

Memo

To: Village President and Board of Trustees
From: Pamela A. Cool, Vice Chairman & the Plan Commission
cc: Village Clerk
Date: August 11, 2016
Re: Revised Tree Preservation Ordinance

On Tuesday, August 9, 2016, at a Special Meeting, the Plan Commission unanimously voted to recommend revisions to the existing Tree Preservation Ordinance (TPO). Below are highlights of the substantive changes to the Ordinance.

- Section 4-6-3 (E) Creation of an Escrow Requirement, the cash value of which is equal to the tree replacement value
- Section 4-6-4 (D) Exception
- Section 4-6-4 (F) Requirement of the posting of a sign displaying the Tree Removal Plan on the property
- Section 4-6-5 (B) Prohibition of other planting or landscape additions that would interfere with planting of replacement trees within the area of a Tree Preservation Plan
- Section 4-6-6 (B) Contribution in lieu of Replacement, in order to fulfill TRP

Also, during the course of the Commission's review, we only received one public comment, from Carol McLuckie, a resident living on Old Hart Road. Ms. McLuckie described to the Commission how the Lake County Department of Transportation is planning a road widening project which will involve the destruction of a large number of Heritage Trees on her property, and which will also likely cause damage to many other Heritage Trees adjacent to the project site. Ms. McLuckie inquired of the Plan Commission if the TPO could be amended to include a requirement of other government entities, such as LDOT, to comply with Barrington Hills' TPO and to plant replacement Heritage Trees when a project would result in the removal of such trees.

The Plan Commission did not have an attorney present at our meeting, and subsequently we recommended that she express her concerns to you, the Board of Trustees and to the Village Attorney, to determine the enforceability of the TPO on other governmental entities. We sympathized with Ms. McLuckie's plight and urged her to seek help from her Lake County Board member, Nick Sauer, and to also seek legal representation. Any further assistance that the Village could provide her would be greatly appreciated.

Sincerely,

Pamela A. Cools
Vice Chairman, Plan Commission
Village of Barrington Hills

**ORDINANCE AMENDING AND RESTATING TITLE 4, CHAPTER 6
TREE PRESERVATION - OF THE VILLAGE CODE IN ITS ENTIRETY**

WHEREAS, the Village of Barrington Hills (hereinafter the “Village”) is a duly organized and existing Illinois home rule municipality pursuant to the Illinois Municipal Code, 65 ILCS 5/1-1-1 *et seq.*; and

WHEREAS, the Village of Barrington Hills is authorized and empowered, under the Municipal Code and the Code of Ordinances of the Village of Barrington Hills, to set forth regulations for building within the Village, including but not limited to those regulations relative to preservation of existing conditions and future landscape conditions on property within the Village; and

WHEREAS, in December 2007, the Village Board approved Ordinance No. 7-24 adopting regulations for tree preservation, which regulations have been codified in Title 4 as Chapter 6, Tree Preservation; and

WHEREAS, a primary intent of such regulations is to ensure the presence and continuation of Heritage Trees, a special natural resource found throughout the Village of Barrington Hills, by requiring sound forestry practices, preventing storm water runoff and topsoil erosion; and

WHEREAS, the Plan Commission has recently studied the provisions of the Tree Preservation Ordinance, and has determined that certain provisions of the Ordinance require modification and/or amplification to best meet the needs of the Village and its residents relative to securing and protecting Heritage Trees; and

WHEREAS, the Village President and Board of Trustees have reviewed the amendments as set forth in Exhibit A, attached hereto and incorporated herein by reference, and based on the recommendations of the Plan Commission, deem it prudent and necessary to adopt the revised amendments through adoption of the provisions set forth in Exhibit A, which will amend and restate Chapter 6 as set forth herein and in the Village Code.

NOW, THEREFORE, BE IT ORDAINED by the President and Board of Trustees of the Village of Barrington Hills, Cook, Kane, Lake and McHenry Counties, Illinois, as a home rule municipality, the following:

SECTION ONE: That the forgoing recitals are hereby incorporated by reference as if fully set forth herein.

SECTION TWO: That Title 4, Chapter 6 Tree Preservation be and hereby is amended and restated as set forth in Exhibit A, attach hereto and incorporated herein by reference.

SECTION THREE: That all other ordinances and resolutions, or parts thereof, in conflict with the provisions of this Ordinance, are, to the extent of such conflict, expressly repealed.

SECTION FOUR: That this Ordinance shall be in full force and effect from and after its passage, approval, and publication in pamphlet form as provided by law.

Ayes: Nays: Absent:

PASSED AND APPROVED by the President and Board of Trustees of the Village of Barrington Hills, Illinois, this 29th day of August, 2016.

APPROVED:

ATTEST:

Village President

Village Clerk

EXHIBIT A

REDLINE VERSION

8/25/2016

Chapter 6

TREE PRESERVATION

4-6-1: INTENT AND PURPOSE:

4-6-2: DEFINITIONS:

4-6-3: ADMINISTRATION:

4-6-4: GENERAL REQUIREMENTS:

4-6-5: CONSTRUCTION STANDARDS:

4-6-6: REPLACEMENT:

4-6-7: APPEALS:

4-6-8: TABLES:

4-6-1: INTENT AND PURPOSE:

~~The intent of this Chapter is to ensure the presence and continuation of Heritage Trees, a special natural resource is found throughout the Village of Barrington Hills by requiring sound forestry practices, preventing storm water runoff and topsoil erosion. It is also the intent of this Chapter to assist, promote and educate its residents as to the importance, protection and existence of Heritage Trees. Residents of the Village will then continue to enjoy all the benefits of living in the unique environment of Barrington Hills, because the Village strives to protect the health, safety and welfare of its residents from situations which may substantially alter the natural environment. This will be accomplished by regulating how Heritage Trees may be removed and replaced, whether as a result of building construction or as a result of only landscaping activity.~~

The intent of this Chapter is to ensure the presence, conservation and perpetuation of Heritage Trees within the Village, and to educate residents about their existence and the importance of protecting them. Heritage Trees are a unique natural resource found throughout the Village of Barrington Hills that have a positive impact on animal habitat,

air and soil quality, as well as watershed and invasive species management. By preventing situations that may substantially alter the natural environment, the Village aims to protect the health, safety and welfare of residents, while also ensuring that they may continue to enjoy all the benefits of living in the unique environment of Barrington Hills. This may be accomplished by regulating how Heritage Trees may be removed and replaced, as a result of building construction and/or landscape activity.

4-6-2: DEFINITIONS:

For the purpose of the regulations contained in this Chapter, the definitions contained in this section shall be observed and applied, except when the context clearly indicates otherwise. Words used in the present tense shall include the future, and words used in the singular shall include the plural, and the plural the singular; the word "shall" is mandatory and not discretionary; the word "may" is permissive; the masculine gender includes the feminine and neuter. Whenever a word or term defined herein appears in the text of this Chapter, its meaning shall be construed as set forth in the definition thereof and any word appearing in parenthesis directly thereafter shall be construed in the same manner.

BUILDING OFFICER: The building and zoning enforcement officer as defined in section 1-6-9 of this code.

CERTIFIED ARBORIST: A person, who based on training and experience, diagnoses the condition of shade or ornamental trees, evergreens and shrubs and recommends or supervises the treatment of any such trees, or in any manner treats any such trees, by feeding or fertilizing, or by pruning, trimming, bracing, treating cavities or other methods, has passed the ISA Certified Arborist exam and maintains his or her certification in good standing with the International Society of Arboriculture (ISA).

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CERTIFIED FORESTER: A person who practices the art and science of forest stewardship and natural resource management, and who has met the requirements to be a Certified Forester and maintains his or her certification in good standing with the Society of American Foresters.

CONDITION RATING: The condition of a Heritage Tree based on a six (6) point scale set forth in table B of this Chapter with 1 being the best and 6 being the worst, for purposes of determining the health of a Heritage Tree and whether the tree is subject to regulations contained in this Chapter.

DIAMETER BREAST HEIGHT (DBH): The diameter of the trunk of the tree measured in inches at a point of four and one-half feet (4 1/2') above grade.

GOOD CONDITION: A tree having a condition rating of 1 or 2, ~~or 3~~ as set forth in table B of this Chapter. Only trees of those ratings in a Woodland will be considered Heritage Trees.

GROWING SEASON: The optimum planting time for the care and nurture of woody plant stock during any one calendar year is when there is less than a 5 percent chance for frost until there is a 95 percent chance for frost.

HERITAGE TREES: Trees of a size, genus and species indigenous to this region, as set forth in Table A of this Chapter, are determined to be of significant historical and ecological value to the Village of Barrington Hills to be protected trees. Such trees shall ~~be above the minimum~~ have a condition rating good condition standard as listed of 1 or 2 as set forth in Table B of this Chapter.

