



## STAFF REPORT

DATE: July 20, 2021

### **New Business**

**TO:** Mayor and City Council  
**FROM:** Ken Roberts, Planning Director  
**AGENDA ITEM:** **Lake Elmo Tree Preservation Ordinance Code Amendment**  
**REVIEWED BY:** Ben Prchal, City Planner  
Sarah Sonsalla, City Attorney  
Sarah Harding, City Landscape Architect (Wenck and Associates)

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### **BACKGROUND:**

City staff has been directed to prepare amendments to the City's Tree Preservation ordinance (Section 154.257) and the City's Landscape ordinance (Section 154.258). The requested changes are to clarify many of the City standards and requirements about tree preservation and landscaping for construction, new development and redevelopment projects in Lake Elmo.

In addition, there are aspects of the City tree preservation and landscape ordinances that Lake Elmo could amend to clarify processes and to meet current City standards and practices. As such, staff has included several other changes to the tree preservation ordinance as part of this review.

### **REVIEW HISTORY:**

On September 8, 2020, City staff presented information to the City Council about the City's tree preservation ordinance and tree trimming policy. After review and discussion of the existing City ordinances and practices, the City Council direct staff to prepare possible revisions for Council consideration to the City's tree preservation ordinance and the City's landscaping standards.

On October 26, 2020, the Planning Commission reviewed the first draft of the proposed amendments to the Tree Preservation and Landscape ordinances. The Commission asked staff several questions about the proposed changes and provided staff with a few comments and suggestions for changes to the draft ordinances.

On February 22, 2021, the Planning Commission held a public hearing and reviewed another set of proposed amendments to the City's Tree Preservation and Landscape Ordinances. After much discussion, the Commission tabled action on the proposed Code Amendments to the Lake Elmo Tree Preservation and Landscape ordinances to allow staff to do further research and editing of the proposed changes.

On June 28, 2021, the Planning Commission considered an updated tree preservation ordinance amendment. This proposed ordinance update included changes suggested by the Planning Commission on February 22, 2021 and comments and suggestions from Commissioner Weeks and the City's Landscape Architects. The Commission recommended approval of the proposed update to the Tree Preservation Ordinance with a 4-1 vote.

### **ISSUE BEFORE THE CITY COUNCIL:**

The City Council is being asked to review and to approve the proposed amendments to the Lake Elmo tree preservation ordinance.

## **REVIEW AND ANALYSIS:**

Zoning and environmental regulations (including tree preservation and landscaping ordinances) allow cities to ensure that new development or redevelopment meets the standards of the city for a safe, functional and enjoyable community. Importantly, environmental protection regulations can help the City preserve and enhance important natural resources and environmental features by regulating what changes or impacts the city will allow or not allow to the natural features on construction, new development and redevelopment sites. It is the goal of City staff to have ordinances that provide clear and reasonable development and design standards while protecting existing trees and ensuring the installation of quality landscaping in Lake Elmo.

Many of the proposed ordinance changes are to ensure the tree preservation ordinance will be consistent with the City landscape ordinance. This is important as the planting of new or replacement trees as may be required by the tree preservation ordinance become part of the landscape plan for a new development or redevelopment site. Staff also is proposing to add language in the update to the tree preservation ordinance that outlines the situations when the Lake Elmo will not require a tree preservation plan.

Since the February 22, 2021 Planning Commission meeting, City staff reviewed comments and suggestions from Commissioner Weeks and we have worked closely with the City's Landscape Architects at Wenck and Associates in developing the latest proposed tree preservation ordinance language. Their input and comments have been invaluable in the creation of the most recent proposed amendments to the Tree Preservation Ordinance. The proposed changes make the ordinance clearer and more useful for land owners, developers and City staff.

## **Background Information and Proposed Changes**

### **Tree Preservation Ordinance**

Early in the research for this request, City staff reviewed the tree preservation ordinances from several other area cities (Ramsey, Shakopee, Oakdale, Rosemount, Roseville, Maplewood, Cottage Grove, Eden Prairie, Lakeville and Forest Lake) to learn the standards those cities use for tree preservation and how those cities implement those standards. There were several parts of those ordinances that were of particular interest in the City staff review. Those include the amount of allowable tree removal that does not require tree replacement (up to 30 percent in Lake Elmo), the tree replacement standards if required including the size and number of new trees, the warranty standards for new trees (2 years minimum in Lake Elmo) and if those ordinances had language for exceptions to meeting the minimum replacement standards on a development site (Lake Elmo has such language). For reference I have attached the Code language of those sections of the other City ordinances to this staff report.

### **Ordinance Review**

City staff reviewed the tree preservation ordinances from the above listed cities to determine if the standards in the Lake Elmo Tree Preservation Ordinance were in keeping with the standards used by other cities in the Twin Cities area. In a very short summary, staff found the Lake Elmo tree preservation standards and practices were similar to those in the other cities reviewed by staff. The following is a summary of our findings:

**Allowable Tree Removal Standards** (how many trees or percentage of trees may be removed without replacement)

Lake Elmo – 30 percent

Other reviewed cities - 25 percent to up to 60 percent (primarily in commercial and industrial districts).

## **Sample Tree Replacement Standards**

Lake Elmo – common species replaced with ¼ diameter inches removed, coniferous or evergreens replaced at ½ of diameter inches removed (based on height), hardwood deciduous species replaced with ½ diameter inches removed.

The other cities staff reviewed had a variety of replacement standards including using diameter inches removed as Lake Elmo does to requiring a certain of trees be planted based on the size and types removed (Oakdale and Forest Lake).

## **Warranty Requirements or Standards for replacement trees**

Lake Elmo – two years from the date of project closure.

Other reviewed cities – 5 cities require a one year warranty and two cities (Shakopee and Roseville) require a two year warranty.

## **Exceptions and Reduced Mitigation for Exceptions**

Lake Elmo – The current tree preservation ordinance has language about exceptions to the standards and the possibility of the City allowing reduced mitigation or tree replacement standards for a development. In such a case, the existing code now allows the City to require a payment from the developer to the City, to implement woodland management practices or planting of replacement trees on City property or a combinations of these options.

