

City of Franklin Tree Care Manual



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Index

INTRODUCTION	3
PURPOSE OF THE TREE CARE MANUAL.....	3
IMPLEMENTATION OF TREE CARE STANDARDS.....	3
ADOPTED POLICIES REGARDING TREE CARE.....	3
PLANTING – CITY RESPONSIBILITY	3
PLANTING – OWNER RESPONSIBILITY	4
PLANTING – PUBLIC UTILITIES RESPONSIBILITY	4
PLANTING	5
TIPS FOR CHOOSING AND PLANTING CITY TREES	5
SELECTING THE RIGHT SIZE TREE:	5
TREE PLACEMENT IN THE TREE LAWN	6
PLANT MATERIAL HANDLING, INSPECTION, AND STORAGE	6
PLANTING PROCEDURES	7
TREE CARE FOR NEW TREES.....	8
ROUTINE STREET TREE CARE.....	10
EMERGENCY TREE CARE.....	11
PRUNING.....	12
CHOOSING AN ARBORIST	12
REGULATIONS SUMMARY.....	12
APPROVED PRUNING TECHNIQUES	13
PROPER PRUNING PRACTICES	13
PROPER PRUNING CUT.....	14
NO TREE TOPPING ALLOWED	14
REMOVALS	15
TREE REMOVAL STANDARDS.....	15
PROTECTING TREE ROOTS	16
MATERIAL STORAGE	16
SIDEWALK CONSTRUCTION AND REPAIR.....	16
OTHER CONSTRUCTION	17
TRENCHING and TUNNELING STANDARDS	18
TREATING WITH PESTICIDES.....	19
TREATMENT STANDARDS	19
OBTAINING A TREE CARE PERMIT	20
SOURCES FOR FURTHER INFORMATION	21
FRANKLIN APPROVED STREET TREE SPECIES LIST	22
PERMITS, BONDS AND CERTIFICATION	25

INTRODUCTION

PURPOSE OF THE TREE CARE MANUAL

The Tree Care Manual specifies the correct standards of practice for tree planting and the care of trees in the City of Franklin. This manual, which serves as an arboricultural specifications manual, was prepared by the Franklin Tree Board and approved by the Common Council of Franklin, Indiana.

IMPLEMENTATION OF TREE CARE STANDARDS

A municipal tree ordinance to establish a Tree Board and to regulate the care of public trees has been in effect since 2005 in the City of Franklin and has most recently been updated in 2011. The ordinance stipulates that all work on trees that lie in the public right-of-way, or within eight foot of curb when no clear right-of-way can be established, shall comply with the standards set forth in this manual. While not mandatory, it is recommended that work on trees in the private sector should follow these standards to assure a safe and healthy environment for the citizens of Franklin.

ADOPTED POLICIES REGARDING TREE CARE

The designation of “Tree City” is one in which the government and citizens take pride and wish to see expressed in the actions and attitudes taken toward trees in the rights-of-ways. A goal toward the expansion of tree cover in our urban environment serves to improve the City’s economic vitality, improve air quality, buffer noise, moderate temperatures, increase wildlife habitat, and beautify the city. The responsibility for improving Franklin’s urban forest is a joint venture between government and citizens.

The Franklin Tree Board has adopted these policies, with a goal of improving the City:

- Encouraging the use of proper preventive tree maintenance techniques to insure long lived trees thereby reducing the need for tree removals.
- Expanding the tree crown coverage in the City by maintaining existing trees and by planting new urban tolerant trees, especially native species of shade trees.
- Increasing public awareness of and involvement in urban forestry through educational efforts to promote landscaping and tree care on private properties.
- Encouraging site designs to provide for the accommodation of trees with other infrastructure, such as utilities, parking lots, buildings, signs, streets, and sidewalks.

PLANTING – CITY RESPONSIBILITY

The planting of all street trees shall be done according to the Tree Board’s city tree plan.

PLANTING – OWNER RESPONSIBILITY

The owner of a property abutting public ways may plant street trees at his own expense provided he secures a permit from the Tree Board or its designee. An owner who gains a permit to remove a healthy tree may be required by the Tree Board to replace that tree.

PLANTING – PUBLIC UTILITIES RESPONSIBILITY

Public utilities are responsible for the replacement of street trees which must be removed in order to maintain utility lines. Species, spacing and size requirements of this guide must be adhered to.

RECOMMENDED STANDARDS OF TREE CARE PRACTICE

PLANTING

TIPS FOR CHOOSING AND PLANTING CITY TREES

Whether you choose to plant a tree in your private yard or along the street on city property, there are important things to consider. The City of Franklin strives to have many beautiful trees gracing its streets, but trees need to coexist in a safe manner with public infrastructure like utility lines, streets, sidewalks, buildings, and signs. Planting the **Right Tree in the Right Place** is key to having a successful urban forest.

Before planting any tree, look around to see how much room a tree would have to grow to mature size. Look at the space between the sidewalk and street. Look above for power lines, phone lines, or street lights that should not be blocked. Be sure to pick the right sized tree both for the location in which you are planting, and for the size of buildings near the tree. Consider tree color both in the spring and fall, the scale of the planting, and the final shape of a tree in designing your planting area.

