August 11, 2020

EXHIBIT "A"

Comprehensive Tree Plan

for the

City of Circleville, Ohio

City of Circleville Tree Commission

Trees are valuable assets to a community and trees are assets that increase in value each year: large trees are more valuable than smaller. Trees are known to : reduce air pollution, create oxygen, mitigate storm water runoff, save energy by shading and cooling in summer while reducing winter winds and keeping buildings warmer, reduce crime and increase the sense of community, make citizens healthier, have beauty and create a sense of pride in a community, increase commerce in a business district. The City of Circleville sees fit to create a comprehensive tree plan to ensure that its citizens will receive all the benefits of a large and healthy urban forest tree canopy.

Established in 2017 by Circleville Ordinance Chapter 161

Ohio Revised Code, Section 715.20 Shade trees. Any municipal corporation may regulate the planting, trimming, and preservation of shade trees in streets, alleys, and public grounds and places, and may provide for the planting, removal, trimming, and preservation of such trees and other ornamental shrubbery.

The mission of the Circleville Tree Commission is to create and maintain a comprehensive plan, and the administration of minimum standards for the care, preservation, pruning, planting, replacement, maintenance, removal and disposition of trees and shrubs in the public streets, rights-of-way, parks, cemeteries, public schools, and other municipal owned property within the City of Circleville. The Commission will assist properly constituted officials of the City, as well as Council and citizens, in the dissemination of news and information regarding the selection, planting and maintenance of trees within the corporate limits, whether the trees are on private or public property, and to make recommendations from time to time to Council as to desirable legislation concerning the tree program and related activities for the City and its residents.

Circleville Ordinance Chapter 161

AN ORDINANCE CREATING AND ESTABLISHING A TREE COMMISSION FOR THE CITY OF CIRCLEVILLE TO PROVIDE OVERSIGHT OVER ALL TREES ON PUBLIC PROPERTY AND RIGHTS OF WAY AND ON PRIVATE PROPERTY THAT CONSTITUTES A HAZARD OR THREAT TO PUBLIC STREETS, SIDEWALKS, PUBLIC PROPERTY OR THE PUBLIC SAFETY.

WHEREAS**,** Council is authorized by statute to exercise police power for the safety of public property as well as the citizens of the City; and

WHEREAS, to protect and preserve public property and rights of way and to prevent hazards or threats to private property as well as the public streets and sidewalks, Council deems it necessary and in the best interest of the City to create and establish a City Tree Commission; and

WHEREAS**,** the creation and establishment of a Tree Commission will not be detrimental to the citizens of the City of Circleville and the same ought to be done.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF CIRCLEVILLE, PICKAWAY COUNTY, OHIO, AS FOLLOWS:

SECTION I. ESTABLISHMENT

There is hereby established the Circleville Tree Commission in order to provide oversight and to assist and advise the City Administration and the Council with the creation of a comprehensive plan and the administration of minimum standards for the care, preservation, pruning, planting, replacement, maintenance, removal and disposition of trees and shrubs in the public streets, rights of way, parks, cemeteries, public schools, and other municipal owned property within the City. The comprehensive plan and updates shall be presented to Council for approval and, upon approval, shall constitute the official tree plan for the City.

SECTION II. MEMBERSHIP, TERMS AND COMPENSATION

A. Membership – The Circleville Tree Commission shall consist of seven 7 members. The members shall be appointed by Council. At least four 4 of the seven 7 appointees shall be residents of the City. In making appointments consideration shall be given to appointing people engaged in the practice of Urban forestry, conservation, nursery production, landscape architecture, plant sciences education, or master gardeners certified by the Ohio State University Extension.

B. Term – The term of each person appointed by Council shall be for three years, except that the term of two of the members appointed to the first commission shall be for one year, and the term of two members of the first commission shall be for two years. In the event that a vacancy shall occur during the term of any member, Council shall appoint his or her successor to complete the unexpired term.

C. Compensation – The members of the Commission shall serve without compensation.

D. Organization – Within a reasonable time after the appointment of the Tree Commission and the approval of the members by City Council, the Tree Commission shall meet and organize by the election of a Chairman, a Vice Chairman and a Secretary. The Tree Commission shall then provide for the adoption of rules and procedures for the holding of regular and special meetings as it shall deem advisable and necessary in order to perform the duties set forth therein. The Tree Commission shall keep a written journal of its proceedings which shall be made available for public inspection. A majority of the members present at each meeting shall be a quorum for the transaction of business. The Commission shall meet a minimum of six times per year and hold such other meetings as the Commission deems necessary.

SECTION III. DUTIES AND OBJECTIVES

The Duties and Objectives of the Tree Commission shall be as follows:

A. Study the problems, investigate, make recommendations, and advise the City Administration and Council in connection with standards for the care, selection, preservation, trimming, planting, replanting, removal or disposition of trees and shrubs in public ways, streets, alleys, parks, cemeteries, public schools and other publicly owned properties within the City;

B. Study, investigate, develop, update, and administer a written plan of minimum standards for caring, preserving, pruning, replanting, removing or disposing of trees and shrubs along public streets, rights of way, parks, cemeteries, public schools and other publicly owned properties within the City for recommendation to the City Administration and Council;

C. Establish a suggested and prohibited species list for the City and recommend to the City the types and kinds of trees to be planted on City property.

D. Assist properly constituted officials of the City as well as Council and citizens in the dissemination of news and information regarding the selection, planting and maintenance of trees within the corporate limits, whether the trees are on private or public property, and to make recommendations from time to time to Council as to desirable legislation concerning the tree program and activities for the City;

E. Identify trees in public ways, streets, alleys, parks, cemeteries, public schools and other publicly owned properties within the City for removal.

F. Solicit grants or contributions and volunteers on behalf of the City and an inventory, enhancing the City's tree plan and educating the public.

G. Provide technical advice and assistance to the developers, builders, contractors, subcontractors and others in the selection, replacement and protection of naturally occurring trees, prior to the development of any construction sites.

H. Recommend legislation to Council concerning the regulation of tree trimmers, the issuances of permits for tree trimming within the City, the tree program and related activities of the City.

I. Provide programs at which the subject of trees as it relates to the City may be discussed by its members, city officials and others interested in the tree program.

J. Plan an annual Arbor Day Program, observance or proclamation if desired; and

K. Encourage the City to obtain Tree City USA Designation.

SECTION IV. **Tree Plan**

The documents and plans created pursuant to this section is to be presented to the Council, and upon their acceptance and approval, shall constitute the official comprehensive tree plan for the City.

SECTION V. This ordinance shall take effect and be in force from and after the earliest period permitted by law.

