



Parks & Public Lands

URBAN FORESTRY PROGRAM

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Tree Protection and Preservation Policy

City code mandates the protection of trees during construction. The urban forest contributes greatly to the environment, quality of life and property value. Tree protection is designed to preserve and protect tree health by avoiding damage to tree roots, trunk and crown. Protecting and preserving trees will reduce long term maintenance costs and tree replacement cost.

Tree roots serve four primary functions: absorption, conduction, storage, and anchorage. Although root cutting usually does not result in immediate visible changes to the tree, construction activities can cause irreparable damage to trees such as the death of the entire tree or large portions of the tree, and compromised anchorage from destroyed root systems, all of which are great public safety concerns because of the increase of the likelihood of tree failure.

Tree roots often spread two to three times wider than the drip line of the canopy. Ninety percent of a tree's roots are found in the top eighteen inches of soil. These facts illustrate why it is so important to use care when working near existing trees.

Tree Protection Guidelines for Construction Sites

Prior to beginning demolition or construction work that is near trees on any property, the following tree protection plan shall be implemented

1. Tree protection practices will include establishing the tree protection zone (herein known as TPZ). The TPZ will be 1 foot radius from the base of the tree's trunk for each 1 inch of the tree's diameter measured at 4.5 feet above grade (referred to as dbh)..

Tree Protection Zone

Tree diameter	Tree Protection Zone radius	Total protection zone diameter including trunk
2 inches	2 feet	4+ feet
6 inches	6 feet	13 feet
20 inches	20 feet	42 feet
46 inches	46 feet	96 feet

When trees are on the parkstrip, the TPZ will be the entire length of the parkstrip from curb to sidewalk.

The TPZ will be defined by 6' tall chain link fencing. Fencing will be erected with free standing

posts, NOT posts driven into the root system. There shall be appropriate signage posted on each linear span of the fence; example of the signage is included with this document. Signage shall be laminated on 8 ½ x 11" paper. The TPZ fencing and signage will remain until the project is complete or until Urban Forestry has provided written authorization allowing the removal of the fencing. Tree protection fencing must be depicted on the site, demolition and grading & drainage drawings.

There will be no digging, trenching, grading, siltation, masonry set-up or storing of materials or equipment in the TPZ.

- 2 All trees are to remain protected, unless given approval and permitted for removal by the Urban Forestry Office. If tree removal is permitted a mitigation fee will be required. If trees are damaged or destroyed (above ground or below ground) due to construction activity, the contractor will be assessed the appraised value of the trees payable to Salt Lake City. A permit is required for all removal and pruning of city trees approved and issued by the Salt Lake City Urban Forestry office. (801-972-7818). Tree pruning and removal permits will only be issued to I.S.A. Certified Arborists.

A minimum 48 hours' notice must be given to the Urban Forestry Program prior to any request for onsite meetings.

- 3 Trees to be preserved during all construction activities shall have a TPZ as shown on all plans. The TPZ shall be clearly marked on the site plan, demo plan, grading plan and landscape plan.
- 4 Only tunneling or boring will be allowed in the TPZ at a depth of 36 inches minimum. The access pit must be located outside of the TPZ. If this is not feasible, written authorization must be obtained from the Urban Forestry office PRIOR to altering the TPZ.
- 5 No equipment (except for a sod cutter) shall be allowed inside the tree protection zone. If special provision for excavation is approved by the Urban Forestry Office, it shall be done by hand or a soil vacuum or air spade.
- 6 Use tunneling or boring for irrigation and utilities. No roots larger than 4" in diameter will be cut. All roots will be cut cleanly with a saw. In situations where a root has been damaged, a clean cut shall be made on the root at the edge of the trench closest to the tree trunk.
- 7 If replacing the sidewalk, no roots larger than 4" in diameter shall be cut. Other alternatives such as ramping or a radius or arch around the existing trees will be used. Roots will not be ripped out with a back hoe. Cuts on tree roots shall be smooth and clean, made with a saw. Any exposed cut roots will be covered as quickly as possible to prevent them from drying out and the tree should be watered immediately. If tree roots are to remain exposed for more than four to six hours, they must be covered with burlap and kept moist at all times.
- 8 Tree care contractors providing services to public trees shall be certified arborists with the International Society of Arboriculture, licensed to do business in Salt Lake City and be

registered with the Utah Division of Commercial Code, insured against personal injury and property damage. Prior to beginning work on tree(s) the tree care contractor shall contact the City's Urban Forestry Program to obtain appropriate public property tree work permit(s).

- 9 Trees shall not be used to support any scaffolding, signs, temporary utility, or any other device. Sidewalks and paving levels should be contoured whenever possible to avoid root cutting. If damage occurs to a protected tree, immediate contact shall be made with the City Forester.
- 10 Do not change the soil grade by cutting or filling in the TPZ
- 11 Do not do any additional planting within 10' of the trunk.
- 12 In certain circumstances, the installation of wood chips from the trunk to the dripline at a depth of 2"-4" may be required. For example, if sod is removed under the tree, woodchips would be required.
- 13 Trees shall be watered according to the following guidelines:
 - a. Established trees need deep watering once every two weeks with low pressure at the drip line to ensure that the ground is soaked to a depth of at least 8 inches. Generally 5 gallons per inch of trunk diameter at breast height.
 - b. Young or newly planted trees need to be watered every 3—4 days, depending on temperature.

Underground Utility Work

When given approval by the Urban Forestry office to work in the TPZ to replace or restore underground utilities, use only a soil vacuum or hand dig, leaving roots larger than 4" in diameter untouched.

1. Where possible when replacing existing utilities such as water or sewer lines very near to preserved trees, abandon the lines and reinstall farther away from the tree.
2. Tunneling or boring will always be done at a minimum depth of 36 ". This shall be performed in a manner and location least damaging to tree roots.
3. Where large anchorage roots are encountered, hand digging and bridging of roots shall be done, leaving roots intact.
4. When encountering roots over 4" in diameter the Salt Lake City Urban Forestry office will be consulted prior to cutting to find some other course of action. Any cutting of tree roots shall give due consideration to future welfare of the tree. Proper action shall be taken so as to protect, and preserve the roots. Roots will not be ripped out with a back hoe. Cuts on tree roots shall be smooth and clean, made with a saw.

Tree Pruning

1. All Pruning on public trees will be approved by the Urban Forestry with the issuance of a permit. No pruning will be allowed that will compromise the aesthetics or structural integrity of a preserved tree. Tree care contractor providing services to public trees shall be a certified arborist with the International Society of Arboriculture, licensed to do business in Salt Lake City, and be registered with the Utah Division of Commercial Code, insured against personal injury and property damage. Prior to beginning work on trees(s) the tree care contractor shall contact the City's Urban Forestry Division to receive authorizing tree permits.