Trees can be planted anytime the ground can be worked. Spring is a good time to plant, while trees are not yet leafed out and newly planted trees can benefit from spring moisture. Late fall planting also allows roots to be established while trees benefit from winter moisture. Containerized trees can be planted in summer, as they have good root systems. Freshness and pre-planting care of tree stock are important for survival, as is post-planting watering weekly for a full growing season. Buy quality trees that are healthy, well pruned, and have a strong central trunk. Bargain trees that have been left in hot sun or cold wind to dry out are no bargain when they die.

Always, **CALL BEFORE YOU DIG**. Dial **811** to contact the free public service utility locate company (www.Call811.com). Underground utilities like phone, gas, electric, and cable TV will be painted or flagged in the vicinity of your digging hole. This locate service will also mark underground water and sewer lines in the public right-of-way area, but not in your yard. **If planting a tree next to the street on public property, you must first obtain a Tree Care Permit from the Franklin Street Department.** This assures that the City Arborist can approve both the site for the tree and make sure that an appropriate tree species is selected. This will also assure that the tree is logged into the public tree inventory data base.

SELECTING THE RIGHT SIZE TREE: Size is important!

This manual contains the Approved Street Tree Species List, which is a list of tree types that are suitable for planting in the climate of Franklin. Trees are grouped into three size classes – small, medium, and large – based on their mature size. Tree species that appear on this list are also adapted to urban stresses such as road salt, limited grow spaces, and poor soils.

A size class should be chosen based on the growing space of the planting area. Be sure to note the “Tree Tips” section for each size of tree when deciding which tree to plant. If you have a small growing space, choose a tree from the small tree type list; a medium space, a medium tree type; and a large space, a large tree type.

Resources for tree species information and photographs:
www.ohiodnr.com/forestry/trees/default.htm.
www.hhrcd.org

TREE PLACEMENT IN THE TREE LAWN

The following standards will apply to trees or shrubs planted in the public right-of-way:

- (1) No vegetation which reaches a maximum mature height of between two and one-half (2 ½) feet and eight (8) feet shall be planted in the public right-of-way, or within fifty (50) feet of the intersecting curb lines of a street corner.
- (2) No new tree shall be planted closer than twenty-five (25) feet from the intersecting curb lines of a street corner on streets designated as local streets, thirty-five (35) feet on streets designated as collector streets, and sixty (60) feet on state highways or other arterial streets, nor within ten feet of the intersection of a street right-of-way and an entrance driveway.
- (3) All street trees shall be a minimum of two and one-half inch caliper as measured six inches from the top of the root ball, at the time of planting.
- (4) One street tree shall be planted for every thirty (30) feet of street frontage.
- (5) Except for special plantings approved by the Tree Board, no tree may be planted so that its center is closer than two feet to a sidewalk, or curb, or edge of pavement if no curbs are present.
- (6) No street tree shall be planted within ten feet of any fire hydrant or five lateral feet of any underground utility service. Street trees shall be planted so that at the tree’s full growth the limbs in the tree’s crown are at least eight lateral feet from any overhead electric line. The spacing of street trees will be in accordance with the three species size classes of the Tree Board’s list of desirable trees. Minimum and maximum spacing between tree plantings shall be: small trees: twenty to twenty-five feet, medium trees: twenty-five to thirty feet, and large trees: thirty-five to forty feet or as consistent with spacing of existing trees dictates. All variances from the above require approval for the Tree Board.

PLANT MATERIAL HANDLING, INSPECTION, AND STORAGE

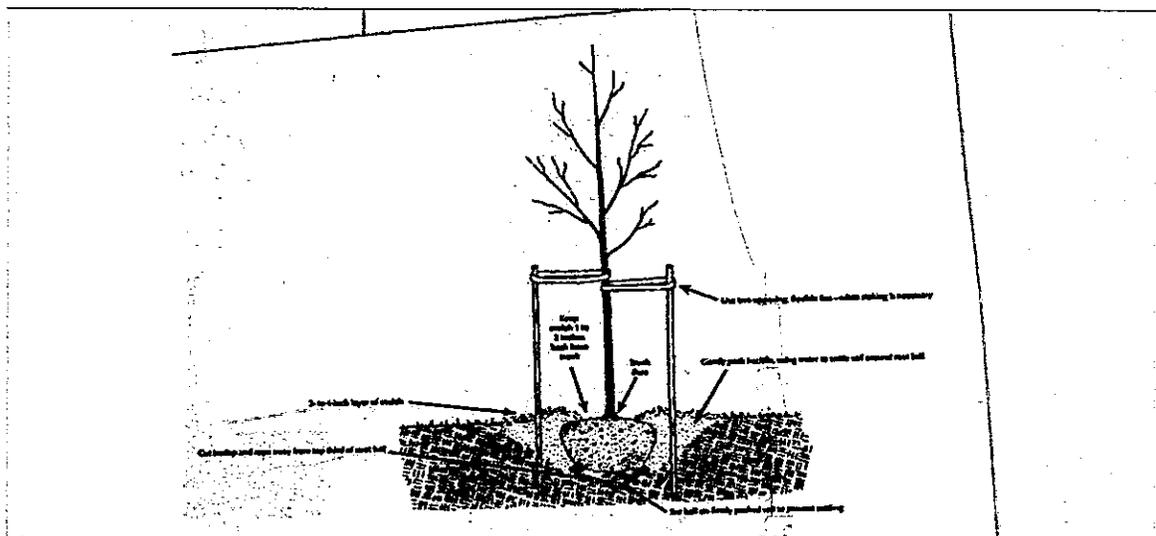
- (1) Only desirable, long-lived trees of good appearance, beauty, adaptability, and generally free from injurious insects and diseases shall be planted on public sites. Any trees planted shall be adaptable to USDA Zone 5 climate conditions.

