

CITY OF

AGOURA HILLS

"Gateway to the Santa Monica Mountains National Recreation Area"

March 12, 2010

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

Subject: Water Conservation in Landscaping Act (AB 1881)

Dear Mr. Eching:

The City of Agoura Hills is pleased to submit the enclosed materials which contain the City's new package to applicants to explain and assist in complying with the City's water efficient landscape ordinance. The enclosure consists of the following:

- Cover Letter To Applicant
- Landscape Documentation Requirements
- IWA Calculations
- Areal Calculations
- Hydrozone Water Use Worksheet Instructions
- Hydrozone Water Use Worksheet
- ETWU Calculations
- Irrigation Matrix Definitions
- Irrigation System Matrix
- Certificate Of Compliance Requirements
- Certificate Of Compliance
- AHMC Section 9658. Guidelines for landscaping, planting, and irrigation plans

The attached package complies with the intent of AB 1881.

If you should have any questions, please do not hesitate to contact me at (818) 597-7321.

Sincerely,



Mike Kamino
Director of Planning and Community Development

Dear Applicant:

On February 14, 1993 the City of Agoura Hills adopted Ordinance No. 92-220 which established Water Efficient Landscaping requirements. This ordinance was adopted in accordance with State Assembly Bill 325, enacted in 1990, to promote water conservation. On January 1, 2010 a modified version of this original Water Conservation in Landscaping Act goes into effect. The purpose of the Water Conservation in Landscaping Act of 2006 (Assembly Bill 1881, Laird) is to further encourage water conservation by providing for water efficient landscaping and irrigation features. Statewide drought conditions and California's expanding population make reduction of water consumption essential.

In addition to recognizing the need to utilize water as efficiently as possible the Water Efficient Landscaping requirements promote the values and benefits of Southern California style landscapes and native plants. The Ordinance established a structure for designing, installing and maintaining water efficient landscapes while maintaining goals for aesthetic enhancement.

The Ordinance requirements apply to the following projects any time a building or landscape permit, plan check, or design review is required:

Nonresidential Development

1. All new nonresidential development
2. Remodeling or renovation of existing nonresidential development projects which results in the refurbishing of at least fifty (50) percent of the landscape area or two thousand five hundred (2,500) square feet of landscape area, whichever is less

Residential Development

1. Common areas in new residential development projects
2. All new construction and rehabilitated landscapes which are developer-installed in single-family and multi-family projects with a landscape area equal to or greater than two thousand five hundred (2,500) square feet
3. All new construction landscapes which are homeowner-provided and/or homeowner-hired in single family and multi-family residential projects with a total project landscape area equal to or greater than five thousand (5,000) square feet

Each applicant must include a **Water Efficient Landscape Documentation Package** with the submittal of the project's detailed Landscape and Irrigation Plans to demonstrate compliance with Ordinance Number 92-220, Water Efficient Landscaping. These plans and supplemental documentation will be forwarded to the City's Landscape Consultant for review and recommendations to the Director of Planning and Community Development.

In addition, upon completion of construction each applicant must submit a **Certificate of Completion** to demonstrate compliance with Ordinance Number 92-220, Water Efficient

Landscaping. The Certificate of Completion will also be forwarded to the City's Landscape Consultant for review and recommendations to the Director of Planning and Community Development

To assist Landscape Architects in providing the information required for compliance, the City of Agoura Hills has prepared the attached package as a supplement to the City's Water Efficient Landscaping Ordinance.

Thank you for your assistance. If you have any questions regarding the requirements of the City's Water Efficient Landscaping Ordinance, please contact this department at (818) 597-7350.

Sincerely,

Planning and Community Development

WATER EFFICIENT LANDSCAPING DOCUMENTATION PACKAGE REQUIREMENTS

Each applicant must submit a Landscape Documentation Package with the submittal of the project's detailed Landscape and Irrigation Plans to demonstrate compliance with Ordinance Number 92-220, Water Efficient Landscaping. This package must include:

1. General project information

- a. Date
- b. Applicant name
- c. Contact information for applicant and property owner
- d. Project address
- e. Project type (New, remodel, public, private, etc)
- f. Total landscape area
- g. Water supply type (potable, recycled) and water purveyor (LVMWD in Agoura Hills)
- h. Checklist of all documents included in Landscape Documentation Package
- i. The following statement must be included, signed by the Applicant and dated:

"I agree to comply with the requirements of the Water Efficient Landscaping Ordinance and submit a complete Landscape Documentation Package."

2. Water Efficient Landscape Worksheet:

- a. Hydrozone Water Use Worksheet (worksheet attached)
- b. Water Budget Calculations:
 - Irrigation Water Allowance (IWA) (calculation instructions attached)
 - Estimated Total Water Use (ETWU) (calculation instructions attached)

3. Soil Management Report (If no significant grading planned)

The soil analysis may include:

- a. Soil texture
- b. Infiltration rate determined by laboratory test or soil texture infiltration rate table
- c. pH
- d. Total soluble salts
- e. Sodium
- f. Percent organic matter
- g. Recommendations

The Applicant should provide Landscape Architect and Irrigation Designer with a copy of soil analysis report prior to plan preparation.

