



CITY OF KIRKLAND
Planning and Building Department
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MEMORANDUM

To: Kurt Triplett, City Manager

From: Adam Weinstein, AICP, Planning and Building Director
Jeremy McMahan, Planning and Building Deputy Director
Katie Hogan, Interim Urban Forester

Date: December 16, 2021

Subject: DRAFT CODE AMENDMENTS – PART 2, KIRKLAND ZONING CODE CHAPTER 95
TREE MANAGEMENT AND REQUIRED LANDSCAPING
FILE NUMBER CAM18-00408

I. **RECOMMENDATION:**

It is recommended that City Council review Part 2 of the draft amendments to Kirkland Zoning Code Chapter 95 (KZC 95) and confirm the following framework for completing the code amendments:

- **January 4:** Review Part 2 of the draft code, including first round of moderate/major amendments with a focus on a Landmark Tree mitigation concept and private property owner tree removals; address Council comments from Part 1 review
 - **January 18:** Review Part 3 of the draft code, including second round of moderate/major amendments and the consolidated draft code with focus on tree retention and replacement standards related to development projects; address additional Council comments from Part 1 and Part 2 review
 - **February 1:** Adopt final regulations; address any additional outstanding Council comments/questions
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II. **BACKGROUND INFORMATION:**

At the [November 16, 2021](#) City Council meeting, staff proposed and Council accepted the proposal to review the draft code in three parts prior to considering final adoption. On November 16, the Council also confirmed the following two primary objectives in their consideration of the amendments:

Objective 1. Support the policy goals established in Kirkland's Comprehensive Plan and the objectives in the Urban Forestry Strategic Management Plan (UFSMP), including reaching the 40-percent canopy cover goal.

Objective 2. Develop a tree code that is more predictable for both private property owners and developers and leads to a more certain outcome.

At that meeting, the Council reviewed Part 1 of the draft code, consisting of *no impact* or *minor impact* amendments. The Council confirmed the direction for Part 1 of the amendments with the exception of requesting changes to the following code sections:

- Revise KZC 95.05 to say “at least” 40 percent canopy cover (*revised – see KZC 95.05(1) in Attachment 1*)
- Add “pruning” definition to KZC 95.10 (*revised – see KZC 95.10(11) in Attachment 1*)
- Remove the following code sections from Part 1 amendments for further discussion/revision:
 - 95.44 Internal Parking Lot Landscaping Requirements (*to be reviewed on January 18*)
 - 95.45 Perimeter Landscape Buffering for Driving and Parking Areas (*to be reviewed on January 18*)
 - 95.51 Tree and Landscape Maintenance Requirements (*to be reviewed on January 18*)

Attachment 2 includes a status summary matrix illustrating Council direction on each section of the draft code from the November 16 meeting.

Additional background information on the evolution of KZC 95 can be found through the links below:

Date/Link		Meeting Topic
June 28, 2018	PC	Understanding KZC 95, Tree Canopy Cover 101
July 12, 2018	PC	Preliminary project scope
Aug 9, 2018	PC	2018 field study findings on KZC 95 efficacy
Aug 27, 2018	HCC	Briefing on Planning Commission (PC) progress
Sept 13, 2018	PC	Preliminary code changes with low-level policy impacts
Sept 27, 2018	PC	Preliminary code changes with moderate policy impacts
Nov 8, 2018(A) Nov 8, 2018(B)	PC	A) Review 2018 Tree Canopy Assessment B) Review 1st draft KZC 95 , options, initial public feedback
Nov 20, 2018	CC	Briefing on PC progress, 1st draft KZC 95, staff recommendations, options, emerging issues
Nov 26, 2018	PC- HCC	Joint review of major code amendments, preliminary public feedback. Discuss canopy cover vs tree density credits.
Feb 14, 2019	PC	Review stakeholder position on remaining code issues, review 2nd draft KZC 95 , consider staff recommendations and other city tree codes
Feb 25, 2019	HCC	Briefing on PC progress, status of code amendments
Apr 25, 2019	PC- HCC	Joint briefing on status of code amendments
May 23, 2019	PC	Review stakeholder’s 2-tiered approach and resulting effects of proposed codes, study tree trunk diameter (DBH) data, provide direction on code
May 30, 2019	HCC	Briefing on May 23 PC meeting topics
July 11, 2019	PC	Review 3rd draft KZC 95 , 6 remaining key code issues, stakeholder feedback and other city tree codes, provide direction on code

Jul 22, 2019	HCC	Review 4th draft KZC 95 and the 6 remaining key code issues using the HCC's Guiding Principles, consider options, prepare for hearing
Oct 1, 2019	CC-PC	Review staff-stakeholder process and key code changes prior to hearing
Nov 5, 2019	PC-HCC	Public hearing, initial joint PC-HCC deliberations
Jan 21, 2020	CC	Review PC recommendations and focus on key issues of code amendments
Feb 4, 2020	CC	Review PC recommendations and discuss KZC 95.23
Feb 18, 2020	CC	Review PC recommendations and provide direction for staff for continued code amendments
May 18, 2021	CC	Discuss general policy direction and desired outcomes of the code amendment project
July 6, 2021	CC	Study session to review high-level policy questions to guide code amendments
Nov 16, 2021	CC	Resume City Council review of no impact/minor impact code amendments and confirm Council position on high-level policy to guide code amendments

III. OVERVIEW OF PART 2 CODE AMENDMENTS:

For the January 4 City Council meeting, staff is proposing to present Council with Part 2 of the code amendments – *moderate to major* amendments related to umbrella regulations that govern mitigation for removal of Landmark Trees (greater than 26 inches DBH) in Kirkland and regulations that govern removal of private property trees (not associated with development activity). Staff will be presenting the following key code changes reflecting the most recent guidance from City Council, results of the public hearing, Houghton Community Council (HCC) and Planning Commission (PC) recommendations:

1. New Landmark Tree Regulations and Mitigation Standards Section [KZC 95.23]
2. Private Property Tree Removals – Not Associated with Development Activity, including:
 - a. Increased tree removal allowances based on property size [KZC 95.25(1)]
 - b. Removal and replacement standards for Hedge Trees [KZC 95.25(3)(d) and (7)(a)]
 - c. Development permit wait periods to prohibit removal and girdling [KZC 95.25(4)]
 - d. Forest Stewardship Plans [KZC 95.25(9)]

Attachment 1 contains the proposed draft KZC 95, including only those Part 2 sections to be discussed during the January 4 meeting, as well as prior code sections that were discussed during the [November 16, 2021](#) City Council meeting. Attachment 1 includes a high-level inline summary of each moderate/major code amendment. A more detailed description of the Part 2 amendments is outlined in this memo, including examples that explain how the code would be applied.

Based on the recommendations of the Planning Commission and City Council direction received to date, Section IV and V of this memo provide an overview of the Part 2 amendments related to KZC 95.23 (new) and KZC 95.25 (previously numbered 95.23).

IV. KZC 95.23: LANDMARK TREES – MITIGATION REQUIREMENTS:

A substantial review of the benefits mature trees contribute to urban settings was explored at the [February 18, 2020](#) City Council meeting. Overall, the purpose of tree code provisions regulating the removal of Landmark Trees is to optimize the environmental and human health benefits from tree canopy over, presently and over time. In alignment with these goals to retain and protect mature trees, Kirkland has identified both canopy cover and relative tree age diversity as two performance measures in Comprehensive Plan policies and in the [Kirkland Urban Forestry Strategic Management Plan](#) Appendix A: Performance Measures.

A. NEW Landmark Tree Code Section – KZC 95.23

New Section 95.23 establishes a mitigation standard that applies consistently to the removal of any healthy Landmark Tree, meaning that it would apply both to private properties (95.25) and development-related activity (95.30). The purpose of this new code section is to address the recommendations of the Planning Commission for “robust” mitigation requirements for removal of Landmark Trees not associated with development permits. It also attempts to address a significant community concern about the immediate impact that results when large trees are removed in the community – echoed in the primary objective of Council that the code provides a path to reach the City’s 40-percent canopy goal. Incorporating Landmark Tree mitigation into the code also provides a tool to aid with offsetting canopy impacts resulting from incrementally increased tree removals on larger properties.

Code Section 95.23 does not specify the conditions under which a Landmark Tree must be retained or may be removed – those regulations are found in sections 95.25 and 95.30. Rather, 95.23 establishes a mitigation requirement for when Landmark Trees are removed. The following is a summary of the proposed regulations:

- Requires a tree removal permit for any Landmark Tree removal across the City unless the tree is obviously dead, dying, or hazardous. The permit process would allow the City to track canopy loss associated with Landmark Tree removals and to implement an inspection process to ensure that mitigation standards are met. For removal of Landmark Trees associated with development activity, the review and inspections would occur in conjunction with the related development permit. The current permit fee for a private property tree removal permit is \$229.
- Establishes a requirement that for each Landmark Tree removed, the applicant shall plant three large species selected from a ***Landmark Tree Mitigation List***. The mitigation list is intended to ensure trees being selected for mitigation will replace or exceed the canopy loss from the Landmark Tree removal over time. This list will be similar to the [Approved Street Tree Selection List](#) the City uses as a guideline for street tree plantings, but will include only those species listed under the “medium/large” and “large” tree categories (Pages 9-11). The list will also be revised to include native tree species selected from the [Kirkland Native Tree List](#).
- Requires that all mitigation trees planted as a result of Landmark Tree removal are subject to a 5-year maintenance agreement.
- Landmark Tree mitigation requirements would be in addition to tree planting otherwise required pursuant to Kirkland Zoning Code or Kirkland Municipal Code.
- Landmark Trees that are obviously dead, dying or hazardous (as evident in provided photographs and reviewed by the Planning Official) and are not subject to special

conditions pursuant to KZC 95.25(3) would not be subject to mitigation requirements and the permit would be waived.

- The applicant may choose to pay a fee in lieu of planting mitigation trees based on a standard formula. This would apply to both private property owners and development applicants. Based on the current formula the fee would be \$350 per tree (or \$1,050 per Landmark Tree). Payments would go into the City's Tree Fund and be used for City sponsored canopy restoration projects.

Notes:

Staff considered requiring a longer-term maintenance agreement for mitigation trees planted as a result of Landmark Tree removals in order to ensure the new trees reach maturity and provide an equivalent contribution to the urban canopy cover. After consideration, staff determined that this approach would present challenges in tracking data over a considerable number of years. Current City-wide operations and data management systems do not support managing and tracking mitigation trees, such as conducting routine follow-up inspections of mitigation trees and deploying code enforcement staff to monitor the removal of small mitigation trees.

City Council Options: The Council should discuss this Landmark Tree and canopy mitigation strategy. Council may choose to adopt these provisions as a whole, to not adopt this new section, or to adopt some but not all of these provisions.

Although this new code section also applies to mitigation standards and fee in lieu for the removal of Landmark Trees related to development activity, the focus of this memo and the January 4 City Council meeting will be to discuss this section as it relates to private property tree removals. Staff will revisit this new code section during the subsequent January 18 Council meeting to discuss in detail how it relates to development activity.

Scenarios providing additional context for how Landmark Tree removals are proposed for regulation compared to the existing KZC 95 can be found in Section V, subsection (c) below.

V. KZC 95.25: PRIVATE PROPERTY TREE REMOVALS – NOT ASSOCIATED WITH DEVELOPMENT ACTIVITY

Tree removal allowances establish a process and standards to slow the loss of tree canopy on private property, contributing towards the City's canopy goals and a more sustainable urban forest. The basic premise is to balance a property owner's right to remove trees on their property with the community interest in slowing the loss of canopy cover over time. Based on direction from both the Planning Commission and City Council, the proposed amendments reflect stricter mitigation requirements for the removal of Landmark Trees (as discussed in Section 95.23 above), while balancing property owner rights to remove trees per the 12-month allowances. Below is a summary of the key code amendments. The full code outlining these regulations can be found in Attachment 1.