- (2) Trees shall be tagged, indicating species and size. Trees shall be free of wounds, insects, and cankers. Root systems should be full and root balls should be moist, but not moldy. Trees in containers should not have circling roots. Root balls should be protected from freezing and desiccation.
- (3) Plants should be protected from wind during transport and be kept cool and moist at all times. Care should be taken as not to drop or otherwise loosen the root ball. Trees should not be picked up by the trunk. Instead the soil ball should be supported when moving the plant.
- (4) Bare rooted plants must be planted when dormant (buds are closed and not leafed out). Roots should always be kept cool and moist and trees planted as soon as possible. If stored, the trees should be covered with moist soil, straw, or wood chips. Bare rooted trees should be soaked in water immediately prior to planting.

PLANTING PROCEDURES

Balled and Burlapped Trees

- (1) Hole should be dug with the width three times the spread of the root ball and no deeper than the root ball height. Sod should be removed from the site.
- (2) Trees will be planted no deeper than previously grown. The trunk flare at the base of the tree should not be buried. In clay soils trees can be planted slightly high, not to exceed 20% of the root ball height above ground level, with sloped backfill covering all roots. Set trees on native soil that is thoroughly compacted. Trees should be set gently into the hole without stress on the trunk or loosening root ball.
- (3) Cut away twine only after tree is set in level position. Remove as much of the burlap and wire basket as possible and/or fold below ground level. Remove all plastic twine.



- (4) Straighten tree and backfill one-third of hole with existing native soil. (Avoid using excessive organic matter additives to the fill.) If desired, at this time a solution of water with root stimulator-type fertilizer can be applied over the roots. Compact backfill with feet. Check tree straightness again, complete backfilling tree, and once again compact the backfill. Construct a 3" high watering dike around the hole.
- (5) Apply water to settle the soil and to eliminate any voids.
- (6) Chop up any dirt clods, add soil if needed.
- (7) Place a three inch layer of mulch around the tree in a minimum two-foot radius. Do not pile mulch against the trunk. Instead, keep mulch at least three inches from the trunk.
- (8) Prune only broken branches. Trees do not normally need to be staked. Staking is recommended for trees with loose root balls, trees exposed to equipment damage, or trees exposed to high wind or high river conditions. Take care not to damage the root ball when staking and remove any supports before they grow into the tree.

Bare Rooted Trees

- (1) Plant trees immediately upon receipt. Keep roots cool and moist at all times.
- (2) Soak roots in water before planting. When planting trees larger than seedlings, tree roots should be soaked in a wetting gel solution.
- (3) Cleanly trim any long root hairs or broken roots.
- (4) Hold tree in hole at soil line, making sure roots are straight and not bent in a "J" shape or circling in the hole. Carefully pack soil firmly around the roots and water. Plant tree at the previous planting depth for hardwood seedlings, slightly deeper for evergreen seedlings.

TREE CARE FOR NEW TREES

Watering

New trees should be supplementally watered for three years after planting. Plants should be thoroughly watered every 5 to 10 days from April through October as needed as a supplement to natural rainfall. Plants should receive a total of two inches of water every two weeks, or about ten gallons per 2" caliper tree. Watering is critical when summer temperatures exceed 90 degrees for extended days.

Fertilizing

Fertilizing is not usually necessary. At planting time, a high phosphorous "root stimulator" type fertilizer can be poured over the roots. If at any time the tree appears stressed, a water-soluble fertilizer like Miracle-Gro can be watered in.

Pruning

Newly planted trees should be pruned only as needed to remove dead, damaged, or poorly located limbs. After trees are established, usually a minimum of three years, structure pruning is recommended to promote a strong central tree leader and to remove lower branches as needed for clearance.

Wrapping

Only thin barked trees such as young maples, linden, beech, and tulip poplars which are subject to sunscald should be protected November to April with specialty paper tree wrap material. Never use tape or plastic material. All wrapping should be removed during the growing season. Open bark wounds should not be wrapped but, instead, the bark should be trimmed cleanly and left open to air circulation. If the wound is fresh and the bark still partially attached, the bark can be pressed in place and gently wrapped to graft back in place.

