

CITY OF MANCHESTER

Arboricultural Specifications & Standards of Practice

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Updated July 2009

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 **at no cost** from the 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. Site Evaluation: 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 Diagram on 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 Diagram on 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 Diagram on 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. Diversity: 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. Procedure: 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. Species: 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.

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 TREES – LESS THAN 35' MATURE HEIGHT
Tatarian Maple – tree form	American Hornbeam
Hedge Maple – tree form	American Hophornbeam
Amur Maple – tree form	Japanese Tree Lilac
Serviceberry – tree form	Cultivars: Ivory Silk
Autumn Brilliance	Regent
Tradition	Summer Snow
Red Bud – tree form	Ornamental Cherry
Flowering Dogwood – tree form	Shubert Chokeberry
Crab 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' MATURE HEIGHT
Goldenrain Tree	European Hornbeam
Norwegian Sunset Maple	Pacific Sunset Maple
Ruby Red Horse Chestnut	Paper Bark Maple
Macho Cork Tree	Ornamental Pear
Cultivars: Red spire	Cleveland Select
Autumn Blaze	Aristocrat
Capital	Washington Hawthorn
Yellowwood	

PARKING WIDTH: 10-12'	MEDIUM – 35' TO 50' MATURE HEIGHT
Black Gum (grows best in low Ph soil)	
Thornless Honey Locust	Turkish Filbert
Bald Cypress	Little Leaf Linden – all cultivars
Japanese Zelkova	Village Green
Green Vase	Ginkgo
Celebration Maple	Autumn Blaze Maple
Japanese Pagoda tree	Norway Maple – all cultivars

PARKING WIDTH OVER 13' LARGE TREE – GREATER THAN 50' MATURE HEIGHT
 (All large trees must be planted in parking widths of 13 feet or greater)

Sugar Maple – all cultivars	Red Maple – all cultivars
White Oak	Tulip Tree
Red Oak	London Plane Tree
Redmond Linden	Hackberry
English Oak	<u>Seedless</u> Cottonwood

NOT ALLOWED

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

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:

1. Damage, cut, carve, nail, bolt, or set fire
2. Attach any rope, chain, wire, cable for any reason
3. Attach advertising posters or any other contrivance
4. Allow any harmful gaseous, liquid, chemical, or solid substance come in contact
5. 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)
6. To patch any tree cavity with concrete or fill material of any kind
7. 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

III. 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. Street Trees: 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 an 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 dead 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. Private Trees: 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

