

**ARTICLE 23**  
**Tree and Woodlands Replacement**

**§ 170-23.1. Intent**

The intent of this Article to place priority on the preservation of trees, vegetation and associated natural resources in recognition of the value they provide the Township in terms of physical, aesthetic, recreation and economic assets to residents, visitors and businesses.

**§ 170-23.2. Applicability**

- A. The standards contained herein shall apply to all parcels requiring site plan review, special land use review, administrative review, subdivision plat review, plot plan review or land divisions/reconfigurations.
- B. For legal lots of record which are not located within a new development, trees located within ten (10) feet of the building footprint and a 15’ wide driveway area are exempt from the requirements of this Article. Replacement of all other trees shall be in accordance with the requirements contained herein.
- C. Issuance of a grading permit shall prohibit clearing or grading within 50’ of a property line prior to site plan or administrative approval.

**§ 170-23.3. Health/condition ranking**

Health condition of trees shall be determined by a forester or other qualified professional, utilizing the criteria contained in the table below. Any tree with a score of 16 or greater is regulated by this Article.

<b>SCORING</b>			
<b>Factor</b>	<b>5 or 4</b>	<b>3 or 2</b>	<b>1</b>
<b>Trunk</b>	Sound or solid	Sections of bark missing	Extensive damage or hollow
<b>Growth Rate</b>	More than 6” twig elongation	2” to 6” twig elongation	Less than 2” twig elongation
<b>Structure</b>	Sound	1 major or several minor limbs dead	2 or more major limbs dead
<b>Insects/Disease</b>	No pest present	1 pest disease present	2 or more pests present
<b>Crown/Development</b>	Full and balanced	Balanced but not full	Unbalanced and without full crown
<b>Life Expectancy</b>	Over 30 years	15 to 10 years	Less than 5 years

**§ 170-23.4. Tree survey**

- A. Tree tagging is only required for portions of the site where development is proposed and where the development area is supported by clearly defined clearing limits. Trees with drip lines that extend into the area to be developed shall be included in the tree survey, even if the trunk of the tree is not in an area that will be disturbed.
- B. Trees eight (8) inches DBH or greater must be identified.
- C. Tree locations must be provided on a topographic survey and the base elevation of all trees proposed for preservation shall be identified.
- D. The tree survey shall clearly identify which trees will be preserved, removed or transplanted.
- E. Trees must be identified in a tabular format by tree tag #, size, common name, genus, condition and classification. Classifications include: regulated, non-regulated, landmark or exempt, as regulated by this Article.
- F. Tree replacement calculations shall indicate the total caliper inches of regulated 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 in written form and graphically illustrated on the tree survey.
- G. Tree identification tags shall consist of 19-gauge aluminum or similar corrosion-resistant material. Tags shall be a minimum of one and one-half (1½) inches in diameter and be permanently stamped or engraved with a number that corresponds to a number designation defined on the tree survey. Numbers shall be a minimum of one-half inch high. Tags shall be attached to trees by way of galvanized roofing nail or other similar method.
- H. The tree survey must be prepared and certified by a registered forester, or other individual possessing related qualifications, with the assistance of a land surveyor or registered engineer. If there are discrepancies in the tree survey information or if the applicant requests that a landmark or protected tree be exempted due to its health/condition, the Township reserves the right to review the situation or engage the services of an independent reviewer.

**§ 170-23.5. Tree replacement requirements**

- A. Protected trees are defined as all trees eight (8) inches DBH or greater provided they are not classified as landmark trees.

B. Landmark trees are defined by size and species, as listed in the chart below.

COMMON NAME	BOTANICAL NAME	DBH
All trees	- -	24"
American hornbeam	Ostrya Virginiana	8"
Arborvitae	Thyja	18"
Beech (American)	Fagur grandifolia	18"
Beech (blue)	Carpinus caroliniana	8"
Birch	Betula	18"
Black Walnut	Juglans nigra	20"
Cedar (red)	Juniperus virginiana	12"
Chestnut	Castanea	10"
Crabapple / Hawthorne	Malus / Crataegus	12"
Dogwood (flowering)	Cornus florida	8"
Fir	Abies	18"
Ginkgo	Ginkgo	18"
Hemlock	Tsuga	18"
Hickory	Carya	18"
Kentucky Coffee tree	Gymnocladus dioicus	18"
Larch / Tamarack	Larix	12"
London Plane / Sycamore	Platanus	18"
Maple	Acer	18"
Oak	Ouercus	18"
Pine	Pinus	18"
Redbud	Cercis canadensis	8"
Sassafras	Sassafras albidum	15"
Serviceberry	Amelanchier	8"
Spruce	Picea	18"
Sweet gum	Liquidamber styraciflua	16"
Tulip poplar	Liriodendrom tulipifera	18"
Wild Cherry	Prunus	18"
Witch Hazel	Hamamelis virginiana	8"

C. Landmark trees must be replaced at a rate of 100% of the total DBH removed.

D. Protected trees must be replaced at a rate of 50% of the total DBH removed.

E. Replacement trees shall be at least two and one-half (2½) caliper inches for deciduous trees and seven (7) feet in height for evergreens. Replacement for evergreens shall be equivalent to 1" = 2.8' height. Consideration may be given to allow smaller trees if they are part of a replacement plan that specifies a mixture of sizes and is intended to simulate as natural woodland habitat.

