

36 NOW THEREFORE, be it ordained by the City Council of _____, Utah that the
37 attached standards and regulations are adopted, and shall be incorporated into the ordinances of
38 the City, as Title ___, Chapters ___ through ___. This Ordinance shall become effective on the
39 date executed below and upon posting as required by law.

40 APPROVED AND ADOPTED this ___ day of _____, 20__.

41 _____ City

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45 ATTEST:

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48 Approved as to Form:

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50 _____

51 _____ City Attorney

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DRAFT

TITLE ____

CHAPTER 1: GENERAL PROVISIONS

__-1-1: SHORT TITLE

__-1-2: CONFLICT

__-1-3: APPLICABILITY

The provisions of this title are applicable to all new construction, development and major landscape improvements in the city. The provisions of this ordinance are severable and if any provision, clause, sentence, word, or part thereof is held illegal, invalid, unconstitutional, or inapplicable to any person or circumstances, such illegality, invalidity, unconstitutionality, or inapplicability shall not affect or impair any of the remaining provisions, clauses, sentences, sections, words or parts thereof of this ordinance or their applicability to other persons or circumstances.

CHAPTER 2: DEFINITIONS

__-2-1: DEFINITIONS

The following definitions shall apply to this ordinance:

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

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 irrigation systems operate.

Drip Irrigation: An irrigation system that delivers water by adding water at the plant's base and root zone, usually measured in gallons per hour. Drip irrigation exhibits a droplet, trickle, umbrella or short stream pattern, to reduce evaporation, overspray, and water use, and improving water conservation.

Drip Emitter: A drip irrigation fitting that delivers 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 new and existing contours with the developed landscaped area.

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

91 Ground Cover: Material planted in such a way as to form a continuous cover over ground that
92 can be maintained at a height no more than twelve (12) inches.

93 Hardscape: Elements of landscape constructed from non-living materials such as concrete,
94 boulders, brick, blacktop, and lumber. It includes patios, decks, and paths, but does not
95 include driveways and sidewalks.

96 Hydrozone: Portion of landscape area having plants with similar water needs and rooting
97 depth. A hydrozone may be irrigated or non-irrigated.

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

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

103 Landscape Architect: A person who holds a professional license to practice landscape
104 architecture in the state of Utah. Per State Code, licensed landscape architects, licensed
105 architects, licensed land surveyors, and licensed engineers can professionally stamp plans
106 that fall under the practice of landscape architecture. This includes commercial landscape and
107 irrigation plans.

108 Landscape Area: Area within a lot or parcel that is not the home footprint, driveway,
109 sidewalk or patio.

110 Landscape Designer: A person who may or may not hold professional certificates for
111 landscape design/architecture, and who generally focuses on residential design and
112 horticultural needs of home landscapes. Landscape designers cannot legally create
113 commercial landscape plans.

114 Landscape Documentation Package: The documentation of graphic and written criteria,
115 specifications, and detailed plans to arrange and modify the effects of natural features to
116 comply with the provisions of this ordinance. The Landscape Documentation Package shall
117 include a project data sheet, a site plan, a planting plan, an irrigation plan, construction
118 details, and a grading plan.

119 Landscape or Landscaping: Any combination of berms; living plants, such as trees, shrubs,
120 vines, ground covers, annuals, perennials, ornamental grass, or seeding; natural features such
121 as rock, stone, or bark chips; and structural features, including but not limited to outdoor
122 artwork, screen walls, fences or benches that create an attractive and pleasing environment.

123 Landscape or Landscaping Maintenance: Maintaining or keeping any landscaping, or any
124 area required to be landscaped:

125 A. In a live and thriving condition, with consideration for normal growth and water needs;
126 and

127 B. Fertilized, mowed, trimmed, edged, mulched and free from weeds, dead plants, litter,
128 refuse, or debris in compliance with regionally accepted horticultural practice and city
129 ordinances.

130 Landscape Plan: A plan that clearly and accurately identifies the location and species of new
131 and existing trees, shrubs, ground covers, and other plants on a site, and any other landscape
132 element, and includes an irrigation plan.