I. Tree Planting

A. Planting Specifications

1. Trees must be:
    a. Of minimum 1 ¼ inches caliper.
    b. Single stem, straight, with no significant damage to trunk or limbs.
    c. Pest and disease free.
2. Unless indicated otherwise, quoted price for the trees should include planting and a minimum one-year warranty, but preferred two-year warranty, from the planting date.
3. The hole diameter should be 2 to 3 times the diameter of the root ball or root spread. The tree shall be set on undisturbed solid ground in the center of the hole. The root flare should be flush with the surrounding soil grade or 1" higher.
4. All plastic burlap should be removed, jute burlap should be removed from the top 2/3's of the ball at the time of planting.
5. Wire basket is cut away so that at least the top 2/3 of the wire is removed. The planting contractor agrees to replace at no charge any tree that dies and subsequent inspection shows that the wire basket was not properly removed.
6. Backfill shall be a mixture of one-part soil from the planting hole and one-part organic matter and include a moisture-retaining polymer (e.g., 'Soil Moist') according to the manufacturer's recommendations. No soil shall be placed on top of the root ball.
7. A saucer of soil shall be formed so that water is directed down through the roots or root ball rather than around the root ball.

8. The tree shall receive a layer of mulch 2-3 inches deep and at least 3 feet in diameter around the tree trunk. Mulch should not lie in contact with the tree trunk. The amount of mulch applied should be adequate to last through the first growing season.
9. All labels twine and wire shall be removed from tree trunk and limbs at the time of planting.
10. An expandable plastic trunk protector, at least 6 inches in height, shall be placed around the base of the trunk to protect the trunk from damage. If needed for deer protection, the protector should be placed along the length of the trunk.
11. If the tree ball seems unstable, the tree should be staked, and the tree secured at approximately two thirds (2/3) of the height of the tree. If the tree is planted bare root staking is required.

B. Underground Utilities

Ohio Utility Protection Service (OUPS) utility, and City of Circleville Service & Utilities Departments, inspections and marking shall be obtained before planting or removal of trees public property or in the right-of-way.

C. Placement

1. General Placement Criteria

Determining the placement of a tree is a decision that affects the surrounding area for years to come and potential future maintenance costs. Knowledge and experience of the Tree Commission of tree species and planting locations may allow for exceptions to these criteria.

a. *A lawn strip must be 4' or wider in order to accommodate the planting of a tree.*
b. *Every effort will be made to coordinate maximum tree sizes with a lawn strip width thereby reducing the potential for clearance problems. Ideally, small trees will be used in lawn strips that are a minimum of 4 feet in width, medium trees will be used in lawn strips that are a minimum of 6 feet in width and large trees will be used in lawn strips that are a minimum of 8 feet in width. However, canopy width of the mature tree will also be considered.*
c. *When planting beneath overhead wires, species will be selected so as to minimize interference with the wires as the tree matures.*
   Every effort will be made to offset the placement of trees under wires, so they are not planted directly beneath them and only small trees under utility lines.
d. *Trees shall not be planted within 10 feet of fire hydrant, driveway apron or utility pole.*
e. *Suitable clearances for stop signs, traffic signs, traffic signals, streetlights or the intersection of curbs from crossing streets will be determined on a site-by-site basis.*
f. *When possible, new trees will not be planted within 5 feet of an underground utility manhole.*
g. *Trees will be planted in locations with suitable microenvironments.*

2. **Sidewalk Cutouts**

   Cutouts shall have minimum area of 56 square feet with the extended surface area covered by brick for permeability, unless other considerations dictate. Downtown business district trees and cutouts (this area is defined by the Circleville Downtown Business Zoning District) will be evaluated by the Tree Commission as necessary.

3. **Commemorative Trees**

   The Tree Commission will review requests for planting of commemorative trees in public places. Commemorative plaques may not be installed for trees on public property.

4. **City Planting Program**

   Tree Commission will obtain agreement from the property owner or occupant (commercial or residential) prior to planting a tree in the City right-of-way whenever possible and practical. The property owner may not be contacted in certain situations, such as when a planting site adjoins a lot that is not commercial nor residential, e.g. publicly owned, and/or when the property owner cannot be determined. Prior to a tree being planted, a stake will be placed in the ground to indicate where the tree is to be planted. If the occupant informs Tree Commission that a tree is not wanted prior to it being planted, then an effort will be made to alter the species or planting location. The decision to relocate a tree once it is planted rests solely with the Tree Commission. The adjoining or abutting landowner is responsible for the maintenance of trees in the tree lawn between the sidewalk and curb of public streets.

D. Species Selection

1. **Allowed and Recommended Species**

   Allowed species are species that are suitable as city trees when planted according to the above Placement and Planting Guidelines. Recommended species are those currently recommended as street trees by the Tree Commission. A list of allowed and recommended species is attached hereto as **Appendix A.**

2. **Prohibited Species**

   Prohibited species shall not be planted as street trees in lawn strips (tree lawn). A list of prohibited species is attached hereto as **Appendix B**. Contact the Service Department for information concerning any species not included on the Allowed and Prohibited lists.

E. Tree Planting Permit

A permit shall be completed and approved by the Director of Public Service, before a tree is planted by a resident or property owner in the city right-of-way. The Tree Commission requires such trees planted by residents in the city right-of-way shall meet Planting, Placement, and Species Regulations given in this document, unless otherwise specified in the planting permit. **See Appendix C**.

F. Watering

The City will water newly planted public trees for a period of 2 years after planting to ensure successful establishment.

II. Pruning and Maintenance

A. Pruning Standard

All pruning has to be done in accordance with standards for shade trees

PRUNING STANDARDS FOR SHADE TREES

This standard is provided by the National Arborist Association to assist tree service companies, utilities, municipalities, governmental agencies, landscape architects, and others in writing contract specifications for tree pruning. It is not intended to be a how-to manual but to define the limits and criteria for work, recognizing that regional practices may dictate variations in this standard.

This standard was prepared by the Standard Practices Committee of the National Arborist Association, Inc., a professional trade association foundation in 1938, that is now known as Tree Care Industry Association, (TCIA).