MINIMUM ROOT ZONE: The area beneath a tree having as its center point the center of the trunk of the tree and a radius equal to one foot (1') for every inch of DBH.

SITE: A lot, or contiguous lots, under the control of a common owner, for which a tree removal permit was sought and obtained.

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SITE PLAN: A general illustration of the proposed work, its location, the use of the building or structure, and all portions of the site, including but not limited to details of grading, and structural, mechanical, sanitary and electrical work.

SURROUNDING AREA: Shall not include any area which is not on the same site as that for which the tree removal permit was sought and obtained.

TREE: Any self-supporting, woody plant together with its root system, growing upon the earth usually with one trunk, or a multi-stemmed trunk system, supporting definitely formed crown.

TREE PRESERVATION PLAN (TPP): A plan directly overlaid on the site plan indicating the location, species, condition rating and DBH of all Heritage Trees, and includes a maintenance plan for three (3) growing seasons for all Heritage Trees, consistent with the sound forestry practices, as found in Tables C and D of this Chapter.

TREE REMOVAL PERMIT (TRP): The permit required by this Chapter in order to remove any Heritage Tree within a protected Woodland.

VILLAGE: The Village of Barrington Hills, in the Counties of Cook, Kane, Lake and McHenry, in the State of Illinois.

WOODLAND: Eight (8) or more Heritage Trees on a site within a circular area having a radius not to exceed 117.8 feet and shall include all such trees within the Woodland regardless of the number of such trees. A site may encompass one or more ~~than one~~ Woodlands.

4-6-3: ADMINISTRATION:

(A) Tree Removal Permit Required: A tree removal permit ("TRP") shall be required for the destruction or removal of any Heritage Tree in any Woodland. No person shall, directly or indirectly remove, damage or destroy a Woodland without having secured a TRP.

(B) Exemption:

1. This Chapter shall not apply to the removal of Woodlands pursuant to a forestry management plan or nursery stock plan that is approved and administered by a governmental agency with jurisdiction over such matters.
2. This Chapter shall not apply to the removal of Woodlands on property owned by a common owner, either singularly, collectively or institutionally, which exceeds one hundred (100) acres of contiguous land in the Village so long as the property is subject to a tree preservation plan acceptable to the Village. Such a plan, which shall have been prepared by or endorsed by a Certified Arborist or Certified Forester, may be accepted by the Village's Plan Commission and shall, at a minimum, include the forestry management practices found in Tables C and D of this Chapter to preserve and protect Heritage Trees.

(C) Application And Fee: A Tree Removal Permit ("TRP") application on the prescribed form shall be submitted to the Village Building Officer with the permit fee established by the Village.

(D) Application Procedure:

1. Construction Permit: The applicant shall submit a Tree Preservation Plan ("TPP") to the Village Building Officer with his application for a TRP in conjunction with construction when a building permit is required by the provisions of this Title.
 - a. The TPP shall consist of two (2) legible reproducible site plans, drawn to scale, of a tree survey of all Heritage Trees in the designated Woodland, overlaid directly upon the site plan, including the location, species, DBH, and condition as rated in accordance with the standards in Table B of this Chapter.

The survey shall distinguish among the Heritage Trees to be preserved, transplanted, or destroyed. Groups of trees which are less than three feet (3') apart may be designed by clumps, provided that all Heritage Trees and all other trees with a DBH of twelve inches (12") or greater shall be individually depicted on the TPP.

b. The Building Officer in consultation with the Village Arborist may permit the TPP to exclude areas of the site from the tree survey if he determines that the proposed construction or other activity will not impact those areas.

c. The TPP shall include a maintenance plan for all Heritage Trees, consistent with the forestry practices found in Tables C and D of this Chapter, to ensure the protection of the trees for a period of at least three (3) growing seasons from the planting of the tree(s).

2. Non-construction Permit: When no building permit is required, the applicant shall submit the following with his application for a TRP:

a. Site plan that depicts the area of the tree removal, the Heritage Trees to be removed, and all other Heritage Trees whose minimum root zone is within the tree removal area. All Heritage Trees shall be identified by location, species, DBH, and condition as rated in accordance with the standards in Table B of this Chapter.

b. Reasons for removing the Heritage Trees, including reports or studies, if any, indicating that the trees should be removed.

3. Application Review: Upon receipt of a completed application including the TPP and the required fee, the Building Officer shall review the application, which, if deemed necessary, may include a site inspection by the Village Arborist.

(E) Escrow:

(1) If tree replacement is required by this Chapter, then as a condition of the TRP, the applicant shall place into escrow with the Village an amount of money in cash equal to the tree replacement value, as determined by the Village Arborist. The escrowed funds shall be returned to the applicant in the following manner: one-half (1/2) of the escrow shall be refunded upon tender to the Village of an executed contract to purchase the trees required by the TRP and the remaining one-half (1/2) of the escrow shall be refunded upon verification that the new tree(s) are planted in conformance with the TRP. Failure to plant the tree(s) in compliance with the TRP shall result in forfeiture of the Escrow, which shall then be used by the Village to plant trees as required by the TRP. Access to the applicant's property shall be granted for such work

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to be completed in accordance with the TRP. The Village Arborist shall maintain a current schedule of cost including planting expenses for replacement of trees which shall serve as the basis for computation of the required cash escrow.

2. If it is determined that practices which violate any portion of the Village Code have resulted in tree damage, then the Village may require an escrow payment be made to the Village, equal to the replacement value of the damaged tree(s) as determined by the Village Arborist. The cash escrow shall be held by the Village for the purpose of assuring that all remedial actions required by the Village to restore the health of the tree(s) are taken, and/or for the purpose of assuring the appropriate tree replacement should any damaged trees die or show noticeable signs of decline as determined by the Village Arborist.

4-6-4 GENERAL REQUIREMENTS:

(A) The Building Officer shall grant a TRP only if:

1. All reasonable efforts have been undertaken in the architectural layout and design of the proposed construction or other activity to preserve Woodlands; or
2. The removal of the Heritage Trees is consistent with sound forestry practice found in Table C or will result in the enhancement of the Woodland; and
3. The transplanting of the Woodlands is not feasible.

(B) As a condition to granting a TRP, the applicant shall be required to replace the Heritage Trees that will be removed in accordance with Section 4-6-6 with those tree species identified in Table A of this Chapter. Replacement trees shall be acquired and planted in conformance with Tables C and D of this Chapter.

(C) A TRP shall expire and become null and void if work authorized by the TRP is not commenced within one growing season from the date of issuance of the TRP, or within

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any other time agreed to by the Village in writing, or if such work, when commenced, is suspended or abandoned at any time for a period of greater than ninety (90) days, without the Village's written agreement to any suspension. ~~Upon good cause shown, the TRP may be extended six (6) months by the Building Officer.~~

(D) Except as set forth herein no certificate of compliance as required by Section 5-1-3 of this Code shall be issued until any required replacement of Heritage Trees, as required by the TRP, has been completed and after three growing seasons, the final tree inspection approval has been given by the Building Officer in consultation with the Village Arborist.

Exception: Upon good cause shown as to why the required replacement of Heritage Trees has not been completed, the Building Officer may issue a temporary certificate of compliance for a period of six (6) months ~~to allow occupancy of a home on the property while~~ until the TRP has been completed, and final tree inspection conducted. In addition to the loss of the cash escrow required ~~under this~~ by Section 4-6-3 (E) of this Chapter, the failure to complete the TRP within the six (6) month extension period shall result in a violation of this Chapter, and shall be subject to the general ~~penalties and procedures set forth in Chapter 4~~ penalty procedures provided in Section 1-4-1 of the Village Code.

(E) In the event the completion of the required ~~Heritage Trees~~ TRP is prevented by seasonal weather conditions, or availability of plant stock, the Building Officer, in consultation with the Village Arborist, may extend the date of completion by six (6) months into the next growing season.

(F) The TRP shall be in a written form and shall be prominently posted on the site so as to provide notice to the owner, owner's agent, and to all persons working or seeking to work on the site. The TRP shall state the conditions under which forestry activities are occurring on the site and any other information that may assist in the identification of the TRP.

4-6-5: CONSTRUCTION STANDARDS:

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(A) During construction, the TPP shall be followed to prevent the destruction or damaging of Heritage Trees including unless otherwise authorized by the TPP, a fence erected and maintained so that no excess soil, additional fill, equipment, liquids, or construction debris shall be placed within the minimum root zone of any Heritage Tree, unless the addition of excess soil or fill is required in order to comply with the Lake County Watershed Development Ordinance found in Section 4-2-10 of this Title.

(B) The area of the site included within a TPP shall not have other plantings or landscape additions planted that will serve to prevent or hinder in any way the planting of the required replacement Heritage Trees.

