

ORDINANCE NO. ____

AN ORDINANCE OF THE TOWNSHIP OF LOWER MAKEFIELD, BUCKS COUNTY, PENNSYLVANIA, ESTABLISHING CHAPTER 185 – “TREES,” AND ESTABLISHING ARTICLE I – “HERITAGE TREES” THEREUNDER TO PROVIDE PROTECTION FOR LOWER MAKEFIELD TOWNSHIP HERITAGE TREES

WHEREAS, the Township of Lower Makefield is a township of the second class, organized and operating in accordance with the laws of the Commonwealth of Pennsylvania; and

WHEREAS, pursuant to the Second Class Township Code of the Commonwealth of Pennsylvania, the Board of Supervisors of Lower Makefield Township (hereinafter referred to as the “Board of Supervisors”) has the authority to enact, amend, and repeal the provisions of the Lower Makefield Township Code of Ordinances (hereinafter referred to as the “Code”); and

WHEREAS, information obtained from the Audubon Society’s “Bucks County Historic Tree Registry” (2005) and “Big Trees of Pennsylvania”(latest edition) reveals that the Township has been forested by a number of magnificent and noteworthy trees, the preservation of which is advantageous for the health and welfare of the citizens and the scenic beauty of the township; and

WHEREAS, the Board of Supervisors has determined that Chapter 185 – “Trees,” Article I – “Heritage Trees” should be enacted to establish provisions to preserve remaining magnificent and noteworthy trees for the maintenance of peace, good government, health, welfare, and scenic beauty of the Township and its residents.

NOW, THEREFORE, be it and it is hereby resolved as follows:

1. The Board of Supervisors hereby enacts Chapter 185 – “Trees,” Article I – “Heritage Trees” with the contents thereof set forth in Exhibit “A” hereto.
2. All other ordinances, portions of ordinances, or any section of the Code inconsistent with this Ordinance, are hereby repealed.

3. The provisions of this Ordinance are severable. If any section, clause, sentence part or provision thereof shall be held illegal, invalid, or unconstitutional by a court of competent jurisdiction, such decision of the court shall not affect or impair any of the remaining sections, clauses, sentences, parts or provisions of this Ordinance. It is hereby declared to be the intent of the Township Supervisors that this Ordinance would have been adopted if such illegal, invalid or unconstitutional section, clause, sentence or part of a provision had not been included herein.
4. This Ordinance shall be effective five (5) days after enactment.

ENACTED AND ORDAINED BY THE TOWNSHIP OF LOWER MAKEFIELD THIS
____ DAY OF _____ 2019.

BOARD OF SUPERVISORS
TOWNSHIP OF LOWER MAKEFIELD

By: _____,
(Vice) Chairperson

ATTEST:

Kurt Ferguson, Township Manager

Exhibit “A”

CHAPTER 185 – TREES.

ARTICLE I – Heritage Trees.

§185-1 Title.

This Article shall be known as the “Lower Makefield Township Heritage Tree Protection Ordinance.”

§185-2 Findings of the Board of Supervisors.

In enacting the Lower Makefield Township Heritage Tree Protection Ordinance, the Board of Supervisors finds that trees benefit the Township of Lower Makefield in the following respects:

- A. Local climate and energy use – Trees influence thermal comfort, energy use, and air quality by providing shade, transpiring moisture, and reducing wind speeds. When properly placed, trees cool buildings and paved surfaces, and can save an average household significant energy costs;
- B. Air quality – Trees improve air quality by lowering temperatures, altering emissions from building energy use and other sources, and removing air pollutants through their leaves;
- C. Climate change – Trees directly store carbon within their tissues thereby reducing carbon emissions from power plants and other sources;
- D. Water flow and quality – By intercepting and retaining or slowing the flow of precipitation reaching the ground, trees prevent erosion of topsoil and sedimentation in waterways; reduce amounts of stormwater runoff; improve water quality; and reduce the amount of water-borne pollutants (harmful substances washed off roads, parking lots, and roofs during rain/snow events) that reach streams and rivers;
- E. Wildlife and biodiversity—Trees help create and enhance animal and plant habitats and can act as “reservoirs” for endangered species;
- F. Soil quality – Trees help remediate soils by absorbing, transforming and containing contaminants.
- G. Real estate – Landscaping with trees can increase property values, thereby increasing the township’s tax base.
- H. Community and individual well-being and public health – Trees make important contributions to the economic vitality and character of Lower Makefield Township. Trees make our community a more aesthetic, pleasant, and emotionally satisfying place to live, work and spend leisure time. Trees also provide numerous health benefits, such as the reduction of ultra violet radiation and its associated health problems.

