



Redevelopment or Changes in Use of Property

Compliance with landscaping provisions of the Code is required for:

- existing developments of less than 50,000 square feet if redevelopment exceeds 4000 square feet or 35% of the existing developed square footage of the site [30-251(4)(b)].
- redevelopment of shopping centers and properties that are larger than 50,000 square feet, although threshold criteria for landscape compliance differ from those listed above [30-251(3)].
- any new use of property that alters the use of existing structures from a residential to nonresidential use, or any other change of use of property to that of religious assembly [30-251(4)(c)].



Additional Information

Landscaping placement. Landscaping is required in three specific areas of each development:

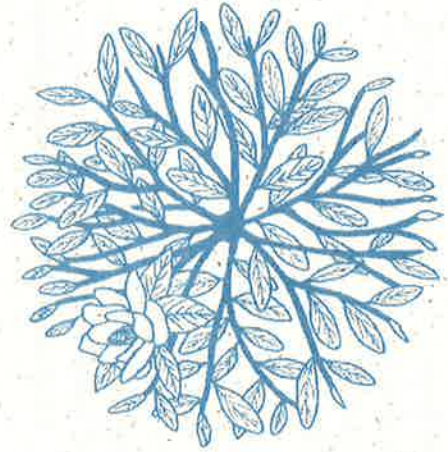
- *Stormwater retention basins.* 25% of the basin area (including shoulders) must be landscaped [30-251(2)(b)iii].
- *Parking areas.* Landscaping and tree placements are regulated so 50% of the vehicular use areas will be shaded within 20 years (30-252).
- *Buffers.* Landscaped buffers are required along street frontages and between properties with differing uses. Buffer widths and plant requirements are determined by consulting the Buffer Matrix (30-253).

Root space. Without adequate root space, trees won't grow well and may damage pavement. Tree islands in parking lots must be at least 140 ft² with the minimum dimension being 9' [30-251(2)a]. If sidewalks are added to tree islands, island size must be increased so the minimum area is maintained.

Tree diversity. To encourage plant diversity in the urban forest, no more than 50% of the required shade trees shall be of the same genus [30-251(2)f].

Plant quality. For your protection against liability and to ensure the long-term health of the urban forest, only Florida Grade #1 (or better) Nursery stock may be planted (30-265). Plant prices are based on size. Florida Grade #1 material costs no more than inferior quality grades.

Everyone's property values and quality of life are enhanced when landscaping is done well and valuable trees are preserved.



Fulfilling Landscape Requirements

the First Step



City of Gainesville
Recreation & Parks Department
Parks Division
Gainesville, Florida
(352) 334-2171

Gainesville's Tree Canopy—An Important Resource



Since 1984, Gainesville has been honored as a Tree City USA. Every year this certification is reviewed by the National Arbor Day Foundation. One requirement we must meet is having ordinances that protect our tree canopy. It's in everyone's best interest to preserve trees on a development site. Research has shown that trees increase the value of a property from 3.5 to 27%. American Forestry Association data show that a mature oak provides the cooling equivalent of five heavy-duty air conditioners running full-time. The Gainesville Land Development Code requires you to preserve as many trees as possible and to plant new trees. This brochure summarizes basic requirements for landscaping and tree protection. Numbers in parentheses refer to sections of the Land Development Code.

Developing Your Plans

After meeting with First Step staff, you will develop detailed plans for your project to submit for development review.



Design Considerations

Properties and landscaping should be designed in accordance with the principles and standards specified in the Code [30-251(7)]. Every effort should be made to:

- Preserve existing native trees, shrubs and wildlife habitat.
- Integrate development with existing environmental features. Development is not permitted within 35' of lakeshores, sinkholes, wetlands or creeks. This distance may be greater in some cases [30-302(a, b)].
- Maximize energy conservation.
- Landscape with trees and shrubs that are adapted to the site environment and that will not require excessive irrigation to look good. Use native species as often as possible.



Basic Planning Requirements

Plan the locations of buildings, utilities, lighting, signs, parking areas, and stormwater management facilities to save trees that add to the value of your property and benefit Gainesville's urban forest.

Concept Plans [30-160(b)] must show:

- canopy outlines of major tree stands and large trees.
- proposed locations of buildings, access roads, and parking lots.

Preliminary Plans [30-160(d)] must include:

- a *topographic map* depicting creeks, wetlands, and other natural features, regulated creek setbacks, and flood zone elevations.
- a *tree survey* identifying all regulated trees (8" plus for all trees except Slash and Loblolly Pines, which are regulated at 12").
- a *generalized landscape plan* showing existing trees, trees to be saved or removed, and demonstrating that at least 20% of the developed area is devoted to landscaping [30-251(1)]. Because some trees live longer and are more durable than others (e.g. Live Oak vs. Laurel Oak), it is in your best interest to

use full names on the tree survey and landscape plan, not just "oak" or "pine". Heritage trees (defined in 30-258) are given special attention during review.