~~(B)~~ (C) Heritage Trees in a TPP that are damaged or as determined by the Building Officer, in consultation with the Village Arborist, shall be required to be replaced by Heritage Trees of equal DBH in the aggregate, in accordance with Section 4-6-6, with those tree species identified in Table A of this Chapter. Replacement trees shall be acquired and planted conformance with Tables C and D of this Chapter.

4-6-6: REPLACEMENT:

(A) Replacement in Kind:

1. In the event that a person shall remove, or damage or destroy a Heritage Tree in a Woodland without having secured a TRP, in addition to the general penalty provided in Section 1-4-1 of the Village Code, he shall plant, within the growing season, a replacement tree or trees on the site within ninety (90) days of written notice from the Village. The failure to plant the replacement tree(s) shall constitute a violation of this Chapter, and each day that the replacement tree is not planted shall constitute a separate offense.

2. The replacement tree(s) required by this Section shall be a species listed in Table A of this Chapter and the replacement tree(s) shall equal the aggregate DBH of the damaged or ~~destroyed~~ removed Heritage Tree(s). Replacement trees shall be acquired and planted in conformance with Tables C and D of this Chapter.

3. Replacement trees required by this Section shall be maintained alive and healthy on the site for three growing seasons. Methods should be used as found in Table D of this Chapter to provide for protection of the replacement trees from deer. Any such replacement tree(s) which dies or becomes severely damaged before the end of the third growing season of planting shall be replaced by the applicant in conformance with Tables C and D of this Chapter at the next growing season, upon written notice from the Building Officer.

(B) Contribution in lieu of Replacement:

In order to fulfill some or all of the TRP's requirement for replacement of Heritage Trees, after providing a TRP for the planting of a Woodland on the site, a fee in lieu of the equal value of the remaining replacement tree(s) may be paid to a governmental or non-profit natural resources management entity to fund a program involving the restoration, establishment, enhancement, or preservation of Heritage Trees in the Village.

4-6-7: APPEALS:

Any person aggrieved by a plan review, action taken, or order issued, other than a stop work order issued pursuant to subsection 4-1-7(C) of this title, may appeal to the Barrington Hills Plan Commission in accordance with the notice and appeal provisions of subsection 4-3-4(D) of this title, upon payment of a filing fee of one hundred dollars (\$100.00).

4-6-8: TABLES:

TABLE A HERITAGE TREES

Species		Diameter at Breast Height (DBH)
<i>Common Name</i>	<i>Scientific Name</i>	
Oak (all species)	Quercus spp.	10 inches or greater
Hickory (all species)	Carya spp.	8 inches or greater
Ironwood	Ostrya virginiana	6 inches or greater
Wild Black Cherry	Prunus serotina	8 inches or greater
Hackberry	Celtis occidentalis	8 inches or greater
Black Walnut	Juglans nigra	8 inches or greater
Basswood/Linden	Tilia americana	10 inches or greater
Sugar Maple	Acer saccharum	10 inches or greater

FOR SPECIES VARIETY FOR SAVING AND PLANTING

Additional upland species to consider

Butternut

Blue Beech

Catalpa

Pawpaw

Ohio Buckeye

Additional low land species to consider

American sycamore

Red Maple

River birch

TABLE B CONDITION RATING

<u>Rating</u>	<u>Description</u>	<u>General Criteria</u>
1	Excellent	The tree is typical of the species, has less than 10 percent deadwood in the crown that is attributable to normal causes, has no other observed problems, and requires no remedial action.
2	Good	The tree is typical of the species and/or has less than 20 percent deadwood in the crown, only 1 or 2 minor problems that are easily corrected with normal care.
3	Fair	The tree is typical of the species and/or has less than 30 percent deadwood in the crown, 1 or 2 minor problems that are not imminently lethal to the tree and no significant decay or structural problems, but the tree must have remedial care above normal care in order to minimize the impact of future stress and to ensure continued health.
4	Fair to poor	The tree is not typical of the species and/or has significant problems such as 30 to 50 percent deadwood in the crown, serious decay or structural defect, insects, disease or other problems that can be imminently lethal to the tree or create a hazardous tree if not corrected in a short period of time or if the tree is subjected to additional stress.
5	Poor	The tree is not typical of the species and/or has over 50 percent deadwood in the crown, major decay or structural problems, is hazardous or is severely involved with insects, disease, or other problems that even if aggressively corrected would not result in the long term survival of the tree.
6	Dead	Less than 10 percent of the tree shows signs of life.

TABLE C STANDARDS

This Table lists the standards and organizations that are referenced in various sections of this ordinance. The standards are listed herein by the promulgating agency of the standard, the standard title and the effective date. The section or sections of the Ordinance that references the standard shall be specified as found in Table C.

American National Standards Institute (ANSI) www.ansi.org

ANSI ASC A300 (tree care)

ANSI Z133 (safety, arboricultural operations)

ANSI Z60.1 (nursery stock)

American Standard for Nursery Stock www.americanhort.org

IDNR, Div. Forest Research, "Urban and Community Forestry Program Tree Planting Standards" 1999 Springfield, Illinois

Illinois Landscape Contractors Association www.ilca.net

International Society of Arboriculture www.isa-arbor.com

NRCS, "Illinois Urban Manual Tree and Shrub Planting" August, 1994

NRCS, "Tree Protection" April, 2000

Society of American Foresters www.safnet.org

University of Illinois Extension, Plant Clinic web.extension.illinois.edu/plantclinic

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TABLE D PICTURES AND ILLUSTRATIONS

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DRAFT

CLEAN VERSION

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Chapter 6

TREE PRESERVATION

4-6-1: INTENT AND PURPOSE:

4-6-2: DEFINITIONS:

4-6-3: ADMINISTRATION:

4-6-4: GENERAL REQUIREMENTS:

4-6-5: CONSTRUCTION STANDARDS:

4-6-6: REPLACEMENT:

4-6-7: APPEALS:

4-6-8: TABLES:

4-6-1: INTENT AND PURPOSE:

The intent of this Chapter is to ensure the presence, conservation and perpetuation of Heritage Trees within the Village, and to educate residents about their existence and the importance of protecting them. Heritage Trees are a unique natural resource found throughout the Village of Barrington Hills that have a positive impact on animal habitat, air and soil quality, as well as watershed and invasive species management. By preventing situations that may substantially alter the natural environment, the Village aims to protect the health, safety and welfare of residents, while also ensuring that they may continue to enjoy all the benefits of living in the unique environment of Barrington Hills. This may be accomplished by regulating how Heritage Trees may be removed and replaced, as a result of building construction and/or landscape activity.

4-6-2: DEFINITIONS:

For the purpose of the regulations contained in this Chapter, the definitions contained in this section shall be observed and applied, except when the context clearly indicates otherwise. Words used in the present tense shall include the future, and words used in

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the singular shall include the plural, and the plural the singular; the word "shall" is mandatory and not discretionary; the word "may" is permissive; the masculine gender includes the feminine and neuter. Whenever a word or term defined herein appears in the text of this Chapter, its meaning shall be construed as set forth in the definition thereof and any word appearing in parenthesis directly thereafter shall be construed in the same manner.

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CERTIFIED FORESTER: A person who practices the art and science of forest stewardship and natural resource management, and who has met the requirements to be a Certified Forester and maintains his or her certification in good standing with the Society of American Foresters.

CONDITION RATING: The condition of a Heritage Tree based on a six (6) point scale set forth in table B of this Chapter with 1 being the best and 6 being the worst, for purposes of determining the health of a Heritage Tree and whether the tree is subject to regulations contained in this Chapter.

DIAMETER BREAST HEIGHT (DBH): The diameter of the trunk of the tree measured in inches at a point of four and one-half feet (4 1/2') above grade.

GOOD CONDITION: A tree having a condition rating of 1 or 2, ~~or~~ 3 as set forth in table B of this Chapter. Only trees of those ratings in a Woodland will be considered Heritage Trees.

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GROWING SEASON: The optimum planting time for the care and nurture of woody plant stock during any one calendar year is when there is less than a 5 percent chance for frost until there is a 95 percent chance for frost.

HERITAGE TREES: Trees of a size, genus and species indigenous to this region, as set forth in Table A of this Chapter, are determined to be of significant historical and ecological value to the Village of Barrington Hills to be protected trees. Such trees shall have a condition rating of 1 or 2 as set forth in Table B of this Chapter.

MINIMUM ROOT ZONE: The area beneath a tree having as its center point the center of the trunk of the tree and a radius equal to one foot (1') for every inch of DBH.

SITE: A lot, or contiguous lots, under the control of a common owner, for which a tree removal permit was sought and obtained.