§185-3 Purpose and Intent.

The Lower Makefield Township Heritage Tree Protection Ordinance establishes policies, regulations, and standards for the protection and removal of Heritage Trees within the township, in order to retain as many large or otherwise notable trees as possible and ensure that the township will continue to realize the benefits provided by its tree resources. The provisions of this ordinance are enacted to:

- A. Establish and maintain the maximum sustainable amount of tree cover on public and private lands in the township.
- B. Maintain township Heritage Trees in a healthy and non-hazardous condition.
- C. Establish and maintain appropriate diversity in tree species and age classes to provide a stable and sustainable tree population within the township.
- D. Establish a “Heritage Tree Program” that will encourage private owners to voluntarily preserve and maintain large or otherwise notable trees on their properties.

§185-4 Definitions.

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

Arborist – A person who has met the criteria for certification from the International Society of Arboriculture, American Society of Consulting Arborists, or similar professional organization, and maintains accreditation.

Circumference Breast Height (or “CBH”) – A tree’s circumference measured in inches at a height of four and one-half feet above grade. When a fork in the trunk occurs at or above four and one-half feet, the CBH is the smallest circumference at four and one-half feet or below. When the fork occurs below four and one-half feet, or the tree splits into multiple stems at ground level, each stem is considered a separate tree trunk and is measured accordingly.

Hazardous Tree - A tree that is cracked, split, leaning, has a dead top or a large dead limb high in the crown, or is otherwise physically damaged, to the degree that it is likely to fall and injure persons or property.

Heritage Tree – An individual tree considered an important community resource because of unique or noteworthy characteristics or values. One or more of the following criteria are used to define a Heritage Tree:

- A. Size – Any state or national “Champion” tree, as recognized by Big Trees of Pennsylvania (The Big Tree Committee of the Pennsylvania Forestry Association) or the National Register of Big Trees (American Forests); any tree appearing on the Audubon Society’s Bucks County Historic Tree Registry; or any tree nominated and accepted by Lower

Makefield Township as a local “Champion” tree. Local Champion trees will be determined by using the American Forests point system to rate tree size, with total point value measured against the Pennsylvania Forestry Association data base of all trees approaching the total point value of champions for each species.

- B. Species - Trees that are associated with the character of the community.
- C. Age – Trees that are known to be especially old. Age shall be documented with existing historical accounts, photographs, and/or association with historical structures. CBH is to be considered, but shall only be used as a crude estimator of a tree’s age.
- D. Historic significance – Trees associated with a notable local or regional historical event, person, structure, or landscape.
- E. Ecological value – Trees that have especially high ecological value because of their location, size, species, and/or condition. This includes, but is not limited to, trees that act as important roosting or nesting sites, or food sources, for certain wildlife species; play a critical role in stabilizing soil; or provide important genetic resources for a local tree population or a species as a whole.
- F. Any tree or group of trees of local significance specifically designated by the Board of Supervisors.

Invasive Tree - An Invasive Plant is one that grows aggressively, spreads, displaces other plants and has generally been introduced from other continents. Lacking natural predators, disease, or other natural controls, these plants can dominate large areas, diminish and/or limit biodiversity, are expensive to control and are directly responsible for the extinction and loss of natural plants that have evolved in communities with other plants, wildlife, insects and micro-organisms. The Pennsylvania Department of Conservation and Natural Resources maintains a periodically updated list of Invasive Plants that is available to the public.

Native Tree – A Native Plant is one that occurs naturally in an area without human intervention and that was growing in the area prior to the time of European settlement. Such plants are adapted to the local climate and tend to be more drought and disease resistant than introduced varieties and they help preserve the balance and beauty of natural eco-systems. For purposes of this Ordinance the range of Native Plants shall be the Lower Delaware Valley, Piedmont-Coastal Plain areas (Refer Ex. 1).

Point System – A system devised by American Forests used to determine biggest trees of each native species. Scoring is based on the sum of three required tree measurements: Circumference at Breast Height (inches) + Total Height (feet) + One Fourth Average Crown Width (feet).

Pruning - Removal of branches from a tree using proper tools and approved cutting techniques, in accordance with the *American National Standards for Tree Care Operations, ANSI A300*.

Tree – A woody plant with an erect, perennial stem; a well-defined crown of foliage; and a total vertical height of at least thirteen (13) feet (Little, 1979). Nominations that do not meet this definition are ineligible for the Lower Makefield Heritage Tree Program.