133 Mulch: Any organic material such as leaves, bark, wood chips, straw; inorganic material such
134 as crushed stone or gravel; other materials left loose and applied to the soil surface for the
135 beneficial purpose of controlling weeds and conserving soil moisture.

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

138 Plant List: A list of locally adaptable and environmentally sustainable plants for compliant
139 Planting Plans as provided by the Washington County Water Conservancy District.

140 Planting Plan: A Planting Plan that clearly and accurately identifies the type, size, and
141 locations for new and existing trees, shrubs, planting beds, ground covers, grass areas,
142 driveways, sidewalks, hardscape features, and fences.

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

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

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

149 Rehabilitated Landscaping: Landscape area in which over 50% percent of existing
150 landscaping is removed and replaced. Includes all landscaping funded in part, or completely,
151 by Washington County Water Conservancy District's landscape conversion program.

152 Secondary Irrigation Water: Non-potable water that is untreated and used for irrigation of
153 outdoor landscaping.

154 Slope: A vertical rise in feet measured over a horizontal distance, expressed as a percentage,
155 measured generally at right angles to contour lines.

156 Water-Conserving Plant: A plant that can generally survive with available rainfall once
157 established, with possible supplemental irrigation needed or desirable during spring and
158 summer months or during drought periods.

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205 c. Each single dwelling shall have a minimum of two water-efficient shade trees
206 with a minimum one-and-one-half-inch (1½") caliper trunk. Each multiple
207 family development with ten units or less shall follow city approved landscape
208 plans for number of shade trees.
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210 2. Multiple Family Dwelling Projects with More than Ten Units: Comply with the
211 Landscape Standards in __-4-2, below.
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213 **__-3-3: Restrictive Covenants in Conflict with Water Efficiency Standards**

214 Any homeowners or property owners association governing documents, such as bylaws, operating
215 rules, covenants, conditions, and restrictions that govern the operation of a common interest
216 development, recorded after passage of this ordinance, are void and unenforceable if they conflict
217 with the water efficiency standards in this ordinance, or if they have the effect of prohibiting or
218 restricting compliance with this ordinance.
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221 **CHAPTER 4: NONRESIDENTIAL ZONES AND DEVELOPMENT WATER**
222 **EFFICIENCY STANDARDS**
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224 These provisions are applicable to all new construction and new development in all nonresidential
225 zones, and nonresidential development in any zone.
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227 **__-4-1: Construction Standards**
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229 A. Hot water recirculation systems shall be installed, unless hot water delivery can be
230 demonstrated to occur without first displacing more than 0.6 gallons of system water.
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232 B. WaterSense labeled fixtures shall be installed, including, but not limited to faucets,
233 showerheads toilets, and urinals.
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235 C. Energy Star qualified appliances shall be installed.
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237 D. All shell units with ground floor square footage, or individually platted, shall be
238 separately metered, submetered, or equipped with alternative technology capable of
239 tracking the water use of the individual unit, and the information shall be made available
240 to the individual unit. Individually platted condominium units are excepted if a property
241 owners association owns and maintains the water lines and meters. All nonresidential
242 projects require separate water meters for all outdoor water usage, including landscaping.
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244 E. All carwash projects shall recirculate and limit the maximum amount of water to 35
245 gallons per vehicle washed.
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247 F. Exterior, decorative water features are prohibited, except up to five decorative water
248 features with 50 gallon or less capacity and maintained recirculating pumps.
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250 G. All golf courses using water district or municipal water supplies shall irrigate with
251 secondary irrigation water and shall have separate water meters for the golf course.
252 Irrigation with potable water is prohibited. Each golf course development shall submit
253 and follow a water budget with the Landscape Documentation Packet and identify water
254 conservation measures for city approval.
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256 H. Outside misting systems shall only operate during the May through August time period
257 where the daily high temperature is 90 degrees Fahrenheit or greater.
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259 **__-4-2: Landscape Standards**