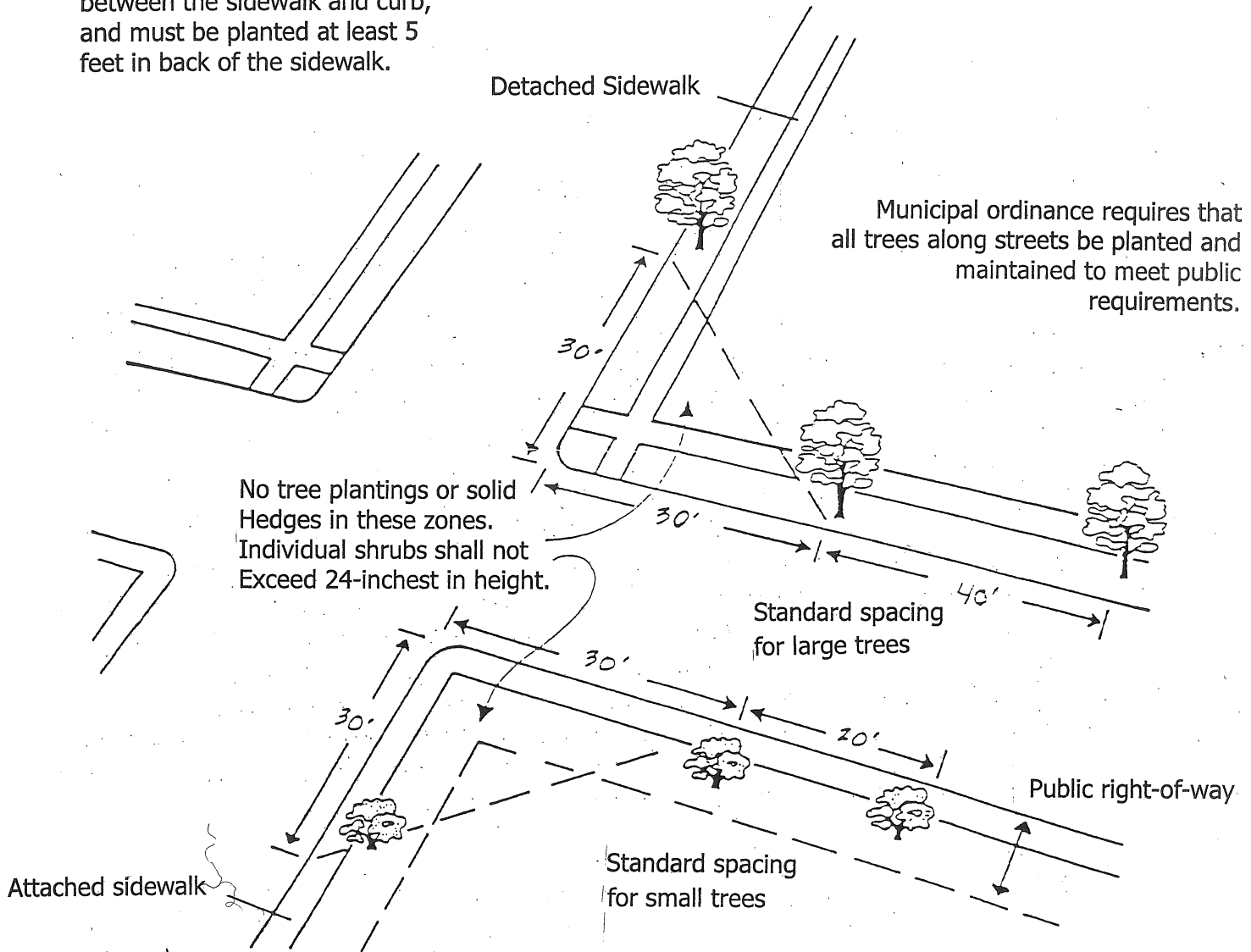
In the event that the property owner receives an order from the Street Superintendent and objects to all or part, the property owner may appeal to the City Manager and Forestry Improvement Committee. The property owner must appeal the order in writing to the City Manager and Forestry Improvement Committee 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. The decision of the City Council shall constitute a final decision.

