

**PARK DISTRICT
OF OAK PARK
ARBORICULTURAL
PROCEDURES
MANUAL**



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of OAK PARK

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1.0 Intent

All persons, including Park District staff, contractors and agents performing arboricultural care of Park District trees and/or performing work affecting Park trees shall comply with the standards set forth in this Manual. Any conflicts shall be resolved by the Grounds Maintenance Supervisor in consultation with the Superintendent of Parks & Planning based on Best Practices standards as set forth by the International Society of Arboriculture and the American National Standards Institute.

This Manual may be amended at any time that experience, new research or laws indicate that improved methods or circumstances make it advisable.

2.0 Purchase/Planting

2.1 Species – The Park District is committed to developing a diverse and healthy urban forest. The goal is to reach and maintain a tree population that meets the Best Management Practice standard of 20:10:5 (no more the 20% of a single Family, 10% of a single Genus, and 5% of a single species) with preference given to native species.

- A. “Preferred Species” are those species which best meet the Park District’s long-term goals for diversity, appropriateness, maintenance and aesthetics in relation to the space, soils and special needs of the Park District. This is the Park District’s list of prioritized species for planting on Park property.
- B. “Deferred Species” are those species that are currently not approved for planting within the parks. Each deferred species listed in Attachment 2 sets forth the reason(s) it is so designated.
- C. The Superintendent of Parks & Planning and the Grounds Maintenance Supervisor will review the preferred and deferred species lists annually as part of the regular purchasing cycle.

2.2 Planting Stock Requirements - The Park District’s current planting stock requirements are as follows:

- A. Size - Unless otherwise specified, all trees shall be of one a half inches to two and a half inches (1½-2½”) in diameter measured six inches (6”) above ground level.
- B. Grade - All trees shall be “specimen quality” having comparatively straight trunks, well developed leaders and tops, and the roots shall not only be characteristic of the species, and its cultivars, but also shall exhibit evidence

of proper nursery pruning practices. At the time of planting, all trees must, have a full healthy crown, be free of mechanical injuries and display no other objectionable features that will affect the future form, health and beauty of the plant.

- C. Purchase Condition – All trees purchased shall be balled and burlapped. No containerized nursery stock shall be used unless specifically authorized.

2.3 Locations and Spacing – The following tree location and spacing requirements shall apply throughout the Park District.

- A. Distance from Infrastructure - To allow for maintenance, minimize infrastructure damage and promote line of sight safety, trees shall be planted at least fifteen-feet (15') from driveways and alleys. In addition, to provide adequate illumination as intended, no tree shall be planted closer than ten-feet (10') from an existing utility pole or walk light standard. Exceptions to this rule may be made by the Superintendent of Parks & Planning or the Grounds Maintenance Supervisor when circumstances warrant and public safety is not threatened.
- B. Distance Between Trees – Spacing of trees is a function of local site conditions, the species or cultivars used, and their mature height, spread and form. Generally, all trees that are large at maturity shall be spaced a minimum of thirty feet (30') center-to-center unless otherwise determined by the Superintendent of Parks & Planning or the Grounds Maintenance Supervisor; and all intermediate/ornamental trees shall be spaced a minimum of twenty feet (20') center-to-center unless otherwise determined by the Superintendent of Buildings & Grounds or the Grounds Maintenance Supervisor.
- C. Overhead Utility Conflicts – Only small-growing trees shall be planted under overhead power lines. Trees planted to the side of power lines shall be carefully selected for mature habit to minimize future conflicts.

2.4 Methods of Tree Planting and Support

- A. Tree Planting Stock Type – All trees intended for planting shall be balled and burlapped prior to moving unless otherwise specified.
- B. Tree Planting Pit Size – Planting pits shall be dug at least twice the diameter of the root ball in order to accommodate the roots without crowding.
- C. Tree and Plant Planting Pit Depth - The planting pit shall not be dug deeper than the depth of the root ball. The root ball will be placed on undisturbed subgrade. The resulting hole shall place the root flare of the tree at or not more than one and a half inches (1½") above the grade of the surrounding

soil. Trees shall be planted no deeper than previously grown with due allowance for settling.

