

CITY OF MOSCOW

ARBORICULTURAL SPECIFICATIONS AND STANDARDS GUIDE

**OUTLINE FOR THE ARBORICULTURAL
SPECIFICATIONS AND STANDARDS GUIDE**

**Ordinance No. 97-15
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SECTIONS:

I.	Introduction	1
II.	General Specifications.....	1
III.	Technical Specifications	3
A.	Planting	3
1.	Planting Standards.....	3
2.	Street tree and shrub spacing and location.....	4
3.	Shrub spacing and location	5
4.	Planting on Public Rights-of-Way	7
B.	Pruning and Removal Standards.....	7
1.	Pruning and removal standards	7
2.	Pruning methods and techniques.....	8
C.	Cabling, Bracing, Guying, Fertilizing and Pest Control.....	8
1.	Cabling, bracing & Guying standards	8
2.	Fertilizing standard.....	9
3.	Pest control standards.....	9
D.	Protection and Preservation During Construction Activities.....	9

SECTIONS:

I. INTRODUCTION.

Trees and shrubs on public and private property in Moscow constitute a valued and significant resource that markedly improves the quality of life of all residents and visitors to our city. In the spirit of preserving and enhancing our community forest, these specifications have been assembled by the Moscow Tree Committee for the following purposes:

- To increase chances of survival of planted trees and shrubs;
- To comply with, through proper arboricultural care, the existing safety codes of Moscow and the State of Idaho;
- To reduce and prevent future problems from tree breakage and disruptions in utilities provided by overhead lines;
- To reduce or eliminate breakage of sidewalks, curbing, and street pavement;
- To reduce public and personal liability associated with trees and shrubs;
- To educate and encourage the public toward greater and proper use of trees and shrubs; and
- To inform Moscow property owners of both new and existing rules for dealing with the street and alley rights-of-way associated with their adjacent property. Moscow's streets and alleys have various right-of-way widths that were set during platting and development of Moscow's many building projects. Even though most residents incorporate street and alley frontage into their landscaping plans, a significant portion of that frontage is city-owned right-of-way subject to long existing codes for the safety of pedestrians, drivers, and vehicles. (For specific details of these rights-of-ways, the City's Engineering Department may be consulted.)

In addition to enhancing public safety and the beautification of Moscow, it is important to have diversity in the plantings of our streets, parks, and private property. Having a great variety of trees and shrubs in our city not only adds to the aesthetics of the community, but also the diversity significantly reduces future problems with insects and plant pathogens. In urban and community forests which have little diversity, epidemics of insects and pathogens cause serious problems which are expensive for the city and private individuals to control or alleviate.

II. GENERAL SPECIFICATIONS.

Requirements for tree and shrub planting, removal, and maintenance operations:

- A. All work on public trees shall comply with the City of Moscow's "Community Forestry Ordinance".

- B. The Arboricultural Specifications and Standards Guide shall be adhered to at all times, but may be amended by the Moscow City Council at any time that experience, new research, or laws indicate improved methods, or whenever circumstances make it advisable, after consultation with the Administrator and the City of Moscow Tree Committee.
- C. Public trees shall be managed in such a manner as to promote their general health by providing the necessary cultural practices which may include pest control, fertilization, irrigation, staking, guying, wrapping, cabling, bracing and pruning.
- D. Trees shall be maintained in such a manner as not to endanger, interfere, or otherwise conflict with requirements of safe public use of an area.
- E. A permit must be obtained from the Administrator before any person, either for himself/herself or another, plants or removes any tree and shrub in or upon the public right-of-way of any street, alley, sidewalk, or other public place.
- F. It shall be unlawful for any person to engage in the business (for fee) of planting, pruning or removing trees and shrubs within the City without first procuring from the city a tree service contractor's license and certificate (see the Community Forestry Ordinance for license and certification requirements and procedures).
- G. All for -fee tree work shall be performed according to the latest revision of the American National Standards Institute Standard Z-133.1, Safety Requirements for Pruning, Trimming, Repairing, Maintaining Trees, and for Cutting Brush, a copy of which is on file with the Administrator. Private individuals are strongly encouraged to follow these standards.
- H. Authorized work on or with public trees or shrubs shall be performed properly and safely by competent personnel in a manner as to cause the least possible interference with or annoyance to others.
- I. Any injury to persons or damages to any improvement, vehicle, tree, shrub or structure while working with public trees or shrubs shall be promptly reported to the Administrator.
- J. Adequate barricades, warning devices, and flaggers shall be stationed along streets, sidewalks, and alleys as necessary for the safety of the public. Approval for street closures and types of barricades shall be requested from the Moscow City Engineer.
- K. Whenever electric or telephone lines, gas lines, water lines, television cable or other improvements, public or private, upon a public area will be affected or jeopardized by any authorized tree or shrub activity, the proper authorities of the utilities involved an/or the property owner involved shall be consulted prior to performing any work activity and all requested precautions by any such authority shall be complied with.