Tree Protection Zone (or “TPZ”) - An area that is radial to the trunk of a tree in which no construction or other potentially harmful activity shall occur. The tree protection zone shall be

fifteen (15) feet from the trunk of the Heritage Tree, or the distance from the trunk to the dripline, whichever is greater.

Tree Removal - To cut down a tree or remove thirty percent (30%) or more of the crown, trunk, or root system of a tree; or to damage a tree so as to cause the tree to decline or die. "Removal" includes, but is not limited to, topping, damage inflicted upon a root system by application of toxic substances, operation of equipment and vehicles, storage of materials, change of natural grade due to unapproved excavation or filling, relocation or unapproved alteration of natural physical conditions. "Removal" does not include normal trimming or pruning of trees.

§185-5 Applicability.

This Ordinance applies to all Heritage Trees located on township property, including right-of-ways. The Ordinance will also apply to Heritage Trees located on private property, if the property owner submits a signed Nomination/Registration Form to the township for inclusion of the tree in the Heritage Tree Program. Once the submitted Nomination/Registration Form is approved by the township and a Restrictive Deed Covenant is signed and recorded by the owner, the protections afforded by this Ordinance remain on the tree until the tree's natural death. Future property owners of the property where the tree is located will also be subject to all the terms of this Ordinance including the existing signed and recorded Deed Restrictive Covenant. Preference will be given to Native Trees of this area (refer Exhibit 1). However, any non-invasive introduced species or Native species not within the above noted area may be considered for inclusion in the program if the tree fits within any of the above noted Heritage Tree criteria.

§185-6 Policy.

It shall be the policy of the township and all property owners who opt into the Heritage Tree Program to use reasonable efforts to maintain and preserve all Heritage Trees in a state of good health pursuant to the provisions of this Ordinance. Failure to do so shall constitute a violation of this Ordinance.

§185-7 Heritage Tree Program.

- A. The "Lower Makefield Heritage Tree Program" is hereby established for the purposes of:
 - 1. Encouraging private property owners to voluntarily enter the program and then comply with the provisions of this Ordinance.
 - 2. Recognizing and protecting qualifying trees on public lands

- B. Private Owners
 - 1. With the approval of the property owner trees on private lands may be nominated for inclusion in the program by completing a Heritage Tree Nomination/Registration Form and submitting it to the Township (Refer Ex. 2). If the drip line or root system of a nominated tree encroaches on more than one property and the tree is to be considered for inclusion in the Heritage Tree Program then all owners must agree to all the terms of this Ordinance. Forms shall be reviewed by the Environmental Advisory Council, after which a recommendation for approval or denial shall be given to the Board of

Supervisors. The Board of Supervisors will have final authority in determining whether or not a nominated tree shall be included in the Heritage Tree Program.

2. Upon a tree's acceptance into the Heritage Tree Program a Certificate of Registry and/or a plaque shall be issued to the owner(s) to acknowledge the tree's special status and the tree shall be entered into the Lower Makefield Heritage Tree Registry. The township shall withhold information concerning the location of Heritage Trees on private property unless either the approval of the property owner(s) has first been obtained by completing a "Consent to Publish Form" and submitting it to the township (Refer Ex. 3) or, as in the case of threatened or endangered trees, prohibited by Federal law.
3. Private owners who opt-in to the Heritage Tree Program shall use reasonable efforts to maintain and preserve their Heritage Trees in a state of good health pursuant to the provisions of this ordinance. A tree care manual shall be provided to owner(s). Once a tree is accepted into the program the protection afforded by this Ordinance shall remain in effect until the natural death of the tree. Also, the required, signed Deed Restrictive Covenant shall bind all future property owners to all the terms of this Ordinance.

C. Public Lands

1. Trees on public lands shall be nominated and considered for special status designation in the same manner as those on private lands. Anyone may nominate a tree on public lands. The Township shall use reasonable efforts to maintain and preserve all Heritage Trees on public lands in a state of good health pursuant to the provisions of this Ordinance.

§185-8 Maintenance and Preservation of Heritage Trees.

A. Tree Protection Zone.

1. Any person who conducts any grading, excavation, demolition, or construction activity on property shall do so in such a manner as to not threaten the health or viability, or cause the removal of, any Heritage Tree. No construction or other potentially harmful activity shall occur within a radius of fifteen (15) feet from the trunk of the tree, or the distance from the trunk to the dripline, whichever is greater.
2. Any work performed within the tree protection zone shall require submittal of a tree protection plan for review and approval by the Environmental Advisory Council and the Township's Zoning Officer prior to the issuance of any permit for grading or construction.
3. The tree protection plan shall be prepared by a Certified Arborist or comparable specialist and shall address issues related to protective fencing and protective techniques to minimize impacts associated with grading, excavation, demolition, and construction.