City staff is aware of only one situation where City required payment from a developer for replacement trees that could not fit on a site. The City negotiated an agreement with the developers of Royal Golf in 2018 to pay \$500 per replacement tree that could not reasonably fit on their site. For 969 trees, the total required payment from the developer was to be \$484,500. (Please see below for more information about this).

Other reviewed cities: 7 cities allow the developer to pay the City a fee (either per tree or per caliper inch), 6 cities allow tree planting elsewhere (on City-owned property or on property in the city owned by the developer) and 2 cities allow for a combination of these mitigation methods.

As for the fees they charge, I have attached a table showing each of the 7 cities and their tree replacement fee with an example if a developer had to pay for 100 replacement trees or 100 replacement diameter inches in that City. The Lake Elmo City Council reviewed this fee during their Workshop meeting on February 9 and directed city staff to add a \$300 tree replacement fee to the City fee schedule.

## **Proposed Ordinance Amendments**

The latest proposed changes to the Lake Elmo tree preservation ordinance include adding definitions and adding language that clarifies when the city will require a tree preservation plan and when the city will not require a tree preservation plan. Staff is not proposing any changes to the type or size of trees that are used for determining the amount of tree replacement or those a developer may remove or the amount of allowable tree removal on a new development or redevelopment site.

For clarity in tracking the proposed changes to the ordinance, all the proposed new language is underlined and all the language proposed for removal is shown with ~~strike through~~.

Staff also is proposing to revise the language in Section E 2, Reduced Mitigation for Exceptions. It is important to note that this section of the Code allows the City to approve exceptions to the tree preservation

standards. The Code now includes several options the City may approve if the City wishes to grant the request of the developer to have an exception to the City tree preservation standards. One of the relief or mitigation methods currently in the Code allows the City to require a developer or property owner to pay a fee to the City if they are unable or unwilling to meet all the tree preservation and/or replacement standards.

An important change that staff is proposing to this Section of the Code is to delete the reference to a variance approval for tree mitigation. This type of approval is best described as the City granting relief or an exception to the tree preservation standards, not as approving a variance.

A recent example of the City using this provision of the City Code is the Royal Golf development. In 2018, the City received a request from the developer of Royal Golf to reduce the number of trees they would need to plant on their site. The following paragraphs are excerpts from the 2018 City staff report:

The Royal Golf Club at Lake Elmo Preliminary Landscape Plans included the need for 3800 trees within the entire Royal Golf Club at Lake Elmo Preliminary Plat per Tree Preservation and Landscape requirements. The original number of trees that were required to be planted within the development was approximately 4600, but because the area is heavily wooded and because the language within the tree preservation ordinance requires a minimum of five trees to be planted for every one acre of land that is developed or disturbed, the City made some concessions, and an agreement was made to require that 3800 trees be planted within the development. The Developer and City have been working on coming to an agreement for trees required within the development, as both the Developer and City believe that the required number of trees within the development would cause tree overcrowding.

The Council discussed this request at the January 9, 2018 workshop and directed Staff to draft an amendment to the Royal Golf Club at Lake Elmo (development agreement) which will reduce the number of trees required to be planted within the development from 3800 to 2912 (the 888 to be planted within single family lots subtracted from the agreed-upon number of trees to be planted within the development). There was consensus that simply not requiring warranty on these trees would leave the City with no way to enforce the requirement that these trees be planted. This direction was given to Staff under the understanding the developer would be paying park dedication fees totaling \$484,500 (\$500 per 2.5 caliper inch tree X 969 trees to be reduced).

This is a large and extreme example of how the City may apply this provision of the City Code. There are probably few, if any, other development sites in Lake Elmo where a developer or property owner would not be able or willing to preserve the minimum number of trees on the site and/or be able to plant the minimum number of replacement trees on the property. It is staff's expectation that developers want to preserve trees on a site as their removal is an expense and by preserving as many trees as reasonably possible they are adding value to the property and preserving the natural amenity that are the trees.

On February 9, 2021, the City Council considered a request from the developer of Royal Golf to reduce the total payment amount the City will require for replacement tree payments. The City Council directed staff to amend the development agreement to require payment of \$300 per remaining replacement tree. This change will reduce the remaining required balance for the replacement trees by \$102,501.77. This would leave the remaining balance to be paid by the developer for the replacement trees at \$153,900. The City Council also directed staff to add the \$300 fee per replacement tree to the City fee schedule.

### **FISCAL IMPACT:**

Staff does not foresee a negative fiscal impact with the proposed changes to the tree preservation and landscape ordinances.

## **OPTIONS:**

The City Council may:

- Adopt the ordinance approving the proposed changes to the tree preservation ordinance.
- Adopt the ordinance approving the proposed changes to the tree preservation ordinance with changes to the proposed language.
- Deny the proposed changes to the tree preservation ordinance.

## **RECOMMENDATION:**

Staff and the Planning Commission are recommending approval of the proposed changes to the Lake Elmo Tree Preservation Ordinance.

***“Motion to adopt Ordinance 08- 247, an Ordinance amending the Tree Preservation Ordinance as proposed by City staff.”***

Because of the length of the ordinance amendments, staff also is recommending City Council approval to publish a summary ordinance.

***“Motion to approve summary publication of Ordinance 08-247 (the Tree Preservation Ordinance code amendments) with approval of Resolution 2021-085”***

## **ATTACHMENTS**

- Tree Preservation Ordinance Language Examples from other cities
- Table of Example Tree Replacement fees
- Ordinance 08 –247 (An ordinance amending the Lake Elmo Tree Preservation Ordinance - Section 154.257)
- Resolution 2021 – 085 (Summary Publication)

## **Tree Preservation Ordinance language examples from Other Cities**

### **Examples of Allowable Tree Removal Standards**

**Ramsey** - within residential developments, must keep at least 40 percent of the existing significant tree DBH (allows for up to 60 percent removal)

for business and employment development, must keep at least 30 percent of the existing significant tree DBH (allows for up to 70 percent removal)

**Shakopee** – for residential subdivisions, allow for up to 30 percent of the DBH to be removed without replacement (must keep 70 percent).