Exhibit A

STREET TREE SPACING AND LOCATION REQUIREMENTS

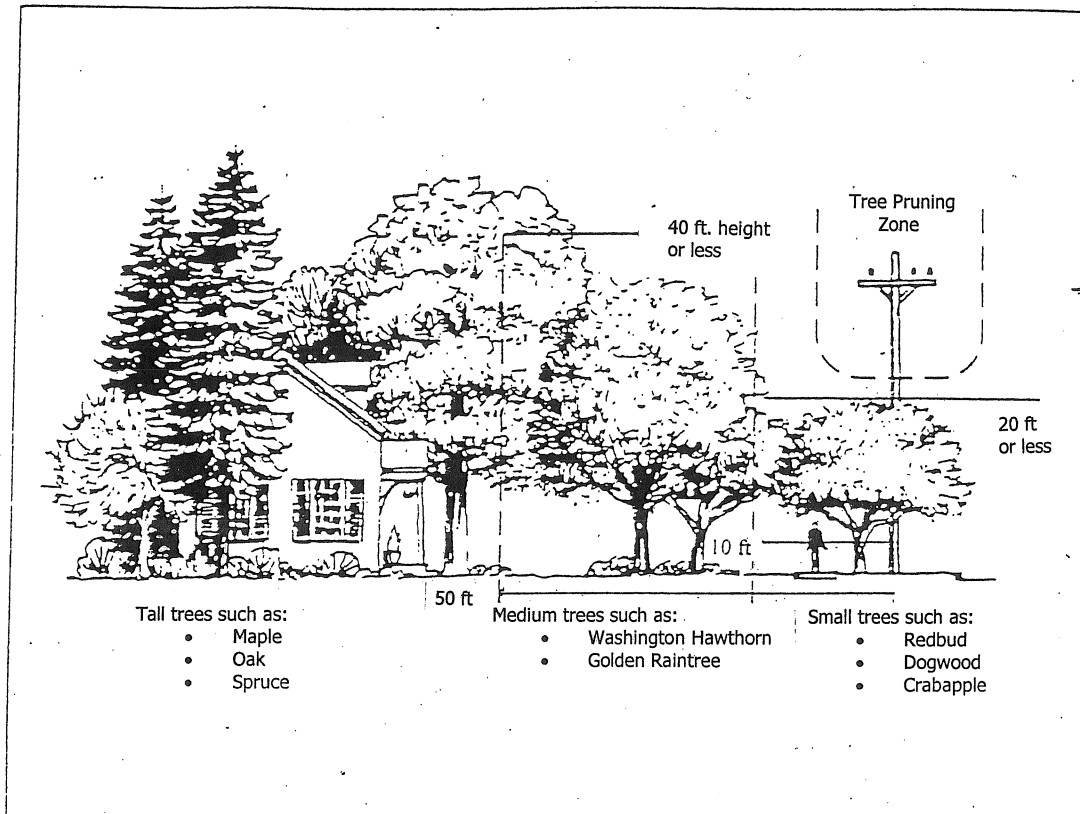
Hedges are not allowed between the sidewalk and curb, and must be planted at least 5 feet in back of the sidewalk.



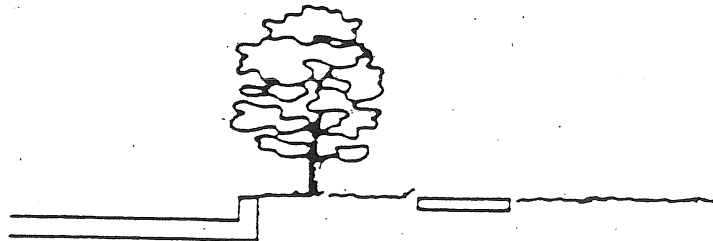
Almost all streets within the City have right-of-way that extend back of the curb line. This area is public property and is generally used for utilities, walks and landscaping. The width of this right-of-way area varies considerably in different section of town. Not all right-of-way areas are defined 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



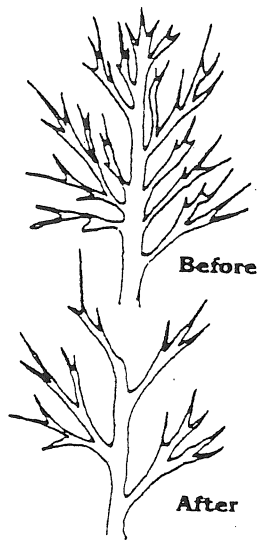
No tree planting is permitted where the distance between a curb and a detached sidewalk is less than 6 feet. No tree shall be planted closer than four (4) feet from the back curb or two (2) feet from the outer line of the sidewalk.

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 from the back of the curb).

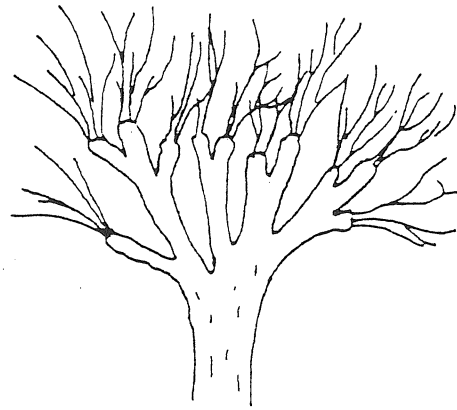
In a terrace area with greater than a 12-foot width, trees must be at least eight (8) feet back of the curb.

