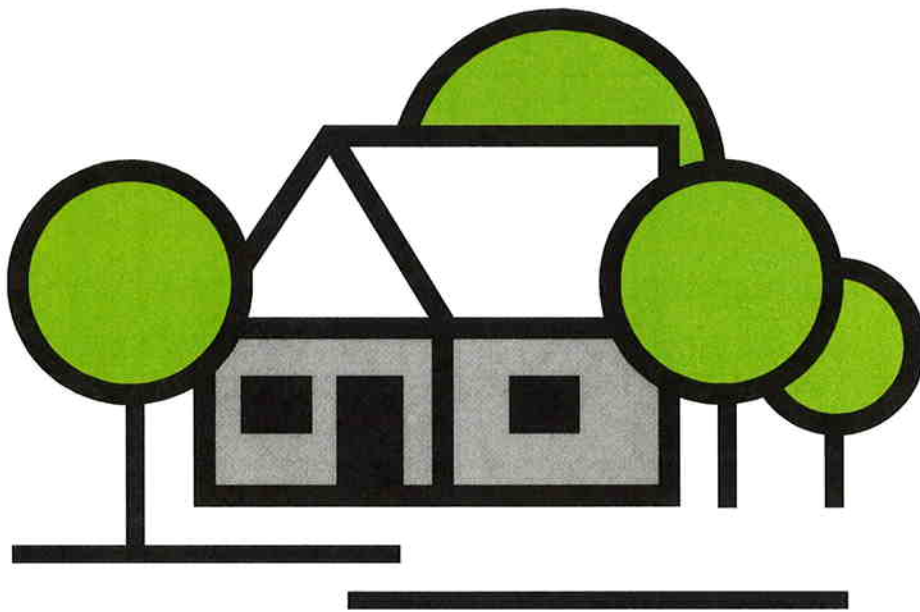


# City of Ceres

## WATER EFFICIENT LANDSCAPE GUIDELINES AND STANDARDS

### Single Family Housing



Prepared by the Planning and Community Development Department  
and Public Works Department – February 1994

*Adopted by City Council Resolution 94-27, February 28, 1994  
(Revised 6/05)*

# TABLE OF CONTENTS

## Single Family Housing

Section 1.0: Purpose and Intent	1
Section 2.0: Applicability	1
Section 3.0 Single-Family Lots	2
3.1 Landscape Design for Single-Family Lots	2
3.2 General Landscape Requirements and Development Standards for Single-Family Lots	3
3.3 Specific Landscape and Development Standards for Single-Family Lots	6
3.4 Landscape and Irrigation Plan Requirements	6
Section 5.0: Definitions	8
Appendix A: Pre-Approved City Standard Plans	A-1
Appendix B: Plant List/Climate and Water Consumption Ratings	B-1

## **WATER EFFICIENT LANDSCAPES AND STANDARDS**

### **Section 1.0: Purpose and Intent**

The purpose of these Guidelines is to establish landscaping regulations that are intended to:

- A. Enhance the aesthetic appearance of development by providing standards relating to quality, quantity, and functional aspects of landscaping and landscape screening.
- B. Increase compatibility between various land uses, particularly between residential and abutting commercial and industrial land uses.
- C. Reduce the heat and glare generated by development.
- D. Reduce water consumption in the landscape environment using conservation principles. Comply with State laws requiring local agencies to adopt water-conserving landscape standards.
- E. Protect public health, safety, and welfare by minimizing the impact of all forms of physical and visual pollution, controlling soil erosion, screening incompatible land uses, preserving the integrity of neighborhoods, and enhancing pedestrian and vehicular traffic and safety.
- F. Provide developers and property owners with a better understanding of the City's expectations regarding the design and installation of landscaping and irrigation systems as currently required by Code.
- G. Establish a system to insure that the City's interests in landscaping and irrigation systems are carried out are both cost-effective and flexible. The City Council recognizes that minor deviations may be granted to these guidelines, whenever such deviations are more likely to satisfy the purpose and intent of the Guidelines.

