

## **City of Easton**

### **Arboricultural Specifications and Standards of practice**

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## **1. Intent**

This Arboricultural Specifications and Standards of Practice for the City of Easton define the *best management practices* for the arboricultural care of City owned trees. All work performed on, or affecting, City trees shall comply with the Arboricultural Specifications and Standards of Practice and all pertinent tree-related ordinances. These minimum standards apply to all city staff, residents, and contractors.

The Arboricultural Specifications and Standards of Practice may be amended at any time that experience, new research or laws indicate that improved methods or circumstances make it advisable. The City Forester with the assistance of the Shade Tree commission may make recommendations at any time for amendments to these Arboricultural Specifications and Standards of Practice.

## **2. Species of Trees:**

A. All trees must be selected from the list of approved trees as contained in the list "Street Trees for the City of Easton" or in the booklet "Street Trees for the City of Easton". These lists are divided into three groups:

Group 1 – Small trees recommended for planting strips less than three (3') feet wide.

Group 2 – Medium trees recommended for planting strips three to four (3' -4') feet wide

Group 3 – Large trees recommended for planting strips more than four (4') feet wide.

B. Deferred Species – There are a number of species that are currently inappropriate for planting on the streets of Easton. See end paragraph of Street Trees for the City of Easton. There are various reasons and criteria for placing species on the deferred list. The first is high-risk/high maintenance. Among other problems are fruit, thorns, nuts, staining of sidewalks and weak wood.

C. The City Forester in conjunction with the Shade Tree Commission shall review the list of general and deferred species every three years to determine the status of each existing species or to add additional species or cultivars with proven adaptability and value.

D. It is desirable to limit the number of different species growing in one area. To this end, no more than four (4) species should appear in a single block.

## **3. Planting**

A. Size: Unless otherwise specified by the City Forester, all trees shall be at least 2 inch caliper measured six inches above ground level and shall be at least 9 feet in height

B. Grade: All trees shall have comparatively straight trunks, well developed leaders and tops, and the root shall not only be characteristic of the species, and its cultivars, but also shall exhibit evidence of proper nursery prune 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. The homeowner can assure him/herself of obtaining trees meeting the above standards by making his/her purchase from a reputable nursery.

C. Type: Unless otherwise specified by the City Forester, all trees for street use shall be balled and burlapped, being sure the burlap is natural and not of the artificial nylon type.

D. Planting Season: Planting is preferable but not exclusive during April 1 to June 30 and September 1 to December 1. No planting shall be done when the soil is excessively wet, frozen or otherwise in unsatisfactory condition for working as determined by the City Forester.

#### **4. Locations and Spacing**

A. Minimum Width: No tree should be planted in a tree lawn area of less than 5 feet in length. Exceptions to this rule may be made by the City Forester when circumstances warrant. No tree shall be planted in an area or a container which does not allow for proper development, either at the time of planting or based on the estimated size of the tree at maturity. All trees shall be planted in the middle of the tree lawn.

B. Distance from Infrastructure: To allow for maintenance, minimize infrastructure damage and promote line of sight safety, trees shall be planted at least 10 feet from driveways and alleys, 20 feet from street intersections, 10 feet from a crosswalk, and 5 feet from valve boxes. In addition, to provide adequate illumination as intended, no tree shall be planted closer than 10 feet from an existing utility pole or streetlight standard. Exceptions to this rule made be made by the City Forester when circumstances warrant and public safety is not threatened.

C. Distance between Trees: Spacing of trees shall be determined by the City Forester according to local conditions, species, cultivars or varieties used, and their mature height, spread, and forms. Generally all large trees shall be planted 40 to 60 feet on center, all medium trees shall be planted a minimum of 30 feet on center, and all small trees shall be planted a minimum of 20 feet on center.

D. Streets without Curbing: All planting on streets without curbs must have the special permission of the City Forester who shall determine the tree's location so it will not be injured or destroyed when the street may have curbing installed.

E. 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.

F. Modifications: The above minimum spacing standards may be modified by the City Forester if conditions warrant and public safety is not threatened.

#### **5. Methods of Planting and Support**

A. All planting stock 2 to 2 ½ inches in diameter or greater, shall be balled and burlapped in biodegradable material prior to moving. If in some circumstance bare rooted stock is utilized the roots shall be protected from drying out.

