adoption and posting of this Ordinance, and shall cause this Ordinance and its certification, together with proof of posting to be entered into the Book of Ordinances of the City of La Quinta.

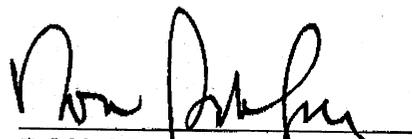
PASSED, APPROVED and ADOPTED by the City Council of the City of La Quinta at a regular meeting thereof held on the 5th day of January 2010, by the following vote:

AYES:

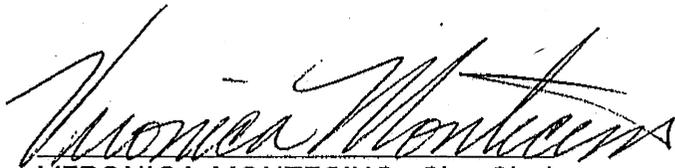
NOES:

ABSENT:

ABSTAIN:

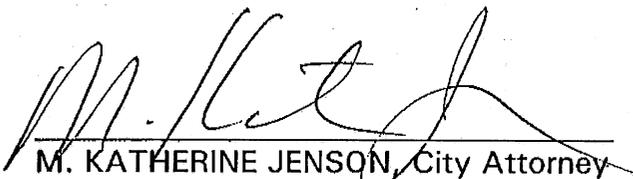

DON ADOLPH, Mayor
City of La Quinta California

ATTEST:



VERONICA MONTECINO, City Clerk
City of La Quinta, California

APPROVED AS TO FORM:



M. KATHERINE JENSON, City Attorney
City of La Quinta, California

CHAPTER 8.13

WATER EFFICIENT LANDSCAPING AND IRRIGATION SYSTEM DESIGN

Sections:

- 8.13.010 Purpose and Intent
- 8.13.020 Definitions
- 8.13.030 Provisions for New or Rehabilitated Landscapes
- 8.13.040 Provisions for Existing Landscapes
- 8.13.050 Appeals
- 8.13.060 Effective Date

Chapter 8.13 WATER EFFICIENT LANDSCAPING

8.13.010 Purpose and intent.

A. The purpose of this chapter is to establish effective water efficient landscape requirements for newly installed and rehabilitated landscapes. It is also the purpose of this ordinance to implement the requirements of the California Code of Regulations Title 23, Waters Division 2, Department of Water Resources Chapter 2.7, Model Efficient Landscaping Ordinance, and State of California Water Conservation in Landscaping Act. Authority Cited: Section 65593, Government Code, Reference: Sections 65591, 65593, 65596, Government Code.

B. It is the intent of the city council to promote water conservation through climate appropriate plant material and efficient irrigation as well as to create a city landscape theme through enhancing and improving the physical and natural environment. (Ord. 392 § 3 (Exh. A)(part), 2003; Ord. 220 § 1 (Exh. A)(part), 1993)

8.13.020 Definitions.

The words used in this chapter have the meanings set forth below:

"Application rate" means the depth of water applied to a given area, usually measured in inches per hour. Also known as precipitation rate (sprinklers) or emission rate (drippers/microsprayers) in gallons per hour.

"Applied water" means the portion of water supplied by the irrigation system to the landscape.

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

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

"Beneficial Use" means water used for landscape evapotranspiration.

"Certified Landscape Irrigation Auditor" means a person certified to perform landscape irrigation audits by an accredited academic institution, a professional trade organization or other program such as the United States Environmental Protection Agency WaterSense irrigation auditor certification program and Irrigation Association Certified Landscape Irrigation Auditor program.

"Conversion Factor (0.62)" means a number that converts the maximum applied water allowance from acre-inches per acre per year to gallons per square foot per year. The conversion factor is calculated as follows:

$$\begin{aligned} (325,851 \text{ gallons}/43,560 \text{ square feet})/12 \text{ inches} &= (0.62) \\ 325,851 \text{ gallons} &= \text{one acre-foot} \\ 43,560 \text{ square feet} &= \text{one acre} \\ 12 \text{ inches} &= \text{one foot} \end{aligned}$$

To convert gallons per year to one hundred cubic feet per year, the common billing unit for water, divide gallons per year by seven hundred forty-eight. (748 gallons = 100 cubic feet)

"Desert Landscape" means a desert landscape using native plants spaced to look like a native habitat utilizing plants native to the southwestern United States and northern Mexico or native to other desert regions of the world but adapted to the Coachella Valley.

"Distribution Uniformity" is a measure of how evenly sprinklers apply water. The low-quarter measurement method (DULQ) utilized in the irrigation audit procedure is utilized for the purposes of these criteria. These criteria assume an attainable performance level of 75% DULQ for spray heads, 80% DULQ for rotor heads and 85% DULQ for recreational turf grass rotor heads.

"Drip Irrigation" means a method of irrigation where the water is applied slowly at the base of plants without watering the open space between plants.

"Ecological restoration project" means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.

"Effective precipitation" or "usable rainfall" means the portion of total natural precipitation that is used by the plants. Precipitation is not a reliable source of water in the desert.

"Electronic Controllers" are time clocks that have the capabilities of multi-programming, water budgeting and multiple start times.

"Emission Uniformity" is a measure of how evenly drip and microspray emitters apply water. The low-quarter measurement method (EULQ) utilized in the landscape irrigation evaluation procedure is utilized for the purposes of these criteria. These criteria assume 90% DULQ for drippers, microsprays and pressure compensating bubblers.

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

"Established landscape" means the point at which plants in the landscape have developed roots into the soil adjacent to the root ball.

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

"Estimated annual applied water use" means the portion of the estimated annual total water use that is derived from applied water. The estimated annual applied water use shall not exceed the maximum applied water allowance.

