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Chapter 15A-25 - LANDSCAPING STANDARDS

15A-25-01 General Landscaping Standards

The following standards shall apply to all districts:

A. **Preservation of Natural Features**. The preservation of natural features that enhance the development and will benefit the community including trees, scenic points, view corridors, historic buildings or locations, unique geological formations, and other community assets shall be preserved and incorporated into the overall landscape plan.

B. **Parking in Landscaped Areas**. Parking is prohibited upon any front, side, rear, or interior landscaped areas.

C. **Parkstrip Maintenance**. Parkstrip maintenance shall be the responsibility of the adjacent property owner. Proper maintenance shall include the removal of all weeds (regardless of height) and debris. Adjacent property owners are required to landscape and beautify the parkstrip with approved streetscape materials. Unless otherwise approved by the Public Works, Public Utilities, and Parks and Recreation Departments, placement of concrete slabs or other impenetrable material, other than approved hard surface materials, as set forth below, within the parkstrip is prohibited. It is prohibited to install either permanent or temporary recreational equipment, such as a basketball standard, anywhere within the public right-of-way.

D. **Parkstrip Hard Surface and Streetscape Materials.** Parkstrip hard surface material includes material that is not plant material, does not need watering, and is a permanent surface. Examples would include colored concrete, stamped concrete (e.g. Bomanite), concrete pavers.

   In general, it is preferable to have no more than 50 percent of the parkstrip area covered in hard surface material. Hard surface sections should alternate with planted sections and be complimentary to the surrounding landscape. The property owner is required to obtain a road cut permit from the Public Works Department prior to adding or changing any hard surface materials within the parkstrip. All hard surface material must be installed according to the specifications within the Sandy City Standard Specifications and Details for Municipal Construction. (Ord 11-14, Amended 9-2-2011)

   Landscaped sections used in conjunction with hard surface sections should not include trees if the parkstrip is less than 8 feet wide. If parkstrip is 8 feet wide, planting may include trees (planted equidistant from the sidewalk and curb and gutter in a planter bed no smaller that 8 feet wide by 8 feet long), sod, ground cover, drought tolerant shrubs, bark, or colored mulch not to exceed 3 feet in height. Planting within 15 feet of the driveway should not exceed 3 feet in height. Drip irrigation systems are highly encouraged and landscaping should comply with Water Efficient Landscape Ordinance.

15A-25-02 Commercial and Industrial Landscaping Requirements

A. **Front Yard**. Front yard landscaping is measured from the front property line(s) after any required street dedication. This standard shall apply to all street frontages.

1. **CBD Zone District.** The CBD Zone District, east of Interstate 15, an average of 30 feet of front yard landscaping shall be required, but in no case shall the landscaping depth be less than 15 feet unless otherwise allowed by this Code. In all other commercial and industrial zones, a minimum of 15 feet of front yard landscaping shall be required.

2. **Berming.** The use of berms (random sculptured mounds), 12 to 18 inches high above the curb level, are required in all front landscape areas where found to be practical by the Community Development and Public Utilities staff.

3. **Street Trees.** Two inch minimum caliper street trees shall be planted in the front parkstrip area (centered between the sidewalk and the curb to minimize tree conflicts and to maximize tree root zone) where the parkstrip is a minimum of 8 feet in width, according to the varieties and spacing specified in the Sandy City Streetscape Plan. Where the parkstrip is less than 8 feet in width or the sidewalk has been placed against the curb, street trees shall be planted 4 feet behind the sidewalk.

4. **Front Landscape.** Front landscape areas shall include a combination of sod as well as areas of trees, shrubs, ground covers, and mulch.

5. **Elimination of Parkstrip.** The Planning Commission may approve the elimination of the parkstrip in a commercial district allowing the sidewalk to be placed against the curb. If the elimination of the parkstrip is approved by the Planning Commission, the sidewalk against the curb shall be increased in width to 6 feet or wider as per AASHTO standards. In these instances, the front landscape area shall not be less than 20 feet in depth.

6. **Non-Existent Parkstrips**. Where a sidewalk exists directly adjacent to a public right of way, the front landscaping shall be a minimum of 20 feet in depth.

B. **Side and Rear Yards.**

1. There shall be a minimum of 5 feet of landscaping between parking areas and side or rear property lines (except between commercial uses where said landscaping is not visible from areas of public access) and a minimum of 5 feet of landscaping between an access driveway and a side or rear property line unless said driveway is to be used for common access by an adjacent lot.