SITE PLAN: A general illustration of the proposed work, its location, the use of the building or structure, and all portions of the site, including but not limited to details of grading, and structural, mechanical, sanitary and electrical work.

SURROUNDING AREA: Shall not include any area which is not on the same site as that for which the tree removal permit was sought and obtained.

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TREE PRESERVATION PLAN (TPP): A plan directly overlaid on the site plan indicating the location, species, condition rating and DBH of all Heritage Trees, and includes a maintenance plan for three (3) growing seasons for all Heritage Trees, consistent with the sound forestry practices, as found in Tables C and D of this Chapter.

TREE REMOVAL PERMIT (TRP): The permit required by this Chapter in order to remove any Heritage Tree within a protected Woodland.

VILLAGE: The Village of Barrington Hills, in the Counties of Cook, Kane, Lake and McHenry, in the State of Illinois.

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WOODLAND: Eight (8) or more Heritage Trees on a site within a circular area having a radius not to exceed 117.8 feet and shall include all such trees within the Woodland regardless of the number of such trees. A site may encompass one or more Woodlands.

4-6-3: ADMINISTRATION:

(A) Tree Removal Permit Required: A tree removal permit ("TRP") shall be required for the destruction or removal of any Heritage Tree in any Woodland. No person shall, directly or indirectly remove, damage or destroy a Woodland without having secured a TRP.

(B) Exemption:

1. This Chapter shall not apply to the removal of Woodlands pursuant to a forestry management plan or nursery stock plan that is approved and administered by a governmental agency with jurisdiction over such matters.

2. This Chapter shall not apply to the removal of Woodlands on property owned by a common owner, either singularly, collectively or institutionally, which exceeds one hundred (100) acres of contiguous land in the Village so long as the property is subject to a tree preservation plan acceptable to the Village. Such a plan, which shall have been prepared by or endorsed by a Certified Arborist or Certified Forester, may be accepted by the Village's Plan Commission and shall, at a minimum, include the forestry management practices found in Tables C and D of this Chapter to preserve and protect Heritage Trees.

(C) Application And Fee: A Tree Removal Permit ("TRP") application on the prescribed form shall be submitted to the Village Building Officer with the permit fee established by the Village.

(D) Application Procedure:

1. Construction Permit: The applicant shall submit a Tree Preservation Plan ("TPP") to the Village Building Officer with his application for a TRP in conjunction with construction when a building permit is required by the provisions of this Title.

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a. The TPP shall consist of two (2) legible reproducible site plans, drawn to scale, of a tree survey of all Heritage Trees in the designated Woodland, overlaid directly upon the site plan, including the location, species, DBH, and condition as rated in accordance with the standards in Table B of this Chapter.

The survey shall distinguish among the Heritage Trees to be preserved, transplanted, or destroyed. Groups of trees which are less than three feet (3') apart may be designed by clumps, provided that all Heritage Trees and all other trees with a DBH of twelve inches (12") or greater shall be individually depicted on the TPP.

b. The Building Officer in consultation with the Village Arborist may permit the TPP to exclude areas of the site from the tree survey if he determines that the proposed construction or other activity will not impact those areas.

c. The TPP shall include a maintenance plan for all Heritage Trees, consistent with the forestry practices found in Tables C and D of this Chapter, to ensure the protection of the trees for a period of at least three (3) growing seasons from the planting of the tree(s).

2. Non-construction Permit: When no building permit is required, the applicant shall submit the following with his application for a TRP:

a. Site plan that depicts the area of the tree removal, the Heritage Trees to be removed, and all other Heritage Trees whose minimum root zone is within the tree removal area. All Heritage Trees shall be identified by location, species, DBH, and condition as rated in accordance with the standards in Table B of this Chapter.

b. Reasons for removing the Heritage Trees, including reports or studies, if any, indicating that the trees should be removed.

3. Application Review: Upon receipt of a completed application including the TPP and the required fee, the Building Officer shall review the application, which, if deemed necessary, may include a site inspection by the Village Arborist.

(E) Escrow:

(1) If tree replacement is required by this Chapter, then as a condition of the TRP, the applicant shall place into escrow with the Village an amount of money in cash equal to the tree replacement value, as determined by the Village Arborist. The escrowed funds shall be returned to the applicant in the following manner: one-half (1/2) of the escrow shall be refunded upon tender to the Village of an executed contract to purchase the trees required by the TRP and the remaining one-half (1/2) of the escrow shall be refunded upon verification that the new tree(s) are planted in conformance with the TRP. Failure to plant the tree(s) in compliance with the TRP shall result in forfeiture of the Escrow, which shall then be used by the Village to plant trees as required by the TRP. Access to the applicant's property shall be granted for such work to be completed in accordance with the TRP. The Village Arborist shall maintain a current schedule of cost including planting expenses for replacement of trees which shall serve as the basis for computation of the required cash escrow.

2. If it is determined that practices which violate any portion of the Village Code have resulted in tree damage, then the Village may require an escrow payment be made to the Village, equal to the replacement value of the damaged tree(s) as determined by the Village Arborist. The cash escrow shall be held by the Village for the purpose of assuring that all remedial actions required by the Village to restore the health of the tree(s) are taken, and/or for the purpose of assuring the appropriate tree replacement should any damaged trees die or show noticeable signs of decline as determined by the Village Arborist.

4-6-4 GENERAL REQUIREMENTS:

(A) The Building Officer shall grant a TRP only if:

1. All reasonable efforts have been undertaken in the architectural layout and design of the proposed construction or other activity to preserve Woodlands; or
2. The removal of the Heritage Trees is consistent with sound forestry practice found in Table C or will result in the enhancement of the Woodland; and
3. The transplanting of the Woodlands is not feasible.

(B) As a condition to granting a TRP, the applicant shall be required to replace the Heritage Trees that will be removed in accordance with Section 4-6-6 with those tree

species identified in Table A of this Chapter. Replacement trees shall be acquired and planted in conformance with Tables C and D of this Chapter.

(C) A TRP shall expire and become null and void if work authorized by the TRP is not commenced within one growing season from the date of issuance of the TRP, or within any other time agreed to by the Village in writing, or if such work, when commenced, is suspended or abandoned at any time for a period of greater than ninety (90) days, without the Village's written agreement to any suspension.

(D) Except as set forth herein no certificate of compliance as required by Section 5-1-3 of this Code shall be issued until any required replacement of Heritage Trees, as required by the TRP, has been completed and after three growing seasons, the final tree inspection approval has been given by the Building Officer in consultation with the Village Arborist.

Exception: Upon good cause shown as to why the required replacement of Heritage Trees has not been completed, the Building Officer may issue a temporary certificate of compliance for a period of six (6) months until the TRP has been completed, and final tree inspection conducted. In addition to the loss of the cash escrow required by Section 4-6-3 (E) of this Chapter, the failure to complete the TRP within the six (6) month extension period shall result in a violation of this Chapter, and shall be subject to the general penalty procedures provided in Section 1-4-1 of the Village Code.

(E) In the event the completion of the required TPP is prevented by seasonal weather conditions, or availability of plant stock, the Building Officer, in consultation with the Village Arborist, may extended the date of completion by six (6) months into the next growing season.

(F) The TRP shall be in a written form and shall be prominently posted on the site so as to provide notice to the owner, owner's agent, and to all persons working or seeking to work on the site. The TRP shall state the conditions under which forestry activities are occurring on the site and any other information that may assist in the identification of the TRP.

4-6-5: CONSTRUCTION STANDARDS:

(A) During construction, the TPP shall be followed to prevent the destruction or damaging of Heritage Trees including unless otherwise authorized by the TPP, a fence erected and maintained so that no excess soil, additional fill, equipment, liquids, or construction debris shall be placed within the minimum root zone of any Heritage Tree, unless the addition of excess soil or fill is required in order to comply with the Lake County Watershed Development Ordinance found in Section 4-2-10 of this Title.

(B) The area of the site included within a TPP shall not have other plantings or landscape additions planted that will serve to prevent or hinder in any way the planting of the required replacement Heritage Trees.

(C) Heritage Trees in a TPP that are damaged or as determined by the Building Officer, in consultation with the Village Arborist, shall be required to be replaced by Heritage Trees of equal DBH in the aggregate, in accordance with Section 4-6-6, with those tree species identified in Table A of this Chapter. Replacement trees shall be acquired and planted conformance with Tables C and D of this Chapter.

4-6-6: REPLACEMENT:

(A) Replacement in Kind:

1. In the event that a person shall remove, or damage a Heritage Tree in a Woodland without having secured a TRP, in addition to the general penalty provided in Section 1-4-1 of the Village Code, he shall plant, within the growing season, a replacement tree or trees on the site within ninety (90) days of written notice from the Village. The failure to plant the replacement tree(s) shall constitute a violation of this Chapter, and each day that the replacement tree is not planted shall constitute a separate offense.