A. Summary of Key Code Changes – Tree Removal Allowances

Staff has provided a summary of the moderate/major code changes as they relate to private property owner tree removal regulations.

1) Tree removal allowances per 12-months

Maximum tree removal allowances are increased based on property size as follows:

- a) Up to 10,000 sq. ft – 2 tree removals
- b) 10,001 to 20,000 sq. ft – 3 tree removals
- c) 20,001 sq. ft. or greater – 4 tree removals

2) Minimum trees to remain

Minimum number of regulated trees required to remain on subject property is increased based on property size as follows:

- a) Up to 10,000 sq. ft – 2 trees remaining
- b) 10,001 to 20,000 sq. ft – 3 trees remaining
- c) 20,001 sq. ft. or greater – 4 trees remaining

3) Mitigation for Regulated & Landmark Trees removed beyond tree removal allowances

Mitigation standards for large tree removal are increased for removal of any of the last trees required to remain on the subject property as described in section (2) above. A tree removal permit is still required to remove any of the last trees required to remain on the property and the trees must meet the City's hazard/nuisance tree criteria (no change from existing code):

- a) 6 to 15 inches DBH – 1 replacement tree required
- b) 16 to 26 inches DBH – 2 replacement trees required
- c) 26 inches DBH or greater (Landmark-sized) – 3 replacement trees required

4) Tree removal permit required

Clarifies existing code provisions for when a property owner must submit a tree removal permit (with associated fee) and mitigation is required pursuant to KZC 95.23 and 95.25(1)(e) and (7)(a):

- a) Tree removal results in less than the minimum number of regulated trees required to remain on the subject property
- b) Tree is located in a public park or adjacent City right-of-way
- c) Tree is located in a wetland, stream, or associated buffer pursuant to Chapter 90 KZC
- d) Tree is located in a high landslide susceptibility area pursuant to Chapter 85 KZC
- e) Tree is located in the Holmes Point Overlay Zone pursuant to Chapter 70 KZC
- f) Tree is located in a shoreline setback pursuant to Chapter 83 KZC
- g) Tree was required to be retained, planted, or preserved as a grove as a condition of previous development activity
- h) Tree was required to be retained or planted pursuant to KZC 95.40 through 95.50 (e.g., multi-family usage, parking lot standards, common open spaces)
- i) Tree is protected under a voluntary Tree Preservation Covenant

Note: Landmark or regulated trees that are obviously dead, dying, or hazardous, as indicated by photographic evidence, will not require a tree removal permit and landmark tree mitigation requirements are waived.

Other Considerations

Mandating Tree Removal Allowances: Staff considered mandating the Tree Removal Notification process for all Regulated trees in the City based on feedback received from Council to improve tracking incremental tree loss. While mandating the notification process could provide benefits such as reducing the number of undocumented/illegal tree removals, ensuring that Landmark Trees are not being removed without a permit, and reducing staff time investigating tree removal complaints and code compliance issues, staff believes tracking individual trees removed would not substantially aid in documenting City-wide canopy growth and loss and could require additional staff resources. The information that could be collected through this process, such as number of trees removed, tree species, and trunk diameter, does not directly correlate to canopy cover. Alternative tools are available to better track canopy gains, losses, and progress toward meeting the City's 40-percent canopy goal. High-definition aerial imagery and canopy studies are more useful for supporting long-range planning goals and the City's Urban Forestry Strategic Management Plan.

Borrowing Tree Removals: The concept of borrowing future tree removals has been discussed during past Council meetings to allow property owners to remove more than the allowed trees per each 12-month period. Staff has considered this option and believes there are many challenges that would arise from allowing borrowed tree removals. Setting standards for 12-month tree removal allowances helps to slow the rate of canopy loss and allows the City to keep pace with replanting efforts to offset this impact. By providing an avenue for property owners to remove future tree allowances, the City would likely see increased tree removals that are counterproductive to the City-wide tree canopy goals and main objective of the proposed KZC 95 amendments. In addition to impacts to overall tree canopy, there are logistical challenges for City staff to accurately track borrowed tree removals for individual properties. If Council wishes to pursue this option, staff recommends mandating the permit process for borrowed tree removals to allow staff to devote the time needed to adequately track and enforce these tree removals.

B. Summary of Key Code Changes – Tree Replacement Standards

To determine the replacement tree standards based on critical areas or other special conditions that apply to a lot when applying for a tree removal permit, the current KZC 95 requires referencing multiple zoning code sections. To simplify replacement tree requirements for users, staff has created a summary table of Tree Replacement Standards, for use when a tree removal permit is required due to special conditions that exist on the subject property. This table clearly outlines replacement tree requirement ratios and guides the reader to the relevant code section for more information.

Tree Replacement Standards

Location of Tree Removal	Tree Replacement Standards
Public trees in parks or City Right-of-Way per KZC 95.21(2)	Minimum 1:1 tree replacement
Significantly wooded properties 25,000 sq. ft. or greater	Determined in approved Forest Stewardship Plan
Hedge Trees on Private Property	1:1 tree replacement ¹
Holmes Point Overlay Zone - species selection and timing of installation shall be approved by the Planning Official	1:1 tree replacement with native trees. See KZC Chapter 70
Shoreline setbacks	See KZC Chapter 83 for tree replacement standards
Streams, wetlands and associated buffers – the Planning Official shall determine the required number of replacement trees	1:1 to 3:1 tree replacement with native trees. See KZC Chapter 90
Required landscaping pursuant to KZC 95.40 through 95.50	Replant to the required landscaping standards of KZC 95.40 through 95.50

Notes:

1. Planning Official may allow reduced replanting requirements for hedge trees based on available space to provide a sustainable planting

C. Summary of Key Code Changes – Examples & Scenarios

Tree Removal Allowance Scenarios

Staff has provided the following examples to help further explain the proposed tree removal allowance and mitigation requirements. The below scenarios apply only to properties that do not contain special restrictions that trigger the tree removal permit process pursuant to KZC 95.25(3) (e.g. wetlands, streams, high landslides, Holmes Point Overlay):

Scenario 1: Property owner has a 5,000-square-foot lot and would like to remove one regulated 20-inch fir tree. Four additional regulated trees remain on the lot (of the required two).

Process: The property owner may remove the tree and may choose to submit an optional tree removal notification form (no fee). No mitigation is required.

Scenario 2: Property owner has a 15,000-square-foot lot and would like to remove two regulated 15-inch fir trees. Only two additional regulated trees remain on the lot (of the required three) following the requested removals.

Process: The property owner must submit a tree removal permit demonstrating the trees meet the City’s hazard/nuisance criteria and is subject to mitigation standards. The property owner will be required to pay a permit fee and submit an arborist report if the trees are not obviously dead, dying and/or hazardous. Due to the size of the removed trees, two total mitigation trees will be required pursuant to KZC 95.25(1).

Scenario 3: Property owner has a 20,000-square-foot lot and would like to remove two regulated 20-inch fir trees and one 27-inch Landmark Tree. No additional regulated trees remain on the lot (of the required four) following the requested removals.

Process: The property owner must submit a tree removal permit demonstrating that the trees meet the City's hazard/nuisance criteria and is subject to mitigation standards. The property owner will be required to pay a permit fee and submit an arborist report if the trees are not obviously dead, dying and/or hazardous. Due to the size of the removed trees, 7 total mitigation trees will be required pursuant to KZC 95.25(1).

Scenario 4: Property owner has a 7,000-square-foot lot and would like to remove one 26-inch Landmark Tree. Three additional regulated trees remain on the lot (of the required two) following the requested removal.

Process: The property owner must submit a tree removal permit and is subject to mitigation. Because the property meets or exceeds the required number or regulated trees remaining on the lot, and no other special restrictions apply, the Landmark Tree can be removed without meeting the City's hazard/nuisance criteria. The property owner will be required to pay a permit fee and replant with 3 mitigation trees (based on 95.23) that are subject to City inspection.

Scenario 5: Property owner has a 7,000-square-foot lot and would like to remove one 26-inch Landmark Tree. No additional regulated trees remain on the lot (of the required two) following the requested removal.

Process: Because the tree is the last remaining tree on the lot, the property owner must submit a tree removal permit demonstrating the Landmark Tree meets the City's hazard/nuisance criteria and is subject to mitigation standards. The property owner will be required to pay a permit fee and submit an arborist report if the tree is not obviously dead, dying and/or hazardous. The property owner will be required to plant 3 mitigation trees that are subject to City inspection, pursuant to KZC 95.23 and 95.25(1).

Tree Removal Permit Required Pursuant to KZC 95.25(3)

The below scenarios apply to properties that contain special restrictions that trigger the tree removal permit process pursuant to KZC 95.25(3) (i.e. wetlands, streams, high landslides, etc.):

Scenario 6: Property owner has a 6,000-square-foot lot and would like to remove one 16-inch regulated tree. Two additional regulated trees remain on the lot (of the required two) following the requested removal. The subject tree is located within a mapped High Landslide susceptibility area per KZC Chapter 85.

Process: Regardless of meeting the minimum remaining trees on the lot, the property owner must submit a tree removal permit demonstrating the regulated tree meets the City's hazard/nuisance criteria and is subject to mitigation standards. The property owner will be required to pay a permit fee and submit an arborist report if the tree is not obviously dead, dying and/or hazardous. The property owner will be required to plant 2 mitigation trees or pursuant to KZC 95.23 and 95.25(1) or replant according to the replacement standards set forth in KZC 95.25(7), whichever is greater.

Landmark Tree Removal & Mitigation Pursuant to KZC 95.23 and 95.25

The below scenarios compare Landmark Tree removal and mitigations standards in the current KZC 95 to the proposed KZC 95.23 and 95.25:

1) Existing Tree Code KZC 95.23

a) *Landmark tree removal – no permit required*

Scenario A: The owner of a developed property wants to remove a tree greater than 26-inches DBH under their 2 per 12-month allowance period and there is no pending development application, and the following conditions are met:

- The lot has the minimum number of significant trees required to remain (2 trees)
- The property is not covered by the tree retention agreement required for new development (new residence built within the last five years)
- The trees are not in a Native Growth Protection Easement (NGPE)
- The trees are not in a critical area or its buffer (i.e., streams, steep slopes, and wetlands)
- There are no subdivision restrictions listed on the deed or plat map
- The property is not subject to the shoreline vegetation requirement
- The property is not within the Holmes Point Overlay (HPO)

Process: The property owner can submit an optional free of charge tree removal notification to the City to confirm there are no special restrictions that require a permit. The applicant can then remove the 26-inch DBH+ tree without a tree removal permit and no mitigation is required.

b) *Landmark tree removal – permit required*

Scenario B: The property owner would like to remove a tree greater than 26-inches DBH and one or more of the above-listed conditions apply.

Process: The property owner must submit a tree removal permit (with associated fee) to be approved by the City prior to removal.

- If the tree is not obviously dead, dying, and/or hazardous (as evident through photos), the property owner must submit a tree removal permit accompanied by an arborist report completed by a qualified professional.
- The tree must qualify as either hazard or nuisance per KZC 95.23 to be approved for removal, as confirmed by the City during a site inspection.
- The property owner, in most scenarios, will be subject to replanting standards depending on critical area designations or the associated Tree Maintenance Agreement.

2) Proposed Tree Code KZC 95.23 and 95.25

a) *Landmark tree removal – permit required in all scenarios*

Scenario C: The owner of a developed property wants to remove a tree greater than 26-inches DBH under their 2 per 12-month allowance and none of the special conditions/restrictions above under section 1(a) apply to the lot.