### **Section 2.0: Applicability**

Section 3.0 of these Guidelines shall apply to the development of a lot with single-family dwelling (including model homes) as permitted use where the Ceres Zoning Ordinance requires the landscaping of the front yard (front setback) and exterior side yard (side setback). Section 4.0 of these Guidelines shall apply to all development projects that consist of two or more dwelling units on a single lot or lots, or non-residential uses that are subject to the discretionary review and approval by the City of Ceres and where landscaping and irrigation systems are required by the Zoning Ordinance. Section 5.0, Definitions, and Appendix A apply to all developments regulated by these Guidelines.

### **Section 3.0: Single-family Lots**

A landscaping and irrigation plan, meeting the standards and requirements of this section of these Guidelines, shall be prepared in conjunction with an application for a building permit for the construction of a single-family dwelling, including model homes, when located on a single lot. The landscaping and irrigation plan shall be submitted with the application for a building permit.

Using the City's pre-approved standard plan, a plan showing plant and irrigation detail, the plan calculation sheet a checklist and a list of exceptions need to be submitted. As long as the plan with the exceptions meets the intent of these regulations, no other information need be provided.

All landscaping is to be installed in accordance to the approved plans prior to final inspection. If the landscaping installed exceeds the water allocation of the approved plan, the building permit for the dwelling shall not be finalized until corrections have been made or a cashier's check is posted equal to the cost of making the corrections by an appropriately licensed contractor recognized by the State of California as competent to install landscaping.

The installation of landscaping on a single-family lot may be deferred for a period of not more than six (6) months after the final inspection has been issued by: (1) showing cause for deferring the installation of landscaping; and (2) posting with the City of Ceres a cashier's check in an amount equal to a licensed landscape contractor's estimate for the installation of the landscaping as a bond. A request to defer the installation of landscaping shall be made in writing to the Director of Public Works and shall authorize the City to use the funds deposited with the City to cause the landscaping to be installed consistent with the landscaping plans approved by the City.

#### **Section 3.1 Landscape Design Policies for Single-family Lots**

The following landscape design policies are intended to assist the landowner in understanding the City's expectations for landscaping required by the Ceres Zoning Ordinance for single-family lots.

- A. Landscaped areas should incorporate plantings utilizing a three tier system: (1) grasses and ground covers, including vines; (2) shrubs; and (3) trees.
- B. Planting masses on-site should assume a simple, non-uniform arrangement.
- C. Plants should be selected based upon their adaptability to the climate, geology, and topographic conditions of the site. The planting of trees is encouraged, especially deciduous trees planted on the south side of buildings.
- D. Plants having similar water needs should be grouped together in distinct "hydrozones" so that the irrigation system can efficiently provide adequate water supplies.

### **Section 3.2 General Landscape Requirements and Development Standards for Single-family Lots.**

The following represent the minimum requirements and development standards for landscaping single-family lots in the City of Ceres.

#### **A. Water Conservation**

The design of the landscaping shall be based on the following method:

1. *Pre-approved City Standard Plans.* Pre-approved standard plans developed by the City that incorporates the appropriate mixture of plant materials and irrigation system components to meet the City's water conservation and landscaping objectives may be used. These standard plans and checklist are included in Appendix A.

#### **B. Trees**

1. Minimum tree size shall be fifteen (15) gallon unless another size is specified in certain situations. One tree shall be planted for each residential lot. Two trees shall be planted for each corner lot. One in the front yard (front yard setback) and one in the exterior side yard (side yard setback).
2. Trees shall be staked and planted in accordance with city standards.
3. Tree varieties shall be long-lived (minimum of 50 years), clean, require little maintenance and be structurally strong and disease and pest resistant.
4. Trees planted in turf areas should be provided with a three-foot (3') diameter clear area around the trunk.
5. Trees planted adjacent to streets, parking areas and pedestrian walkways shall have a deep rather than shallow root system and be coordinated with any street trees located within the right-of-way.

#### **C. Ground Cover/Turf**

1. The size and spacing of plants used for ground cover shall be based on the requirements for the specific plants to achieve 100 percent coverage within three years from being planted.
2. Drought tolerant grasses should be planted in turf areas unless specific conditions prevent the selection of these species.

