

# WATER EFFICIENT LANDSCAPE ORDINANCE

ORDINANCE NUMBER <CITY ORDINANCE NUMBER>

## Section 1. Preamble

- A. Whereas, <CITY NAME> desires to promote the design, installation and maintenance of landscapes that are both attractive and water efficient;
- B. Whereas, <CITY NAME> can accomplish these goals by adopting this ordinance; and,
- C. Whereas, <CITY NAME> has the authority to adopt this ordinance pursuant to Utah Code Annotated (2010) § 10-3-702, and hereby exercises its legislative powers in doing so.

## Section 2. Ordaining Clause

Be it ordained by the <CITY NAME>, that the Water Efficient Landscape Ordinance, Number <CITY ORDINANCE NUMBER>.

## Section 3. Title, Water Efficient Landscape Requirements

- A. An ordinance amending the Zoning Code of the City of <CITY NAME> so as to add a Water Efficient Landscape Ordinance of minimum landscape requirements. This ordinance shall be referred to as "<CITY NAME> City Water Efficient Landscape Ordinance".

## Section 4. Purpose

The City Council has found that it is in the public interest to conserve the public's water resources and to promote water efficient landscaping. The purpose of this ordinance is to protect and enhance the community's environmental, economic, recreational, and aesthetic resources by promoting efficient use of water in the community's landscapes, reduce water waste and establish a structure for designing, installing and maintaining water efficient landscapes throughout the City.

## Section 5. Definitions

The following definitions shall apply to this ordinance:

Active Recreation Area: An area that is dedicated to active play where turf grass may be used as the playing surface. Examples of active recreation areas include sports fields, play areas, and other similar uses.

Bubbler: An irrigation head that delivers water to the root zone by "flooding" the planted area, usually measured in gallons per minute. Bubblers exhibit a trickle, umbrella or short stream pattern.

Check Valve: A device used in sprinkler heads or pipe to prevent water from draining out of the pipe through gravity flow.

Controller: A device used in irrigation systems to automatically control when and how long sprinklers or drip systems operate.

Drip Emitter: Drip irrigation fittings that deliver water slowly at the root zone of the plant, usually measured in gallons per hour.

Grading Plan: The Grading Plan shows all finish grades, spot elevations, drainage as necessary and existing and new contours with the developed landscaped area.

Ground Cover: Material planted in such a way as to form a continuous cover over the ground that can be maintained at a height not more than twelve (12) inches.

Hardscape: Patios, decks and paths. Does not include driveways and sidewalks.

Irrigation Plan: The irrigation plan shows the components of the irrigation system with water meter size, backflow prevention, precipitation rates, flow rate and operating pressure for each irrigation circuit, and identification of all irrigation equipment.

Landscape Architect: A person who holds a professional license to practice landscape architecture in the state of Utah. Per State Code, licensed landscape architects, licensed architects, licensed land surveyors, and licensed engineers can professionally stamp plans that fall under the practice of landscape architecture. This includes commercial landscape and irrigation plans. Each municipality has the authority to require that only a licensed landscape architect can stamp plans that fall under the practice of landscape architecture.

Landscape Designer: A person who may or may not hold professional certificates for landscape design/architecture and cannot legally create commercial landscape plans. Landscape Designers generally focus on residential design and horticultural needs of home landscapes.

Landscape Documentation Package: The preparation of a graphic and written criteria, specifications, and detailed plans to arrange and modify the effects of natural features such as plantings, ground and water forms, circulation, walks and other features to comply with the provisions of this ordinance. The Landscape Documentation Package shall include a project data sheet, a Site Plan, a Planting Plan, an Irrigation Plan, Construction Details, and a Grading Plan.

Landscape Zone: A portion of the landscaped area having plants with similar water needs, areas with similar microclimate (i.e., slope, exposure, wind, etc.) and soil conditions, and areas that will be similarly irrigated. A landscape zone can be served by one irrigation valve, or a set of valves with the same schedule.

Landscaping: Any combination of living plants, such as trees, shrubs, vines, ground covers, annuals, perennials, ornamental grass, or seeding; natural features such as rock, stone, or bark chips; and structural features, including but not limited to, fountains, reflecting pools, outdoor art work, screen walls, fences or benches.

Localscapes®: A locally adaptable and environmentally sustainable urban landscape style that requires less irrigation than traditional Utah landscapes (see [www.Localscapes.com](http://www.Localscapes.com)).

Mulch: Any material such as rock, bark, wood chips or other materials left loose and applied to the soil.

Park Strip: A typically narrow landscaped area located between the back-of-curb and sidewalk.

Planting Plan: A Planting Plan shall clearly and accurately identify the type, size, and locations for new and existing trees, shrubs, planting beds, ground covers, turf areas, driveways, sidewalks, hardscape features, and fences.

Pop-up Spray Head: A sprinkler head that sprays water through a nozzle in a fixed pattern with no rotation.

Precipitation Rate: The depth of water applied to a given area, usually measured in inches per hour.

Pressure Regulating Valve: A valve installed in an irrigation mainline that reduces a higher supply pressure at the inlet down to a regulated lower pressure at the outlet.