Process: Under the new code section KZC 95.23, all property owners are ***required*** to submit a tree removal permit and adhere to mitigation standards, even if there are no special restrictions (critical areas, 5-year tree maintenance agreement, etc.). Unless any of

the special conditions listed above in section 1(a) apply, the permit will be ***approved*** without a site inspection from City staff, and the Landmark Tree does not have to qualify as a hazard or nuisance tree to be removed. In all scenarios, the property owner will be required to replace the removed tree with three new trees or pay the fee in lieu. The landmark tree removal ***will*** count as one of their 2 per 12-month tree removal allowances.

Explanation of Permit Requirement: In order for City staff to track and enforce mitigation plantings, a tree removal permit is required to conduct an inspection of the mitigation trees after planting and provide assistance to property owners throughout the permitting process.

b) *Landmark tree removal – permit required in all scenarios*

Scenario D: The owner of a developed property wants to remove a tree greater than 26-inches DBH and there is no pending development application, and one or more of the following conditions ***apply***:

- The lot does not meet the minimum number of regulated trees required to remain based on lot size after the proposed removal
- The property is covered by the tree retention agreement required for new development (new residence built within the last five years)
- The trees are in a Native Growth Protection Easement (NGPE)
- The trees are in a critical area or its buffer (i.e., streams, steep slopes, and wetlands)
- There are subdivision restrictions listed on the deed or plat map
- The property is subject to the shoreline vegetation requirement
- The property is within the Holmes Point Overlay (HPO)

Process: For all special restrictions listed above under section 2(b), property owners are ***required*** to submit a tree removal permit and adhere to mitigation standards. The tree removal permit is subject to tree permit standards per KZC 95.25(5), (6), and (8) and mitigation standards pursuant to KZC 95.25(7). This includes demonstrating that the Landmark Tree meets the City's hazard or nuisance tree criteria, along with submittal of an arborist report. An inspection of the tree will be performed by City staff and if approved, the property owner will be required to replace the removed tree with three new trees, or meet the tree replacement standards set forth in KZC 95.25(7), whichever is greater.

After demonstration and City confirmation that the tree meets the hazard/nuisance criteria, the landmark tree removal ***will not*** count toward the 2 tree per 12-month tree removal allowances.

D. Summary of Key Code Changes – Removal and Replacement Standards for Hedge Trees

Based on prior feedback received from the Planning Commission and City Council, new and more permissive regulations for hedge tree removals have been included in KZC Chapter 95.25. The goal of the new regulations is to allow removal of trees that are not making a sustainable long-term contribution to the City's canopy goals while encouraging the planting of replacement trees that will be more desirable by the property owner and provide a better long-term contribution to the City's canopy goals.

The draft regulations now provide an avenue for property owners to submit tree removal permits for the removal of over-grown, poorly planted, and/or difficult to maintain hedges that exceed the 12-month removal allowances, without meeting the City's hazard/nuisance tree criteria. The following Hedge Tree definition was reviewed with Council at the November 16, 2021 meeting:

Hedge Trees – Five (5) or more trees of the same species with overlapping or touching crowns that are in fair or poor condition; have been planted and maintained in a linear formation at maximum eight (8) foot spacing, typically to function as a screen or barrier

Property owners can submit a tree removal permit (with associated fee) requesting the removal of hedge trees. The Planning Official may conduct a site visit to determine whether the hedge meets the City's definition of Hedge Trees pursuant to KZC 95.10(17)(c) and determine appropriate mitigation. Hedge trees that are permitted for removal will be subject to 1:1 replacement. The Planning Official may authorize reduced replanting requirements for hedge trees based on available space to ensure a sustainable planting.

E. Summary of Key Code Changes – Development permit wait periods

One issue that was identified with the existing KZC 95 by both the Planning Commission and City Council is that tree removal allowances provide an opening to remove trees prior to submittal of development permits, resulting in preemptive tree removals to avoid being regulated under KZC 95.30. To disincentive preemptive removals, the Planning Commission recommended the following restrictions:

- The City will not accept development permits for detached dwellings, cottages, carriage units, two/three-unit homes; or short plats or subdivisions for a property for a period of:
 - 12-months following the most recent removal of a regulated (non-Landmark) tree
 - 24-months following the most recent removal of a Landmark Tree

Earlier Council direction was to increase the wait period to 24 and 48 months, respectively, with a new hardship clause to allow the Planning Director to modify the wait period for certain unforeseen circumstances. With the inclusion of new Landmark Tree mitigation requirements in draft KZC 95.23 and due to the difficulty for the City (or a property owner) to track removals over a 4-year period, staff recommends adoption of the Planning Commission restrictions and has included this in KZC 95.25(4), stating the following:

Tree Removal on Private Property Prior to Development Permit Submittal. With the exception of approved removals of hazard trees or nuisance trees, the City will not accept any development permit application with a pending tree removal permit or tree removal notification. In addition, the City will not accept a development permit for cottages, carriage units, two/three-unit homes; or short plats or subdivisions for a property for a period of 12-months following the most recent removal of a regulated tree or a period of 24-months following the most recent removal of a Landmark Tree.

Note: Trees that qualify and were permitted (if required) for removal subject to the City's hazard or nuisance criteria would not be subject to the development wait-periods. Tree

removals in violation of the regulations would be subject to the restriction, in addition to any civil penalties and restoration requirements.

F. Summary of Key Code Changes – Forest Stewardship Plans

The existing KZC 95.23(5)(e), Forest Management Plan, was revised slightly to clarify intent and provide broader opportunities for larger properties to manage canopy cover. The following revisions were made to this section:

- Renamed to Forest Stewardship Plan
- Minimum property size to qualify for this plan was reduced from 35,000 to 25,000 square feet
- Condition added that the Planning Official may require a performance security pursuant to KZC 175 to ensure the reforestation requirements are met

VI. NEXT STEPS:

Assuming Council can provide a conclusive decision on most of the Phase 2 amendments, staff proposes the following schedule for Council review and adoption of the remaining amendments:

- **January 18:** Review Part 3 of the draft code, including second round of moderate/major amendments and the consolidated draft code with focus on tree retention and replacement standards related to development projects; follow up on code sections from the Part 1 and Part 2 amendments that Council provided feedback on
- **February 1:** Adopt final regulations
- **2022 TBD:** HCC review within disapproval jurisdiction
- **Spring 2022:** Implementation and outreach

KZC code changes will involve comprehensive implementation phases. Prior to the adoption of KZC 95, staff will be seeking additional direction from the City Council on effective dates and options related to the vesting of projects.

Attachments

1. Draft KZC 95, including only Part 1 (no impact/minor impact) and Part 2 (moderate/major impact amendments)
2. Progress Tracking Matrix

cc: File Number CAM18-00408
Planning Commission
Houghton Community Council

KEY:

Plain text not highlighted = current code *without changes*

Bold text not highlighted = indicates a change to the existing code

*Note: **Bold text** that is underlined = section titles that are normally bolded in KZC 95 but that were revised

Grayed-out text = no impact or minor impact amendments reviewed during November 16, 2021 City Council meeting

Orange highlighted text = sections with moderate and major code amendments for review during January 4, 2021 City Council meeting

Moderate Amendments – restructuring of code sections and any of the above that results in new, increased or eliminated requirements that seem relatively uncontroversial.

Major Amendments – controversial and substantially new, increased or eliminated requirements, added procedures or cost to permit applicants. Changes the intent of the code.

Yellow highlighted text = section titles for review at future Part 3 meeting

REVIEW OF PART 2 DRAFT AMENDMENTS

Overall there are eight code sections that staff believe result in **moderate to major code amendments**. Staff proposes to present two of these code sections during the January 4 City Council meeting. The additional six code sections will be fully reviewed and presented during the January 18 Council meeting.

For each code amendment, the following information is provided as a brief high-level summary of the amendment:

Update: description of how the code changed from the existing code

Explanation: additional information on the purpose of the update based on Council feedback and main objectives for code amendments

Result: overall high-level outcome of the proposed amendment (e.g. increased tree removals, more tree protection, enhanced property owner rights)

For additional information and explanation of the proposed amendments, please refer to the provided Staff Memo dated December 16, 2021 included in the Council Packet. As we work through each section of the Code, Council will have the opportunity to ask clarifying questions about the amendments. We ask that Councilmembers provide staff with clear direction on the presented amendments for inclusion in a final draft code.

[DRAFT] KIRKLAND ZONING CODE CHAPTER 95 – TREE MANAGEMENT AND REQUIRED LANDSCAPING

Sections:

- 95.05 Purpose and Intent
- 95.10 Definitions
- 95.15 **Exempt Tree Removal Activities**
- 95.20 **Public Tree – Pruning and Removal**
- 95.21 **Private Property - Tree Pruning**
- 95.23 **Landmark Trees – Mitigation Requirements**
- 95.25 **Private Property - Tree Removal, Not Associated with Development Activity**
- 95.30 **Tree Retention Associated with Development Activity**
- 95.32 Tree and Soil Protection during Development Activity
- 95.34 **Tree Replacement Standards Related to Development Activity**
- 95.40 Required Landscaping Based on Zoning District
- 95.41 Supplemental Plantings
- 95.42 **Land Use Buffer Requirements**
- 95.43 Outdoor Use, Activity, and Storage
- 95.44 **Internal Parking Lot Landscaping Requirements**
- 95.45 **Perimeter Landscape Buffering for Driving and Parking Areas**
- 95.46 Modifications to Required Landscaping and Buffer Standards
- 95.47 Nonconforming Landscaping and Buffers
- 95.50 Installation Standards for Required Plantings
- 95.51 **Tree and Landscape Maintenance Requirements**
- 95.52 Prohibited Vegetation
- 95.55 **Enforcement and Penalties**
- 95.57 City Forestry Account

95.05 Purpose and Intent

1. Trees and other vegetation are important elements of the physical environment. They are integral to Kirkland’s community character and protect public health, safety and general welfare. Protecting, enhancing, and maintaining healthy trees and vegetation are key community values. Comprehensive Plan Policy NE-3.1 describes working towards achieving a **healthy, resilient urban forest with a City-wide tree canopy coverage of at least 40 percent**. The many benefits of healthy trees and vegetation contribute to Kirkland’s quality of life by:

- a. Minimizing the adverse impacts of land-disturbing activities and impervious surfaces such as runoff, soil erosion, land instability, sedimentation and pollution of waterways, thus reducing the public and private costs for storm water control/treatment and utility maintenance;
- b. Improving the air quality by absorbing air pollutants, mitigating the urban heat island effect, assimilating carbon dioxide and generating oxygen, and decreasing the impacts of climate change;
- c. Reducing the effects of excessive noise pollution;
- d. Providing cost-effective protection from severe weather conditions with cooling effects in the summer months and insulating effects in winter;
- e. Providing visual relief and screening buffers;
- f. Providing recreational benefits;
- g. Providing habitat, cover, food supply and corridors for a diversity of fish and wildlife; and
- h. Providing economic benefit by enhancing local property values and contributing to the region’s natural beauty, aesthetic character, and livability of the community.

2. Tree and vegetation removal in urban areas has resulted in the loss to the public of these beneficial functions. The purpose of this chapter is to establish a process and standards to provide for the protection, preservation, replacement, proper maintenance, and use of **regulated** trees, associated vegetation, and woodlands located in the City of Kirkland.