Staking

Only those trees in windy open areas, along floodplains, or with loose root balls should be staked as to avoid movement of the base of the tree at the roots. Freedom of movement in a tree trunk helps a tree develop a stronger trunk. If staking, avoid cutting roots while driving the stake or damaging bark with any rope or wire used. All staking materials should be removed after one year from installation.

Mulching

Mulch should be applied at time of planting and reapplied annually in the spring. Mulch to a depth of three inches for a minimum two-foot radius around the tree. Do not pile mulch against the trunk. Instead, keep mulch two to three inches from the trunk. Recommended mulch is shredded bark or aged wood chips.

ROUTINE STREET TREE CARE

Within the limits of the city tree plan and of the Tree Board's budget, the city shall assume the expense of tree care for street trees. All routine street tree care undertaken by the city shall be initiated or authorized by the Tree Board or its designee and undertaken either by trained city employees or someone under direct supervision of a certified arborist.

The property owner/occupant shall be responsible for the routine care of street trees in the right-of-way between his property and the street, such as watering, raking, and preparing leaves, twigs and other debris for removal by the city. Should an owner/occupant wish to perform routine trimming on a street tree in the right-of-way between his property and the street, he may do so at his own risk and after securing the proper permit. An owner/occupant may hire an ISA Certified Arborist to perform routine street tree care. The arborist must then secure a permit from the Tree Board or its designee.

Public utilities may trim street tree roots and branches as necessary for the maintenance of utility service. Trimming is prescribed by state law, and the cost of such tree care is not the responsibility of the city.

It is unlawful for any person to top, or prune horizontally a branch of more than one inch in diameter, or cut limbs within the tree's canopy back to stubs larger than three inches in diameter, on any street tree. An owner/occupant may trim limbs less than one inch in diameter. It is unlawful for any person to fasten or attach in any way to any defined street tree any rope, wire, sign, poster, handbill, or other object; except, however, that the police department may attach temporary traffic and parking control signs as necessary, but so as not to damage the trees. It is unlawful for any person in any other way to injure or deface or permit any animal to injure or deface any tree.

It is unlawful for any person to remove, damage, or otherwise misuse any guard or protective device placed around any public tree by the city without the written consent of the Tree Board. It is also unlawful for any person to remove, damage, cut or otherwise disturb the root system of a public tree without reviewing and obtaining a permit from the Tree Board or its designee.

EMERGENCY TREE CARE

The city street commissioner or public utilities may act to trim or remove trees in extreme emergency situations. The State Highway Department may act to trim or remove trees endangering traffic on state highways within the city limits. In extreme emergencies, when a tree (or trees) has been severely damaged by storms or other causes or is obstructing utility wires, the street commissioner or public utilities may resort to topping or other severe cutting back of limbs of street trees but must report all such incidents to the Tree Board by location, date and time.

PRUNING

CHOOSING AN ARBORIST

Why hire an Arborist? An arborist is a specialist in the care of individual trees. Arborists are knowledgeable about the needs of trees and are trained and equipped to provide proper care. Hiring an arborist is a decision that should not be taken lightly. Proper tree care is an investment that can lead to substantial returns. Well cared for trees are attractive and can add considerable value to your property. Poorly maintained trees can be a significant liability. Pruning or removing trees, especially large trees, can be dangerous work. Tree work should be done only by those trained and equipped to work safely in trees. A listing of local certified arborists for hire can be located at the website www.isa-arbor.com. Go to "Find a Certified Arborist" tab.

REGULATIONS SUMMARY

The following regulations apply to tree pruning activities on public street trees, whether done by the individual or his contracted agent. Please refer to the Tree Ordinance for complete details.

- (1) Any citizen pruning a public street tree by removing branches over three inches diameter in size is required to obtain a Tree Care Permit from the Franklin Street Department prior to pruning.
- (2) To facilitate the flow of traffic and pedestrians, trees overhanging the street shall be pruned for a clearance of 15 feet and trees and shrubs overhanging the sidewalk shall be pruned for a clearance of 8 feet. The Tree Board or its designee shall have the right to prune or cause to be pruned any street trees and privately owned trees overhanging any street or public right-of-way or sidewalk which they determine constitute a menace to the safety of the public, which obstructs the light from any street lamp at the intersection, which obstructs the motorist's view of any street intersection or any traffic control device or sign, or which obstructs or endangers passing vehicles and pedestrians.
- (3) No tree topping is allowed. To reduce the crown of a tree, Crown Reduction Pruning should be used, which is accomplished by pruning back the tree leaders and branch terminals to lateral branches that are large enough to assume the terminal roles (at least one-third the diameter of the cut stem). In simpler terms, always cut back to the "Y" of a limb.
- (4) Any persons or firm engaging in the business of pruning, treating, or removing trees shall be bonded and insured as currently required by the City.
- (5) Proper pruning techniques and practices will be used, as set forth in the Tree-Pruning Guidelines prepared by the International Society of Arboriculture (ISA).
- (6) Safe tree pruning practices shall be followed. Acceptable Tree care Safety Standards can be found on the web by researching document ANSI Z133.1-2006 from the American National Standards Institute. This document lists the current national safety standards for arboricultural operations.

