

# Arboricultural Specifications & Standards of Practice



Updated August 2023

## **ARBORICULTURAL SPECIFICATION AND STANDARDS OF PRACTICE**

This document has been developed in conjunction with the Tree Ordinance for the City of Manchester, Iowa, to detail the specifications and standards of practice concerning trees within the city.

### I. PERMITS

Before any street tree can be planted, or removed a permit must be obtained. This permit may be obtained <u>at no</u> <u>cost</u> from City Hall, 208 E. Main Street, Manchester, Iowa.

A tree permit will only cover the planting or removal of a tree. If the property owner is doing the work, proof of Homeowner Personal Liability Insurance may be required. If the property owner has hired another person or contractor to do the work, the contractor shall provide the City of Manchester with a Certificate of Insurance showing the following minimum required limits of coverage before permits will be issued:

Commercial General Liability Insurance with limits of not less than five hundred thousand dollars (\$500,000) per occurrence and Workers Compensation Insurance coverage at statutory limits on any and all employees.

Prior to digging or doing any underground work, utilities must be located. Locations can be obtained free of charge by calling Iowa One-Call; 1-800-292-8989.

## **II. PLANTING**

A. <u>Site Evaluation</u>: Not all sites are appropriate for trees. Before planting, thought should be given to how the mature tree will fit the site.

#### 1. Spacing

The spacing of the street trees is dependent upon the species size classes as established for the City of Manchester, Iowa. *(See Exhibit A.)* 

- Small Trees: no closer than 20 feet
- Medium Trees: no closer than 30 feet
- Large Trees: no closer than 40 feet

Exceptions will be made for special plantings designed or approved by a landscape architect.

#### 2. Distances

No tree planting is permitted where the distance between a curb and a detached sidewalk is less than 6 feet. No tree shall be planted closer than four (4) feet from the back curb or two (2) feet from the outer line of the sidewalk. In a terrace area with a 12 foot width or less, trees shall be planted to maintain 2/3 of the parkway width from the street, (i.e. 12 foot parkway plant 8 feet back of curb). In a terrace area with greater than a 12 foot width, trees must be at least 8 feet back of the curb. In areas without sidewalks, an allowance should always be provided in the terrace area for future construction of sidewalks. *(See Exhibit B.)* 

Trees shall be planted no closer than thirty (30) feet from an intersection as measured from the back of the curb of the intersecting street. Trees shall be no closer than ten (10) feet from any alley or driveway edge.

#### 3. Utilities

- a. No street trees, other than those low-growing species that do not attain a mature height greater than twenty (20) feet, shall be planted under or within ten (10) lateral feet of any overhead utility wire exclusive of service lines. (See Exhibit B.)
- b. No street trees shall be planted over or within five (5) lateral feet of any underground line.
- c. No street trees shall be planted within twenty five (25) feet of stop signs, stop lights, or fire hydrants.
- d. No street trees shall be planted closer than ten (10) feet to a water shut off, manhole, or sewer lateral.

- B. <u>Diversity</u>: Due to potential threat from pests or disease it is desirable to plant trees from a variety of tree species. An inventory of trees growing in the area where the new tree is planned should be taken to ensure diversity in the species, genus and family of tree.
- C. <u>Procedure:</u> To promote the healthy and continuous growth of any tree, care should be given to its planting. Proper procedures vary according to tree species and type. For detailed instructions consult a local nursery, the Iowa State University Extension Service or the local Trees Forever office.
- D. <u>Species:</u> To ensure trees planted in the right-of-way are suitable for urban areas, certain trees are recommended for planting, while certain species cannot be planted on street right-of-way.

#### **III. RECOMMENDED SPECIES**

No list of recommended trees is ever complete or static. New species and cultivators are developed and will prove useful, while old standards will be phased out. The following list, taken from Iowa State University Extension Service Bulletin (Pm-1492e dated October, 1998), should provide a broad selection of trees proven to be tough and attractive additions to the urban landscape. For a more updated list contact the Iowa State University Extension Service. If a tree is recommended in an updated Pm-1492e bulletin, it will be approved for planting in the street right-of-ways in the City of Manchester. The Street Superintendent shall also have the discretion to approve additional types of trees.