- D. Containers –When containers are used in the packaging and delivery of trees, the container shall be removed before planting.
- E. Baskets – When baskets are used in the packaging and delivery of balled and burlapped trees, the basket shall be removed before planting.
- F. Twine – All non-biodegradable twine used in the packaging of a balled and burlapped tree, shall be removed and discarded. If biodegradable, all twine encircling the trunk and the top half of the ball shall be cut away. Whenever possible, burlap wrapping should also be removed.
- G. Trunk Wrapping and Staking – Tree trunks shall not be wrapped and guyed at time of planting. Approved burlap wrap may be seasonally used if trees prove to be susceptible to cracking or mechanical damage. All tree wrap shall be removed the following spring. Staking of trees shall not be used unless deemed necessary for public safety or the survival of the tree.
- H. Backfill – In most instances, the backfill around the ball shall be the same soil as that which was removed from the hole; however, in cases where rocks, stones, etc., are encountered, top soil shall be used.
- I. Berm – A shallow berm of soil, approximately three (3") to four (4") inches high shall be formed just inside the edge of each planting hole to serve as a water reservoir.
- J. Mulching – A three-inch (3") layer of mulch shall be placed at an even depth around the tree on the interior of the berm. Mulch shall be pulled away from the trunk so as not to be touching the trunk. *Volcano-mulching*, as defined in Section 10 is not a permitted mulching technique.

2.5 Early Maintenance – It is imperative that proper care takes place after planting to promote the early healthy development of the tree. The following maintenance requirements shall apply for the first three years after tree planting:

- A. Watering – Spring and fall planted trees shall get a thorough watering on the day of planting and will be watered one-two times per week thereafter during the then current and next growing season. When natural precipitation maintains good soil moisture, watering for that period can be delayed until the next cycle.

- B. Training Pruning – Training pruning refers to the five-step method of pruning young trees to establish good form and improve branch structure. This type of pruning occurs twice.

The first pruning event is at the time of planting and consists of the removal of broken, diseased, dying or dead branches.

The second pruning event occurs three years after planting and shall include the following steps:

- Step 1 – Remove broken, diseased, dying or dead branches.
- Step 2 – Select a central leader and remove competing branches.
- Step 3 – Select the lowest permanent scaffold branch.
- Step 4 – Select scaffold branches and cut back or remove competing branches.
- Step 5 – Select temporary branches.

All pruning practices shall conform to Section 5 of the American National Standards Institute A300-2001 Standards.

3.0 Pruning

Pruning shall be done to maintain a four (4) year pruning cycle. Pruning shall comply with the American National Standards Institute pruning and safety standards set forth in ANSI A300, 2001: “Standard Practices for Tree Care Operations, and ANSI Z133.1, 2002): “Safety Requirements for Tree Care Operations, the American National Standards Institute, Inc.”.

- A. Types of Pruning – All pruning activities to be performed on Park District trees shall conform to the following ANSI pruning types:

- 1) Training – Training refers to the five-step method of pruning to establish good form and improve branch structure on young trees .
- 2) Cleaning – Cleaning consists of selective pruning to remove one or more of the following parts: dead, diseased, crossing, and/or broken branches. Branches of all sizes may be removed for this type of pruning. There shall be no minimum size restriction.
- 3) Raising – Raising consists of selective pruning to provide vertical clearance.

To the extent possible, pruning shall maintain the crown shape and symmetry typical of the tree species being pruned. Pruning shall

allow free passage of pedestrians and vehicles. In order to achieve this objective, all large established trees shall be pruned to allow eight feet (8') of clearance over sidewalks, and sixteen feet (16') of clearance at curbside. This type of pruning will guarantee clearance over the sidewalk and street until the next cycle.

- 4) Reduction – Reduction consists of selective pruning to decrease height and/or spread. No limb over six inches (6") in diameter at the branch attachment shall be removed without the consent of the Grounds Maintenance Supervisor.
- 5) Thinning – Thinning consists of selective pruning to reduce density of live branches. No limb over six inches (6") in diameter at the branch attachment shall be removed without the consent of the Grounds Maintenance Supervisor.

B. In addition to the ANSI pruning and safety standards, the requirements set forth below shall be observed with regard to the pruning of all trees on Park District property. In the event of a conflict between the ANSI standards and the requirements set forth in this Section 3B, the requirements of Section 3B shall apply:

- 1) Topping – No topping of public trees shall be permitted.
- 5) Climbing Spurs – No spurs or climbing irons shall be used in trees except when trees are to be removed.
- 6) Wound Dressing – Although wound dressing will not normally be applied to pruning cuts, the Grounds Maintenance Supervisor may authorize the use of wound dressing if research or individual conditions show it to be appropriate.

The Grounds Maintenance Supervisor may modify individual requirements not inconsistent with this Manual and applicable Best Practice Standards when such modifications promote the health of trees and safety of persons and property.

4.0 REMOVALS

Healthy trees are an important component of the Parks, and contribute significantly to the quality of the park environment. It is the policy of the Park District to maintain park trees as long as they remain assets to the community and to remove park trees when they become a liability.