The intent of this chapter is to:

- a. Maintain and enhance canopy coverage provided by trees for the **benefits** identified in KZC 95.05(1);
- b. Preserve and enhance the City of Kirkland’s environmental, economic, and community character with mature landscapes;
- c. Promote site planning, building, and development practices that work to avoid removal or destruction of trees and vegetation, that avoid unnecessary disturbance to the City’s natural vegetation, and that provide landscaping to buffer the effects of built and paved areas;
- d. Mitigate the consequences of required tree removal in land development through on- and off-site tree replacement with the goals of halting net loss and enhancing Kirkland’s tree canopy to achieve an overall healthy tree canopy cover of **at least 40 percent** City-wide over time;
- e. Encourage tree retention efforts by providing flexibility with respect to certain other development requirements;
- f. **Balance tree protection with other major citywide interests;**
- g. Implement the goals and objectives of the City’s Comprehensive Plan **and Sustainability Master Plan;**
- h. Implement the goals and objectives of the State Environmental Policy Act (SEPA); and
- i. Manage trees and other vegetation in a manner consistent with the City’s **Urban Forest Strategic Management Plan; industry standards; and best management practices established by the International Society of Arboriculture (ISA) and the American National Standards Institute (ANSI) for Management of Trees During Site Planning, Development and Construction, Pruning, and Tree Risk Assessment.**
- j. Preserve and protect street trees, trees in public parks and trees on other City property.

95.10 Definitions

The following definitions shall apply throughout this chapter unless the context clearly indicates otherwise. Definitions that apply throughout this code are also located in Chapter 5 KZC.

- 1. **Arborist Report – written review and recommendations, submitted by a Qualified Professional Arborist for the purpose of meeting the requirements set forth in this Chapter.**
- 2. Caliper – The **industry** standard for trunk measurement of nursery stock, **applicable to required replacement trees**. Caliper shall be measured six (6) inches above the ground.
- 3. Critical Root Zone (CRZ) –The area **encircling the trunk of a tree** equal to one (1) foot radius for every inch of DBH **Example: a 24-inch DBH tree has a 24-foot radius CRZ measured from the face of the trunk.**
- 4. Crown – The area of a tree containing leaf- or needle-bearing branches.
- 5. Diameter at Breast Height (DBH) – The diameter or thickness of a tree trunk measured at 4.5 feet **above average grade. For trees with multiple trunks at 4.5 feet height, only trunks 3” DBH or greater shall be included. Where a tree splits into several trunks close to ground level, the DBH for the tree is the square root of the sum of the DBH for each individual stem squared (example with 3 trunks: DBH = square root [(stem1)² +**

$(\text{stem2})^2 + (\text{stem3})^2$). If a tree has been removed and only the stump remains that is below 4.5 feet tall, the size of the tree shall be the diameter of the top of the stump.

6. Dripline – The distance from the tree trunk that is equal to the furthest extent of the tree's crown. For trees with asymmetrical crowns, the dripline shall be measured in all four cardinal directions (North, South, East, West).

7. Impact – A condition or activity that adversely affects any part of a tree, including, but not limited to, the trunk, branches, or CRZ.

8. Inner Critical Root Zone (Inner CRZ) – an area half the distance of the CRZ that, when impacted, may compromise the structural integrity of the tree. Example: a 24-inch DBH tree has a 12-foot radius Inner Critical Root Zone measured from the face of the trunk.

9. Prohibited Plant List – A list of trees and vegetation published by the Planning and Building Department that are invasive, noxious, or inappropriate species for retention or replacement trees.

10. Qualified Professional Arborist – An individual with relevant education and training in arboriculture or urban forestry, having two (2) or more of the following credentials:

- International Society of Arboriculture (ISA) Certified Arborist;
- Tree Risk Assessor Qualification (TRAQ) as established by the ISA (or equivalent);
- American Society of Consulting Arborists (ASCA) registered Consulting Arborist;
- Society of American Foresters (SAF) Certified Forester for Forest Management Plans;
- Board Certified Master Arborist as established by the ISA.

A Qualified Professional Arborist must have the TRAQ or equivalent qualification for the submittal of Tree Risk Assessment reports related to hazard tree removal. For tree retention associated with a development permit, a Qualified Professional Arborist must have, in addition to the above credentials, a minimum of three (3) years' experience working directly with the protection of trees during construction and have experience with ascertaining tree survival after construction. A Qualified Professional Arborist must also be able to prescribe appropriate measures for the preservation of trees during land development.

11. Pruning – the practice of selectively removing branches (or roots) from a tree or other plant, using approved practices, to achieve a specified objective.

12. Significantly Wooded Site – for a Forest Stewardship Plan; a subject property that has numerous trees with crowns that, when outlined in aerial imagery, cover at least 40 percent of the total area of the property.

13. Site Disturbance – Any development, construction, or related operation that could alter the subject property, including, but not limited to, soil compaction; tree or tree stump removal; road, driveway, or building construction; installation of utilities; or grading.

14. Topping – Indiscriminate cuts made between branches that leave a stub, used to reduce the height or crown size of an established tree. Topping is not an acceptable practice pursuant to best management practices in the ANSI A300 Pruning Standards.

15. Tree Protection Zone (TPZ) – A defined area within and including an outer boundary, as determined by a Qualified Professional Arborist, in which certain activities are prohibited or restricted to prevent or minimize potential impacts from construction or development, applicable to individual trees or groups of tree trunks, roots and soil. TPZ is measured in feet from the face of the trunk and may be determined using Critical Root Zone, dripline, exploratory root excavations or other methodologies. The TPZ is variable depending on species, age and health of the tree, soil conditions and proposed construction. TPZ denotes the location of tree protection fencing.

16. Tree Removal – The removal of a tree, through either direct or indirect actions, including but not limited to: (1) clearing, damaging, girdling, or poisoning, in each case, resulting in an unhealthy or dead tree; (2) topping that results in the removal of more than 25% of the live crown or (3) damage to roots or trunk that is likely to destroy the tree's structural integrity.

17. Trees – A tree or a group of trees may fall under one (1) of the following definitions for purposes of this chapter:

- a. 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.
- b. Hazard Tree – A tree/tree part assessed by a Qualified Professional Arborist as having an Extreme or High Overall Risk Rating using the ISA Tree Risk Assessment Qualification (TRAQ) method in its most current form, as applied in KZC 95.25 that meets all the following criteria:

- 1) A tree with a combination of structural defects and/or disease which makes it subject to a high probability of failure;
- 2) Is in proximity to moderate to high frequency-occupied targets, persons or property that can be damaged by tree failure; and
- 3) The hazard condition of the tree cannot be lessened with reasonable and proper arboricultural practices nor can the target be removed.

c. Hedge Trees – Five (5) or more trees of the same species with overlapping or touching crowns that are in fair or poor condition; have been planted and maintained in a linear formation at maximum eight (8) foot spacing, typically to function as a screen or barrier.

d. Landmark Tree – a regulated tree with a minimum 26-inch DBH.

e. Nuisance Tree – A tree that meets either of the following criteria:

- 1) Is causing obvious physical damage to private or public structures, including, but not limited to a: sidewalk, curb, road, driveway, parking lot, building foundation, or roof; or
- 2) Has sustained damage from past maintenance practices or from naturally occurring events such as wind, ice or snow-loading.

The problems associated with a nuisance tree must be such that they cannot be corrected by reasonable practices, including, but not limited to: pruning of the crown or roots of the tree, bracing, cabling to reconstruct a healthy crown.

f. Public Tree – A tree located in parks, within maintained or unmaintained public rights-of-way, in a stormwater facility, or on other property owned by the City.

g. Regulated Tree – A tree that is at least six (6) inches DBH that is not listed on the Prohibited Plant List.

h. Retention Value - The Planning Official's designation of a tree based on information provided by a qualified professional that is one (1) of the following:

- 1) High – any of the following trees:
 - a. Grove
 - b. Landmark Tree
 - c. A viable tree with any portion of the trunk located in a required yard, land use buffer, and/or common open space
- 2) Moderate – A viable tree that is not a High Retention Value Tree

i. Street Tree – A Public Tree located within the public right-of-way; provided, that if the trunk of the tree straddles the boundary line of the public right-of-way and the abutting property, it shall be on the abutting property and subject to the provisions of this chapter.

j. Viable Tree – A regulated tree on proposed development sites that fits the viable criteria in Table 95.30.2 based on the tree condition ratings pursuant to KZC 95.30. A tree that is not viable is also a tree in an area where removal is unavoidable due to the anticipated development activity after having applied the provisions in this Chapter.

18. Wildlife Snag – The remaining trunk of a tree that is intentionally reduced in height and usually stripped of its branches **with the intent of providing habitat.**

19. Windfirm – A condition of a tree in which it withstands average peak local wind speeds and gusts.

95.15 Exempt Tree Removal Activities

The following activities are exempt from the provisions of this chapter:

1. **Emergency Tree Removal.** Any tree that poses an imminent threat to life or property may be removed. The City must be notified within seven (7) days after the emergency tree removal with evidence of the threat for removing the tree to be considered exempt from this chapter. If the Planning Official determines that the emergency tree removal was not warranted or if the removed tree was required **to be retained or planted pursuant to a development permit, then the removal will be subject to code enforcement, including fines and restoration.** The Planning Official may require that the party obtain a tree removal permit.
2. **Utility Maintenance.** Trees may be removed by the City or utility provider in situations involving interruption of services provided by a utility only if pruning cannot solve utility service problems. Utility maintenance shall conform to a City-approved Utility Vegetation Management Plan.
3. **Commercial Nurseries or Tree Farms.** A nursery or tree farm owner may remove trees that are being grown to be sold as Christmas or landscape trees.

95.20 Public Tree - Pruning and Removal

1. **Public Tree Pruning, including the pruning of Street Trees, shall conform to the following:**

- a. **Permit Requirements.** Other than City crews, no person, directly or indirectly, shall prune, trim, modify, alter, or damage any Public Tree without first obtaining a Public Tree Pruning Permit as provided in this chapter, unless the activity falls under the Exempt Tree Removal Activities per KZC 95.15 or falls within the maintenance exceptions set forth in subsection (b) of this section.
- b. **Pruning.** It is the responsibility of the adjacent property owner to maintain Street Trees abutting their property, including watering and mulching. **Maintenance may include minor pruning of up to 1.5-inch diameter branches for sidewalk clearance. A Public Tree Pruning Permit is required to trim, modify, alter, or substantially prune Street Tree branches more than 1.5-inches in diameter.** The City reserves the right to have City or utility crews perform routine pruning and maintenance of Street Trees.
- c. **Pruning Standards.** The most recent version of the American National Standards Institute (ANSI) A300 Pruning Standards **apply**, or as outlined in a City-approved Utility Vegetation Management Plan. Tree topping is not allowed. **Pruning which results in the removal of more than 25% of the live crown is not an acceptable pruning practice.**

2. **Public Tree Removal. Other than City crews and City-authorized**

d contractors, no person, directly or indirectly, shall remove-any Public Tree without first obtaining a tree removal permit as provided in this chapter, unless the activity falls under the Tree Removal Exemptions per KZC 95.20. The City will not authorize any Public Tree removal by any private party unless the tree is determined to be a Hazard Tree or Nuisance Tree pursuant to KZC 95.25.

95.21 Private Property - Tree Pruning

To ensure that trees function well in their intended landscape, the City of Kirkland promotes the proper care of trees on private property to ensure trees reach their normal life expectancy and contribute optimal benefits to the community. For that reason, tree topping is prohibited and may be considered tree removal per KZC 95.10(14).

A permit is not required to prune trees on private property, however, pruning of the following categories of trees does require prior written approval from the City:

1. **Located within Natural Greenbelt Protective Easements and wetlands, streams, or their buffers; or**
2. **Grove trees preserved pursuant to KZC 95.51(3).**

Pruning shall conform to the most recent version of the ANSI A300 Pruning Standards.

