

Kirkland Tree Ordinance Amendments

Summary of Development Related Tree Regulations



Effective Date: May 13th, 2022

Link to revised KZC Chapter 95: [O-4786](#)

The amended Kirkland Zoning Code Chapter 95 – Tree Management and Required Landscaping is effective as of May 13th, 2022. This document provides a brief overview of key amendments related to development projects and is not intended to be a comprehensive outline of amendments. Prior to submitting building permits to the City, please review the amended tree code in its entirety to ensure the submitted materials meet City requirements.

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KZC 95.23 Landmark Trees – Mitigation Requirements

Landmark Tree Mitigation

New Section 95.23 establishes a mitigation standard that applies to the removal of healthy Landmark Trees City-wide. This section does not specify the conditions under which a Landmark Tree must be retained or may be removed – those regulations can be found in section 95.30.

Landmark Tree Definition: a viable regulated tree with a minimum 26-inch DBH located anywhere on a property.

Replacement Tree Mitigation Standard: 3:1 replacement with tree species selected from City-Approved Landmark Tree Mitigation List. Replacement trees for Landmark Tree Removals are in addition to the minimum tree density requirements under KZC 95.34.

Fee-in-lieu: Should the Planning Official determine there is inadequate space to replant on the subject lot, a fee-in-lieu of \$450 per replacement tree (\$1,050 total per Landmark Tree) shall be paid to the City's Forestry account to support replanting elsewhere in the City.

KZC 95.30 Tree Retention Associated with Development Activity

Tree Retention Plan Requirements

A Tree Retention Plan is required for any proposed development requiring approval through a building permit; land surface modification permit; demolition permit; and/or Design Review, Process I, IIA, or IIB, described in Chapters 142, 145, 150 and 152 KZC.

The required components of Tree Retention Plans are generally the same as the old tree code with a few key differences. The following is a summary of new requirements, which must be included in addition to those listed under KZC 95.30(3), subsections (a) through (d):

Tree Inventory:

- All existing regulated trees on the subject property identified by a numbering system that is **consistent throughout the Arborist Report**
- Identification of all existing trees in the public right-of-way adjacent to the subject property, **regardless of tree size**
- The Tree Protection Zone (TPZ) of all existing regulated trees **specified in feet from the face of each tree trunk**
- Identification of potential **Landmark Trees** and **Groves**

Site Plan:

- Site disturbances associated with **over-excavation of foundations, retaining walls, and similar improvements**
- **Specific tree protection standards** during construction, as described in KZC 95.32 or recommended by the Qualified Professional Arborist, **shown on demolition, grading, and building permit plans**
- Proposed locations of any replacement trees to be planted to meet tree density credits or mitigation requirements, **including the proposed size and species**, as outlined in KZC 95.34

Qualified Professional Arborist Report:

- If development proposals result in the retention and/or removal of High Retention Value Trees (including Landmark Trees and Groves) **provide an explanation of how tree retention was prioritized** based on retention feasibility and proposed construction impacts
- A discussion of timing and installation of tree protection measures that must include fencing in accordance with the tree protection standards in KZC 95.32, **including any anticipated changes to tree protection fence location or other activity within the CRZ of retained trees during project construction** (e.g., material delivery, equipment access, landscaping)
- Arborist reports that are based on field work **collected three or more years prior to submittal shall be updated** with current tree data

Additional Requirements:

- A description of additional tree retention and protection requirements that apply to properties with development projects proposed within:
 - 1) Shoreline setbacks as set forth in Chapter 83 KZC;
 - 2) Critical Areas and Associated Buffers as set forth in Chapters 85 and 90 KZC; and
 - 3) Holmes Point Overlay Zone areas as set forth in Chapter 70 KZC.

Tree Condition and Viability Ratings

The revised tree code includes a new process for determining tree viability to reduce subjectivity.