B. All coniferous trees shall be planted balled and burlapped, basket, and/or planted with a mechanical tree mover approved be the City Forester. Balled roots should be prevented from drying out at the surface of the ball and protected against injurious freezing.

C. Pits dug for planting of bare-rooted plants shall be a minimum of 12 inches larger in diameter than the diameter of the root system so as to be of sufficient size to accommodate the roots without crowding. For balled trees the pits shall be a minimum of 12 inches larger in diameter than the diameter of the ball of soil to allow proper backfill and root development.

D. 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 1 inch above the grade of the surrounding soil. Plants shall be planted no deeper than previously grown with due allowance for settling. In poorly drained soil, artificial drainage shall be provided to properly drain the soil about the roots or a tolerant species selected.

E. When baskets are used in the packaging and delivery of balled and burlapped trees, as a minimum, the top half of the basket shall be removed before planting. When half baskets are used, no removal of the basket is required.

F. Care must be taken to avoid non-biodegradable twine and burlap. When non-biodegradable twine or burlap is found to be used it must be removed completely. All twine and burlap encircling the trunk and the top half of the ball shall be removed.

G. Tree trunks need not be guyed and wrapped at time of planting unless so stated by the City Forester. If wrap were to be used it should be removed the following spring. If staking of trees is deemed necessary for the survival of the tree due to windy or other conditions, supports shall be fastened so that they will not girdle or cause serious injury to the tree or endanger the public safety. All stakes, fasteners, guys, etc. should be removed the following spring if at all possible, but in no case shall they remain more than 2 years unless safety is involved and appropriate steps taken to protect the tree from girdling.

H. All plant pits shall be dug with vertical sides and flat bottoms. The planting mixture shall consist of topsoil improved by the addition of humus. Thoroughly incorporate humus with topsoil in the proportion of 1 part humus to 4 parts topsoil plus 5 pounds of bone meal per cubic yard. The mixing shall be done preferably by mechanical means on the planting site. In no case shall rock, concrete or construction debris be allowed to remain in the planting pit. This is a preferred mix which can be altered by the City Forester at his discretion for the betterment of the plant. Fertilizer packs may be placed in the planting holes at this time. 4 or 8 year slow release packets are preferred. While backfilling soil shall be tamped very 4 inches and watering shall accompany the backfilling. After backfilling is complete the pit the soil should be firmly tamped

I. A shallow berm of soil, approximately 3 to 4 inches high shall be formed just inside the edge of each planting hole to serve as a water reservoir.

J. A fiber matting of the (Soil-Check) variety with a three-inch 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* is not an appropriate mulching technique. The placing of stone, cement, bricks, or other impervious pavement around the trunk of the tree is prohibited. An area of at least 6 square feet around each tree shall preferably be covered by a 3 inch layer of mulch.

K. Pruning at the time of transplanting shall consist mainly of removing broken, dead, crossed and rubbing branches and any remedial pruning necessary to improve the plants basic branch structure. The central leader shall not be removed, shortened or otherwise destroyed.

## **6 Early Maintenance**

A. Spring and fall planted trees shall get a thorough watering on the day of planting. All newly planted trees, spring and fall, will be watered every ten days during the next growing season. When natural precipitation maintains good soil moisture, watering for that period can be delayed until the next ten-day cycle.

B. Frequent and thorough inspections shall be made to determine when measures for the control of diseases, insects, and weeds shall be taken. Plants in a weakened condition following transplanting may be more susceptible to insects and disease than are vigorously growing trees and shall be monitored appropriately. If it becomes necessary to spray, insecticides or fungicides that are recommended for safe and effective control shall be approved by the City Forester and applied in accordance with State and Federal Standards, by a licensed Tree Surgeon who currently holds a valid Pennsylvania Pesticide Applicators License issued under the Pennsylvania Pesticide Control Act.

C. Pruning shall be practiced subsequent to transplanting and as necessary thereafter to assure sturdy crotch development. Pruning practices to be followed the first few years following planting shall consist of removing dead, broken, or injured branches and the removal of water sprouts.

## **7 Container Plantings**

A. Container planting shall only be done if all other options are exhausted. No container may be placed in any manner that would constitute a visibility hazard. The planting medium shall be of sufficient volume to support and sustain plant materials, and the City Forester shall approve the design and construction details.