In areas without sidewalks, an allowance should always be provided in the terrace area for future construction of sidewalks.

Exhibit C



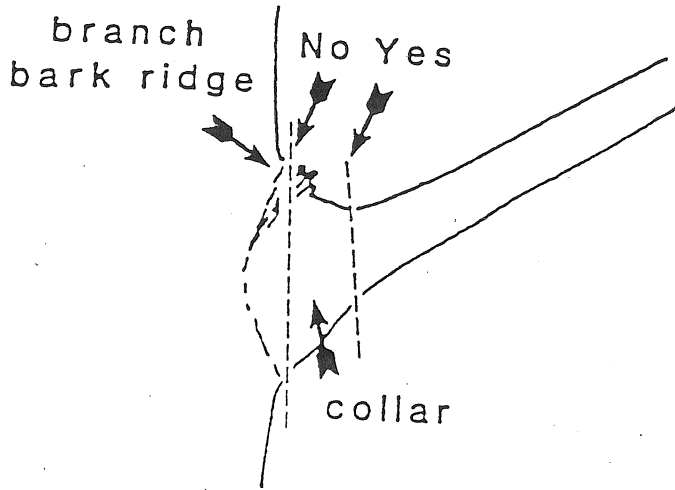
Natural pruning
preserves the general
shape of the tree.



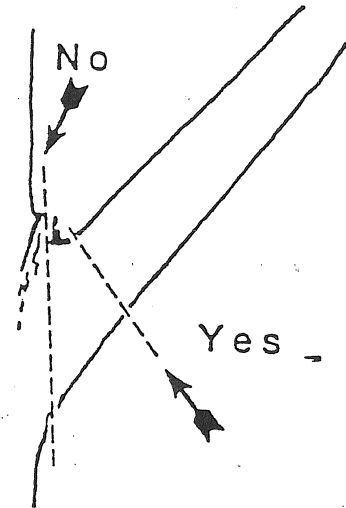
Topping results in
weak, undesirable
re-growth.

Exhibit D

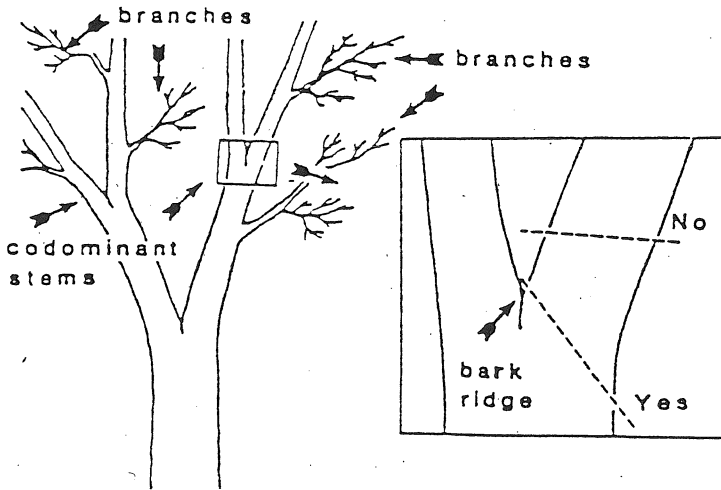
PRUNING DECIDUOUS TREES



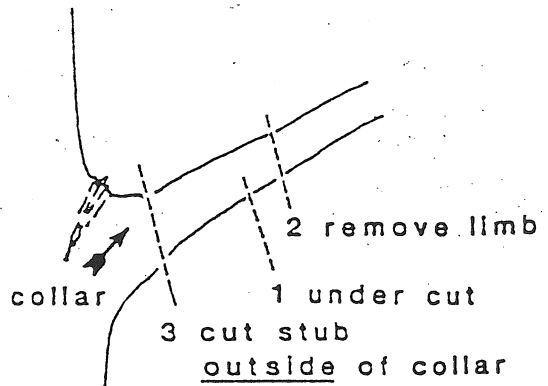
When removing a branch, always cut outside the branch bark ridge and collar. Do not make a flush cut.