2. The replacement tree(s) required by this Section shall be a species listed in Table A of this Chapter and the replacement tree(s) shall equal the aggregate DBH of the damaged or removed Heritage Tree(s). Replacement trees shall be acquired and planted in conformance with Tables C and D of this Chapter.

3. Replacement trees required by this Section shall be maintained alive and healthy on the site for three growing seasons. Methods should be used as found in Table D of this Chapter to provide for protection of the replacement trees from deer. Any replacement tree(s) which dies or becomes severely damaged before the end of the third growing season of planting shall be replaced by the applicant in conformance with Tables C and D of this Chapter at the next growing season, upon written notice from the Building Officer.

(B) Contribution in lieu of Replacement:

In order to fulfill some or all of the TRP's requirement for replacement of Heritage Trees, after providing a TRP for the planting of a Woodland on the site, a fee in lieu of the equal value of the remaining replacement tree(s) may be paid to a governmental or non-profit natural resources management entity to fund a program involving the restoration, establishment, enhancement, or preservation of Heritage Trees in the Village.

4-6-7: APPEALS:

Any person aggrieved by a plan review, action taken, or order issued, other than a stop work order issued pursuant to subsection 4-1-7(C) of this title, may appeal to the Barrington Hills Plan Commission in accordance with the notice and appeal provisions of subsection 4-3-4(D) of this title, upon payment of a filing fee of one hundred dollars (\$100.00).

4-6-8: TABLES:

TABLE A HERITAGE TREES

Species		Diameter at Breast Height (DBH)
<i>Common Name</i>	<i>Scientific Name</i>	
Oak (all species)	Quercus spp.	10 inches or greater
Hickory (all species)	Carya spp.	8 inches or greater
Ironwood	Ostrya virginiana	6 inches or greater
Wild Black Cherry	Prunus serotina	8 inches or greater
Hackberry	Celtis occidentalis	8 inches or greater
Black Walnut	Juglans nigra	8 inches or greater
Basswood/Linden	Tilia americana	10 inches or greater
Sugar Maple	Acer saccharum	10 inches or greater

FOR SPECIES VARIETY FOR SAVING AND PLANTING

Additional upland species to consider

Butternut

Blue Beech

Catalpa

Pawpaw

Ohio Buckeye

Additional low land species to consider

American sycamore

Red Maple

River birch

TABLE B CONDITION RATING

<u>Rating</u>	<u>Description</u>	<u>General Criteria</u>
1	Excellent	The tree is typical of the species, has less than 10 percent deadwood in the crown that is attributable to normal causes, has no other observed problems, and requires no remedial action.
2	Good	The tree is typical of the species and/or has less than 20 percent deadwood in the crown, only 1 or 2 minor problems that are easily corrected with normal care.
3	Fair	The tree is typical of the species and/or has less than 30 percent deadwood in the crown, 1 or 2 minor problems that are not imminently lethal to the tree and no significant decay or structural problems, but the tree must have remedial care above normal care in order to minimize the impact of future stress and to ensure continued health.
4	Fair to poor	The tree is not typical of the species and/or has significant problems such as 30 to 50 percent deadwood in the crown, serious decay or structural defect, insects, disease or other problems that can be imminently lethal to the tree or create a hazardous tree if not corrected in a short period of time or if the tree is subjected to additional stress.
5	Poor	The tree is not typical of the species and/or has over 50 percent deadwood in the crown, major decay or structural problems, is hazardous or is severely involved with insects, disease, or other problems that even if aggressively corrected would not result in the long term survival of the tree.
6	Dead	Less than 10 percent of the tree shows signs of life.

TABLE C STANDARDS

This Table lists the standards and organizations that are referenced in various sections of this ordinance. The standards are listed herein by the promulgating agency of the standard, the standard title and the effective date. The section or sections of the Ordinance that references the standard shall be specified as found in Table C.

American National Standards Institute (ANSI) www.ansi.org

ANSI ASC A300 (tree care)

ANSI Z133 (safety, arboricultural operations)

ANSI Z60.1 (nursery stock)

American Standard for Nursery Stock www.americanhort.org

IDNR, Div. Forest Research, "Urban and Community Forestry Program Tree Planting Standards" 1999 Springfield, Illinois

Illinois Landscape Contractors Association www.ilca.net

International Society of Arboriculture www.isa-arbor.com

NRCS, "Illinois Urban Manual Tree and Shrub Planting" August, 1994

NRCS, "Tree Protection" April, 2000

Society of American Foresters www.safnet.org

University of Illinois Extension, Plant Clinic web.extension.illinois.edu/plantclinic

8/25/2016

TABLE D PICTURES AND ILLUSTRATIONS

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DRAFT

NATURAL RESOURCES CONSERVATION SERVICE
ILLINOIS URBAN MANUAL
PRACTICE STANDARD

TREE PROTECTION

(no.)
CODE 990



(Source: USDA - Natural Resources Conservation Service - Illinois)

DEFINITION

The protection of individual trees from damage during construction operations.

PURPOSE

The purpose of this practice is to reduce damage to and loss of individual trees during construction by implementing pre- to post-construction tree protection procedures.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies on development sites containing individual trees. Refer to practice standard TREE AND FOREST ECOSYSTEM PRESERVATION 989 for information on preserving stands of trees.

CRITERIA

The Critical Root Zone (CRZ) is one foot outside the perimeter of the leaf canopy of the tree to be protected. This area shall be protected from damage during construction operations. Trees not

identified to be protected shall be removed.

All required protection measures shall be installed prior to the commencement of any site development activity and shall remain in place and in working, functional order until all site development activities have ceased or the surrounding area has been stabilized.

No construction activities, including the placement of topsoil, shall be permitted within the CRZ. In addition, all roadways, parking areas, and storage areas shall be located outside any CRZ.

Construction fencing (fluorescent polyethylene laminar safety netting), wooden snow fence, or approved equivalent with a minimum height of 40 inches shall be installed around the CRZ of all trees to be protected, prior to pruning. The fencing shall be secured to ground-mounted metal or wood posts spaced a maximum of 6 feet apart and maintained to prevent clearing, grading

and development activities from encroaching within the CRZ.

If a higher degree or more permanent protection is desired a chain link fence following criteria in Construction Specification 91 CHAIN LINK FENCE, a wire fence following criteria in Construction Specification 92 FIELD FENCE, or a comparable wooden structure may be used.

Signs shall be posted that identify the fenced areas as CRZ.

Appropriate soil erosion and sediment control measures shall be installed outside the CRZ to prevent sediment from reaching the CRZ.

Locate roadways, storage areas, parking pads, etc. at least 25 feet from the CRZ of an individual tree.

Follow natural contours; where feasible to maintain the natural drainage patterns of the site so as not to cause the tree to get reduced moisture.

Do not trench within the CRZ of the protected tree. For roots impacted outside the CRZ, the roots shall be properly pruned according to the Society of American Foresters, National Arborist Association and International Society of Arboriculture standard of using the appropriate pruning tool to make a clean cut. The use of heavy equipment such as a backhoe for tree root pruning shall be prohibited.

In situations where it is not feasible to avoid impact in the critical root zone, follow criteria in practice standard TREE PROTECTION - AUGERING 991.

CONSIDERATIONS

When working within the boundary of a municipality, local authorities such as the Urban Forester, City Arborist, Municipal Forester or Horticulturist, or Public Works officials should be contacted to determine locally enforced tree protection/preservation standards.

A professional forester or certified arborist should be consulted for any clearing of trees and any actions that deviate from criteria within this standard. On-site supervision is recommended.

Trees to be saved should be evaluated using the following criteria in priority order:

1. Species and condition (maintain slower growing trees in good condition),
2. Long-term suitability of the tree for its present location,
3. Length of time to mitigate losses,
4. Cost of mitigating tree losses,
5. Expected long-term maintenance costs for the tree compared to other trees of the same age/size,
6. Soil erosion prevention and reduction of storm water runoff,
7. The number of other trees growing under the same conditions and the precedent that would be set by removing the tree in question,
8. Impact on property value and aesthetics,
9. Ability to screen noise and visual improprieties or ability to enhance privacy, and
10. Ability to moderate temperature changes, provide shade and reduce wind forces.

