

CHARTER TOWNSHIP OF BLOOMFIELD

**COUNTY OF OAKLAND
STATE OF MICHIGAN**

ORDINANCE NO. 608

AN ORDINANCE TO PRESERVE AND PROTECT TREES.

THE TOWNSHIP OF BLOOMFIELD ORDAINS:

An Ordinance to safeguard trees on private and public property from unnecessary removal and to regulate such removal for the preservation of important physical, recreational and economical assets for both present and future generations and to provide penalties for violation thereof.

Section 1. Article IV Supplementary Regulations, Section 42-578, Chapter 42, Zoning Ordinance, of the Bloomfield Charter Township Code, as amended, is hereby added to read as follows:

Sec. 42-578. Tree Preservation.

1. Intent.

The Township finds that trees and woodlands are an important asset to the natural ecosystem, beneficially contribute to the character of the community and positively influence the quality of life in the Township. Furthermore, the Township finds conventional development without specific regulations to protect natural resources frequently encroaches upon, damages or eliminates important trees, other forms of vegetation and natural resources. These trees, if preserved and maintained in an undisturbed and natural condition, constitute important physical, aesthetic, recreation and economic assets to residents of the Township, visitors, businesses and the general public. The standards contained herein are further intended to:

- A. Provide for the protection, preservation, replacement, and proper maintenance of trees and woodlands.
- B. Protect the integrity of woodland areas as a whole, in recognition that woodlands serve as part of an ecosystem and to place priority on the preservation of woodlands, trees, similar woody vegetation and related natural resources over development when other on-site location alternatives exist.
- C. Maintain areas for wildlife, flora and fauna habitat.
- D. Provide paramount public concern for these natural resources in the interest of health, safety and general welfare for the residents.

- E. Provide the minimum regulation necessary to ensure these important resources are preserved wherever possible while accommodating the landowners' property rights to make reasonable use of their property through compliance with other standards of this and other applicable Township ordinances.

2. Definitions.

As used in this article, the following terms shall have the meanings indicated:

ARBORIST – A professional person skilled and trained in the art and sciences of municipal arboriculture, who shall hold a college degree or its equivalent in arboriculture, horticulture, forestry, landscape architecture or other closely related fields.

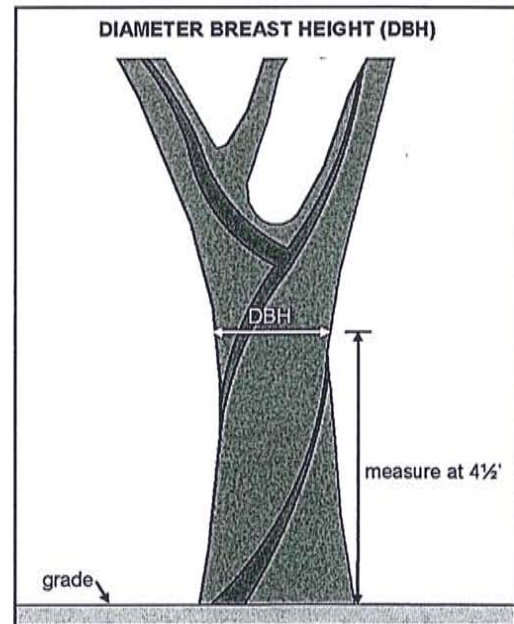
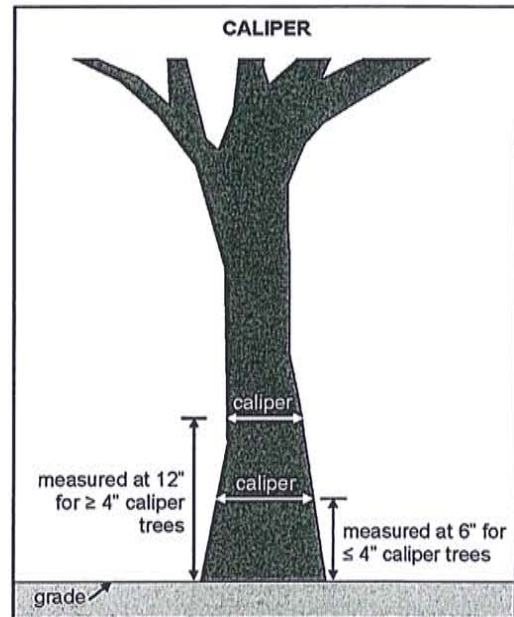
BUILDING FOOTPRINT – The ground area of a lot or parcel of land enclosed or to be enclosed by the exterior walls or perimeter of principal and accessory buildings and associated improvements, including but not limited to pools, decks, patios, walks, tennis courts, driveways, and utility services.