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261 A. All new construction and new development in all nonresidential zones, and nonresidential
262 development in any zone, shall meet the Landscape Design Standards and Irrigation
263 Design Standards of this ordinance.
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265 1. Grass is not permitted outside of an active recreation area. In addition, grass is
266 prohibited in park strips, all landscape areas less than eight feet wide, and on any
267 slope that exceeds 15%.
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269 2. Landscape and irrigation installers shall follow the plans that have been signed
270 and approved by the city.
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272 3. Each project shall propose and follow an approved Planting Plan that has a
273 minimum of 40% vegetative cover of a landscaped area with water-efficient
274 shade trees and bushes adequate in number and configuration to visually enhance
275 the project, prevent heat islands, and prevent soil erosion. The configuration of
276 the vegetation in the Planting Plan is in the sole discretion of the city.
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278 4. If secondary irrigation water is available, each project shall connect to the system
279 for all outdoor water use. A city may make minor exceptions, allowing use of
280 treated water for outdoor plantings in small beautification areas, in its sole
281 discretion.
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283 B. Required Documentation
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285 1. Landscape Documentation Package: A copy of a Landscape Documentation
286 Package shall be submitted to and approved by the city prior to the issue of any
287 building permit. A copy of the approved Landscape Documentation Package shall
288 be provided to the property owner or site manager. The Landscape
289 Documentation Package shall be prepared by a professional landscape architect
290 (PLA) and shall consist of the following items:

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- a. Project Data Sheet containing the following:
 - i. Project name and address;
 - ii. Applicant or applicant agent's name, address, phone number, and email address;
 - iii. Landscape architect's name, address, phone number, and email address; and
 - iv. 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:
 - i. Location of all plant materials, a legend with common and botanical names, and size of plant materials;
 - ii. Property lines and street names;
 - iii. Existing and proposed buildings, walls, fences, utilities, paved areas and other site improvements;
 - iv. Existing trees and plant materials to be removed or retained;
 - v. Scale: graphic and written;
 - vi. Date of design;
 - vii. Designation of hydrozones, and
 - viii. 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 contain the following information:
 - i. 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;
 - ii. Static water pressure in pounds per square inch (psi) at the point of connection to the public water supply;

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- iii. 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 irrigation equipment (i.e., sprinklers, drip emitters, bubblers, etc.); and
 - iv. 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:
 - i. Property lines and street names, existing and proposed buildings, walls, fences, utilities, paved areas and other site improvements; and
 - ii. Existing and finished contour lines and spot elevations as necessary for the proposed site improvements, as well as drainage.
2. Plan Review, Construction Inspection, and Post-Construction Monitoring.
- a. As part of the building permit approval process, a copy of the Landscape Documentation Package shall be submitted with a city provided pre-submittal checklist completed to initiate a review and approval process 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 or other entity tasked with approvals.
 - d. Following construction, and prior to issuing an occupancy permit, an inspection shall be scheduled with the Building Inspection Department or other appointed entity to verify compliance with the approved landscape plans. The Certificate of Substantial Completion shall be completed by the property owner, developer, contractor or landscape architect and submitted to the city.
 - e. The city or other appointed entity 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.

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381 **CHAPTER 5: LANDSCAPE AND IRRIGATION DESIGN STANDARDS FOR ALL**
382 **NEW DEVELOPMENT IN ANY ZONE**

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384 **10-5-1: Plant Selection**

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386 Plants shall be well-suited to the microclimate and soil conditions at the project site. Native, locally
387 adaptable and environmentally sustainable plants are acceptable. See the Washington County Water
388 Conservancy District’s recommended plant list on wcwcd.org. Plants with similar water needs shall
389 be grouped together as much as possible into hydrozones for efficient irrigation. Invasive plant
390 species as identified by the city shall not be planted.

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392 A. Areas with slopes greater than 15% shall be landscaped with deep-rooting, water-conserving
393 plants that do not include grass.

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395 B. Park strips and other landscaped areas less than eight (8) feet wide shall be landscaped with
396 water-conserving plants and/or mulch that do not include grass.