4. Planting Plan Requirements Pertaining to Water Efficient Landscaping Ordinance

- a. Turf is not allowed on slopes greater than 25% where the toe of the slope is adjacent to impermeable hardscape
- b. The following irrigation requirements need to be taken into consideration when designing planting:
 - i. Subsurface irrigation or low volume irrigation is required in narrow or irregularly shaped areas less than eight (8) feet wide in any direction including turf areas
 - ii. Only drip, drip line, or other low flow non-spray irrigation technology is permitted within 24" of any non-permeable surface unless:
 1. the landscape area is adjacent to permeable surfacing and no runoff occurs; or

2. The adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping
- c. Delineate and label each hydrozone by number, letter, or other method
- d. The following statement must appear on the planting plan:

"I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plan"

5. Irrigation Plan Requirements Pertaining to Water Efficient Landscaping Ordinance

- a. Irrigation system must include an automatic irrigation controller that utilizes either evapotranspiration or soil moisture sensor data for irrigation scheduling
- b. Irrigation system must include a Sensor (either integral or auxiliary) that suspends or alters irrigation operation during unfavorable weather conditions
- c. Low volume irrigation is required in mulched planting areas
- d. Subsurface irrigation or low volume irrigation is required in narrow or irregularly shaped areas, including turf, less than eight (8) feet in width in any direction
- e. Only drip, drip line, or other low flow non-spray irrigation technology is permitted within 24" of any non-permeable surface unless:
 - the landscape area is adjacent to permeable surfacing and no runoff occurs; or
 - The adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping; or
 - The irrigation designer specifies an alternative design or technology, as part of the Landscape Documentation Package and clearly demonstrates that the irrigation system has been designed to prevent runoff, overspray, etc onto non-targeted areas
- f. Slopes greater than 25% must be irrigated with an irrigation system with a precipitation rate not to exceed 0.75 inches per hour. This restriction may be modified if the landscape designer specifies an alternative design or technology, as part of the Landscape Documentation Package, and clearly demonstrates no runoff or erosion will occur
- g. The installation of recycled water irrigation systems shall allow for the current and future use of recycled water, unless a written exemption has been granted (This requirement is not applicable to residential projects)
- h. Delineate and label each hydrozone by number, letter, or other method
- i. Overhead irrigation must be scheduled between 8:00 p.m. and 10:00 a.m. unless weather conditions prevent it
- j. The following statement must appear on the irrigation plan:

"I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plan."

6. Grading Plan

The Applicant must submit a copy of the final approved Grading Plan.

Prior to construction the applicant must submit a copy of both the approved Landscape Documentation Package and the Water Efficient Landscape Worksheet to the Las Virgenes Municipal Water District.

WATER EFFICIENT LANDSCAPING DOCUMENTATION PACKAGE CALCULATIONS

AREAL CALCULATIONS (Worksheet attached)

Measure each hydrozone area on irrigation plans. All areas should be accurately measured using AutoCAD, a planimeter, or other measuring device. List the square footage for each of the landscape areas described on the attached worksheet.

Total landscape area is required to calculate the Irrigation Water Allowance (IWA). The IWA is the upper limit of annual applied water for the project landscape once established. This includes all non-irrigated planted area, total turf area, total tree, shrub and groundcover area, and total water feature area.

IRRIGATION WATER ALLOWANCE CALCULATION (Show calculation on irrigation plan)

$$IWA = (51.0)(0.00083) [(0.7)(LA) + (1.0)(SLA)]$$

Where:

IWA	= Irrigation Water Allowance (billing units per year)
51.0	= ETo Rate for the City of Agoura Hills (inches per year)
LA	= Landscape Area* (square feet)
SLA	= Special Landscape Area** (square feet)
0.00083	= Conversion Factor
0.7	= Landscape Allocation Coefficient for Established Landscapes (ET adjustment factor)
1.0	= Landscape Allocation Coefficient for Special Landscape Areas (ET adjustment factor)

* Landscape Area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or non-pervious hardscape, and other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation).

** Special Landscape Areas include areas permanently and solely dedicated to edible plants such as orchards and vegetable gardens, recreation areas dedicated to active play such as parks, sports fields and golf courses where turf provides the playing surface, and areas irrigated with recycled water.

AREAL CALCULATIONS

TOTAL SITE AREA	sq.ft.
Total Non-Landscaped Area	sq.ft.
Total Parking Lot and Driveway Area	sq.ft.
Total Non-permeable Hardscape	sq.ft.
Total Permeable Hardscape	sq.ft.
Total Building Footprint Area	sq.ft.
Total Non-Irrigated and Undisturbed Area	sq.ft.
Total Landscaped Area	sq.ft.
Total Non-Water-using Landscape	sq.ft.
Total Non-irrigated Planted Landscape	sq.ft.
Total Water-using Landscape	sq.ft.
Total Recreational Turf Area	sq.ft.
Total Non-recreational Turf Area	sq.ft.
Total Tree, Shrub and Groundcover Area	sq.ft.
Total Water Feature Area	sq.ft.

FINAL HYDROZONE AREA	sq.ft.
Hydrozone 1	sq.ft.
Hydrozone 2	sq.ft.
Hydrozone 3	sq.ft.
Hydrozone 4	sq.ft.
Hydrozone 5	sq.ft.
Hydrozone 6	sq.ft.
Hydrozone 7	sq.ft.
Hydrozone 8	sq.ft.
Hydrozone 9	sq.ft.
Hydrozone 10	sq.ft.
Hydrozone 11	sq.ft.
Hydrozone 12	sq.ft.
Hydrozone 13	sq.ft.
Hydrozone 14	sq.ft.
Hydrozone 15	sq.ft.
Hydrozone 16	sq.ft.
Hydrozone 17	sq.ft.
Hydrozone 18	sq.ft.
Hydrozone 19	sq.ft.
Hydrozone 20	sq.ft.
Hydrozone 21	sq.ft.
Hydrozone 22	sq.ft.
Hydrozone 23	sq.ft.
Hydrozone 24	sq.ft.
Hydrozone 25	sq.ft.
Hydrozone 26	sq.ft.
Hydrozone 27	sq.ft.
Hydrozone 28	sq.ft.
Hydrozone 29	sq.ft.
Hydrozone 30	sq.ft.