3. Turf must be installed in front area between the driveway and the property line providing the irrigation system is designed to minimize overspray. Sprinkler head radius in relation to turf width will be verified in Landscape Approval process.
4. Turf is not recommended for berms and other areas with slopes in excess of 20%. The toe of turf-planted berms or sloped areas (greater than 5%) shall be located a minimum of 24 inches behind any hardscape (curb, sidewalk, driveway, or walkway).
5. Turf shall not be installed within 24 inches of driveways or sidewalks unless a three-inch (3") deep swale, measured from the top of the hardscape, is constructed at least three feet (3") back of the hardscape.
6. Turf or **densely-planted, fast-growing walk-on groundcover** will be the options available for the area between the sidewalk and curb. Groundcover selection and planting density will be verified in the Landscape Approval process.

D. Rock-Stone and Mulch

1. A minimum of three inches (3") of rock, gravel, or mulch (e.g. wood chips, bark, etc) shall be required in conjunction with ground covers, shrubs and trees, provided that it does not become the dominant feature of the landscape program except for the few months after initial planting. Non-porous material such as impervious sheet plastic may not be placed under the mulch as it blocks the infiltration of rainwater and can cause runoff elsewhere on the site.
2. Inorganic materials such as rocks, stones, boulders and timbers may be incorporated into a landscape program only when used in conjunction with live plant materials and when limited to an accent feature.

E. Planters

1. All planter areas should provide positive drainage away from paved areas.
2. Planters should be separated from surrounding areas by a four inch (4") high curb of raised concrete or treated wood, or be recessed at least two (2") below the surrounding surface with a 4:1 slope away from any adjoining paved area.
3. All planters constructed adjacent to buildings or structures shall drain away from the building or structure.

## F. Irrigation Systems

1. All landscaped areas shall be provided with an approved automatic irrigation system that meets the criteria listed below:
  - Low pressure/low precipitation rate systems (e.g. drip irrigation, etc.) shall be used where high pressure/high precipitation systems are not required and a low pressure system can provide an adequate supply of water.
  - Sprinkler heads irrigating turf or other high-water-demand landscape areas shall be circuited so that they are on a separate zone or zones from those irrigating trees, shrubbery or other reduced-water requirement areas.
  - **The system shall be designed to minimize overspray** onto impervious surfaces such as sidewalks, buildings, parking areas, etc. through the use of such techniques as low-trajectory spray nozzles or underground or low-volume applicators.
  - Sprinklers should not be installed immediately adjacent to sidewalks and other impervious areas but should be set inward in turf areas and other planting areas.
  - Automatic irrigation controllers shall have multiple cycle capabilities; electronic controllers shall have a battery backup.
  - Automatic irrigation controllers shall be programmed consistent with the days and hours established by the Water Conservation Program adopted by the City of Ceres.
  - Serviceable check valves are required where elevation differences may cause low head drainage.

### **Section 3.3: Specific Landscape Requirement and Development Standards Single-family Lots.**

- A. Yards, Setbacks and Open Spaces. All front yards (front setbacks) and exterior sideyards (side setbacks) not otherwise devoted to driveways or walkways shall be landscaped in accordance with the minimum standards described below. Landscaping along street frontages shall be extended into the right-of-way and/or public utility easement to the sidewalk. Parkway strips, if any, shall also be landscaped with either turf (See Section 3.2, C) or a walk-on type of groundcover (See approved list in Appendix B). Street trees shall be consistent with the Ceres Street Tree Program.

- B. Model Homes. In each residential project that consists of eight (8) or more detached single-family homes, at least one model home shall demonstrate by signs (maximum four (4) square feet) or drawings, and information brochures, the principles and benefits of water efficient landscaping techniques. The sign and brochure shall focus on specific water efficient features, such as drip irrigation, hydrozones, and drought tolerant plants, etc. and may list the designers and suppliers.

### **Section 3.4: Landscape and Irrigation Plan Requirements for Single-family Lots**

All Landscape and Irrigation Plans and associated construction documents shall indicate the information listed below, a calculation sheet, and a checklist

Plans shall be drafted at a scale sufficient to adequately show plant and irrigation detail and shall not exceed 30" X 42", or be less than 8½" X 11". The landscape plan plant symbols shall reflect the size of plants three (3) to four (4) years after planting.

