

Model Water Efficient Landscape Ordinance (MWELO) Compliance Submittals and Guidelines

City of Palo Alto (CPA) Building Inspection Division 285 Hamilton Ave. Inspection Request: 650 329-2496

IVR# 249

Revision Date: 4/18/18

General

Requirements/Checklist for:

Codes Enforced:
Model Water Efficient

Landscape Ordinance 2015

California Green Building Code 2016

The information provided in this document is general and intended as a guide only. Each project is unique and additional requirements may be enforced as deemed appropriate.

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE COMPLIANCE INSTRUCTIONS:

Landscape Ordinance Triggers:

The applicability includes residential, commercial, industrial and institutional projects that require a permit, plan check or design review, including the following square footage thresholds:

- New development projects that include landscape areas of 500 sq. ft. or more
- Rehabilitated projects that include landscape areas of 2500 sq. ft. or more
- Any project with an aggregate landscape area of 2500 sq. ft or less- Appendix D

The Model Water Efficient Landscape Ordinance can be found in the following location: http://www.water.ca.gov/wateruseefficiency/landscapeordinance/docs/Title%2023%20extract%20-%20Official%20CCR%20pages.pdf

Submit Landscape Documentation Package:

- 1. Complete all instruction requirements found in this document.
- 2. Submit all requirements found in the <u>Landscape Documentation Package Checklist</u> with a permit application. *There are two pathways for compliance:*
 - A. Water Budget Compliance Pathway (See Page 2)
 - B. Prescriptive Compliance Pathway Appendix D (See Page 3)
 (Note: This is a streamlined compliance pathway available only to projects with a landscaped area less than 2,500 square feet)
- 3. Pay the fee associated with Water Efficient Landscape Review and Inspection.
- 4. Receive approval to begin work.

Inspection:

Note: The inspection requirements are the same for the Water Budget Compliance Pathway and the Prescriptive Compliance Pathway Appendix D

- 1. Call 650 617-3145 to schedule a Landscape Inspection.
- 2. Follow the Water Efficient Landscape Inspection Checklist (See page 6).
- 3. Projects must submit a copy of the "Certificate of Installation" (See page 7) and submit all required submittals shown on the certificate to the project owner.

<u>Landscape Documentation Package Submittal Checklist</u> Water Budget Compliance Pathway

When a landscape project triggers the Model Water Efficient Landscape Ordinance (Title 23, Chapter 2.7), the follow items must be included as part of the Landscape Documentation Package (Section 492.3) in order to be considered complete and ready for Water Efficient Landscape Review.

| Project Information Worksheet/Certificate of Completion of the Landscape Package (In | | | | | | |
|---|--|--|--|--|--|--|
| accordance with §492.3) | | | | | | |
| Applicants shall complete the Project Information Worksheet (in accordance with §492.3) and shall paste this on either the GB-2 sheet or on the Landscape Plans. | | | | | | |
| □ Water Efficient Landscape Worksheet (In accordance with §492.4) | | | | | | |
| Applicants shall complete the Water Efficient Landscape Worksheet using the link below (In accordance with §492.4) and shall paste this on either the GB-2 sheet or on the Landscape Plans. Submit the Landscape Documentation Package with the building permit application. a. NOTE: An example of the worksheet is included in this document on page 5. The applicant shall download the water budget calculator found at the Department of Water Resources webpage: https://www.water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency | | | | | | |
| □ Soil Management Report (In accordance with §492.5) | | | | | | |
| Applicants shall prepare a soil management report (In accordance with §492.5) and shall submit as part of the Plan Review requirements. | | | | | | |
| ☐ Landscape Design Plan (In accordance with §492.6) | | | | | | |
| A Landscape Design Plan shall be submitted and must meet all requirements outlined in §492.6. The Landscape Design Plan must 1) contain the following statement "I have complied with the criteria of the Model Water Efficient Landscape Ordinance and have applied them for the efficient use of water in the landscape design plan" and 2) shall bear the signature of a licensed landscape architect or licensed landscape contractor. | | | | | | |
| ☐ Irrigation Design Plan (In accordance with §492.7) | | | | | | |
| An Irrigation Design Plan shall be submitted and must meet all requirements outlined in §492.7. The Irrigation Design Plan must 1) contain the following statement "I have complied with the criteria of the Model Water Efficient Landscape Ordinance and have applied them for the efficient use of water in the Irrigation Design Plan" and 2) shall bear the signature of a licensed landscape architect, certified irrigation designer, or licensed landscape contractor. | | | | | | |
| ☐ Grading Design Plan (In accordance with §492.8) | | | | | | |
| A Grading Design Plan shall be submitted and must meet all requirements outlined in §492.8. The Grading Design Plan must 1) contain the following statement "I have complied with the criteria of the Model Water Efficient Landscape Ordinance and have applied them for the efficient use of water in the Grading Design Plan" and 2) shall bear the signature of a licensed civil engineer. NOTE: A comprehensive grading plan prepared by a civil engineer for other local agency permits satisfies the requirement outlined in §492.8. However, the statement above must be shown. | | | | | | |
| ☐ Irrigation Metering Device (In accordance with PAMC 5393 Section 16.14.220) | | | | | | |
| The project is subject to either CALGreen Tier 1 or Tier 2 and the landscape is greater than 1,000 sq.ft., and therefore, must install a dedicated irrigation meter. | | | | | | |