HYDROZONE WATER USE WORKSHEET (Copy attached)

The categories shown should be provided as follows:

Plant Materials – List all plant materials by botanical name for each hydrozone

Plant Factor and Decimal Equivalent – Show the plant factor for each plant in accordance with the following table:

TABLE # 1		
	Plant Factor	Decimal Equivalent
Turf		
Recreational	Turf Recreational	0.85
Non-recreational, Cool Season	Turf Cool Season	0.67
Non-recreational, Warm Season	Turf Warm Season	0.52
Trees, Shrubs, Groundcover		
High	H	0.71
Medium	M	0.53
Low	L	0.30
Temporarily Irrigated Areas	L	0.30
Non-irrigated Landscape Areas		
Planted	Dry	0
Water Feature	Water F	1.00

Microclimate – This column may be left blank

Area – From Areal Calculations worksheet

Irrigation Efficiency – Show the predicted irrigation efficiency of the hydrozone in accordance with the following table:

Table #2	
Contiguous Hydrozone Area (square feet)	System Efficiency
Up to 1,999	0.55
2,000 to 9,999	0.60
10,000 to 49,999	0.65
50,000 to 99,999	0.70
100,000 or more	0.75

KEWU – (Reference evapotranspiration) x (Conversion Factor) = (51.0) x (0.00083) = 0.0423

Billing Units per Year – Calculated for each hydrozone as follows:

$$\frac{(\text{Area}) \times (\text{Decimal Equivalent}^*) \times \text{KEWU}}{(\text{System Efficiency})}$$

*Use the highest decimal equivalent shown for each hydrozone.

**WATER EFFICIENT LANDSCAPING
DOCUMENTATION PACKAGE CALCULATIONS**

ESTIMATED TOTAL WATER USE CALCULATION (Show calculation on irrigation plan)

$$ETWU = (51.0) \left(\frac{(PF \times HA)}{IE} + SLA \right) (0.00083)$$

Where:

ETWU	= Estimated Total Water Use* (billing units per year)
51.0	= ETo Rate for the City of Agoura Hills (inches per year)
PF	= Plant Factor (see Table #1 attached)
HA	= Hydrozone Area (square feet)
SLA	= Special Landscape Area (square feet)
IE	= Average Irrigation Efficiency (must be minimum of 0.71 – see Table #2 attached)
0.00083	= Conversion Factor

ETWU must not exceed IWA to comply with the Water Efficient Ordinance

WATER EFFICIENT LANDSCAPING DOCUMENTATION PACKAGE CALCULATIONS

IRRIGATION SYSTEM MATRIX (Worksheet attached)

The categories shown should be provided as follows:

Sta – Controller station number

Hz – Hydrozone number

Plant Material – Repeat as shown on the Hydrozone Water Use Worksheet

Plant Factor – Show the decimal equivalent (highest for the hydrozone) from the Hydrozone Water Use Worksheet

Area – From Areal Calculations Worksheet

Slope – Show the average slope (e.g. 0.20)

Exposure – Show the typical exposure (e.g. sun, shade)

Make – Manufacturer's name (e.g. Rainbird)

Body – Per manufacturer's specifications (e.g. 1804)

Nozzle(s) – Per manufacturer's specifications (e.g. #10LA)

PSI – Pressure rating of equipment

GPM – Flow at specified pressure rating

GPH – Flow at specified pressure rating

Precip. – Precipitation rate

Spacing – As shown on plan

Examples provided do not constitute endorsement of any products or manufacturers.

CERTIFICATE OF COMPLETION REQUIREMENTS

Each applicant must submit a Certificate of Completion to demonstrate compliance with Ordinance Number 92-220, Water Efficient Landscaping. This package must include:

1. **Signed and completed Certificate of Completion (Copy attached)**
2. **Parameters used to set the automatic controller for:**
 - a. plant establishment period
 - b. established landscape
 - c. any temporarily irrigated areas

Parameters may include:

- a. irrigation interval (days between irrigation)
 - b. irrigation run times (hours or minutes per irrigation event to avoid runoff)
 - c. number of cycle starts required for each irrigation event to avoid runoff
 - d. amount of applied water scheduled to be applied on a monthly basis
 - e. application rate setting
 - f. root depth setting
 - g. plant type setting
 - h. soil type
 - i. slope factor setting
 - j. shade factor setting
 - k. irrigation uniformity or efficiency setting
3. **Schedule of Irrigation and Landscape Maintenance**
 4. **Landscape Irrigation Audit Report**

Audit must be conducted by a Certified Landscape Irrigation Auditor.
 5. **Soil Management Report (if not submitted with Landscape Documentation Package)**

The soil analysis may include:

 - a. soil texture
 - b. infiltration rate determined by laboratory test or soil texture infiltration rate table
 - c. pH
 - d. Total soluble salts
 - e. Sodium
 - f. Percent organic matter
 - g. Recommendations

Attach documentation verifying implementation of recommendations from soil analysis report.