Final Plans (or combined preliminary and final plans) [30-160(e)] must have a landscape plan that complies with Code sections 30-251 through 30-253. The plan can be designed by the property owner, project engineer, or by a landscape architect registered in the State of FL. Advantages of working with a landscape architect include their familiarity with Code requirements, knowledge of suitable plant materials and planting practices, and having an expert to oversee the landscape installation contract.

Your landscaping investment must be maintained. Poorly installed landscaping may create future problems that are very expensive to correct.

When May Property Clearing Begin?

No clearing, grubbing or construction may begin until the site and landscape plans have been approved (30-251; 30-259). No trees may be taken down until building permits requiring their removal have been issued, or appropriate tree removal permits have been secured (30-254). Tree barricades must be in place and inspected. The City Arborist and Current Planning Division must be contacted if more trees are to be removed than those indicated on the approved landscape plan.





Mulch Rings and Trunk Protection

After the tree is planted, mound a ring of soil 3"-4" deep around the perimeter of the hole to collect water. Apply 4" of organic mulch in a ring over the area excavated for planting. Avoid placing mulch over the root ball near the trunk as this encourages fungi and disease organisms. Mulch shrub beds in border and perimeter areas completely. Protect the trunks of trees outside of mulched landscape beds from physical damage by mowers and string trimmers with 12" of 4" diameter plastic drain tubing.



Proper Pruning

Avoid pruning newly installed trees and shrubs. Florida Grade #1 standards require that no more than 40% of tree trunks be free of foliage, so trees must not be limbed up until they are well established. Do not top or cut back the primary shoot and/or major branches of any tree. Prune to preserve the branch collar on any branches to be removed. Again, prune only after trees are adapted to the site.

Section 30-265c of the Gainesville Land Development Code specifically prohibits trimming or pollarding crowns and branches of trees into rounded forms. This manner of pruning compromises the healthy structure of the trees and prevents them from achieving the shading and screening requirements set forth in the Code.



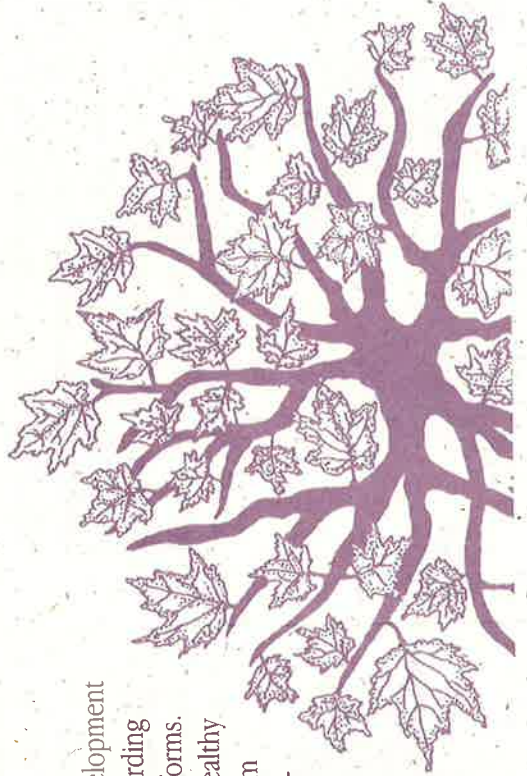
Staking

Remove all nursery stakes, labels and tie ribbons at the time of planting. The landscape contract may require the trees to be staked. Use biodegradable twine for guy lines. The Maintenance Agreement Form and the landscape plan will specify who will remove the staking within one year.



Watering

Plants require sufficient water. The Landscape Code specifies hose bibbs within 100 feet of landscaped areas or automatic irrigation systems. If an automatic system is specified on the landscape plan but is not installed, the plans must be red-lined to show hose bibbs within the prescribed distance. Automatic irrigation systems are designed for turf and shrubs, and generally do not supply sufficient water for newly installed trees. Trees should therefore have their own bubblers, or should receive supplemental watering with hoses during the establishment period.



Landscape Installation Guidelines

for
Landscape
Contractors

City of Gainesville
Recreation & Parks Department
Parks Division
Gainesville, Florida
(352) 334-2171

Landscape Installation Guidelines for Contractors

This pamphlet provides landscape contractors with information about City guidelines for the installation of landscape materials. You must comply with the Land Development Code and must pass inspections by the Parks Division before your client's Certificate of Occupancy is granted. Good planting practices as outlined below must be followed.