For commercial/industrial sites, up to 60 percent of the DBH may be removed without replacement (must keep 40 percent).

For a redevelopment lot, up to 30 percent of the DBH is allowed to be removed without replacement (must keep 70 percent).

**Oakdale** – Development plans should remove no more than 25 percent of the total number of significant trees from a site (without any replacement required).

**Rosemount** – 25 percent of the existing caliper inches of trees can be removed during development without obligation of replacement. Any removal beyond 25 percent will require replacement.

**Roseville** – Allowable Tree removal – up to 15 percent of the total DBH inches of all Heritage trees, up to 35 percent of the total DBH-inches of all significant trees and up to 35 percent of the total DBH inches of all common trees may be removed without tree replacement or restitution.

**Cottage Grove** – Allowable maximum percentage of DBH inches that may be removed without mitigation

Residential site with less than 10 units per acre – 35 percent

Residential site with more than 10 units per acre and Business/Commercial – 50 percent

Industrial sites – 60 percent

**Hugo** – None listed

**Forest Lake** – maximum percentage of woodland or significant DBH inches that may be removed without obligation for reforestation or restitution by land use or zoning:

Agriculture – 25 percent

Rural residential – 30 percent

Suburban residential (all types) – 50 percent

All other zoning districts – 60 percent

### **Sample Tree Replacement Standards**

**Ramsey** – For every one significant tree inch that is removed in excess of the removal threshold, the developer shall plant 1.25 inches (diameter) of new trees OR provide the city with \$125 in restitution.

**Shakopee** – not clear – uses credits for trees planted as part of the City’s Landscaping requirements. If the number of replacement trees cannot be met on the site they require a cash payment to the City of \$400 per replacement tree or replacement trees may be planted in City owned or managed land or replacement trees may be planted on other property owned by the Applicant within the City.

**Oakdale** – Table in Section 22-06 (page 7)

<u>Size of damaged or removed tree</u>	<u>Number of replacement trees</u>
Coniferous -12’ to 24’ feet high	2
Coniferous – 24 feet or taller	4
Hardwood decid – 8”- 20 inch dia.	2
Hardwood decid. – greater than 20 inch dia.	4
Softwood deciduous 12-24 inch dia.	2
Softwood deciduous greater than 24 inch dia.	4

Required size for replacement trees – deciduous - not less than 2.5 inch diameter, coniferous – not less than 8 feet in height.

Note: the ordinance also says that if the site cannot accommodate the required replacement trees, those remaining to be planted shall be located on other property owned by the developer/builder located in the City or on property owned by the City. The city shall determine the location of the placement of trees on City property.

### **Rosemount – Tree replacement formula**

Replacement of removed or disturbed trees in excess of the percentage allowed shall be according to the following guidelines;

For development that exceeds the percentage of allowable removal of significant trees, all significant tree shall be replaced at the ration of one-half (0.5) caliper inch per one (1) caliper inch removed.

For each Heritage tree removed by the developer, all heritage trees shall be replaced at the ration of one (1) caliper inch per one (1) caliper inch removed.

#### **Roseville –**

For deciduous trees, one caliper inch of replacement tree is required for every one DBH inch of required replacement.

For coniferous trees, a replacement tree 6-8 feet in height = 1 inch of required DBH replacement inches, for replacement trees 8-12 feet tall = 2 inches of required DBH replacement inches and for replacement trees 12 feet tall or greater = 3 inches of DBH replacement inches.

#### **Cottage Grove – Mitigation and Tree Replacement Schedule**

Mitigation – for any site where the allowed tree removal (in inches) exceeds the permitted threshold, the applicant shall mitigate the tree loss in one of the following ways:

Planting replacement trees on the development site according to the tree replacement plan;

Planting replacement trees on City property;

Paying the City a cash mitigation fee based on the diameter inches of required tree replacement. The cash fee in lieu of the required replacement inches shall be in accordance with the city's fee schedule.

#### **Tree Replacement Schedule –**

- a. Quantity: qualifying tree inches removed beyond the permitted thresholds shall be replaced at a rate of 50 percent - or one (1) replacement caliper inch for every two (2) removed diameter inches.
- b. Size: Deciduous trees planted in mitigation of excessive tree loss shall have a minimum caliper of 2.5 inches and coniferous trees shall be a minimum of 6 feet tall. One new conifer tree at least six feet tall shall be credited as contributing two (2) caliper inches of the total replacement inches.
- c. Ornamental trees are not acceptable as replacement trees.

## **Forest Lake (very similar to Oakdale standards)**

<u>Size of damaged or removed tree</u>	<u>Number of replacement trees</u>
Coniferous -12' to 24' feet high	2
Coniferous – 24 feet or taller	4
Hardwood decid – 8”- 20 inch dia.	2
Hardwood decid. – greater than 20 inch dia.	4
Softwood deciduous 12-24 inch dia.	2
Softwood deciduous greater than 24 inch dia.	4
Required size for replacement trees – deciduous - not less than 2.5 inch diameter, coniferous – not less than 6 feet in height.	

## **Warranty Requirements or Standards (for replacement trees)**

### **Shakopee –**

For commercial/industrial sites and residential developers – 2 years

For builders of individual residential lots – 1 year

### **Oakdale –**

One year after the date that the last replacement tree was planted. Any tree removed shall be replaced with a new healthy tree of the same size and species in place of the removed tree within eight months of the removal. Requires a security of 125 percent of the estimated cost to furnish and plant the replacement trees.

### **Rosemount -**

One year from the date the improvements were completed. Requires a security of 110 percent of the value of the trees (and landscaping).

### **Roseville –**

Minimum Two year guarantee with a financial guarantee for at least 125 percent of the cost to furnish and plant replacement trees. The City shall maintain the security for at least 2 years after the date the last replacement tree was planted.

### **Cottage Grove –**

Warranty – Replacement trees - at least one year after the date of project closure. If not alive or healthy in that first year, must be removed and replaced by the applicant with a new, healthy tree meeting the same minimum size requirements. The City requires a cash escrow or an irrevocable letter of credit (a financial guarantee) of 150 percent of all the landscaping (including replacement trees).