APPROVED PRUNING TECHNIQUES

These techniques should be used, for whatever the pruning goals.

Crown Cleaning is the removal of dead, dying, or diseased, crowded, weakly attached and low-vigor branches from the crown of a tree.

Crown Thinning is the selective removal of branches to increase light penetration and air movement through the crown. Thinning opens the foliage of a tree, reduces weight on heavy limbs, and helps retain the tree's natural shape.

Crown Raising removes the lower branches from a tree in order to provide clearance for buildings, vehicles, pedestrians, and vistas.

Crown Reduction reduces the size of a tree, often for clearance for utility lines. Reducing the height or spread of a tree is best accomplished by pruning back the leaders and branch terminals to lateral branches that are large enough to assume the terminal roles (at least one-third the diameter of the cut stem). Tree topping is not an accepted pruning method.

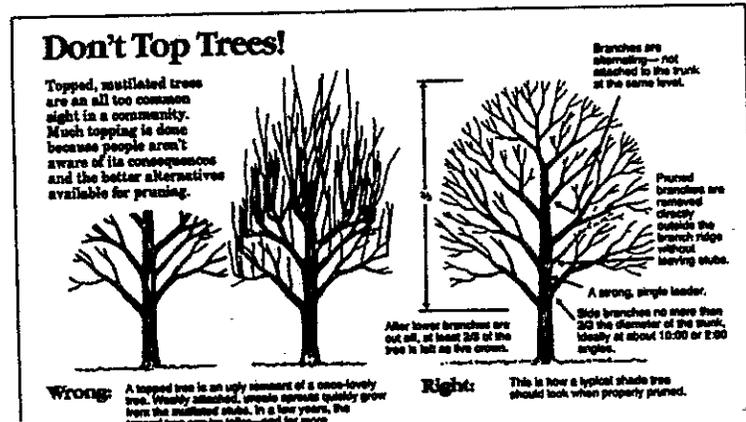
PROPER PRUNING PRACTICES

- (1) Proper pruning tools help a tree heal its pruning cuts. Pruners, loppers, and saws should be sharp. Hedge shears should never be used. To prevent the spread of infectious diseases, all pruning tools should be cleaned or disinfected with alcohol before being used on a new tree.
- (2) Trees should not be over pruned. Do not remove too many small branches when tree pruning. A rule of thumb is never to remove more than one fourth of a tree's leaf-bearing crown. Another rule of thumb is that when clearance pruning under a tree, always leave at least the top two-thirds of the tree's height with branches.
- (3) Wound dressings are not recommended.
- (4) Dead, damaged, or diseased branches should be removed. Branches that cross or rub should be pruned.
- (5) Pruning cuts should only be made at a lateral bud on a twig or by pruning back a leader or branch terminal to a lateral branch. Pruning cuts should be made just outside the branch collar.

PROPER PRUNING CUT

NO TREE TOPPING ALLOWED

Topping is defined as the severe cutting back of major limbs to stubs larger than three (3) inches in diameter within the tree's crown to such a degree as to remove the normal canopy and disfigure the tree.



Eight good reasons not to top a tree:

- Cost
- Ugliness
- Weak limbs
- Tree shock
- Insects and diseases
- Tree death
- Rapid new growth
- Tree starvation

To prevent the need for topping, start out by planting the right trees that will fit the available space. Begin pruning early to modify the structure of a tree as needed. Pruning early in the life of a tree can prevent the need for expensive mature tree pruning. More information on topping and alternate pruning techniques can be found at the website: www.treesaregood.com/treecare/topping.aspx.

REMOVALS

TREE REMOVAL STANDARDS

- (1) All removals of street trees shall require a Tree Care Permit. Permits are obtainable at the Franklin Street Department office, or online at www.franklin-in.gov. Persons performing tree removals must meet all insurance and bonding requirements set forth in the Tree Ordinance. Persons performing the removals must also remove the debris and the stump.
- (2) Appropriate street and sidewalk barriers shall be placed where removals may endanger the public. The Board of Works shall be notified of any street blockages.
- (3) Care shall be taken in dropping trees to prevent sidewalk and curb damage.
- (4) The stumps of all trees shall be removed to at least 6 inches below ground level and the cavity shall be filled with soil and leveled.
- (5) Except in emergency situations, the Tree Board or its designee shall have the exclusive right to cause or to approve the removal of any street tree they feel is dead, diseased, or otherwise unsafe.
- (6) The Tree Board, or its Designee, shall have the right to spray or to cause the removal of any dead, diseased or otherwise unsafe tree on private property within the city, when such trees constitute a hazard to life, health, and property, or harbor insects or disease which constitutes a threat to other trees throughout the city. The Tree Board will notify in writing the owner of trees so described. Removal or spraying shall be done at the owner's expense within sixty (60) days after the date of service of notice unless, within those sixty (60) days, the owner can demonstrate to the board his inability to comply.

