

Arboricultural Specification Manual

Third Revision – January 2011

Village of Howard, Wisconsin



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Village of Howard

Urban Forestry Division

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INTRODUCTION

AUTHORITY: Pursuant to the authority granted under the Village of Howard Municipal Code Chapter 38: Vegetation, §38-2, and the assistance and review of the Village of Howard Tree Board, the following serves as the Arboricultural Specifications and Standards of Practice for the Village of Howard, Wisconsin, and hereinafter referred to as the Arboricultural Specifications Manual.

POLICY: Village policy, LPD-01, is to regulate and control the planting, transplanting, removal, maintenance, and protection of public trees and shrubs in the Village in order to maximize utility and function of the urban forest and minimize and guard against dangerous conditions which may result in injury to persons using the streets, alleys, sidewalks, or other property of the Village. It is also Village policy to promote and enhance the beauty and general welfare of the Village, and protect trees and shrubs located in the public areas from undesirable and unsafe planting, removal, treatment, and maintenance practices. (Exceptions - public school sites are not included.)

FUNCTION: The purpose of the Arboricultural Specifications Manual is to enable the Village of Howard to maintain and manage all trees located within the parkways, along village streets, and within the acres of public parks and recreational land by specifying proper treatments. This involves all phases of arboricultural work from planting to maintenance to removal. To carry out these functions, certain guiding policies and procedures have evolved and been adopted. Through these policies, the Forestry Division of the Department of Public Works makes every effort to produce maximum public service for the Village's urban forest.

ORGANIZATION: The Village's urban forestry effort is administered and managed by the Village Forester of the Forestry Division in the Department of Public Works. The Village Forester maintains an office at the Public Works Facility, 1336 Cornell Road, Howard, Wisconsin. Urban forestry guidance and input is provided by the Village of Howard Tree Board and the Director of Public Works.

PERSONNEL: The Forestry Division is supervised and managed by the Village Forester, with oversight by the Director of Public Works. The Division is staffed by utilizing Public Works Street Department personnel and seasonal employees.

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TREE PLANTING PROGRAM

Tree Planting Plan

The Tree Planting Program guides the planting of trees on all Village owned public properties. This includes the street tree planting plan, tree planting standards and best practices, tree planting operations, and maintenance of newly planted trees. This document should be referenced for all inquiries regarding the Village's street tree planting program.

1. Master Tree Planting Plan

The purpose of the Master Tree Planting Plan (MTPP) is to establish guidelines for tree planting along streets and other public properties that are based on proper arboricultural industry best management practices and most recent scientific research. The MTPP should focus on tree species diversity, not only on the individual street level, but also on the village wide level. Having species diversity will greatly improve the health of the urban forest, reduce mortality, and reduce or eliminate other issues associated with monoculture tree planting.

Throughout the entire Village, no single genera should be allowed to exceed 10% of the entire street tree population. Also, no single species should be allowed to exceed 5% of the entire population. This broadens the genera and species base and assures that if an insect, disease, or other tree issue arises that may lead to the mortality of that genera or species, the amount of trees lost will be minimized. Species selection for tree plantings on street right-of-ways and other public properties should be directed by the Village Forester or Village Tree Board utilizing the Master Street Tree Planting List, the Tree Planting Standards, and the following criteria.

- a. Local/Residential Streets: Streets will have a minimum of two genera planted along the same street section or block. In most instances the two genera should be planted on an alternating basis. This will virtually eliminate the spread of tree diseases via root grafting between trees. In addition to having a minimum of two genera per street section/block, no more than three trees of the same genera will be planted side-by-side.
- b. Collector Streets: For these streets, unlike residential streets, uniform singular species, or alternating two species, plantings may be used to gain a corridor effect and aesthetic values on our main streets. These singular species plantings should be switched to a different genus after a maximum of 1000 linear feet or at prominent street intersection points.
- c. Arterial Streets: These streets are mainly county trunk roads that are maintained by the Brown County Highway Department. Planting permits must first be obtained prior to planting along these roadways within the Village. Again for these streets, uniform plantings may be used as with collector streets.

2. Street Tree Planting Programs

- a. New Subdivision – This program was established to plant trees in new subdivisions platted after 1999. Funding for this program is provided by developer monies charged at the establishment of the subdivision by the linear foot of frontage per Municipal Code §46-172 (8). Planting in these subdivisions, per Municipal Code §46-174, will begin once 75% of the lots are developed and will continue until all tree planting locations in the subdivision are filled. Tree sizes for this program will include 1 ½” – 1 ¾” bare root and 1 ¾” – 2 ½” balled and burlap depending on availability from nurseries.
- b. Neighborhood Tree Program (NTP) – This program is to allow older neighborhoods (platted before 1999) the opportunity to have the Village plant trees along their street. This is a cost share program where the property owner will purchase the tree thru the Village at wholesale cost and the Village will plant and maintain the tree for life. Property owners will have a choice of bare root or balled and burlap trees in the sizes indicated in 2.a. above.
- c. Street Reconstruction – When trees are removed in preparation for reconstruction or widening of any established street, new trees will be planted provided there is space in the terrace to support tree growth. The cost of replacing these trees will be at the expense of the Village, budgeted in the project fund for that street. Tree sizes for reconstruction planting will typically be 1 ¾” – 2 ½” balled and burlap depending on availability.
- d. Replacement – Removed trees will be replaced, if space provides, with 1 ¾” – 2 ½” balled and burlap stock at the expense of the Village. Exceptions are trees destroyed by vandalism, vehicles, lawn equipment, etc. Such trees shall be replaced at a cost to the person causing the damage, if known.
- e. Unimproved Streets – No trees shall be planted in the terrace or road right-of-way where no curb exists.
- f. Tree Planting Permit – Permits under Miscellaneous Maintenance Programs

3. Installation Time Periods

- a. Street tree plantings will take place during two time periods per season.
 - i. Spring: mid-April through May.
 - ii. Fall: mid-October through November.
- b. Some tree species can only be transplanted in the spring for optimal establishment so these species will only be available once per year.
- c. Evergreen trees, when planted, should only be planted in the spring or summer to ensure establishment prior to freezing weather in the fall. Because evergreens continue to transpire throughout winter they should not be planted in the fall since water will not be available for uptake by the tree.

4. Recommended Tree Species

Tree species selected for the Recommended Street Tree Planting List (Appendix E) are hardy for the 5a plant hardiness zone and adaptable to the less than perfect growing conditions in urban soils. This list is separated into three size breakdowns to accommodate various site locations and growing situations. This tree species list should be periodically updated as new tree varieties become available or when listed trees are no longer appropriate for planting.

5. Undesirable Tree Species

Undesirable tree species (Appendix F) are those that have been found to be poor selections for right-of-way plantings, have poor growth habits, have nuisance aspects, are susceptible to

insect or disease, and for safety reasons. This tree species list should be periodically updated as trees are no longer appropriate for planting.

Tree Planting Standards

Tree planting operations on all Village of Howard owned properties shall follow the American National Standards Institute (*ANSI A300 - Part 6 Standard Practices*) and the companion *Best Management Practices for Tree Planting*.

1. Condition

All trees must be in healthy conditions with evidence of vigorous growth during previous year. Shade trees must have single trunks, with a dominant central leader, which will develop into a desirable crown. Ornamental trees may have multiple leaders, in all areas except street right-of-ways. Select a healthy tree from a reputable nursery.

- a. Avoid plants that have damaged twigs, branches, trunk, and roots.
- b. Is the tree well anchored in the pot or burlap root ball?
- c. Don't buy plants that look unhealthy and have dried out roots.