### **Eden Prairie –**

Warranty - Replacement trees that are not alive or healthy one year after the date the last replacement tree has been planted shall be removed and a new healthy tree of the same size and species shall be planted in its place. The City requires a financial security in the amount of 150 percent of the estimated cost to furnish and plant replacement trees.

### **Forest Lake –**

Warranty – Replacement trees that are not alive or healthy one year after the date of project closure shall be removed and a new healthy tree of the same size and species shall be planted in its place within 8 months of removal. The City requires a letter of credit or a cash escrow in an amount equal to at least 125 percent of the approved landscaping costs (including the cost of replacement trees).

### **Exception Standards (when and how to allow reduced mitigation for tree replacement)**

#### **Ramsey –**

If a development exceeds the removal threshold specified in the ordinance, the developer shall replant areas within the site, pay restitution or some combination thereof.

For every one significant tree inch removed in excess of the removal threshold, the developer shall replant 1.25 inches (diameter) of new trees or provide the City with \$125 in restitution.

#### **Shakopee –**

If the number of replacement trees cannot be met on site, the following is required:

A cash payment of \$400 per replacement tree shall be provide to the City for the planting of trees that are as close as possible to the project site; or

Trees may be planted on City owned or managed land as approved by the Director;  
or

Replacement Trees may be planted on other properties owned by the Applicant in the City.

#### **Oakdale –**

If the site cannot accommodate the required replacement trees, those remaining to be planted shall be located on other property owned by the developer/builder located within the city or on property owned by the City. The city shall determine the location of the placement of the trees on City property.

#### **Rosemount –**

Fee-in-Lieu of tree Replacement or Replacement Trees Planted in Public Areas: the City recognizes there may be instances where the total amount of tree replacement required cannot occur on site or that there are some land uses that are not compatible with trees. In those instances, the City may, at its option, accept a fee-in-lieu of tree replacement OR allow the planting of replacement trees in public areas. Tree replacement is encouraged to happen on site as much as possible and fee-in-lieu of tree replacement should only be used when replacement cannot occur on site. The fee-in-lieu of tree replacement will be determined annually by the City Council through the fee schedule.

#### **Roseville –**

Replacement tree Locations. Required replacement shall be planted on the site being developed unless doing so is deemed to be impractical (i.e. due to a lack of space), inappropriate (available planting areas are not ideal for new plantings or would do little to enhance the site) or counterproductive to a property's intent (i.e. would entail too much screening for a retail business) as determined by the City Forester. When such a determination is made, the applicant shall comply with the replacement requirements in one of three ways in the following manner:

- a. As directed by the city, required replacement trees may be located on private property within 1000 feet of the subject development site with the consent of the property owners, on public improvement project sites that are not greater than 1000 feet from the development site, or on other public and private lands that are not greater than 1000 feet from the development site if such lands are deemed to be available, with priority given to locations near the affected area; OR
- b. The City may accept a cash-in-lieu tree replacement payment in accordance with the required fee listed in the city fee schedule; OR
- c. The City may approve a combination of tree replacement in accordance with A above and a payment consistent with b above to fulfill this requirement.

## **Maplewood –**

After putting as many trees as feasible on the site, if the tree replacement requirement is still not met, the Community Development Director can approve tree replacement steps as outlined in the tree standards document for the project before the issuance of a grading or building permit.

## **Cottage Grove –**

### **Mitigation**

- a. For any development or site in which the number of qualifying inches removed exceeds the permitted removal threshold, the applicant shall mitigate the tree loss in one of the following ways:
  1. Planting replacement trees in appropriate areas within the development in accordance with the tree replacement schedule; OR
  2. Planting replacement trees on City property; Or
  3. Paying the City a cash mitigation fee, based on the diameter inches of required replacement in accordance with the tree replacement schedule. The cash fee in-lieu-of required replacement inches shall be in accordance with the City's fee schedule.

## **Eden Prairie –**

Payment. Alternatively, if the Permittee demonstrates to the satisfaction of the City Manager, that it is not practical or reasonable to plant all or some of the required replacement trees on the Land, the Permittee may request approval to make cash payment to the city to be used for planting of trees on land within the city. Cash payments shall be calculated as set forth in the adopted fee schedule.

## **Forest Lake –**

### **Mitigation Procedures.**

Trees or woodlands removed beyond the permitted thresholds as described in this Ordinance shall be mitigated by the applicant through either of the following methods as determined by the City:

- a. Replace the trees or woodlands in accordance with the tree replacement provisions outlined in this Ordinance: OR
- b. Pay to the city the sum per caliper inch calculated from the total amount of caliper inches of the required replacement trees in accordance with the tree provisions in this Ordinance. The fee per caliper inch shall be set forth in the City fee schedule.

CITY OF LAKE ELMO  
COUNTY OF WASHINGTON  
STATE OF MINNESOTA

ORDINANCE NO. 08-247

AN ORDINANCE AMENDING THE LAKE ELMO CITY CODE OF ORDINANCES BY  
AMENDING CHAPTER 154, SECTION 154.257 RELATING TO TREE  
PRESERVATION

**SECTION 1.** The City Council of the City of Lake Elmo hereby amends Title XV: Land Usage; Chapter 154: Environmental Performance Standards by amending various parts of Section 154.257 by adding the underlined language and deleting the ~~strikethrough~~ language as follows:

**§ 154.257 TREE PRESERVATION.**

- A. Purpose. Within the City of Lake Elmo, trees and woodlands are considered a valuable asset to the community. The City places a priority on protecting this asset and finds that it is in the best interest to regulate the development and alteration of wooded areas within the community. All ~~builders, developers and subdividers~~ applicants shall comply with all the provisions in the Zoning Code which address the preservation of existing significant trees, including this section. All ~~builders, developers and subdividers~~ applicants are encouraged to preserve all healthy trees of significant value even if the trees do not meet the size requirements to be considered significant trees.
- B. Definitions. The following words, terms and phrases, when used in this section, shall have the meanings ascribed to them in this subsection, except where the context clearly indicates a different meaning:

Applicant. Any person or entity submitting an application to the City for approval of a land use permit including preliminary plat, final plat, conditional use permit, interim use permit, planned unit development, variance or grading permit.