95.23 Landmark Trees – Mitigation Requirements

Removal of Landmark Trees results in immediate loss of significant canopy and associated functions and values. Replacement of canopy loss and associated impacts to the City-wide 40 percent canopy goal requires a long-term strategy for replanting large trees in areas where they can successfully reach mature size.

1. No person, directly or indirectly, shall remove any Landmark tree from public or private property without first meeting the standards as provided in this chapter. In addition to the application requirements established in this chapter, the permit application shall include a Landmark Tree mitigation plan consistent with the standards in this section.
 - a. Landmark Trees on private properties pursuant to KZC 95.25 shall not be removed without first obtaining a tree removal permit as provided in this chapter.
 - b. Landmark Trees associated with a development permit pursuant to KZC 95.30 shall constitute a tree removal permit for purposes of this section.
2. The Planning Official shall review the tree removal permit or the associated development permit for compliance with the applicable retention standards of KZC 95.25 or 95.30.
3. If a Landmark Tree(s) is approved for removal based on compliance with KZC 95.25 and 95.30, the applicant shall install mitigation plantings on the subject property consistent with the following standards:
 - a. Mitigation ratio. For each landmark tree removed, the applicant shall plant three large species selected from the City’s Approved Landmark Tree Mitigation List. Mitigation trees shall be a minimum of 6-feet tall for a conifer or a minimum of 2-inch caliper for a deciduous or broad-leaf evergreen tree at the time of planting.
 - b. Location of mitigation trees. Mitigation trees shall be planted in a location on the subject property that will allow the trees to reach mature height and width without significant conflicts with existing or proposed improvements on the subject or adjoining properties.
 - c. Timing of Plantings and Inspection. Mitigation trees shall be installed within 12-months of the associated tree removal reviewed pursuant to KZC 95.25, or prior to final inspection of a development permit reviewed pursuant to KZC 95.30. Upon completion of the plantings, the applicant shall schedule an inspection by the Planning Official for consistency with the approved mitigation plan.
 - d. The applicant shall sign a 5-year maintenance agreement, on a form provided by the City and approved by the City Attorney, to maintain the mitigation trees for a period of 5 years from final inspection.
 - e. The mitigation tree plantings shall be in addition to tree planting otherwise required pursuant to Kirkland Zoning Code or Kirkland Municipal Code.
4. If a Landmark Tree(s) is obviously dead, dying, and/or hazardous, as evident in a photograph provided to the Planning Official, it will not be subject to a tree removal permit or mitigation requirements.
5. The applicant may elect to not plant mitigation trees on the subject property and pay a fee in lieu of planting. The fee in lieu shall be determined by the City based on the formula outlined in the most recent edition of the Guide for Plant Appraisal, published by the Council of Tree and Landscape Appraisers. The fee in lieu shall be multiplied by the number of required mitigation trees. All fee in lieu payments shall be paid into the City Forestry Account pursuant to KZC 95.57 and shall be used by the City to fund canopy restoration efforts elsewhere in the City.

✓ **Update:** New Landmark Tree section added to outline landmark tree regulations as it relates to both private properties and development-related activity. Provides a high-level explanation of landmark trees and associated regulations, with reference to relative code sections and mitigation standards. Additional references to Landmark Tree regulations can be found throughout in the applicable code section

✓ **Explanation:** Summarizes Landmark Tree removal and mitigation requirements for both private property and development-related projects, including:

- Tree Permit required for removal of any Landmark tree on private property
- 3:1 mitigation trees required for all Landmark tree removals
- Mitigation trees shall be selected from City Approved list of “large” tree species
- Requires 5-year maintenance agreement for mitigation trees
- Clarifies that obviously dead, dying, or hazardous Landmark Trees will be waived from permit and mitigation requirements
- Provides information on fee in lieu option

✓ **Result:** Provides a long-term program to help restore the City to 40% canopy cover through a mitigation strategy that would apply consistently to all landmark tree removals

95.25 Private Property - Tree Removal, Not Associated with Development Activity

Tree and vegetation removal in urban areas has resulted in the loss of beneficial functions provided by trees to the public. The majority of tree canopy within the City of Kirkland is on private property. The purpose of this section is to establish a process and standards to slow the loss of tree canopy on private property resulting from tree removal, contributing towards the City’s policy goals for a healthy, sustainable urban forest with at least 40 percent tree canopy cover. To slow the loss of canopy cover, the City of Kirkland allows the limited removal of regulated trees on private property.

1. Tree Removal Allowances. Any private property owner of developed property may remove up to a specified number of regulated trees based on property size shown in Table 95.25.1 within a 12-month period, without having to apply for a tree removal permit; provided that:

- a. The tree is not a Landmark tree pursuant to KZC 95.10(17)(d) and 95.23;

✓ **Update:** Landmark Trees do not qualify for the 2 per 12-month allowance without first submitting a tree removal permit

✓ **Explanation:** Requiring a tree removal permit for Landmark Trees ensure mitigation tree standards are met

✓ **Result:** Offsets canopy loss from Landmark Tree removals by ensuring mitigation trees are installed through permitting process

- b. The tree removal does not result in less than the minimum number of regulated trees to remain on the subject property shown in Table 95.25.1. Trees that qualify as hazard or nuisance trees may be permitted for removal pursuant to subsection (6) of this section with approval of a tree removal permit and tree replacements based on the size of the removed trees shown in Table 95.25.2 below;

✓ **Update:** Increase tree removal allowances according to property size; tree replacement standards increased based on the size of removed trees when a permit is required

✓ **Explanation:** Properties are required to have either 2, 3, or 4 trees remaining on the lot to qualify for tree removal allowances. See Tables 95.25.1 and 95.25.2 below.

✓ **Result:** Allows for more equitable tree removal for large properties. The overall result is greater tree removal, however, mitigation standards were increased therefore canopy loss will be partially offset in the long-term

- c. There is no active application for development activity for the subject property. Development activity within 12- or 24-months following tree removal may be subject to the limitations of subsection (4) of this section;

✓ **Update:** Development wait-period added following removal of the most recent regulated or Landmark Tree

✓ **Explanation:** Regulated tree removal wait period: 12-months; landmark tree removal wait period: 24-months. See KZC 95.25(4)

✓ **Result:** Prevents preemptive tree removals prior to development that would otherwise be protected pursuant to KZC 95.30

- d. All of the additional standards for tree removal and tree removal permits as described in subsections (3) through (9) of this section are met.

Table 95.25.1 Regulated Tree Removal Allowances, No Permit Required

Property Size	Maximum Allowance for Tree Removals per 12 Months	Minimum Number of Regulated Trees to Remain on Subject Property
Up to 10,000 sq. ft.	2	2
10,001 to 20,000 sq. ft.	3	3
20,001 sq. ft. or greater	4	4

Table 95.25.2 Tree Replacement Standards for Property Owner Removal of the Last Remaining Trees

Diameter of Removed Tree	Number of Replacement Trees Required
6 to 15 inches DBH	1
16 to 26 inches DBH	2
26 inches DBH or greater	3 (see KZC 95.23)

For example: A property owner of a 15,000 square foot lot with three (3) existing trees would like to remove a 25-inch DBH maple tree due to its meeting the hazard tree criteria. Because the maple tree is one of the minimum number of trees required on that size property, tree replacements are required. Because of the size of the removed tree, two (2) replacement trees would be required.

2. **Tree Removal Allowance Notification Form.** The Planning and Building Department shall make available a tree removal notification form. The tree removal notification form may be used by property owners to request review by the Planning and Building Department for compliance with applicable City regulations.
3. **Tree Removal Permit Required.** No person, directly or indirectly, shall remove any regulated tree from private property without first obtaining a tree removal permit as provided in this chapter, unless the activity falls under the exempted tree removal activities per KZC 95.15 or is within the tree removal allowances per subsection one (1) of this section. If any of the below conditions apply, trees must qualify as hazard or nuisance to be permitted for removal:

A Tree Removal Permit is required if:

- a. The property owner is requesting to remove trees located within:
 - 1) A public park or adjacent City Right-of-Way pursuant to KZC 95.20;
 - 2) Wetlands, streams and associated buffers. See Chapter 90 KZC for additional permit requirements;
 - 3) High landslide susceptibility areas. See Chapter 85 KZC for additional permit requirements;
 - 4) Properties in the Holmes Point Overlay Zone. See Chapter 70 KZC for additional permit requirements; or
 - 5) Shoreline setbacks. See Chapter 83 KZC for additional permit requirements.
- b. The trees were required to be retained, planted or preserved as a grove as a condition of previous development activity;
- c. The trees were required to be retained or planted pursuant to KZC 95.40 through 95.50
- d. The trees are hedge trees and removals are proposed in excess of the Maximum Allowance for Tree Removals per 12 Months established in Table 95.25.1;
- e. The trees are protected under a voluntary Tree Preservation Covenant; and

Prior to approving a tree removal permit, the Planning Official shall find that all of the additional standards for tree removal and tree removal permits as described in sections (4) through (9) are met.

<ul style="list-style-type: none"> ✓ Update: Information in this section was reorganized and consolidated from existing code sections ✓ Explanation: Providing all conditions that require permits in one location allows for ease of use ✓ Result: No change – permit requirements are the same as existing code; revised to improve clarity

4. **Tree Removal on Private Property Prior to Development Permit Submittal.** With the exception of approved removals of hazard trees or nuisance trees, the City will not accept any development permit application with a pending tree removal permit or tree removal notification. In addition, the City will not accept a development permit for detached dwelling units, cottages, carriage units, two/three-unit homes short plats or subdivisions for a property for a period of 12-months following the most recent removal of a regulated tree or a period of 24-months following the most recent removal of a Landmark Tree.

<ul style="list-style-type: none"> ✓ Update: Development wait-period added following removal of the most recent regulated or Landmark Tree ✓ Explanation: Regulated tree removal wait period: 12-months; Landmark Tree removal wait period: 24-months ✓ Result: Prevents preemptive tree removals prior to development that would otherwise be protected pursuant to KZC 95.30
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5. **Removal of Hazard or Nuisance Trees.** Removal of hazard or nuisance trees, including hedge trees, does not count toward the tree removal allowances if the nuisance or hazard is evident in a photograph or supported by a Tree Risk Assessment report prepared by a Qualified Professional Arborist and approved by the City. Tree Risk Assessment reports shall follow the method for developing a tree risk rating set forth in the most current edition of the ISA Tree Risk Assessment (TRAQ) Manual and include the following:
 - a. Explanation of how the tree or tree parts meet the definition of a hazard pursuant to KZC 95.10(15)(b); and
 - b. Overall tree risk rating with correlating mitigation measures as follows:
 - 1) If a potential target does not exist, applicants should consider routine pruning and maintenance to abate the tree issue;
 - 2) If a tree/tree part is found to have a Low or Moderate Overall Risk Rating, the Planning Official may approve mitigation measures to reduce the risk; or
 - 3) If a tree/tree part is found to have a High or Extreme Overall Risk Rating and mitigation of the risk through pruning or moving potential targets is not feasible, the Planning Official shall approve the removal of the tree as a hazard tree.

The City may order diseased trees removed from private property as hazard trees to prevent the spread of a disease/pest that would cause catastrophic decline in tree health and failure.