2. Areas not visible from the street shall have one landscape area in the amount of 100 square feet for every 75 lineal feet of property line not visible from the public right-of-way.

C. **Landscaping Within Parking Areas.**

1. Landscaping within all parking and driveway areas shall comprise a minimum 5 percent of the total square footage of those areas. In addition, the required front, side, and rear landscaping (parking area shall be defined to include all asphalt areas with parking spaces and driveways). The placement of this landscaping shall be within parking areas to break up the mass of asphalt as well as adjacent to the building for foundation landscaping. Such landscaping shall be composed of natural elements including ground cover, shrubs, trees (evergreen and deciduous), and combinations of mulch.

2. All traffic islands shall be fully landscaped and be considered as a portion of the required 5 percent parking lot landscaping and shall be a minimum of 5 feet in width.

3. Landscape planters and/or raised barrier sidewalks shall be installed along buildings (except where not visible from public access areas or loading areas) and any paved areas where visible from the street to provide safety to pedestrians, to protect the structure, and to provide foundation landscaping to soften a structure's appearance.

4. All landscaped areas abutting any paved area shall include a 6 inch high concrete curb. Concrete bumper stops are not acceptable.

5. At intersections of streets, driveways, sidewalks, etc., landscaping shall be limited to a height of not more than 3 feet above street level within the area required for minimum sight distances for local roads and streets.

D. **Undeveloped Areas**.

1. All undeveloped areas shall be maintained free of weeds and trash.

2. All expansion areas or pad sites shall be maintained with drought tolerant sod, mulch, or other materials as approved by the Director until such time as construction is started on that building pad.

E. **Adjacent to Residential Districts**. A minimum 10 foot width of landscaping shall be provided on an applicant's property, including a combination of trees and shrubs (evergreen and deciduous), and ground covers shall be provided to create a buffer for the adjacent residential district.

F. **Installation.**

1. It shall be the responsibility of the developer to grade, place topsoil, seed or sod, install automatic sprinkler irrigation systems, and properly plant trees, shrubs, and other approved plant materials.

2. All trees planted on site less than 2 inch caliper shall be double staked.

3. All landscaping shall be completed in accordance with the plans submitted and approved by staff.

   a. All landscape work must be installed prior to a Certificate of Occupancy of the building being issued or as otherwise approved by the Community Development Department as seasonal conditions may dictate.

   b. The developer shall bond for such landscape improvements if not installed prior to occupancy to ensure that installations are completed as submitted and approved. Performance assurance requirements for landscape improvements shall be the same as required by the City for street improvements.

G. **Maintenance.**

1. It shall be the responsibility of the property owner to properly maintain landscaped areas in accordance with the approved site plan and landscape plan, which includes watering, mowing, proper pruning, fertilizing, the removal and replacement of dead plant materials in a timely manner, and the maintenance of irrigation systems to eliminate waste of water.

2. All pruning shall be accomplished according to good horticultural standards. Trees shall be pruned only as necessary to promote healthy growth.

3. Unless approval is otherwise provided by the Director, trees shall be allowed to attain their normal size and shall not be severely pruned up from the ground or "hat racked" in order to permanently maintain growth at a reduced height. Pruning trees solely for the purpose of exposure is prohibited.

4. Pruning trees for traffic safety reasons shall be reviewed and approved by the City Transportation Engineer.

H. **Vegetation Removal.**

1. Once the required landscaping has been installed, it shall not be removed without the approval of the Community Development Department.

2. Removed vegetation shall be replaced with equal or better quality plant materials. Trees that are necessarily removed shall be replaced with trees with comparable total caliper. Street trees that are necessarily removed shall be replaced with comparable original landscape plan caliper in compliance with the Sandy City Streetscape Plan, unless otherwise approved by the Community Development Department.

3. When utility connections or other disturbances are made to existing landscaped areas, the existing landscaping must be replaced to its previous condition. Other modification of landscaped areas shall require approval by the Director.

I. **Minimum Tree Size.** The minimum size of all trees planted on a development site shall be as follows:

1. Street trees - 2 inch caliper minimum as measured 18 inches above grade.

2. All other trees on site - 1½ inch caliper minimum as measured 18 inches above grade.

3. Evergreen trees - 6 foot minimum height above grade.

J. **Tree Mix.** There shall be a mix of evergreen and deciduous trees on all development sites to allow for a green winterscape. A minimum of 40 percent of all trees on the proposed site shall be evergreens, where found to be practical by the Community Development Department.

