

Olmstead Falls
Chapter 1218
Tree Preservation and Management

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CROSS REFERENCES

- Power to regulate shade trees and shrubbery- see Ohio R.C. 715.20
- Assessment for tree planting or maintenance- see Ohio R.C. 727.011
- Shade Tree Assessments Fund- see ADM. 234.05(g)
- Injury or destruction- see GEN. OFF. 642.06
- Trees and shrubs generally- see S.U. & P.S. Ch. 1030

1218.01 PURPOSE.

The purpose of this chapter is to promote the public health, safety, and general welfare through the preservation, replacement, and planting of trees in order to lessen air pollution, intercept airborne particulate matter, reduce noise and light glare, moderate air temperature, moderate storm water runoff, reduce erosion and sedimentation, maintain wildlife habitats, provide visual screening, provide natural shading, protect property values, and enhance the natural beauty of Olmstead Falls.

(Ord. 24-97. Passed 10-14-97.)

1218.02 APPLICABILITY

No person, firm, or corporation, that is the owner or lessee of any lot or land greater than two acres shall remove any tree having a caliper five inches or greater without first obtaining a permit and meeting the City's requirements for submission of a TP&M Plan and receiving its approval by the Planning Commission if (1) the property does not have a dwelling upon it; or (2) the property does have a dwelling upon it and the owner contemplates a sale of the property for subdivision or further development, or plans a change of the use of the property or construction on the property. If, however, the change of the use of the property or construction on the property. If, however, the continued preservation of the tree(s) poses a threat to the health, safety, or welfare to the public or to adjacent property, or if the tree is dead, diseased, or structurally

weak or hazardous and so confined by the City Arborist, the tree(s) may be removed without the submission of a TP&M Plan. The regulations set forth in this chapter shall be applicable to all land within the City.

There are somewhat different Tree Preservation and Management Requirements applying to (a) residential developments (Chapter 1218.05) and to (b) developments requiring a Development Plan (Chapter 1218.06)

1218.03 DEFINITIONS

The following terms are defined for the purposes of this chapter:

(a) Buildable area: The area of construction for a building and parking area, including a distance of fifteen feet around the perimeter of the foundation of the building.

(b) Caliper: The American Association of Nurserymen standard for trunk measurement of nursery stock. This is the diameter of the tree measured six inches above the ground line if the resulting measurement is no more than 4 inches. If the resulting measurement is more than 4 inches, the measure is made at a point twelve inches above the ground line. This code uses “caliper” for new trees provided from commercial nurseries and “DBH” for trees that are on the site or moved or transplanted from another location.

(c) Clearing: Any intentional or negligent act that causes a tree or other vegetation to decline and/or die. Such acts shall include, but not be limited to, damage inflicted upon the root system of the vegetation by the application of toxic substances, by the operation of equipment and vehicles, by the storage of materials, by the change of natural grade due to unapproved excavation or filling, or by the unapproved alteration of natural physical conditions.

(d) Critical root-zone (CRZ): This is the circular area surrounding a tree in which the tree’s roots critical to its survival usually will be found, and which should be protected. The radius of the CRZ in feet is, typically, 1.5 times the DBH in inches. (For example, if a tree’s DBH is 10 inches, then the CRZ is 1.5 times 10 or 15 feet.) This formula is particularly useful in dealing with trees that have been growing in a forest or that naturally have a narrow growth habit. Recognizing that the root zone varies with tree variety, the actual radius for the critical root-zones shall be approved by the City Arborist.

(e) DBH: Diameter-at-breast-height is tree trunk diameter measured in inches at a height of four and one-half feet above the ground. If a tree splits into multiple trunks below four and one-half feet, the trunk is measured at its most narrow point beneath the split. As noted under (b) above, this code uses “caliper” for new trees provided from commercial nurseries, and “DBH” for trees that are on the site or have been moved or transplanted there from another location.

(f) Protective barriers: Structural measures, such as fencing or berms, installed prior to construction for the purpose of preventing damage to trees during construction.

(g) Tree: Any self-supporting woody plant growing upon the earth that usually provides one main trunk and produces a more or less distinct and elevated head with many branches.

(h) Tree Protection and Management (TP&M) Plan: The plan (Chapter 1218.07) required before trees can be removed from applicable properties (Chapter 1218.02).

(i) Trees of quality: These are trees within a natural wooded area that can be expected to be a future asset to the property. Typically, they would be healthy, single-trunked hard-woods that are adapted to this area and have branches that are not limited to the upper half of the trunks. The final decision as to whether trees meet this criteria shall be made by the City's certified arborist or certified urban forester.