"Estimated annual total applied water use" (total of all hydrozones) means the annual total amount of water estimated to be needed by all hydrozones to keep the plants and water features in the landscaped area healthy and visually pleasing. It is based upon such factors as the local evapotranspiration rate, the size of the landscaped area, the size and type of the water feature, the types of plants, and the efficiency of the irrigation system. The estimated annual total applied water use shall not exceed the maximum applied water allowance.

"ET adjustment factor" means a factor of 0.5 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 landscape. A combined plant mix with a site-wide average of 0.38 is the basis of the plant factor portion of this calculation. The irrigation efficiency for purposes of the ET adjustment factor is 0.71. Therefore, the ET adjustment factor $(0.5) = (0.38/0.71)$.

"Evapotranspiration, or ET" means the quantity of water evaporated from adjacent soil surfaces and transpired by plants during a specific time.

"Flow rate" means the rate at which water flows through pipes and valves (gallons per minute or cubic feet per second).

"Hardscape" means concrete or asphalt areas including streets, parking lots, sidewalks, driveways and patios and decks.

"Head-to-Head Coverage" means one hundred percent sprinkler coverage of the area to be irrigated, with maximum practical uniformity.

"High Flow Check Valve" means a valve located under/in a sprinkler head to stop the flow of water if the spray head is broken or missing.

"Hydrozone" means a portion of the landscaped area having plants with similar water needs that are served by a valve or set of valves with the same schedule. A hydrozone may be irrigated or nonirrigated. For example, a naturalized area planted with native vegetation that will not need supplemental irrigation once established is a nonirrigated hydrozone.

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

"Irrigation efficiency" 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. The minimum irrigation efficiency for purposes of this chapter is 0.71. Greater irrigation efficiency can be expected from well-designed and maintained systems.

"Landscape irrigation audit" means a process to perform site inspections, evaluate irrigation systems, and develop efficient irrigation schedules.

"Landscape Architect" means a person who holds a license to practice landscape architecture as per the state of California Business and Professions Code, Section 5615.

"Landscape Contractor" means a person licensed by the state of California to construct, maintain, repair, install, or subcontract the development of landscape systems.

"Landscaped area" means the entire parcel less the building footprint, driveways, non-irrigated portions of parking lots, hardscapes such as decks and patios, and other nonporous areas. Water features are included in the calculation of the landscaped area.

"Lateral line" means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.

"Local water purveyor" shall mean the Coachella Valley Water District (CVWD).

"Main line" means the pressurized pipeline that delivers water from the water meter to the valve or outlet.

"Maximum applied water allowance" means for design purposes, the upper limit of annual applied water for the established landscaped area, as specified in Division 2, Title 23, California Code of Regulations, Chapter 7, Section 702. It is based upon the area's reference evapotranspiration, the ET adjustment factor, and the size of the landscaped area. The estimated applied water use shall not exceed the maximum applied water allowance.

"Mined-land reclamation projects" means any surface mining operation with a reclamation plan approved in accordance with the Surface Mining and Reclamation Act of 1975.

"Mulch" means any material such as gravel, small rocks, pebbles, decorative sand, decomposed granite, bark, straw or other material left loose and applied to the soil surface for the beneficial purpose of reducing evaporation.

"Native plants" means low water using plants that are indigenous to the Coachella Valley and lower Colorado Desert region of California and Arizona.

"Operating pressure" means the manufacturer's recommended pressure at which a system of sprinklers, bubblers, drippers or microsprayers is designed to operate.

"Overhead sprinkler irrigation systems" means those with high flow rates (pop-ups, impulse sprinklers, rotors, etc.).

"Overspray" means the water which is delivered beyond the landscaped area, wetting pavements, walks, structures, or other nonlandscaped areas.

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

"Plant factor" means a factor that when multiplied by reference evapotranspiration, estimates the amount of water used by plants. For purposes of this chapter, the average plant factor of very low water using plants ranges from 0.01 to 0.10, for low water using plants the range is 0.10 to 0.30, for moderate water using plants the range is 0.40 to 0.60 and for high water using plants, the range is 0.70 to 0.90. Reference: Water Use Classifications of Landscape Species III (WUCOLS III).

"Pressure Compensating (PC) Bubbler" means an emission device that allows the output of water to remain constant regardless of input pressure. Typical flow rates for this type of bubbler range between 0.25 gpm to 2.0 gpm.

"Pressure Compensating Screens/Devices" means small screens/devices inserted in place of standard screens/devices that are used in sprinkler heads for radius and high pressure control.

"Qualified Professional" means a person who has been certified by their professional organization or a person who has demonstrated knowledge and is locally recognized as qualified among landscape architects due to longtime experience.

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

"Record drawing" or "as-builts" means a set of reproducible drawings which show significant changes in the work made during construction which are usually based on drawings marked up in the field and other data furnished by the contractor.

"Recreational area" means areas of active play or recreation such as sports fields, school yards, picnic grounds, or other areas with intense foot traffic.

"Recreational turfgrass" means turfgrass that serves as a playing surface for sports and recreational activities. Athletic fields, golf courses, parks and school playgrounds are all examples of areas hosting recreational turfgrass.

"Recreational turfgrass ET adjustment factor" means a factor of 0.82 that, when applied to reference evapotranspiration, adjusts for the additional stress of high traffic on recreational turfgrass and the higher irrigation efficiencies of long range rotary sprinklers. These are the two major influences upon the amount of water that needs to be applied to a recreational landscape. A mixed cool/warm season turfgrass with a seasonal average of 0.7 is the basis of the plant factor portion of this calculation. The irrigation efficiency of long range sprinklers for purposes of the ET adjustment factor is 0.85. Therefore, the ET adjustment factor is $0.82 = 0.7/0.85$.