PROTECTING TREE ROOTS

If a tree's roots are damaged, the tree is damaged and may succumb to an early death. Trees usually decline slowly and begin showing stress with dying tips of branches in the canopy. While roots extend well beyond the drip line or edge of a tree's canopy, there is a root area that needs special protection – the Critical Root Zone. This is defined as a circular region measured outward from the tree's trunk representing the essential area of the roots that must be maintained or protected for the tree's survival. Critical Root Zone is one foot in radial distance for every inch of tree diameter at breast height (DBH), with a minimum distance of eight feet. For specimen (very special) trees, the formula changes to 1.5 feet for every inch of diameter at breast height (DBH).

MATERIAL STORAGE

No dirt or materials, construction or otherwise, should be stored within the tree's Critical Root Zone for more than one week. Chemicals, oil or hot charcoals should never be disposed of in the critical root zone under a tree. When grading yards, a layer of soil over six inches deep will damage tree roots, as will the cutting of roots. Eighty percent of a tree's roots are in the top eighteen (18) inches of soil. Roots need to be close to the surface for oxygen needs.

Parking under trees causes soil compaction which hurts roots and stresses trees. During construction activities where vehicles will pass repeatedly under trees and over roots, a thick layer of wood chips can be placed temporarily on the path to prevent soil compaction.

SIDEWALK CONSTRUCTION AND REPAIR

Large trees in small grow spaces can cause sidewalk lift and a tripping hazard. Planting the right tree (or no tree) in a small space helps prevent this problem. Where tree and sidewalk conflicts already exist, there is unfortunately no perfect solution. Options range from sidewalk redesign to root pruning to tree removal.

Sidewalk lift is caused by both tree root expansion and by poor sidewalk condition. Sidewalks deteriorate with time and from seasonal movement from freezing and thawing. Tree roots can then grow into cracks and voids, raising pavement. By properly installing sidewalks with adequate base materials, the concrete will be less prone to both soil movement and tree root pressure.

Where sidewalk replacement and installation is performed, street trees affected will be evaluated by the City Arborist to assess impact of construction on the tree health. Damage to sidewalks is not sufficient reason to remove a tree if present damage can be adequately corrected and future damage can be averted.

City zoning laws require new sidewalks to be installed at a five foot width. Any smaller width would require a variance through the Board of Zoning Appeals. Where tree-root conflicts exist it may be possible to reduce sidewalk width and still be in compliance with federal ADA sidewalk mandates. With City permission, sidewalks may be reduced to a width of three feet at a tree as long as there is a passing zone of five feet sidewalk width within 200 feet of the tree area.

With permission from the City, it may be possible to install paving options such as paver bricks, asphalt, or rubber mats, or to ramp the site to avoid cutting tree roots. If tree roots are cut, they must be cut cleanly. It is also important that not too many roots are cut. The “four-by-four rule” noted in the following section is a good guideline for determining if a tree’s support or health is compromised.

Roots exposed during construction should be kept moist. Wet burlap makes a good protective covering. For the year after a root pruning for sidewalk, sewer, or curb construction a tree will benefit from an application within the tree root zone of nitrogen in the form of common grass fertilizer.

OTHER CONSTRUCTION

In order to protect existing vegetation intended for preservation, persons, developers, and construction firms must place substantial barriers around the vegetation at or beyond the drip line of enclosed trees, allowing no heavy equipment or other machinery, tools, chemicals or temporary soil deposits permitted within the barriers. These barriers are to remain in place until after the completion of all heavy construction on the site, and no burning may take place within the sensible distance of preserved vegetation.

Significant changes in grading or water flow which would adversely affect preserved vegetation must be avoided or mitigated through protected measures.

The Tree Board, or its designee, may substitute alternative means in lieu of the required barriers where appropriate to specialized circumstances.

These restrictions shall not be interpreted as applying to public utilities or utility subcontractors doing routine utility work. However, public utilities and their subcontractors must take reasonable care to protect trunks, branches and roots of existing trees and shrubs.

Grass and other vegetative ground cover is to be used in those portions of the setback areas and tree plots not occupied by other landscape materials. Normally trees should be mulched around their bases. Special uses of gravel, crushed stone, or riprap at the base of street trees must be approved by the Tree Board.

Subdivisions with preliminary plats submitted to the city after the passage of this chapter will be planted at the expense of the developer and/or builder in compliance with the articles of this chapter except as the subdivision control ordinance specifically indicates otherwise. Where the affirmative or negative requirements of the subdivision control ordinance conflict with this chapter, the subdivision control ordinance controls. Where the subdivision control ordinance is silent, this chapter controls.

TRENCHING and TUNNELING STANDARDS

- (1) Any installation of underground public utilities shall employ, whenever physically able, tunneling instead of trenching within the critical root zone area of any public tree.
- (2) All roots cut over two inches in diameter shall be cut cleanly. All trenches shall not stay open longer than necessary and shall be properly barricaded.
- (3) Four-by-Four-by-Four Rule: If any four tree roots four inches in diameter within four feet of the tree are cut, the tree should be removed because of increased tree wind-throw failure potential.