Trees to be removed should be evaluated using the following criteria in priority order:

1. In the opinion of the professional forester or certified arborist, there is a clear and reasonable risk of failure that could cause injury or property damage including existing utility service and corrective measures are not feasible and/or the tree is a safety hazard.
2. Tree is dead.
3. The tree is in poor condition with several dead branches or major crack(s).
4. Contiguous and fatal disease is present as diagnosed by a trained entomologist, plant pathologist or professional forester.
5. Current tree damage is beyond repair or the tree is in extremely poor shape due to storm damage or previous mechanical injury.
6. There is a potential of the tree to damage existing or future hardscape features such as driveways or sidewalks.
7. There is no feasible way to avoid disturbing the soil around, grading over, or placing a hardened surface within the critical root zone and the tree is an oak, hickory, red bud, horse chestnut, Kentucky coffee tree, larch, honey locust, or conifer. Consultation with a professional forester is required prior to using this criteria for tree removal.
8. Tree has a greater than 45 degree lean toward traffic or another target or it creates an unsafe vision clearance for pedestrians or vehicular traffic.
9. Tree is a fast growing or a weak wooded tree that is invasive such as box elder, silver maple, tree of heaven, Russian olive or black

cherry. Exceptions may be made for large healthy specimens of these species.

10. Tree is within five feet of a structure or that when mature will have a canopy spread that will overlap the structure. Consult with an arborist or forester.
11. The tree could be successfully transplanted with a tree spade onto another site.
12. Trees that are non-native species or invasive.

A mitigation plan for damaged trees should be prepared in consultation with a professional forester or certified arborist and included with construction plans and contract documents.

When site soil resources have been greatly altered, it is recommended a soil restoration strategy be implemented. The strategy may include:

1. Scarifying compacted areas
2. Adding top soil in areas of extreme erosion
3. Adding about 12 inches of well-rotted leaf compost
4. Adding ground cover using herbaceous vegetation, shrubs, and trees. Use of native species is encouraged.

PLANS AND SPECIFICATIONS

Plans and specifications for tree protection shall be in keeping with this standard and will describe the requirements for applying the practice. At a minimum include the following items:

1. All existing trees by species, location, and diameter at 4 ½ feet above the ground and clearly

- indicate the trees and/or branches to be removed.
2. Locations of roadways, storage areas, truck clean-out areas, and parking pads, in relationship to the trees to be protected.
 3. Location and type of fencing to be used to protect trees, including the distance for placing the fencing around the CRZ.
 4. Types and locations of signs.

All plans shall include the installation, inspection, and maintenance schedules with the responsible party identified.

Standard drawing IL-690 TREE PROTECTION - FENCING may be used as the plan sheet.

OPERATION AND MAINTENANCE

The protective signs and fences will be removed only after all construction work has been finished, including final grading and shaping of the site, and the site has been inspected by a professional forester for damages to the trees.

On active construction sites, it is recommended that trees be inspected every 7 days for compliance.

Inspections shall include a listing of trees with:

1. Damage to trunks
2. Mounding of soil around the trunk
3. Evidence of root damage
4. Evidence of improper pruning

REFERENCES

Websites

<http://www2.champaign.isa-arbor.com/catalog/publications.html>

http://willow.ncfes.umn.edu/HT_prune/P_RUN001.HTM

Publications

American Association of Nurserymen, 1996. American Standards for Nursery Stock. American National Standards Institute, Inc., Washington D.C.

Clark and Metheny, 1998. Trees and Development: A Technical Guide to Preservation of Trees During Land Development. International Society of Arboriculture, Champaign, IL

Fazio, J.R., ed., 1991. How to Save Trees During Construction. Tree City USA Bulletin #7. The National Arbor Day Foundation, Nebraska City, NE

Fazio, J.R., ed., 1991. A Systematic Approach to Building With Trees. Tree City USA Bulletin #20. The National Arbor Day Foundation, Nebraska City, NE

Fazio, J.R., ed., 1996. How to Manage Community Natural Areas. Tree City USA Bulletin #27. The National Arbor Day Foundation, Nebraska City, NE

Illinois Department of Natural Resources, Division of Forest Resources, 1999. Urban and Community Forestry Program Tree Planting Standards, Springfield, IL

Watson, G., ed., 1998. Selecting and Planting Trees. The Morton Arboretum, Lisle, IL

Watson, G. and E.B. Himelick, 1997. Principles and Practices of Planting Trees and Shrubs. International Society of Arboriculture, Champaign, IL

Wenger, K, 1996. The Forestry Handbook. Society of American Foresters, Bethesda, MD

Videos

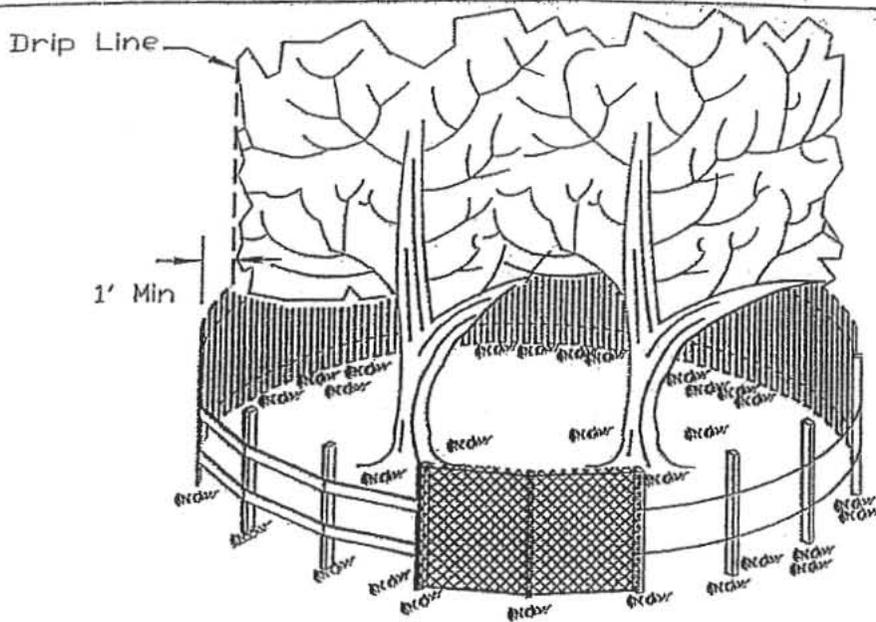
Root Injury and Tree Health. Illinois Arborists, the Morton Arboretum, the USDA Forest Service and the International Society of Arboriculture.

Trenching and Tunneling: A Video Guide for Excavating Around Trees. The Davey Resource Group. The International Society of Arboriculture and the Utility Arborist Association.

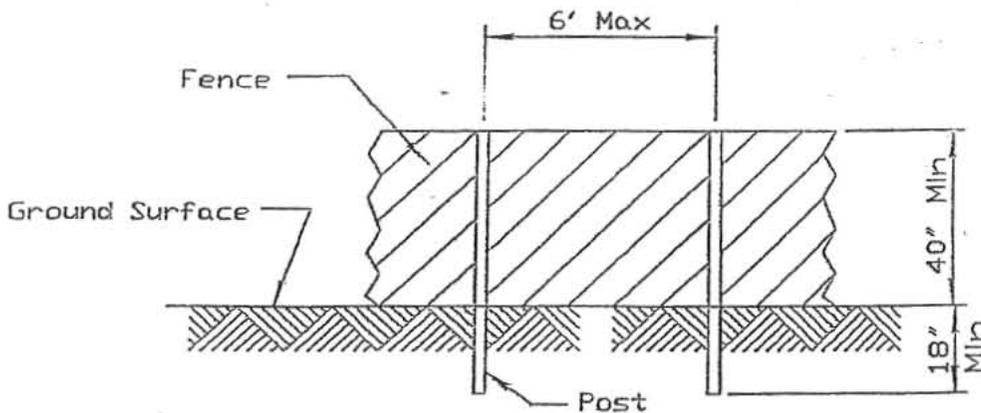
NRCS IL April 2000

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TREE PROTECTION - FENCING



SIDE VIEW



POST AND FENCE DETAIL

NOTES:

1. The fence shall be located a minimum of 1 foot outside the drip line of the tree to be saved and in no case closer than 5 feet to the trunk of any tree.
2. Fence posts shall be either standard steel posts or wood posts with a minimum cross sectional area of 3.0 sq. in.
3. The fence may be either 40' high snow fence, 40' plastic web fencing or any other material as approved by the engineer/inspector.

REFERENCE

Project _____
 Designed _____ Date _____
 Checked _____ Date _____
 Approved _____ Date _____



NRCS

Natural Resources Conservation Service

STANDARD DWG. NO.