III. TECHNICAL SPECIFICATIONS.

A. PLANTING

1. Planting Standards

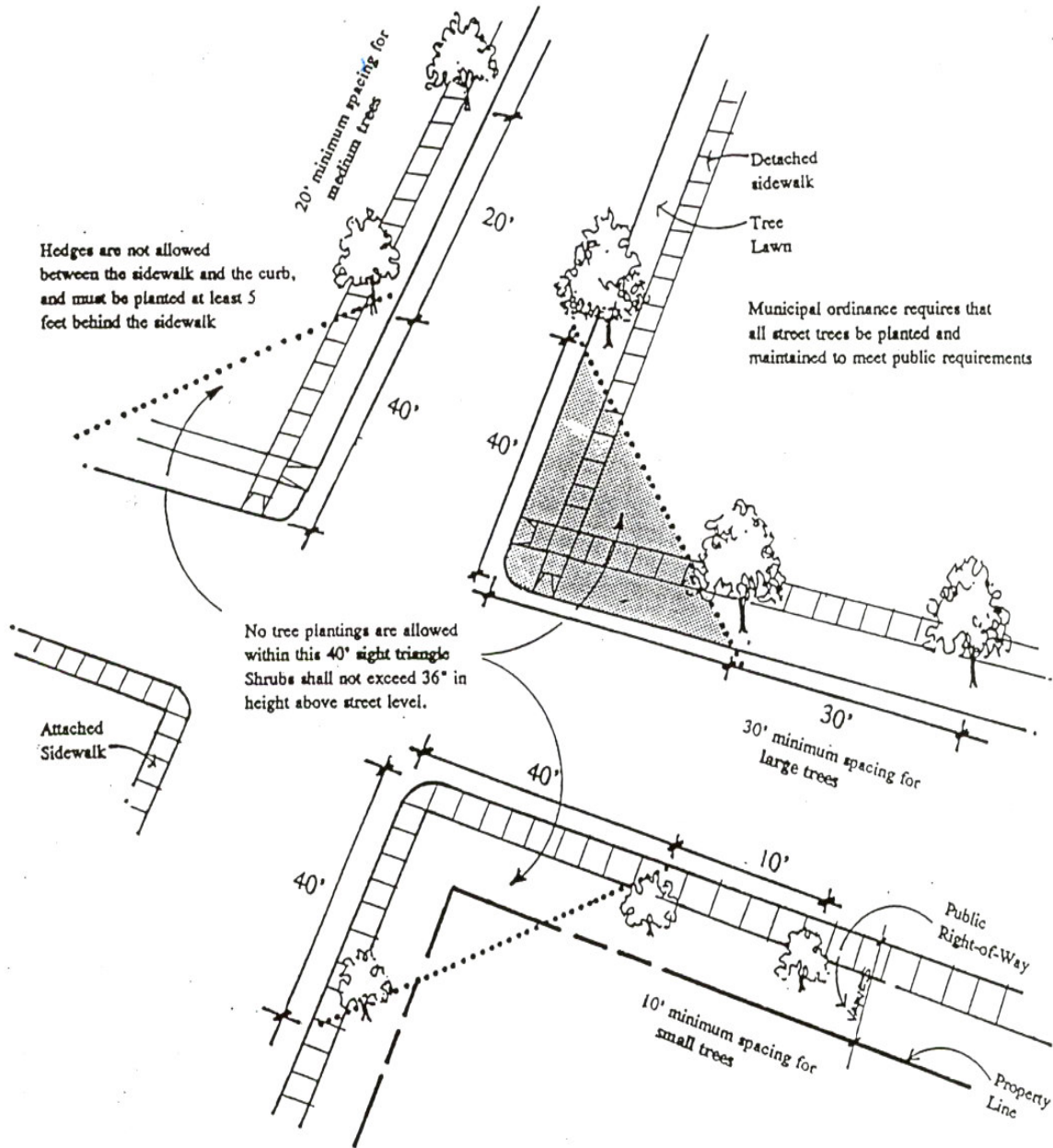
- a. The following site criteria shall be evaluated in determining planting locations:
 - (1) Safety;
 - (2) Probability of long term survival and health of the planting;
 - (3) Overall benefit to the community.
- b. Once the proper tree has been chosen for the proper space, it is suggested that balled and burlapped trees of 1 ¾” caliper at 6” above the soil line be planted in the public right-of-way portions of the adjacent property in order that chances for survival be increased. Appropriate woody plants should be disease free and conform to the current edition of the American Standard for Nursery Stock (a copy of which is on file with the Administrator).
- c. A diversity of species shall be encouraged in order to prevent disease and insect epidemics that frequently infest monocultures. It is a common goal of community forest managers to discourage planting of species which comprise more than 15% of the community forest.
- d. Species to be planted in the public right-of-way should be appropriately hardy, deep rooting, and have inherently strong branches and trunks. Certain species should not be planted within the public rights-of-way for reasons cited below:
 - (1) Inherently weak branches and high susceptibility to wind, ice, and snow breakage (e.g., poplars, willows, silver maple, box-elder maple).
 - (2) Susceptibility to Dutch Elm Disease (elms).
 - (3) Litter and thorn problems (e.g., Russian-olive and thorny honeylocust).
 - (4) View obstruction, vehicular safety (e.g., low branched conifers, dense shrubs, etc.).
- e. The following shall be the designation of species size:
 - (1) Small – trees that attain a mature height of 25’ or less.
 - (2) Medium – trees that attain a mature height of between 26’ and 50’.