Pressure Compensating: A drip irrigation system that compensates for fluctuating water pressure by only allowing a fixed volume of water through drip emitters.

Rotor Spray Head: A sprinkler head that distributes water through a nozzle by the rotation of a gear or mechanical rotor.

Runoff: Irrigation water that is not absorbed by the soil or landscape area to which it is applied, and which flows onto other areas.

Spray Sprinkler: An irrigation head that sprays water through a nozzle.

Stream Sprinkler: An irrigation head that projects water through a gear rotor in single or multiple streams.

Turf: A surface layer of earth containing mowed grass with its roots.

Water-Conserving Plant: A plant that can generally survive with available rainfall once established although supplemental irrigation may be needed or desirable during spring and summer months.

## Section 6. Applicability of Water Efficient Landscape Ordinance

The provisions of this ordinance shall apply to all new and rehabilitated landscaping for public agency projects, private development projects, developer-installed landscaping in multi-family and single-family residential projects, and homeowner provided landscape improvements within the front, side, and rear yards of single and two-family dwellings.

## Section 7. Landscape Design Standards

- A. Plant Selection. Plants shall be well-suited to the microclimate and soil conditions at the project site. Both native and locally-adapted plants are acceptable. Plants with similar water needs shall be grouped together as much as possible.

Areas with slopes greater than 25 percent, or 4:1 grade, shall be landscaped with deep-rooting, water-conserving plants, that do not include turf.

Park strips and other landscaped areas less than eight (8) feet wide shall be landscaped with water-conserving plants, that do not include turf.

- B. Mulch. After completion of all planting, all irrigated non-turf areas shall be covered with a minimum 3 to 4-inch layer of mulch to retain water, inhibit weed growth, and moderate soil temperature. Non-porous material shall not be placed under the mulch.
- C. Soil Preparation. Soil preparation will be suitable to provide healthy growing conditions for the plants and to encourage water infiltration and penetration. Soil preparation shall include scarifying the soil to a minimum depth of six (6) inches and amending the soil with organic material as per specific recommendations of the Landscape Designer/Landscape Architect based on the soil conditions. In some cases, soil testing will provide additional recommendations for amending the soil.
- D. Tree Selection. Tree species shall be selected based on growth characteristics and site conditions, including available space, overhead clearance, soil conditions, exposure, and desired color and appearance. Trees shall be selected as follows:
  - 1. Broad canopy trees shall be selected where shade or screening of tall objects is desired;
  - 2. Low-growing trees shall be selected for spaces under utility wires;
  - 3. Select trees from which lower branches can be trimmed to maintain a healthy growth habit where visual clearance and natural surveillance is a concern;
  - 4. Narrow or columnar trees shall be selected for small spaces, or where awnings or other building features limit growth, or where greater visibility is desired between buildings and the street for natural surveillance;
  - 5. Street trees shall be planted within existing and proposed park strips, and in sidewalk tree wells on streets without park strips. Tree placement shall provide canopy cover (shade) and avoid conflicts with existing trees, retaining walls, above and below ground utilities, lighting, and other obstructions; and
  - 6. Trees less than a two-inch caliper shall be double-staked until the trees mature to a two-inch caliper.

#### Section 8. Irrigation Design Standards

- A. Pressure Regulation. A pressure regulating valve shall be installed and maintained by the consumer if the static service pressure exceeds 80 pounds per square inch (psi). The pressure-regulating valve shall be located between the meter and the first point of water use, or first point of division in the pipe, and shall be set at the manufacturer's recommended pressure for the sprinklers.
- B. Irrigation Controller. Landscaped areas shall be provided with a WaterSense labeled smart irrigation controller which automatically adjusts the frequency and/or duration of irrigation events in response to changing weather conditions. All controllers shall be equipped with automatic rain delay or rain shut-off capabilities.

- C. Each valve shall irrigate a landscape with similar site, slope and soil conditions and plant materials with similar watering needs. Turf and non-turf areas shall be irrigated on separate valves. Drip emitters and sprinklers shall be placed on separate valves.
- D. Drip emitters or a bubbler shall be provided for each tree. Bubblers shall not exceed 1.5 gallons per minute per device. Bubblers for trees shall be placed on a separate valve unless specifically exempted by the City due to the limited number of trees on the project site.
- E. Drip irrigation or bubblers shall be used to irrigate plants in non-turf areas.
- F. Pop-up spray heads shall be at a minimum of four (4) inches in height to clear turf.
- G. Sprinklers shall have matched precipitation rates with each control valve circuit.
- H. Sprinkler heads shall be attached to rigid lateral lines with flexible material (swing joints) to reduce potential for breakage.
- I. Check valves shall be required where elevation differences cause low-head drainage. Pressure compensating valves and sprinklers shall be required where a significant variation in water pressure occurs within the irrigation system due to elevation differences.
- J. Filters and end flush valves shall be provided as necessary for drip irrigation lines.
- K. Valves with spray or stream sprinklers shall be scheduled to operate between 6 p.m. and 10 a.m. to reduce water loss from wind and evaporation.
- L. Program valves for multiple repeat cycles where necessary to reduce runoff, particularly on slopes and soils with slow infiltration rates.