Who: The Qualified Professional Arborist conducting the tree inventory assigns ratings which are peer-reviewed by the City Arborist

Why: Viability plays a large role in determining whether the trees meet the City's High Retention Value Tree criteria (meaning that the tree is a candidate for retention efforts), this new system reduces subjectivity and ensures consistent ratings are used

Table 1. Tree condition rating system for determining viability status (KZC 95.30)

Condition Rating	Tree Health <i>Twig and leaf density, size and growth, pest/pathogen issues</i>	Tree Structure <i>Root flare, trunk condition, branch assembly</i>
Excellent	High or above average vigor with little or no twig dieback, discoloration or defoliation.	Trunk and root flare exhibit no visible defects or cavities. Branch structure and attachments are normal for species and free of defects.
Good	Vigor is normal for species. No significant damage due to diseases or pests. Any twig dieback, defoliation or discoloration is minor (up to 10% of the crown).	Well-developed structure. Defects are minor and can be corrected. Codominant stem formation may be present. Trees in groves may have asymmetries/deviations from an open-grown form of the same species.
Fair	Reduced vigor. Twig dieback, defoliation, discoloration, and/or dead branches up to 30% of the crown. Obvious signs of pest problems contribute to a lesser condition but is not likely to be fatal.	Visible evidence of trunk damage or cavities, large girdling roots or branch attachments that require moderate corrections.
Poor	Poor vigor, unhealthy and declining. Low foliage density with extensive (more than 50%) twig and/or branch dieback. Smaller-than-normal leaf size and little evidence of new growth.	Structural problems cannot be corrected, such as recent change in tree orientation, extensive trunk decay or poor branch attachments. Tree/tree part failure may occur at any time

Based on the condition ratings for health and structure in the table above, the tree's overall viability shall be assessed according to the table below. The City shall review the assigned viability ratings for consistency and accuracy.

Table 2. Tree viability matrix (KZC 95.30)

		Tree Health			
Tree Structure					
		Excellent	Good	Fair	Poor
	Excellent	Viable	Viable	Viable	Not viable
	Good	Viable	Viable	Viable	Not viable
	Fair	Viable	Viable	Not viable	Not viable
	Poor	Not viable	Not viable	Not viable	Not viable

Example: A Douglas-fir tree that is determined by a Qualified Professional Arborist to be in ‘good’ health condition and ‘fair’ structural condition has an overall rating of ‘viable’. See exhibit below.

Tree Health →

Tree Structure ↓

	Excellent	Good	Fair	Poor
Excellent	Viable	Viable	Viable	Not viable
Good	Viable	Viable	Viable	Not viable
Fair	Viable	Viable	Not viable	Not viable
Poor	Not viable	Not viable	Not viable	Not viable

Tree Retention During Development

High Retention Value Trees (HRV)

Applicable to Single-Family Dwellings, Short Plats, Subdivisions, Two/Three-Unit Homes and Cottage/Carriage Dwellings

To provide clarity to tree retention standards and support the City’s tree canopy goals, the amended KZC 95 requires that trees of High Retention Value, including Landmark Trees and Groves, **shall be retained.**

Applicants are required to pursue site plan alterations, utilize best available science and arboricultural methods, and explore variations to development standards **prior to the Planning Official authorizing removal** of High Retention Value Trees.

The City does not require tree retention efforts that would reduce maximum allowed density, number of allowed lots, maximum allowed Floor Area Ratio (FAR) or Lot Coverage, or preclude the ability to construct ADUs consistent with KZC 115.07, or that preclude required access and utility connections.

Definition of High Retention Value Trees:

- 1) **A viable regulated tree** with any portion of the trunk located in a required yard, land use buffer, and/or common open space which measures less than 26-inches DBH;
- 2) **Landmark tree** – a viable regulated tree with a minimum 26-inch DBH located anywhere on a property; and
- 3) **Grove** – a group of three (3) or more viable regulated trees with overlapping or touching crowns that are located on a proposed development site; one of which is located in a required yard, land use buffer, and/or common open space

The highest level of tree retention standards applies to Landmark Trees and Groves, with the next highest level of standards applying to trees located in required setbacks/yards.

High Retention Value Trees: applicants shall demonstrate that the following have been pursued:

1) Site Plan Alterations:

- a) Shift or flip (mirror) the location of proposed building footprints and driveways;
- b) Selection of the required front yard on corner lots in the RSA and RSX zones and selection of the required side yard to meet the 15-foot total required in RS zones;
- c) Shift the building footprint on the lot to utilize the variations to development standards allowed in subsection (3) of this section;
- d) Relocate utilities when feasible, taking into account gravity and location of existing mains;
- e) Adjust deck, patio, and path designs;
- f) Avoid rockery/retaining walls located within CRZs to maintain existing grades.