"Recycled water," "reclaimed water" or "treated sewage effluent water" means treated or recycled waste water of a quality suitable for nonpotable uses such as landscape irrigation; not intended for human consumption.

"Reference evapotranspiration" or "ET_o" means a standard measurement of environmental parameters which affect the water use of plants. ET_o is given in inches per day, month, or year, and is an estimate of the evapotranspiration of a large field of cool-season grass that is well watered. Reference evapotranspiration is used as a basis of determining the maximum applied water allowances so that regional differences in climate can be accommodated. For purposes of this chapter, the most current edition of the Coachella Valley Water District's Reference Evapotranspiration Table shall be referenced.

"Rehabilitated landscape" means any re-landscaping project whose choice of new plant material and/or new irrigation system components is such that the calculation of the site's estimated water use will be significantly changed. The new estimated water use calculation must not exceed the maximum applied water allowance calculated for the site using a 0.5 ET adjustment factor.

"Runoff" means water which is not absorbed by the soil or landscape to which it is applied and flows from the planted area. For example, runoff may result from water that is applied at too great a rate (application rate exceeds infiltration rate), when there is a severe slope or when water is misapplied to hardscapes.

"Service line" means the pressurized pipeline that delivers water from the water source to the water meter.

"Smart Controller" means weather based or soil moisture based irrigation controls that monitor and use information about environmental conditions for a specific location and landscape (such as soil moisture, rain, wind, the plants' evaporation and transpiration rates and, in some cases, plant type and more) to decide for themselves when to water and when not to, providing exactly the right amount of water to maintain lush, healthy growing conditions.

"Soil moisture sensing device" means a device that measures the amount of water in the soil.

"Soil texture" means the classification of soil based on the percentage of sand, silt and clay in the soil.

"Sprinkler head" means a device which sprays water through a nozzle.

"Static water pressure" means the pipeline pressure when water is not flowing.

"Station" means an area served by one valve or by a set of valves that operates simultaneously.

"Turf" means a surface layer of earth containing mowed grass with its roots. Perennial and annual ryegrass are cool season grasses. Hybrid and common Bermuda grass, are warm season grasses.

"Valve" means a device used to control the flow of water in the irrigation system.

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

"Water feature" means any water applied to the landscape for nonirrigation decorative purposes. Fountains, streams, ponds and lakes are considered water features. Water features use more water than efficiently irrigated turf grass and are assigned a plant factor value of 1.1 for a stationary body of water and 1.2 for a moving body of water.

Note: Section 65594, Government Code. Reference: Section 65597, Government Code. (Ord. 392 § 3 (Exh. A)(part), 2003; Ord. 220 § 1 (Exh. A)(part), 1993)

8.13.030 Provisions for new or rehabilitated landscapes.

A. APPLICABILITY.

1. Except as provided in subsection (A)(3) of this section, this section shall apply to:
 - a. All new construction and rehabilitated landscaping for private, public, commercial and governmental development projects; and
 - b. All new construction and rehabilitated landscaping in single-family tracts and multi-family projects.
2. Projects subject to this section shall conform to the provisions in this section.
3. This section shall not apply to:
 - a. Resident homeowner-provided and/or homeowner-hired landscaping at single-family residential projects with a total project landscape area less than 5,000 square feet;
 - b. Homeowner-provided landscaping within individually-maintained patio areas, courtyards, or private gardens at a condominium, townhome, or similar multifamily project;
 - c. Registered local, state, or federal historic sites;
 - d. Ecological restoration projects that do not require a permanent irrigation system;
 - e. Mined-land reclamation projects that do not require a permanent irrigation system;
 - f. Plant collections, as part of botanical gardens and arboretums open to the public.

B. FINAL LANDSCAPING PLAN APPLICATION SUBMITTAL PACKAGE.

1. Each Final Landscaping Plan submittal shall include the following elements:
 - a. Water conservation concept statement;
 - b. Calculation of the maximum applied water allowance;

- c. Calculation of the estimated applied water use;
- d. Calculation of the estimated total water use;
- e. Landscape design plan;
- f. Irrigation design plan;
- g. Grading design plan; and
- h. Soil analysis.

2. Five copies of the Final Landscaping Plan submittal conforming to this chapter shall be submitted to the city. No permit shall be issued until the city and the local water purveyor reviews and approves the landscape documentation package. Prior to preparation and submission of the Final Landscaping Plan submittal, with the exception of rehabilitated or home-owner provided landscaping, the preliminary landscape design shall be approved by the planning commission.

3. A copy of the approved Final Landscaping Plan submittal shall be provided to the property owner or site manager along with the record drawings and any other information normally forwarded to the property owner or site manager.

C. ELEMENTS OF FINAL LANDSCAPING PLAN SUBMITTAL.

1. Water Conservation Statement and Landscape Worksheet.

a. **Water Conservation Concept Statement.** Each landscape documentation package shall include a cover sheet, referred to as the water conservation statement, an example of which can be obtained from either the Planning Department or the Coachella Valley Water District. It serves as a checklist to verify that the elements of the landscape documentation package have been completed and has a narrative summary of the project.

b. **Water Efficient Landscape Worksheet.** Each landscape documentation package shall include a Water Efficient Landscape Worksheet, an example of which may be obtained from either the Planning Department or the Coachella Valley Water District. The Water Efficient Landscape Worksheet serves as a checklist to verify that the elements of the landscape documentation package have been completed and has a narrative summary of the project.

i. The Water Efficient Landscape Worksheet shall contain a hydrozone information table and a water budget calculation for the Final Landscaping Plans. For the calculation of the Maximum Applied Water Allowance and the Estimated Total Water Use, the project applicant shall refer to the most current localized ETo value from the Coachella Valley Water District's Reference Evapotranspiration Table, a copy of which may be obtained from either the Planning Department or the Coachella Valley Water District.

ii. Water budget calculations shall adhere to the following requirements:

(A) The plant factor used shall be from the "Water Use Classifications of Landscape Species III" (WUCOLS III), prepared by the University of California Cooperative Extension and California Department of Water Resources. The plant factors range from 0 to 0.3 for the low use plants, from 0.4 to 0.6 for the moderate use plants, from 0.7 to 1.0 for the high use plants and 1.1 to 1.2 for water features.