CALIPER – refers to the diameter of a tree. In nursery-landscape practice, caliper is measured at six (6) inches above ground level for trees four (4) inches caliper or less and at twelve (12) inches above ground level for all trees greater than four (4) inches caliper.

CLEAR-CUTTING – Is the removal of a significant amount of trees and vegetation from an area such that the activity negatively affects the overall character of the lot.

DIAMETER BREAST HEIGHT (DBH) – The diameter in inches of a tree measured at 4½ feet above the existing grade. On multi-stem trees, the largest diameter stem shall be measured.

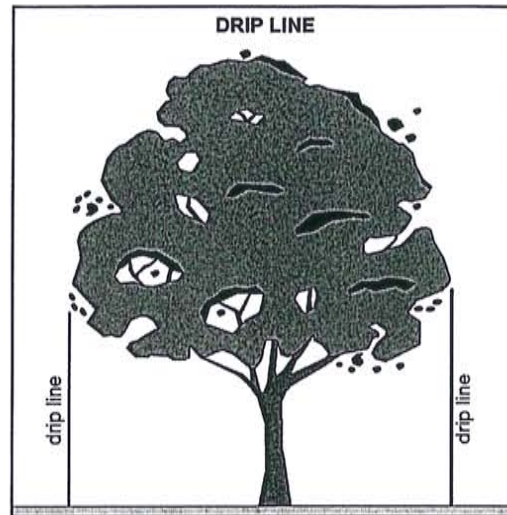
DRIPLINE – An imaginary vertical line that extends downward from the outermost tips of the tree branches to the ground.



GRUBBING – The effective removal of under canopy vegetation from a site. This shall not include the removal of any trees.

INVASIVE SPECIES – Shall mean non-native or non-indigenous plant species that adversely affect the habitats they invade economically, environmentally or ecologically.

LANDMARK TREE – A tree of the botanical name and diameter identified in the list below, as well as any tree that is twenty-four (24”) inches DBH or greater. The following are considered landmark trees, the listed DBH represents the minimum size protected for each species:



BOTANICAL NAME (<i>Genus species</i>)	COMMON NAME	DBH
--	All trees	24"
<i>Abies spp.</i>	Fir	18"
<i>Acer spp.</i>	Maple (excluding <i>Acer negundo</i>)	18"
<i>Aesculus carnea</i>	Horse Chestnut	18"
<i>Aesculus glabra</i>	Buckeye	18"
<i>Amelanchier spp.</i>	Serviceberry	8"
<i>Betula spp.</i>	Birch	18"
<i>Carya spp.</i>	Hickory	18"
<i>Castanea spp.</i>	Chestnut	10"
<i>Cercis canadensis</i>	Redbud	8"
<i>Cornus florida</i>	Flowering Dogwood	8"
<i>Crataegus spp.</i>	Hawthorn	12"
<i>Fagus grandifolia</i>	American Beech	18"
<i>Ginkgo biloba</i>	Ginkgo	18"
<i>Gleditsia triacanthos</i>	Honeylocust	18"
<i>Gymnocladus dioicus</i>	Kentucky Coffeetree	18"
<i>Hamamelis virginiana</i>	Witch Hazel	8"
<i>Juglans nigra, J. cinerea</i>	Black and White Walnut	20"
<i>Juniperus spp.</i>	Eastern Red Cedar	18"
<i>Larix laricina</i>	Larch/Tamarack	12"
<i>Liquidamber styraciflua</i>	Sweetgum	16"
<i>Liriodendrom tulipifera</i>	Tulip Tree	18"
<i>Malus spp.</i>	Crabapple	12"

