



WATER EFFICIENT LANDSCAPE SUBMITTAL PACKAGE

Effective June 13, 2019, the City of Rolling Hills will begin implementing Chapter 13.18 Water Efficient Landscape Ordinance (RHWEL) subject to Executive Order B-29 issued by the State of California (Department of Water Resource (DWR) Title 23, Chapter 2.7 Model Water Efficient Landscape Ordinance (MWEL)).

The City of Rolling Hills requires new projects with an aggregate landscape area equal to or greater than 500 square feet requiring discretionary review and projects with an aggregate landscape area equal to or greater than 2,500 square feet requiring administrative review - (over-the-counter) to accurately and fully complete the Landscape Documentation Package at the start of the project and submit the Certificate of Completion at the end of the project. This submittal package provides the documentation, forms, and applicable fees required for permitting.

DOCUMENTATION PACKAGE

- Applicant & Project Information
- Water Efficient Landscape Worksheet
- Landscape Plans

FORMS DUE AT BUILDING PERMIT FINAL INSPECTION

- Landscape Certification
- Certificate of RHWEL Completion

APPLICABLE FEES:

- Landscape Packet Review: \$1,500 (Unused balance refunded or if requires additional review, additional funds will be collected from applicant)
- Refundable Deposit: \$5,000 (Refunded upon satisfactory completion of the project)

The Landscape Documentation Package contained within this submittal package shall be included as part of the plan check submittal. It shall be embedded onto construction documents. The Landscape Certification and Certificate of Completion shall be attached to plans at the Building Permit Final Inspection, unless extension granted by City staff.

The most current regulations can be found at the following website:

<https://water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Model->

[Water-Efficient-Landscape-Ordinance](http://www.rolling_hills.org) O R City of Rolling Hills website
http://www.rolling_hills.org

APPLICANT & PROJECT INFORMATION

Name: _____

Phone: _____

Address: _____

Email: _____

Project

Site Address: _____

Project Type (new dwelling or rehab): _____

_____ The current project does not include landscaping. I am aware that future landscape installations may be required to comply with the City of Rolling Hills Water Efficient Landscape Ordinance Chapter 13.18.

_____ This project does incorporate landscaping. (Please provide the information below specific to the landscape area which will be completed as part of this project and specify the compliance method to be used):

Total Landscape Area (sq. ft.): _____ Turf Area (sq. ft.): _____

Non-Turf Plan Area (sq. ft.): _____ Special Landscape Area (sq. ft.): _____

Water Type (potable, recycled, well): _____

Name of water purveyor (If not served by private well): _____

Project Description

Signature

I certify the above information is correct and agree to comply with the requirements of Chapter 13.18 Water Efficient Landscape Ordinance.

Signature of property owner or authorized representative

Date

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.

Reference Evapotranspiration (ETo)=39.7 (annual ETo for Signal Hill/Long Beach per State Reference Table)

Hydrozone# /Planting Description ^a	Plant Factor (PF)	Irrigation Method ^b	Irrigation Efficiency (IE) ^c	ETAF (PF/IE)	Landscape Area (sq. ft.)	ETAF x Area	Estimated Total Water Use (ETWU) ^e
Regular Landscape Areas							
Totals					(A)	(B)	
Special Landscape Areas							
Totals					(C)	(D)	
ETWU Total							
Maximum Allowed Water Allowance (MAWA)^e							

^a**Hydrozone#/Planting Description**

E.g

- 1) front lawn
- 2) low water use plantings
- 3) medium water use planting

^b**Irrigation Method**

overhead spray
or drip

^c**Irrigation Efficiency**

0.75 for spray head
0.81 for drip

^d**ETWU(Annual Gallons Required)=**

$Eto \times 0.62 \times ETAF \times Area$
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year.

^e**MAWA(Annual Gallons Allowed) = (Eto) (0.62) [(ETAFx LA) + ((1-ETAF)x SLA)]**

where 0.62 is conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, SLA is the total special landscape area in square feet, and ETAF is .55 for residential areas and 0.45 for non-residential areas.

ETAF Calculations

Regular Landscape Area

Total ETAFx Area	(B)
Total Area	(A)
Average ETAF	B ÷ A

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Regular Landscape Area

Total ETAFx Area	(B+D)
Total Area	(A+C)
Sitewide ETAF	(B+D) ÷ (A+C)

A copy of this form may be obtained from Department of Water Resources website:

<https://water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Model-Water-Efficient-Landscape-Ordinance>

LANDSCAPE CERTIFICATION FORM - Required at Final Inspection

Project Information:

Site Address: _____

Permit Number: _____

Section A: Landscape Designer

_____ I certify that I am qualified by the State of California to perform landscape design services; the landscape design and water use calculations for this project were prepared by me or under my supervision; the landscape design and water use calculations comply with the requirements of Chapter 13.18 Water Efficient Landscape Ordinance, and the Landscape Documentation Package is complete; **OR**

_____ Interior T.I., no landscape work performed (**do not need to complete sections B or C below**); **OR**

_____ This project is not subject to Chapter 13.18 Water Efficient Landscape Ordinance.

Name: _____

Company Name (if applicable): _____

Relationship to Project: _____

State License # (if applicable): _____

Signature: _____ Date: _____

Section B: Landscape Installer

_____ I certify that (a) I am qualified by the State of California to provide landscape design services; the landscape project for this project was installed by me or under my supervision; (b) the landscaping for the identified property has been installed in substantial conformance with the approved Landscape Documentation Package and complies with the requirements of Chapter 13.18 Water Efficient Landscape Ordinance; (c) a diagram of the irrigation plan showing hydrozones is kept with the irrigation controllers; (d) the Certificate of Completion has been completed in compliance with the requirements of the Water Efficient Landscape Ordinance and shall be implemented.