(B) All water features shall be included in the 1.1 to 1.2 hydrozone and temporary irrigated areas shall be included in the low water use hydrozone.

2. The Annual Maximum Applied Water Allowance.

a. A project's annual maximum applied water allowance shall be calculated using the following formula:

- MAWA = (ETo) (0.5) (LA) (0.62) where:
- MAWA = Maximum applied water allowance (gallons per year)
- ETo = Reference evapotranspiration (i.e., seventy-five inches per year)
- 0.5 = ET adjustment factor
- LA = Landscaped area (square feet)
- 0.62 = Conversion factor (to gallons per square foot)

b. An example calculation of the annual maximum applied water allowance is:
 Project site: Landscape area of fifty thousand square feet in Zone No. 3a of the Coachella Valley ETo Map.

- MAWA = (ETo) (0.5) (LA) (0.62)
- = (75.0 inches) (0.5) (50,000 square feet) (0.62)
- Maximum applied water allowance = 1,162,500 gallons per year, 1,554 hundred-cubic-feet per year (billing units), 3.56 acre feet/acre per year or 42.7 inches of water per year.

3. Estimated Annual Applied Water Use.

a. The annual estimated applied water use shall not exceed the annual maximum applied water allowance.

b. A calculation of the estimated annual applied water use shall be submitted with the landscape documentation package.

c. For the calculation of the Maximum Applied Water Allowance and Estimated Total Water Use, the project applicant shall refer to the localized ETo value on the current Coachella Valley ETo Map, prepared by the Coachella Valley Water District.

d. The estimated annual total water use for each hydrozone is calculated from the following formula:

- EWU (hydrozones) = $\frac{(ETo) (PF) (HA) (0.62)}{(IE)}$
 (in 100 cubic feet)
- EWU (hydrozone) = Estimated water use (gallons per year)
- ETo = Reference evapotranspiration (i.e., ETo Zone 3a =seventy-five inches per year)
- PF = Plant factor (see definitions)
- HA = Hydrozone area (square feet)
- (0.62) = Conversion factor
- (IE) = Irrigation efficiency (see definitions)
- 748 = Conversion to billing units (one hundred cubic feet = 748 gallons = 1 CVWD billing unit)

4. Estimated Annual Total Water Use. A calculation of the estimated annual total hydrozone water use shall be submitted with the Final Landscaping Plan submittal. The estimated annual total water

use for the entire landscaped area equals the sum of the estimated annual water use (EWU) of all hydrozones in that landscaped area.

5. Landscape Design Plan. A landscape design plan meeting the following requirements shall be submitted as part of the Final Landscaping Plan submittal.

a. Plant Selection and Grouping.

i. Any plants may be used in the landscape, providing the estimated annual applied water use recommended does not exceed the maximum annual applied water allowance and that the plants meet the specifications set forth in this section.

ii. Plants having similar water use shall be grouped together in distinct hydrozones.

iii. Plants shall be selected appropriately based upon their adaptability to the climate, geologic, and topographical conditions of the site. Protection and preservation of native species and natural areas is encouraged. The planting of trees is encouraged whenever it is consistent with the other provisions of this chapter.

iv. A landscape design plan for projects in fire-prone areas shall address fire safety and prevention. A defensible space or zone around a building or structure is required per Public Resources Code Section 4291(a) and (b). Avoid fire-prone plant materials and highly flammable mulches.

v. The use of invasive and/or noxious plant species is strongly discouraged. Applicants should consult the Invasive Plant Inventory prepared by the California Invasive Plant Council prior to the selection of any plant species for landscaping.

vi. Applicants shall consult the most current list of prohibited and restricted plant species prepared by the Riverside County Agricultural Commissioner prior to the selection of any plant species for landscaping. Restricted plant species shall be approved or cleared by the Agricultural Commissioner and obtained from an authorized local supplier.

vii. The architectural guidelines of a common interest development, which include community apartment projects, condominiums, property owners associations, planned developments, and stock cooperatives, shall not prohibit or include conditions that have the effect of prohibiting the use of low-water use plants as a group.

b. Water Features.

i. Recirculating water shall be used for decorative water features.

ii. Water features shall be appropriately sized and designed for functional and recreational purposes in conjunction with recreational amenities, placed at a location visible from adjacent residential or commercial uses, and serve a functional purpose such as storm water retention, interactive play, irrigation storage, and/or wildlife habitat.

iii. All water features shall be replenished by a non-potable water supply unless otherwise conditioned or approved by the Planning Commission. Where available, recycled water shall be used as a source for decorative water features.

iv. Surface area of a water feature shall be included in the high water use hydrozone area of the water budget calculation.

c. Landscape Design Plan Specifications. The Final Landscaping Plans shall be designed in accord with the requirements of the local water purveyor. The landscape design plan shall be drawn on 36 inch-by 24-inch project base sheets at a scale that accurately and clearly identifies:

- i. Designation of hydrozones, including the Total Estimated Annual Applied Water Use for each major plant group hydrozone and water feature hydrozone (if water features have been approved).
- ii. Landscape materials, trees, shrubs, groundcover, turf and other vegetation. Planting symbols shall be clearly drawn and plants labeled by botanical name, common name, water use classification, container size, spacing and quantities of each group of plants indicated;
- iii. Property lines, tract name, tract number or parcel number, and street names;
- iv. Streets, driveways, walkways and other paved areas;
- v. Pools, ponds, water features, fences and retaining walls;
- vi. Existing and proposed buildings and structures including elevation, if applicable;
- vii. Location of all overhead and underground utilities;
- viii. Natural features including but not limited to rock outcroppings, existing trees and shrubs that will remain;
- ix. Tree staking, plant installation, soil preparation details, and any other applicable planting and installation details;
- x. A calculation of the total landscaped area; and
- xi. Designation of recreational turf areas.

d. Design and Placement of Turf.