In all cases trees to be planted in the street right-of-way will not be less than one (1) inch in diameter of trunk at six (6) inches above ground.

This is a list of approved varieties and species that do well in an urban development. As new cultivars are developed, this list will be added to and some may be deleted. This list does not include some varieties that may be approved for planting in certain conditions.

For purposes of this document, allowable tree species are divided into categories based on tree size and available area for planting.

PARKING WIDTH: 6-8'	SMALL – LESS THAN 35' MATURE HEIGHT	
Tatarian Maple – tree form	American Hornbeam	Japanese Tree Lilac
Hedge Maple – tree form	American Hophornbeam	Cultivars: Ivory Silk, Regent, Summer Snow
Amur Maple – tree form	Ornamental Cherry	Serviceberry – tree form
Red Bud – tree form Flowering Dogwood – tree form	Shubert Chokeberry Crab Apple	Autumn Brilliance, Tradition
	Cian Apple	

Only small trees with a maximum height of 20 feet may be planted under utility wires, regardless of parking width.

PARKING WIDTH: 8-10'	MEDIUM – 35' TO 50' M	MEDIUM – 35' TO 50' MATURE HEIGHT	
Goldenrain Tree	Yellowwood	Macho Cork Tree	
Norwegian Sunset Maple	Washington Hawthorn	Cultivars: Red Spire, Autum Blaze, Capital	
Ruby Red Horse Chestnut	Pacific Sunset Maple	Ornamental Pear	
European Hornbeam	Paper Bark Maple	Cleveland Select, Aristocrat	
PARKING WIDTH: 10-12'	MEDIUM – 35' TO 50' MATURE HEIGHT		
Thornless Honey Locust	Turkish Filbert	Black Gum (grows best in low Ph soil)	
Bald Cypress	Ginkgo	Little Leaf Linden – all cultivars / Village Green	
Celebration Maple	Autumn Blaze Maple	Japanese Zelkova / Green Vase	

#### **PARKING WIDTH OVER 13'**

Sugar Maple – all cultivars Red Maple – all cultivars **Tulip Tree** 

LARGE TREE - GREATER THAN 50' MATURE HEIGHT White Oak English Oak Red Oak London Plane Tree

**Redmond Linden** Hackberry Seedless Cottonwood

All large trees must be planted in parking widths of 13 feet or greater.

### **IV. NOT ALLOWED**

Due to their susceptibility to storm damage, disease, their limited hardness or because they are considered unusually messy due to dropped fruit and/or limbs, the following tree species will not be allowed to be planted in any street right-of-way within the City of Manchester:

Chinese Elm	All Shrubs	European Mountain Ash
Red Elm-American Elm	Catalpa	Mountain Ash
Siberian Elm	Lombardy	White Ash – all cultivars
Popular	Tree of Heaven	Blue Ash
White Popular	Russian Olive	Green Ash – all cultivars
Popular (cotton bearing)	Black Locust	Willows and all weeping trees
Boilena Popular	Silver Maple	Weeping European Birch
American Sycamore	Sweet gum	All Evergreens (firs, spruces, conifers)
Pin Oak	All Fruit Trees	Mulberry
Box Elder	All Nut Trees	Osage Orange
Honey locust (thorny)		(Hedge Apple)

Shrubs – As defined in the City's tree ordinance, are not acceptable plantings in the street right-of-way. Any other plantings or ground cover planted in the street right-of-way shall not attain a height of eighteen (18) inches at maturity.

It is **ALSO NOT ALLOWED** to do any of the following to street/parkway trees:

- Damage, cut, carve, nail, bolt or set fire
- Attach any rope, chain, wire, cable for any reason
- Attach advertising posters or any other contrivance
- Allow any harmful gaseous, liquid, chemical, or solid substance come in contact
- Topping (which means the drastic removal of large branches, severely cutting back limbs to stubs larger than three (3) inches in diameter within the tree's crown to such a degree so as to remove the normal canopy and disfigure the tree. See Exhibit C)
- To patch any tree cavity with concrete or fill material of any kind
- To place or store any stone, brick, sand, concrete, or other material which shall impede the free passage of water, air, and fertilizer to the roots of any tree.