K. **Existing Trees.**

1. The retention of existing healthy, desirable tree species on site is strongly encouraged. Buildings and parking areas should be designed around existing trees wherever possible.

2. A tree survey on an existing site may be required as determined by the Community Development Department.

L. **Minimum Number of Trees.** A minimum ratio of one tree per every 500 square feet of on-site landscaping shall be provided on the overall site plan.

M. **Xeriscape.**

1. Xeriscape is encouraged in required landscape areas. A true xeriscape may include a combination of drought resistant trees, shrubs, ground covers, organic mulches as well as some dry landscape materials.

2. All xeriscape design and installation shall be completed by a professional landscape designer and installer certified in the design and installation of xeriscape.

15A-25-03 Tree Stewardship

A. **Purpose**. Sandy City prides itself on its many areas of public and private landscapes, both natural and enhanced, and recognizes the importance of trees within the community.

The City Council declares it to be a policy of the City that:

1. Specified City properties be landscaped to enhance the natural beauty of the City.
2. Responsibilities of City departments be coordinated to encourage quality landscaping.
3. Landscaped City properties be effectively managed.
4. The City plant species of trees that are aesthetically pleasing, require less maintenance, (so as to prevent damage to sidewalks and streets and reduce risks to pedestrians and motorists), work with utilities, and conserve natural resources.
5. The street environment be made hospitable through landscaping.
6. Residents of Sandy City be encouraged to participate in beautification efforts through installing and maintaining quality trees and landscaping on private property.

To fulfill this policy, this section is enacted and intended to establish a tree stewardship ordinance. This section may be referred to as the Tree Stewardship Ordinance.

B. **Urban Forester**. The Urban Forester shall be the supervisor of the Tree Stewardship Ordinance and administrator of the provisions of this Chapter. The Urban Forester shall:

1. Be responsible for the long term management, health, maintenance, inventory, planting, and design of City trees in cooperation with the Community Development Department, Parks & Recreation Department, Public Utilities Department, and the Public Works Department.

2. Foster and maintain partnerships between public and private parties for the benefit of trees.

3. Facilitate communication, coordination, cooperation, and education for the stewardship of City and private trees.

4. Keep abreast of new information and research in arboriculture.

5. Provide a written annual report to the Parks & Recreation Department Director highlighting the fiscal year activities of the tree stewardship program.

6. Train and supervise City crews so the best methods of tree care are practiced in the community.

7. Work with engineers, architects, and the Community Development Department during the design phase of development.

8. Periodically review this section, the Tree Stewardship Ordinance, the Streetscape Plan and Streetscape Specifications to evaluate the effectiveness of each and make recommendations for improvement and/or change.

C. **Citizen Responsibilities.** Citizens/property owners, occupants, and their agents shall have the following responsibilities for the protection of trees in parkstrips abutting their real property except in those parkstrips that are maintained by the City.

1. Periodic watering and fertilization of City trees as necessary to maintain good health and vigor.

2. Protect City trees in parkstrips from damage caused by lawn mowers, weed trimmers, snow blowers, and similar equipment.

3. Protect City trees in parkstrips from damage caused by attachment of any items such as signs, nails, wires, ropes, and chains.

4. The species of trees planted in the parkstrips should comply with the list contained in the Streetscape Plan unless otherwise approved by the Urban Forester. They should also be planted as set forth in the Streetscape Plan and Sandy City Standard Specifications.

5. Remove private trees or limbs that have fallen upon a City street, property, or sidewalk.

6. Maintain ground covers except in those parkstrips maintained by the City.

7. Notify the Urban Forester of any hazard tree.

8. Rake, clean up, and properly disposing of leaves that fall from City and private trees so leaf fall does not impede the storm water system.

9. Sandy City shall have no liability for the failure of any tree or landscaping installed by private parties on other than City-maintained property.

D. **City Responsibilities**. The City shall assume responsibility for:

1. Tree care in City owned and operated parks, on the grounds of City buildings, and in parkstrips that the City administration has designated will be maintained by the City in this Chapter.

2. Pruning of City trees, as necessary, after appropriate notification to property owners.

3. Pruning of trees in the public rights-of-way and utility easements.

4. Removal of diseased or dying City trees that are beyond reclamation.

5. Removal of City trees and/or limbs that the Urban Forester or Transportation Engineer determines to be a hazard after appropriate notification.