- i. Turf shall be placed within functional and accessible recreational areas. Turf placement is discouraged at locations adjacent to perimeter streets and sidewalks and those locations having limited visibility and/or pedestrian activity.
- ii. All typical landscaping plans for prototypical residential units (tract homes) shall include a no-turf option.
- iii. Long, narrow or irregularly shaped turf areas shall not be designed because of the difficulty in irrigating uniformly without overspray onto hardscaped areas, streets, and sidewalks. Landscape areas less than 8 feet in width shall not be designed with turf. Turf will be allowed in these areas only if irrigation design reflects the use of subsurface irrigation or a surface flow/wick irrigation system.
- iv. Turf areas irrigated with spray/rotor systems must be set back at least 24 inches from curbs, driveways, sidewalks or any other area that may result in runoff of water onto hardscape. An undulating landscape buffer area created by the setback shall be designed with rocks, cobble or decomposed granite and/or can be landscaped with drip irrigated shrubs/accents or covered with a suitable ground cover.

- v. Turf is prohibited on slopes greater than 25% where the toe of the slope is adjacent to an impermeable hardscape and where 25% means 1 foot of vertical elevation change for every 4 feet of horizontal length (rise divided by run x 100 = slope percent).
 - vi. Turf grass coverage shall be limited to no more than 50% (fifty percent) of any project's total landscaped area.
- e. Design and placement of Groundcover and Mulch.
- i. The use of a soil covering mulch or a mineral groundcover of a minimum two-inch depth to reduce soil surface evaporation is required around trees, shrubs, and on non-irrigated areas. The use of boulders and creek stones shall be considered to reduce the total vegetation area. These areas have should have enough shade to avoid reflected or retained heat.
 - ii. Stabilizing mulching products shall be used on slopes.
 - iii. Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected.
- f. Stormwater best management practices.
- i. The landscaping plans shall identify the location and installation details of any applicable stormwater best management practices that encourage on-site retention and infiltration of stormwater. Stormwater best management practices are strongly encouraged in the landscape design plan and examples include, but are not limited to:
 - (A) Infiltration beds, swales, and basins, that allow water to collect and soak into the ground;
 - (B) Constructed wetlands and retention ponds that retain water, handle excess flow, and filter pollutants;
 - (C) Pervious or porous surfaces (e.g., permeable pavers or blocks, pervious or porous concrete, etc.) that minimize runoff; and
 - (D) Any applicable rain harvesting or catchment technologies used (e.g., rain gardens, cisterns, etc.).
 - ii. All stormwater best management practices identified on the Final Landscaping Plans shall be prepared by the landscape architect in conjunction with the Engineer of Record preparing the Water Quality Management Plan, grading plans, and other related engineering plans.
6. Irrigation Design Plan.
- a. For the efficient use of water, an irrigation system shall meet all the requirements listed in this section and the manufactures recommendations. The irrigation system and its related components shall be planned and designed to allow for proper installation, management, and maintenance. An irrigation design plan meeting the following criteria shall be submitted as part of the Final Landscaping Plan submittal.
 - b. Separate landscape water meters shall be installed for all projects except single family homes. When irrigation water is from a well, the well shall be metered. The irrigation design plan shall be drawn on project base sheets. It should be on separate pages from, but use the

same format as, the landscape design plans. The irrigation system specifications shall accurately and clearly identify the following:

i. Specifications for Irrigation Design.

- (A) Control valves, manufacturer's model number, size and location.
- (B) Irrigation head manufacturer's model number, radius, operating pressure, gallons per minute/gallons per hour (gpm/gph) and location.
- (C) Piping type, size and location.
- (D) Power supply/electrical access and location.
- (E) Plan scale and north arrow on all sheets.
- (F) Irrigation installation details and notes/specifications.
- (G) Graphic scaling on all irrigation design sheets.
- (H) The irrigation system shall be automatic, constructed to discourage vandalism, and simple to maintain. Irrigation equipment shall be screened from view when installed adjacent to pedestrian areas and public rights-of-way.
- (I) All equipment shall be of proven design with local service available.
- (J) Control valves shall be rated at 200 psi.
- (K) Visible sprinklers near hardscape shall be of pop up design.
- (L) All heads should have a minimum number of wearing pieces with an extended life cycle.
- (M) Sprinklers, drippers, valves, etc., must be operated within manufacturer's specifications.
- (N) Manual shut-off valves (such as a gate valve, ball valve, or butterfly valve) shall be required, as close as possible to the point of connection of the water supply, to minimize water loss in case of an emergency (such as a mainline break) or routine repair.
- (O) High flow sensors that detect and report high flow conditions created by system damage or malfunction are recommended.
- (P) The following statement "I have complied with the criteria of the ordinance and have applied them accordingly for the efficient use of water in the irrigation design plan." shall be identified on the irrigation plans and include the landscape architect's signature.