### **V. MAINTENANCE**

A. General: To promote their healthy and vigorous growth, trees should be pruned throughout their life span. Primary care and maintenance of street and parkway streets shall be the responsibility of the adjacent property owner. Bulletins and tree pamphlets are available from the Iowa State University Extension Office or the local Trees Forever office.

In order to allow the free passage of vehicular traffic and ensure trees will not obstruct or shade traffic control devices or the view of street intersections, all trees shall be trimmed so any overhanging portions shall be fourteen (14) feet over the paved portion of the street or the traveled portion of an alley.

Branches overhanging sidewalks shall be trimmed to a minimum height of seven (7) feet. Good pruning practices should be followed at all times. (See Exhibit D.) The possibility exists that in order to balance the tree, additional pruning may be necessary over the sidewalk to match the minimum height of the limbs hanging over the street.

It is the policy of the City that the difference of pruning heights between the street side and sidewalk should be no more than four (4) feet.

To ensure the ability of the motorists to see any traffic control device, trees shall be kept trimmed to the specifications listed here: Any traffic light or regulatory sign (as defined in the current edition of the Manual on Uniform Traffic Control Devices (MUTCD)) shall be visible from a distance no less than two hundred (200) feet as measured from the signal or sign to the center of the street. An exception has been made for No Parking Signs; these should be visible from a distance of one hundred (100) feet as measured from the sign to the center of the street.

B. <u>Street Trees</u>: If it becomes necessary in the opinion of the Street Superintendent to trim or remove any street tree, the Street Superintendent shall notify the adjacent property owner. Notification shall be first by contacting the owner by phone or in person. If the property owner is not able to be contacted in this manner, the notice shall be sent by certified mail.

Before a property owner can plant or remove any street tree, they must first obtain a permit. If the property owner is doing the work, proof of Homeowner Personal liability Insurance may be required. If the property owner has hired another person or contractor to do the work, the contractor shall provide the City of Manchester with a Certificate of Insurance showing the following minimum required limits of coverage:

Commercial General Liability Insurance with limits of not less than five hundred thousand dollars (\$500,000) per occurrence and Workers Compensation Insurance coverage statutory limits on any and all employees.

Removal of trees shall be complete and the work site shall be cleaned up properly. All tree trunks, limbs, branches, twigs, and brush shall be collected and disposed of in and authorized manner. Stumps and all surface roots shall be ground down below normal ground line, debris cleaned up and the hole shall be backfilled with black dirt.

Whenever the Street Superintendent is notified or becomes aware of dead or broken branch or limb in any street tree or a dead street tree which is in the imminent danger of falling and has the potential of thereby injuring an individual or causing property damage, the defending branch, limb, or tree shall be considered a hazard and be removed. Subsequent trimming of the tree which contained the dead or broken branch or limb should occur after notification of the adjacent property owner as outlined above. If the cost of trimming a tree exceeds one-half the cost of tree removal, the Street Superintendent may decide to remove the tree, rather than trim the tree.

C. <u>Private Trees:</u> The property owner is responsible for the maintenance of any tree on their property. Owners are encouraged to contact the local ISU Extension Office for the information on proper planting and care of trees. The Extension Service can help determine which tree species grow best in our area as well as which types of trees are most susceptible to disease.

If it becomes necessary to trim trees and shrubs on private property to comply with the specifications set forth in this document, the Street Superintendent shall notify the owner of the property upon which the tree or shrub is growing. Notification shall be first by contacting the owner by phone or in person. In the event the property owner cannot be notified in this manner, the notice shall be sent by certified mail.

If the property owner fails to comply with the trimming of the tree or shrub within thirty (30) days after receipt of the stated above notice, the Street Superintendent shall have the tree or shrub trimmed. The exact cost of the work shall be certified by the City Clerk to the County Auditor of Delaware County, Iowa to be collected with and in the same manner as property taxes.