2. Size

All trees planted along public streets must be of sufficient size to absorb the abuse and conditions common to street trees. Unless otherwise permitted for special reasons, the minimum size will be 1 ½" caliper and may not exceed 3" caliper. Bare root stock should not exceed 1 ¾" caliper while balled & burlap stock can be of any caliper as long as the proper root ball diameter corresponds to the proper industry standards.

3. Location

Select the right tree for the right site. Choose a tree species which matches, or is adaptable, to the growing conditions you have found during the site analysis. Carefully review all aspects of the site.

- a. How much physical space is available above ground and below ground. Will the tree you want fit within this space at maturity? Don't plant a tree that will grow to a large size under power lines.
- b. Closely review the soil. Find out about the ability of moisture to drain through the soil. What is the pH?
- c. Consider environmental factors such as exposure to the sun, drying winds, and pollution.

Generally all street trees shall be planted midway between the sidewalk and curb, following all guidelines listed below:

- a. 40' from an approach corner (corner as traffic is approaching intersection)
- b. 25' from a non-approach corner (corner that traffic is departing from intersection)
- c. 20' from a street light
- d. 10' from a driveway or carriage walk
- e. 10' from a fire hydrant
- f. 10' from underground utility valves and t's
- g. 25' from an approaching sign (front of sign)

h. 10' from a non-approach sign (back side of sign)

4. Spacing

All small trees will be planted a minimum of 30' apart. Medium trees will be spaced a minimum of 40' apart and large trees will be spaced a minimum of 50' apart. Greater spacing maybe needed depending on each species mature form.

5. Parkway/Terrace Width

No trees will be planted where the grassy terrace between the sidewalk and curb is less than 4 feet wide.

6. Planting Hole Specification

The planting hole size should be two to three times larger than the root ball on balled & burlap trees and at least the root spread on bare root trees. The planting depth is determined by root collar. All new plantings should be placed so that the root collar is even with the soil surface or slightly higher, where conditions and species favor the tree being slightly above grade.

7. Transplanted Trees

Care must be taken when planting bare root stock to prevent unnecessary injury to roots. All broken roots should be pruned at time of planting. When digging balled and burlap trees, the following guide should be used to determine the diameter of the ball:

<u>Tree Diameter</u>	<u>Root Ball Diameter</u>	<u>Approximate Root Ball Weight</u>
1 ½"	22"	270#
2"	24"	350#
2 ½"	28"	625#
3"	32"	850#
4"	42"	1250#
5"	54"	2500#

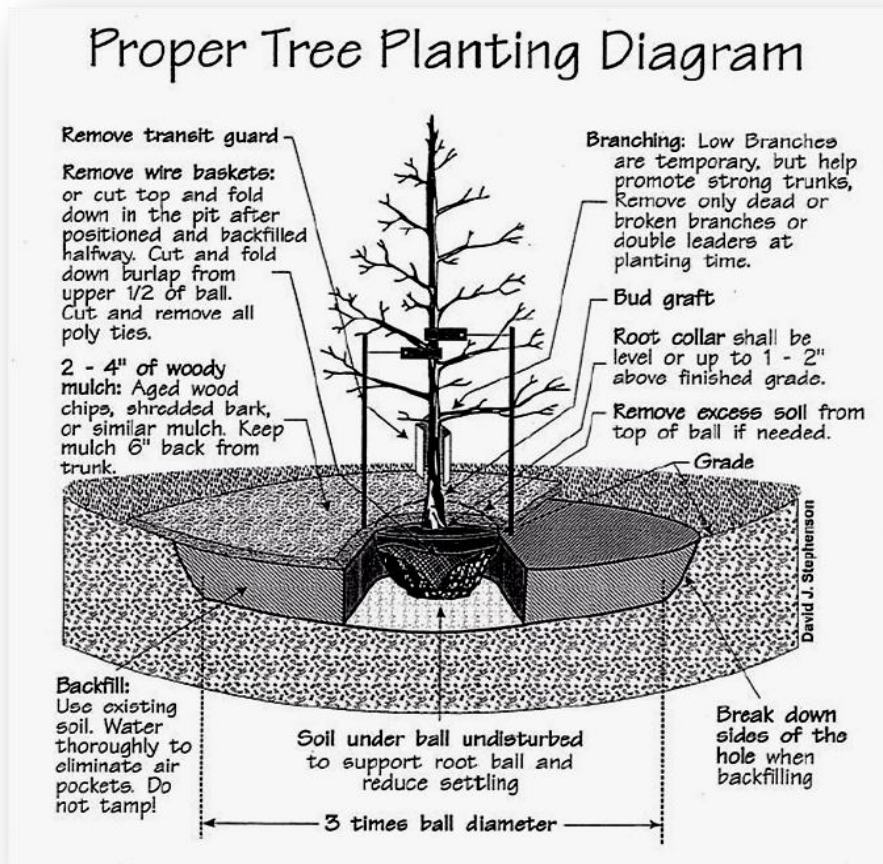
Tree Planting Operations & Procedures

Tree planting operations are performed utilizing arboricultural industry Best Management Practices to ensure the long term survivability of the trees (see *Figure 1*).

- Prepare the site by digging a hole 1-3 inches shallower than the root ball/system and three times as wide. Leave a pedestal in the center of the hole to rest the root system on.
- Plant the tree with the root collar at grade or slightly higher. Remove excess soil from top of root ball.
- Remove at least ½ of the wire basket and burlap from the top part of the ball on balled and burlap trees and remove from hole.
- Use the soil removed from the hole as backfill. Discard any rocks, sod, and large objects from the soil before backfilling. Create a slight basin around the planting hole to hold water around the tree.
- Water the soil thoroughly to remove air pockets. Don't pack the soil down (water will do this naturally with the help of gravity). Fill in any voids with more soil after watering.
- Create a mulch bed using wood chips that extends from the trunk outward to at least the drip line of the canopy to a depth of 4". Do not pile the woodchips up around the trunk.

- Stake the tree only if it will not remain upright in a moderate wind. Stake all bare root trees.
 - If you must stake, use a wide belt-like material when supporting the tree to avoid injuring the bark.
 - Trees need to move in the wind. Make sure there is some play in the support system to allow the trunk to sway without being uprooted.
 - Check tree following one (1) year and remove stakes if tree is stable.
- Wrapping the trunk is not necessary. If rodent damage is a concern, place a plastic tree protector around trunk.
- Prune any broken, dead, or dying limbs without damaging the branch collar at the time of planting. Routine pruning to train branching structure should be started within two years after planting. Do not use pruning paint or wound dressing on the pruning cuts.
- Clean up site thoroughly before leaving site.
- Place a "Post Planting Care" informational door hanger at the residence.
- Wait until one year after planting to fertilize, if needed.

Figure 1.



Wisconsin Dept. Of Natural Resources - Oct. 2000

Maintenance of Newly Planted Trees

1. Soil Fertilization & Amendments

Fertilization of newly planted trees in the first year is not recommended. Typically a tree can be fertilized once it has become established usually 2 or 3 years after planting, however most homeowners will provide this when they fertilize their turf. Fertilization and amendments are typically applied in spring or fall. Sulfur is applied to bring down the soil pH and make up take of some nutrients possible. Typically the Village of Howard Forestry Division does not perform nutrient maintenance to street trees however the adjacent property owner is allowed to fertilize if they so wish.

2. Mulching

A layer of wood chip mulch around the base of the tree will help conserve the soil moisture, help protect the tree from lawn mower damage, and reduce competition from grass for nutrients. It will also decompose over the years to provide nutrients, organic matter, and improve soil structure. The mulch should not be piled around the trunk, known as “mulch volcanoes”. Piles of mulch at base of trees provide a home for small rodents that will chew bark and can cause damage to the trunk. Mulch also holds moisture by the trunk promoting fungal problems if decay is present and mulch against the trunk provides protection for insect pests.