6. Maintenance of planted areas on City property and specifically designated City rights-of-way.

E. **Responsibility for Correcting Private Hazard Trees.** Where a hazard tree exists upon private property, the property owner and all other persons having control of the property on which such hazard tree exists shall be responsible to mitigate, abate, remove, or correct the hazard. Any tree that is a hazard tree is a public nuisance.

1. It is unlawful for any person, firm, or corporation, either as owner, agent, or occupant, to create, aid in creating, or maintain a hazard tree.

2. If the City determines that a particular tree is a hazard tree, the City may give a written notice to the owner, occupant, or agent of any lot, building, or premises in or upon which a hazard tree is found, or to the person who may be the cause of such hazard tree to remove, mitigate, abate, or correct the hazard, including its recommendation as to the most effective method of doing so.

3. Notice under this Section may be served by personal service or by mailing the notice to the person, firm, or corporation by certified mail (return receipt requested), and posting a copy on the property a minimum of 28 calendar days in advance of further action.

4. If the hazard tree is not mitigated, abated, removed, or corrected within 28 additional calendar days after the notice is complete, the City may mitigate, abate, correct, or remove the hazard tree at the expense of such person, firm, or corporation or may take further action as determined.

5. The City may recover the costs and expenses incurred in mitigating, abating, correcting, or removing the hazard tree, serving notice, and the costs of a lawsuit, if any.

6. If the person, firm, or corporation disputes or denies the City's determination that the tree is a hazard tree or refuses to remove or permit removal, the City may bring an action to abate the hazard tree as a public nuisance. If the City is granted a judgment, the City may recover the costs of having the public nuisance abated.

7. The City, its agents, or employees, if acting in good faith, incur no liability for causing removal of a hazard tree.

8. Notice of appeal of the City's determination that a tree is a hazard tree may be filed with the Urban Forester or Transportation Engineer within 10 working days of service of the notice to abate. Appeals from the Urban Forester's or Transportation Engineer's decision shall be heard by the City's Parks & Recreation Director or Public Works Director within 15 calendar days of receipt of the appeal, which decision is final.

F. **Protection of City Trees**

1. It shall be unlawful for any person to do any of the following:

   a. Construct a concrete, asphalt, brick or gravel sidewalk within 18 inches of a City tree that damages any part (roots, crown, trunk) of the tree so as to cause injury or death to the tree.

   b. Fill up the ground area around any City tree so as to shut off air, light, or water from its roots.

c. Pile building material, equipment, or other substance on or near a City tree so as to cause injury to the tree.

d. Pour or spray any injurious matter on or around a City tree.

e. Injure any City tree, tree stake or guard with any vehicle or animal, or in any other manner causing injury to any City tree, shrub, groundcover, or lawn .

f. Post any sign, tree stake, or guard, or by fastening any guy wire, cable, or rope to any City tree, tree stake, or guard.

g. Prune trees for commercial exposure.

2. Any person doing construction, excavation, or demolition work in the near vicinity of a City tree shall protect the tree from injury or damage with a substantial protective barrier. Said barrier shall not be less than 4 feet high and have a 2 foot radius or to a distance in feet from the tree equal to the diameter of the tree trunk in inches measured 4½ feet above ground, whichever is greater. All building materials, extra dirt, or other debris shall be kept outside the barrier. The Urban Forester and the City Transportation Engineer must be consulted about any deviation to this standard.

3. No person shall use a City tree for any unauthorized purpose.

G. **Trees Planted in Parkstrips.** Trees planted in parkstrips or other public rights-of-way should be in conformance with the Streetscape Plan.

H. **Interference with Service**. It shall be unlawful for any person to interfere with City personnel or contractors under the direction of the Urban Forester in the performance of their duties.

I. **Historic Tree Preservation**. The Urban Forester, in conjunction with the City's Parks & Recreation Department, the Community Development Department, and property owners may identify, mark, publicize, and preserve historic and notable trees on public or private property in conjunction with the Utah Heritage Tree Act. The Urban Forester may help locate and record healthy trees that qualify as candidates for the Utah Heritage Tree Register.

J. **Preservation of Trees During Development.** Tree surveys may be required as part of the development review and approval process. Said surveys shall be reviewed by the Community Development Department and the Urban Forester. Tree surveys must identify both City and private trees, or groves of trees, of at least 2 inch caliper and shall indicate which, if any, may be preserved or relocated. Where practically possible, site designs should be modified to accommodate significant tree cover. Proper care should be taken during the construction phase to protect tree root zones from compaction and excessive excavation. Clear cutting an area of trees on a site will not be allowed unless determined appropriate by the Community Development Department and the Urban Forester.