Whenever the Street Superintendent is notified or becomes aware of a dead tree or broken or dead branch or limb in any private tree which has the potential of falling and thereby injuring any individual or causing property damage to adjacent property, the Street Superintendent shall declare the tree, branch, or limb a hazard and order the property owner to remove the hazard in an expedient manner.

If the property owner fails to remove the hazard, the Street Superintendent shall cause the hazard to be removed. For purposes of removing the hazard, City crews or a City agent shall be allowed on private property. Attempts should be made to notify the property owner before entering onto private property. The exact cost of such work shall be certified by the City Clerk to the County Auditor of Delaware County, Iowa, to be collected with and in the same manner as general property taxes.

## IV. REMOVAL

City Trees may be removed only when one or more of the following criteria are met:

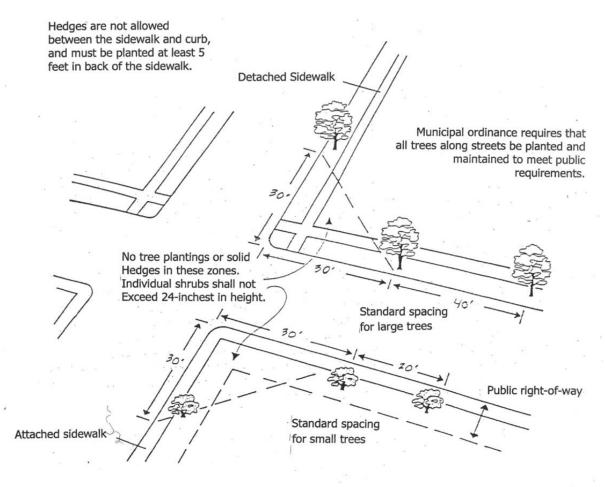
- A. The tree is infected with an epidemic insect or disease where the recommended control is not applicable and removal is the recommended practice to prevent transmission.
- B. The tree poses an extreme public nuisance because of its species, size, location or condition. The nuisance could be caused by fruit or seed drop, harboring of insects or excessive twig or limb breakage.
- C. The tree poses a severe safety hazard that cannot be corrected by pruning, transplanting or other treatments.
- D. The tree severely interferes with the growth and development of a more desirable tree.
- E. The aesthetic values of the tree are so low or negative that the site is visually enhanced by the tree's removal.
- F. Work improvements required to be made around the tree will kill or render it a hazard.
- G. Preservation of the tree, when adjacent property is developed, is not cost effective. The monetary value of the tree shall be compared to construction costs necessary to preserve the tree.
- H. The tree is causing cracking or raising problems with sidewalks, streets, or curbs and the roots cannot be pruned properly to preserve the tree.
- I. Tree roots are causing continual sewer problems that cannot be corrected by alternate methods.
- J. The tree is causing intersection sight problems or other public safety problems when it is determined that the branches cannot be pruned properly to eliminate this problem.

## V. APPEAL PROCESS

In the event that the property owner receives an order from the Street Superintendent and objects to all or part, the property owner may appeal to the City Manager and Forestry Improvement Committee. The property owner must appeal the order in writing to the City Manager and Forestry Improvement Committee within ten (10) days of the receipt of the order, stating the nature of objection and request a hearing. The hearing shall be held within twenty (20) days. Within ten (10) days the Chair of the Forestry Improvement Committee shall notify the appellant and the Street Superintendent of the final decision.

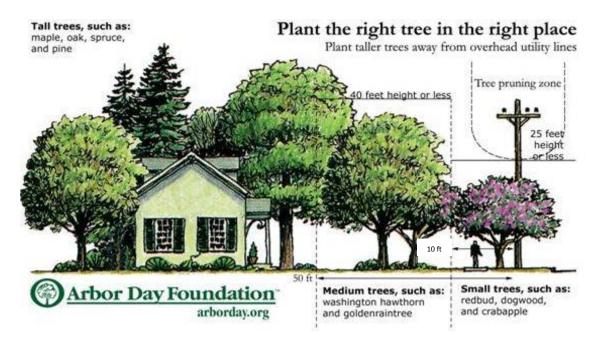
A person may appeal the decision of the Forestry Improvement Committee to the City Council by filing a written notice with the City Clerk within seven (7) days of issuance of the decision of the Forestry Improvement Committee. The notice of appeal shall specify the nature of the objection to the decision of the Forestry Improvement Committee, and shall include a summary of the factual basis supporting the appeal, as well as a request for hearing before the City Council. The hearing shall be held before the City Council within twenty (20) days of the notice of appeal being filed with the City Clerk. The City Council shall, within ten (10) days of hearing the appeal, issue a decision.