3. Pruning

No pruning should occur at the time of planting. Pruning at this time will reduce the amount of stored energy that the tree contains and could cause added stress to the tree. The exceptions to this rule are the pruning of any broken, dead, or dying limbs without damaging the branch collar at the time of planting. Pruning to train branching structure should be started within two years after planting and continue every 3rd year for the first 15 years. Do not use pruning paint or wound dressing on the pruning cuts.

4. Staking/Guying

Stake only trees that are unstable and will not remain vertical in a wind. All bare root stock shall be staked at planting. Two to three steel T post or wooden stakes should be installed within the mulch ring and parallel to the street whenever possible. Wide bands of nylon strap, carpet, or canvas should be used to support the tree tied with rope or twine to the stake. Make sure that the tree has a small amount of room to move. Wire and a garden hose shall not be used to support trees. Stakes should be checked and removed after one year if tree is stable.

5. Trunk Protectors and Wrapping

Plastic tree guards will be put on at the time of planting and will remain on the tree until the bark thickens enough to prevent damage or mortality from trunk injuries. Tree wrap is unnecessary and should be avoided.

6. Watering

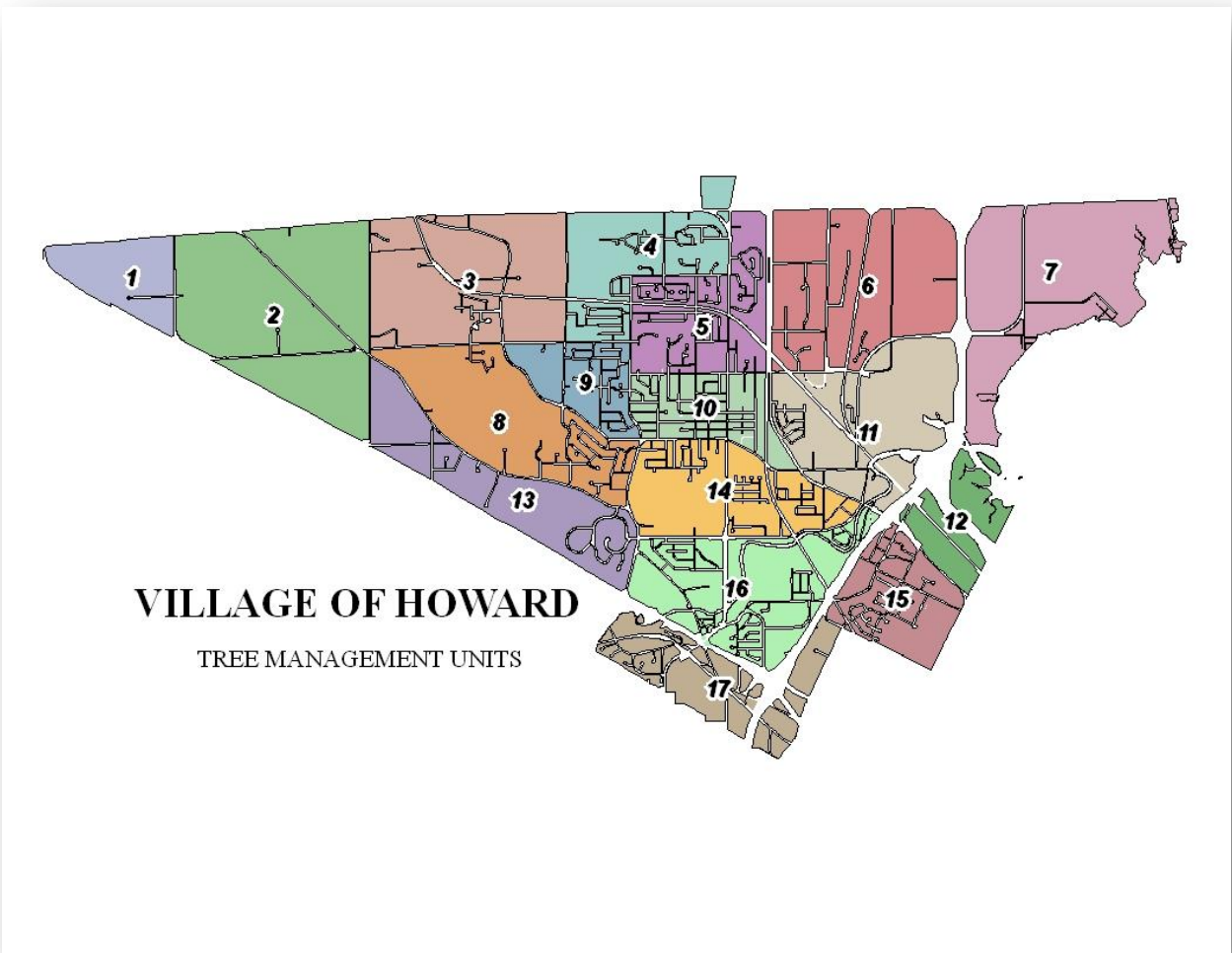
All trees are watered by the Village at the time of planting. Following planting the Village requests that the homeowner waters the tree for at least the first two years. The Forestry Division will install supplemental watering bags / devices on all non-residential trees. This will aid in watering efficiencies and prevent water runoff. In times of adverse dry periods and

drought, the Forestry Division will provide watering notices to residents through various media outlets.

7. Post Planting Care Information

The Forestry Division provides a “Post Planting Care” informational door hanger to homeowners at the time of planting. (Appendix G)

Figure 2.



TREE PRUNING PROGRAM

Tree Pruning Plan

The Village of Howard Pruning Plan relies on three different pruning operations; training pruning, routine pruning, and request pruning. The first two operations rely on a scheduled cycle, while the latter operation is typically scheduled monthly throughout the year. The Village is divided into 17 different forest management units (*Figure 2*) for management, maintenance, and to increased efficiency by reducing crew travel time to a minimum. To establish an orderly way of pruning street trees for an appearance of uniformity and tree health, a "Rotation Prune Schedule" will be put into operation (see table 2-2 in the Urban Forestry Management Plan for the five year pruning cycle schedule).

1. Training Pruning

Training pruning should begin within the first two years of planting and continue on a 2 to 3 year cycle for the first 15 years. The following pruning objectives should be followed when training pruning of young trees (trees less than 8" in diameter).

- Develop a central leader.
- Raise the crown.
- Establish good branch structure.
- Eliminate poor branch angles.
- Heading of temporary branches.
- Sanitation - Remove damaged, dead, or diseased branches.

2. Routine Pruning

Routine pruning of mature trees should be scheduled every 5 to 6 years after year 15. Pruning objectives for routine pruning include the following items (trees 8" in diameter and greater).

- Clearance – Prune for clearance over streets, sidewalks, structures, lights, and for vision safety.
- Sanitation / Clean – Remove dead, damaged, and diseased branches greater than 2" in diameter.
- Tree Structure – Prune for branch balance and spacing along stem. Remove interfering branches, crossing and rubbing branches, poor branch unions, and poorly structural branches.
- Storm Damage Repair – Preserve as much of the tree as possible and train new growth for future.
- Reduction – Prune to reduce branch length should be to a lateral branch at least 1/3 the diameter of the parent limb or leader.

3. Spot & Request Pruning

Spot and request pruning operations should be determined by the Village Forester for justification and scheduled accordingly. Typically legitimate request pruning should be scheduled within one month of initial site visit or as soon as possible should a hazard or nuisance exist as determined by the Village Forester. Exceptions would be to preserve the health and wellness of the tree due to insect or disease issues (i.e. Oak Wilt).