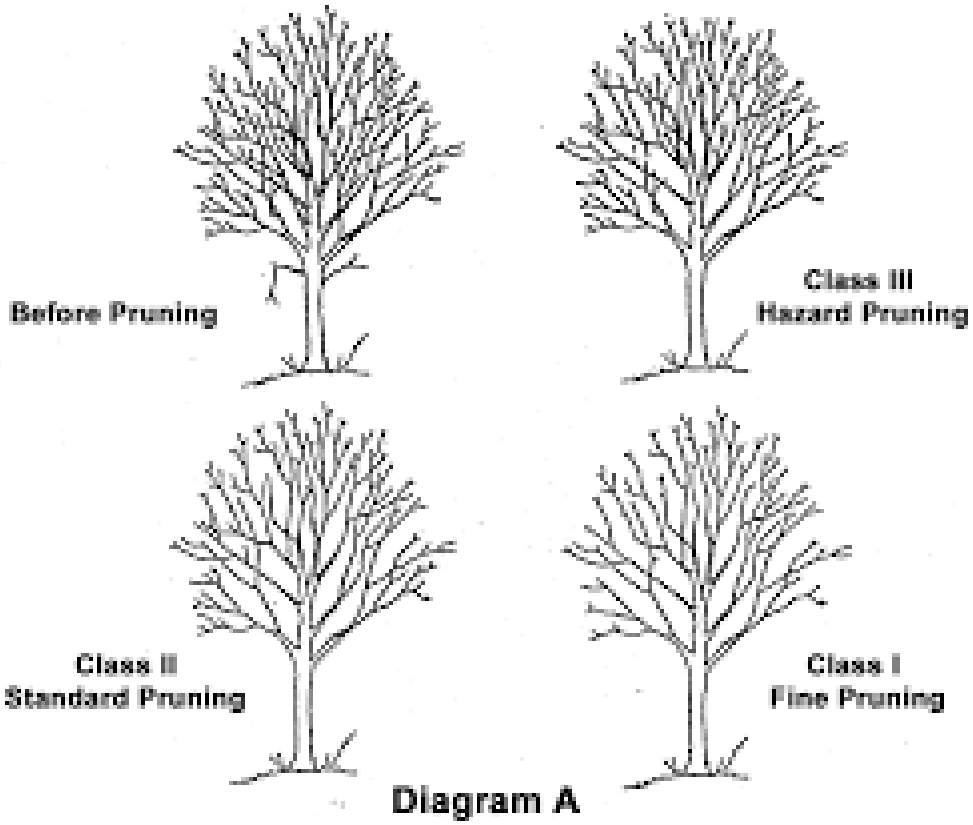
Before Pruning
Class III
Hazard Pruning
Class II
Standard Pruning
Class I
Fine Pruning

Diagram A

INTRODUCTION

Pruning of shade trees shall only be performed by qualified tree workers who, through related training and/or on the job experience, are familiar with the techniques and hazards of arboricultural work including trimming, maintaining, repairing or removing trees, and the equipment used in such operations. The pruning of trees can be a potentially hazardous occupation and is to be undertaken only by qualified personnel or trainees under the direct supervision of qualified personnel or trainees under the direct supervision of qualified personnel. All tree workers/trainees should be covered by workers compensation, property damage, public liability and completed operations insurance.

Trees are complex living organisms whose growth, appearance, condition and longevity are greatly influenced by environmental factors. Useful generalizations concerning pruning practices can be made to improve the health, structure, aesthetics, and safety of trees, even though tree species may vary in their cultural requirements, and even within a species individual trees differ in branch configuration.

There are four classes of pruning established to accommodate varying work needs. Pruning performed on certain tree types, such as palm and Norfolk Island pine, might not fall into these categories due to their particular growth characteristics.

CLASS I – FINE PRUNING

Fine pruning is recommended for premium quality work with emphases on aesthetic considerations in addition to structural integrity. Fine pruning shall consist of the removal of dead, dying, diseased, decayed, interfering, objectionable, obstructing, and weak branches, as well as selective thinning to lessen wind resistance. The removal of such described branches is to include those on the main trunks, as well as those inside the leaf area (see Diagram A). An occasional undesirable branch up to one-half inch in diameter, as described above, may remain within the main leaf area to its full length when it is not practical to remove it.

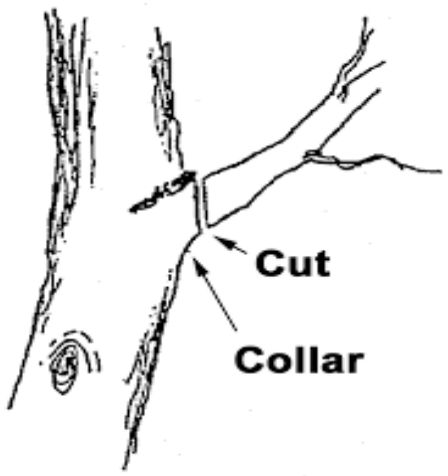

Diagram B

All of the following General Specifications, listed below in italics, apply to Class I, Fine Pruning.

a. *All cuts shall be made as close as possible to the trunk or parent limb, without cutting into the branch collar or leaving a protruding stub (see diagram B). Bark on the edge of all pruning cuts should remain firmly attached.*

b. *All branches too large to support with one hand shall be precut (see diagram C) to avoid splitting or tearing of the bark. Where necessary, ropes or other equipment should be used to lower large branches or stubs to the ground.*

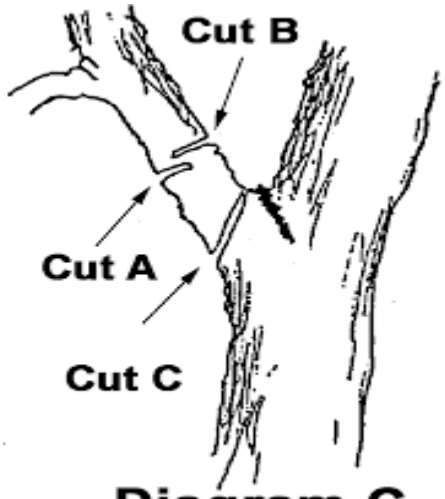

Diagram C

c. *Treatment of cuts and wounds with wound dressing or paints has not been shown to be effective in preventing or reducing decay and is not recommended for that reason. Wound dressing over infected wood may stimulate the decay process. If wounds are painted for cosmetic or other reasons, then materials non-toxic to the cambium layer of meristematic tissue should be used. Care must be taken to apply a thin coating of the material only to the exposed wood.*

d. *Old injuries are to be inspected. Those not closing properly and where the callus growth is not already completely established should be bark traced if the bark appears loose or damaged. Such tracing shall not penetrate the xylem (sapwood), and margins shall be kept rounded.*

e. *Equipment that will damage the bark and cambium layer should not be used on or in the tree. For example, the use of climbing spurs (hooks, irons) is not an acceptable work practice for pruning operations on live trees. Sharp tools shall be used so that clean cuts will always be made.*

f. *All cut limbs shall be removed from the crown upon completion of the pruning.*

g. Trees susceptible to serious infectious diseases should not be pruned at the time of year during which the pathogens causing diseases, or the insect vectors are most active. Similarly, if pruning wounds may attract harmful insects, pruning should be timed so as to avoid insect infestation.