## **EXHIBIT A:** STREET TREE SPACING & LOCATION REQUIREMENTS

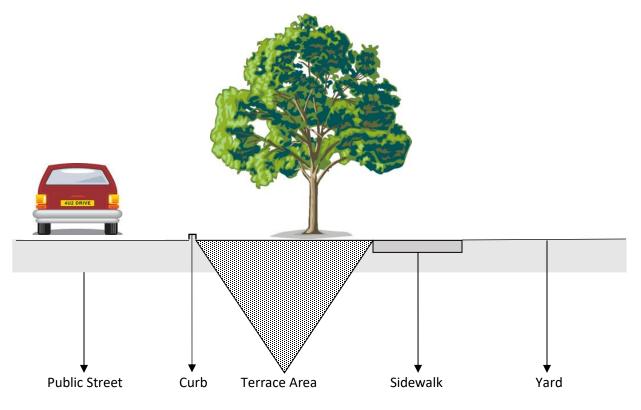


Almost all streets within the City have right-of-way that extend back of the curb line. This area is public property and is generally used for utilities, walks and landscaping. The width of this right-of-way area varies considerably in different section of town. Not all right-of-way areas are defined by sidewalks. A free, written permit is required prior to planting, or removing trees upon public areas.

# **EXHIBIT B:** SUCCESSFUL TREE PLANTING

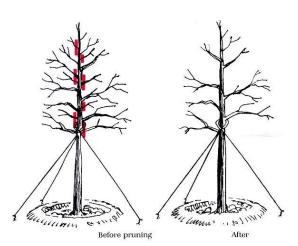


## **SPACING & LOCATION REQUIREMENTS**



- No tree planting is permitted where the distance between a curb and a detached sidewalk is less than 6 feet.
- No tree shall be planted closer than 4 feet from the back of the curb or 2 feet from the outer line of the sidewalk.
- Terrace Area, 12-foot or Less: Trees shall be planted to maintain 2/3 of the parkway width from the street (i.e., 12-foot parkway, plant 8 feet from the back of the curb).
- Terrace Area Greater than 12-foot: Trees must be at least 8 feet from the back of the curb.
- No Sidewalks: An allowance should always be provided in the terrace area for future construction of sidewalks.

## **EXHIBIT C: NATURAL PRUNING VS. TOPPING**



Natural pruning preserves the general shape of the tree.

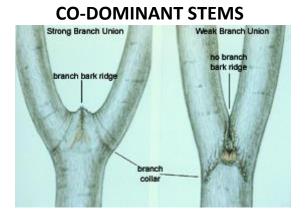
**EXHIBIT D: PROPER PRUNING PRINCIPLES** 

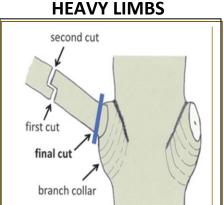


Topping results in weak, undesirable re-growth.

#### Living Branch Dead Branch **Branch Bark Branch Bark** Ridge Ridge Branch Collar ranch Branch Collar Collar not cut alo Hardwoods Conifers

- When removing a branch, always cut outside the branch bark ridge and collar. Do not make a flush cut (line C X).
- Branches that do not have a distinct collar should be cut at a right angle to the branch outside the branch bark ridge.





- Trees may have co-dominant stems, as shown above. If a co-dominant stem must be removed, cut at an angle outside of the bark ridge. Avoid leaving any stub.
- When removing heavy limbs, first make an undercut several inches outside of the collar. Then remove limb by a second cut an inch or so outside of the first cut. Remove stub with a third cut just outside of the collar.