(j) Trees, unacceptable species: The City's Shade-Tree Commission maintains a listing of trees that are not acceptable for the various uses required within this code, such as landscape trees for meeting caliper requirements, screening trees, street trees, etc.

(k) Wooded areas: A group of trees and other woody plants covering a land area of 10,000 square feet or greater with at least ten trees per 10,000 square feet (or an average of at least 40 trees per acre) having a two inch or greater DBH.

1218.04 SPECIAL CONSIDERATIONS FOR WOODED AREAS.

It is recognized that there are three different ways in which wooded areas may be utilized within new developments. These different uses require different management and preservation approaches. It is further recognized that existing wooded areas may consist of quality trees mixed with undesirable trees and undesirable underbrush. The three utilization methods are as follows:

Natural undisturbed: Some developments may include, when completed, large wooded areas that it would be appropriate to have remain in their natural state, essentially undisturbed. Perhaps the natural terrain or other factors limit construction and landscaping to areas that do not include these wooded areas. Such specific areas do not require internal tree surveys, and the trees within them are not to be counted in meeting the tree caliper requirements for the project. These areas shall be shown on the Tree Preservation and Management Plan and be approved by the Planning Commission as qualifying as "Natural Undisturbed" areas after review and comment by the Shade Tree Commission, who may consult with the City Arborist, as appropriate.

Buffer zones or screening: In some cases, the trees of a wooded area may be utilized to provide (or contribute to providing) a required buffering or screening function. It will be necessary to identify specific trees or groups of trees that are appropriate for screening/buffering purpose, with the balance to be removed without damaging those to be saved. Additional trees or other landscaping approaches may need to be added to achieve the intended purpose. The quality of the existing trees and their suitability, either individually or as a group, for the

screening or buffering plan shall be proposed by the developer, documented in the TP&M Plan, and reviewed and recommended to the Planning Commission by the Shade-Tree Commission after consulting with the City Arborist. The trees within these areas are not to be counted in meeting the tree caliper requirements for the project.

Wooded area within the buildable area of the property. Wooded areas may exist within the portions of the property that are to be developed. Such areas may be counted in meeting the minimum total tree caliper requirements. In such cases, all of the individual trees of quality, or grouping thereof, shall be identified as to species, DBH, and quality before the property is prepared for construction and they shall be preserved and utilized, insofar as is practical, to meet the tree requirements for the property. The trees or groups thereof so identified, as well as those to be removed because of unsuitability and for construction, shall be noted on the TP&M Plan and the plan shall be reviewed and commented upon by the City Arborist before the plan is submitted to PC. (It should be noted that the understory beneath some varieties of trees is essential to the survival of the trees and the cleaning of such understory shall be first approved by the City Arborist.)

1218.05 REGULATIONS FOR RESIDENTIAL DEVELOPMENTS.

All proposed residential developments, including but not limited to single-family subdivisions, shall be designed to preserve healthy trees and woodlands, especially trees providing natural buffering and trees having a caliper of five inches or greater, where possible, according to the following provisions.

(a) Design and Layout Criteria.

(1) Existing trees of quality, including wooded areas, which are located outside the buildable area, street rights-of-way, drainage ways and utility easements, shall be preserved to the extent practicable.

(2) Storm and sanitary sewers shall be located and elevations set in a manner which requires the least amount of grading and tree removal.

(3) House elevations and street elevations shall be designed to minimize the change in the existing natural grade of yard. Grade changes, in regard to the critical root zones of trees that are to be retained, that will reduce the grade to any degree or will increase the grade more than 3 inches over the critical root zones shall be noted on the plan.

(b) Minimum Tree Standards. Notwithstanding the provisions of subsection 1218.05 (a) hereof, each subdivision or residential development shall provide trees, not including those in the "Natural undisturbed" and "Buffer zones or screening" areas, that, when added together, have a total caliper (or DBH as appropriate) of not less than forty (40) inches per each acre of the subdivision or residential development, regardless of whether or not this land area consists of any trees that are to be removed.

(1) New trees which are planted on the site to meet the minimum tree standard shall be a minimum of two (2), and a maximum of six (6) inches in caliper and a minimum of five feet in height.

(2) Existing individual trees may be included as meeting the minimum tree requirements of this subsection, but trees having a caliper greater than six (6) inches in DBH are to be counted as only six (6) inches when calculating the sizes to meet the total caliper requirements.

(3) A TP&M Plan, as described in Chapter 1218.07 shall be submitted to PC at the time of the submittal of the Preliminary Plat.

1218.06 REGULATIONS FOR DEVELOPMENTS WHICH REQUIRE DEVELOPMENT PLAN REVIEW

In addition to the landscaping requirements of Chapter 1274.01, all proposed projects that require development plan review (chapter 1232.06©), both residential and non-residential, shall comply with these regulations so as to ensure that, to the extent practicable, existing trees are retained and preserved.