B. the Responsible party for the maintenance of containers and plants shall be the property owner not their approved contractor or landscaper.

## **8 Tree Wells and Sidewalk Cutouts**

A. The design of any tree well or sidewalk cutout for a tree shall be such as to provide adequate drainage and provide area for water accessibility. All tree wells or cutouts shall be approved by the City Forester. All effort should be made for the dimensions for tree wells or sidewalk cuts to be at least 5 feet in length and 3 feet wide. In the situations where these dimensions are not possible the City Forester shall make the final decision.

B. Any tree well or sidewalk cutout not serving its designed function because the tree has been removed and is not to be replaced shall be restored to a condition satisfactory to the City Forester.

## **9 Pruning**

A. Pruning shall follow the current National Arborist Association Arboricultural Standards for Pruning of Shade Trees. No “topping” or “dehorning” of trees shall be permitted except with written permission of the City Forester.

B. All established trees shall be pruned to sufficient height to allow free passage of pedestrians and vehicular traffic. A clear height of 10 feet over sidewalks and 12 feet over streets shall be maintained, except those streets that are subject to truck traffic which shall have a clearance of 16 feet.

C. All cuts shall be made with a saw or pruner and only outside the branch collar. No stubs shall be left. No spurs or climbing irons shall be used in trees, except when trees are to be removed.

D. All dead, crossed, and rubbing branches shall be removed.

E. Branches that block the view of street signs or traffic control devices shall be pruned so that the view of the sign or device is clear to oncoming traffic.

F. All tools being used on a tree suspected to be infected with a contagious disease shall be disinfected before being used on another tree.

G. Although wound dressing will not normally be applied to pruning cuts, the City Forester may authorize the use of wound dressing if research or individual conditions show it to be appropriate. Usually a wound dressing will be used for purely cosmetic purposes.

H. In the pruning of street trees, it must constantly be kept in mind to preserve, as much as possible, the character and natural shape of each tree and avoid artificial shaping. Deep vee cuts shall not be allowed.

I. Whenever streets are to be blocked off to public services, the Police and Fire departments shall be notified of the location and the length of time the street will be blocked. Notification shall be given these departments upon the removal of such barriers or if such barriers are to remain longer than originally expected.

J. To protect the public from danger, suitable street and sidewalk barriers, highway cones, or signs shall be used when pruning a tree. Flashing signals shall be placed on all barriers or obstructions remaining in the street after dark.

K. The stumps of all removed trees shall be cut to at least 4 inches below ground, topsoil shall be placed and the area seeded and leveled.

L. The City Forester may modify individual requirements not inconsistent with these standards that promote the health of trees and safety of persons and property.

## **10 Removals**

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

**10.1 Tree Removals** –All removals are to be done by City of Easton licensed Tree Surgeons. The property owner should first enlist the services of a licensed Tree Surgeon; it is the Tree Surgeons responsibility to get the proper permit not the property owner. It is also the Tree Surgeons responsibility to get the property owners signature on the permit before any work is performed. The Tree Surgeon is responsible for all work performed, clean up, debris removal and reseeding of removed stumps or other damaged areas. 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 a liability. The location of a tree may also cause it to be a liability in the form of interfering with traffic visibility. It is the policy of the City to base tree removals on criteria of safety (and therefore liability). A tree may be potentially removed when the City Forester concludes that any of the following conditions apply.

- A. The tree is dead.
- B. 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.
- C. A tree is infected with a contagious and /or fatal disease.
- D. A tree is infested with insects so as to make it structurally unsound, unsightly, or beyond the help of artificial or other control.
- E. Trees are blocking vehicular view at an intersection or alley and pruning cannot bring the trees into compliance with City ordinance.
- F. A tree is injured by construction, lightning, vandalism, or auto accident and cannot be saved.
- G. More than 50 % of the crown is missing or dying as a result of decline or storm damage.
- H. Tree is in the way of City authorized project designed to benefit the community in general; rerouting of construction or alternative tree protection measures are not feasible (e.g. road widening, main break repair).
- I. Tree is almost totally obstructing growth of an adjacent tree specimen that is clearly superior (based on species, condition and location).
- J. Tree trunk is growing into and damaging a fence, valve box, utility pole, or fire hydrant.
- K. Large-growing species under power lines cannot be pruned for adequate clearance without severely compromising the tree's appearance or long-term survival.
- L. A serious chronic condition exists which will result in tree death before its normal lifespan (e.g. entire trunk is completely encircled with girdling roots).