IL-690

SHEET 1 OF 1

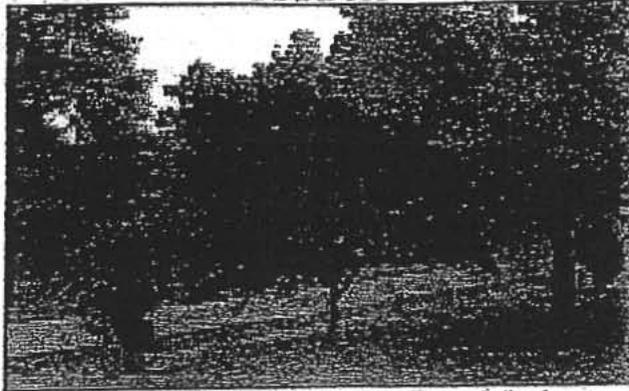
DATE 4-7-94

NATURAL RESOURCES CONSERVATION SERVICE
ILLINOIS URBAN MANUAL
PRACTICE STANDARD

TREE AND SHRUB PLANTING

(acre or sq. ft.)

CODE 985



(Source: National Arbor Day Foundation)

DEFINITION

Planting of selected trees and shrubs.

PURPOSE

The purpose of this standard is to establish trees and/or shrubs to conserve soil, beautify, screen unsightly views, provide shade and attract wildlife.

CONDITIONS WHERE PRACTICE APPLIES

In urban environments where woody tree and shrub species are needed to protect the soil from erosion, where ornamental plants are desirable for landscaping and beautification and where woody plants are needed to screen unsightly views, reduce noise levels or provide wildlife food and habitat.

CRITERIA

Select tree and shrub species suited to the soil and site conditions and adapted to the plant hardiness zone in which the planting site is located.

Keep the roots of bare root stock moist at all times prior to planting. The ball of balled and burlapped (B&B) stock and the soil of container grown stock shall be kept moist but not saturated prior to planting.

Plant trees and shrubs at a spacing that will provide enough space for full crown development. Ornamental and shade trees shall have a minimum spacing of 20 feet by 20 feet and ornamental shrubs at 5 feet by 5 feet. Trees and shrubs planted as noise barriers, screen plantings and windbreaks shall have a minimum spacing of 8 feet by 8 feet for trees and 4 feet by 8 feet for shrubs.

All bare root, container grown and balled and burlapped (B&B) planting stock shall meet the minimum root system spread criteria as established in construction specification 707-DIGGING, TRANSPORTING, PLANTING AND ESTABLISHMENT OF TREES, SHRUBS AND VINES.

All plant materials will be dormant at the time they are planted. Planting dates and procedures shall conform to those

established by construction specification 707 DIGGING, TRANSPORTING, PLANTING AND ESTABLISHMENT OF TREES, SHRUBS AND VINES for the applicable Planting Suitability Zone of Illinois.

All plantings shall be mulched unless specified otherwise in a landscaping or planting plan following criteria in practice standard MULCHING 895. The mulching material shall be uniformly graded and have the ability to completely block sunlight from reaching the surface of the soil. Mulching materials shall meet the minimum requirements as listed in material specifications 592 GEOTEXTILE, 800 PAPER AND PLASTIC NETTING, 801 JUTE NETTING, 802 EXCELSIOR BLANKETS, and 803 STRAW BLANKETS.

CONSIDERATIONS

Tree planting in urban areas should be completed as specified in a landscaping or tree and shrub planting plan developed for each site.

Care should be exercised to avoid locating trees and shrubs where they will, at maturity, interfere with electrical lines, utility maintenance zones, drain tiles, septic fields or create a traffic hazard due to blocked visibility.

Existing quality trees and shrubs should be evaluated and, where appropriate, incorporated into the landscaping or tree and shrub planting plan.

Trees and shrubs to plant should be selected based on:

1. Desired function such as shade, privacy or noise reduction screening,

2. Plant characteristics such as hardiness, growth rate, mature height and spread, resistance to insect, disease and pollution, seed production habits and soil or site requirements.

PLANS AND SPECIFICATIONS

Plans and specifications are to be developed for specific planting sites in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose.

Installation for this practice shall meet the requirements as listed in construction specification 707-DIGGING, TRANSPORTING, PLANTING AND ESTABLISHMENT OF TREES, SHRUBS AND VINES.

All plans shall include the installation, inspection, and maintenance schedules with the responsible party identified.

Standard drawing IL-686 TREE AND SHRUB PLANTING SITE PLAN may be used as the planting plan for a specific site.

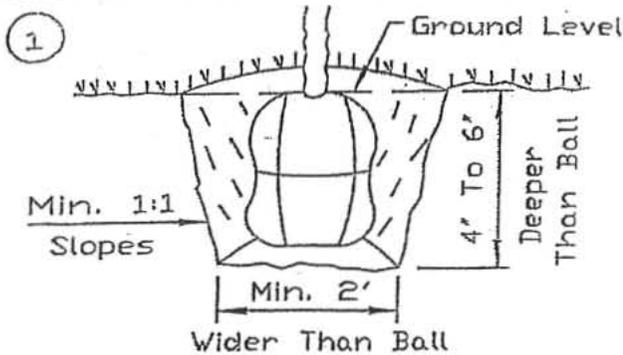
OPERATION AND MAINTENANCE

A maintenance program shall be established to provide sufficient water, fertility, mulch, corrective pruning and protection from damage by insects, diseases and machinery. Dead or severely damaged plants will be replaced as needed.

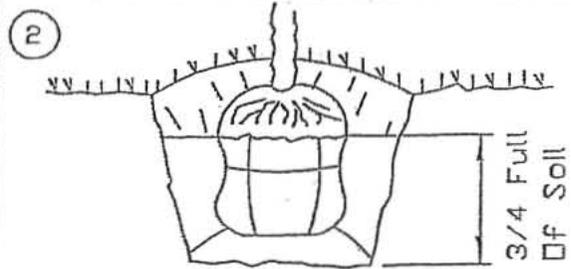
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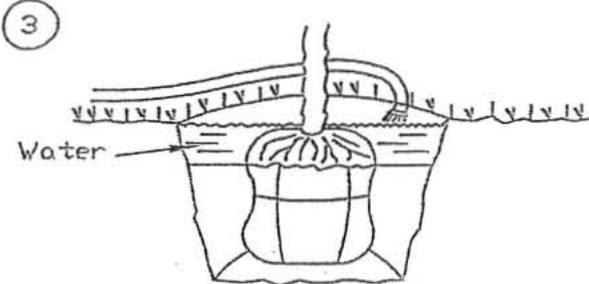
PLANTING PROCEDURE FOR BALLED AND BURLAPPED OR CONTAINER GROWN TREES AND SHRUBS



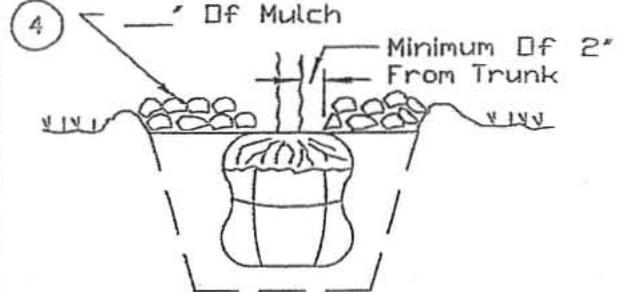
Add enough tamped soil in the bottom of the hole to set the ball at or slightly higher than the original planting depth.



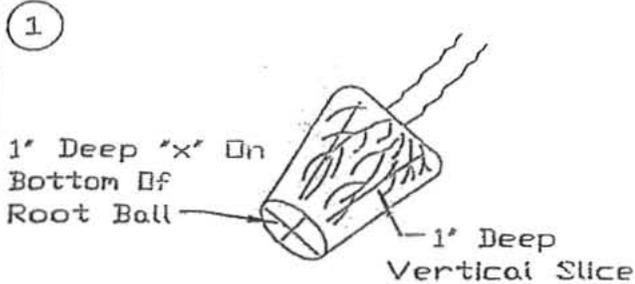
Fill the hole 3/4 full of tamped soil then remove all exposed burlap and twine using a sharp utility knife.



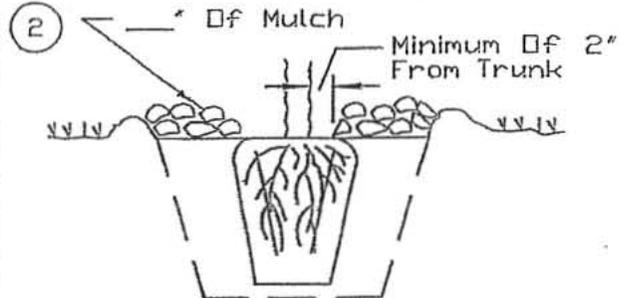
Fill the remaining 1/4 of the hole with water to remove air pockets and settle the soil. Finish filling the hole with soil after all the water has drained.



Unless soil is poorly drained, mound soil around edges of hole 4" to 6" high. Add a minimum of 4" of approved mulching material. Keep mulch about 2" from tree trunk.



Cut the circling roots of container grown trees with a sharp utility knife. Make 4 vertical slices on the sides and an "x" on the bottom. All slices should be 1-inch in depth.