Tree Pruning Standards

Tree pruning operations on all Village of Howard owned properties shall conform to the *ANSI A300 - Part 1 Standard Practices* and the companion *Best Management Practices for Tree Pruning*. In addition, all tree pruning operations shall conform to the *ANSI Z133.1 Safety Requirements*.

1. Clearance

Tree pruning for clearances over roadways, sidewalks, obstacles, and for vision should abide by the following minimum standards:

Street / Roadway	14 feet
Sidewalk	10 feet
Building	10 feet
Street Light	Sufficient branch wood for adequate street lighting on pavement and clearance of light photo eye.
Street Sign / Traffic Light	Clear line of site to signs / lights.
Vision Triangle	Clear line of site at street intersection for pedestrian and vehicular safety.

2. Structure

Pruning a tree for structure should include:

- a. Develop a central dominant leader; remove any co-dominant leaders.
- b. Removal of any weakly attached branches, crossing and rubbing branches, or branches with poor branch unions.
- c. Develop the lowest permanent scaffold limbs.
- d. Develop scaffold branch spacing along the parent stem. Spacing should be a minimum of 18" for large maturing trees and 12" for smaller trees. These scaffold branches should also be spread radial around the parent stem.

3. Sanitation

Sanitation pruning should include the removal of any dead, dying, diseased, or damaged branches two inches and larger in diameter throughout the crown.

4. Pruning Cuts

- a. All cuts should be made sufficiently close to the trunk or parent limb without cutting into the branch bark ridge or branch collar so that callus growth can readily start under normal conditions.
- b. Branches too large to support with one hand shall be precut (3 cut method) to avoid tearing or splitting of the bark. (see *Figure 3*)
- c. Removal of dead branches shall have the final cut outside of the collar of live tissue.
- d. All limbs 4" in diameter or larger should be lowered to the ground by proper ropes.
- e. No more than 1/4 of the foliage on mature trees should be removed within one growing season.
- f. Heading cuts should consist of cutting the parent branch back to a lateral branch at minimum 1/3 the size of the parent limb.
- g. Topping of trees shall not be allowed. Topping consists of cutting a branch between

lateral branches or pruning the parent limb to a lateral branch that is less than 1/3 the size of the parent limb.

5. Wound Treatment

- a. Pruning paints and wound dressings shall not be used to cover pruning cuts. Research has shown that wound dressings do not improve wound closure and may actually promote disease at site of application.
- b. Repairing of bark wounds should only include the removal of loose bark, disturbing as little of the live tissue as possible, and using rounded edges when possible.
- c. Tree cavities shall not be filled with concrete, bricks, wire, or any other non flexible substances. If cavity filling is required expandable foam should be used.

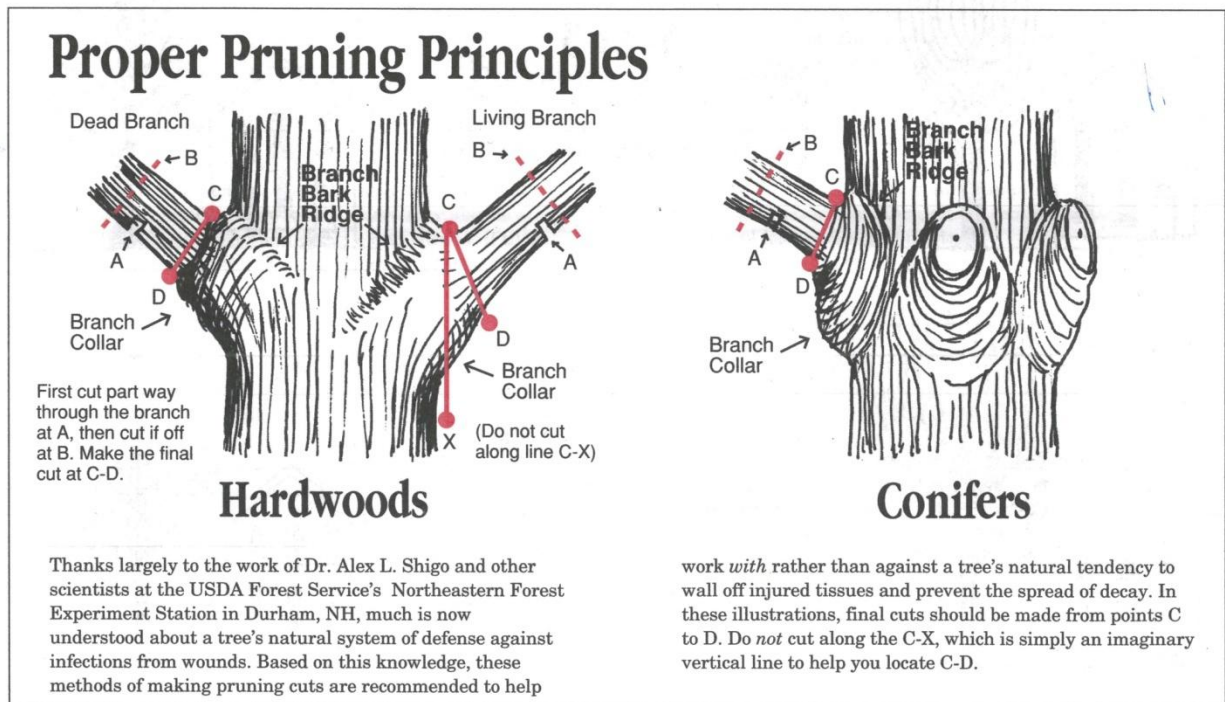
6. Miscellaneous Pruning Standards

- a. Climbing spikes or spurs shall not be used during pruning operations as they damage the cambium of the tree.
- b. On thin bark species, just enough limbs are to be removed to obtain necessary results. Sucker growth can result from too heavy pruning.
- c. All girdling roots visible to the eye, where practicable, should be treated with one of the following: Cutting of the root at either end, notching of the root in center with chisel, or removing the root without injury to bark or parent stem.
- d. Vehicle and pedestrian warning devices shall be properly placed prior to any tree work being performed.
- e. All wires are to be considered as "HOT" or "LIVE"; any branches that are within 10' should not be pruned. All tree workers shall abide by clearance standards outlined in the ANSI Z133.1 Standards. Contact the appropriate utility for assistance if necessary. Any branches which accidentally fall against or hang on wires must be removed by the appropriate utility.
- f. Holiday lighting - Homeowners are welcome to install holiday lighting in street trees however they should be removed in a timely manner after the holidays to facilitate tree maintenance and tree growth. Every effort will be made to accommodate such situations during pruning operations however tree maintenance takes priority over lighting.

Tree Pruning Operations & Procedures

- Place proper traffic and pedestrian control devices prior to beginning work.
- Staff should wear the appropriate Personal Protective Equipment (PPE) for all pruning operations.
- Prune all trees following the requirements previously listed for the appropriate pruning operations.
- Use the most efficient method for pruning including, aerial truck, ladders, rope & saddle equipment, and extendable saws.
- Chip or clean up all debris generated during pruning operations prior to leaving the site.
- No equipment or debris shall be left on site overnight.
- If a tree has holiday lighting installed attempt to prune while leaving lights in place. If unable to do this, then gently remove lighting and place next to tree or make note of address and return at a later date to complete the pruning.

Figure 3.



TREE REMOVAL PROGRAM

Tree Removal Plan

Trees are removed for the safety and well being of the public, structures, and the urban forest. Many factors may contribute to the transformation of a tree from an asset in the urban forest to a liability. These factors shall be determined and verified by the Village Forester following the acceptable causes listed below.