These additional specifications shall also apply to Class I, Fine Pruning.

h. Remove the weaker or less desirable of crossed or rubbing branches. Such removal, if possible, should not leave large open spaces in the general outline of the tree.

i. Where practical, all visible girdling roots shall be treated as follows:

1. Cut root at either end, or:

2. Sever root in center with a chisel and allow growing tree to push root away.

3. Remove section of root.

j. The presence of any disease condition, fungus fruit bodies, decayed trunk or branches, split crotches or branches, cracks, or other structural weakness should be reported to a supervisor and/or the home-owner, and corrective measures recommended.

CLASS II – STANDARD PRUNING

Standard pruning is recommended where aesthetic considerations are secondary to structural integrity and tree health concerns.

Standard pruning shall consist of the removal of dead, dying, diseased, decaying, interfering, objectionable, obstructing, and weak branches, as well as selective thinning to lessen wind resistance.

The removal of such described branches is to include those on the main trunks, as well as those inside the leaf area (see Diagram A). An occasional undesirable branch up to one inch in diameter may; remain within the main leaf area where it is not practical to remove it.

(General Specifications for Class II, Standard Pruning are the same as those listed in italics under Class I, Fine Pruning.]

These additional specifications shall also apply to Class II, Standard Pruning:

h. All visible girdling roots are to be reported to a supervisor and/or the owner.

i. The presence of any disease condition, fungus fruit bodies, decayed trunk or branches, split crotches or branches, cracks or other structural weakness should be reported to a supervisor and/or the home-owner, and corrective measures recommended.

CLASS III – HAZARD

Hazard Pruning is recommended where safety considerations are paramount.

Hazard Pruning shall consist of the removal of dead, diseased, decayed, and obviously weak branches, two inches in diameter or greater (see Diagram A).

[General Specifications for Class III, Hazard Pruning are the same as those listed in italics under Class I, Fine Pruning.]

These additional specifications shall also apply to Class III, Hazard Pruning:

h. All visible girdling roots are to be reported to a supervisor and/or the owner.

i. The presence of any disease condition, fungus fruit bodies, decayed trunk or branches, split crotches or branches, cracks, or other structural weakness should be reported to a supervisor and/or the home-owner, and corrective measures recommended.

CLASS IV – CROWN REDUCTION PRUNING

Crown reduction pruning shall consist of the reduction of tops, sides or individual limb or dominant leader at the point of attachment of a lateral branch, as illustrated in Diagram D. This practice is to be undertaken only for the following reasons.

a. In situations where branches interfere with utility lines.

b. When there has been significant crown dieback.

c. When it is necessary to achieve specific topiary training or dwarfing.

d. In cases where, due to storm damage or prior incorrect pruning, it is appropriate to prune for safety and aesthetic reasons.

The terms “cutting back” and “drop crotch pruning” are sometimes used interchangeably with the term “crown reduction pruning.” By contrast, the term “topping” is often used to refer to a generally unacceptable arboricultural practice. Please refer to the Terminology section of this standard for further information.

[General Specifications for Class IV, Crown Reduction Pruning are the same as those listed in italics under Class I, Fine Pruning.]

These additional specifications shall also apply to Class IV, Crown Reduction Pruning:

g. When removing a parent leader or limb to lateral branch, the final cut should be made as close to parallel as possible with the branch bark ridge and the lateral limb. The cut should be made as close to the bark ridge as possible without cutting into it. Care should be taken to avoid damaging the lateral limb when the final cut is made.

h. Remove the weaker or less desirable of crossed or rubbing branches. Such removal should not leave large open spaces in the general outline of the tree.

i. Generally, in crown reduction pruning, not more than one-third of the total leaf area should be removed in a single operation.

ii. Every effort should be made to cut back to a lateral at least one-third to one-half the diameter of the parent limb or leader that is being removed. Cuts not made to a suitable lateral, sometimes called 'topping cuts', are not to be permitted.

j. Before a branch is cut back, the ratio of live wood in the branch to leaf surface area in the remaining branch should be considered carefully. The leaves must supply sufficient carbohydrates (food) to maintain the wood in the remaining branch as well as send excess carbohydrates to the trunk and roots for storage and later use. Generally, not more than one-third the total leaf surface area should be removed at any one time.

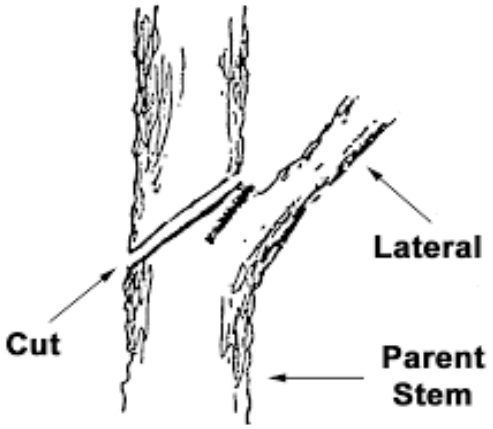

Diagram D

k. To prevent sunburn on thin-barked trees, just enough limbs shall be removed to get the desired effect without admitting too much sunlight to the trunk of the tree or the top of large branches. Care should be taken with the following species: Linden (Tillia spp.), Maple (Acer spp.), Beech (Fagus spp.), Apple (Malus spp.), Oak (Quercus spp.), and other trees susceptible to sunburn.

Sunburn damage may be minimized by doing work on susceptible species during the dormant season.

l. When removing the lower branches of trees for crown elevation or under clearance, care should be taken to maintain a symmetrical appearance, and cuts should not be made so large or so numerous that they will prevent normal sap flow.

m. Periodic crown reduction for certain species such as silver maple, the true poplars, and other trees with brittle and soft wood is an established arboricultural practice. This procedure has proved

beneficial in maintaining safety over long periods of time. In all cases, it is preferable to make cuts when branches are small so as to avoid developing stem decay, and to begin training these trees when they are young and prune them regularly thereafter so as to avoid removing an excessive amount of leaf surface in one operation.

TERMINOLOGY

BRANCH – A secondary shoot or stem arising from one of the main axes (i.e. trunk or leader) of a tree.

BRANCH BARK RIDGE – The raised area of bark in the branch crotch that marks where the branch wood trunk wood meet.

BRANCH COLLAR – Trunk tissue that forms around the base of a branch between the main stem and the branch. As a branch decreases in vigor or begins to die, the branch collar becomes more pronounced.

CALLUS – Tissue formed by the cambium layer around and over a wound.

CANOPY – Upper portion of the tree consisting of limbs, branches, and leaves.

CAMBIUM – Dividing layer of plant cells that forms sapwood (xylem) to the inside and bark (phloem) to the outside.

CLEAN CUTS – Cuts made using a sharp tool, with no marks or tears on the branch collar or trunk.

CLOSURE – Refers to callus growth covering of a cut or other tree wound.

CROWN – Technically, the juncture of the trunk above the roots, but in common usage, it refers to the foliage comprising the uppermost branch structure.