K. **Violation and Penalty**. Any person who violates any provision of this Chapter shall be guilty of a Class C Misdemeanor. In addition to other remedies provided for herein or otherwise provided by law, if the violation of any provision of this Chapter causes the injury, mutilation, or death of a tree, shrub, or other plant located on City owned or maintained property, the violating party shall pay the cost of repair or replacement of such tree, shrub, or other plant. The replacement value of trees and/or shrubs shall be determined in accordance with the latest edition of the "Guide For Plant Appraisal" as published by the

International Society of Arboriculture. The City may pursue criminal or civil actions against any person or entity who violates this Chapter as is deemed appropriate, including abatement or injunctive relief.

15A-25-04 Water Efficient Landscaping

A. **Purpose**. The City Council has found that:

1. Water is an increasingly scarce resource.

2. Nearly two-thirds of the City's culinary water resources are used for outdoor use including watering landscapes.

3. The City desires to promote the design, installation, and maintenance of landscapes that are both attractive and water efficient.

Furthermore, the City Council has determined that it is in the public's interest to conserve public water resources and 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.

B. **Definitions Applicable to Water Efficient Landscaping Section**. The following definitions shall apply to this Chapter:

Administrative Standards - The set of rules, procedures, and requirements set forth in a landscape ordinance associated with making permit application, assembling materials for public review, meeting the requirements of the landscape ordinance, seeking approvals, enforcement, conducting site inspections, and filing reports.

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.

Drip Emitter - A drip irrigation fitting that delivers water slowly at the root zone of the plant, usually measured in gallons per hour.

Evapotranspiration (ET) - The quantity of water evaporated from adjacent soil surfaces and transpired by plants during a specific time, expressed in inches per day, month, or year (see also Reference Evapotranspiration Rate).

Extra-Drought Tolerant Plant - A plant that can survive without irrigation throughout the year once established, although supplemental water may be desirable during drought periods for improved appearance and disease resistance.

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 12 inches.

Hardscape - Patios, decks, and paths; does not include driveways, parking lots, and sidewalks.

Irrigation Audit - An on-site survey of the irrigation system, conduct a catch-can test to measure system efficiency, and the generation of an irrigation schedule and recommendations to improve irrigation efficiency.

Irrigated Landscaped Area - All portions of a development site to be improved with planting and irrigation. Natural open space areas shall not be included in the irrigated landscaped area.

Irrigation Efficiency - The measurement of the amount of water beneficially applied, divided by the total amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system hardware characteristics and management practices.

Irrigation Contractor - A person who has been certified by The Irrigation Association to install irrigation systems or as otherwise approved by the Public Utilities Department.

Irrigation Designer - A person who has been certified by The Irrigation Association to prepare irrigation system designs, or a landscape architect, or as otherwise approved by the Public Utilities Department.

Irrigation Plan - The plan that shows the components of the irrigation system with water meter size, backflow prevention, rain shut-off device, precipitation rates, flow rate and operating pressure for each irrigation zone, and identification of all irrigation equipment.

Landscape Architect - A person who holds a certificate to practice landscape architecture in the State of Utah.

Landscape Designer - A person who has been certified by the Utah Nursery and Landscape Association to prepare landscape plans or as otherwise approved by the Public Utilities Department.

Landscape Education Package - A package of documents that is intended to inform and educate water users in the City about water efficient landscapes. The package includes the principles of water efficient landscape design, a listing of water conserving plants, a listing of certified landscape designers, landscape architects, certified irrigation designers, certified irrigation contractors, an information packet about various area demonstration projects, City's water rates, billing format for water use, and the economics of installing and maintaining a water efficient landscape.

Landscape Irrigation Auditor - A person who has been certified by The Irrigation Association to conduct a landscape irrigation audit or as otherwise approved by the Public Utilities Department.

Landscape Plan Documentation Package - The preparation of 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 Plan Documentation Package shall include a project data sheet, a planting plan, an irrigation plan, a grading plan, a soils report, a landscape water allowance, and an irrigation schedule.

Landscape Water Allowance - For design purposes, the upper limit of annual applied water for the established landscaped area. It is based upon the local Reference Evapotranspiration Rate, the ET adjustment factor, and the size of the landscaped area.