Acceptable Cause for Tree Removal

- Trees located in the Village right-of-way, parks, and other public property are removed only when they are declared a public nuisance per §38-140 of the Howard Municipal Code. The cost of removal will then be assumed by the Village of Howard.
- Public trees that must be removed due to street reconstruction will be determined by the Village Forester and cost of said removals shall be assumed by that reconstruction project funding.
- Damage to any public tree that is determined, by the Village Forester, to require removal shall be assumed by and charged to the individual causing damage, if known.
- Property owner requests for the removal of any public tree will be evaluated and a determination made by the Village Forester and/or the Village of Howard Tree Board. Cost of removal will be charged to the property owner.
- Removal of undesirable tree species will be determined by the Village Forester and/or the Village of Howard Tree Board.

Un-Authorized Tree Removal

The Village of Howard shall be compensated for any tree removed from the road right-of-way or other public property without prior written authorization or permit by the Village of Howard Forestry Division (or other authorized Village representative). The party responsible for said tree removal shall compensate the Village for the value of the tree and may also be subject to a Municipal Court citation from the Village of Howard. The value of the tree shall be determined by the Village Forester utilizing the latest version of the *"Guide to Plant Appraisal"* published by the International Society of Arboriculture.

Tree Removal Operations & Procedures

- Vehicle and pedestrian traffic must be adequately warned and controlled prior to and during removal operations according to the Village of Howard Safety Manual.
- If both lanes of traffic are to be closed in the removal operations, the Public Works Director, Police, Fire, and Rescue must be notified prior to work commencing.
- All safety standards shall be in accordance, but not limited to, ANSI Z133.1 Standards.
- Proper PPE shall be worn at all times while performing tree work.
- Note location of overhead power lines, utilities, homeowner obstruction, etc. and avoid.
- The tree shall be removed using the safest and most efficient arboricultural procedures.
- All precautions shall be made to prevent damage to any public or private property.
- Any limb that cannot be controlled by hand while being cut off shall have a rope or ropes attached for controlled lowering using the appropriate equipment and ropes.
- No equipment shall be left at the work site overnight.

- Climbing spikes or spurs may be used during the removal of a tree.
- At the end of each working day, all limbs, branches, twigs, and debris shall be cleaned up before leaving work area.
- Any wood generated from the removal process may be offered to the property owner at the location where the tree is being removed providing:
 - The wood is not to be left on the terrace overnight. The wood is to be placed off of the right-of-way for safety and liability reasons.
 - The Village employee is not to perform extra work for said property owner (i.e. cutting wood into firewood size pieces, stacking wood, etc.)
- If the property owner does not want the wood then it shall be cleaned up and hauled to the Village of Howard Public Works Facility prior to the end of each day. At no time is wood to be left in the right-of-way overnight or without safety cones during the work day.
- Report all unusual situations or conditions to the Village Forester as soon as possible.

MISCELLANEOUS MAINTENANCE PROGRAMS

Permits

1. Planting Permit

Property owners who wish to plant trees in the Village right-of-way must first complete a planting permit application (Appendix A). Upon completion of an application, the Village Forester will accept or deny this application following a site inspection and administer a planting permit for such plantings (Appendix B). Planting permit recipients must follow the tree planting procedures as outlined within the permit.

2. Tree Maintenance Permit

Property owners who wish to perform any maintenance to a tree in the road right-of-way must first complete a Tree Maintenance Permit application (Appendix C). Upon completion of an application, the Village Forester will accept or deny this application following a site inspection and administer a permit (Appendix D). Said maintenance may include but is not limited to removal, pruning, insect or disease treatment, root excavation or removal, and stump removal. Permit recipients must follow the procedures as outlined within the Tree Maintenance Permit. Homeowners are allowed and encouraged to water street trees without a permit.

Root Pruning, Cutting, or Removal

The Village Forestry Division does not recommend or actively prune, cut, or remove tree roots. This practice may cause detrimental affects to the health or stability of a tree.

- If the cutting of tree roots is required, clean cuts shall be made with sharp hand tools only.
- No cutting of roots by mechanical means.
- No buttress roots shall be cut or damaged. This may compromise the stability of a tree.
- Exceptions are for removal of girdling roots that affect the health of a tree or during construction as outlined under Tree Protection During Construction.

Stump Removal

The Village Forestry Division stump removal program consists of removal of stumps where trees were formally standing on the street right-of-away, in the Village Parks and on other public property within the Village.

- This operation will be performed by qualified Village of Howard employees or will be contracted out to a professional service.
- All precautions shall be made to limit flying debris from damaging private property.
- All stumps are to be removed completely or to a depth of 18" whichever is reached first.
- All surface roots and mounded turf shall be ground down to final grade for a 10' radius around the stump.
- Any stump grindings and holes that are not immediately cleaned up should be barricaded or coned to alert vehicles and pedestrians of a hazardous situation.
- All of the debris generated from stump grinding operations located outside of hole and at least ½ of the debris in the hole shall be removed from the site.
- Topsoil is placed in hole and graded to a finish grade.
- Initial seeding of the area is to be done by the Village, it is the responsibility of the property

owner to water to establish the grass and provide weed control if so desired in these locations.

Tree Insect & Disease Issues

1. Dutch Elm Disease

Dutch Elm Disease is caused by the fungus *Ceratocystis ulmi* attacking American elms by infecting the water carrying xylem vessels resulting in wilting and eventual death of the tree. Spread of this disease is either via root grafts or from overland spread via sap feeding elm bark beetles. Stopping the spread is virtually impossible; however sanitation removals of dead elms to try and prevent the spread where practical can limit or slow the spread of Dutch Elm Disease. Wood from infected trees should either be debarked or destroyed to prevent further spread to new areas.

2. Gypsy Moth

The gypsy moth is an exotic insect that feeds on the leaves and can defoliate many tree species especially oaks. The Village of Howard has been monitoring numbers since 2001 and has been working with the WDNR to aerial spray *Bt* on high population areas since 2002. This is a cost share program in which the Village is reimbursed a portion of the money spent in monitoring and spraying for the gypsy moth. This insect is becoming established in our area and we will need to continue to monitor and control pockets of higher populations for a long time. The Forestry Division also applies soybean oil to egg masses on public trees and burles them during the caterpillar stage to aid in the control of the gypsy moth.

3. Oak Wilt

The Village of Howard Tree Board established an Oak Wilt Policy on August 11, 1993 which imposes a ban on the pruning or wounding of any Oak trees growing within the Village limits during the period from **April 1st to July 31st**. This ban is necessary to prevent the further spread of Oak Wilt Disease.

4. Emerald Ash Borer

The Emerald Ash Borer (EAB) is an exotic beetle from Asia that feeds on all ash (*Fraxinus spp.*) trees. The larvae of the EAB feed in the cambium between the bark and the wood, producing galleries that eventually girdle the branches killing them and the tree. EAB was first discovered in southeast Wisconsin in 2008. To date there has not been a positive find within the Village of Howard. When found, the Village of Howard Forestry Division's policy on EAB will follow the Emerald Ash Borer Preparedness Plan.