(a) Buildings and parking areas should be located to fit into the existing topography and preserve the natural amenities of the site.

(b) Existing trees of good quality of eight inches DBH or greater that are located in a proposed parking lot or interior landscape area shall be preserved within a landscaped island unless otherwise approved by the Planning Commission after referral to the Shade Tree Commission and the City Arborist for comment and advice. Any landscaped island which contains one or more trees shall have adequate dimensions to protect the trees and their root systems. If there is to be any solid surface material, such as concrete or asphalt, covering the critical root-zone of the tree as it is projected to exist by the end of five years, the City's Arborist may recommend that the developer provide a root-aeration system to serve the CTZ. A plan showing such a system must receive the arborist's approval. The developer shall identify trees he/she deems to be of quality, but a final recommendation in this regard shall be made by the City Arborist, who will inspect the property.

(c) Existing trees should be used as far as possible to comply with the screening and perimeter parking lot landscaping requirements set forth in Chapter 1274.01, but the quality and suitability of trees for this purpose shall be review and recommended to the PC by the City Arborist.

(d) Minimum Tree Standards. Notwithstanding the provisions of subsection 1218.06 (a) and (b), each commercial and/or industrial development shall provide trees, not including those in the "Natural undisturbed" and "Buffer zones or screening" areas, that, when added together, have a total caliper (or DBH, as appropriate) of not less than forty (4) inches per acre for the land not occupied by building, regardless of whether or not his land area consists of any trees that are to be removed. The trees are to be generally well distributed over the total acreage of the development.

(1) New trees which are planted on the site to meet the minimum tree standard shall be a minimum of two (2), and a maximum of six (6) inches in caliper, and a minimum of five feet in height.

(2) Existing individual trees may be included as meeting the minimum tree requirements of this subsection. In determining whether the DBH of existing

trees meet the forty (40) inch requirement, however, trees having a DBH greater than six (6) inches shall be counted as six inches.

(e) A TP&M Plan, as described in Chapter 1218.07 shall be submitted to PC at the time of the submittal of the Preliminary Development Plan.

1218.07 TREE PROTECTION AND MANAGEMENT PLAN REQUIREMENTS

Before any clearing or disturbance of the property pursuant to the requirements of this chapter, a TP&M Plan shall be presented to PC for approval. The submission and approval of the Tree Protection and Management (TP&M) Plan can be a phased process if the project itself is phased. In many cases it will be necessary to submit a Preliminary TP&M Plan along with the Preliminary Plat (Chapter 1224.05) or Preliminary Development Plan (Chapter 1232.06(c)).

Preliminary TP&M Plan. If a Preliminary Plat or Preliminary Development Plan is describing a large area that is to be subdivided later or developed in phases, a Preliminary TP&M Plan shall be provided at an appropriate scale that shows wooded areas within the total area and that provides some of the details required by Chapter 1218.08 by identifying in a general way the condition of the trees in those areas that are to be cleared for roadways, utilities, etc. The roadways and utility areas shall be located so as to preserve desirable trees insofar as is practicable. In addition, insofar as can be predicted, the planned uses of the wooded areas shall be indicated in terms as defined in 1218.04, at least for those portions to be utilized as “Natural undisturbed” or for “Buffer zones or screening”. Further, the general location of wooded areas on adjacent properties within fifty (50) feet of the boundaries of this project shall be shown on the plan, and tree protection zones or trees on adjacent properties whose critical root zones extend into the subject property shall also be defined. The City Arborist and Shade Tree commission shall inspect the property to advise the PC on the appropriateness of the developer’s concept indicated in this Preliminary TP&M Plan. If this preliminary plan approach is followed, a detailed TP&M Plan will be required subsequently for each Phase of the project as part of the approval process for that phase.

Final TP&M Plan. The final TP&M Plan shall be prepared by an arborist or urban forester and submitted to the Planning Commission as part of a subdivision Preliminary Plat approval (Chapter 1224.05) or Preliminary Development Plan approval (Chapter 1232.06). The Tree Protection and Management Plan shall comply with the following.

(a) The Tree Protection and Management Plan shall be drawn at a scale not less than one inch equals fifty feet and shall indicate the following:

(1) An inventory of existing trees showing:

A. All individual trees of quality that have a DBH of at least six (6) inches, and that are not part of a wooded area; and

B. Specific wooded areas and their proposed use as defined in 1218.04. For wooded areas that are not to be left “Natural undisturbed” (i.e.,

those that are to be utilized for “Buffer zones or screening”) or that would be classed as “Wooded areas within the buildable area of the property”, the approaches defined in 1281.04 for those areas shall be followed.