Name: _____

Company Name (if applicable): _____

Relation to Project: _____

State License #(if applicable): _____

Signature: _____ Date: _____

Section C: Owner/Representative

_____ I certify that I am the property owner or an authorized representative and have received copies of all the documents within the Landscape Documentation Package and the Certificate of Completion and that it is my responsibility to see that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule.

Signature: _____ Date: _____

Qualified irrigation service provider:

The following individuals are authorized to provide services required by the Model Water Efficient Landscape Ordinance in the State of California: Landscape Architects, Landscape Contractors, Landscape Designers and Irrigation Consultants. (Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title 16 of the California Code of Regulations, and Section 6721 of the Food and Agricultural Code.)

CERTIFICATE OF RHWEO 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 the 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 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 Certificate No.		
Company Name	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 per ordinance §492.10.

PART 4. SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE

Attach schedule of Landscape and Irrigation Maintenance per ordinance §492.11.

PART 5. LANDSCAPE IRRIGATION AUDIT REPORT

Attach Landscape Irrigation Audit Report per ordinance §492.12.

PART 6. SOIL MANAGEMENT REPORT

Attach soil analysis report, if not previously submitted with the Landscape Document Package per ordinance §492.6.

Attach documentation verifying implementation of recommendations from soil analysis report per ordinance §492.6.

SUBMITTAL CHECKLIST

Submittal Date: _____

Project Address: _____

Applicant Name: _____ Phone: _____

The following checklist provides a list of information that must be included on the plans before your permit application can be processed. Please provide the appropriate information on construction documents.

Landscape Documentation Package

- The project's address, total landscape area, water supply type, and contacts shall be stated on the plans.
- Add, sign and date the following statement on the plans: "I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package."
- Water Efficient Landscape Worksheet that includes a hydrozone information table and water budget calculations shall be submitted for plan check.
- A landscape design plan and irrigation design plan shall be submitted for plan check.

Water Efficient Landscape Worksheet

- Incorporate the Water Efficient Landscape Worksheet into plans. Show that the Maximum Applied Water Allowance (MAWA) meets or exceeds the calculated Estimated Total Water Use (ETWU).
- The evapotranspiration adjustment factor (ETAF) for the landscape project shall not exceed a factor of (0.55 for residential areas) (0.45 for non-residential areas).
- The plant factor used shall be from WUCOLS or from horticultural researchers with academic institutions. WUCOLS plants database can be found on-line at: <http://ucanr.edu/sites/WUCOLS/>.
- All water features shall be included in the high water use hydrozone. All temporary irrigated areas shall be included in the low water use hydrozone.
- All Special Landscape areas shall be identified on the plans. The ETAF for new and existing (non-rehabilitated) Special Landscape Areas shall not exceed 1.0.
- For the purpose of calculating ETWU, the irrigation efficiency is assumed to be 0.75 for overhead spray devices and 0.81 for drip system devices.

Landscape Design Plan

- The landscape design plans, at a minimum, shall:
 - Delineate and label each hydrozone by number, letter, or other methods.
 - Identify each hydrozone as low, moderate, high water, or mixed water use.
 - Identify recreational areas, areas solely dedicated to edible plants, areas irrigated with recycled water, type and surface area of water features, impermeable and permeable hardscape, and any infiltration systems.
- For hydrozone with a mix of both low and moderate water use plants or both moderate and high water use plants, the higher plant factor or the plant factor based on the proportions of the respective plant water uses shall be used. Hydrozones containing a mix of low and high water use plants is not permitted.

Landscape Design Plan

- Turf is not allowed on slopes greater than 25% where the toe of the slope is adjacent to an impermeable hardscape.
- Add note to plans: "Recirculating water systems shall be used for water features"
- Add note to plans: "A minimum 3-inch layer of mulch shall be applied on all exposed soil surfaces of planting areas except turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated."
- Add note to plans: "For soils less than 6% organic matter in the top 6 inches of soil, compost at a rate of a minimum of four cubic yards per 1,000 square feet of permeable area shall be incorporated to a depth of six inches into the soil"

Irrigation Design Plan

- The irrigation plans, at a minimum, shall contain the following:
 - Location and size of separate water meters for landscape
 - Location, type, and size of all components of the irrigation system, including controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices.
 - Static water pressure at the point of connection to the public water supply
 - Flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station.
- A dedicated water service meter or private submeter shall be installed for all (non-residential irrigated landscapes of at least 1,000sqft) (residential irrigated landscape areas of at least 5,000sqft).
- Add note to plans: "Pressure regulating devices are required if water pressure is below or exceeds the recommended pressure of the specified irrigation devices."

- Manual shut-off valves 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 or routine repair.
- Add note to plans: “Check valves or anti-drain valves are required on all sprinkler heads where low point drainage could occur.”
- Areas less than 10-feet in width in any direction shall be irrigated with subsurface or drip irrigation.
- Overhead irrigation shall not be permitted within 24-in. of any non-permeable surface.

Required Statements and Certification

- Add the following statement on the landscape and irrigation plans: “I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plans”.
- The final set of landscape and irrigation plans shall bear the signature of a licensed landscape architect, licensed landscape contractor, certified irrigation designer, licensed architect, licensed engineer, licensed land surveyor, or personal property owner.
- Add note to plans: “A diagram of the irrigation plan showing hydrozones shall be kept with the irrigation controller for subsequent management purposes.”
- Add note to plans: “A Certificate of Completion shall be filled out and certified by either the designer of the landscape plans, irrigation plans, or the licensed landscape contractor for the project”.
- Add note to plans: “An irrigation audit report shall be completed at the time of final inspection.”