ii. Specifications for Irrigation Efficiency. The minimum irrigation efficiency shall be 0.71 (71%). Greater irrigation efficiencies are expected from well-designed and maintained systems. The following are required:

- (A) Design spray head and rotor head stations with consideration for worst wind conditions. Close spacing and low-angle nozzles are required in high and frequent wind areas (Coachella Valley Water District ETo Zone No. 5).
- (B) Spacing of sprinkler heads shall not exceed manufacturer's maximum recommendations for proper coverage. The plan design shall show a minimum of 0.75 (75%) distribution uniformity.
- (C) Only irrigation heads with matched precipitation rates shall be circuited on the same valve.
- (D) Valve circuiting shall be designed to be consistent with hydrozones.
- (E) Individual hydrozones that mix plants that are moderate and low water use may be allowed if the plant factor calculation is based on the proportions of the respective plant water uses and their plant factor, or if the plant factor of the higher water using plant is used for the calculations.
- (F) Individual hydrozones that mix high and low water use plants shall not be permitted.

- (G) On the landscape design plan and irrigation design plan, hydrozone areas shall be designated by number, letter, or other designation. On the irrigation design plan, designate the areas irrigated by each valve, and assign a number to each valve. Use this valve number in the hydrozone information table. This table can assist with pre inspection and final inspection of the irrigation system, and programming the controller.

iii. Irrigation System Design

- (A) Point of connection or source of water and static water pressure.
- (B) Meter location and size (where applicable).
- (C) Pump station location and pumping capacity (where applicable).
- (D) Reduced pressure backflow prevention devices shall be installed behind meter at curb by the District.
- (E) Show location, station number, size and design gpm of each valve on plan.
- (F) Smart Controller details shall be specified for all projects. This includes climate based or sensor based controllers, which can automatically adjust for local weather and/or site conditions.
- (G) High flow check valves shall be installed in or under all heads adjacent to street curbing, parking lots and where damage could occur to property due to flooding, unless controllers with flow sensor capabilities are specified that can automatically shut off individual control valves when excess flow is detected.
- (H) Pressure compensating screens/devices shall be specified on all spray heads to reduce radius as needed to prevent overthrow onto hardscape and/or to control high pressure misting.
- (I) All irrigation systems shall be designed to avoid runoff onto hardscape from low head drainage, overspray and other similar conditions where water flows onto adjacent property, nonirrigated areas, walks, roadways or structures.
- (J) Rotor type heads shall be set back a minimum of 4 feet from hardscape.
- (K) The use of drip, microirrigation or pressure compensating bubblers or other systems with efficiencies of 90 percent or greater is required for all shrubs and trees. Small, narrow (less than 8 feet), irregularly shaped or sloping areas shall be irrigated with drip, microspray or PC (pressure compensating) bubbler heads.
- (L) Trees in turf areas shall be on a separate station to provide proper deep watering.

iv. Street median irrigation system design

- (A) No overhead sprinkler irrigation system shall be installed in median strips or in islands.
- (B) Median islands or strips shall be designed with either a drip emitter to each plant or subsurface irrigation. PC bubblers are acceptable for trees only.

v. Drip Irrigation Design

- (A) The drip system must be sized for mature-size plants.
- (B) The irrigation system should complete all irrigation cycles during peak use in about 12 hours. Normally, each irrigation controller should not have more than four drip stations that operate simultaneously.
- (C) Field installed below ground pipe connections shall be threaded PVC or glued PVC. Surface laid hose and tubing is not allowed. Microtube distribution is not allowed unless emitter/manifold is installed in an access box. Microtubing must be buried at least 6 inches below grade and the end of microtubing must be secured by a stake. The maximum length of microtubing must be specified on

the plan to be 10 feet or less.

- (D) Proportion gallons per day per plant according to plant size. The following sizing chart is for peak water use. The low to high end of the range is according to the relative water requirements of the plants. The low end is for desert natives and the high end is for medium water use type plants.

Size of Plant	Gallons Per Day
Large trees (over 30-foot diameter)	58+ to 97+
Medium trees (about 18-foot diameter)	21 to 35
Small trees/large shrubs (9-foot diameter)	6 to 10
Medium shrubs (3.5-foot diameter)	.8 to 1.3
Small shrubs/groundcover	.5 or less

- (E) Plants with widely differing water requirements shall be valved separately. As an example, separate trees from small shrubs and cactus from other shrubs. Multiple emitter point sources of water for large shrubs and trees must provide continuous bands of moisture from the root ball out to the mature drip line plus 20 percent of the plant diameter.
- (F) Most plants require 50 percent or more of the soil volume within the drip line to be wetted by the irrigation system.

vi. Recycled Water Specifications

- (A) When a site has recycled water available or is in an area that will have recycled water available as irrigation water, the irrigation system shall be installed using the industry standard purple colored or marked "Recycled Water Do Not Drink" on pipes, valves and sprinkler heads.
- (B) The backup groundwater supply (well water or domestic water) shall be metered. Backup supply water is only for emergencies when recycled water is not available.
- (C) Recycled water users must comply with all county, state and federal health regulations. Cross connection control shall require a 6-inch air gap system or a reduced pressure backflow device. All retrofitted systems shall be dye tested before being put into service.
- (D) Where available, recycled water shall be used as a source for decorative water features.
- (E) Sites using recycled water are not exempted from the Maximum Water Allowance, prescribed water audits or the provisions of these criteria.
- (F) A Recycled Water Checklist shall be submitted upon submittal of the first plan check of the Final Landscape Plan submittal, an example of which may be obtained from the Planning Department or Coachella Valley Water District.

vii. Non-potable Irrigation Water Specifications

- (A) When a site is using non-potable irrigation water that is not recycled water (from an on-site well, Bureau of Reclamation irrigation lines, or from canal water) all hose bibs shall be loose key type and quick coupler valves shall be of locking type with non-potable markings or signs to prevent possible accidental drinking of this water.