- ✓ **Update:** Terminology for risk assessments revised to reflect most current version of the ISA Tree Risk Assessment Manual
- ✓ **Explanation:** Clarifies that hazard trees shall be rated as High or Extreme overall risk to meet the City's criteria for a hazard tree
- ✓ **Result:** Provides more predictability of tree code for residents; eliminates unnecessary removal of non-hazardous trees

6. Tree Removal Permit Application Form. The City shall provide a tree removal permit application form. Property owners required by this chapter to obtain a tree removal permit shall submit a completed permit application for City review for compliance with applicable City regulations. The tree removal permit application shall require, at a minimum, submittal of the following:
- a. A site plan, map, or aerial photograph showing the approximate location of all regulated trees on the subject property, their DBH, and their species, along with the location of structures, driveways, access ways, and easements on the subject property. Property owners requesting to remove adjacent street trees must indicate the location of the hazard or nuisance tree in the right-of-way.
 - b. For required replacement trees, a planting plan showing the location, size, and species of each replacement tree to be planted on the subject property, in accordance with the tree replacement requirements set forth in subsection (7) of this section.
7. Tree Replacement Requirements. To mitigate the consequences of tree removal unrelated to development activity, for tree removal permits the City requires the planting of replacement trees in suitable locations appropriate to the subject property. Replacement trees shall be a minimum 6-foot tall conifer or a minimum 2-inch caliper deciduous or broad-leaf evergreen tree. Trees planted to form a clipped or sheared hedge or Thuja/Arborvitae (or other slow-growing conifers as listed by the Planning Department) shall not count towards tree replacement requirements.
- a. Tree removal and replacement standards for tree removal permits pursuant to subsection (3) of this section are subject to the following:

Table 95.25.3 Tree Replacement Standards

Location of Tree Removal	Tree Replacement Standards
Public trees in parks or City Right-of-Way per KZC 95.21(2)	Minimum 1:1 tree replacement
Significantly wooded properties 25,000 sq. ft. or greater	Determined in approved Forest Stewardship Plan
Hedge Trees on Private Property	1:1 tree replacement ¹
Holmes Point Overlay Zone - species selection and timing of installation shall be approved by the Planning Official	1:1 tree replacement with native trees. See KZC Chapter 70
Shoreline setbacks	See KZC Chapter 83 for tree replacement standards
Streams, wetlands and associated buffers – the Planning Official shall determine the required number of replacement trees	1:1 to 3:1 tree replacement with native trees. See KZC Chapter 90
Required landscaping pursuant to KZC 95.40 through 95.50	Replant to the required landscaping standards of KZC 95.40 through 95.50

Notes:

1. Planning Official may allow reduced replanting requirements for hedge trees based on available space to provide a sustainable planting

- ✓ **Update:** New table added to clearly outline mitigation tree requirements for properties with special conditions
- ✓ **Explanation:** Information in table lists existing mitigation tree standards outlined in KZC Chapters 70, 83, and 90
- ✓ **Result:** Provides clarity in tree code and makes mitigation tree standards readily available in one section

8. Tree Removal Permit Decision and Appeals.
- a. The City shall review each tree removal permit application for consistency with the applicable regulations and other standards adopted by reference. Tree removal permits shall be reviewed within 21 calendar days and either approve, approve with conditions or modifications, deny, or request additional information. The Planning Official shall review required mitigation trees and has the discretion to modify or waive applicable standards when the subject property has significant canopy that precludes successful mitigation planting or similar unique conditions. Any decision to deny the application shall be in writing along with the reasons for the denial and the appeal process. The decision of the Planning Official is appealable using the applicable appeal provisions of Chapter 145 KZC.
 - b. Time Limit. Tree removal by felling shall be completed within one (1) year from the date of permit approval or the permit is void. Approved tree removals shall not be combined or accumulated.
9. Forest Stewardship Plan. To support sustainable, stewardship-focused forest management of developed, significantly wooded sites that are at least 25,000 square feet in size, a Forest Stewardship Plan may be submitted where tree removal exceeds the allowances in KZC 95.25. The purpose of a forest stewardship plan is to manage objectives in order to improve the long-term health and condition of existing trees and vegetation. Applicants for a Forest Stewardship Plan are encouraged to seek the technical assistance, incentives and resources available through local and state agencies that promote forestland best management practices. Property owners shall submit a completed permit application for City review for compliance with applicable City regulations.
- a. A Forest Stewardship Plan shall be developed by a Qualified Professional Arborist and include the following:
 - 1) A site plan depicting the location of all existing regulated trees with a numbering system of the trees (with corresponding tags on trees in the field). A survey identifying tree locations is not required. The site plan or additional documentation shall include:
 - a) The DBH, species, and condition of each regulated tree; and
 - b) Identification of trees proposed to be removed, the reasons for their removal and a description of low impact removal techniques pursuant to subsection (b)(4) of this section.
 - 2) A reforestation plan that addresses the installation and establishment of trees and vegetation, including tree location, size, species; and
 - 3) A prescribed maintenance plan that ensures perpetuity of the wooded areas, with the sequence of tree removals and reforestation activities specified over a minimum five (5) year timeline.
 - b. The following Forest Stewardship Plan standards shall apply:
 - 1) Trees to remain should be dominant or co-dominant in the stand, healthy and windfirm;
 - 2) Unless otherwise permitted by this chapter, there shall be no removal of:
 - a) Landmark Trees or preserved groves;
 - b) Trees located in critical areas and associated buffers;

- c) **Trees located in high landslide susceptibility areas; and**
 - d) **Trees that would cause trees on adjacent properties to become hazardous.**
- 3) The size of planted trees for reforestation shall be a minimum of **six (6) feet tall for a conifer and 2-inch caliper for deciduous or broad-leaf evergreen tree, unless approved otherwise by the City;**
 - 4) Logging operations shall be conducted to expose the smallest practical area of soil to erosion for the least possible time. To control erosion, native shrubs, ground cover, and stumps shall be retained where feasible. Where not feasible, appropriate erosion control measures to be approved by the City shall be implemented;
 - 5) Removal of debris shall be done pursuant to Kirkland Fire Department standards; and
 - 6) **The Planning Official may require a performance security pursuant to KZC 175 in order to ensure that the reforestation requirements of the approved Forest Stewardship Plan are met.**

- ✓ **Update:** Forest Management Plan changed to Forest Stewardship Plan; minimum lot size to qualify for this plan reduced from 35,000 to 25,000 sq. ft.; requirement for maintenance plan ensuring the success of the plan was added
- ✓ **Explanation:** Allows for larger properties to manage trees on a greater scale
- ✓ **Result:** Supports traditional forest stand management for selective thinning/replanting on wooded lots >25,000 sq. ft

95.30 PLACEHOLDER Tree Retention Associated with Development Activity

95.32 Tree and Soil Protection During Development Activity

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 for tree protection as follows:

1. Placing Materials near Trees. No person may conduct any activity within the **TPZ** of any tree designated to remain, including, but not limited to, operating or parking equipment, placing solvents, storing building material or stockpiling any materials, or dumping concrete washout or other chemicals. During construction, no person shall attach any object to any tree designated for protection.
2. **Tree Protection Fence.** Before development, land clearing, filling, or any land surface modifications, the applicant shall:
 - a. Erect and maintain readily visible temporary protective tree fencing at the approved **TPZ** which completely surrounds the protected area of all retained trees, groups of trees, vegetation and native soil. Fences shall be constructed of chain link and be at least six (6) feet high, unless another type of fencing is authorized by the Planning Official.
 - b. Install highly visible signs spaced no further than 15 feet along the entirety of the **Tree Protection Fence**. Said signage must be approved by the Planning Official and shall state at a minimum "Tree and Soil Protection Area, Entrance Prohibited" and provide the City phone number for code enforcement to report violations.
 - c. **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.**
 - d. Prohibit excavation or compaction of soil or other potentially damaging activities within the fence; provided, that the Planning Official may allow such activities approved by a qualified professional and under the supervision of a qualified professional retained and paid for by the applicant.
 - e. **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 can demonstrate, through non-injurious methods such as pneumatic root excavations, that there are no roots within the Inner Critical Root Zone.**
 - f. Maintain the Tree Protection Fence in its approved location for the duration of the project until the Planning Official authorizes its removal.
 - g. Ensure that any approved landscaping done in the protected zone subsequent to the removal of the barriers shall be accomplished with machinery from outside the protected zone or by hand.
 - h. In addition to the above, the Planning Official may require the following:
 - 1) If equipment is authorized to operate within the **CRZ**, the soil and CRZ of a tree must be covered with mulch to a depth of at least six (6) inches or with plywood, steel plates or similar material in order to protect roots and soil from damage caused by heavy equipment.
 - 2) Minimize root damage by hand-excavating a 2-foot-deep trench, at the edge of the CRZ, to cleanly sever the roots of trees to be retained. Never rip or shred roots with heavy equipment.
 - 3) Corrective pruning performed on protected trees in order to avoid damage from machinery or building activity.
 - 4) Maintenance of trees throughout construction period by watering and fertilizing.
3. **Grade.**
 - a. The grade shall not be elevated or reduced within the **CRZ** of trees to be preserved without the Planning Official's authorization based on recommendations from a qualified professional in compliance with **ANSI A300 Part 5 Standard Practices for the Management of Trees and Shrubs During Site Planning, Site Development and Construction.**
 - b. If the grade adjacent to a preserved tree is raised such that it could slough or erode into the tree's **CRZ**, it shall be permanently stabilized to prevent soil erosion and suffocation of the roots.
 - c. The applicant shall not install an impervious surface within the **CRZ** of any tree to be retained without the authorization of the Planning Official. The Planning Official may require specific construction methods and/or use of aeration devices to ensure the tree's survival and to minimize the potential for root-induced damage to the impervious surface.
 - d. To the greatest extent practical, utility trenches shall be located outside of the **CRZ** of trees to be retained. The Planning Official may require that utilities be tunneled under the roots of trees to be retained if the Planning Official determines that trenching would significantly reduce the chances of the tree's survival.
 - e. Trees and other vegetation to be retained shall be protected from erosion and sedimentation. Clearing operations shall be conducted so as to expose the smallest practical area of soil to erosion for the least possible time. To control erosion, it is encouraged that shrubs, ground cover and stumps be maintained on the individual lots, where feasible.
4. **Directional Felling.** Directional felling of trees shall be used to avoid damage to trees designated for retention.
5. **Additional Requirements.** The Planning Official may require additional tree protection measures that are consistent with accepted urban forestry industry practices, including maintenance pursuant to **KZC 95.51**.

95.34 PLACEHOLDER Tree Replacement Standards Related to Development Activity

95.40 Required Landscaping Based on Zoning District

1. User Guide. Chapters 15 through 56 KZC containing the use zone or development standards tables assign a landscaping category to each use in each zone. This category is either "A," "B," "C," "D," or "E." If you do not know which landscaping category applies to the subject property, you should consult the appropriate use zone or development standards tables.

Requirements pertaining to each landscaping category are located throughout this chapter, except that Landscaping Category E is not subject to this section.

Landscaping Categories A, B, C, D, and E may be subject to additional related requirements in the following other chapters:

- a. Various use zone charts or development standards tables, in Chapters 15 through 56 KZC, establish additional or special buffering requirements for some uses in some zones.
 - d. Chapter 110 KZC and Chapter 19.36 KMC address vegetation within rights-of-way, except for the I-405 and SR-520 rights-of-way, and the Cross Kirkland Corridor railbanked rail corridor or the Eastside Rail Corridor.
 - e. KZC 115.135, Sight Distance at Intersections, which may limit the placement of landscaping in some areas.
 - f. Chapter 22 KMC addresses trees in subdivisions.
2. Use of Significant Existing Vegetation.
- a. General. The applicant shall apply subsection KZC 95.30, Tree Retention Plan Procedure, to retain existing native trees, vegetation and soil in areas subject to the landscaping standards of this section. The Planning Official shall give substantial weight to the retained native trees and vegetation when determining the applicant's compliance with this section.
 - b. Supplement. The City may require the applicant to plant trees, shrubs, and groundcover according to the requirements of this section to supplement the existing vegetation in order to provide a buffer as effective as the required buffer.
 - c. Protection Techniques. The applicant shall use the protection techniques described in KZC 95.32 to ensure the protection of significant existing vegetation and soil.
3. Landscape Plan Required. In addition to the Tree Retention Plan required pursuant to KZC 95.30, application materials shall clearly depict the quantity, location, species, and size of plant materials proposed to comply with the requirements of this section and shall address the plant installation and maintenance requirements set forth in KZC 95.50 and 95.51. Plant materials shall be identified with both their scientific and common names. Any required irrigation system must also be shown.