2) Arboricultural Methods. The applicant shall employ arboriculture methods to retain trees such as air excavations, boring under roots instead of trenching within TPZs for utilities less than 2 inches diameter, and use additional CRZ protection per KZC 95.32.

3) Variations to Development Standards. The applicant shall pursue the following variations and the Planning Official (or Public Works Official, where applicable) is authorized to require these variations to development standards:

- a) Reduce required front yard by up to 5 feet;
- b) Reduce required rear yards by up to 5 feet where the rear yard is adjacent to an access easement, tract, or alley;
- c) Allow variations to the garage requirements of KZC 115.43(3);
- d) Allow variations to the maximum lot coverage by not more than 10 percent where necessary to extend access due to building footprint location while ensuring that the driveway width does not exceed a width of 20 feet;
- e) Allow minimum 18-foot by 18-foot parking pads;
- f) Modify right-of-way frontage improvement requirements, such as adjusting the location of any required landscape strip;
- g) Allow up to a 5-foot increase in building height where the additional height is clearly related to tree retention (e.g., locating mechanical equipment in the attic, avoiding excavation or fill); and
- h) With short plats and subdivisions, allow clustering per subsection (d) of this section.

Landmark Trees and Groves: in addition to the standards listed above, applicants shall demonstrate that the following have been pursued:

1) Site Plan Alterations:

- a) Reasonable modifications to the proposed building footprints and driveways;
- b) Shore basements and other extensive excavations in order to avoid impact within CRZs;
- c) Cantilever structures over CRZs; and

d) With short plats and subdivisions, clustering per subsection (d) of this section, rearrangement of property lines within the applicable short plat or subdivision, relocation of access roads, and relocation of utilities.

2) Arboricultural Methods. The applicant shall employ arboricultural methods to retain Landmark Trees and groves such as air excavations, boring under roots instead of trenching, and using additional CRZ protection per KZC 95.32.

3) Variations to Development Standards. The applicant shall pursue, and the Planning Official is authorized to require the following additional standards:

a) Allow required side yards to be reduced to 3 feet where those yards are internal within a proposed short plat or subdivision;

b) Allow required yards to be reduced to 10-foot front and 5-foot rear;

c) Reductions and variations in required parking and driveways.

Moderate Retention Value Trees (MRV)

Trees that do not meet the definition of High Retention Value are **not required for retention** during development. Instead, **incentives are available** for retaining trees of Moderate Retention Value (i.e., viable regulated trees that are not High Retention Value Trees).

Incentive Options:

1) Applicants can propose the retention of Moderate Retention Value Trees in-place of retaining High Retention Value trees only **after** demonstrating retention is not feasible.

- **High Retention Value Tree Incentive:** When viable trees located in required yards, land use buffers, and/or common open spaces cannot be feasibly retained, the applicant may propose to retain MRV trees instead. The Planning Official may approve this incentive provided that the size and condition of the Moderate Retention Value Tree(s) are equal or superior to that of the tree removed.
- **Landmark Tree Incentive:** Applicants requesting the removal of a Landmark Tree must replant at a 3:1 ratio (in addition to required density credits per KZC 95.34) or pay in-lieu a total of \$1,050 (\$450 per tree X 3 mitigation trees). By requesting this incentive and retaining a MRV tree, the mitigation and/or fee-in-lieu requirements may be waived. The incentive must be formally requested by the applicant and approved by the Planning Official.

***TIP:** indicate tree protection areas on site plans and clearly indicate a request for this incentive on the site plan

KZC 95.32 Tree and Soil Protection During Development Activity

Tree Protection

Prior to development activity or initiating tree removal on the site, vegetated areas, individual trees, and soil to be preserved shall be protected from potentially damaging activities during development activity per ISA and ANSI standards.