6. **As-Built or Record Drawings**

As-built drawings are required if significant changes have been made in the field during construction.

After the Certificate of Completion has been approved by the City the applicant must ensure that copies are submitted to Las Virgenes Municipal Water District and the property owner or his or her designee.

CERTIFICATE OF COMPLETION

This certificate is filled out by the project applicant upon completion of the landscape project.

PART 1. PROJECT INFORMATION SHEET

Date		
Project Name		
Name of Project Applicant	Telephone No.	
	Fax No.	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

Project Address and Location:

Street Address	Parcel, tract or lot number, if available.	
City	Latitude/Longitude (optional)	
State	Zip Code	

Property Owner or his/her designee:

Name	Telephone No.	
	Fax No.	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

Property Owner

"I/we certify that I/we have received copies of all the documents within the Landscape Documentation Package and the Certificate of Completion and that it is our responsibility to see that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule."

Property Owner Signature

Date

Please answer the questions below:

1. Date the Landscape Documentation Package was submitted to the local agency _____
2. Date the Landscape Documentation Package was approved by the local agency _____

3. Date that a copy of the Water Efficient Landscape Worksheet (including the Water Budget Calculation) was submitted to the local water purveyor _____

PART 2. CERTIFICATION OF INSTALLATION ACCORDING TO THE LANDSCAPE DOCUMENTATION PACKAGE

"I/we certify that based upon periodic site observations, the work has been substantially completed in accordance with the ordinance and that the landscape planting and irrigation installation conform with the criteria and specifications of the approved Landscape Documentation Package."

Signature*	Date	
Name (print)	Telephone No.	
	Fax No.	
Title	Email Address	
License No. or Certification No.		
Company	Street Address	
City	State	Zip Code

*Signer of the landscape design plan, signer of the irrigation plan, or a licensed landscape contractor.

PART 3. IRRIGATION SCHEDULING

Attach parameters for setting the irrigation schedule on controller.

PART 4. SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE

Attach schedule of Landscape and Irrigation Maintenance.

PART 5. LANDSCAPE IRRIGATION AUDIT REPORT

Attach Landscape Irrigation Audit Report.

PART 6. SOIL MANAGEMENT REPORT

Attach soil analysis report, if not previously submitted with the Landscape Documentation Package.

Attach documentation verifying implementation of recommendations from soil analysis report.

- F. *Oak tree preservation guidelines.* In granting an oak tree permit, the director of planning and community development or the planning commission shall require the permit to comply with provisions of the adopted "Oak Tree Preservation Guidelines" and may impose such conditions necessary to carry out the intent of this article and said guidelines. However, in no case shall less than four (4) native oaks be provided for any oak tree removed or relocated.
- G. *Notice of permit decision.* Upon completion of the processing of an oak tree permit, the director of planning and community development or the planning commission may approve, conditionally approve or deny the application for an oak tree permit and notice of such decision shall be mailed to the applicant, city council, and planning commission.
- H. *Appeals.* Within twenty (20) calendar days of the notice of decision, the applicant, city council, or planning commission may appeal the decision of the director of planning and community development to the planning commission or the decision of the planning commission to the city council.
- I. *Enforcement.*
1. *Additional remedies.* Any person who cuts, damages, moves, or removes any oak tree within the city or encroaches into the drip line of an oak tree in violation of this chapter shall be subject to the following remedies in addition to any penalties provided by the Municipal Code:
 - (a) A suspension of any building permits until all mitigation measures specified by the city are satisfactorily completed.
 - (b) Completion of all mitigation measures as established by the city.
 2. *Restitution.* It has been determined that the oak trees within the city are valuable assets to the citizens of this community and to the citizens of the County of Los Angeles and as a result of the

loss or damage to any of these trees, the public should be recompensed.

Any person violating the provisions this chapter shall be responsible for proper restitution and may be required to replace the oak tree(s) so removed or damaged, by the donation of or by replanting two (2) or more oak trees of reasonable equivalent size and value to the tree damaged or removed. The number, size and location of said equivalent replacement oak trees shall be determined by the director of planning and community development.

The value shall be established as provided in the tree evaluation formula, as prepared by the Council of Tree and Landscape Appraisers.

DIVISION 8. GUIDELINES FOR LANDSCAPING, PLANTING AND IRRIGATION PLANS

9658. Guidelines for landscaping, planting and irrigation plans; purpose.

The purpose of these regulations is to clearly define the manner in which landscape plans shall be submitted to satisfy the landscaping requirements of the city. It is the intent of these regulations to offer the applicant as much latitude as possible in designating the project landscaping, while at the same time meeting the minimum landscape standards of the city. All applicants are encouraged to take full advantage of the wide range of landscape materials and design possibilities within the framework established by these regulations. These regulations describe the procedure for landscape plan approval, the requirements for submittal of landscape plans, the minimum landscape standards, the proper use of landscaping, and a suggested plant list of native and exotic plant materials.