CROWN ELEVATION – A regional term synonymous with UNDER CLEARANCE.

CUTTING BACK – Pruning designed to reduce the crown of a tree or individual branch. Sometimes referred to as heading back, drop crotch pruning, natural pruning, lateral pruning, or directional pruning. It is distinctly different from ‘topping’ (see definition) in that an effort is made to keep the symmetry of the tree on the sides as well as the top.

DECAY – The degradation of plant tissue, including wood by pathogens such as fungus organisms. Wood decay can reduce the structural integrity of a tree or its individual limbs.

DORMANT – A state of inactivity, or no growth. Deciduous trees are considered to be dormant from the time the leaves fall until new foliage begins to appear.

DROP CROTCH PRUNING – The specific cutting back of a branch or leader to a lateral branch at least one-third to one-half the diameter of the cut being made.

GIRDLING ROOTS – Roots located above or below ground level whose circular growth around the base of the trunk or over individual roots applies pressure to the bark area, thereby choking or restricting the flow of sap.

LATERAL – A side branch or twig.

LEADER – A dominant upright stem, usually the main trunk.

LIFTING – The removal of lower branches for under-clearance.

LIMB – Same as branch.

LINE CLEARANCE – Pruning for the safe operation and maintenance of uninterrupted electric service.

PARENT STEM – The main trunk system of the tree; also, the dominant leader of a major limb.

PHOTOSYNTHESIS – The process by which green plants manufacture food (carbohydrates) in cells containing chlorophyll, utilizing sunlight for energy.

POLLARDING – Trees cut back to essentially the same joint seasonally, resulting in multiple sprouts above the cuts.

PRECUT OR PRECUTTING – The removal of the branch far enough beyond the finished cut so as to prevent splitting into the parent stem.

PRUNING – The removal of plant parts, dead or alive, in a careful and systematic manner so as to not damage other parts of the plant.

SAP FLOW – The course assumed by sap in its movement through a tree.

SAPWOOD – A wood layer of variable thickness found immediately inside the cambium, composed of water conducting vessels and living plant cells. Also known as xylem.

SCARS or INJURIES – Natural or man-made lesions of the bark in which wood is exposed.

SUCKER – A vigorous shoot arising at or below a graft union or near the base of the trunk.

SUNBURN – Bark splitting or injury caused by temperature extremes or sudden temperature fluctuation.

THINNING – The removal of branches where they arise in order to let in light, reduce wind resistance, remove unwanted branches, or to retain a tree's natural shape.

TOPIARY – Trees sheared or pruned carefully in a formal shape.

TOPPING – The severe reduction of branches without consideration of the specifications for cutting back. (This is generally considered to be an undesirable practice.)

TRACING – Careful removal of the loose or damaged bark along the edges of a wound to encourage closure.

TRIMMING – See PRUNING.

UNDER-CLEARANCE – The removal of lower tree limbs to allow clearance beneath the tree crown. The same as CROWN ELEVATION.

WATER SPROUT – A vigorous shoot arising from the above-ground portion of the tree or above the graft union. See SUCKER.

WOUND – The opening that is created any time the tree's protective bark covering is penetrated, cut, or removed, injuring or destroying living tissue. Pruning a live branch creates a wound, even when the cut is properly made.

B. Pruning Permit

A permit shall be completed, and approved by the Director of Public Service, before a city tree is pruned by a resident or by a contractor not operating under a city contract. Unless specifically indicated otherwise in an approved permit, all pruning shall be done under direction of an ISA Certified Arborist. **See Appendix C**.

C. Reasons for Pruning

The following is a list of reasons why a tree may need to be pruned:

1. Limbs which either may rub or are rubbing a building.
2. Dead limbs that can fall and cause damage or injury.
3. Low limbs which interfere with pedestrian or vehicular traffic. It is a requirement that sidewalks have an overhead clearance of eight 8 feet and that tree branches provide fifteen 15 feet of overhead clearance on roadways.
4. Branches which block traffic signs and signals.
5. Branches which block streetlight illumination over the traffic or pedestrian corridor.
6. Improvement of tree health by removing diseased limbs and correcting growth defects.

D. Tree Topping

Topping of trees is prohibited. Directional pruning is the accepted practice for utility line clearance.

E. Street and Sidewalk Clearances

When pruning to raise limbs, the standard height to allow for free passage of pedestrians shall be not less than 8 feet over sidewalks and 15 feet over streets and highways.

F. Spraying

Application of chemicals to city trees shall be prohibited except by permission to be granted by permit from the Director of Public Service. Application of chemicals must follow the label guidelines. **See Appendix C.**

G. Mulching

Park Trees shall be mulched with hardwood mulch. The mulch bed should be 3 inches in thickness and have a radius of at least 3 feet (5 feet for larger trees). Mulch should not be applied against the tree trunk.

III. Tree Protection in Work Zones

A. No construction activities, including trenching, excavating, boring, or any other earth-disturbing activity, are to be performed within the drip line of a tree without an approved permit, from the Director of Public Service.

B. The protected area around a tree shall be designated by work limit fencing and maintained in place throughout the construction project.

C. No construction activities are to occur within the Protected Root Zone (PRZ) defined by the dripline of the tree. Where it is not practical to protect the entire PRZ, the largest possible protected area is to be designated in consultation with the Tree Commission.

D. Appropriate measures are to be used to minimize damage to the trunk, limbs and roots of each tree as follows. Required measures may include:

   a. *When work within the PRZ is necessary, the trunk is to be temporarily wrapped or boarded around to protect against damage from construction equipment. Protective materials shall not be nailed to the tree.*
   b. *Major roots (6-inch diameter or larger) are not to be severed unless authorized in the permit. All roots that must be severed are to be clean cut with a saw.*
   c. *Tunneling under major roots is to be practiced when trenching or it will cause significant damage to the health and stability of the tree.*
   d. *Roots exposed for more than 2 days are to be protected from desiccation.*
   e. *Where necessary, measures should be taken to avoid compaction of the soil in the PRZ. Heavy machinery should not be driven or parked over unprotected areas in the PRZ.*
   f. *Soil in the PRZ is not to be altered by waste disposal or recontouring.*
   g. *Tree limbs are not to be pruned unless authorized in the permit.*

IV. Tree Protection and Sidewalk Repair

Sidewalk repair shall be performed with a minimum impact on tree roots where practical. Roots with a diameter of 6 inches or more shall not be cut without prior inspection and recommendation by the Tree Commission. Practices to be employed, where appropriate, include:

1. Contouring of the new sidewalk around tree trunks and major roots.

2. Ramping of the sidewalk over roots underlying the path of the sidewalk.

3. Where root removal must occur, the roots are to be cut with a sharp tool (e.g., saw or pruners) in a clean and even manner.