On-Site Review Before Plant Purchase

Schedule an on-site review of the landscape plan with an inspector from the Parks Division (334-2171) before any plants are purchased. This meeting will be a field check to make sure the landscape plan is compatible with infrastructure on the site. You will receive a Maintenance Agreement Form from the Parks Division that will specify who is responsible for guaranteeing the survival of required trees and shrubs.



Selection and Proper Planting of Materials

The Land Development Code requires that parking lot trees shade 50% of paved areas within 20 years. Shrubs in border and perimeter areas must provide a 75% visual screen at least 3 feet high within 3 years. Supplemental plantings will be required if these requirements are not met. To protect your client from further cost, proper installation techniques are essential. These planting guidelines will help your project pass the landscape inspection.

Quality. All plants must be Florida Grade #1 Nursery Stock or better, as defined by the Florida Division of Plant Industry's publication Grades & Standards For Nursery Plants. Trees must be at least 8 feet tall, 1.5-2.0 inches in trunk caliper, healthy, and free of diseases or wounds. Pot-bound trees or trees with too small a root ball or girdling roots will not be approved. Florida statutes require Grade #1 trees to be tagged or labeled as such on the delivery invoice.

Proper Holes. Dig holes only as deep as the root ball is high and twice the diameter of the container. Sides of the holes should slant outward. Roughen compacted soil in the walls of tree spade holes with a sharp tool.

Planting depth. Plant trees and shrubs so the trunk flare is flush with the soil surface or slightly higher on wet sites. The upper surface of the root ball should not be covered with any soil. Mulch will protect roots from drying out.

Breaking Root Balls. With a hand pruner sever any circling roots and make 3-4 vertical cuts through the outer surface of the root ball of container-grown plants. Remove synthetic (e.g. nylon) straps or cords and binding wire from balled-in-burlap plants. Cut or remove wire baskets and cut or pull down burlap to expose at least the upper 1/3-1/2 of the root ball. Remove all synthetic-burlap. Minimize root exposure to sunlight and air.

Tree Placement. Plant shade trees no closer than 10 feet from a building or 4 feet from paved areas or curbing.

Installation Watering. Thoroughly water all plant materials at installation to remove air pockets and to prevent the roots from drying out and dying.

Changes to the Approved Landscape Plan



The landscaping you install should comply with the approved landscape plan. Occasionally, changes can be red-lined and initiated by Parks Division staff on the red-stamped, approved copy of the site plan, which you must take to Current Planning for final approval.



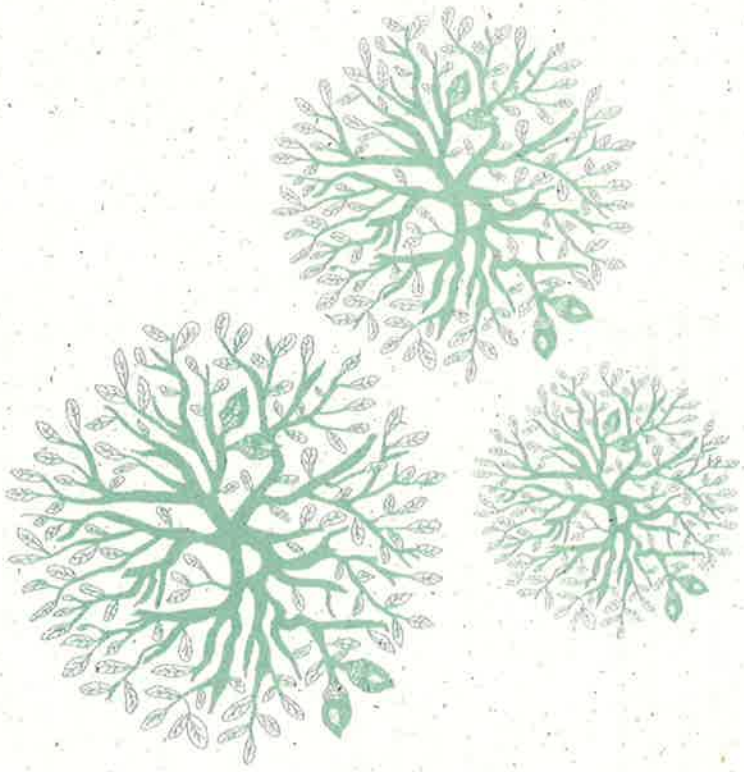
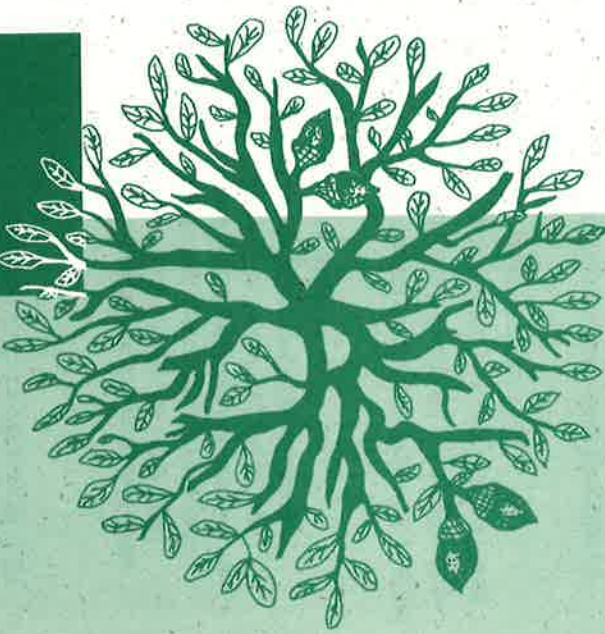
Remember!