(B) Sites using non-potable irrigation water are not exempted from the Maximum Annual Applied Water Allowance, prescribed water audits or the provisions of these criteria.

7. Groundwater Water Specifications

a. Sites using groundwater irrigation water from wells are not exempted from the Maximum Annual Applied Water Allowance, prescribed water audits or the provisions of these criteria.

8. Grading Design Plan.

a. For efficient use of water, grading of a project site shall be designed to minimize soil erosion, runoff, and water waste. A landscape grading plan shall be submitted as a part of the Final Landscaping Plan submittal package. A comprehensive grading plan prepared by a civil engineer in coordination with the landscape architect satisfies this requirement.

b. The grading design plan shall indicate finished configurations and elevations of the landscaped area, including the height of graded slopes, drainage patterns, pad elevations, finish grade, and stormwater retention improvements, if applicable.

c. To prevent excessive erosion and runoff, it is highly recommended that project applicants:

i. Grade so that all irrigation and normal rainfall remains within property lines and does not drain on to non-permeable hardscapes;

ii. Avoid disruption of natural discharge drainage patterns and undisturbed soil; and

iii. Avoid soil compaction in landscape areas.

d. The grading design plan shall contain the following statement: "I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the grading plan."

e. Slopes greater than 25% shall not be irrigated with an irrigation system with a precipitation rate exceeding .75 inches per hour. This restriction may be modified if the landscape designer specifies an alternative design or technology, as part of the Final Landscaping Plan submittal, and clearly demonstrates no runoff or erosion will occur. Prevention of runoff must be confirmed during an irrigation audit.

f. All grading must retain normal stormwater runoff and provide for an area of containment. All irrigation water must be retained within property lines and not allowed to flow into public streets or into the public right-of-way. Where appropriate, a simulated dry creek bed may be used to convey storm drainage into retention areas. A drywell shall be installed if the retention basin is to be used as a recreational area.

g. Avoid mounded or sloped planting areas that contribute to runoff onto hardscape. Sloped planting areas above a hardscape area shall be avoided unless there is a drainage swale at toe of slope to direct runoff away from hardscape.

h. Median islands must be graded to prevent stormwater and excess irrigation runoff.

9. Soil Analysis.

- a. In order to reduce runoff and encourage healthy plant growth, a soil management report shall be completed by the project applicant, or their designated agent, as follows:
 - i. Submit soil samples to a laboratory for analysis and recommendation;
 - ii. Soil sampling shall be conducted in accordance with laboratory protocol, including protocols regarding adequate sampling depth for the intended plants;
 - iii. The soil analysis shall include:
 - (A) Determination of soil texture, indicating the available water holding capacity.
 - (B) An appropriate soil infiltration rate (either) measured or derived from soil texture/infiltration rate tables. A range of infiltration rates shall be noted where appropriate.
 - (C) Measure of pH, total soluble salts, and percent organic matter.
 - iv. The soil analysis report shall be submitted to the City as part of the Final Landscaping Plan;
 - v. The soil analysis report shall be made available, in a timely manner, to the professionals preparing the landscape design plans and the irrigation plans to make any adjustments to the design plans.
 - vi. The project applicant or their designated agent shall submit documentation verifying implementation of the soil analysis report recommendations to the local agency with the Certificate of Completion prior to final inspection.

10. Certification.

- a. An approval stamp and/or signature block from the Coachella Valley Water District and Riverside County Agricultural Commissioner shall be identified on the Final Landscaping Plans. Approval of Final Landscaping Plans from any outside agencies, if necessary, shall be obtained by the applicant prior to final approval of the plans by the planning director.

D. PUBLIC EDUCATION.

1. Publications.

- a. The city, county or water district will, upon request, provide information to the public regarding the design, installation, and maintenance of water efficient landscapes.
- b. Information about the efficient use of landscape water shall be provided to water users throughout the community.
- c. The landscape architect will provide a site-specific landscape irrigation package for the homeowner or irrigation system operator. The package will include a set of drawings, a recommended monthly irrigation schedule and a recommended irrigation system maintenance schedule.
- d. Irrigation Schedules. Irrigation schedules satisfying the following conditions shall be submitted as part of the landscape irrigation package:

i. An annual irrigation program with monthly irrigation schedules shall be required for the plant establishment period, for the established landscape, and for any temporarily irrigated areas. The irrigation schedule shall:

- (A) Include run time (in minutes per cycle), suggested number of cycles per day, and frequency of irrigation for the station; and
- (B) Provide the amount of applied water (in hundred cubic feet) recommended on a monthly and annual basis.
- (C) Whenever possible, irrigation scheduling shall incorporate the use of evapotranspiration data such as those from the California Irrigation Management Information System (CIMIS) weather stations to apply the appropriate levels of water for different climates.
- (D) Whenever possible, landscape irrigation shall be scheduled between ten p.m. and five a.m. to avoid irrigating during times of high wind or high temperature.

e. Maintenance Schedules. A regular maintenance schedule satisfying the following conditions shall be submitted as part of the landscape documentation package:

i. Landscapes shall be maintained to ensure water efficiency. A regular maintenance schedule shall include but not be limited to checking, adjusting, cleaning and repairing equipment; resetting the automatic controller, aerating and dethatching turf areas; replenishing mulch; fertilizing; pruning; and weeding in all landscaped areas.

ii. Repair of irrigation equipment shall be done with the originally specified materials or their approved equivalents.