Common Tree. Includes Ash, Aspen, Basswood, Catalpa, Elm, Hackberry, Locust, Poplar, Silver Maple, Willow and any other tree not defined as a hardwood deciduous tree or a coniferous/evergreen tree.

Coniferous/Evergreen Tree. A wood plant, which, at maturity, having foliage on the outermost portion of the branches year-round. Tamaracks are included as a coniferous tree species.

Construction Area: Any area in which construction activity has or is occurring.

Construction Activity. Any disturbance to the land that results in the movement of earth, the alteration in the topography or existing soil cover (both vegetative and non-vegetative) that may result in accelerated stormwater runoff, leading to soil erosion and movement of sediment into surface water or drainage systems. Examples of construction

activity may include clearing, grading, filling, excavating, building construction and landscaping.

Construction Damage. Any action such as filling, scraping, trenching, or compacting the soil around trees or wounding trees in such a manner that it may result in the eventual death of the tree.

Critical Root Zone (CRZ). An imaginary circle surrounding the tree trunk with a radius distance of one (1) foot per one (1) inch of tree diameter. E.g. a twenty-inch diameter has a critical root zone with a radius of twenty (20) feet.

Deciduous Hardwood Tree. A tree that loses its foliage or leaves annually such as ~~includes~~ Birch, Cherry, Hickory, Ironwood, Hard Maples, Oak and Walnut.

Development. Any activity or proposal that requires City approval of a preliminary plat, final plat, building permit, demolition permit, conditional use permit, interim use permit, planned unit development, variance or grading permit.

Diameter Breast Height (DBH). The diameter of trees at breast height, measured 4 ½ feet (54 inches) above the ground.

Drip Line. The farthest distance away from the trunk of a tree that rain or dew will fall directly to the ground from the leaves or the branches of the tree.

Healthy Tree. A healthy tree has:

1. A live top (live crown) that is greater than one-third (1/3) the total tree height;
2. Dead branches that make up less than fifteen percent (15 %) of the total crown;
3. Less than fifteen percent (15%) of the tree crown with missing branches;
4. Consistent growth of foliage throughout the live portion of the crown; and
5. A tree trunk with no open wounds that are greater than one-third (1/3) the diameter of the tree, with no wounds in contact with the ground and no wounds that have soft, punky wood or other indication of decay.

New Development. All sites with construction activity or development that are not defined as redevelopment.

Nuisance Tree. (1) Any living or standing tree or part thereof infected to any degree with a shade tree disease (See ~~Shade~~ Tree Disease Below) or shade tree pest; (2) Any logs, stumps, branches, firewood or other part of dead or dying tree(s) infected with a shade tree disease or shade tree pest unless properly treated; and (3) Any standing dead trees or limbs which may threaten human health or property. Also included are noxious or invasive trees such as Amur Maple, Japanese Barberry, Russian Olive, Siberian Elm, buckthorn, box elder, and cottonwood.

Ornamental Tree. A small tree, usually less than thirty (30) feet in height at maturity, often planted for ornamental characteristics such as flowers or attractive bark.

Redevelopment. A site with construction activity that creates new or replaces existing impervious surface, buildings or structures on a parcel that is fully or partially occupied by buildings, structures, or other impervious surfaces.

~~Shade~~ Tree Disease. Dutch elm disease (*Ophiostoma ulmi* or *Ophiostoma novo-ulmi*), oak wilt (*Ceratocystis fagacearum*), or any other tree disease of epidemic nature.

~~Shade~~ Tree Pest. Emerald Ash Borer (*Agilus plannipenis*), European elm bark beetle (*Scolytus multistriatus*), Native elm bark beetle (*Hylurgopinus rufipes*) or any other ~~Shade~~ tree pest with potential to cause widespread damage.

Significant Tree. A healthy tree measuring a minimum of six (6) inches in diameter for hardwood deciduous trees, 19 ft. in height or eight (8) inches in diameter for coniferous/evergreen trees, or twelve (12) inches in diameter for common trees, as defined herein.

Site. A parcel or area of land within which construction activity, development, or redevelopment occurs or is to occur.

Specimen Tree. A healthy, deciduous hardwood tree measuring equal to or greater than thirty (30) inches in diameter breast height or a healthy coniferous/evergreen tree measuring equal to or greater than twenty-five (25) feet in height.

Tree Preservation Plan. A plan prepared by a certified landscape architect or forester indicating all of the significant trees in the proposed development or property. A Tree Preservation Plan must include a proposed site plan, a proposed grading plan including all custom graded lots, a tree inventory that includes the size, species, and location of all significant trees proposed to be saved and removed on the area of development, and the measures proposed to protect the significant and specimen trees that are to be saved. The applicant shall have the tree preservation plan superimposed on the proposed development grading plan.

Woodland Evaluation Report. A report prepared by a certified landscape architect, forester, or land surveyor indicating the general location, condition, and species of significant trees on a parcel planned for future development or grading activity. The report must demonstrate that there will be no impact to existing significant trees as part of the development or grading activity. Finally, the report must include the measures proposed to protect significant trees on the site.

### C. Tree Preservation Standards for Developing Properties

#### 1. Applicability.

- a. A Tree Preservation Plan, or suitable alternatives as determined by the City, shall be submitted and approved by the City for the following activities:
  - i. New Development or redevelopment in ~~Any~~ Zoning District. A Tree Preservation Plan shall be required as part of any new development, redevelopment, or subdivision application.
  - ii. Any grading or excavation project that result in the movement of greater than 400 cubic yards of material per acre of site per §151.017.
  - iii. If the applicant is able to demonstrate that the proposed development, redevelopment, construction activity or ~~major~~ grading activity includes no impact to the significant trees on the site, then the applicant may be exempt from the requirement to submit a Tree Preservation Plan. It is

the responsibility of the applicant to demonstrate that there are no impacts to significant trees through a Woodland Evaluation Report or some other form of tree survey or study.