9658.1. Processing procedures.

Any permit issued under this article shall be conditioned to require landscaping. The procedure for processing and review of landscape plans shall be as follows:

- A. *Presubmittal meeting.* The presubmittal meeting is a recommended, rather than mandatory first step in securing landscape plan approval for the proposed project. The purpose of this meeting is to familiarize the applicant with the city's review process, identify the information and materials necessary to file landscape plans, and discuss various planting materials.
- B. *Plan submittal.* Upon payment of the required fee, the applicant may formally submit its landscape plan to the city for approval.
- C. *Plan review.* Upon receipt of the landscape plans, in conformity with section 9658.2, the city's landscape coordinator shall review the plans for completeness and forward the plans, if complete, to the city's landscape consultant (architectural review board) for review. The consultant's (board's) review shall consist of an on-site inspection and a determination as to the compatibility of selected plant materials, the adequacy of irrigation, and the consistency with standards. Upon completion of such review, the consultant (board) shall submit the plans to the department of planning and community development with his/her findings and recommendations.
- D. *Approval.* Based upon the findings and recommendations of the city's landscape consultant (board), the director may approve or require modification of the project's landscape plans.
- E. *Guarantee/surety.* If the landscaping will not be installed prior to occupancy (nonsloped areas of residential projects only), the applicant shall post with the department of planning and community development adequate surety, as determined by such department, to ensure the completion of the required landscaping. Such surety shall be submitted to the city prior to issuance of a building clearance.
- F. *Installation and inspection.* Landscape plantings and accompanying irrigation for commercial, industrial and sloped areas shall be installed prior to the issuance of a cer-

tificate of occupancy by the department of building and safety. Landscaping and irrigation for residential projects (nonsloped area only) shall be installed within the time period established by the conditions of the permit or approved landscape plans. The applicant's landscape architect shall be required to certify in writing to the director that all work has been completed in accordance with the approved plans and specifications. The city's landscape coordinator shall conduct the final landscape inspection after receipt of this certification.

- G. *Exoneration of surety.* If, upon final landscape inspection, it is determined that the landscaping and irrigation have been installed in accordance with the approved plans, the department of planning and community development shall return after a one-year maintenance period the security deposited with the city to the applicant.

9658.2. Submittal requirements.

The project's landscape plans shall be prepared by a California registered landscape architect, unless such requirement is waived by the director. In order to be able to evaluate the project's landscape plans in a comprehensive and complete manner, submittals shall include the following:

- A. *Plan check fee.* The applicant shall pay a fee to cover landscape review and inspection.
- B. *Planting plan.* The planting plan shall be drawn on clear and legible base sheets prepared specifically for the landscape submittal. Three (3) copies shall be submitted at the time of filing, which satisfy the following requirements:
 1. *Size.* Plans shall not exceed thirty (30) inches by forty-two (42) inches, or be less than twenty-two (22) inches by thirty-six (36) inches in size.
 2. *Scale.* The scale shall not be smaller than one (1) inch equals twenty (20) feet, unless otherwise approved by the director for large areas not requiring detail. In no case shall the scale be less than one (1) inch equals thirty (30) feet.

3. *Title block.* All plans shall indicate the names, addresses and phone numbers of the applicant and landscape architect. Also, the project identification number shall be specified.
4. *Physical characteristics.* The landscape plans accurately and clearly depict the following existing (to be retained) and proposed features:
 - Landscape materials, trees, shrubs, ground cover and any other landscaping;
 - Property lines;
 - Streets, street rights-of-way, access easements and/or public or private driveways, walkways, bike paths, and any other paved areas;
 - Buildings and structures;
 - Parking areas, including lighting, striping and wheel stops;
 - General contour lines;
 - Grading areas, including top and toe of slopes and slope direction;
 - Utilities, including street lighting and fire hydrants (if available);
 - Natural features, including watercourses and rock outcroppings; planting plans may include design elements such as boulders, mounds, signs and sculptures. All items shall be indicated as to the size (at maturity in the case of plant materials) in scale with the proposed project.
 - Planting symbols shall be clearly drawn and plants labeled or abbreviated (three-letter minimum) on each sheet by botanic name. Numeric or graphic definition alone is not acceptable. Container size and/or spacing and quantities shall be clearly indicated for each group of plants. Sizes of plants at planting time shall be adequate to meet specific conditions of project approval.

- C. *Irrigation plan.* The irrigation design shall provide adequate coverage and sufficient water for the continued healthy growth of all proposed plantings with a minimum of waste or overspray on adjoining areas.

Irrigation plans shall be drawn in a legible manner, separate from, but utilizing the same format, as the planting plan. Plans shall be concise and accurate, including but not limited to:

1. Design pressure, as well as static pressure.
2. Point of connection (location and size).
3. Backflow protection, as approved by the department of building and safety.
4. Valves, piping, controllers, heads, quick couplers, and gallonage requirements for each valve on the plan, shall be shown.

The legend shall include equipment manufacturer, type of equipment, model number, gallons per minute (gpm) demand, pounds per square inch (psi) demand, radius/diameter of coverage, remarks or special notes and a reference to the corresponding detail number. All equipment shall be designed for installation per manufacturer's recommendation, Uniform Plumbing Code, and all local regulations.

Specific site conditions and proposed landscape materials will determine the design of the irrigation system. Further, when considering design alternatives, the following criteria shall be utilized:

1. Landscape materials which require different watering needs shall be irrigated by separate control valves (examples: full sun/full shade, level areas/sloped areas, shrubs/lawns, street trees, etc.). If one (1) control valve is used for a given area, only landscape materials with similar watering needs shall be used.
2. Low precipitation sprinklers shall be employed to conserve water.
3. Sprinklers shall not throw water off of the property onto public areas or into nonplanted areas.
4. Plastic (PVC) mainline piping requires placement not less than eighteen (18) inches below final grade, with lateral lines requiring twelve (12) inches. Gal-

vanized lines on slope areas may not be above ground.