Landscaped 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, flowers, turf or ornamental grass; 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.

Mulch - Any material such as bark, wood chips, rocks/stones, or other similar materials left loose and applied to the soil.

Non-Drought Tolerant Plant - A plant that will require regular irrigation for adequate appearance, growth, and disease resistence.

Planting Plan - A plan which clearly and accurately identifies and locates new and existing trees, shrubs, ground covers, turf areas, driveways, sidewalks, hardscape features, and fences.

Precipitation Rate - The rate at which water is applied per unit of time, usually measured in inches per hour.

Rain Shut-Off Device - A device wired to an automatic controller that shuts off the irrigation system when it rains.

Reconstructed Landscaping - Any existing approved landscaping and irrigation that is removed and replaced as part of new construction.

Reference Evapotranspiration Rate or ET_O. A standard measurement of environmental parameters that affect the water use of plants. ET_O is expressed in inches per day, month or year and is an estimate of the evapotranspiration of a large field of four to five inch tall, cool season grass that is well watered. The average growing season ET_O for the Sandy City area is 31.18 inches. [See also Evapotranspiration]

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

Soils Report - A report by a soils laboratory indicating soil type(s), soil depth, uniformity, composition, bulk density, infiltration rates, and pH for the top soil and subsoil for a given site. The soils report also includes recommendations for soil amendments.

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.

Waste of Water - shall include, but not be limited to:

1. The use of water for any purpose, including landscape irrigation, that consumes or for which is applied substantial amounts of excess water beyond the reasonable amount required by the use, whether such excess water remains on the site, evaporates, percolates underground, goes into the sewer system, or is allowed to run into the gutter or street. Every water consumer is deemed to have under his control at all times the water lines and facilities, other than water utility facilities, through which water is being supplied and used to his premises, and to know the manner and extent of his water use and excess runoff.

2. The excessive use, loss, or escape of water through breaks, leaks, or malfunctions in the water user's plumbing for any period of time after such escape of water should reasonably have been discovered and corrected. It shall be presumed that a period of 48 hours after the water user discovers such break, leak, or malfunction or receives notice from the City of such condition, whichever occurs first, is a reasonable time to correct such condition.

3. Washing sidewalks, driveways, parking areas, tennis courts, patios, or other paved areas except to alleviate immediate fire, health, or safety hazards.

Water Use Efficiency Review - An on-site survey and measurement of irrigation equipment and management efficiency and the generation of recommendations to improve efficiency.

Water Check [see Irrigation Audit]

Water Conserving Plant - A plant that can generally survive with available rainfall once established although supplemental irrigation may be needed or desired during the growing season.

Xeriscape - A landscaping method developed especially for arid and semiarid climates that utilizes water-conserving techniques (as the use of drought tolerant plants, mulch, and efficient irrigation).

C. **Commercial, Industrial, and Multi-Family Development**

1. **Applicability.** The provisions of this section shall apply to landscaping for all new and reconstructed landscaping for public agency projects, private commercial and industrial projects, developer-installed landscaping in multi-family residential projects, and developer-installed landscaping in single family projects that require project review and approval by the City. Such review includes site plan review, modified conditional use permit review, and building permits issued for exterior modifications to commercial and multi-family buildings.

   This section does not apply to homeowner provided landscaping at single family projects nor registered historical sites.

2. **Documentation to be Submitted for Plan Approval.** A Landscape Plan Documentation Package shall be submitted to and approved by the Public Utilities Department prior to the issuance of any permit. A copy of the approved Landscape Plan Documentation Package shall be provided to the property owner or site manager and to the local retail water purveyor. The Landscape Plan Documentation Package shall be prepared by a registered landscape architect or a landscape designer. The irrigation plan shall be prepared by an irrigation designer or a landscape architect. The Landscape Plan Documentation Package 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's agent's name, address, phone, and fax number;

(3) Landscape designer/landscape architect's name, address, phone, and fax number; and

(4) Landscape contractor's name, address, phone, and fax number.

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, light poles, utilities, paved areas, and other site improvements;

(4) Existing trees and plant materials to be removed or retained; and

(5) Designation of landscape zones.

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; and

(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.