Tree Protection During Construction

A. Bridging, Tunneling, Drilling, Etc

The protection of trees shall involve bridging, tunneling, drilling or boring underneath the existing trees. The surface area directly adjacent to the tree shall not be disturbed under the following guidelines:

- a. 3" DBH trees or less – two feet on either side of tree with a minimum three foot depth
- b. 3" to 8" DBH trees – four feet on either side of tree with a minimum three foot depth
- c. 8" DBH trees and over – five feet on either side of tree with a four foot minimum depth

B. Removal of Sidewalk, Driveway, or Curb

- a. Caution should be used during removal to avoid any unnecessary damage to the tree or its root system.
- b. Roots requiring removal shall not be cut by means of mechanical root cutting machines. If root removal is essential, roots shall be manually cut with sharp hand implements.
- c. Root systems on the sidewalk or driveway side of the tree shall be cut no deeper than 9 inches below the finished grade of the new walk and not more than 5 inches from the edge of the new walk or driveway.
- d. Root systems on the curb side shall be cut not more than 12 inches behind the back of the new curb and not more than 18 inches in depth when constructing new curb and gutter.

C. Depositing Materials Near Trees

No person shall place or maintain upon the ground in a public street or right-of-way of the Village of Howard any soil, stone, cement, lumber, or other substance or material which shall impede the free passage of water and air to any tree or shrub without leaving an open space of ground outside of said tree or the base of said shrub of an area not less than 16 square feet. Before depositing any such materials near to trees or shrubs, the person so depositing said material shall place such guards around the trees and shrubs as shall effectually prevent injury to them.

D. Trunks, Branches, and Root Zone

Tree trunks shall be protected with wood slats, rubber tires, or snow fence wired in place where contractor's operation may scar the trunk or compact the root zone of the tree. The contractor shall exercise care to assure tree trunks, branches, and roots are not damaged by its operation. The contractor shall call the Village Forester at least 48 hours before start of construction to discuss problems with overhanging branches that might be damaged in spite of his/her exercising care in construction.

E. Root Care

Exposed tree roots shall be covered with backfill as soon as possible to prevent drying out or desiccation. Root foundations must remain adequate to withstand heavy windstorms.

F. Moving of Buildings

The contractor shall notify the Village Forester at least 48 hours in advance of moving any buildings. If any pruning is necessary as the building is being moved, the pruning will be coordinated by the Village Forester and costs absorbed by the contractor.

G. Tree Repair / Replacement

Damage to branches of a tree due to the contractor's negligence will be repaired by the Village Forestry Division at the contractor's expense. If damage to a tree has been determined to be excessive, the Village Forester may remove and replace said tree at the contractor's expense.

Tree Support Systems

Tree cabling, bracing, or guying shall be performed in accordance with the *ANSI A300 – Part 3 Support Systems Cabling, Bracing, and Guying Standards* and the companion *Best Management Practices for Tree Support Systems: Cabling, Bracing, and Guying*.

Nuisance / Hazardous Trees

The Nuisance and Hazard Tree Policy is governed by Howard Municipal Code Chapter 38: VEGITATION; Article IV: PUBLIC NUISANCES.

DIGGERS HOTLINE & LOCAL UTILITIES

Diggers Hotline shall be notified of all locations three days prior to any underground excavation. This is required by Wisconsin State Statute 182.0175 to prevent damage to underground utilities. Village staff shall locate all private utility services within parks or other Village properties. All staff performing underground excavations shall abide by the Digger's Hotline Excavator Safety Guide found at www.diggershotline.com/images/10man.pdf.

Any tree work performed above ground in close proximity to overhead power lines shall be performed by a qualified line clearance worker. The appropriate electric utility shall be notified of any tree work that is within the minimal approach distances found in Table 2 of the *ANSI Z133.1 Safety Standards*.

REFERENCES

American National Standard Institute. *American National Standards for Arboricultural Operations – Pruning, Repairing, Maintaining and Removing Trees, and Cutting Brush – Safety Requirements (Z133.1-2006)*. International Society of Arboriculture, Champaign, IL.

American National Standards Institute. *American Standards for Nursery Stock, (Z60.1-2004)*. American Nursery and Landscape Association, Washington D.C.

American National Standard Institute. *American National Standards for Tree Care Operations – Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices (Pruning) (A300, Part 1-2001)*. National Arborist Association, Manchester, NH.

American National Standard Institute. *American National Standards for Tree Care Operations – Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices (Support Systems a. Cabling, Bracing, and Guying) (A300, Part 3-2000)*. National Arborist Association, Manchester, NH.

Council of Tree and Landscape Appraisers, 2000. *Guide for Plant Appraisal*. International Society of Arboriculture, Champaign, IL.

Gilman, E. F. and S. Lilly. 2002. *Best Management Practices Tree Pruning*. International Society of Arboriculture, Champaign, IL.

Smiley, E.T. and S. Lilly. 2001. *Best Management Practices Tree Support Systems: Cabling, Bracing, and Guying*. International Society of Arboriculture, Champaign, IL.

Watson, G. and E.B. Himelick. 2005. *Best Management Practices Tree Planting*. International Society of Arboriculture, Champaign, IL.

APPENDICES

- A. Planting Permit Application
- B. Planting Permit
- C. Maintenance Permit Application
- D. Maintenance Permit
- E. Recommended Street Tree Planting List
- F. Undesirable Tree Planting List
- G. Post Planting Care Information



VILLAGE OF HOWARD RIGHT-OF-WAY PLANTING PERMIT APPLICATION

As required by Ordinance Number §38.111

A planting permit is required before planting any tree, shrub, or other vegetation that at maturity will exceed 24' in height, within the Village Right-of Way or other Village owned properties. Typically this is the area from the curb to the back of the sidewalk (or where the sidewalk would be). The location of the sidewalk can often be seen in the driveways. If you are unsure please call and ask.

Tree species and location or landscape designs MUST be approved by the Village Forester prior to any planting in the Village right-of-way.

Site Address: _____

Name of Applicant: _____

Street Address: _____

City-State-Zip: _____ Phone: _____

Estimated date of planting _____

Species of tree(s) to be planted (choose from recommended street trees on back page) or landscape design.

Specific location to be planted (i.e. number of feet from property line or driveway, left or right side, etc.) NOTE: Trees shall be planted 1/2 the distance from the curb to the street side of the sidewalk. No trees will be planted in a terrace that is three feet or less in width.

Number of trees to be planted (estimate 30' -50' spacing) _____

Diameter (caliper) at 6" above the ground of the tree(s) to be planted. (1 1/2" – 3") _____

Landscape design with location and names of shrubs or other vegetation (please attach). _____

Signature of Applicant: _____ Date _____

PLEASE RETURN TO: VILLAGE OF HOWARD
Attn: Village Forester
1336 Cornell Rd.
Green Bay, WI 54307-2207

GUIDELINES: *(keep for your records)*

🌳 **No Evergreen Trees!**

🌳 Trees must be single stem form. No multi-stem specimens will be allowed.

🌳 Species selection recommended matching other street trees on your street for continuity.

🌳 **Minimum Clearances:**

🌳 10' from driveways or other property access points.

🌳 10' from fire hydrants.

🌳 10' from underground utility valves.

🌳 20'-30' from street lights.

🌳 40' from intersections (Note: this can vary depending on the intersection).

🌳 30'-50' spacing between trees depending on maturity size.

🌳 All trees shall be planted in the center of the terrace; ½ the distance between the curb and the street side of the sidewalk (or where the sidewalk would be).

🌳 The Village Forester will mark the planting location on the curb with a white "T".

🌳 Minimum caliper size is 1 ½" at 6" above the root collar.

🌳 Trees shall be planted with root collar at grade; contact Village Forester for proper tree planting procedures.

🌳 Trees shall be mulched to a depth of 3-4" and a diameter of 5' with wood mulch following planting. Mulch shall not be mounded around the tree trunk however.

🌳 If trees need to be staked contact the Village Forester for proper procedures.

🌳 Plastic trunk protectors can be obtained from the Village free of charge for street trees.