Landscape Documentation Package Submittal Checklist

Prescriptive Compliance Pathway Appendix D

Note: This is a streamlined compliance pathway available only to projects with landscaped area less than 2,500 square feet.

When a landscape project triggers the Model Water Efficient Landscape Ordinance (Title 23, Chapter 2.7), the follow items must be included as part of the Landscape Documentation Package (Section 492 – Appendix D) in order to be considered complete and ready for Water Efficient Landscape Review.

| | Project Information Worksheet/Certificate of Completion of the Landscape Package (In | | | | | |
|---|--|--|--|--|--|--|
| | accordance with §492.3) | | | | | |
| | Applicants shall complete the Project Information Worksheet (in accordance with §492.3) and shall paste this on either the GB-2 sheet or on the Landscape Plans. | | | | | |
| | Landscape Design Plan (In accordance with §492.6) | | | | | |
| A Landscape Design Plan shall be submitted and must meet all requirements outlined in Chapter 2.7 Model Water Efficient Landscape Ordinance Appendix D. The Landscape Design Plan must 1) contain the following statement "I have complied with the criteria of the Model Water Efficient Landscape Ordinance Appendix D Prescriptive Requirements and have applied them for the efficient use of water in the landscape design plan" and 2) shall bear the signature of a licensed landscape architect or licensed landscape contractor. | | | | | | |
| | Irrigation Metering Device (In accordance with PAMC Ordinance 5393 Section 16.14.220) | | | | | |
| The project is subject to either CALGreen Tier 1 or Tier 2 and the landscape is greater than 1,000 sq.ft., and therefore, must install a dedicated irrigation meter. | | | | | | |

CERTIFICATE OF COMPLETION OF THE LANDSCAPE DOCUMENTATION PACKAGE

This certificate is filled out by the project applicant upon completion of the Landscape Documentation Package.

| | ROJECT INF | ORMATION SHEET | | | | |
|-----------------------------|-------------------|---------------------------------|---|--|--|--|
| Date | | | | | | |
| Project Name | | | | | | |
| Name of Project Applicant | | Telephone No. | Telephone No. | | | |
| | | Fax No. | | | | |
| itle | | Email Address | | | | |
| Company | | Street Address | | | | |
| ity | | State | Zip Code | | | |
| Project Address a | nd Location: | | | | | |
| treet Address | | Parcel, tract or lot number | er, if available. | | | |
| iity | | Latitude/Longitude (option | onal) | | | |
| tate | Zip Code | | | | | |
| | | | | | | |
| Project Landscap | | | | | | |
| otal Landscaped Area (squar | e feet) | Project Type (select all th | at apply): | | | |
| Vater Supply Type: | | ☐ Rehabilitated | | | | |
| □ Potable | | Public | | | | |
| ☐ Recycled | | _ | | | | |
| □ Well | | ☐ Cemetery ☐ Homeowner-i | nstalled | | | |
| | | - Homeowner-i | nstalled | | | |
| Property Owner o | r his/her desi | gnee: | | | | |
| lame | | Telephone No. | Telephone No. | | | |
| | | Fax No. | Fax No. | | | |
| itle | | Email Address | Email Address | | | |
| ompany | | Street Address | | | | |
| ity | | State | Zip Code | | | |
| Package and the Cert | ificate of Comple | | thin the Landscape Documentation sibility to see that the project is main edule." | | | |
| Property Owner Signa | ature | | Date | | | |
| FOR OFFICIAL US | E ONLY: | | | | | |
| Please answer the ques | | | | | | |
| | | Package was submitted to the lo | ncal agency | | | |
| | | Package was submitted to the R | | | | |
| | | | | | | |