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.

e. **Soils Report**. A soils report will be required where irrigated landscaped areas consisting of grass or similar turf exceed 33 percent of the overall landscaped area. The soils report shall describe the depth, composition, and bulk density of the top soil and subsoil at the site and shall

include recommendations for soil amendments. The planting plan shall incorporate the recommendations of the soils report into the planting specifications.

f. **Landscape Water Allowance**. The annual landscape water allowance shall be calculated using the following equation:

Landscape Water Allowance = ET_O x 1.0 x 0.62 x A

Where landscape water allowance is in gallons per growing season:

ET_O	=	Reference Evapotranspiration in inches per growing season
1.0	=	ET_O adjustment factor, 100% of turf grass ET_O (growing season adjustment factor)
0.62	=	conversion factor
A	=	total irrigated landscape area in square feet

g. **Irrigation Schedule**. A monthly irrigation schedule shall be prepared that covers the initial 90 day plant establishment period and the typical long term use period. This schedule shall consist of a table with the following information for each valve:

(1) Plant type, e.g., turf, trees, low water use plants;

(2) Irrigation type, e.g., sprinklers, drip, bubblers;

(3) Flow rate in gallons per minute;

(4) Precipitation rate in inches per hour (sprinklers only);

(5) Run times in minutes per day;

(6) Number of water days per week; and

(7) Cycle time to avoid runoff.

3. **Landscape Design Standards.**

a. **Plant Selection**. Plants selected for landscape zones shall consist of plants that are well suited to the microclimate and soil conditions at the project site. Plants with similar water needs shall be grouped together as much as possible in landscape zones.

For projects located at the interface between urban areas and natural open space (non-irrigated), extra drought tolerant plants shall be selected that will blend with the native vegetation and are fire resistant or fire retardant. Plants with low fuel volume or high moisture content shall be emphasized. Plants that tend to accumulate excessive amounts of dead wood or debris shall be avoided.

Areas with slopes greater than 30 percent shall be landscaped with deep rooting water conserving plants for erosion control and soil stabilization. Irrigation devices are limited to drip emitters, bubblers, or sprinklers with a maximum precipitation rate not to exceed 0.85 inches per hour.

Parkstrips and other landscaped areas less than 8 feet wide shall be landscaped with water conserving plants and/or grass.

b. **Mulch**. After completion of all plantings, all irrigated non-turf areas shall be covered with a minimum layer of 4 inches 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 shall 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 6 inches and amending the soil with organic material as per specific recommendations of the landscape designer/landscape architect based on the soils report.

4. **Irrigation Design Standards**

a. Irrigation design standards for this ordinance shall be as outlined in the latest version of the Minimum Standards for Efficient Landscape Irrigation System Design and Installation as specified in the Sandy City Standard Specifications and Details for Municipal Construction. In addition, the following portions of this Section shall also be applicable.

b. **Landscape Water Meter.** A water meter and backflow prevention assembly for landscaping that are in compliance with State code shall be installed after the City meter and outside the City maintained meter box on the customer's service line. The size of the meter shall be determined based on irrigation demand.

c. **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 landscape water 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 sprinklers.

d. **Automatic Controller.** All irrigation systems shall include an electric automatic controller with multiple program and multiple repeat cycle capabilities and a flexible calendar program. All controllers shall be equipped with an automatic rain shut-off device.

e. On slopes exceeding 30 percent, the irrigation system shall consist of drip emitters, bubblers, or sprinklers with a maximum precipitation rate of 0.85 inches per hour and adjusted sprinkler cycle to eliminate runoff.

f. Each valve shall irrigate a landscape zone with similar site, slope and soil conditions, and plant materials with similar watering needs. Turf and non-turf areas shall be irrigated on separate valve(s).

g. Drip emitters or a bubbler shall be provided for each tree, where practicable. 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 Public Utilities Department due to the limited number of trees on the project site.

h. Sprinklers shall have matched precipitation rates with each control valve circuit.

i. Check valves shall be required where elevation differences will cause low head drainage. Pressure compensating valves and sprinklers shall be required where a significant variation in water pressure will occur within the irrigation system due to elevation differences.

j. Drip irrigation lines shall be placed underground or otherwise permanently covered, except for drip emitters and where approved as a temporary installation. Filters and end flush valves shall be provided as necessary.

k. Irrigation zones with overhead spray or stream sprinklers shall be designed to operate between 6:00 p.m. and 10:00 a.m. to reduce water loss from wind and evaporation. Drip or bubbler zones are excluded.

l. Program valves for multiple repeat cycles where necessary to reduce runoff, particularly slopes and soils with slow infiltration rates.