- F. Deciduous trees shall be replaced with deciduous trees and evergreen trees shall be replaced with evergreen trees. Where all of the trees being removed are entirely deciduous or evergreen, the Planning Commission may approve substituting up to ten (10) percent evergreen for deciduous or deciduous for evergreen. Alternatives may be based on site specific conditions.
- G. The proposed 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 landscape elements required per Article 24, Landscape Standards.
- H. All replacement trees shall satisfy American Association of Nurseryman standards, including:
  - (1) Nursery grown.
  - (2) State Department of Agriculture inspected.
  - (3) 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.
  - (4) No. 1 grade, with straight unscarred trunk and a well-developed uniform crown. Park grade trees are not acceptable.
  - (5) Staked, fertilized, watered and mulched in accordance with standard planting practices.
- I. Where it is not reasonable and desirable to relocate or replace trees on site, relocation or replacement may be made at another approved location within the Township.
- J. Where the Planning Commission finds it is not reasonable, practical and desirable to relocate or replace trees on site or at another approved location within the Township, the Planning Commission may direct the applicant to pay into the Township's Woodlands Trust Fund.

### **§ 170-23.6. Exemptions**

The following trees may be considered for exemption, provided they are not landmark trees, they do not comprise the predominant species on-site or within a vegetated area, they do not contribute to the overall vigor of the woodland or have significant value for watershed or erosion control. Singular trees in good condition are not exempt.

- Ash
- Black locust
- Box elder
- Catalpa
- Cottonwood
- Elm
- Mulberry
- Poplar
- Silver maple
- Tree of heaven
- Willow

**§ 170-23.7. Review standards**

- A. The preservation of wooded areas, individual trees, woody vegetation and related natural resources, shall have priority over development when there are other on-site location/design alternatives. The Planning Commission 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 regulated trees.
- B. Because natural systems do not occur in isolation, the location of regulated trees with respect to topography, water features and other significant natural features shall be viewed as having a high priority in terms of preservation value.
- C. The removal of regulated trees and wooded areas, shall be limited to the following:
- (1) When necessary for the location of a structure or site improvement, when a feasible and prudent alternative location does not exist.
  - (2) The tree is dead, diseased, injured or in danger of falling too close to existing or proposed structures, interferes with existing utility service, interferes with safe vision clearances or conflicts with other ordinances or regulations.
  - (3) When a landmark tree does not meet the health/condition standards contained herein.
- D. The integrity of wooded areas shall be maintained even when such woodlands cross property lines.
- E. Existing trees, wooded areas and under story vegetation shall be preserved within the required landscape greenbelt or buffers, unless removal is approved by the Planning

Commission. Preserved vegetation may be credited toward landscape requirements contained in Article 24, Landscape Standards.

- F. When a designated wooded area abuts a corridor identified as a natural beauty road, as authorized by Wayne County, existing vegetation shall be maintained for an average width of 100', and a minimum of 50', beyond the future right-of-way.
- G. The clearing limits and locations of tree protection barriers shall be clearly identified on a plan.

**§ 170-23.8. Tree transplanting**

- A. Transplanted trees may be counted toward replacement trees, provided trees meet the minimum size and quality requirements of Article 24, Landscape Standards.
- B. For deciduous trees over 10 caliper inches and evergreens greater than 30' tall, a statement regarding the method of transplanting shall be included and the work shall be performed by a qualified individual.
- C. A Township representative shall review the trees prior to commencing transplanting. The trees shall be reviewed again at their final location to ensure the transplanting operation has been successfully completed.

**§ 170-23.9. Tree protection procedures**

- A. Before development, land clearing, filling or land alteration, a tree protection fence must be installed at the approved clearing limits and tree protection measures shall be inspected by the township.
- B. Protective fencing shall be located 10' outside the tree drip line.
- C. Posts for fencing shall be staked at least two (2) feet into the ground, with posts spaced a maximum of 10' on-center.
- D. Tree protection shall remain in its approved location until removal is authorized or directed by the Township.

**§ 170-23.10. Replacement of trees damaged during construction**

Trees within preservation areas are subject to replacement when damaged or removed during construction. Trees shall be replaced at a rate of one and one-half (1½) inch caliper for each one (1) inch DBH removed or damaged.