submitted to the local water purveyor___

EXAMPLE WATER EFFICIENT LANDSCAPE WORKSHEET

This is an example worksheet to be filled project applicant and it is a required element of the Landscape Documentation Package. The applicant must use the water budget calculator found at the Department of Water Resources webpage:

https://www.water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency

| Hydrozone # /Planting Description | 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 | | | | | | | |
| | | | | | | | |

| Special Landscape Areas | | | | | | | |
|-------------------------|---|--|--|--------|-----|-----|--|
| | | | | 1 | | | |
| | | | | 1 | | | |
| | | | | 1 | | | |
| | | | | Totals | (C) | (D) | |
| | ETWU Total | | | | | | |
| | Maximum Allowed Water Allowance (MAWA) ^e | | | | | | |

^aHydrozone #/Planting Description E.g

Reference Evapotranspiration (ETo)

1.) front lawn

- 2.) low water use plantings
- 3.) medium water use planting

bIrrigation Method overhead spray or drip ^cIrrigation Efficiency 0.75 for spray head 0.81 for drip ^dETWU (Annual Gallons Required) = Eto x0.62 x ETAF x Area

where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year.

^eMAWA (Annual Gallons Allowed) = (Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]

where 0.62 is a 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.

Water Efficient Landscape Inspection Checklist

| 1. | Inspector shall request to see a copy of the following submittals: "Certificate of Installation According to the Landscape Documentation Package" (See Page 6) "Irrigation Controller: O The inspector shall review the landscape submittals to verify that the | | | | | |
|----|--|--|--|--|--|--|
| | controller contains either a weather or soil moisture based system. | | | | | |
| | NOTE: The applicant must certify that the following have been submitted to the project owner. These are not required submittals for the inspection. | | | | | |
| | □IRRIGATION SCHEDULING Parameters for setting the irrigation schedule on controller per ordinance Section 492.10. | | | | | |
| | ☐ SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE Schedule of Landscape and Irrigation Maintenance per ordinance Section 492.11. ☐ LANDSCAPE IRRIGATION AUDIT REPORT | | | | | |
| | Landscape Irrigation Audit Report per ordinance Section 492.12. To be completed by a third party. | | | | | |
| 2. | Inspector shall field verify the following: | | | | | |
| | ☐ Irrigation Meter: ○ The inspector shall verify that a separate irrigation meter has been installed as shown on the landscape plans. Applicant shall contact Utilities at (650) 566-4500 for any questions related to installation. | | | | | |
| | ☐ Irrigation Controller: | | | | | |
| | The inspector shall review the landscape submittals to verify that the controller contains either a weather or soil moisture based system. The inspector shall review digital irrigation schedule to verify that the irrigation has been scheduled for times between 8:00 p.m. and 10:00 a.m. only. | | | | | |
| | The inspector shall field verify that a weather or soil moisture based controller has been installed (as shown in the landscape submittal). | | | | | |

Further, I/we certify that the following have been submitted to the project owner:

CERTIFICATION OF INSTALLATION ACCORDING TO THE LANDSCAPE DOCUMENTATION PACKAGE (Submit during Landscape Inspection)

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. I/we certify that the standards within the Palo Alto Tree Technical Manual have been satisfied.

| Schedule of Landscape and Irrigation Mai | dule on controller per ordinance _ANDSCAPE AND IRRIGATI intenance per ordinance Section RIGATION AUDIT REPORT | ON MAINTENANCE 1 492.11. | | | | |
|--|---|-----------------------------|--|--|--|--|
| | | | | | | |
| Signature* | Date | | | | | |
| | | | | | | |
| Name (print) | Telephone No. | | | | | |
| Name (print) | relephone No. | releptione No. | | | | |
| | Fax No. | | | | | |
| Title | Email Address | | | | | |
| License No. or Certification No. | I | | | | | |
| Company | Street Address | Street Address | | | | |
| City | State | Zip Code | | | | |

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