Section 9. Landscapes in New Single-family Residential Developments

- A. Homebuilders and/or developers subdividing lots and/or constructing new single-family residential homes shall offer a water-efficient landscaping option to prospective home buyers, such as the Locascapes design style. The water-efficient landscaping option shall meet the Landscape Design Standards and Irrigation Design Standards of this ordinance, and the turf area shall not exceed 35% of the total landscaped area.
- B. Homebuilders and/or developers who construct model homes for a designated subdivision shall have at least one model home with water-efficient landscaping, such as the Locascapes design style. The water-efficient landscaping option shall meet the Landscape Design Standards and Irrigation Design Standards of this ordinance, and the turf area shall not exceed 35% of the total landscaped area.
- C. Model homes shall have landscaping and irrigation plans approved by the City Planning Department prior to issuance of building permits, for which no variance may be granted, and which meet the aforementioned requirements.
- D. Model homes shall include an informational brochure on water-efficient landscaping or Locascapes. Locascapes brochures can be obtained from the City Planning Department.

## Section 10. Prohibition on Restrictive Covenants Requiring Turf

- A. Any Homeowners Association governing documents, such as bylaws, operating rules, covenants, conditions, and restrictions that govern the operation of a common interest development, are void and unenforceable if they:
  - 1. Require the use of turf in landscape areas less than 8 feet wide or require turf in other areas that exceed 35% of the landscaped area; or
  - 2. Prohibit, or include conditions that have the effect of prohibiting, the use of water-conserving plants as a group; or
  - 3. Have the effect of prohibiting or restricting compliance with this ordinance or other water conservation measures.

## Section 11. Landscapes in Commercial, Industrial, and Institutional Developments

- A. Commercial, industrial and institutional landscapes shall meet the Landscape Design Standards and Irrigation Design Standards of this ordinance, and the turf area shall not exceed 20% of the total landscaped area, outside of active recreation areas.

## Section 12. Documentation for Commercial, Industrial, and Institutional Projects

Landscape Documentation Package. A copy of a Landscape Documentation Package shall be submitted to and approved by the City prior to the issue of any permit. A copy of the approved Landscape Documentation Package shall be provided to the property owner or site manager and to the local retail water purveyor. The Landscape Documentation Package shall be prepared by a professional landscape architect (PLA) and shall consist of the following items:

- A. Project Data Sheet. The Project Data Sheet shall contain the following:
  - 1. Project name and address;
  - 2. Applicant or applicant agent's name, address, phone number, and email address;
  - 3. Landscape architect's name, address, phone number, and email address; and
  - 4. Landscape contractor's name, address, phone number and email address, if available at this time.
- B. Planting Plan. A detailed planting plan shall be drawn at a scale that clearly identifies the following:
  - 1. Location of all plant materials, a legend with botanical and common names, and size of plant materials;
  - 2. Property lines and street names;
  - 3. Existing and proposed buildings, walls, fences, utilities, paved areas and other site improvements;

4. Existing trees and plant materials to be removed or retained;
  5. Scale: graphic and written;
  6. Date of design;
  7. Designation of landscape zones, and
  8. Details and specifications for tree staking, soil preparation, and other planting work.
- C. Irrigation Plan. A detailed irrigation plan shall be drawn at the same scale as the planting plan and shall contain the following information:
1. Layout of the irrigation system and a legend summarizing the type and size of all components of the system, including manufacturer name and model numbers;
  2. Static water pressure in pounds per square inch (psi) at the point of connection to the public water supply;
  3. Flow rate in gallons per minute and design operating pressure in psi for each valve and precipitation rate in inches per hour for each valve with sprinklers, and
  4. Installation details for irrigation components.
- D. Grading Plan. A Grading Plan shall be drawn at the same scale as the Planting Plan and shall contain the following information:
1. Property lines and street names, existing and proposed buildings, walls, fences, utilities, paved areas and other site improvements, and
  2. Existing and finished contour lines and spot elevations as necessary for the proposed site improvements, as well as drainage.

Section 13. Plan Review, Construction Inspection, and Post-Construction Monitoring for Commercial, Industrial, and Institutional Projects

- A. As part of the Building Permit approval process, a copy of the Landscape Documentation Package shall be submitted to the City for review and approval before construction begins.
- B. All installers and designers shall meet state and local license, insurance, and bonding requirements, and be able to show proof of such.
- C. During construction, site inspection of the landscaping may be performed by the City Building Inspection Department.
- D. Following construction and prior to issuing the approval for occupancy, an inspection shall be scheduled with the Building Inspection Department to verify compliance with the approved landscape plans. The Certificate of Substantial Completion shall be

completed by the property owner, contractor or landscape architect and submitted to the City.

- E. The City reserves the right to perform site inspections at any time before, during or after the irrigation system and landscape installation, and to require corrective measures if requirements of this ordinance are not satisfied.

Section 14. Effective Date

This ordinance shall be effective as of <EFFECTIVE DATE>.

Dated: _____	<u>&lt;CITY NAME&gt;</u>
	By: _____
	Its: _____ Mayor
[Municipal Recorder Attestation and Seal]	