TREATING WITH PESTICIDES

TREATMENT STANDARDS

- (1) Treating trees or flora with pesticides (herbicides or insecticides) shall be done only for the control of specific diseases or insects, with the proper materials, at the properly labeled dosage, and applied at the proper time to obtain the desired control, as specified by the chemical manufacturer. All spraying of pesticides shall conform to federal and state regulations.
- (2) Read the product label and follow all manufacturers' instructions in order to protect yourself and the public when using chemicals.
- (3) A Tree Care Permit must be secured before treating with pesticides any trees or flora on the public street right-of-way or any public places.

OBTAINING A TREE CARE PERMIT

Obtaining a Tree Care Permit is required for the following:

Any persons

- (1) Planting a tree in the public right-of-way, such as along the street;
- (2) Removing any tree on a public right-of-way or public place;
- (3) Pruning, within the public right-of-way, any tree where branches over three (3) inches in diameter will be removed;
- (4) Excavating any ditches, tunnels, or trenches; or laying any drive; installing underground utilities; or storing any soil, stone, cement, or other substance within a ten (10) foot radius of any public tree;
- (5) Treating with pesticides any tree(s) or flora on a public right-of-way or public place;

Tree Care Permit applications are available free of charge from the office of the City Arborist which is located within the Franklin Street Department at 2871 North Morton Street or online at www.franklin-in.gov. The telephone number is (317) 736-3660. Keep in mind that permits must be approved before work begins.

SOURCES FOR FURTHER INFORMATION

Purdue Extension

Free advice on tree care and insects and diseases of plants can be obtained from the Purdue Extension County Agent, located at the Johnson County Fairgrounds, 484 North Morton Street, Franklin, Indiana, 46131. The office phone number is 317-346-8725.

Websites

The following websites contain good information on tree care:

International Society of Arboriculture; main site; <http://www.isa-arbor.com>.

International Society of Arboriculture. tree care site;

<http://www.treesaregood.com>.

Emerald Ash Borer; main site; <http://www.entm.purdue.edu/EAB/>

Indiana Urban Forest Council, Inc. <http://www.iufc.org>

Northern Trees-Tree Selection Guide; <http://orb.at.ufl.edu/TREES/index.html>

Planting Trees in the Landscape; <http://hort.ifas.ufl.edu/woody/planting>

Tree Link; <http://www.treelink.org>

USDA Forest Service, Northeastern Area Urban and Community Forestry;

<http://www.na.fs.fed.us/urban/index.shtm>

To Contact the City Arborist

Contact is through the City Street Department located at:

2871 North Morton Street, Franklin, Indiana, 46131

Telephone: (317) 736-3660.

Fax: (317) 736-4008

www.franklin-in.gov

FRANKLIN APPROVED STREET TREE SPECIES LIST

At its meeting on October 15, 2009 the Franklin Tree Board approved the following list as the official Street Tree Species for Franklin. These are the tree species with growth characteristics that do well on urban sites. All trees are suited for USDA cold hardiness Zone 5. Other species, varieties and cultivars may be added or deleted as experience demonstrates their superiority. Those species in bold print denote native trees.

No species other than those included on the Tree Board's list of desirable trees may be planted as street trees without special written permission of the Tree Board. If such special permission has not been received, the cost of removal and replacement of the undesirable trees shall be charged to the individual or firm who planted the trees.

The desirable species should be classified by size, into three groups: large (maximum height over 40 feet), medium (25 to 40 feet), and small trees (maximum height under 25 feet). Additionally large trees are recommended for streets with no overhead restrictions and with tree lawns 4-6 feet or more in width. They are recommended for large areas such as parks, school yards, and homeowner yards. They should be planted at least one-half the mature height of the tree away from structures. **DO NOT PLANT UNDER OR NEAR POWER LINES.** Medium trees are recommended for areas around the home, yard and with tree lawns that are 4 feet or greater. Check for mature size before planting near utility lines and plant at least 25-35 feet from structures. Small trees generally can be planted under and near power lines. Check mature height and spread before planting. They are recommended for lawn widths of 3 feet or greater.

DESIRABLE LARGE TREES

Genus	Species	Common Name
Acer	nigrum	Black Maple
Acer	rubrum	Red Maple
Acer	saccharum	Sugar Maple
Acer	x freemanii	Freeman Maple
Aesculus	hippocastanum	Horse Chestnut
Aesculus	glabra	Ohio Buckeye
Aesculus	x carnea	Red Horse Chestnut
Alnus	glutinosa	Black Alder
Betula	nigra	River Birch
Carya	cordiformis	Bitternut Hickory
Carya	glabra	Pignut Hickory
Carya	laciniosa	Shellbark Hickory
Carya	ovata	Shagbark Hickory
Carya	tomentosa	Mockernut Hickory
Celtis	laevigata	Sugar Hackberry
Celtis	occidentalis	Common Hackberry
Fagus	grandifolia	American Beech
Fagus	sylvatica	European Beech