BOTANICAL NAME (Genus species)	COMMON NAME	DBH
<i>Ostrya virginiana</i>	American Hornbeam	8"
<i>Picea spp.</i>	Spruce	18"
<i>Pinus spp.</i>	Pine	18"
<i>Platanus spp.</i>	London Planetree/Sycamore	18"
<i>Pseudotsuga menziesii</i>	Douglas Fir	18"
<i>Quercus spp.</i>	Oak	16"
<i>Sassafras albidum</i>	Sassafras	15"
<i>Thuja occidentalis</i>	Arborvitae	18"
<i>Tilia americana</i>	American Basswood/Linden	18"
<i>Tsuga canadensis</i>	Eastern Hemlock	12"

MATERIAL – Refers to soil, sand, gravel, clay, peat, mud, debris, refuse or any other organic or inorganic material.

NUISANCE SPECIES – See invasive species definition.

NURSERY – A licensed plant or tree nursery whose trees are planted and grown for sale to the general public in the ordinary course of the licensee’s business.

PROTECTED TREE - Includes all trees eight (8) inches DBH or greater provided they are not classified as landmark trees.

REMOVE OR REMOVAL – The act of removing a tree by digging up or cutting down (including the removal of the tree stump), or the effective removal through damage to the tree or its root system.

ROUTINE YARD MAINTENANCE – Property owners shall be allowed to perform the necessary trimming and pruning of vegetation (e.g. trees, bushes and shrubbery) required to maintain compliance with the Township Property Maintenance Ordinance.

TOWNSHIP – the reference to Township in this article refers to the Planning, Building, and Ordinance Department of the Township.

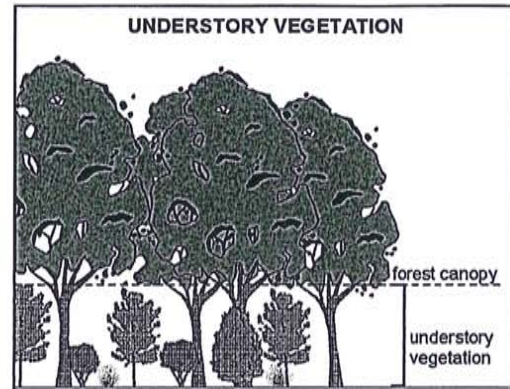
TREE – Shall mean a woody plant with an erect perennial trunk(s), which at maturity is thirteen (13') feet or more in height and has a more or less definite crown or foliage.

TREE SURVEY – Shall mean a drawing, prepared by an Arborist, which illustrates the location of all protected trees plotted by accurate techniques, which includes the DBH, common and botanical name, and health/condition score of the trees affected.

UNDERSTORY VEGETATION - the vegetative layer, including trees and shrubs, between the forest canopy and the ground cover.

VEGETATION – Refers to plant life in general, such as shrubs and ground cover, within protected woodland areas.

WOODLANDS AREA – One or more trees, and including a grouping of trees.