Landscape and Irrigation Plans must be prepared by a licensed landscape architect, landscaped contractor, or other competently trained professional recognized by the State of California to prepare landscape and irrigation plans. State regulations permit a property owner to prepare a landscape and irrigation plan for his or her own property.

Site drawings used to obtain a building permit may be used as the base for the plans.

#### A. Project Information

1. Project name and file number.
2. Landscape designer's name, address, phone number, and professional credentials (License, etc).
3. North arrow and scale.
4. Site plan drawn to scale indicating:
  - Property lines, right-of-way line(s) and easements
  - Buildings (proposed and/or existing)
  - Driveways, patios, and walkways
  - Existing trees and significant vegetation stands
  - All proposed hardscape



## B. Landscape Plan and Planting Program

1. All landscape plans shall include areas and number and location of shrubs.
  - Turf and/or ground cover areas and number and location of shrubs
  - Turf locations; trees are to be identified by general description (i.e., (tall, vertical, broad, accent, evergreen, deciduous, etc)
  - Proposed plant palatte with botanical and common name, sizes, and total number proposed
  - Staking and/or guying for trees
  - Raise planters, including drains
  
2. A tabulation of landscape square footage and percentage of landscaping devoted to:
  - Net lot area
  - Area occupied by buildings and structures
  - Hardscape including Driveways, Patios, Decks, and Walkways for Front Yard (Or yard being approved)
  - Backyard
  - Other landscaped areas
  - Turf areas

## C. Irrigation Plan

1. The type and location of all equipment, heads, valves, backflow-preventer(s), etc., including:
  - location and size and type of all non-pressure and pressure lines.
  - location of connections.
  - water service line, size and location.
  - system design water pressure and existing static water pressure (40 PSI).
  - site grading showing finished configurations, slopes, elevations and drainage patterns of the landscaped are.
  
2. All equipment is to be identified by manufacturer's name, model number and size if applicable.
  
3. All heads and/or emitters are to identified by manufacturer, model number, pattern, radius, and GPM or GPH demand.
  
4. All control valves are to indicate manufacturer, model number, size and estimate GPM demand at each valve.

5. An irrigation schedule for an entire year, organized by season, that shows the estimated annual water consumption.

D. Maintenance and Fertilization Schedule

1. All landscape plans shall include the landscape designer's annual maintenance and fertilization recommendations.

E. Designer's Certification

The individual preparing the Comprehensive Landscape and Irrigation Plan shall sign and certify that the plans submitted to the City of Ceres meet the City's Water Efficient Landscape Guidelines and Standards.

**Section 5.0: Definitions**

"Estimated applied water use" means the amount of the water recommended (based upon the irrigation schedule).

"Hydrozone" means a portion of the landscaped area having plants with similiar water needs that are served by a valve or set of valves with the same schedule.

"Landscaped area" means the entire parcel including water features such as ponds, fountains, swimming pools, and spas; less the building footprint, driveways, non-irrigated portions of parking lots, hardscapes such as decks and patios, and other non-pourous areas. (If plans are submitted for front yard landscaping only, then "Landscape Area" refers to the front yard rather than the entire parcel, minus the items/areas mentioned above. Rev. 2005)

"Turf" means single bladed grass or sod. Bermuda grass, Kikya grass, Seashore paspalum, St. Augustine grass, Zoysiz grass, and Buffalo grass are warm-season grasses. Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are cool-season grasses.

## **APPENDIX A STANDARD PLANS – CHECK LIST METHOD**

### **PURPOSE**

#### Method – Check List:

1. Complete the check list for the property. Please note that for Question 12, the choice of sprinkler device should be indicated; i.e., turf at least (2') two feet from the side-walk, use of a swale, or use of low trajectory large drop type sprinklers.
2. Attach the appropriate standard plan, either A, B, C, OR D, to the check list.
3. The site will be checked for its conformance to the standard plan prior to final of the house.

#### Method – Standard Plans:

1. Determine which standard plan will be used, either A, B, C, or D.
2. Complete the calculation sheet.
3. Compare the percentages calculated against those given under the specific plan chosen; i.e., for Plan A the lawn area maximum is 65%. The amount calculated for the property needs to be equal to or less than that percentage. The only area where the percentage should be equal to or higher than what is shown in the column is for low water use and/or non-landscaped areas.
4. Submit the calculation sheet and the specific standard plan with the building permit application.
5. At final inspection, the landscaping will be checked against the standard plan submitted.