The Tree Preservation Plan shall reflect the applicant's best effort to determine the most feasible and practical layout of lots, buildings, parking lots, driveways, streets, storage, storm water management facilities and other physical features, so the fewest significant and specimen trees are destroyed or damaged.

- b. A Tree Preservation Plan is not required for the following activities:
- i. ~~This section does not apply to~~ The issuance of a development approval for the construction of a single-family residence on an existing platted lot of record.
  - ii. ~~This section does not apply to~~ The harvesting of trees. For purposes of this section, "harvesting" means cutting or clearing trees for purposes relating to forestry operations, as defined in §154.012. "Harvesting" does not include the clearing of land for purposes of development, even where the trees are sold for purposes of creating lumber for related purposes.
  - iii. Additions to single-family homes, general home improvements and the construction of accessory buildings (i.e., garages, sheds) on residential properties.
  - iv. Home gardens or an individual's home landscaping, installation, repairs, or maintenance work.
  - v. Tree removal related to public improvement projects and maintenance or repairs to existing streets, roadways, sewers, parks, storm water facilities and utility infrastructure.
  - vi. Emergency removal of trees to protect the public health and safety or to alleviate immediate dangers to life, limb, property, or natural resources.
  - vii. Tree removal related to public improvement projects to restore or enhance woodlands, savannas, or prairies.
  - viii. Removal of dead or dying trees, unless those trees were planted as part of tree replacement in which case the property owner shall replace such trees based on the City-approved Tree Preservation Plan for the property.
  - ix. Removal of nonnative trees that the City deems as nuisance or as an invasive species.
2. Tree Preservation Plan. All applicants shall submit a ~~Tree p~~Tree p~~Preservation p~~Preservation p~~Plan~~ prepared by a certified forester or landscape architect in accordance with the provisions of this section. During the review of an application for a building permit, grading permit, site plan approval, planned unit development, conditional use permit, interim use permit or P~~preliminary P~~plat, the City will review the project and the ~~Tree p~~Tree p~~Preservation p~~Plans will be reviewed according to the best available layout in order to preserve significant trees and to ensure that the

~~developer and/or the applicant the efforts of the subdivider~~ used the best possible design to mitigate and minimize construction damage to significant trees.

3. Tree Preservation Plan Requirements. The Tree Preservation Plan shall be a separate plan sheet(s) that includes the following information:
  - a. The name(s), certification(s), telephone number(s) and address(es) of the person(s) responsible for tree preservation during the course of the development project.
  - b. Tree Inventory. The Tree Preservation Plan must include a Tree Inventory through one of the following methods:
    - i. Individual Tree Inventory ~~Individual~~. An individual tree inventory including an identification system linked to metal field tags located four and one-half (4.5) feet from grade on all significant trees must be identified on a plan sheet in both graphic and tabular form.
    - ii. Tree Inventory Sampling. In cases of sites with large tracts of significant trees, the City may approve the use of a sampling inventory for all or portions of a site as an alternative to an individual tree inventory. The sampling inventory must include the methodology for sampling, identification ribbon around the perimeter of the sampling areas, and metal field tags located four and one-half (4.5) feet from grade on all significant trees in the sampling area. Within the sampling area, the quantity, size, species, health and location of all significant trees must be identified on a plan sheet in both graphic and tabular form. Based on sampling, total estimates and locations of healthy significant trees shall be provided.
    - iii. Combination Tree Inventory ~~Combination~~. With the approval of the City, sites that include both large tracts of significant trees and areas of individual significant trees may utilize a combination of the individual and sampling inventory methods.
  - c. Trees that were planted as part of a commercial business such as a tree farm or nursery do not need to be inventoried on an individual tree basis. A general description of the trees and an outer boundary of the planted area must be provided. The burden of proof shall be on the applicant to provide evidence to support the finding that the trees were planted as part of a commercial business.
  - d. A listing of healthy significant trees inventoried in subsection (b) above. Dead, diseased, nuisance or dying trees do not need to be included in the totals.
  - e. A listing of the healthy significant trees removed, identified by the metal field tag or some other form of identification used in the tree inventory in subsection (b) above.

- f. A listing of the healthy significant trees to remain, identified by the metal field tag or some other form of identification used in the tree inventory in subsection (b) above.
  - g. Outer boundary of all contiguous wooded areas, with a general description of trees not meeting the significant tree size threshold.
  - h. Locations of the proposed buildings, structures, or impervious surfaces.
  - i. Delineation of all areas to be graded and the limits of land alteration and disturbance.
  - j. Identification of all significant trees proposed to be removed within the construction area. These significant trees should be identified in both graphic and tabular form.
  - k. Measures to protect significant and specimen trees and the City standard tree protection detail.
  - l. Size, species, number and location of all replacement trees proposed to be planted on the property in accordance with the Mitigation Plan, if necessary.
  - m. Signature of the person(s) preparing the plan.
4. Implementation. All new construction areas, development sites, and redevelopment sites shall be staked, as depicted in the approved Tree Preservation Plan, and the required tree protection fencing shall be installed around the critical root zone before land disturbance is to commence. The City has the right to inspect the site at any time for compliance with the Tree Preservation Plan. No encroachment, land disturbance, trenching, filling, compaction, or change in soil chemistry shall occur within the fenced areas protecting the critical root zone of the trees to be saved.
  5. Allowable Tree Removal. Up to thirty (30) percent of the diameter inches of significant trees on any parcel of land being developed, redeveloped, graded, or proposed for construction activity may be removed without having to adhere to the tree replacement requirements. Replacement according to the Tree Replacement Schedule is required when removal exceeds more than thirty (30) percent of the total significant tree diameter inches. The following types of trees do not need to be included as part of the tally of tree removals:
    - a. Dead, diseased, nuisance, or dying trees;
    - b. Trees that are transplanted from the site to another appropriate area within the City;
    - c. Trees that were planted as part of a commercial business, such as a tree farm or nursery (subject to verification by the City); or
    - d. Trees that were planted by the current property owner. In making such a determination, the City shall consider consistency of the age of the trees, any patterns in the location of trees, historical aerial photography and evidence of

intentional planting such as invoices, formal planting plans or cost sharing agreements.