- (3) Large – trees that attain a mature height of greater than 50’.
- f. In the restricted height zone at intersections and within 10 feet of a driveway or alley, only shrubs maintained at 36 inches or less above the plane of the street shall be planted.

2. Street tree spacing and location:

- a. At the intersection of roadways, no tree shall be planted within a sight triangle measuring 40 feet along the boundary of each of the intersecting roadways, measured from the point of intersecting curb lines, except where engineering standards indicate otherwise. (See Figure 1 and refer to existing sight triangle specifications in Idaho Code section 49-593).
- b. Trees should be centered in the planting strip when the distance between the curb and detached sidewalk is 8 feet or less.
- c. The spacing of public trees located in the public right-of-way shall be in accordance with the three species size classes as established. With the exception of trees planted in special plantings designated or approved by the Administrator and the Moscow Tree Committee, it is recommended that trees be planted no closer together than the following:
 - (1) Small trees.....10 feet.
 - (2) Medium trees.....20 feet.
 - (3) Large trees.....30 feet.
- d. In order to minimize sidewalk damage from roots, the minimum distance from tree to curb or sidewalk is recommended as follows:
 - (1) Small trees.....2 feet
 - (2) Medium trees.....2 ½ feet
 - (3) Large trees.....3 feet
- e. Where street lights are present that might be obscured, the minimum distance from tree trunk to light pole should be as follows:
 - (1) Small trees.....10 feet
 - (2) Medium trees.....20 feet
 - (3) Large trees.....30 feet
- f. In an effort to minimize tree damage due to power line maintenance, it is recommended that only small trees be planted where there are overhead power lines.
- g. No Tree shall be planted within 10 feet of any fire hydrant.

Street Tree Spacing and Location Requirements



Almost all streets within the city have rights-of-way that extend beyond the back of the curb line. This area is public property and is generally used for utilities, walks and landscaping. The width of this right-of-way varies considerably in different sections of town. A free written permit from Administrator is required prior to planting and or removing trees and or shrubs within the public right-of-way.

3. Shrub Spacing and Location:

- a. At the intersection of roadways within a sight triangle measuring 40 feet along the boundary of each intersecting roadway, shrubs shall not exceed 36 inches in height above the roadway.
- b. Shrubs in the public right-of-way must not interfere with pedestrian traffic or sight clearance for vehicle traffic.
- c. A 3 foot clear space shall be maintained around the circumference of fire hydrants except as otherwise required or approved by the Fire Chief. A 2 foot clear space shall be maintained around the circumference of public utility appurtenances (e.g. water meters, gas valve lids, telephone terminals, etc.).

4. Planting on Public Rights-of-Way

- a. No planting holes shall be dug or prepared until their location is approved by the Administrator via the permit system.
- b. Prior to planting, contact should be made with utility companies for underground electric or telephone lines, gas lines, water lines or any other improvements, public or private. Call 882-1974 "CALL BEFORE YOU DIG" FOR INFORMATION.
- c. Excavated planting holes that will be left open when work is not in progress, or which pose an immediate and considerable hazard to pedestrian or vehicular traffic shall be adequately barricaded with qualified warning devices.
- d. Soil, branches or other debris resulting from any tree or shrub planting shall be promptly removed. The work area shall be kept safe at all time.