2. Information shall be provided about designing, installing, and maintaining water efficient landscapes.

E. APPROVAL OF LANDSCAPING

1. Final Landscaping Plans shall be approved by the Planning Director. Median landscaping plans located within private streets and public rights-of-way shall be reviewed by the Public Works Department and approved by the Planning Director.

2. Planning staff shall field inspect all completed landscaping for compliance with the approved Final Landscaping Plans and Site Development Permit. Public Works staff shall inspect all median landscaping for compliance with the approved Final Landscaping Plans.

3. Prior to inspection, the landscape architect shall provide the planning department a copy of the official Certificate of Completion. The Certificate of Completion shall include all of the following:

a. Project information identifying the project's location, date of installation, and contact information for all persons involved;

b. Certification by either the signer of the landscape design plan, the signer of the irrigation design plan, or the licensed landscape contractor that the landscape project has been installed per the approved Final Landscaping Plans;

c. Irrigation scheduling parameters used to set the controller;

d. Landscape and irrigation maintenance schedule;

- e. Irrigation audit report (if applicable);
- f. Soil analysis report and documentation verifying implementation of soil report recommendations; and
- g. Any additional project information required by the City or local water purveyor.

4. Final Certificates of Occupancy may be authorized for issuance once the Final Landscaping Plans have been approved, a Certificate of Completion has been submitted, and the landscaping and irrigation installation has been inspected and approved by both the City and the local water purveyor.

Note: Authority cited: Section 65593, 65594, Government Code. Reference: Section 65593, 65596, 64497. (Ord. 392 § 3 (Exh. A)(part), 2003; Ord. 220 § 1 (Exh. A)(part), 1993)

8.13.040 Provisions for existing landscapes.

A. Water Management. All existing landscaped areas, including golf courses, green belts, common areas, multifamily housing, schools, businesses, public works, parks, and cemeteries may be subject to a landscape irrigation audit at the discretion of the water purveyor if the water purveyor has determined that the annual maximum applied water allowance has been exceeded. At a minimum, the audit shall be conducted by a certified landscape irrigation auditor and shall be in accordance with the California Landscape Irrigation Auditor Handbook, the entire document which is hereby incorporated by reference. (See Landscape Irrigation Audit Handbook, Department of Water Resources, Water Conservation Office (June, 1990, Version 5.5).).

B. Water Waste Prevention. Water waste resulting from inefficient landscape irrigation including run-off, low-head drainage, overspray, or other similar conditions where water flows onto adjacent property, nonirrigated areas, walks, roadways, or structures shall be prohibited. All broken heads and pipes must be repaired within seventy-two hours of notification. Penalties for violation of these prohibitions shall be in accord with administrative citation guidelines as outlined in Section 1.09.020.

Note: Authority cited: Section 65594, Government Code. Reference: Section 65597, Government Code. (Ord. 392 § 3 (Exh. A) (part), 2003; Ord. 220 § 1 (Exh. A) (part), 1993)

8.13.050 Appeals.

Decisions made by the Planning Director or Public Works Director may be appealed by an applicant, property owner(s), or designee(s) of any applicable project to the Planning Commission and thereafter the City Council by an application in writing to the Planning Director and City Clerk of the City Council respectively within fifteen days from the date of notification of decision. (Ord. 392 § 3 (Exh. A) (part), 2003; Ord. 220 § 1 (Exh. A) (part), 1993)

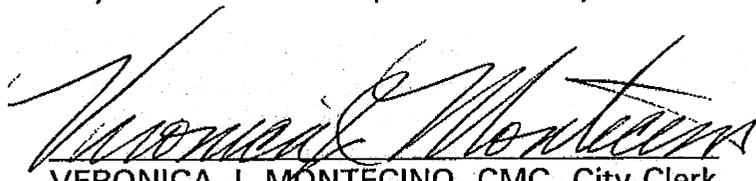
8.13.060 Effective date.

The ordinance codified in this chapter will become effective on February 5, 2010. All plans approved after February 4, 2010 are subject to the provisions of this Chapter. (Ord. 392 § 3 (Exh. A) (part), 2003)

STATE OF CALIFORNIA)
COUNTY OF RIVERSIDE) ss.
CITY OF LA QUINTA)

I, VERONICA J. MONTECINO, City Clerk of the City of La Quinta, California, do hereby certify the foregoing to be a full, true, and correct copy of Ordinance No. 476 which was introduced at a regular meeting on the 15th day of December 2009, and was adopted at a regular meeting held on the 5th day of January 2010, not being less than 5 days after the date of introduction thereof.

I further certify that the foregoing Ordinance was posted in three places within the City of La Quinta as specified in City Council Resolution No. 2006-115.



VERONICA J. MONTECINO, CMC, City Clerk
City of La Quinta, California

DECLARATION OF POSTING

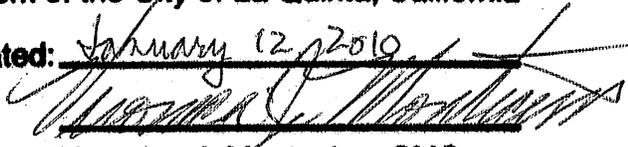
I, VERONICA J. MONTECINO, City Clerk of the City of La Quinta, California, do hereby certify that the foregoing ordinance was posted on the 7th day of January 2010, pursuant to Council Resolution.



VERONICA J. MONTECINO, CMC, City Clerk
City of La Quinta, California

This is to certify that the foregoing is a full, true and correct copy of the original document containing 22 pages; which is on file in the Office of the City Clerk of the City of La Quinta, California

Dated: January 12, 2010



Veronica J. Montecino, CMC
City Clerk

full, true and correct copy of the original
document containing _____ pages;
which is on file in the Office of the City
Clerk of the City of La Quinta, California

Dated: _____

Veronica J. Montecino, CMC
City Clerk