B. Removal and Major Pruning of Heritage Trees Prohibited.

1. It is unlawful for any person to remove, or cause to be removed any Heritage Tree from any parcel of property within the township, or prune more than one-fourth of the branches or roots within a twelve month period, without obtaining a permit.

2. Under certain emergency conditions, such as damage resulting from storm or fire, and when a tree is imminently hazardous or dangerous to life or property, a Heritage Tree may be removed without a permit, by order of the Police Chief, Fire Chief or Public Works Director, or by recommendation from a Certified Arborist or comparable specialist.
3. It is unlawful to cut down a Heritage Tree; remove thirty percent (30%) or more of its crown, trunk, or root system; vandalize; or damage a tree (nailing, affixing signs, etc.) so as to cause the tree to decline or die. Topping; damage to the root system by application of toxic substances, operation of equipment and vehicles, storage of materials, and alteration of natural physical conditions; and work conducted without a permit or beyond the scope of an approved permit shall be considered "removal", and are strictly prohibited. "Removal" does not include normal trimming or pruning of trees.

C. Permits for Removal or Major Pruning.

1. Any person desiring to remove one or more Heritage Trees or perform major pruning shall apply for a permit. It is the joint responsibility of the property owner and party removing the Heritage Tree or trees, or portions thereof, to obtain the permit. The application for the permit is to be accompanied by a written recommendation from a Certified Arborist or comparable specialist, explaining the necessity of removal or major pruning. Permits will only be issued by the Zoning Officer for removal or major pruning if it is determined that there is good cause for such action. Consideration for issuance of such a permit will be based on the following:
 - a. The condition of the tree with respect to disease, danger of falling, proximity to existing or proposed structures, and interference with utility services;
 - b. The necessity to remove the tree in order to construct proposed improvements to the property;
 - c. The topography of the land and the effect of the removal of the tree on erosion, soil retention, and diversion or increased flow of surface waters;
 - d. The long-term value of the species under consideration, particularly lifespan and growth rate;
 - e. The ecological value of the tree, such as food, nesting, habitat, protection, and shade for wildlife and other plant species;
 - f. The number, size, species, age distribution and location of existing trees in the area, and the effect the removal would have upon shade, privacy impact, and scenic beauty;
 - g. The number of trees the particular parcel can adequately support according to good arboricultural practices;
 - h. The availability of reasonable and feasible alternatives that would allow for the preservation of the tree.

- A. Any resident or property owner may appeal the decision of the Zoning Director. Appeals must be made to the Lower Makefield Township Board of Supervisors within ten (10) days of the decision. The appeal shall be in writing and shall be filed with the Township for placement on the Board of Supervisors agenda. The appeal shall clearly specify the reasons for which the hearing is requested.
- B. After a hearing, the Board of Supervisors shall render its decision. The decision of the Board of Supervisors shall be final.

§185-9 Enforcement/Remedies for Violation.

In addition to all other remedies set forth in this code or otherwise provided by law, the following remedies shall be available to the township for violation of this ordinance:

- A. The township may issue a stop work order suspending and prohibiting further activity on the property. Pending permits may be withheld, or valid permits may be revoked.
- B. If a Heritage Tree is effectively removed without a permit, mitigation measures may be required. The mitigation plan shall include measures for protection of any remaining Heritage Trees on the property, and shall provide for replacement of each tree removed or heavily damaged on the property; or, payment of a fine not to exceed \$***** per violation, to be deposited in the township's Tree Bank Account. Replacement value for the purposes of this section shall be determined utilizing the most recent edition of the Guide for Plant Appraisal, published by the Council of Tree and Landscape Appraisers. Remedial actions and replacement required under this section shall be completed within sixty (60) days of notice from the township that such actions are required.
- C. The township may require the violator to immediately undertake remedial actions in the event the abused tree is an imminent threat to the public or property.
- D. In any civil action brought pursuant to this ordinance in which the township prevails, the court shall award to the township all costs of investigation and preparation for the trial, the costs of the trial, reasonable expenses including overhead and administrative costs incurred in prosecuting the action, and reasonable attorney fees.

§185-10 Severability.

Should any part or provision of this Ordinance be declared by a court of competent jurisdiction to be invalid, the same shall not affect the validity of the Ordinance as a whole or any part thereof other than the part held to be invalid.