3. Tree permit required.
 - A. Any clear-cutting activity on **any** property in Bloomfield Township requires a tree permit.
 - B. On any property in Bloomfield Township undergoing new construction or redevelopment a tree permit is required for any person to clear-cut, remove, cause to be removed, transplant or destroy any protected tree or landmark tree.
4. Activities not requiring a tree permit.
 - A. *Routine yard maintenance.* A tree permit shall not be required for legal lots of record that seek to perform routine yard maintenance and/or alteration to property that is not subject to site plan review and approval for building permit. Clear-cutting is not included in this exemption.
 - B. *Invasive species/nuisance species.* The following trees may be considered for exemption, provided that they are not landmark trees, they do not comprise the predominant species within the woodland or vegetated area, they do not contribute to the overall vigor of the woodland or have significant value for watershed or erosion control or are considered an invasive species/nuisance species. Singular trees in good condition are not automatically exempt unless otherwise approved by the Township.
 1. *Acer negundo* (Box Elder)
 2. *Acer saccharinum* (Silver Maple)
 3. *Ailanthus altissima* (Ailanthus/Tree-of-Heaven)
 4. *Catalpa speciosa* (Catalpa)
 5. *Elaeagnus umbellata* (Autumn-olive)
 6. *Frangula alnus* (Glossy Buckthorn)
 7. *Fraxinus spp.* (Ash)
 8. *Populus spp.* (Poplar)
 9. *Rhamnus cathartica* (Common Buckthorn)

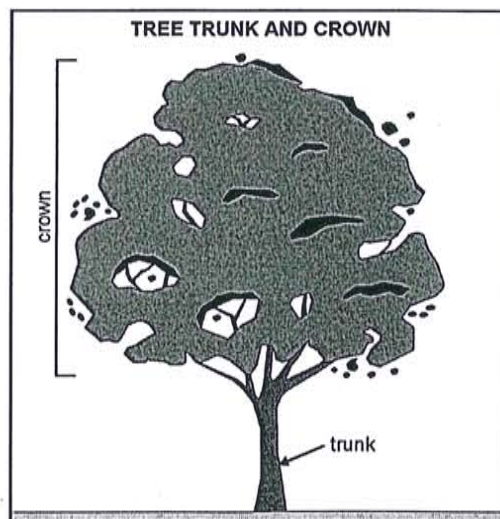
10. *Salix spp.* (Willow, except horticultural varieties)
11. *Ulmus spp.* (Elm, except American Elm)

- C. *Emergencies.* A tree permit shall not be required for actions made necessary to expedite the removal of damaged, destroyed or dead trees in the interest of public safety, health, and general welfare following high winds, storms, tornadoes, floods, freezes, fire or other natural or man-made disasters.
- D. *Governmental agencies and public utilities.* A tree permit shall not be required to perform maintenance or repair of lawfully located roads, sewers, structures, and/or facilities used in the service of the public to provide transportation, electricity, gas, water, telephone, telecommunication, or other services, provided that such roads, sewers, structures, or facilities are not materially changed or enlarged, and provided that the work is conducted using best management practices to ensure that the woodlands areas are not adversely impacted. A permit shall not be required for the trimming or cutting of trees associated with the repair or maintenance work performed by public utilities.
- E. *Dead or damaged trees.* A tree permit shall not be required for removal or trimming of dead, diseased or damaged trees. Determination of the health/condition of the tree (s) is determined by utilizing the scoring criteria contained in Paragraph five (5).

1. If a tree is determined by Bloomfield Township to be dead, diseased or damaged as to cause an immediate threat to public health, safety and welfare of the users of the property and/or adjacent properties, said tree shall be removed and a tree permit shall not be required.

5. Tree health/condition scoring criteria.

- A. Health/condition scoring must be clearly indicated on the tree survey. A tree with a score of ten (10) or greater qualifies as a protected tree and a tree with a score of nine (9) or less could be eligible as non-protected.
- B. All protected trees and landmark trees shall be replaced as required by the provisions of this article. However, if the health/condition of the tree is such that it should not be counted, tree replacement shall not be required.



- C. In requesting that a tree not be counted toward replacement, the applicant shall indicate the health/condition of the trees, as determined by an arborist or other qualified professional, utilizing the criteria contained herein.
- D. Any tree with a score of ten (10) or greater is protected under this section.