5. Utilization of reclaimed water as an alternative.
- D. *Written specifications/applicable details.* Three (3) copies of the details and specifications shall be provided for all aspects of the landscape project, including planting, soil preparation, tree staking and guying, separation of different types of planting areas, installation details, and post installation maintenance.
- E. *Site plan.* One (1) copy of the city-approved site plan for the proposed project shall be provided in order for the city landscape consultant (board) to have a clear and accurate portrayal of the project and project site.
- F. *Architectural elevations.* One (1) copy of the proposed project's elevations shall be submitted in order to review compatibility of proposed plant materials with architectural design elements.
- G. *Grading plan.* One (1) copy of the approved grading plan shall be provided in order to review height of graded slopes, pad elevations, and finish grade.
- H. *Photographs.* One (1) colored photograph of proposed major landscaping elements, particularly the trees.
- I. *Conditions of approval.* One (1) copy of the approved project conditions, with the signature of the applicant's landscape architect thereon, shall be submitted with the landscape plans so that the applicant's landscape architect is ensured of having seen the conditions and so that the city's landscape consultant (board) can review the proposed landscape plans for consistency with the specific conditions.

9658.3. Landscape standards.

Proposed plant materials shall relate to architectural design elements of the structures on the site and shall be compatible with the character of adjacent landscaping, provided the quality of the adjacent landscaping meets the standards set forth

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in this section. The following landscape standards for permanent landscaping are minimum requirements.

- A. *Minimum site coverage.* Landscape percentages shall be computed on the basis of the net project site area which includes the area of all structures, drives, walks, and parking on the site, but not areas dedicated for public right-of-way. The required percentages of landscaping relative to site area are set forth in the provisions relating to each land use district.
- B. *Minimum planter width.* Landscaped areas shall be a minimum of four (4) feet wide (including curbs).
- C. *Perimeter planting.* The area within required setbacks of commercial or business projects, not used for other permitted purposes, shall be landscaped.
- D. *Parking areas.* The landscape requirements for parking lots are set forth in the provisions relating to off-street parking.
- E. *Screening.* Landscaping should be used to screen storage areas, trash enclosures, parking areas, public utilities, and other similar land uses or elements which do not contribute to the aesthetic enhancement of the surrounding areas. Landscape screening shall be of a height and density so that it provides the desired effect within five (5) years growing time.
- F. *Street trees.* Street trees may be required as a condition of any permit granted or issued under this article. No street tree will be approved for planting where its growth will cause interference, obstruction, damage, or injury (either directly or indirectly) to the use of a sidewalk or street right-of-way. Street trees shall be planted according to the following standards:

1. Trees shall not be planted within thirty (30) feet of the curb return of a street intersection.
2. Trees shall not be planted closer than four (4) feet from any public walkway or public sidewalk, except where tree

wells or parkways are provided in the sidewalk area.

3. Trees shall not be located closer than ten (10) feet from any driveway, utility pole, fire plug or to the rear of any street or directional sign; fifteen (15) feet from light standards, and twenty-five (25) feet from the front of any traffic or directional sign.
4. Trees shall be spaced an average of forty (40) feet apart, but not less than one (1) per lot and two (2) per corner lots.
5. Trees that typically grow taller than twenty (20) feet in height shall not be encouraged under utility wires.

9658.4. Use of plant materials.

The scope of a project will ultimately determine landscape plant selection. In order for landscaping to relate to architectural design, the following criteria shall apply:

- A. Evergreen trees are encouraged against buildings to soften the appearance of bland expanses of walls, and to visually screen neighboring projects and subdivided exterior spaces.
- B. Deciduous trees are effectively used for solar control in summer and winter. Some such trees are flowering and are desirable as accents.
- C. Large shrubs are effectively used to screen undesirable views and act as an intermediate height element to bring buildings into human scale.
- D. Medium/low shrubs are ornamental and provide foliage, texture and color to landscape themes.
- E. Vines and espalier are effective screens in visually softening walls and fences. Many vines provide excellent flower color to brighten narrow planters against buildings and walls.
- F. Applicable native plant materials and drought tolerant species are encouraged for water conservation.

9658.5. Ground cover.

The use of a perennial ground cover is an acceptable landscaping method in reducing maintenance costs and controlling erosion. Irrigated and nonirrigated ground covers shall be as follows:

- A. *Irrigated ground cover.* Irrigated ground covers may be planted from rooted cuttings or applied as hydromulch. Rooted cuttings and hydromulched groundcovers shall be from the city-approved list. Other rooted cuttings and seed mixtures may be considered if submitted by a California registered landscape architect.
- B. *Nonirrigated ground cover.* In certain situations, temporary plantings may be required where irrigation is not economically feasible nor desirable. Nonirrigated hydromulch seeds are acceptable for natural or undisturbed slopes. Hydromulch seeds should be applied following the first measurable rainfall in the fall of the year or a temporary irrigation method shall be provided to ensure germination and minimum growth. If the natural rainfall fails to provide adequate moisture for germination, supplemental irrigation may be required.

9658.6. Water efficient landscaping.

A. *Purpose.* The purpose of this section is to:

1. Promote the values and benefits of Southern California style landscapes and native plants and to recognize the need to utilize water as efficiently as possible, given the Mediterranean climate of the area;
2. Establish a structure for designing, installing, and maintaining water efficient landscapes in new projects;
3. Establish provisions for water management practices and water waste prevention for established landscapes; and
4. Incorporate provisions for water efficient landscapes while maintaining goals for aesthetic enhancement.