6. Mitigation Plan.

- a. In any new development, redevelopment, new construction area, or grading project where the allowable tree removal is exceeded, the applicant shall mitigate the tree loss by planting replacement trees in appropriate areas within the development in accordance with the Tree Replacement Schedule.
- b. The form of mitigation to be provided by the applicant shall be determined by the City.
- c. The planting of trees for mitigation on residential projects shall be in addition to any other landscape requirements of the City.
- d. All trees, with the exception of ornamental trees, planted as landscaping on commercial or mixed-use projects may be counted towards tree replacement requirements.

7. Tree Replacement Calculations. Thirty (30) percent of the total diameter inches of significant trees on the site of new construction, new development, or redevelopment may be removed without replacement. ~~Any percentage over 30~~ The applicant shall plant all required replacement trees shall be replaced on the site of the proposed new construction, new development, or redevelopment. The following calculation procedure must be used to determine tree replacement requirements:

- a. Tally the total number of diameter inches of all significant trees on the site.
- b. A calculation must be provided which breaks out the number of inches removed for hardwood, evergreen/deciduous, and common trees. The 30% removal figure applies to each category individually and trees are replaced according to the Tree Replacement Schedule in subsection 8.

8. Tree Replacement Schedule. Tree removals over the allowable tree removal limit on the parcel or site of new construction, new development, or redevelopment shall be replaced according to the following schedule:

- a. Common tree species shall be replaced with new trees at a rate of one-fourth (1/4) the diameter inches removed.
- b. Coniferous/evergreen tree species shall be replaced with new coniferous or evergreen trees at a rate of one-half (1/2) the diameter inches removed. Since coniferous species are often sold by height rather than diameter inch, the following conversion formula can be used:

$$\text{Height of Replacement Coniferous Tree}/2 = \text{Diameter Inches of Credit}$$

- c. Hardwood deciduous tree species shall be replaced with new hardwood deciduous trees at a rate of (1/2) the diameter inches removed.

- d. Replacement Tree Size. Replacement trees must meet the minimum sizes listed in Section 154.258 B (Table 6-1). ~~be a minimum of one (1) inch in diameter.~~
9. Species Requirement. The City must approve all species used for tree replacement. Ornamental trees are not acceptable for use as replacement trees. Where ten (10) or more replacement trees are required, not more than thirty (30) percent of the replacement trees shall be of the same species of tree. The planting of Nnative species are is encouraged, and hardiness and salt tolerance of the plants should be considered where applicable.
10. Warranty Requirement. Any replacement tree which is not alive or healthy, as determined by the City, or which subsequently dies ~~due to construction activity~~ within two (2) years after the date of the initial landscape inspection and acceptance by the City or the of project closure, whichever occurs later shall be removed by the applicant and replaced with a new healthy tree meeting the same minimum size requirement within eight (8) months of removal.
11. Protective Measures. The Tree Preservation Plan shall identify and require the following measures to be utilized to protect significant trees planned for preservation:
- a. Before any grading or construction activity, the applicant shall install ~~Installation of~~ snow fencing or polyethylene laminate safety netting ~~placed~~ at the drip line or at the perimeter of the critical root zone, whichever is greater, of significant trees, specimen trees and significant woodlands to be preserved. No grade change, construction activity, parking, or storage of materials shall occur within this fenced in area.
  - ~~b. Identification of any oak trees requiring pruning between April 15 and July 1. Any oak trees so pruned shall be required to have any cut areas sealed with an appropriate nontoxic tree wound sealant.~~
  - b. Measures to be taken so that oak trees are not wounded, trimmed, pruned, or damaged in any way (roots, bark, branches, etc.) between the dates of March 15 and October 31. Measures to be taken to ensure that any oak trees pruned or trimmed have any cut areas sealed with an appropriate nontoxic tree wound sealant.
  - c. Prevention of change in soil chemistry due to concrete washout and leakage or spillage of toxic materials, such as fuels or paints.
  - d. Removal of any nuisance or dead trees located in areas to be preserved.
  - e. Installation of erosion control methods.
12. Additional protective measures. The City encourages applicants to use the following tree protection measures to protect the root zones and to prevent damage to significant and specimen trees that the applicant intends to preserve:
- a. Installation of retaining walls or tree wells to preserve trees.

b. Placement of utilities in common trenches outside of the drip line of significant and specimen trees or use of tunneled utility installation.

c. Use of tree root aeration, fertilization, or irrigation systems.

13. Compliance with the Tree Preservation Plan. The applicant ~~and/or developer~~ shall implement the Tree Preservation Plan prior to and during any grading or construction activities. The tree protection measures shall remain in place until all grading, land disturbance and construction activity is terminated or until a request to remove the tree protection measures is made to, and approved by, the City.

a. No significant trees shall be removed until ~~a the t~~ the Tree p ~~P~~ Preservation p ~~P~~ Plan is approved by the City and except in accordance with the approved Tree Preservation Plan.

b. If an applicant damages or removes a significant tree that is intended to be preserved to the point that City staff believes the tree will not survive, the applicant must remit to the City a cash mitigation, calculated per diameter inch of the removed or damaged tree in the amount set forth in the City fee schedule.

~~b c.~~ The City shall have the right to inspect the ~~development, and/or building~~ site in order to determine compliance with the approved Tree Preservation Plan. The City shall determine whether the Tree Preservation Plan has been met.

e ~~d.~~ Instances where ~~(a)~~ a significant tree(s) is ~~(are)~~ removed due to new development, redevelopment, new construction activity or were disturbed, and the removal which was not noted on the landscaping or tree removal plan will result in a one-to-one replacement penalty regardless of if it the removal is over the thirty percent (30%) allowance.