SCORING			
Factor	3	2	1
TRUNK	Sound or solid	Sections of bark missing	Extensive damage or hollow
GROWTH RATE	More than 6" twig elongation	2" to 6" twig elongation	Less than 2" twig elongation
STRUCTURE	Sound	One major or several minor limbs dead	2 or more major limbs dead
DISEASE	No disease or infestation present	One disease or infestation present	2 or more diseases and/or infestation present
CROWN / DEVELOPMENT	Full and balanced	Full but unbalanced	Unbalanced and lacking full crown
LIFE EXPECTANCY	Over 30 years	15 to 20 years	Less than 5 years

6. Tree permit application requirements.

A person seeking a tree permit shall submit an application on forms supplied by the Township along with a tree survey, prepared by an Arborist, to the Planning, Building & Ordinance Department, and pay the application and permit fee as established by resolution of the Township Board. The application shall be approved or rejected in the sole discretion of the Planning, Building and Ordinance Department.

7. Tree replacement requirements.

As a condition of granting a tree permit, the applicant shall be required to replace all protected and/or landmark trees being removed having eight (8) inches or more DBH subject to the following conditions:

- A. *Required replacement calculations.* The replacement calculations shall indicate the total caliper inch at DBH of protected and landmark trees being removed, as well as any trees being considered for exemption. The

total number of replacement trees and caliper inches shall be provided and graphically illustrated on a plan.

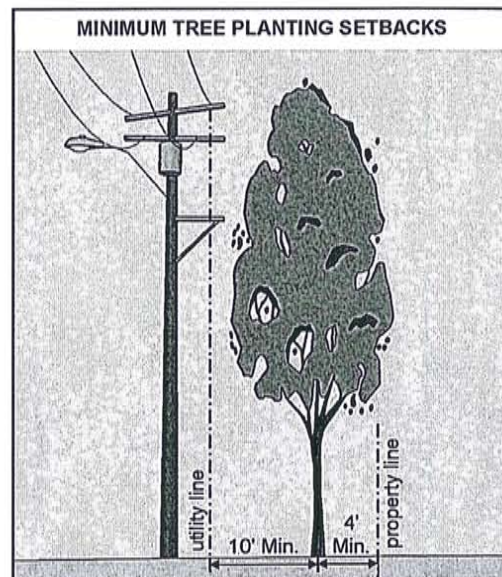
1. Replacement trees shall be at least three (3) inches caliper and eight (8) feet in height for evergreens.
 - (a) Trees will be measured at six (6) inches above finished grade for replacement trees four (4) inches caliper or less and at twelve (12) inches above finished grade for all trees greater than four (4) inches caliper.
2. Larger evergreen trees may be used to fulfill replacement requirements at the equivalent rate of one (1) inch for each 2.8 feet in height.
3. Consideration may be given to allow smaller caliper trees if they are part of a replacement plan that specifies a mixture of sizes and intended to simulate as natural woodland habitat.

B. *Replacement rate for protected trees.* Protected trees, other than landmark trees, must be replaced at a rate of 50% of the total DBH removed. Each protected tree(s) must be replaced with a tree that is a minimum of three (3) inch caliper or eight (8) feet in height for evergreens

C. *Replacement rate for landmark trees.* Landmark trees must be replaced at a rate of 100% of the total DBH removed. Each landmark tree(s) must be replaced with a tree that is a minimum of three (3) inch caliper or eight (8) feet in height for evergreens.

D. In instances where all of the trees being removed are entirely deciduous or entirely evergreen, the Township may approve substituting up to thirty (30) percent evergreen for deciduous or deciduous for evergreen. Diversity of tree species shall be maintained where essential to preserving a wooded area.

E. The location of transplanted trees and required woodland replacement trees must be provided on the landscape plan. Transplanted and replacement trees shall be clearly distinguished from required landscape elements.