CITY OF CERES SINGLE FAMILY RESIDENCE CHECKLIST  
PRE-APPROVED WATER EFFICIENT STANDARD LANDSCAPE PLANS

CONTRACTOR: \_\_\_\_\_

DATE: \_\_\_\_\_ ADDRESS: \_\_\_\_\_

INDICATE PLAN SELECTED: A B C D

	PROVIDED	
	Yes	No
1. One street tree per interior lot, two street trees per corner lot. Tree and planting conforms to City street tree standard and is a fifteen (15) gallon tree.	<input type="checkbox"/>	<input type="checkbox"/>
2. Turf is of drought tolerant variety.	<input type="checkbox"/>	<input type="checkbox"/>
3. Selection of plants is listed on drawing or elsewhere.	<input type="checkbox"/>	<input type="checkbox"/>
4. Planting areas have a minimum of three inches (3") of rock, gravel, or mulch (e.g., wood chips, bark, etc.	<input type="checkbox"/>	<input type="checkbox"/>
5. Planters provide positive drainage away from paved areas, buildings or structures.	<input type="checkbox"/>	<input type="checkbox"/>
6. Planters are recessed at least two inches (2") below surrounding surfaces or are separated from surrounding areas with a four inch (4") high curb of raised concrete or treated wood.	<input type="checkbox"/>	<input type="checkbox"/>
7. Sprinkler heads irrigating turf or other high-water-demand areas are on a separate zone/circuit from those irrigating reduced-water requirement areas (e.g., trees, shrubbery, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
8. System designed to minimize overspray onto impervious surfaces such as sidewalk, driveways. Sprinklers set inward from impervious surfaces where necessary to minimize overspray.	<input type="checkbox"/>	<input type="checkbox"/>
9. Low pressure/low precipitation rate system (e.g., drip irrigation, bubblers, etc) provided where a low pressure system can provide an adequate supply of water (i.e., trees, shrubbery, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
10. Irrigation system incorporates automatic irrigation controllers with battery backup and multiple cycle capability. Units must have 24 hour/7 day controls.	<input type="checkbox"/>	<input type="checkbox"/>
11. Irrigation controller programmed consistent with water conservation program established by the City.	<input type="checkbox"/>	<input type="checkbox"/>
12. Turf areas are: a) at least two feet (2') from sidewalk or driveway; b) there is a swaled area that provides drainage away from sidewalk or driveway; or c) sprinkler devices are equivalent to or equal to Rainjet 8800 or Rainjet RS series. (Indicate choice)	<input type="checkbox"/>	<input type="checkbox"/>
13. Servicable check valves provided where elevation differences may cause low head drainage.	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX A