5. **Plan Review, Construction Inspection, and Post-Construction Monitoring**

a. As part of the site plan approval and building permit process, a copy of the Landscape Plan Documentation Package shall be submitted to the City for review and approval before construction begins. With the Landscape Plan Documentation Package, a copy of the Landscape Water Allowance Worksheet shall be completed by a landscape designer and submitted to the City.

b. All Landscape Plan Documentation Packages submitted must be certified by a licensed landscape architect or an approved landscape designer. The irrigation plan must be prepared by an approved irrigation designer or a landscape architect.

c. All landscape irrigation systems shall be installed by an irrigation contractor. The person representing the contracting firm shall be a full-time employee of the firm and shall be directly involved with the project including at least weekly site visits during construction.

d. All installers, designers, and auditors shall meet state and local license, insurance, and bonding requirements and be able to show proof of such upon demand.

e. During construction, site inspection of the landscaping may be performed by the City.

f. Following construction and prior to the release of the secondary bond guarantee posted for the project, an inspection shall be scheduled with the Public Utilities Department to verify compliance with the approved landscape and irrigation plans. A Certificate of Substantial Completion as defined in the Sandy City Standard Specifications and Details of Municipal Construction manual shall be completed by the property owner, contractor, or landscape designer/landscape architect and submitted to the City.

g. Following construction and prior to release of the secondary bond guarantee posted for the project, a water use efficiency review will be conducted by a landscape irrigation auditor. The auditor shall be independent of the contractor, design firm, and owner/developer of the project. The water performance audit will verify that the irrigation system complies with the minimum standards required by this ordinance. The minimum efficiency required for the irrigation system

is 60 percent for distribution efficiency for all fixed spray systems and 70 percent distribution efficiency for all rotor systems. The auditor shall furnish a certificate to the City, designer, installer, and owner/developer certifying compliance with the minimum distribution requirements, and an irrigation schedule. Compliance with this provision is required before the City will release the bond for the project.

D. **Residential (Single Family) Development**

1. The provisions of this Section apply to landscaping for all new and reconstructed landscaping for single family residential dwellings. This Section does not apply to residential developments with developer installed landscapes nor registered historical sites.

2. **Provisions for New or Reconstructed Landscapes.**

   a. **Landscape Education Package**. A copy of the Landscape Education Package shall be given to all new single family homeowners by the City at the time of application for a building permit and all new or modified water account owners. The Landscape Education Package, prepared by the Public Utilities Department, shall consist of the following items:

      (1) Principals of water efficient landscape design;

      (2) List of water conserving plants;

      (3) List of certified landscape designers, certified irrigation system designers and suppliers, and certified landscape irrigation contractors;

      (4) Information packet about the various area demonstration gardens; and

      (5) Information packet about the City's water rate schedule, billing format for water use, and the economics of installing and maintaining a water efficient landscape.

   b. **Post Installation.** After the landscaping has been installed, the homeowner is encouraged to notify the Public Utilities Department of its completion and request a listing of landscape auditors who can perform a water use efficiency review also called a water check. The water check will determine the irrigation system efficiency, make recommendations for improvements, and provide the homeowner with an irrigation schedule. (Ord 09-17, Amended 7-31-2010)

3. Parkstrips and other landscaped areas less than 8 feet wide are encouraged to be landscaped with water conserving plants and/or grass. (Ord 10-04, Amended 2-19-2010)

E. **Prohibited Watering Practices**

1. **Waste of Water.** Regardless of the age of a development (commercial, industrial, office, or residential), water shall be properly used. Waste of water is prohibited.

2. **Restricted Watering Time.** Watering time is restricted as specified in Title 14, Chapter 2 of the Revised Ordinances of Sandy City.

F. **Enforcement, Penalty for Violations**

1. **Enforcement Authority.** The Public Utilities Director and other employees of the Public Utilities Department are authorized to enforce all provisions of this Chapter.

2. **Violation of this Chapter.** Any consumer who violates any provisions of this Chapter shall be issued a written notice of violation. The written notice shall be affixed to the property where the violation occurred and mailed to the consumer of record and to any other person known to the City who is responsible for the violation and its corrections. Such notice shall describe the violation and order that it be corrected, cured, or abated immediately or within such specified time as the City determines is reasonable under the circumstances. Failure to receive such notice shall not invalidate further actions by the City. If the order is not complied with, the City may terminate water service to the customer and/or issue a class "C" misdemeanor citation.