(2) The portion of the site to be contained within the construction battery limits, noting the individual trees of quality and tree areas within this area that are to be removed;

(3) The tree protection zone(s) outside the major construction battery limits, indicating the areas to be left undisturbed and protected from impact during construction;

(4) All new trees to be planted on the site to meet the minimum tree requirements set forth in Chapters 1218.05 and 1218.06; and

(5) The location and outline of all existing and proposed buildings, driveways, parking lots and drainage ways on the property and all those existing on adjacent lots within fifty feet of the property lines.

(b) The RP&M Plan(s) must be reviewed by the Planning Commission and receive their approval prior to any clearance or disturbance of the property. The Planning Commission shall request additional review from the Shade Tree Commission, who may request additional review from the City Arborist.

1218.08 TREE PROTECTION METHODS

All existing trees to be retained shall be protected during construction according to the following tree-protection methods:

(a) Tree Protection Zones. The development plan or subdivision plat shall show the number and location of existing trees as required by these regulations and shall further indicate all those marked for retention. All trees to be retained shall be designated in identified tree-protection zones on the landscape plan submitted as part of the development plan or subdivision plat (Tree protection zones for trees on adjacent properties whose critical root zones extend into the subject property must also be delineated.) The plan may include multiple zones, which do not need to be contiguous.

(1) The tree protection zones shall at a minimum encompass the critical root zones of all existing trees. The critical root zones shall be recommended by the City Arborist.

(2) The critical root zone shall extend to a depth of five feet below surface ground level.

(b) Placement of Tree Protective Barriers. On the site, trees within the tree protection zones shall be protected in the following ways:

(1) Prior to construction, all trees or groups of trees to be preserved shall be marked with a blue ribbon or blue paint-stripe. Tree protective barriers of orange plastic construction fencing that is at least four and one-half (4 ½) feet in height and held in place by seven (7) foot poles placed on no more than eight (8) foot centers shall be placed around all trees, or groupings thereof, to be preserved and any other vegetation that is located near construction activity and that is to be saved. These barriers shall be located so as to totally encompass the perimeter of the tree protection zones.

(2) Protective barriers shall remain in place until construction is complete, landscaping is installed, and an occupancy permit has been issued.

(3) No land disturbance, including grading, filling, shall occur within the tree protection zone, except as may be approved by the Zoning Administrator and the City Engineer when a tree-aeration system is installed. Tree aeration systems, if recommended by the City Arborist and required by the PC, shall be shown on the TP&M Plan, and their installation shall be monitored by the City Arborist.

(4) Areas within the tree protection zones shall not be disturbed in any way. They shall be kept free of all building materials, dirt, chemicals (including gas and oil,) contaminated water or other foreign materials, construction debris, and vehicles. Personnel shall not enter those zones except to perform essential tree and landscaping functions.

1218.09 TREE INSTALLATION AND MAINTENANCE

(a) New trees required to be planted in order to meet the minimum tree requirements set forth in Chapters 1218.04 and 1218.05 shall be installed according to an approved landscape or tree preservation plan within six months of completion of the building and prior to the issuance of an occupancy permit but only during the months of October through April (unless otherwise approved by performance bond or a certified letter of credit from a banking institution covering the full cost of tree stock, and their installation shall be submitted to the City, or letter from the construction lender stating that the funds will be held until the tree installation is complete shall be submitted to the City. Failure to install the trees within six months shall result in forfeiture of the funds to the City to be used for the installation of the required trees.

(b) All trees and vegetation planted shall be healthy and adapted to northeast Ohio or similar climates, and they shall be properly installed using planting procedures as defined in written documents available from the Shade Tree Commission.

(c) All trees required in this chapter shall be maintained in a healthy and living condition. Any required tree that does not thrive or is removed for any reason within two years of installation of said tree shall be replaced with a new tree or trees to conform to the minimum tree requirements set forth in Chapters 1218.04 and 1218.05. A bond or other security shall be provided to the city to allow fulfillment of this requirement.

1218.10 INSPECTIONS, VIOLATIONS, AND PENALTIES

(a) The City will regularly inspect the site during construction to insure that, in accordance with the approved Tree Protection and Management Plan, the trees and their root-zones are being properly protected and remain undamaged. If violations or damage is found, the construction shall be stopped until remedies are provided.

(b) Any tree that is damaged, or whose critical root-zone is imperiled to such extent as to seriously injure the tree and/or make its survival for two years uncertain, is to be replaced with a tree or trees of equal appraised value, and a bond for all such damaged or imperiled trees equal to the appraised cost of their replacement shall be posted before construction may continue.

Contact:

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