- F. Trees required to be planted in accordance with this Section shall be in place and properly supported prior to the issuance of a final certificate of occupancy. The center of said trees shall not be located closer than four (4) feet to any property line or ten (10) feet to any utility line.
- G. All purchased replacement trees shall satisfy American Association of Nurseryman standards, including:
 - 1. Nursery grown.
 - 2. State Department of Agriculture inspected.
 - (a) Tree spade transplanted while in the dormant state, or if not in the dormant state, having been balled and burlapped with a solid well-laced root ball when in the dormant state.
 - (b) No.1 grade, with straight unscarred trunk and a well-developed uniform crown. Park grade trees are not acceptable.
 - (c) Staked, watered and mulched in accordance with standard planting practices.
- H. Replacement trees shall be guaranteed for a minimum of one year, including labor. After one year, dead or diseased trees must be replaced prior to final Township approval.
- I. Where the Township finds it is not reasonable or desirable to relocate or replace trees on site, relocation or replacement may be made at another approved location within the Township.
- J. Where the Township finds it is not reasonable, practical and desirable to relocate or replace trees on site or at another approved location within the Township, the Township may direct the applicant to pay into the Township's Woodlands Trust Fund an amount of money equal to the value of the replacement trees, including installation, that would otherwise be required.
 - 1. The cost estimate shall be calculated at two times the wholesale cost from an established local nursery catalog with a current publish date, submitted by the applicant and approved by the Township.
 - 2. Use of the Woodland Trust Funds for various Township-wide beautification and/or tree preservation efforts including, but not limited to, gypsy moth management program, diplodia spraying and similar preservation efforts will be at the sole discretion of the Township Board.

8. Review standards.

- A. The wooded area shall be evaluated for quality, based upon the following information supplied by the applicant:
1. Soil quality as it relates to potential tree disruption.
 2. Habitat quality.
 3. Tree species, including diversity of tree species.
 4. Tree size and density.
 5. Health and vigor of tree stand.
 6. Under story species and quality.
 7. Other factors such as the value of the wooded area as an aesthetic asset, wind block, noise and/or visual buffer, environment asset and the value of landmark trees within the woodlands area.
- B. The preservation of woodland areas, individual trees, similar woody vegetation and related natural resources, shall have priority over development when there are other functional on-site location/design alternatives. The applicant shall be responsible for demonstrating that no feasible and prudent alternative locations exist without causing undue hardship. The Township may impose conditions on the method and extent of the proposed activity/use as necessary to ensure it will be conducted in a manner that will minimize damage, encroachment or interference with the natural resources and/or natural processes within areas containing protected and/or landmark trees.
- C. Because natural systems do not occur in isolation, the location of woodlands with respect to topography, water features and other significant natural features shall be viewed as having a high priority in terms of preservation value.
- D. The removal or relocation of trees or shrubs within wooded areas, or of protected and/or landmark trees outside of the wooded areas, shall be limited to the following:
1. When necessary for the location of a structure or site improvement and when no feasible and prudent alternative location can be had without causing undue hardship.
 2. When the tree is dead, diseased, injured or in danger of falling too close to proposed or existing structures, interferes with existing

utility service, interferes with safe vision clearances or conflicts with other ordinances or regulations.

3. When a landmark or protected tree does not meet the health/condition standards contained herein.

E. The integrity of wooded areas shall be maintained irrespective of whether such woodlands cross property lines.

F. All existing trees, wooded area and under story vegetation shall be preserved within the required roadway greenbelt or buffers.

G. Where woodland densities permit, tree relocation or replacement shall be within the same wooded area as the removed plants. Where tree relocation or replacement is not feasible within the wooded area, the relocation or replacement on the site may be elsewhere on the subject property.

H. A detail or narrative indicating the method of tree protection including protective barriers, tree walls, tunnels or retaining walls shall be provided.

I. If haul roads or vehicle access points used during construction are different from proposed roads or access, their location must be identified on the woodland and/or landscape plan.