#### D. Tree Protection Standards for Non-Developing Properties.

##### (1) Existing Developed Commercial, Industrial, and Mixed-Use Properties.

(a) Trees that are removed in an existing commercial, industrial, or mixed-use development must be replaced in accordance with the original landscaping plan, unless the property owner has obtained City approval for an alternative landscaping plan. If the original landscaping plan is not able to be found, trees identified by the most recent aerial photo of the property will be assumed to be part of the original landscape plan.

(b) Trees that are removed that were part of a designated tree preservation area must be replaced in accordance with the tree replacement requirements outlined in Sections 154.257 (C)(7) and (C)(8). The thirty percent (30%) allowable tree removal limit does not apply in these situations.

~~D.E.~~ Financial Security. In cases where mitigation or tree replacement is required, the City may require that a financial security, in a form acceptable to the City, be provided as part of a development agreement, site improvement agreement or applicable permit to ensure compliance and performance of the ~~M~~ mitigation P ~~plan~~. The financial security will

be released to the applicant upon verification by the City that the ~~M~~itigation ~~P~~plan was followed, and that all replacement trees are planted and are healthy. ~~in a reasonable state of health~~. The financial security may be used to replace any replacement trees that have become damaged, are not healthy, or are diseased after planting.

~~E-F.~~ Exceptions

1. *Exception Standards.* Notwithstanding the City's desire to accomplish tree preservation and protection goals, there may be instances where these goals are in conflict with other City objectives. These conflicts will most likely occur on small, heavily-wooded parcels. The City recognizes there may be instances where it is not practical or reasonable to have an applicant plant the total required replacement trees on the site. The City encourages applicants to have the required number of replacement trees plant on the site of as much as possible. The City will only approve the use of fee-in-lieu of tree replacement or other mitigation methods when all the required tree replacement cannot practically or reasonably occur on the site in the judgment of the City.

Applicants ~~Developers~~ may ask the City to approve for exceptions to the City's tree preservation and replacement standards through the variance process as indicated in 154.109. The City Council may grant exceptions ~~may be granted~~ if all of the following conditions exist:

- a. It is not feasible to combine the subject parcel with adjacent parcels that could use the parcel as required green space;
  - b. Strict adherence to the ~~Tree Preservation Ordinance~~ City's tree preservation and replacement standards would prevent reasonable development that is consistent with the Comprehensive Plan and desirable to the City on the parcel; and
  - c. The exception requested is the minimum needed to accomplish the desired development or redevelopment.
2. *Reduced Mitigation for Exceptions.* If the City Council approves an exception to the tree preservation standards is granted, relief from the requirements of the ~~ordinance~~ standards may take the form of reduced mitigation requirements, greater allowable tree removal, higher thresholds for determining significant trees, or any combination of the above. The City Council will determine which form of relief best balances the objectives of the City and tree preservation.

The City Council may require payment to the City of a fee-in-lieu of tree replacement, payment of additional park dedication fees; the implementation of woodland management practices by the applicant; or the planting of replacement trees on City property by the applicant under direction of the City Public Works Director; or a combination of these methods as a condition of the City approving relief or an exception from the City tree preservation and replacement standards. ~~variance approval.~~ The amount of the fee-in-lieu of tree replacement is set forth in the City's fee schedule.

**SECTION 2. Effective Date.** This ordinance shall become effective immediately upon adoption and publication in the official newspaper of the City of Lake Elmo.

**SECTION 3. Adoption Date.** This Ordinance 08-247 was adopted on this \_\_\_\_\_ day of \_\_\_\_\_ 2021, by a vote of \_\_\_\_ Ayes and \_\_\_\_ Nays.

**LAKE ELMO CITY COUNCIL**

\_\_\_\_\_  
Charles Cadenhead, Mayor

ATTEST:

\_\_\_\_\_  
Julie Johnson, City Clerk

This Ordinance 08-247 was published on the \_\_\_\_\_ day of \_\_\_\_\_, 2021

**CITY OF LAKE ELMO  
COUNTY OF WASHINGTON  
STATE OF MINNESOTA**

**RESOLUTION NO. 2021-085**

**RESOLUTION AUTHORIZING PUBLICATION OF ORDINANCE 08-247**

**WHEREAS**, the Lake Elmo City Council has adopted Ordinance No. 08-247, an ordinance amending the City's Zoning Ordinance language in Section 154.257 regarding Tree Preservation standards; and

**WHEREAS**, the ordinance is lengthy; and

**WHEREAS**, Minnesota Statutes, section 412.191, subd. 4, allows publication by title and summary in the case of lengthy ordinances or those containing charts or maps; and

**WHEREAS**, the City Council believes that the following summary would clearly inform the public of the intent and effect of the ordinance.

**NOW, THEREFORE, BE IT RESOLVED** by the City Council of the City of Lake Elmo, that the City Clerk shall cause the following summary of Ordinance No. 08-247 to be published in the official newspaper in lieu of the entire ordinance:

**Public Notice**

The City Council of the City of Lake Elmo has adopted Ordinance No. 08-247, which amends the language and standards for Tree Preservation within Section 154.257 of the City's Zoning Code. The following is a summary of the adopted ordinance language:

The proposed changes to the Lake Elmo Tree Preservation Ordinance include adding definitions and adding language that clarifies when the city will require a tree preservation plan and when the city will not require a tree preservation plan. The City is not proposing any changes to the type or size of trees that are used for determining the amount of tree replacement or those a developer may remove or the amount of allowable tree removal on a new development or redevelopment site.

The full text of Ordinance No. 08-247 is available for inspection at Lake Elmo City Offices during regular business hours.

**BE IT FURTHER RESOLVED** by the City Council of the City of Lake Elmo that the City Administrator keep a copy of the ordinance at City Hall for public inspection and that a full copy of the ordinance be placed in a public location within the City.

Dated: July 20, 2021

\_\_\_\_\_  
Mayor – Charles Cadenhead

ATTEST:

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Julie Johnson, City Clerk

(SEAL)

The motion for the adoption of the foregoing resolution was duly seconded by member

\_\_\_\_\_ and upon vote being taken thereon, the following voted in favor thereof:

and the following voted against same:

Whereupon said resolution was declared duly passed and adopted.