B. *Definitions.* The words used in this section have the meaning set forth below:

1. *Anti-drain valve* means a check valve located under a sprinkler head to hold water in the system so it minimizes drainage from the lower elevation sprinkler heads.
2. *Application rate* means the depth of water applied to a given area, usually measured in inches per hour.
3. *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.
4. *Backflow prevention device* means a safety valve used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.
5. *Billing unit* means one hundred (100) cubic feet of water (seven hundred forty-eight (748) gallons) and is the unit of water volume utilized by the Las Virgenes Water District as a basis for charging its customers.
6. *Established landscape* means landscape in which plants have developed roots into the soil adjacent to the root ball.
7. *Evapotranspiration* means the quantity of water evaporated from adjacent soil surfaces and transpired by plants during a specific time.
8. *Hydrozone* means a portion of the landscaped area having plants with similar water needs. A hydrozone may be irrigated or non-irrigated. For example, a naturalized area planted with native vegetation that will not need supplemental irrigation once established is a non-irrigated hydrozone.
9. *Infiltration rate* means the rate of water entry into the soil, usually measured in inches per hour.
10. *Irrigation water allowance* means the upper limit of annual applied water for the established landscape area. It is based upon the city's mean reference evapotranspiration, the landscape allocation coefficient, and the size of the landscaped area.
11. *Landscape allocation coefficient* means a factor which, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two (2) major influences upon the amount of water that needs to be applied to the landscape.
12. *Landscaped area* means the entire parcel less the building footprint, driveways, non-irrigated portions of parking lots, hardscapes, pools, decks, patios, and other non-porous areas.
13. *Native plant* means any species of indigenous tree, shrub, or herb, existing before European settlement.
14. *Operating pressure* means the pressure at which a system of sprinklers is designed to operate, usually indicated at the base of a sprinkler.
15. *Overspray* means water which is delivered beyond the landscaped area, wetting pavements, walks, structures, or other non-landscaped areas.
16. *Rain sensing device* means a device which automatically shuts off the irrigation system when it rains.
17. *Reclaimed water* means tertiary treated wastewater of a quality suitable for non-potable uses such as landscape irrigation, but not intended for human consumption.
18. *Reference evapotranspiration or ETO* means a standard measurement of environmental parameters which affect the water use of plants. ETO is given in inches per year. For the purpose of this section an ETO factor of fifty-one (51.0) inches shall be used, which is the reference evapotranspiration for the City of Agoura Hills.
19. *Runoff* means water which is not absorbed by the soil or landscape to which it is applied and flows from the area. For example, runoff may result from water that is applied at too great a rate (application rate exceeds infiltration rate) or when there is a severe slope.

- 20. *Soil moisture sensing device* means a device that measures the amount of water in the soil.
- 21. *Southern California style landscape* means a landscape design utilizing plant materials adapted to the local Mediterranean climate pattern of winter rain and summer drought.
- 22. *Sprinkler head* means a device which sprays water through a nozzle for the irrigation system.
- 23. *Static water pressure* means the pipeline or municipal water supply pressure when water is not flowing.
- 24. *Valve* means a device used to control the flow of water in the irrigation system.

- 51.0 = Reference evapotranspiration for the City of Agoura Hills (inches per year)
- 0.8 = Landscape allocation coefficient for established landscape (site wide plant factor/irrigation efficiency), assuming a site wide plant factor of 0.5 and an irrigation efficiency of 0.625
- LA = Landscaped area in square feet
- 0.00083 = Conversion constant (converts inches of applied water to billing units [to covert to gallons use 0.62])

C. *Provisions for new landscapes; landscape and irrigation design.*

- 1. Applicability. This subsection shall apply to:
 - a. All new nonresidential development projects.
 - b. Common areas in new residential development projects.
 - c. Remodeling or renovation of existing nonresidential development projects which results in the refurbishing of at least fifty (50) percent of the landscaped area or two thousand five hundred (2,500) square feet of landscaped area, whichever is less.
- 2. Irrigation water allowance. In addition to the submittal requirements in section 9658.2, the project's irrigation water allowance (IWA) shall be submitted in order for the city to evaluate the water efficiency of the landscaping proposed for the project. The IWA shall be calculated for individual projects using the following formula:

$$IWA = (51.0)(0.8)(LA)(0.00083)$$

Where:

IWA = Irrigation water allowance (billing units per year)

- 3. Planting plan. In addition to the features listed in section 9658.2.B.4, planting plans shall include the following information:
 - a. Location of pools, ponds, water features, fences and retaining walls.
 - b. A calculation of the recreational turf area, the nonrecreational turf area, the shrub and ground cover area and the total landscaped area.
- 4. Planting standards. In addition to the landscape standards contained in section 9658.3, the following water efficient landscape standards shall apply:
 - a. Plants having similar water uses should be grouped together in distinct hydrozones.
 - b. Any plants may be used in the landscape; however, use of drought tolerant and low water use plant materials is encouraged. The use of inert materials such as decorative rocks and organic soil amendments may also be considered.
 - c. Plants shall be selected appropriately based upon their adaptability to the climatic, geologic and topographical conditions of the site. Protection and preservation of native species and natural areas is encouraged.
- 5. Irrigation plan. In addition to the features listed in section 9658.2.C., irrigation plans shall include the following information:

- a. Location, type and size of all components of the irrigation system.
 - b. A matrix specifying the characteristics of plant material served by, and irrigation equipment connected to, each valve.
 - c. An annual irrigation program with monthly irrigation schedules for the plant establishment period, for temporarily irrigated areas and for long-term irrigation once landscaping is established.
6. Irrigation design standards. In addition to the standards contained in section 9658.2.C, the following water efficient irrigation standards shall apply:
- a. Runoff and overspray: Soil types and infiltration rates shall be considered when designing irrigation systems. All irrigation systems shall be designed to avoid runoff, low head drainage, overspray, or other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, roadways, or structures. Proper irrigation equipment and schedules, including features such as repeat cycles, shall be used to closely match application rates to infiltration rates therefore minimizing runoff. Special attention shall be given to avoid runoff on slopes and to avoid overspray in planting areas with a width less than ten (10) feet and in median strips. Whenever possible, landscape irrigation shall be scheduled between 2:00 a.m. and 10:00 a.m. to avoid irrigating during times of high wind or high temperature.
 - b. Equipment:
 - i. Water meters. Separate landscape water meters or sub-meters shall be installed for all applicable projects.
 - ii. Valves. Different hydrozones shall be irrigated by separate valves.
 - iii. Controllers. Automatic control systems shall be installed for all irrigation systems and must be able to accommodate all aspects of design. Automatic controllers shall have multiple programs, multiple cycles (start times) and have moisture sensor input capabilities.
 - iv. Sprinkler heads. Sprinkler heads shall be selected for proper area coverage, application rate, operating pressure, adjustment capability, and ease of maintenance. Sprinklers shall have matched precipitation/application rates within each control valve circuit. All sprinkler heads shall incorporate an integral anti-drain valve.
 - v. Rain and soil moisture sensing devices. Rain sensing devices are encouraged to be included in all irrigation systems to prevent watering during rain. It is recommended that soil moisture sensing devices be used where appropriate, such as within turf areas.
 - vi. Backflow prevention devices. Backflow prevention devices shall be installed as required.
7. Reclaimed water. For those sites where the installation of reclaimed water systems is feasible and meets all regulatory requirements, recycled water irrigation systems (dual distribution systems) shall be installed to allow for the current and future use of reclaimed water and shall be designed and operated in accordance with local and state codes.
8. Model homes. In any residential development where there are two (2) or more model homes, at least one (1) model home shall be landscaped in conformance with the principles of this section. In addition:
- a. Signs shall be used to identify the model as an example of a water efficient landscape, featuring elements such as hydrozones, water conserving irrigation equipment and other features which contribute to the overall water efficient theme.

- b. Information shall be provided describing the design, installation and maintenance of water efficient landscapes.

D. Provisions for existing landscapes; water waste prevention. All public and private properties shall prevent water waste resulting from inefficient landscape irrigation by minimizing runoff; low head drainage, overspray or other similar conditions where irrigation water flows or drifts onto adjacent property, nonirrigated areas, walks, roadways or structures.

(Ord. No. 220, § 1, 4-14-93)

Editor's note—It should be noted that Ord. No. 220, § 2, adopted Apr. 14, 1993, provided as follows:

Prior to adopting this ordinance, the city has considered the model water efficient landscape ordinance prepared by the California Department of Water Resources (California Code of Regulations, Title 23, Division 2, Chapter 2.7). This ordinance supersedes the state model ordinance, which took effect in the city on January 1, 1993.

DIVISION 9. EXTERIOR AESTHETIC IMPROVEMENTS

9659. Exterior aesthetic improvements requirement.

No certificate of occupancy shall be issued for any building with a floor area greater than or equal to thirty thousand (30,000) square feet, for the alteration or repair of fifty (50) percent or more of the floor area of such building, or for any building that is part of the development of a subdivision of forty (40) or more lots unless exterior aesthetic improvements have been installed and conform to an arts plan that has been approved by the director of planning and community development.

If the exterior aesthetic improvements required by this section are not maintained in good condition, or are altered without the permission of the director of planning and community development so that the improvements no longer conform to the arts plan approved by the director, the certificate of occupancy for the building served by the improvement, or the certificate of occupancy for any building in the subdivision served by the improvement may be revoked and the owner of

the property on which the improvement is located shall be deemed to have committed a misdemeanor.

(Ord. No. 157, § 1, 8-8-89)

9659.1. Exceptions.

The following development activities shall be exempt from the requirements of section 9659 and section 9659.2:

- (a) Construction, repair, or alteration of buildings to carry out publicly assisted rehabilitation of private property.
- (b) Construction, repair, or alteration of low or moderate income multi-unit housing projects.
- (c) Construction, repair, or alteration of improvements that are not buildings.

(Ord. No. 157, § 1, 8-8-89)

9659.2. Arts plan required.

No building permit shall be issued for any building with a floor area greater than or equal to thirty thousand (30,000) square feet, for alteration or repair of fifty (50) percent or more of the floor area of such a building, or for any building that is part of the development of a subdivision of forty (40) lots or more, unless the director of planning and community development has approved an arts plan for the building or subdivision which meets the requirements set forth by resolution of the city council.

(Ord. No. 157, § 1, 8-8-89)

9659.3. Procedures, guidelines, and requirements.

The city council shall establish, by resolution, the procedure for city review of an arts plan. The city council shall also establish, by resolution, the requirements and guidelines for exterior aesthetic improvements required by section 9659.

(Ord. No. 157, § 1, 8-8-89)

DIVISION 10. MEDICAL MARIJUANA DISPENSARIES PROHIBITED

9660. Medical marijuana dispensaries prohibited.

A. Purpose and findings. The city council finds that federal and state laws prohibiting the possession, sale and distribution of marijuana would