M. Tree trunk (not just roots) has grown into and is lifting a driveway apron or sidewalk, creating a high-risk condition. Procedures being undertaken to alleviate the risk will kill the tree and alternate measures for alleviating the risk are not possible.

A final decision on a tree removal request will always try to balance the needs of the adjacent property owner, the City and its citizens.

## **10.2 Stump grinding/removal**

The stumps of all removed trees shall be ground to a depth of at least 4 inches below the ground level. The area shall be filled with clean topsoil and the area leveled and seeded. If the area where the tree is removed from 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. In this case the stump shall be removed to a depth of no less than 2 feet.

## **11 Cavities**

Extensive cavity work should be performed on trees only if they are sufficiently high in value to justify the cost. All cavity work shall be done by a licensed City Tree Surgeon or Certified Arborist with the approval of the City Forester.

## **12 Cabling and Bracing**

As a general rule, cables should be placed approximately 2/3 of the distance between the crotch and top branch ends. Rust resistant cables, thimbles, and lags should be used. The ends of the cable should be attached to hooks or eyes of lags or bolts, and thimbles must be used in the eye splice in each end of the cable. In no instances shall cables be wrapped around a branch. Cabling should only be done by a licensed City Tree Surgeon or Certified Arborist with the approval of the City Forester.

## **13 Fertilization of City trees**

A. The City does not as a policy; fertilize street side trees with the exception of fertilizer packs possibly being used in conjunction with newly planted trees. A resident, who wishes to fertilize the street trees in front of his residence, shall request permission from the City Forester. The City Forester has the authority to approve or deny a fertilization request. The person requesting permission to fertilize must submit the following information: type of fertilizer, timing (week to be applied), quantity to be used, and reason for fertilizing.

## **14 Pesticides on City Trees (Herbicides, Insecticides, Fungicides, Etc.)**

. The City does not as a policy, use pesticides of any sort on its street side trees.

A. Permission - person who wants to apply restricted-use pesticides shall first enlist the services of a Tree Surgeon or Arborist who is certified and currently holds a valid Pennsylvania Pesticide Applicators License issued under the Pennsylvania Pesticide Control Act. The Surgeon or Arborist shall apply for the proper permit from the City Forester. The person requesting permission to spray must supply the following information: type of pesticide, herbicide, fungicides, etc., timing (week to be applied), quantity to be used, and reason for spraying.

B. Application – Pesticide application shall be avoided unless conditions warrant.

1. Suitable precautions shall be taken to protect and warn the public that pesticide application is being done.

2. Pesticide application shall be done only for the control of specific diseases or insects with the proper materials in the necessary strength, and shall be applied at the proper time to obtain the desired control. All application practices shall conform to the Pennsylvania Pesticide Control Act.

## **15 Special Situations**

A. Any person, corporation, partnership or other legal entity which desires to have action taken on street side trees in a manner which does not conform to the Shade Tree Ordinance or these Arboricultural Specification and Standards of Practice of the City of Easton , may apply to the City Forester for a variance.

B. Property Owners or City employees who place lights on street side or park trees shall not attach them so tightly that they might interfere with the tree's health. In addition when such trees are to be pruned the property owner shall remove them to allow for safe pruning. Decorative lights shall be loosened or removed every two years.

## **16 Licenses and Permits**

City of Easton licensed Tree Surgeons shall have their Tree Surgeons License on the job site. If the license owner leaves the job site for any reason, work on the tree from the ground or otherwise must cease. Ground work or cleanup can continue. The permit for each specific job must stay on the job at all times, in the event that the permit is taken off site, all work must cease until the permit is back on site. A copy of the Shade Tree Permit for the tree that is being worked on shall be shown to the City Forester, his representative or a Police Officer on request. An Arborist or Tree Surgeon must also show their Tree Surgeons License to the City Forester, his representative or a Police Officer on request. It is the licensed Tree Surgeons responsibility to secure a permit for any tree work, not the property owner, it is also the Tree Surgeons responsibility to see that the property owner signs the permit before any work is undertaken.