Plant container-grown trees using same steps as for B & B trees except that the plastic container should be completely removed.

REFERENCE

Project _____
 Designed _____ Date _____
 Checked _____ Date _____
 Approved _____ Date _____



NRCS

Natural Resources Conservation Service

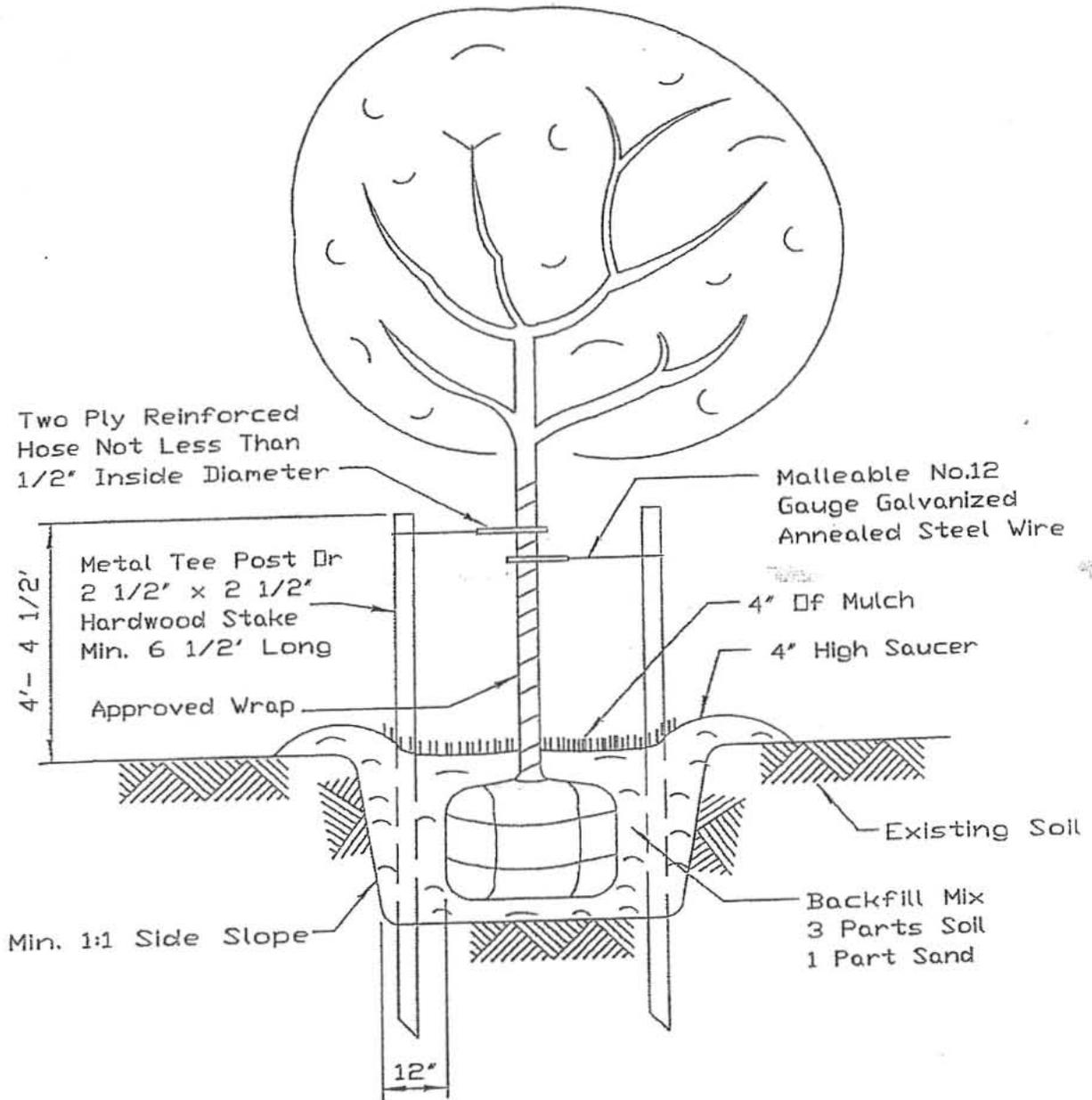
STANDARD DWG. NO.

IL-685

SHEET 1 OF 1

DATE 8-22-94

TWO GUY METHOD-TREES UNDER 8'



No Scale

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Project	_____	
Designed	_____	Date _____
Checked	_____	Date _____
Approved	_____	Date _____



NRCS

Natural Resources Conservation Service

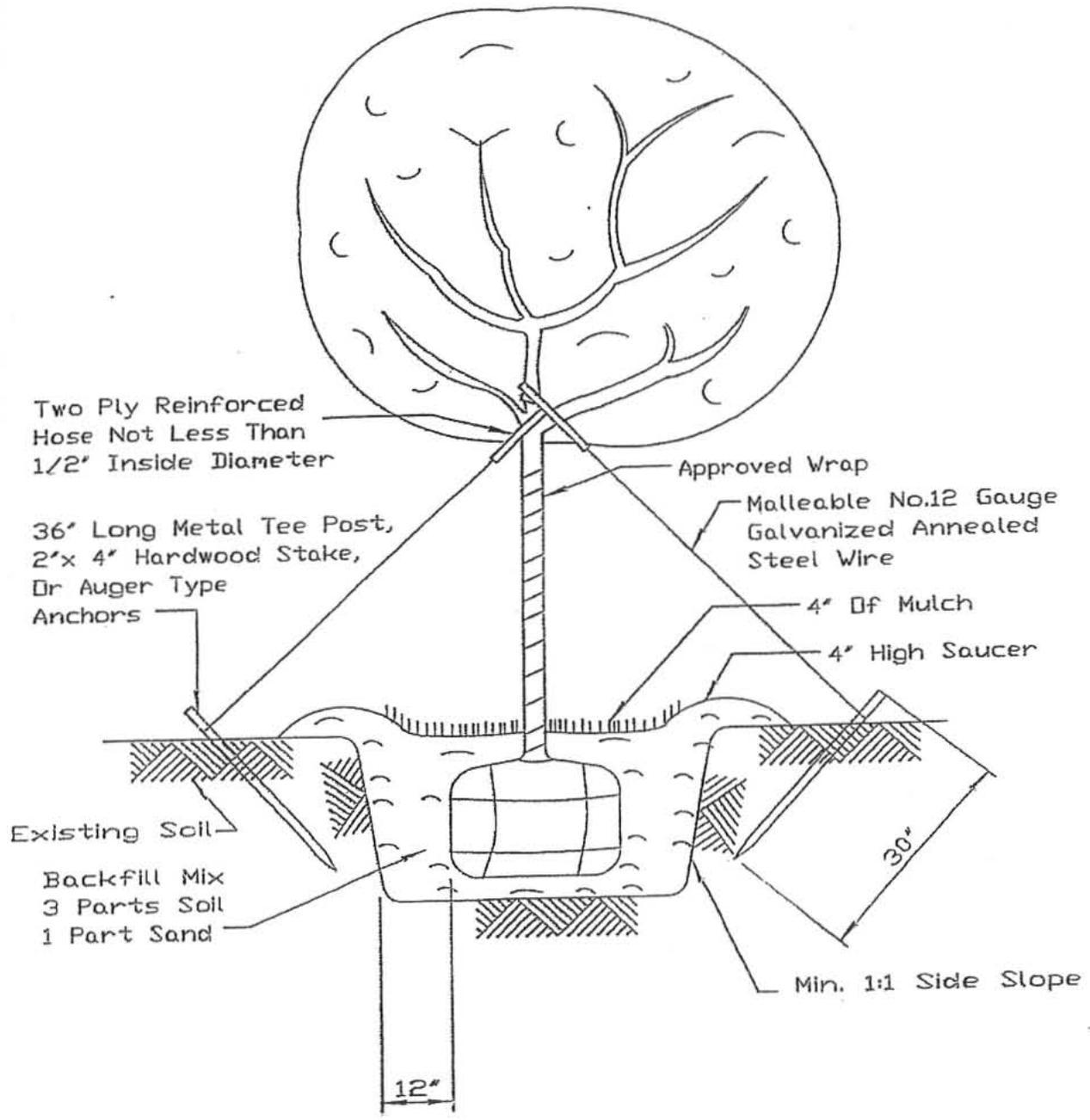
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IL-687

SHEET 1 OF 1

DATE 8-25-93

THREE GUY METHOD-TREES OVER 8'



No Scale

REFERENCE	
Project	_____
Designed	_____ Date _____
Checked	_____ Date _____
Approved	_____ Date _____



STANDARD DWG. NO.
IL-688
 SHEET 1 OF 1
 DATE 9-17-93