Fraxinus	americana	White Ash
Fraxinus	excelsior	European Ash
Fraxinus	pennsylvanica	Green Ash
Fraxinus	quadrangulata	Blue Ash
Ginkgo	biloba	Ginkgo
Gleditsia	triacanthos	Honeylocust
Gymnocladus dioicus		Kentucky Coffee Tree
Liquidambar	styraciflura	Sweetgum
Liriodendron	tulipifera	Tulip Tree
Metasequoia	glyptostrobooides	Dawn Redwood
Nyssa	sylvatica	Black Gum
Platanus	occidentalis	Sycamore
Platanus	x acerifolia	London Planetree
Quercus	alba	White Oak
Quercus	bicolor	Swamp White Oak
Quercus	imbricaria	Shingle Oak
Quercus	macrocarpa	Bur Oak
Quercus	robur	English Oak
Quercus	rubra (borealis)	Northern Red Oak
Quercus	shumardii	Schumard Oak
Taxodium	distichum	Bald Cypress
Tilia	cordata	Littleleaf Linden
Tilia	tomentosa	Silver Linden
Tilia	x euchiora	Crimean Linden
Zelkova	serrata	Japanese Zelkova

DESIRABLE MEDIUM TREES

Genus	Species	Common Name
Acer	campestre	Hedge Maple
Acer	maximowiczianum	Nikko Maple
Acer	triflorum	Three-Flowered Maple
Amelanchier	species	Serviceberry
Carpinus	betulus	European Hornbeam
Carpinus	caroliniana	American Hornbeam
Cercidiphyllum	japonicum	Katsura Tree
Cladrastis	kentukea (lutea)	Yellowwood
Corylus	colurna	Turkish Filbert
Crataegus	crus-galli	Cockspur Hawthorn
Crataegus	phaenopyrum	Washington Hawthorn
Crataegus	viridis	Winter King Green Hawthorn
Eucommia	ulmoides	Hardy Rubber Tree
Maackia	amurensis	Amur Maachia
Magnolia	species	Magnolia
Ostrya	virginiana	Hop Hornbeam
Pyrus	calleryana	Callery Pear
Robinia	x ambigua	Purple Robe Locust

DESIRABLE SMALL TREES

Genus	Species	Common Name
Acer	ginnala	Amur Maple
Acer	griseum	Paperbark Maple
Acer	tartaricum	Tartarian Maple
Cercis	canadensis	Eastern Redbud
Cornus	alternifolia	Pagoda Dogwood
Cornus	kousa	Kousa Dogwood
Cornus	mas	Cornelian Cherry
Malus	species	Crabapples
Prunus	species	Cherries
Syringa	reticulata	Japanese Tree Lilac
Viburnum	lantana	Wayfaring Tree
Viburnum	lentago	Nannyberry Viburnum
Viburnum	plicatum tomentosum	Doublefile Viburnum
Viburnum	prunifolium	Blackhaw Viburnum

PERMITS, BONDS AND CERTIFICATION

No person shall plant, treat, spray or prune a street tree or hire an ISA certified arborist to care for a street tree unless the Tree Board or its designee shall have first granted a proper permit. Such permits may be issued to property owners or to certified arborists.

No person shall remove a street tree unless the Tree Board or its designee shall have first granted a proper permit. Such permits may be issued only to certified arborists.

Every permit issued by the Tree Board or its designee shall specifically describe the work to be done, be issued according to the seasonal aptness of the proposed work, and be valid for a period of sixty (60) days from issue date unless extended by a board decision.

Each applicant firm having an ISA Arborist's Certification must provide evidence of possession of liability insurance in the minimum amounts of three hundred thousand dollars (\$300,000.00) (per occurrence) for death or bodily injury and fifty thousand dollars (\$50,000.00) (per occurrence) for property damage and the insurance policy shall name as "additional insured" and indemnify the city, its elected or appointed officers, employees and agents, from the cost of defense and/or payment of any claim or judgment for damages.

The Arborist's Certification fee shall be twenty-five dollars (\$25.00) paid in advance to the Tree Board at the Office of the City Clerk-Treasurer, 70 East Monroe Street, Franklin, Indiana, 46131.

Cancellation or other termination of any insurance policy issued for or in compliance with the provisions of this chapter shall automatically terminate any arborist's certificate, unless another policy complying with the provisions of this chapter shall be provided and in full force and effect at the time such cancellation or termination becomes effective.

Upon certification, each arborist must file with the City Clerk-Treasurer a cash bond of up to five hundred dollars (\$500.00) as security against any damage to street trees resulting from the pursuit of such endeavors as described herein. The bond shall be refunded to the arborist (less any assessment by the Tree Board for damages caused by the arborist) upon certification being withdrawn by the arborist or revoked by the Tree Board.

The Tree Board may revoke certification when it has evidence of the arborist's failure to apply principles of good arboriculture, and may hear appeals of any person whose application for an arborist's certificate has been denied.