B. Pruning and Removal

1. Pruning and Removal Standards:

- a. Any Public tree which because of growth habit, age, condition or disease becomes a public nuisance as defined by the Community Forestry Ordinance shall be maintained or removed to correct the problem.
- b. No tree shall be pruned in such a manner that its health will be impaired. An exception shall be allowed when necessary for the emergency relief of an immediate danger to persons or property. Any such emergency procedures must be reported promptly to the Administrator with plans for completion or follow-up work.
- c. The use of climbing spurs or spike shoes in the act of pruning trees is prohibited.
- d. No severed or partially cut branches shall be left in the upper portion of any tree being worked on after the tree workers leave the scene of the operation.
- e. Unless the tree work area is totally barricaded or otherwise kept safe for the public while pruning or removing trees, at least one responsible tree worker shall serve to coordinate safe operations on the ground when work operations are in progress.
- f. Stumps of public trees shall be removed to ground level or below unless special exception for good cause shown is granted by the Administrator.

- g. Excavations resulting from tree or shrub removal must be promptly filled in to normal ground level with appropriate backfill, free of debris and properly compacted.
- h. Public trees used for mechanical advantage shall not be damaged in the process of removing tree sections or other trees.
- i. Branches, logs or any other debris resulting from any tree pruning or removing shall be disposed of promptly and properly. The work area shall be kept safe at all time.

2. Pruning Methods and Techniques:

- a. Public tree pruning conducted by certified tree workers shall be according to the requirements of the latest revision of the American National Standards Institute, Inc. (ANSI) Tree Care Operations – Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices” (a copy of which Is on file with the Administrator). Property owners are encouraged to follow these standards.
- b. Trees shall be pruned in such a manner as to prevent branch and foliage interference with safe public passage. Clearance shall be kept to a minimum of 12 feet above the surface of the street and 8 feet over the surface of the public sidewalk or pedestrian way.
- c. Anyone pruning trees near electric lines shall follow the guidelines of the electric utility on file with the Administrator.

C. Cabling, Bracing, Guying, Fertilizing and Pest Control

1. Cabling, Bracing, and Guying Standards:

All public tree cabling, bracing and guying performed by certified tree workers shall be performed according to the requirements of the latest revision of the National Arborist Association Cabling, Bracing, and Guying Standard for Shade Trees (a copy of which is on file with the Administrator). Property owners are encouraged to follow these standards.

2. Fertilizing Standards:

When fertilizers are applied, applications shall be performed according to the latest revision of the National Arborist Association Standard for Fertilizing Shade and Ornamental Trees (a copy of which is on file with the Administrator). Property owners are encouraged to follow these standards.

3. Pest Control Standards:

- a. Any person engaged in the business of tree and shrub pest control shall maintain a current State of Idaho, Department of Agriculture Pesticide Applicator's License and be certified in the ornamental insect and disease categories. State reciprocity of current licenses is also accepted.
- b. All pesticides shall be evaluated for their worthiness and environmental impact. When pesticides are deemed necessary every attempt shall be made to use the least toxic alternative without sacrificing effectiveness.
- c. Ineffectual control, damage, injury, or death to plants, animals, or persons resulting from the use of pesticide shall be the responsibility of the operator/applicator.
- d. When applying pesticides, full compliance with all laws and ordinances providing for the safety of the public an safe an unobstructed passage of vehicles and pedestrians is required.

D. Protection and Preservation During Construction Activities

The following standards are intended to prevent unnecessary damage and destruction to public trees during construction activities:

1. Authorization must be given by the Administrator prior to:
 - a. Attaching or installing any materials, signs, cables, wires or other things potentially harmful to any tree.
 - b. Excavating into the root zone within the drip line of any tree. An exception shall be allowed for the emergency repair of utility services. Any such emergency procedures must be reported promptly to the Administrator together with plans for completion and/or follow-up work.
 - c. Treating the soil within the root zone of a tree with a soil sterilant which could cause significant damage to any tree.
2. All site or landscape plans involving public property shall show all existing public trees. Trees to be saved and removed shall be indicated. Every effort should be made to preserve desirable trees. Trees to be saved shall be marked prominently to prevent accidental removal.
3. All public trees which may be endangered by any excavation or construction of any building, structure, or street work, shall be protected by a substantial fence intended to protect the essential root and branch system of the tree. It is the

responsibility of the person(s) performing such work to erect said fence. All building material, dirt, or other debris shall be kept outside the barrier.

4. Heavy equipment should not repeatedly compact the soil over the root zone of existing trees. Restricted equipment access routes should be established.
5. Curb cuts should not be closer than 10 feet from the trunk of the tree unless special authorization is given by the Administrator upon good cause shown.
6. Persons shall avoid disturbing the soil grade under and around public trees. When a grade change requires excavation or fill, construction of a retaining wall outside the essential root system may be necessary to prevent soil disturbance, significant root damage and subsequent damage to the tree. It shall be the responsibility of the person performing such work to construct said retaining wall when necessary.
7. Persons shall avoid cutting surface roots wherever possible. When required, excavation involving root cuts should be done rapidly. Cuts on tree roots should be smooth and flush. Backfill should be done before the roots have a chance to dry out, and the tree should be watered immediately.