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398 **10-5-2: Tree Selection**

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400 Tree species shall be selected based on growth characteristics and site conditions, including available
401 space, overhead clearance, soil conditions, exposure, and desired color and appearance. Trees shall
402 be suited for water-efficient landscapes. Trees shall be selected and planted in accordance with the
403 following city guidance:

404 A. Broad canopy trees shall be selected where shade or screening of tall objects is desired;

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406 B. Low-growing trees shall be selected for spaces under utility wires;

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408 C. Select trees from which lower branches will be trimmed to maintain a healthy growth habit
409 where visual clearance and natural surveillance is a concern;

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411 D. Narrow or columnar trees shall be selected for small spaces, or where awnings or other
412 building features limit growth, or where greater visibility is desired between buildings and
413 the street for natural surveillance;

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415 E. Tree placement shall provide canopy cover (shade) and avoid conflicts with existing trees,
416 retaining walls, above and below ground utilities, lighting, and other obstructions; and

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418 Trees shall be irrigated on a separate hydrozone as needed for efficient irrigation and allow for
419 watering under water-shortage conditions when other plant material may not be watered due to
420 drought conditions.

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422 **__-5-3: Irrigation Design Standards**

- 423 A. Pressure Regulation. A pressure regulating valve shall be installed by the builder or
424 developer, and maintained by the owner, if the static service pressure exceeds 90 pounds per
425 square inch (psi). The pressure-regulating valve shall be located between the meter and the
426 first point of water use, or first point of division in the pipe, and shall be set at the
427 manufacturer's recommended pressure for the sprinklers.
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- 429 B. Irrigation Controller. It is required that landscaped areas use a WaterSense labeled smart
430 irrigation controller, which automatically adjusts the frequency and/or duration of irrigation
431 events in response to changing weather conditions. All controllers shall be equipped with
432 automatic rain delay or rain shut-off capabilities and have memory retention capability to
433 retain pre-programmed irrigation schedules. Sites are not exempt from water waste
434 prohibitions.
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- 436 C. Each valve shall irrigate a landscape with a similar site, slope and soil conditions, and plant
437 materials with similar watering needs. Grass, trees and non-grass areas shall be irrigated on
438 separate valves. Drip emitters and sprinklers shall be placed on separate valves.
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- 440 D. Low-volume irrigation equipment (i.e., drip emitters, bubblers) shall be provided for each
441 tree.
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- 443 E. Drip irrigation shall be used to irrigate plants in non-grass areas. Spray head to drip
444 conversion for rehabilitated landscape sites may be acceptable with city approval of Irrigation
445 Plans.
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- 447 F. High conservation efficiency spray nozzles are required for sprinkler applications.
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- 449 G. Sprinkler heads shall have matched precipitation rates with each control valve circuit.
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- 451 H. Sprinkler heads shall be attached to rigid lateral lines with flexible material (swing joints) to
452 reduce potential for breakage.
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- 454 I. Check valves are required. Pressure compensating valves and sprinklers are required where a
455 significant variation in water pressure occurs within the irrigation system due to elevation
456 differences.
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- 458 J. Filters and end-flush valves shall be provided for drip irrigation lines.
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- 460 K. Landscape watering with potable (treated) water is prohibited from 10 a.m. to 8 p.m., from
461 June 1 to September 1, to maximize irrigation efficiency.
462
- 463 L. Water waste is prohibited. Waste includes overwatering, irrigating during a precipitation
464 event, water that sprays or flows off your property, failure to comply with drought
465 restrictions and/or a failure to repair irrigation system leaks and/or malfunctions in a timely
466 manner.
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468 Overwatering can be avoided by following the water district's recommended irrigation
469 schedule and practices as noted on wcwcd.org. The generally recommended schedule is:

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- Winter (Nov – Feb) – sprinkler and drip irrigation up to 1 day a week. Irrigation is typically not needed in December and January
- Spring (Mar – April) – sprinkler irrigation up to 3 days a week and drip irrigation up to 2 days a week
- Summer (May – Aug) – sprinkler irrigation up to 4 days a week and drip irrigation up to 3 days a week
- Fall (Sept – Oct) – sprinkler irrigation up to 3 days a week and drip irrigation up to 2 days a week

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M. Program valves for multiple repeat cycles are required to reduce runoff on slopes and for soils with slow infiltration rates.

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