V. Tree Removal

A. Removal Permit

A Permit shall be completed and approved by the Director of Public Service, after review by the Tree Commission, before a city tree is removed by a resident or by a contractor not operating under a city contract. Unless specifically indicated otherwise in an approved permit, removal shall be done under the direction of an ISA Certified Arborist. **See Appendix C**.

B. Reasons for Removal

The following is a list of reasons why a tree may need to be removed:

1. Tree is dead or dying as determined by the Tree Commission.

2. Tree is diseased and death is imminent, or for which removal will help to control spread of the disease.

3. Tree is structurally hazardous or poses a threat to the health and well-being of the public.

4. The tree is part of a group of trees that is overcrowded as determined by an arborist.

5. Infrastructure Conflicts. Trees in the urban forest may conflict with the infrastructure of the City. For the most common situations, Tree Commission policies are given in this Section (V) of this document.

    a. <u>Sewer lines</u>. *Tree roots do not seek out sewer lines and grow in them causing a blockage. Instead they enter a sewer line through a defect. Therefore, a sewer lateral line on private property that is blocked with tree roots is the result of a defective sewer line. The Tree Commission will not recommend removal of a tree because of a blocked sewer line except where the location of the tree prevents repair of the lateral sewer line. It is the property owner's responsibility to prove that the tree is obstructing repair of the sewer line. In such a*

case the property owner will be responsible for the cost of the tree removal and a replacement tree in the public right-of-way.

b. *Sidewalks. The Tree* Commission might not *recommend removal of trees for the purpose of sidewalk repair. In situations where tree roots are lifting a sidewalk, appropriate measures shall be taken to protect tree roots as suggested in Section IV of this document.*

c. *Driveway Aprons and Other Construction. Requests for tree removal in order to accommodate the construction of driveways and other projects will be reviewed on an individual basis. Whenever possible, the Tree commission will encourage alternative construction plans that will preserve a tree.*

d. *Removal beneath Utility Lines. Whenever a utility company wishes to remove a public tree, permission must be obtained from the Tree Commission. If it is determined that a tree must be removed to accommodate such a request, then the utility company shall provide a replacement tree and pay for the removal.*

C. Assessment of Tree Condition

Assessment of tree condition and recommendations for removal shall be made by the Tree Commission and/or the City's Ohio Department of Natural Resources, Division of Forestry, Urban Forester Consultant. In emergency situations, the Director of Service may have a tree's condition assessed by another licensed tree care professional or may remove a tree where its condition presents an immediate danger to persons or property. The Tree Commission may recommend removal of a non-hazard tree. If the removal is requested by a resident, the resident must pay for the removal and the planting of a tree or trees of equal value, as well as the repair of altered infrastructure.

D. Tree Value Determination

The monetary value of a tree shall be determined in accordance with the current version of the Guide for Plant Appraisal, by the Council of Tree and Landscape Appraisers or the latest edition of Guide to Appraisal of Trees and Other Plants in Ohio. A publication of The Ohio Chapter, International Society of Arboriculture.

E. Stump Removal

Except when a tree is approved to be dropped in place, all stumps and surrounding surface roots shall be ground to a depth of 18 inches. Wood chips from the top 4" of the stump are to be removed. The area of the stump removal should be leveled with added topsoil as required.

VI. Enforcement

Any work on public trees without a permit or without adherence to the provisions of permits will be enforced by the Code Enforcement Officer. **See Appendix C**

VII. Appeals

The City Board of Zoning Appeals should be consulted regarding any appeal of interpretation or administration of The Comprehensive Tree Plan for the City of Circleville by any person aggrieved. Such appeal shall be taken within thirty (30) days after the date of the decision by filing a request with the City Board of Zoning Appeals.

VIII. Penalty

Any person, firm or corporation violating or failing to comply with the requirements of Sections II, III, IV or V shall be deemed guilty of a minor misdemeanor on a first offense; on each subsequent offense such person is guilty of a misdemeanor of the fourth degree in addition to any required restitution for damages incurred by the city.

IX. Definitions

Large Tree - means any tree species which normally attains a full-grown height over fifty feet (50').

Medium Tree – means any tree species which normally attains a full-grown height between thirty (30') and fifty feet (50').

Small Tree – means any tree species which normally attains a full-grown height under thirty feet (30').

Lawn strip, or Tree Lawn – The region between the street curb and sidewalk within the city or public right-of-way.

Protected Root Zone (PRZ) – The region around a tree designated by work-limit fencing in which no construction activity is allowed.

Pruning – The removal of plant parts, dead or alive, in a careful and systematic manner so as to not damage other parts of the plant.

Public Tree – shall include all trees now or hereafter growing or planted in any city park or on other city owned property, and all street trees now or hereafter growing or planted within the right-of-way of any city street, including tree lawns, regardless of who purchased or planted the tree.

Topping – The severe reduction of branches without consideration of the specifications for cutting back. (This is generally considered to be an undesirable practice.)

ISA – International Society of Arboriculture

ANSI – American National Standards Institute

Destruction of weeds – see R.C. Ohio 971.33 et seq.
Destruction of shrubs, trees or crops – see GEN. OFF. 541.06

Appendix A
Small Trees- Mature height under 30’

Tree lawn width minimum 4’

Sizes may vary depending on site placement

Common Name	Botanical Name	Mature Height	Mature Width	Species Notes
Cherry- Canada Red Select	Prunus virginiana ‘Canada Red’	25’	20’	
Cherry- Kwanzan	Prunus serrulata ‘Kwanzan’	30’	20’	
Cherry- Okame	Prunus ‘Okame’	25’	20’	
Crabapple- Golden Raindrops	Malus ‘Schmidtcutleaf’	20’	15’	
Crabapple- Prairifire	Malus ‘Prairifire’	20’	20’	
Crabapple- Royal Raindrops	Malus ‘Royal Raindrops’	20’	15’	
Crabapple- Spring Snow	Malus ‘Spring Snow’- fruitless	25’	15’	
Dogwood- Corneliancherry	Cornus mas	22’	20’	
Dogwood- Kousa	Cornus kousa	25’	25’	
Hornbeam- American	Carpinus caroliniana	30’	30’	
Horsechestnut- Ruby Red	Aesculus x carnea ‘Briotii’	30’	35’	
Lilac- Tree Ivory Silk	Syringa reticulata ‘Ivory Silk’	25’	15’	
Lilac- Tree Summer Charm	Syringa pekinensis ‘Summer Charm’	20’	15’	
Maackia- Amur	Maackia amurensis	30’	30’	
Magnolia- Sweetbay Moonglow	Magnolia virginiana ‘Jim Wilson’	30’	15’	
Maple- Amur	Acer ginnala	20’	18’	
Maple- Tatarian Flame	Acer tataricum ‘Flame’	15’	15’	
Maple- Tatarian	Acer tataricum	30’	20’	
Maple- Trident	Acer buergerianum	30’	30’	
Redbud- Eastern	Cercis canadensis	20’	25’	
Serviceberry- Allegheny Lustre	Amelanchier laevis ‘Lustre’	25’	15’	
Viburnum- Blackhaw	Viburnum prunifolium	15’	12’	
Zelkova, Goshiki	Zelkova serrata ‘Goshiki’	25’	12’	