CITY OF CERES

Applicant Name: \_\_\_\_\_

Phone Number: \_\_\_\_\_ Fax: \_\_\_\_\_

Address of Plan: \_\_\_\_\_

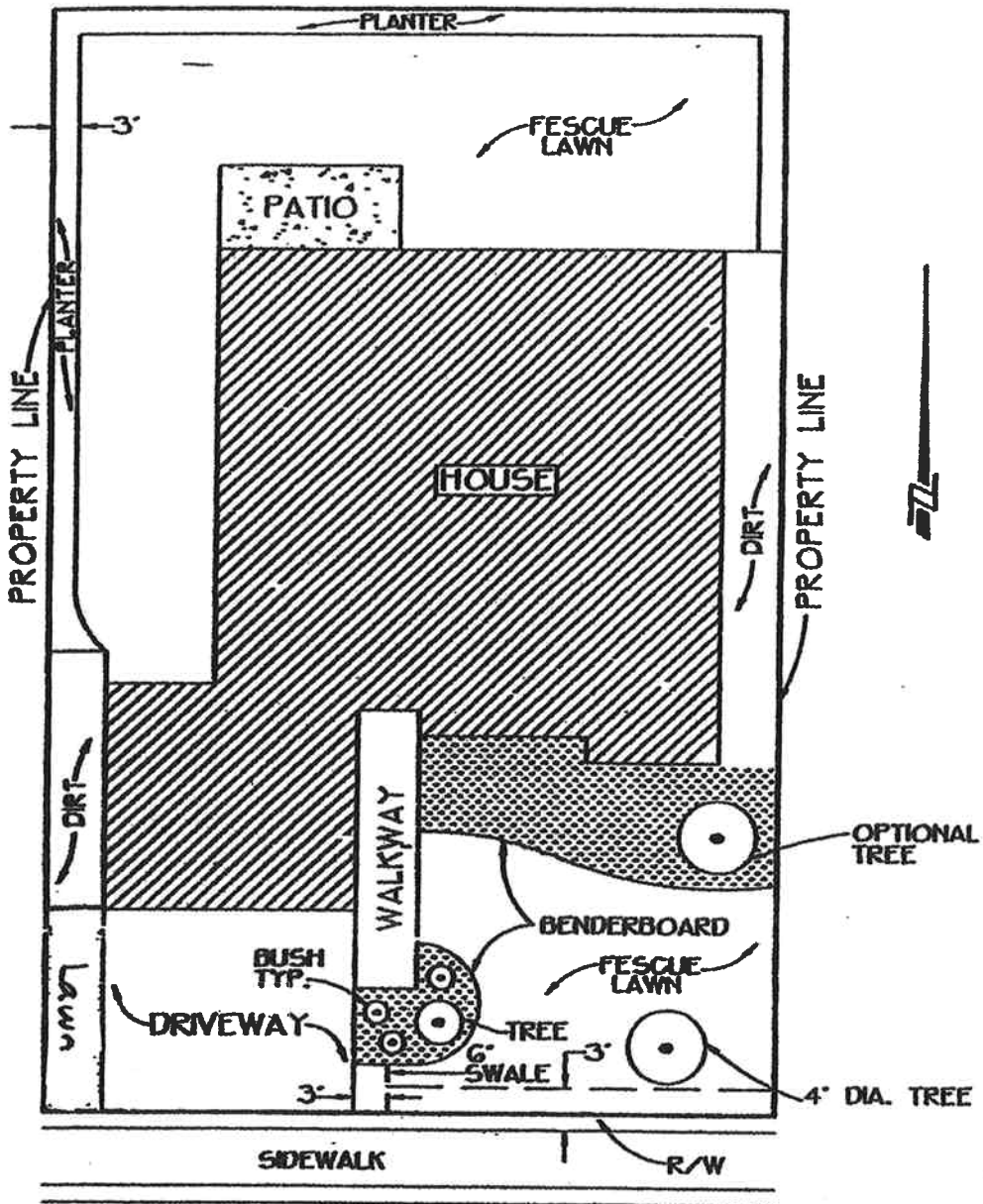
LANDSCAPE AND IRRIGATION PLAN  
STANDARD PLANS CALCULATION SHEET

- 1. Square footage of lot = \_\_\_\_\_ sq. ft.
- 2. Square footage of house (Garage included) = \_\_\_\_\_ sq. ft.
- 3. Square footage of Driveways, Patios, Decks, and Walkways = \_\_\_\_\_ sq. ft.
- 4. Back and Side Yards Behind Fence = \_\_\_\_\_ sq. ft.
  
- Landscaped Area (Front) (1-2-3-4) = \_\_\_\_\_ sq. ft.

Maximum Percent Plan

		Circle One	A	B	C	D
Lawn Area	_____ Sq. Ft. ÷ Landscape Area =	65	45	64	48	
High Water Use	_____ Sq. Ft. ÷ Landscape Area =	0	0	0	0	
Medium Water Use	_____ Sq. Ft. ÷ Landscape Area =	0	5	0	0	
Low Water Use	_____ Sq. Ft. ÷ Landscape Area =	21	20	18	43	
Non-Plant Area	_____ Sq. Ft. ÷ Landscape Area =	14	30	18	9	

# APPENDIX A



 = SHRUBS + MULCH OR GROUNDCOVER

**PLAN A**  
1"=20"

	PLANT FACTOR	PERCENT
LOW-	0.3	21% MIN.
MED-	0.4	0 MAX.
GRASS-	0.75	65% MAX.
BARE AREA- 14.00%		