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 on the left. If a co-dominant stem must be removed, cut at an angle outside of the bark ridge as shown in the insert at right. 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.

Care & Maintenance of New Plantings from the
Shade Tree Short Course
– by Larry Schmidt

Plant the right tree in the right place!!

You need to know where your trees come from. Some businesses get trees from south of Iowa. These may not adapt to our climate. In fact, some southern Iowa trees may not adapt to our area. Trees from up north, central to northern Minnesota or Wisconsin, might not survive for the same reason.

Pruning young trees is essential to good tree development. It is recommended to use a by-pass pruner instead of an anvil-type pruner because a by-pass pruner cuts branches cleaner.

It is very important to trim any double leaders as soon as possible, even in pine trees. The thing to watch for, though, is by trimming a double leader, how much of the canopy you are removing. If you are going to remove more than $\frac{1}{4}$ of the canopy with a double leader removal, then it should be trimmed over a two to three year time period.

Begin by clipping the outer growth bud area the first year followed by $\frac{1}{3}$ to $\frac{1}{2}$ of the remaining leader the next year and maybe at the leader fork the third year. Again, stage your cut as to not remove more than $\frac{1}{4}$ of the canopy each year.

You next want to prune crossing branches and branches that are rubbing against another branch. Then trim straight vertical growing branches off of horizontal branches. Remember the $\frac{1}{4}$ canopy rule! Do not trim Oaks between February and September unless absolutely necessary. Make sure to use a wound dressing on the cut, other than asphalt or creosote types., if you have to trim Oaks.

On the lower horizontal branches you want to leave them until 1-inch in diameter, but definitely remove by the time they are 2 inches. Be careful no to prune into the growth collars!

When planting trees, find the first lateral root and plant it at or just above ground level. Do minimal fertilizing unless you actually test the soil. Fertilizing a tree to keep it going is admitting you planted the wrong tree in the wrong place.

Mulch is important. Put minimal mulch next to the trunk of the tree, out to a depth of 3 to 6 inches. Do not cone it!

Proper watering for trees would be to wet the entire root systems well 10-14 days apart. Allow them to dry out between watering. In the 2nd year let it go unless you get a dry period of more than 3 to 4 weeks. Actually, lawn irrigation systems are bad for tree root system development because the watering is too frequent and does not penetrate the entire root system.

Tree Permit Application

A permit must be obtained before work can proceed in the street right of way
Iowa One Call Required 800-292-8989

Return completed application to:
City Office
Larry Schmidt, Street Superintendent
208 E Main Street

Applicant Information

Name: _____ Phone: _____ Best Time to Reach: _____

Street Address: _____

Type of Work to Be Done

Planting

I hereby apply for the permission to plant _____ tree(s)

Iowa One Call Confirmation # _____

Planting Information

Height of overhead line _____ ft.
Distance to intersection, driveway or alley _____ ft.
Species: _____
Distance between trees: _____ ft.
Height at Maturity: _____ ft.
Crown Width at Maturity: _____ ft.

Please use a stake to mark desired location for planting

Removal

I hereby request the City to remove _____ tree(s)

Iowa One Call Confirmation # _____

Removal Information

Species: _____ ft.
Size: _____ ft.
Reason: _____ ft.

Applicant's Acknowledgement

I have received a copy of the City's Arboricultural Specifications and Standards of Practice and agree to follow its provisions. I am aware that the permit will expire six months from the date of issue.

Signature of Applicant: _____ Date: _____

OFFICE USE ONLY

Permit Number: _____ Date: _____

APPROVED

I have inspected the property listed on this application and found the (placement or removal) of the street tree to be in compliance with the Tree Ordinance and the Arboricultural Specifications and Standards of Practice as established by the City of Manchester.

DENIED

I have inspected the property listed on the application and have found the (placement or removal) street tree is **not in compliance** with the Tree Ordinance and the Arboricultural Specifications and Standards of Practice as established by the City of Manchester.

Comments:

Signature of Street Superintendent: _____

Larry Schmidt, Street Superintendent

Date: _____