Appendix A

Medium Trees- Mature height 30-50’

Tree lawn width minimum 6’- Size may vary depending on site placement

Common Name	Botanical Name	Mature Height	Mature Width	Species Notes
Alder- Black	Alnus glutinosa	40’-50’	30’	
Elm- Frontier	Ulmus ‘Frontier’	35’	25’	
Hackberry- Prairie Sentinel	Celtis occidentalis ‘Prairie Sentinel’	45’	12’	
Ginkgo- (male cultivars)	Ginkgo biloba ‘Autumn Gold’ ‘Fairmount’ ‘Princeton Sentry’	45-50’	20’-40’	
Honeylocust- Thornless Street Keeper	Gleditsia triacanthos var. inermis ‘Draves’	45’	20’	
Honeylocust- Thornless (cultivars)	Gleditsia triancanthos var. inermis ‘Moraine’ ‘Skyline’ ‘ Sunburst’	40-50’	35’	
Hophornbeam- American	Ostrya virginiana	40’	25’	
Hornbeam- European, Upright	Carpinus betulus ‘Fastigiata’	35’	25’	
Linden- Littleleaf (cultivars)	Tilia cordata ‘Greenspire’ ‘Corazam’	40-45’	30’-15’	
Linden- Silver, Sterling	Tilia tomentosa ‘Sterling’	45’	25’	
Maple- Freeman, cultivars	Acer x freemanii ‘Celebration’ ‘Autumn Blaze’	45-50’	20’-40’	
Maple- Crimson Sunset	Acer truncatum x platanoides ‘Crimson Sunset’	35’	25’	
Maple- Hedge, Metro Gold	Acer campestre ‘Metro Gold’	35’	20’	
Maple- Pacific Sunset	Acer truncatum x platanoides ‘Warrenred’	30’	25’	
Oak- Crimson Spire	Quercus robur x alba ‘Crimschmidt’	45’	15’	
Oak- Sawtooth	Quercus accutissima	40’	35’	
Oak- Willow	Quercus phellos	50’	35’	
Osage Orange- Whiteshield	Maclura pomifera ‘Whiteshield’ (spineless, fruitless)	25-40’	20’-40’	
Rubbertree- Hardy	Eucommia ulmoides	45’	45’	
Yellowwood	Cladrastis kentukea	35-50’	40+’	

Appendix A

Large Trees- Mature height 50+’

Tree lawn width minimum 8’ (Size may vary depending on site placement)

Common Name	Botanical Name	Mature Height	Mature Width	Species Notes
Honeylocust- Thornless	Gleditsia triacanthos var. inermis	40-70’	40’	
Linden- American	Tilia americana	40-60’	35’	
Linden- Silver	Tilia tomentosa	40-60’	35’	
Magnolia (Cucumbertree)	Magnolia acuminata	50-80’	60’	
Maple- Black	Acer nigrum	60+’	50’	
Oak- Burr	Quercus macrocarpa	70+’	65’	
Oak- Chinkapin	Quercus muehlenbergii	65+’	60’	
Oak- Scarlet	Quercus coccinea	60+’	40’	
Oak- Swamp White	Quercus bicolor	60+’	50’	
Pagodatree- Japanese	Sophora japonica	60+’	50’	
Planetree- American	Platanus occcidentalis	75+’	60’	
Planetree- London	Platanus x acerifolia	70+’	30’	
Redwood- Dawn	Metasequoia glyptostroboides	65+’	30’	
Tuliptree	Liriodendron tulipifera	70+’	35’	
Tupelo- Black or Black Gum	Nyssa sylvatica	60+’	30’	
Zelkova- Green Vase	Zelkova serrata ‘Green Vase’	60+’	50’	

Appendix A

Business District Trees
(Trees for use in Tree Wells*)

(Sizes and description may vary depending on placement)

Common Name	Botanical Name	Mature Height	Mature Width	Species Notes
Frontier Elm	Ulmus 'Frontier'	35'	25'	
Patriot Elm	Ulmus 'Patriot'	45'	25'	
Ginkgo	Ginkgo biloba- 'Princeton Sentry'	40'	15'	
Prarie Sentinel Hackberry	Celtis Occidentalis 'Prairie Sentinel'	45'	12'	
Street Keeper Honeylocust	Gleditsia tricanthos var. inermis 'Draves' or 'Street Keeper'	45'	20'	
Autumn Treasure Hophornbeam	Ostrya virginiana 'JFS-KW5'	40'	20'	
Rising Fire American Hornbeam	Carpinus caroliniana 'Uxbridge'	30'	15'	
Comumnar European Hornbean	Carpinus betulus 'Fastigiata'	35'	20'	
Franz fountain European Hornbeam	Carpinus betulus 'Franz fontaine'	35'	15'	
Great Wall Tree Lilac	Syringe pekinensis 'WFH2'	20'	12'	
Japanese Tree Lilac	Syringa reticulate	20'	15'	
Corinthian Little Leaf Linden	Tilia cordata 'Corzam'	45'	15'	
Streetside Maple	Acer campestre 'JFS Shichtel2'	35'	18'	
Greencolumn Maple	Acer nigrum 'Greencolumn'	50'	20'	
Urban Sunset Maple	Acer truncatum x platanoides 'JFS-KW187'	35'	20'	
Beacon Oak	Quercus bicolor 'Bonnie and Mike'	40'	15'	
Crimson Spire Oak	Quercus robur x alba 'Crimschmidt'	45'	15'	
Regal Prince Oak	Quercus robur x bicolor 'Long'	45'	18'	
Green Vase Japanese Zelkova	Zelkova serrata Green Vase	60'	40'	

Appendix B

Prohibited Trees for Circleville Public Plantings

PROHIBITED TREES IN ANY SITUATION

Common Name	Botanical Name	Species Notes
Callery Pear	Pyrus calleryana – any cultivar	Invasive
Tree of Heaven/Ailanthus	Ailanthus altissima	Invasive
White Mulberry	Morus alba	
Ginkgo – Female only	Ginkgo biloba	Fruit25 – bad odor
Russian Olive	Elaeagnus angustifolia	Invasive
Autumn Olive	Elaeagnus umbellate	Invasive

Appendix B

PROHIBITED STREET TREES – New Plantings (Tree Lawns & Tree Wells)