The following is a summary of new requirements included in the revised tree code, which shall be followed in addition to all measures listed in KZC 95.32:

- Site plans showing approved tree retention/protection **shall be displayed on development sites** in plain view with the general contractor or other responsible party's phone number
- If any disturbance is proposed within the Inner Critical Root Zone of one or more regulated trees on a neighboring property, **the applicant shall provide evidence that the owner of said tree(s) has been notified in writing of the potential impact.** The Planning Official may waive this requirement if the applicant's Qualified Professional Arborist can demonstrate, through non-injurious methods such as pneumatic root excavations, that there are no roots within the Inner Critical Root Zone

KZC 95.34 Tree Replacement Standards Related to Development Activity

Tree Density Credits

Applicable to Single-Family Dwellings, Short Plats, Subdivisions, Two/Three-Unit Homes, Cottage/Carriage Dwellings, and/or Accessory Structures and associated demolition and land surface modification

The current KZC 95 requires a minimum density of 30 tree credits per acre. **The new tree code increases replanting standards up to 50 tree credits per acre.**

**Table 95.34
Tree Credits for Existing Regulated Trees**

DBH:	Regulated Tree										Landmark Tree	
	3"-5"	6"-10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30+"
Tree Credits:	0.5	1	2	3	4	5	6	7	8	9	10	11

Additional components of KZC 95.34:

- The maximum number of tree credits awarded to any single tree is now **capped at 11 credits**
- Shared trees located on property lines shall count for **0.5 tree credits**
- Native conifer trees shall count at **1.5 times credits** for retention (see City-approved List)
- Tree density credit shall be calculated **for each lot** within a short plat or subdivision
- Trees planted in the public right-of-way and vehicular easements **shall not count** towards tree density credit requirements for the development
- Transplanted trees **shall not count** toward tree density requirements unless approved by the Planning Official
- The minimum size of replacement trees worth one tree credit shall be **6-feet tall for conifers** and **2-inches caliper for deciduous or broad-leaf evergreen trees**
- Trees planted to form a clipped or sheared hedge **shall not count** toward tree density credits
- Supplemental Thuja/Arborvitae (or other slow-growing conifers as listed by the Planning and Building Department) **shall not count** towards tree density credits
- Payment in-lieu of planting: Should the Planning Official determine there is inadequate space to replant on the subject lot, a fee-in-lieu of **\$450 per tree** shall be paid to the City's Forestry account to support replanting elsewhere in the City

KZC 95.51 Tree and Landscape Maintenance Requirements

Maintenance Duration

The City requires the maintenance of trees preserved or planted as a result of development. The following maintenance requirements apply to all trees, including street trees, and other vegetation required to be planted or preserved by the City.

The required maintenance periods are the same as the old tree code but were rewritten for clarity.

Applicable to Single-Family Dwellings, Short Plats, Subdivisions, Two/Three-Unit Homes, Cottage/Carriage Dwellings, and/or Accessory Structures Development:

Any existing trees or trees planted pursuant to 95.34 or other existing vegetation designated for preservation in a Tree Retention Plan shall be maintained for **a period of five years** following issuance of the certificate of occupancy. A 5-year Tree Maintenance Agreement shall be recorded on the document approved by the City Attorney. After five years, all trees on the property are subject to KZC 95.25 unless:

- 1) Trees are in a grove that is protected pursuant to subsection (3) of this section;
- 2) The tree or vegetation is considered to be a public benefit related to approval of a Planned Unit Development;
- 3) The tree or vegetation was retained to partially or fully meet requirements of KZC 95.40 through 95.45, Required Landscaping and Zoning.

Applicable to Multifamily, Commercial, and/or Mixed Use Development:

- 1) Any existing trees or trees planted with the development designated for preservation in a Tree Retention Plan shall be maintained for a period of five years following issuance of the certificate of occupancy. A 5-year Tree Maintenance Agreement shall be recorded on the document approved by the City Attorney.
- 2) All required landscaping installed pursuant to 95.40 through 95.45 **shall be maintained throughout the life of the development** and are subject to KZC 95.25(3). Plants that die must be replaced in kind.

For additional maintenance requirements pertaining to Preserved Groves, Holmes Point Overlay (HPO), Nonnative Invasive and Noxious Plants, and Landscape Plans and Utility Plans, refer to the full code - KZC 95.51 subsections (3) through (6).