9. Tree transplanting.

A. Transplanted trees may be counted toward replacement trees, provided such trees meet the minimum size and quality requirements.

B. For deciduous trees over eight (8) caliper inches and evergreens greater than twenty-five (25) feet tall, a statement regarding the method of transplanting shall be included. The individual performing the transplanting of trees as noted above shall have demonstrated experience and success in transplanting trees of this size.

10. Tree protection procedures.

A. Prior to construction, land clearing, filling and/or land alteration, the applicant shall do the following:

1. All trees for which application is being made for removal shall be so identified on-site by fluorescent orange spray paint (chalk based) or by fluorescent orange flagging tape prior to field inspection by the Township. Trees selected for transplanting shall be flagged with a separate distinguishing color.

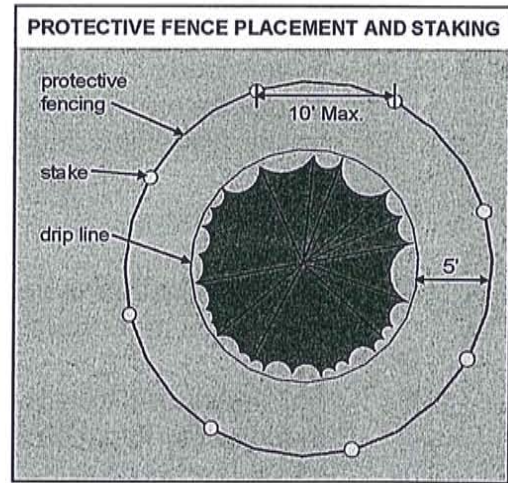
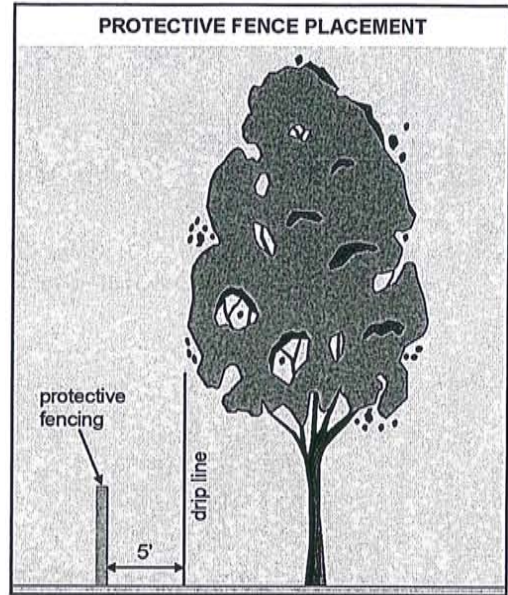
2. Protective fencing shall be erected which restricts access to protected areas.

(a) Fencing shall be installed five (5) feet outside the tree drip line or tree groupings, unless it can be demonstrated that this is not practical.

(b) Stakes for fencing shall be staked into the ground, with stakes spaced at a maximum of ten (10) feet.

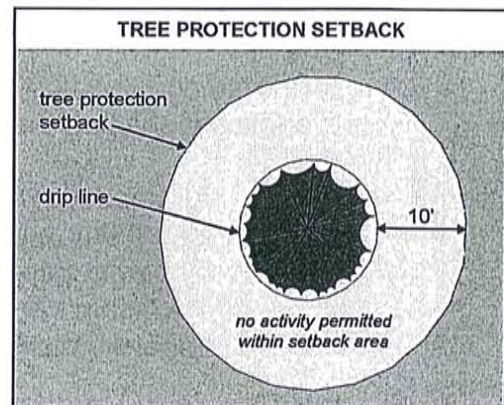
(c) The protective fencing shall be maintained and all construction materials, supplies and equipment shall be kept outside of the protective areas.

(d) Fencing material shall be a minimum of forty-eight (48) inches high. Acceptable materials include: green or orange snow fence and galvanized or vinyl-coated chain link.