95.41 Supplemental Plantings

1. General. The applicant shall provide the supplemental landscaping specified in subsection (2) of this section in any area of the subject property that:
- a. Is not covered with a building, vehicle circulation area or other improvement; and
 - b. Is not in an area to be planted with required landscaping; and
 - c. Is not committed to and being used for some specific purpose.
2. Standards. The applicant shall provide the following at a minimum:
- a. Living plant material which will cover 80 percent of the area to be landscaped within two (2) years. If the material to be used does not spread over time, the applicant shall re-plant the entire area involved immediately. Any area that will not be covered with living plant material must be covered with nonliving groundcover, i.e.: mulch. Preference is given to using native plant species. See Kirkland Native Tree/Plant Lists.
 - b. One (1) tree for each 1,000 square feet of area to be landscaped. At the time of planting, deciduous trees must be at least two (2) inches in caliper and coniferous trees must be at least five (5) feet in height.
 - c. If a development requires approval through Process I, IIA or IIB as described in Chapters 145, 150 and 152 KZC, respectively, the City may require additional vegetation to be planted along a building facade if:
 - 1) The building facade is more than 25 feet high or more than 50 feet long; or
 - 2) Additional landscaping is necessary to provide a visual break in the facade.
 - d. In RHBD, varieties of rose shrubs or ground cover along with other plant materials shall be included in the on-site landscaping.
 - e. If development is subject to Design Review as described in Chapter 142 KZC, the City will review plant choice and specific plant location as part of the Design Review approval. The City may also require or permit modification to the required plant size as part of Design Review approval.

95.42 Land Use Buffer Requirements

The applicant shall comply with the provisions specified in the following chart and with all other applicable provisions of this chapter. Land use buffer requirements may apply to the subject property, depending on what permitted use exists on the adjoining property or, if no permitted use exists, depending on the zone that the adjoining property is in.

ADJOINING PROPERTY	*Public park or low density residential use or if no permitted use exists on the adjoining property then a low density zone.	Medium or high density residential use or if no permitted use exists on the adjoining property then a medium density or high density zone.	Institutional or office use or if no permitted use exists on the adjoining property then an institutional or office zone.	A commercial use or an industrial use or if no permitted use exists on the adjoining property then a commercial or industrial zone.
A	Must comply with subsection (1) (Buffering Standard 1)	Must comply with subsection (1) (Buffering Standard 1)	Must comply with subsection (2) (Buffering Standard 2)	
B	Must comply with subsection (1) (Buffering Standard 1)	Must comply with subsection (1) (Buffering Standard 1)		
C	Must comply with subsection (1) (Buffering Standard 1)	Must comply with subsection (2) (Buffering Standard 2)		
D	Must comply with subsection (2) (Buffering Standard 2)			
E				
Footnotes:	*If the adjoining property is zoned Central Business District, Juanita Business District, North Rose Hill Business District, Rose Hill Business District, Finn Hill Neighborhood Center, Houghton/Everest Neighborhood Center, Business District Core or is located in TL 5, this section KZC 95.42 does not apply.			

This chart establishes which buffering standard applies in a particular case. The following subsections establish the specific requirement for each standard:

1. For standard 1, the applicant shall provide a 15-foot-wide landscaped strip with a 6-foot-high solid screening fence or wall. Except for public utilities, the fence or wall must be placed on the outside edge of the land use buffer or on the property line when adjacent to private property. For public utilities, the fence or wall may be placed either on the outside or inside edge of the landscaping strip. A fence or wall is not required when the land use buffer is adjacent and parallel to a public right-of-way that is improved for vehicular use. See KZC 115.40 for additional fence standards. The land use buffer must be planted as follows:
 - a. Trees planted at the rate of one (1) tree per 20 linear feet of land use buffer, with deciduous trees of two and one-half (2-1/2) inch caliper, minimum, and/or coniferous trees eight (8) feet in height, minimum. At least 70 percent of trees shall be evergreen. The trees shall be distributed evenly throughout the buffer, spaced no more than 20 feet apart on center.
 - b. Large shrubs or a mix of shrubs planted to attain coverage of at least 60 percent of the land use buffer area within two (2) years, planted at the following sizes and spacing, depending on type:
 - 1) Low shrub – (mature size under three (3) feet tall), 1- or 2-gallon pot or balled and burlapped equivalent;
 - 2) Medium shrub – (mature size from three (3) to six (6) feet tall), 2- or 3-gallon pot or balled and burlapped equivalent;
 - 3) Large shrub – (mature size over six (6) feet tall), 5-gallon pot or balled and burlapped equivalent.
 - c. Living ground covers planted from either 4-inch pot with 12-inch spacing or 1-gallon pot with 18-inch spacing to cover within two (2) years 60 percent of the land use buffer not needed for viability of the shrubs or trees.
2. For standard 2, the applicant shall provide a 5-foot-wide landscaped strip with a 6-foot-high solid screening fence or wall. Except for public utilities, the fence or wall must be placed on the outside edge of the land use buffer or on the property line when adjacent to private property. For public utilities, the fence or wall may be placed either on the outside or inside edge of the landscaping strip. A fence or wall is not required when the land use buffer is adjacent and parallel to a public right-of-way that is improved for vehicular use. See KZC 115.40 for additional fence standards. The landscaped strip must be planted as follows:
 - a. One (1) row of trees planted no more than 10 feet apart on center along the entire length of the buffer, with deciduous trees of 2-inch caliper, minimum, and/or coniferous trees at least six (6) feet in height, minimum. The spacing may be increased to 15 feet to accommodate larger species and avoid long-term crowding. At least 50 percent of the required trees shall be evergreen.
 - b. Living ground covers planted from either 4-inch pot with 12-inch spacing or 1-gallon pot with 18-inch spacing to cover within two (2) years 60 percent of the land use buffer not needed for viability of the trees.
3. Plant Standards. All plant materials used shall meet the most recent American Association of Nurserymen Standards for nursery stock: ANSI Z60.1.
4. Location of the Land Use Buffer. The applicant shall provide the required buffer along the entire common border between the subject property and the adjoining property.
5. Multiple Buffering Requirement. If the subject property borders more than one (1) adjoining property along the same property line, the applicant shall provide a gradual transition between different land use buffers. This transition must occur totally within the area which has the less stringent buffering requirement. The specific design of the transition must be approved by the City.
6. Adjoining Property Containing Several Uses. If the adjoining property contains several permitted uses, the applicant may provide the least stringent land use buffer required for any of these uses.
7. Subject Property Containing Several Uses. If the subject property contains more than one (1) use, the applicant shall comply with the land use buffering requirement that pertains to the use within the most stringent landscaping category that abuts the property to be buffered.
8. Subject Property Containing School. If the subject property is occupied by a school, land use buffers are not required along property lines adjacent to a street.
9. Encroachment into Land Use Buffer. Typical incidental extensions of structures such as chimneys, bay windows, greenhouse windows, cornices, eaves, awnings, and canopies may be permitted in land use buffers as set forth in KZC 115.115(3)(d); provided, that:
 - a. Buffer planting standards are met; and
 - b. Required plantings will be able to attain full size and form typical to their species.

95.43 Outdoor Use, Activity, and Storage

Outdoor use, activity, and storage uses (KZC 115.105(2)) must comply with required land use buffers for the primary use, except that the following outdoor uses and activities, when located in commercial or industrial zones, are exempt from KZC 115.105(2)(c)(1) and (2)(c)(2) as stated below:

1. That portion of an outdoor use, activity, or storage area which abuts another outdoor use, activity, or storage area which is located on property zoned for commercial or industrial use.
2. Outdoor use, activity, and storage areas which are located adjacent to a fence or structure which is a minimum of six (6) feet above finished grade, and do not extend outward from the fence or structure more than five (5) feet; provided, that the total horizontal dimensions of these areas shall not exceed 50 percent of the length of the facade or fence (see Plate 11).
3. If there is an improved path or sidewalk in front of the outdoor storage area, the outdoor use, activity or storage area may extend beyond five (5) feet if a clearly defined walking path at least three (3) feet in width is maintained and there is adequate pedestrian access to and from the primary use. The total horizontal dimension of these areas shall not exceed 50 percent of the length of the facade of the structure or fence (see Plate 11).
4. Outdoor dining areas.
5. That portion of an outdoor display of vehicles for sale or lease which is adjacent to a public right-of-way that is improved for vehicular use; provided, that it meets the buffering standards for driving and parking areas in KZC 95.45(1); and provided further, that the exemptions of KZC 95.45(2) do not apply unless it is fully enclosed within or under a building, or is on top of a building and is at least one (1) story above finished grade.
6. Outdoor Christmas tree lots if this use will not exceed 30 days, and outdoor amusement rides, carnivals and circuses, and parking lot sales which are ancillary to the indoor sale of the same goods and services, if these uses will not exceed seven (7) days.

95.44 PLACEHOLDER Internal Parking Lot Landscaping Requirements

95.45 PLACEHOLDER Perimeter Landscape Buffering for Driving and Parking Areas

95.46 Modifications to Required Landscaping and Buffer Standards

1. Modification to Land Use Buffer Requirements. The applicant may request a modification of the requirements of the buffering standards in KZC 95.42. The Planning Official may approve a modification if:
 - a. The owner of the adjoining property agrees to this in writing; and
 - b. The existing topography or other characteristics of the subject property or the adjoining property, or the distance of development from the neighboring property decreases or eliminates the need for buffering; or
 - c. The modification will be more beneficial to the adjoining property than the required buffer by causing less impairment of view or sunlight; or
 - d. The Planning Official determines that it is reasonable to anticipate that the adjoining property will be redeveloped in the foreseeable future to a use that would require no, or a less intensive, buffer; or

- e. The location of pre-existing improvements on the adjoining site eliminates the need or benefit of the required landscape buffer.
2. Modifications to General Landscaping Requirements.
- a. Authority to Grant and Duration. If the proposed development of the subject property requires approval through Design Review or Process I, IIA, or IIB, described in Chapters 142, 145, 150, and 152 KZC, respectively, a request for a modification will be considered as part of that process under the provisions of this section. The City must find that the applicant meets the applicable criteria listed in subsections (2)(b) and (2)(c) of this section. If granted under Design Review or Process I, IIA, or IIB, the modification is binding on the City for all development permits issued for that development under the building code within five (5) years of the granting of the modification.
If the above does not apply, the Planning Official may grant a modification in writing under the provisions of this section.
 - b. Internal Parking Lot Landscaping Modifications. For a modification to the internal parking lot landscaping requirements in KZC 95.44, the landscape requirements may be modified if:
 - 1) The modification will produce a landscaping design in the parking area comparable or superior to that which would result from adherence to the adopted standard; or
 - 2) The modification will result in increased retention of significant existing vegetation; or
 - 3) The purpose of the modification is to accommodate low impact development techniques as approved by the Planning Official.
 - c. Perimeter parking lot and driveway landscaping. For a modification to the perimeter landscaping for parking lots and driveways, the buffering requirements for parking areas and driveways may be modified if:
 - 1) The existing topography of or adjacent to the subject property decreases or eliminates the need for visual screening; or
 - 2) The modification will be of more benefit to the adjoining property by causing less impairment of view or sunlight; or
 - 3) The modification will provide a visual screen that is comparable or superior to the buffer required by KZC 95.45; or
 - 4) The modification eliminates the portion of the buffer that would divide a shared parking area serving two (2) or more adjacent uses but provides the buffer around the perimeter of the shared parking area.