🌳 Obtain a "post planting care" informational handout from the Village Forester following tree planting or check on the website (www.villageofhoward.com).

🌳 Trees become the property of the Village of Howard following planting and will be maintained by the Village for the life of the tree.

🌳 A landscape design must accompany the application for shrub or other vegetation plantings.

🌳 Landscaping in the right-of-way is not exempt from damage if underground maintenance of utilities is needed in that specific location.

**Before you dig please call
Diggers Hotline 1-800-242-8511**



VILLAGE OF HOWARD RIGHT-OF-WAY PLANTING PERMIT

As required by Ordinance §38.111

Permit Number: 20xx-001

Name of Applicant:

Street Address:

City-State-Zip:

Phone:

Site Address: Same

Approved	Tree Species:
	Quantity: Tree Caliper: (inches)
	Location of Planting:
	Comments: The tree planting hole should be 2-3 times the diameter of the root ball. The tree is to be planted with the root collar at grade and access soil above the root collar removed. Twine, burlap, and wire basket shall be removed from the top ½ of the root ball at minimum. Staking of the tree shall be with flexible stapping material a minimum of ¾" wide; wire and garden hose will not be acceptable. Wood chip mulch placed around the tree is recommended for moisture preservation and weed control.
	Allowable Planting Period (within 30 days of issuance): to

Denied	Reason for Denial:
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If work is not completed within this allowable planting period, and planting is still desired, another planting permit must be obtained.

CHRIS CLARK

Village Forester

Date



VILLAGE OF HOWARD TREE MAINTENANCE PERMIT APPLICATION

As required by Ordinance Number §38-111

Permit No. _____

A tree maintenance permit is required prior to performing work on any tree within the Village Right-of Way or other Village owned properties. Typically this is the area from the curb to the back of the sidewalk (or where the sidewalk would be). The location of the sidewalk can often be seen in the driveways. If you are unsure please call and ask.

Any maintenance or removal of trees MUST be approved by the Village Forester prior to any work being done.

Site Address: _____

Name of Applicant: _____

Street Address: _____

City-State-Zip: _____ Phone: _____

Name of Contractor (if applicable) _____

Pesticide Applicator License # _____ Arborist Certification # _____

Contractor Address: _____

City-State-Zip: _____ Phone: _____

Estimated date of work: _____

Explanation of work to be performed on trees: _____

Specific location and number of trees to have work performed: _____

Signature of Applicant: _____ Date _____

PLEASE RETURN TO: **VILLAGE OF HOWARD**
 Attn: Village Forester
 1336 Cornell Rd.
 Green Bay, WI 54313

* Certificate of Insurance enclosed?

VILLAGE OF HOWARD TREE PRUNING / REMOVAL GUIDELINES

(Keep for your records)

Insurance and Workers Compensation

No person without proper insurance may perform work on trees on any Village property. The Contractor shall furnish evidence of Workers Compensation, public liability and property damage insurance. Limits of liability shall not be less than:

1. Bodily Injury - \$1,000,000 each occurrence and \$1,000,000 aggregate
2. Property Damage - \$1,000,000 each occurrence and \$1,000,000 aggregate, including both injury and property damage caused by vehicles and machinery.

A certificate of insurance SHALL be filed with this application, listing the Village of Howard as an additional insured.

Tree Pruning Specifications

Tree pruning to be performed on Village trees by a contractor shall be completed by an International Society of Arboriculture Certified Arborist.

All pruning activities shall conform to the standards listed below following the National Arborist Association Class II (Standard Pruning) and Class III (Hazard Pruning) standards and American National Standard Institute (ANSI) A300 standards.

1. All cuts on live branches shall be made as close as possible to the trunk or parent limb, without cutting into the branch bark ridge and branch collar, or leaving a protruding stub. Bark at the edge of all pruning cuts should remain firmly attached. Cuts on dead branches shall be made as close as possible, without causing injury to the callus tissue when evident.
2. When removing a parent leader of limb to a lateral branch, the final cut should be made as close to parallel as possible with the branch bark ridge and the lateral limb. The cut should be made as close to the bark ridge as possible without cutting into it. Care should be taken to avoid damaging the lateral limb when the final cut is made.
3. All branches too large to support with one hand shall be precut to avoid splitting or tearing of the bark. Where necessary, ropes or other equipment should be used to lower large branches or stubs to the ground.
4. No more than 1/3 of the foliage shall be removed within one (1) growing season.
5. Equipment that will damage the bark and cambium layer shall not be used on or in the tree. For example, the use of climbing spikes (hooks, irons) is not acceptable work practice for pruning operations on live trees. Sharp tools shall be used so that clean cuts will be made at all times.
6. All cut limbs shall be removed from the crown upon completion of the pruning.
7. Wound dressing / pruning paints should not be used on pruning cuts.

Stump Grinding

Any tree removed in the Village right-of-way shall have the stump ground out and the debris generated shall be removed. The hole shall be filled with soil and seeded with grass seed. If a replacement tree is desired, a tree planting permit shall be completed prior to planting.

Inspection

The Village Forester shall inspect work periodically to insure that all specifications are adhered to.

Completion

All work shall be completed within the pruning/removal window stated on the permit. If the work is not performed within this window and is still desired, another permit must be filled out and completed.

**Before you dig please call
Diggers Hotline 1-800-242-8511**



VILLAGE OF HOWARD RIGHT-OF-WAY TREE MAINTENANCE PERMIT

As required by Ordinance §38.111

Permit Number: 20xx-001

Name of Applicant:

Street Address:

City-State-Zip:

Phone:

Site Address: Same

Approved	<p>Tree Species:</p> <p>Quantity:</p> <p>Work to be Performed:</p> <p>Location of Work:</p> <p>Allowable Maintenance Period (within 30 days of issuance): _____ to _____</p> <p>Contractor Name Performing Work (if applicable):</p> <p>Comments:</p>
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Denied	Reason for Denial:
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If work is not completed within this allowable period, and maintenance is still desired, another permit must be obtained.

CHRIS CLARK

Village Forester

Date

RECOMMENDED STREET TREE PLANTING LIST

SMALL TREES (30' Maximum Height) - Acceptable trees for terraces w/overhead power lines and/or if terrace is 3-5 feet wide. Can be planted in wider terraces.

<u>Scientific Name</u>	<u>Common Name</u>	<u>Cultivars</u>
<i>Acer ginnala</i>	Amur Maple (Tree Form)	
<i>Acer tataricum</i>	Tartarian Maple	
<i>Amalanchier canadensis</i>	Serviceberry	'Autumn Brilliance'
<i>Carpinus caroliniana</i>	American Hornbeam	
<i>Crataegus crusgalli</i> var. <i>inermis</i>	Cockspur Thornless Hawthorn	
<i>Maackia amurensis</i>	Amur Maackia	
<i>Malus spp.</i>	Flowering Crab	'Bob White', 'David', 'Golden Raindrops', 'Harvest Gold', 'Indian Summer', 'Prairifire', 'Red Barron', 'Red Jade', 'Snowdrift', 'Spring Snow'
<i>Ostrya virginiana</i>	Ironwood	
<i>Prunus cerasifera</i>	Newport Plum	
<i>Prunus nigra</i>	Princess Kay Plum	'Princess Kay'
<i>Syringa reticulata</i>	Japanese Tree Lilac	'Ivory Silk', 'Summer Snow'

MEDIUM TREES (30' - 45' Maximum Height) - Acceptable trees for terraces that are 5-8 feet wide. Can be planted in wider terraces if desired.