B. Tree protection shall remain in its approved location until such time removal is authorized by the Township. During construction, no attachments or wires shall be attached to any trees which are protected. Wood, metal or other substantial material shall be utilized in the construction of barriers.

C. No activity shall be conducted within ten (10) feet of the tree drip line, including but not limited to placing of any solvents, material, construction machinery, vehicles or soil.



- D. The location of fencing may be adjusted, as administratively approved, in the field to accommodate site-specific conditions or constraints.
- E. The developer and/or the builder shall be responsible to inform all subcontractors, suppliers and tradesmen that they are to help maintain the trees and will be held responsible for any unauthorized damage to trees and woodlands. As indicated under subsection thirteen (13), the tree removal permit shall be displayed at all times.
- F. Prior to issuance of a temporary certificate of occupancy or certificate of occupancy, all required replacement trees shall be planted in accordance with the approved plans, or cash deposit in the amount of the estimated tree replacement and transplant costs to be refunded in full at time of completion.

11. Replacement of trees damaged during construction.

The developer or builder shall be required to replace trees originally intended to be preserved when such trees are damaged during construction. The replacement requirements for such damaged trees shall be one (1) caliper inch for each one (1) caliper inch DBH of the damaged trees.

12. Tree maintenance and replacement.

If any of the trees required to be retained or trees planted as part of the landscaping plan should die within a period of twelve (12) months after completion of the activities associated with the tree removal permit, the owner of the property shall replace the trees within six (6) months at a ratio of one-to-one with an approved tree having a minimum of three (3) inch caliper or eight (8) feet in height for evergreens. Shrubbery or other plantings that die within twelve (12) months of completion of the activities shall be replaced in kind within six (6) months.

13. Display of tree permit

The tree permit grantee shall conspicuously display the permit on-site. The grantee shall display the tree permit conspicuously while trees are being removed or replaced or while activities authorized under the permit are performed. The tree permit grantee shall allow Township representatives to enter and inspect the premises at any reasonable time. Failure to allow inspection shall constitute a violation of this section.

14. Variances

Pursuant to Sec. 42-53, an appeal may be made to the Zoning Board of Appeals if a practical difficulty makes strict compliance with this article impractical. In determining the existence of a practical difficulty, the Zoning Board of Appeals shall consider:

- A. The intent and purpose of the article.
- B. The character and community value of the protected trees affected; and
- C. The presence of unique circumstances which makes compliance with the article physically impractical.

15. Penalties for violations

Any person who violates the provisions of this article, as amended, shall be responsible for a municipal civil infraction, subject to civil fine, court order enforcement, and any remedies mandated by the Court pursuant to Section 42-118. Penalties for violations.

Section 2. Repealer.

All Ordinances or parts of Ordinances in conflict herewith are hereby repealed only to the extent necessary to give this Ordinance full force and effect.

Section 3. Savings.

All proceedings pending and all rights and liabilities existing, acquired or incurred at the time this Ordinance takes effect, are saved and may be consummated according to the law when they were commenced.

Section 4. Severability.

If any section, clause or provision of this Ordinance shall be declared to be unconstitutional, void, illegal or ineffective by any Court of competent jurisdiction, such section, clause or provision declared to be unconstitutional, void or illegal shall thereby cease to be a part of this Ordinance, but the remainder of this Ordinance shall stand and be in full force and effect.

Section 5. Effective Date.

The provisions of this Ordinance are hereby ordered to take effect immediately upon publication in the manner prescribed by law.

Section 6. Adoption.

This Ordinance is hereby declared to have been adopted by the Township Board of the Charter Township of Bloomfield at a meeting thereof duly called and held on the 9th day of March, 2009, and ordered to be given publication in the manner prescribed by law.

A complete copy of this Ordinance is on file in the Bloomfield Township Clerk's Office, 4200 Telegraph Road, Bloomfield Township, Michigan.

Janet Roncelli, Township Clerk