4.1 Tree Removal – There are many factors that contribute to transforming a tree from an asset to a liability. Disease, decay, and mechanical damage can cause a tree to be structurally unsound, and therefore unsafe. The location of a tree may also cause it to be unsafe in the form of interfering with programming and activities. It is the policy of the Park District to base tree removals on the following safety related criteria (and therefore liability):

- A. Reasons for Removal – A tree may be potentially removed when the Superintendent of Parks & Planning, the Grounds Maintenance Supervisor or a Park District-designated arborist concludes that any of the following conditions apply:
- 1) An elm is infected with Dutch Elm Disease and it is not possible to remove all of the disease by pruning. (See Village Code, Sections 25-2-1 through 25-2-4).
 - 2) A tree is infected with another contagious and fatal disease.
 - 3) The tree is dead.
 - 4) There is a substantial and imminent risk of failure which could cause injury or significant property damage, and corrective measures are neither feasible nor cost effective.
 - 5) A tree is injured by construction, lightning, vandalism, or auto accident and cannot be saved.
 - 6) More than fifty percent (50%) of the crown is missing or dying as a result of improper pruning, decline or storm damage.
 - 7) Species that may be considered high-risk adjacent to a park area that has frequent program activity.
 - 8) A tree is in the way of Park District-authorized construction project designed to benefit the community in general; rerouting of construction or alternative tree protection measures are not feasible.
 - 9) A tree is almost totally obstructing growth of an adjacent tree specimen that is clearly superior (based on species, condition and location).
 - 10) Unauthorized (volunteer) trees recently planted that do not meet requirements due to species, spacing or location.
 - 11) A tree trunk is growing into and damaging a fence, building or other structure.

- 12) Large-growing tree species under power lines which cannot be pruned for adequate clearance without severely compromising the tree's appearance or long-term survival.
- 13) A serious chronic condition exists which will result in tree death before its normal lifespan (e.g., an entire trunk is completely encircled with girdling roots).
- 14) A tree trunk (not just roots) has grown into and is lifting a driveway apron or sidewalk, creating a high-risk condition. Procedures being undertaken, and procedures to alleviate the risk will kill the tree and alternate measures for alleviating the risk are not possible.

4.2 Stump Grinding - The stumps of all removed trees shall be ground to a depth of at least eight inches (8") below the ground level. The soil cavity shall be filled with clean topsoil and the area leveled and seeded. If the area where the tree is removed is to be paved, the stump shall be removed to a suitable depth to allow adequate paving. No tree shall be planted in the location of a tree stump unless no other space is available.

5.0 FERTILIZATION OF PARK TREES

The Park District does not, as a policy, fertilize trees.

6.0 PESTICIDES ON PARKWAY TREES (Herbicides, Insecticides, Fungicides, etc.)

The Park District, with one exception, does not, as a policy, use pesticides of any sort on its parkway trees. The exception is the elm injection program.

7.0 CABLE/BRACING

The Park District does not, as a policy, cable/brace trees. If cabling/bracing is warranted, all work shall conform to Section 35.1 through 41.5.2 of the American National Standards Institute," ANSI A300, 2001 "Standard Practices for Tree Care Operations"

8.0 GLOSSARY OF TERMS

Best Management Practices: Practices considered by the profession to be the current standard for the industry.

Cultural: Any activity that modifies the structure or affects the internal function of a tree.

Deferred Species: A species that is currently not acceptable to plant on PDOP property.

Preferred Use Species: A species that will currently be planted on PDOP property in preference to other species.

Root Protection Zone (RPZ): An area around a tree in which protection measures must take place.

Volcano Mulching: The piling of mulch in a mound against the base of the trunk. This practice is an unacceptable form of mulching.

ATTACHMENT I

PDOP PREFERRED SPECIES

(natives less than 1% of population)

Aesculus octandra	Yellow Buckeye
Aesculus pavia	Red Buckeye
Betula papyrifera	Paper Birch
Carpinus caroliniana	American Hornbeam
Carya ovata	Shagbark Hickory
Cladastrus kentukea	American Yellowwood
Cornus florida	Flowering Dogwood
Cotinus obovatus	American Smoketree
Diospoyros virginiana	Common Persimmon
Fagus grandifolia	American Beech
Hamamelis virginiana	Common Witchhazel
Ilex opaca	American Holly
Juglans nigra	Black Walnut
Liquidambar styraciflua	Sweetgum
Ostrya virginiana	American Hophornbeam
Nyssa sylvatica	Black Tupelo
Platanus occidentalis	American Sycamore
Pseudotsuga menziessi	Douglas Fir

ATTACHMENT II

PDOP DEFERRED SPECIES

Acer...	Maples	genus exceeds 10% of population
Celtis occidentalis	Common Hackberry	species exceeds 3% of population
Cercis canadensis	American Redbud	species exceeds 3% of population
Fraxinus...	Ashes	pest susceptibility
Gleditsia triacanthos	Honeylocust	species equals 3% of population
Malus...	Crabapple	genus exceeds 10% of population
Morus...	Mulberry	undesirable species
Pinus strobus	White Pine	species exceeds 3% of population
Quercus...	Oaks	genus exceeds 10% of population