<i>Acer miyabei</i>	Miyabe Maple	'State Street'
<i>Acer truncatum</i> x <i>platanoides</i>	Shantung Hybrid Maple	'Norwegian Sunset', 'Pacific Sunset'
<i>Corylus colurna</i>	Turkish Filbert	
<i>Cercidiphyllum japonicum</i>	Katsuratree	
<i>Phellodendron amurense</i>	Amur Cork Tree	
<i>Pyrus calleryana</i>	Callery Pear	'Autumn Blaze', 'Bradford', 'Cleveland Select'
<i>Sorbus alnifolia</i>	Korean Mountain Ash	

LARGE TREES (50' Minimum Height) - Acceptable trees for terraces 8 foot and wider.

<i>Acer x freemanii</i>	Freeman Maple	'Autumn Blaze', 'Celebration', 'Marmo', 'Sienna Glen'
<i>Acer platanoides</i>	Norway Maple (Limit use of this species due to overplanting)	'Cleveland', 'Crimson King', 'Crimson Sentry', 'Crystal', 'Deborah', 'Emerald Lustre', 'Emerald Queen', 'Globosum', 'Royal Red', 'Schwedleri', 'Superform'
<i>Acer saccharum</i>	Sugar Maple	'Green Mountain', 'Fairview', 'Goldspire'
<i>Aesculus hippocastanum</i>	Horsechestnut	'Baumannii', 'Ruby Red'
<i>Celtis occidentalis</i>	Hackberry	'Prairie Pride'
<i>Ginkgo biloba</i>	Ginkgo (male)	'Autumn Gold', 'Magyar', 'Princeton Sentry'
<i>Gleditsia triacanthos</i>	Thornless Honeylocust	'Imperial', 'Moraine', 'Shademaster', 'Skyline', 'Sunburst'
<i>Gymnocladus dioica</i>	Kentucky coffeetree	'Espresso', 'Prairie Titan'
<i>Liriodendron tulipifera</i>	Tuliptree	
<i>Platanus x acerifolia</i>	London Planetree	'Exclamation'
<i>Quercus alba</i>	White Oak	
<i>Quercus bicolor</i>	Swamp White Oak	
<i>Quercus macrocarpa</i>	Bur Oak	
<i>Quercus robur</i>	English Oak	'Skymaster'
<i>Quercus rubra</i>	Northern Red Oak	
<i>Tilia americana</i>	American Linden	'Redmond'
<i>Tilia cordata</i>	Littleleaf Linden	'Fairview', 'Glenleven', 'Greenspire', 'Prestige'
<i>Tilia tomentosa</i>	Silver Linden	
<i>Tilia x euchlora</i>	Crimean Linden	
<i>Ulmus x</i>	Hybrid Elm	'Accolade', 'Frontier', 'Homestead', 'Pioneer', 'Prospector', 'Regal'

UNDESIRABLE TREE PLANTING LIST

Nuisance Species – banned from planting in the right-of-way

<u>Scientific Name</u>	<u>Common Name</u>	<u>Reason</u>
	All Evergreen Species	Obstruct visibility
<i>Acer negundo</i>	Boxelder	Weak wooded, attracts boxelder bug
<i>Fraxinus americana</i>	White Ash	Emerald Ash Borer (EAB)
<i>Fraxinus mandshurica</i>	Manchurian Ash	EAB
<i>Fraxinus nigra</i>	Black Ash	EAB
<i>Fraxinus pennsylvanica</i>	Green Ash	EAB
<i>Salix spp.</i>	All Willow Species	Weak wooded, diseased foliage
<i>Populus deltoides</i>	Cottonwood	Weak wooded, heaves pavement, heavy seed crop
<i>Robinia pseudoacacia</i>	Black Locust	Weak wooded, thorns, spread from root suckers

Undesirable Species – unacceptable for planting in the right-of-way

<u>Scientific Name</u>	<u>Common Name</u>	<u>Reason</u>
<i>Acer rubrum</i>	Red Maple	Intolerant of alkaline soils
<i>Acer saccharinum</i>	Silver Maple	Weak wooded, heaves pavement, heavy seed crop
<i>Betula papyrifera</i>	Paper Birch	Susceptible to insect & disease, intolerant of disturbed sites
<i>Betula pendula</i>	European White Birch	Susceptible to insect & disease, intolerant of disturbed sites
<i>Malus sylvestris</i>	Common Apple	Fruit tree
<i>Prunus domestica</i>	Garden Plum	Fruit tree
<i>Prunus serotina</i>	Black Cherry	Fruit tree
<i>Prunus virginiana</i>	Canada Red Chokecherry	Susceptible to black knot
<i>Pyrus communis</i>	Common Pear	Fruit tree
<i>Quercus palustris</i>	Southern Pin Oak	Intolerant of alkaline soils
<i>Sorbus americana</i>	American Mountain Ash	Susceptible to disease & fungal rot, heavy fruit set
<i>Sorbus aucuparia</i>	European Mountain Ash	Susceptible to disease & fungal rot, heavy fruit set

REMEMBER

- Watering is very important. Water seldom but heavily. Use a 5 gallon bucket with holes drilled in the bottom for easy watering.
- Protect the tree trunk from lawn mowers and string trimmers.
- Mulch “volcanoes” are not good for trees.
- ALL MAINTENANCE needed on the tree will be performed by the Village Forestry Division whether you call or not.
- This is a community tree, owned by all, and enjoyed by all.

If you have questions or notice any problems with the tree(s) please contact the Village Forester at 434-4060.

THANK YOU

FORESTRY WEBSITE

For even more information about the Village of Howard Forestry Division or general forestry information and links to other websites visit us at www.villageofhoward.com



FORESTRY DIVISION

**INFORMATION ABOUT
NEW STREET TREES**

WATERING

MULCHING

FERTILIZING

STAKING

REPLACEMENT

PRUNING

The Forestry Division has planted a new community tree on the terrace. In order for the tree to become established and be a valuable asset to your property, the following procedures are recommended.

WATERING

Proper watering is the most important part of post-planting care. You can help insure establishment and continued growth by following these guidelines.

- Water tree(s) on an as needed basis, usually once per week.
- Apply 10 to 15 gallons of water slowly so that it can soak into the soil thoroughly.
- For easy watering, use a 5 gallon bucket with small holes drilled in the bottom.
- In periods of wet weather check the soil moisture to a depth of 6” to 8”. If soil is wet **DO NOT WATER**. Over watering can kill a tree.
- Water tree for the first 2 years to ensure establishment and growth.

MULCHING

All newly planted trees are mulched with woodchips. Please leave mulch around tree as this helps retain soil moisture and keeps lawn mowers / string trimmers away from the tender bark. Try to maintain a 4” layer of mulch; however **DO NOT** pile mulch around trunk as this will cause insects and disease to attack the trunk near the root collar.

FERTILIZING

All newly planted trees should not be fertilized the first year while they become established.

STAKING

The Forestry Division will stake the tree(s) at time of planting if it is required. Stakes that are placed on the tree are done so with wide strapping to prevent girdling of the trunk, and will be evaluated after 1 year for removal. If the tree is not growing straight please notify the Village Forester.

REPLACEMENT

If the street tree(s) does not survive, the Village will replace it. Please notify the Village Forester if the tree appears to be dead and it will be inspected and replaced at no expense, as it is a community tree. Some trees may not be replaced within the year as they can only be planted in the spring. All others will try to be replaced by the next planting period.

TREE PRUNING

The Forestry Division will prune and maintain the tree throughout its life. Dead or broken branches will be removed at time of planting. Future pruning of the tree will be performed on a periodic cycle. Please contact the Village Forester to report any damage or if the street tree needs pruning, and remember that over the life of the tree street and sidewalk clearances must be maintained.