Maintaining the landscaping and the irrigation system on your property is a Code requirement. Plan now to protect this part of your investment by providing the kind of after-care that results in thriving plants and a beautiful landscape.

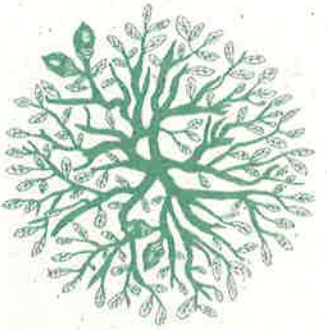


Landscape Maintenance Guidelines

for
Property Owners
and
Developers



City of Gainesville
Recreation & Parks Department
Parks Division
Gainesville, Florida, (352) 334-2171



Congratulations!

Your development has successfully passed the final landscape inspection, a requirement for the Certificate of Occupancy. City ordinances require that you protect and maintain the trees and shrubs that were planted.



Landscape Maintenance is a Code Requirement

The trees and shrubs that have been planted bring your site into compliance with City Codes. You should be particularly aware of City Code Section 30-265b, which states:

"Within six (6) months of a determination of the County Forester, City Arborist, or other city-designated qualified specialist, that a required tree or plant is severely damaged or diseased, the tree or plant shall be replaced by the owner/developer in accordance with the standards specified in this article."

These standards require replanting with trees that are at least 8' tall and Florida Grade #1 Nursery Stock or better. The average planted cost of a Grade #1 tree in a 30-gallon container is about \$120.

Trees removed without permits must be replaced with trees 14' tall and 3" in trunk caliper. The average planted cost for a tree this size is about \$250, so it pays to keep your trees healthy and to check with the Parks Division if you think you need to remove any tree from your property.



Plant Guarantees

The plants installed to meet the approved landscape plan may have a guarantee that depends on your landscape maintenance contractor providing appropriate aftercare. Be sure all parties are aware of their responsibilities.



Proper Aftercare

Frequent Checkups. Landscape maintenance personnel should inspect plants periodically for signs of disease, physical damage, or lack of water. "Weed-eater blight" (cutting the bark on young trees with string-trimmers during routine lawn maintenance operations) frequently kills young trees.

Irrigation. Trees need water during the establishment period.

Weeks 1-4: 3 gallons/day

Weeks 5-12: 3 gallons, 3 times/week

Since trees require more water than shrubs, the irrigation system should include bubblers at the base of each tree; another option is to arrange for supplemental hose watering.

Staking Trees. If newly planted trees don't lean, they don't need staking. In fact, they will develop better without it. If the installation contractor was required by the contract to stake the trees, be sure the stakes are removed within the first year. Failure to remove stakes will cause the trunks to become girdled by guy lines, which eventually will result in tree death and replanting costs.

Trunk Protection. Instruct your landscape contractor to maintain the mulch rings around individual trees. Protect trees from mower and string-trimmer damage by sleeving the lower 12" of the trunks with sections of 4" plastic drain tubing slit up one side.

Fertilization. Fertilize your plants every 4-6 months to keep them healthy and thriving.

Pruning. Most of the trees planted on your site were required to meet Code shading provisions. Newly planted Grade #1 trees don't generally need any pruning whatsoever. Rounding the crowns of trees for so-called aesthetic purposes is specifically prohibited by Code Section 30-265c:

"The excessive pruning or pollarding of trees into round balls of crowns or branches, which results in an unnecessary reduction of shade shall be prohibited, and may require supplemental plantings."

Florida Grade #1 standards require that no more than 40% of the trunk be free of branches. Instruct landscape maintenance personnel not to limb trees too high or thin out the foliage along branches. These styles of pruning severely compromise the healthy growth structure of young trees and will prevent them from achieving the shading requirements specified by the Code.