*** = Suitable for parks, natural areas**

Common Name	Botanical Name	Species Notes
Spruce, Pines, other evergreens		Create blind spots for both pedestrians and vehicles. *
'Bradford' Callery Pear and other Callery Pears	Pyrus calleryana	Very invasive, poor structure; subject to wind breakage
Boxelder	Acer negundo	Breakage and insect pests, reseeds easily, poor structure *
Silver Maple	Acer saccharinum	Soft wooded *
Tree of Heaven/Ailanthus	Ailianthus altissima	Very invasive, reseeds easily, mess, foul odor
Ash	Fraxinus spp.	All native ashes are susceptible to the lethal emerald ash borer.
Black Walnut	Juglans nigra	Large nuts cause damage and stain surfaces *
Osage Orange	Maclura pomifera	Large fruit, thorns (fruitless and thornless cultivars OK)
Mulberry	Morus spp.	Fruit objectionable
Cottonwood	Populus deltoids	Cottony masses objectionable *
Purpleleaf Plum	Prunus cericifer 'Thundercloud'	Susceptible to borers, short lived
Birch	Betula pendula	Susceptible to bronze birch borer, some weeping
Black Cherry	Prunus serotine	Not suitable as a street tree *
Black Locust	Robinia pseudoacacia	Insects, borers and leaf miners; thorns
Willows	Salix spp. (all kinds)	Breakage; disease and insects
European Mountain Ash	Sorbus aucuparia	Shallow rooted; susceptible to wind; short-lived, fire blight
Ginkgo – (female only)	Ginkgo biloba	The fruit on the female trees have an offensive smell. Male trees are fruitless
Catalpa	Catalpa spp.	Large see pods *
Russian Olive	Elaeagnus angustifolia	Invasive, weak wooded
Fruit Trees (Apple, Pear, Plum, Cherry, etc.)		Fruit objectionable on street and sidewalk; numerous insect pests and diseases; require too much spraying and pruning
Shrubs & Hedges		Create blind spots for motorists and pedestrians, obstruct sidewalks
Weeping trees of any species		Create visibility problems and clearance problems over streets, sidewalks*

Appendix C – Permits & Exhibits

1. Application for Permit to Prune, Spray, Remove or Plant a Tree(s) within municipal lands or the public right-of-way including tree lawns, sidewalk cutouts or wells as defined by the Comprehensive Tree Plan in Sections I and II.
2. Application for Work-zone permit for contractors and others doing work within the drip zone of a public tree as required in Section III.
3. Application for a License to Prune, Spray, Remove or Plant Trees on Public Property within the City of Circleville. Renewable annually January 1st. List of approved licensees will be maintained by the Service Department
4. Permit to Prune a Tree - $25
5. Permit to Spray a Tree - $25
6. Permit to Remove a Tree - $25
7. Permit to Plant a Tree - $5
8. Work- Zone Permit - $25
9. License to Prune, Spray, Remove or Plant Trees on Public Property within the City of Circleville - $25

Application for Permit to Prune/ Remove/ Plant or Spray Tree(s) on Public Property within the City Circleville.

Permit No. _______________

Property Owner/Contractor ____________________________________ Date _________________

Address ____ Phone ___________________ Permit is requested to ___________ (prune / spray / remove / plant) a tree.

Location of tree ____

Type and approximate trunk diameter of tree: _______________________________________

If permit is for pruning or removal, please state reason for action.
If permit is to plant a tree, please identify type and size of tree to be planted.
If permit is to spray, please state the chemical to be used and follow directions on the label.

____

____

____

Who will do the work? ____
(If someone other than the property owner, then a License must also be obtained)

It is understood and agreed that if this application is granted, then the property owner will have the work done in a workmanlike manner, comply with any special instructions stated below, remove from the street all debris and dirt and replace the paving and lawn and leave them compatible with the surrounding landscape. It is further agreed that the applicant will save the City its officers, employees, and agents free and harmless from all damage to life, limb and property arising from the proposed work and as well as damage to nearby and abutting property. It is further agreed that the applicant will comply with all provisions of the ordinances of the City of Circleville and with the laws of the State of Ohio.

Applicant's signature _______________________

-- -

Tree Commission Comments: Tree type _________________________________

____

____

____

____________________________________ ______________________
Member Tree Commission Date

____

Permit is approved _____________ Permit is denied ______________

____________________________________ ______________________
Safety-Service Director Date

Application for Work-Zone Permit for doing work within the Drip Zone of public tree(s) within the City of Circleville, as required in Section III of the Comprehensive Tree Plan.

1. Business Name and Contact Person: _____

2. Business Phone: _____Cell_____

3. Address: _____City_____State_____

4. Address where work is to be performed _____

5. Work to be performed and number of trees affected_____

_____

6. Applicants qualifications and experience working within tree drip zones:

_____

_____

7. List three (3) references where work was performed within the drip zone of trees: Name, address, and phone number:

1) _____

2) _____

3) _____

8. Applicant agrees to comply with all the provisions set forth in the Comprehensive Tree Plan for the City of Circleville, and any amendments thereto as hereinafter made and has received a copy of same.

9. Applicant agrees to save the City harmless against all losses and claims for damages to persons or property caused by the trimming, pruning, removal or planting of trees.

10 Applicant shall provide evidence of commercial liability insurance and property damage in the combined single limit amount of $1,000,000 and of Bureau of Workers' Compensation coverage.

11. TREE COMMISSION ENDORSEMENT: _____

_____

_____ Tree Commission member: _____

12. Permit approved/ denied_____ this _____day of _____

13. $25 license fee attached _____.

_____
Service Director

Appendix C Comprehensive Tree Plan for the City of Circleville

Application for Commercial License to Prune, Spray, Remove or Plant Trees on Public Property within the City of Circleville

1. Business Name/ Contact Person: _____

2. Business Phone: _____Cell_____

3. Address: _____

3. Qualifications and experience in tree trimming and removal:

_____

_____

_____

4. List three (3) references where trees were trimmed/removed: Name, address, and phone number:

1) _____

_____

2) _____

_____

3) _____

_____

5. Applicant agrees to comply with all the provisions set forth in the Comprehensive Tree Plan for the City of Circleville, and any amendments thereto as hereinafter made and has received a copy of same.

6. Applicant agrees to save the City harmless against all losses and claims for damages to persons or property caused by the trimming, pruning, removal or planting of trees.

7. Applicant shall provide evidence of commercial liability insurance and property damage in the combined single limit amount of $1,000,000 and of Bureau of Workers' Compensation coverage.

8. TREE COMMISSION ENDORSEMENT: _____

_____

_____ Tree Commission member: _____

9. License granted/ denied_____ this _____day of _____

10. $25 license fee attached _____.

_____
Service Director

Appendix C Comprehensive Tree Plan for the City of Circleville