95.47 Nonconforming Landscaping and Buffers

1. The landscaping requirements of KZC 95.40, Required Landscaping Based on Zoning District, KZC 95.43 Outdoor Use, Activity and Storage, KZC 95.44, Internal Parking Lot Landscaping, and KZC 95.45, Perimeter Landscape Buffering for Driving and Parking Areas, must be brought into conformance as much as is feasible, based on available land area, in either of the following situations:
 - a. An increase of at least 10 percent in gross floor area of any structure; or
 - b. An alteration to any structure, the cost of which exceeds 50 percent of the replacement cost of the structure.
2. Land use buffers must be brought into conformance with KZC 95.42 in either of the following situations:
 - a. An increase in gross floor area of any structure (the requirement to provide conforming buffers applies only where new gross floor area impacts adjoining property); or
 - b. A change in use on the subject property and the new use requires larger buffers than the former use.

95.50 Installation Standards for Required Plantings

All required trees, landscaping and soil shall be installed according to sound horticultural practices in a manner designed to encourage quick establishment and healthy plant growth. All required landscaping shall be installed in the ground and not in above-ground containers, except for landscaping required on the top floor of a structure.

When an applicant proposes to locate a subterranean structure under required landscaping that appears to be at grade, the applicant will: (1) provide site-specific documentation prepared by a qualified expert to establish that the design will adequately support the mature size of specified trees and other vegetation species; and (2) enter into an agreement with the City, in a form acceptable to the City Attorney, indemnifying the City from any damage resulting from development activity on the subject property which is related to the physical condition of the property. The applicant shall record this agreement with the King County Recorder's Office.

1. Compliance. It is the applicant's responsibility to show that the proposed landscaping complies with the regulations of this chapter.
2. Timing. All landscaping shall be installed prior to the issuance of a certificate of occupancy, except that the installation of any required tree or landscaping may be deferred during the summer months to the next planting season, but never for more than six (6) months. **Trees should be planted in the fall, winter or early spring, between October and April, or must be irrigated.**

Deferred installation shall be secured with a performance bond pursuant to Chapter 175 KZC prior to the issuance of a certificate of occupancy.

3. Grading. Berms shall not exceed a slope of two (2) horizontal feet to one (1) vertical foot (2:1).
4. Soil Specifications. Soils in planting areas shall have soil quality equivalent to Washington State Department of Ecology BMP T5.13. The soil quality in any landscape area shall comply with the soil quality requirements of the Public Works Pre-Approved Plans. See subsection (9) of this section for mulch requirements.
5. Plant Selection.
 - a. Plant selection shall be consistent with the appropriate Kirkland Plant Lists, which is **shown on the Planning and Building Department webpage and** available in the Planning and Building Department. **Species diversity is encouraged by planting species other than those listed, with Planning Official approval.**
 - b. Plants shall be selected and sited to produce a hardy and drought-resistant landscape area. Selection shall consider soil type and depth, the amount of maintenance required, spacing, exposure to sun and wind, the slope and contours of the site, and compatibility with existing native vegetation preserved on the site. Preservation of existing vegetation is strongly encouraged.
 - c. Plants listed in the Kirkland Prohibited Plant List **shall not be planted**. Additionally, there are other plants that may not be used if identified in the Kirkland Plant List as potentially damaging to sidewalks, roads, underground utilities, drainage improvements, foundations, or when not provided with enough growing space.
 - d. All plants shall conform to American Association of Nurserymen (AAN) grades and standards as published in the "American Standard for Nursery Stock" manual.
 - e. Plants shall meet the minimum size standards established in other sections of the KZC.
 - f. Multiple-stemmed trees may be permitted as an option to single-stemmed trees for required landscaping provided that such multiple-stemmed trees are at least 10 feet in height and that they are approved by the Planning Official prior to installation.

6. **Plant Location. Newly-planted replacement trees should generally be planted at least 3 feet away from property lines. Large trees shall not be planted under or within proximity to overhead utilities. Newly-planted replacement trees may be checked for the approved locations as a final inspection procedure on development sites. Replacement trees must be planted in a manner that allows the tree species to mature to its full height and width. Trees shall be located with the appropriate spacing from buildings and other trees, soil volume should not be restricted for the mature size of the tree and soil should be amended in accordance with the storm water code. Trees shall be installed so that the root flare is at or slightly above the finished ground elevation in order to promote a healthy root structure and identify any girdling roots at the time of planting**

7. Fertilization. All fertilizer applications to turf or trees and shrubs shall follow Washington State University, National Arborist Association or other accepted agronomic or horticultural standards. **Fertilizer may include soil drenches to increase fungal biota and chemical root growth stimulators.**
8. Irrigation. The intent of this standard is to ensure that plants will survive the critical establishment period when they are most vulnerable due to lack of watering. All required plantings must provide an irrigation system, using either Option 1, 2, or 3 or a combination of those options. **Selected irrigation option shall be specified on the Landscape or Tree Plan.** For each option irrigation shall be designed to conserve water by using the best practical management techniques available. These techniques may include, but not be limited to: drip irrigation to minimize evaporation loss, moisture sensors to prevent irrigation during rainy periods, automatic controllers to ensure proper duration of watering, sprinkler head selection and spacing designed to minimize overspray, and separate zones for turf and shrubs and for full sun exposure and shady areas to meet watering needs of different sections of the landscape.

Exceptions, as approved by the Planning Official, to the irrigation requirement may be approved for xeriscape (i.e., low water usage plantings), plantings approved for low impact development techniques, established indigenous plant material, or landscapes where natural appearance is acceptable or desirable to the City. However, those exceptions will require temporary irrigation (Option 2 and/or 3) until established.

 - a. Option 1. A permanent built-in irrigation system with an automatic controller designed and certified by a licensed landscape architect as part of the landscape plan.
 - b. Option 2. An irrigation system designed and certified by a licensed landscape architect as part of the landscape plan, which provides sufficient water to ensure that the plants will become established. The system does not have to be permanent if the plants chosen can survive adequately on their own, once established.
 - c. Option 3. Irrigation by hand, **which includes the use of water bags.** If the applicant chooses this option, an inspection will be required one (1) year after final inspection to ensure that the landscaping has become established.
9. Drainage. All landscapes shall have adequate drainage, either through natural percolation or through an installed drainage system. A percolation rate of one-half (1/2) inch of water per hour is acceptable.
10. Mulch.
 - a. Required plantings, except turf or areas of established ground cover, shall be covered with two (2) inches or more of organic mulch to minimize evaporation and runoff. Mulch shall consist of materials such as yard waste, sawdust, and/or manure that are fully composted.
 - b. All mulches used in planter beds shall be kept at least six (6) inches away from the trunks of shrubs and trees.
11. Protection. All required landscaped areas, particularly trees and shrubs, must be protected from potential damage by adjacent uses and development, including parking and storage areas. Protective devices such as bollards, wheel stops, trunk guards, root guards, etc., may be required in some situations.
12. **Final Inspection. These requirements shall be completed prior to final inspection.**

95.51 PLACEHOLDER Tree and Landscape Maintenance Requirements

95.52 Prohibited Vegetation

Plants listed in the Kirkland Prohibited Plant List shall not be planted in the City or required to be retained.

For landscaping not required under this chapter, this prohibition shall become effective on February 14, 2008. The City may require removal of prohibited vegetation if installed after this date. Residents and property owners are encouraged to remove pre-existing prohibited vegetation whenever practicable.

95.55 PLACEHOLDER Enforcement and Penalties

95.57 City Forestry Account

1. Funding Sources. All civil penalties received under this chapter and all money received pursuant to KZC 95.34(6) shall be used for the purposes set forth in this section. In addition, the following sources may be used for the purposes set forth in this section:
 - a. Agreed upon restoration payments imposed under KZC 95.55 or settlements in lieu of penalties;
 - b. **Agreed upon payment in lieu of planting replacement trees under KZC 95.34(6);**
 - c. Sale of trees or wood from City property where the proceeds from such sale have not been dedicated to another purpose;
 - d. Donations and grants for tree purposes;
 - e. Sale of seedlings by the City; and
 - f. Other monies allocated by the City Council.
2. Funding Purposes. The City shall use money received pursuant to this section for the following purposes:
 - a. Acquiring, maintaining, and preserving wooded areas within the City;
 - b. Planting and maintaining trees within the City;
 - c. Establishment of a holding public tree nursery;
 - d. Urban forestry education;
 - e. Implementation of a tree canopy monitoring program; or
 - f. Other purposes relating to trees as determined by the City Council.

Kirkland Tree Code (KZC 95)
Progress Tracking Matrix

Attachment 2

KZC	Section Title	Updates	Council Review	Council Direction	Staff Response
95.05	Purpose and Intent	No impact	November 16, 2021	Revise purpose to "City-wide tree canopy coverage of at least 40 percent "	<input checked="" type="checkbox"/> Completed. See KZC 95.05
95.10	Definitions	Minor	November 16, 2021	Add definition of "Pruning"	<input checked="" type="checkbox"/> Completed. See KZC 95.10(11)
95.15	Exempt Tree Removal Activities (previously 95.20)	Minor	November 16, 2021	Retain proposed language	
95.20	Public Tree – Pruning and Removal (previously 95.21)	Minor	November 16, 2021	Retain proposed language	
95.21	Private Property – Tree Pruning (previously 95.23)	Minor	November 16, 2021	Retain proposed language	
95.23	Landmark Trees – Mitigation Requirements	Moderate/Major	January 4, 2022		
95.25	Private Property – Tree Removal, Not Associated with Development Activity	Moderate/Major	January 4, 2022		
95.30	Tree Retention Associated with Development Activity	Moderate/Major	January 18, 2022		
95.32	Tree and Soil Protection during Development Activity	Minor	November 16, 2021	Retain proposed language	
95.34	Tree Replacement Standards Related to Development Activity	Moderate/Major	January 18, 2022		
95.40	Required Landscaping Based on Zoning District	None	November 16, 2021	Retain proposed language	
95.41	Supplemental Plantings	None	November 16, 2021	Retain proposed language	
95.42	Land Use Buffer Requirements	None	November 16, 2021	Retain proposed language	
95.43	Outdoor Use, Activity, and Storage	None	November 16, 2021	Retain proposed language	
95.44	Internal Parking Lot Landscaping Requirements	None	January 18, 2022	Elevate from minor to moderate/major amendments for further discussion	<input type="checkbox"/> To be reviewed 1/18/2021
95.45	Perimeter Landscape Buffering for Driving and Parking Areas	None	January 18, 2022	Elevate from minor to moderate/major amendments for further discussion	<input type="checkbox"/> To be reviewed 1/18/2021
95.46	Modifications to Required Landscaping and Buffer Standards	None	November 16, 2021	Retain proposed language	
95.47	Nonconforming Landscaping and Buffers	None	November 16, 2021	Retain proposed language	
95.50	Installation Standards for Required Plantings	Minor	November 16, 2021	Retain proposed language	
95.51	Tree and Landscape Maintenance Requirements	Moderate/Major	January 18, 2022	Elevate from minor to moderate/major amendments for further discussion	<input type="checkbox"/> To be reviewed 1/18/2021
95.52	Prohibited Vegetation	None	November 16, 2021	Retain proposed language	
95.55	Enforcement and Penalties	Moderate	January 18, 2022		
95.57	City Forestry Account	No impact	November 16, 2021	Retain proposed language	