



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: November 4, 2021

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

I. **RECOMMENDATION:**

It is recommended that City Council review and discuss the following framework for completing amendments to Kirkland Zoning Code Chapter 95 (KZC 95), including taking the actions listed for November 16:

- **November 16:**
 - Confirm approach and schedule
 - Review staff summary of Council guidance on policy direction and objectives (Section III below)
 - Review Part 1 of the draft code (see Section IV below and Attachment 1), which encompasses amendments that are minor in nature and topics where staff believes Council has previously provided clear direction
- **January 4:** Review Part 2 of the draft code, including first round of moderate/major amendments
- **January 18:** Review Part 3 of the draft code, including second round of moderate/major amendments and the consolidated draft code
- **February 1:** Adopt final regulations

II. **BACKGROUND DISCUSSION:**

Kirkland's tree code (KZC 95) establishes standards for the protection and replacement of trees, mainly on private property. The November 16 meeting will be the sixth City Council meeting focused on reviewing KZC 95 since receiving the Planning Commission recommendation on November 5, 2019. Between February 2020 and May 2021, the review was placed on hold due to the pandemic. During that hiatus the City Council acted on a number of other important urban forestry issues, including:

- Adopting new rules for the enforcement of the current tree code, [Kirkland Municipal Code 1.12.100](#).
- Adopting the [Urban Forestry 6-Year Work Program](#) to guide staff on urban management priorities and initiatives.

- Approving two service packages for the City to improve inventories of public trees, establish planting priorities based on the inventory, and investigate a formal tree bank program to help mitigate canopy loss.
- Adopted the [Sustainability Master Plan](#), which establishes goals and actions related to the natural environment and ecosystems.

At the [May 18, 2021](#) City Council meeting, Council decided to “step back” from discussion of the specific amendments and discuss the general policy direction and desired outcomes of the code amendment project. The City Council requested that staff prepare a series of questions for the Council to consider in deliberating the amendments based on their desired outcomes. At the [July 6, 2021](#) study session, Council discussed those questions on the high-level policy direction of the code and discussed staff recommendations. Based on feedback from Council, staff is returning with a code framework that is intended to meet Council’s needs and supports a final draft code.

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 |

III. COUNCIL DIRECTION ON POLICY OBJECTIVES AND DESIRED OUTCOMES

This section addresses the same high-level policy questions presented to Council at the July 6, 2021 study session and provides staff's summary of all feedback and responses received from Council over the course of Council's review. Common themes and areas of general agreement are discussed below. Where clear Council direction was not received, additional staff recommendations are provided to help guide Council's deliberations. Staff requests that Council review these themes and confirm basic assumptions and conclusions (acknowledging that individual Councilmember preferences may differ slightly).

Q1. Does the current code need a major update as proposed, or just minor amendments such as adjusting definitions and code clarifications?

Staff understanding of Council position: Generally, staff believes that Council provided a clear response on this question and is interested in mostly minor to moderate amendments that achieve the overall desired outcome. Generally, Council is interested in some major amendments that result in the same or greater tree retention on development sites as the current code and meeting policy goals with code amendments that incrementally increase tree canopy citywide.

Discussion: Councilmembers were presented with this question at the beginning of the July 6 study session, which resulted in some uncertainty from Council on which level of code amendments were needed to meet the desired outcome.

As Council worked through each subsequent question, it became apparent that the majority of code amendments would fall into the minor to moderate categories. In order to review each amended code section holistically, staff has assigned code sections in their entirety to one of four categories: *no impact*, *minor amendments*, *moderate amendments*, or *major amendments*. Staff proposes that each code section be reviewed as a whole rather than piece-by-piece. As a result, some code sections for subsequent review with moderate or major amendments may also include no impact or minor amendments. Descriptions for each level of impact and amendment, based on a comparison to the existing code, are outlined below.

- No Impact - addresses typos and redundancies; clarifies, simplifies or further defines something already in the code; simplifies formatting or removes outdated references.
- Minor Amendments - updates Best Available Science, Best Management Practices, industry standards, etc., without an increase in requirements or changes to code intent.
- 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.

Of the twenty-two code sections in KZC 95, four sections have been identified as requiring moderate to major code amendments, while the remaining eighteen sections comprise of either no impact or minor amendments. These eighteen sections are included in Attachment 1 for Council discussion and deliberation on November 16. The sections of code which staff believe, based on feedback from Council, will require either moderate, major, or a combination both amendments are:

- 95.25 Private Property – Tree Removal, Not Associated with Development Activity
- 95.30 Tree Retention Associated with Development Activity
- 95.34 Tree Replacement Standards Related to Development Activity
- 95.55 Enforcement and Penalties

These four code sections will be discussed and reviewed in detail at the subsequent City Council meetings scheduled for January.

Q2. What is Council's desired outcome from an amended tree code?

Staff understanding of Council position: As a result of the May 18 Council meeting and July 6 study session, two main themes clearly emerged from a majority of the Council that drive the Council's primary desired outcomes from the tree code amendments.

KZC 95 Amendments – Primary Objectives

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.

Discussion: As we navigate through the proposed minor code amendments in Attachment 1, staff has tied each minor amendment back to the primary objectives provided by Council.

KZC 95 Amendments – Secondary Objectives

In addition to the primary objectives outlined above, the Council has discussed secondary objectives and themes based on the additional nine questions presented at the July 6 City Council meeting. Proposed code amendments in Attachment 1 relate back to these overarching secondary objectives where applicable. However, the substance of the following questions relates to code sections that will be presented at the January Council meetings. Therefore, staff list the questions for context, but further discussion is not presented at this time.

Q3. Does the Council feel the problems with the current tree code are related to trees lost with development, or with private property tree removals?

Related code sections: KZC 95.25, 95.30

Q4. Does the Council want to provide more flexibility to private property owners to remove (more?) trees from their property?

Related code sections: KZC 95.25

Q5. Should big (Landmark) trees have higher retention standards on development sites than other trees? Be protected on non-development sites?

Related code sections: KZC 95.25, 95.30, 95.34

Discussion: Attachment 1 includes the definition of Landmark Trees based on previous Council direction. How the definition is applied will be reviewed in January and Council may choose to revisit the definition once it establishes applicability.

Q6. Should the updated tree code require more retention of trees on development sites than the current code?

Related code sections: KZC 95.30

Q7. In addition to unavoidable tree removal with development (i.e., within building envelope), should some/all remaining trees be allowed to be removed if they are mitigated?

Related code sections: KZC 95.30, 95.34

Q8. Does the Council prefer certain mitigation options for trees removed on development sites, such as:

- a) On-site tree replanting?***
- b) Off-site replanting supported by fees-in-lieu of planting?***
- c) Off-site replanting in specified locations using a formal "tree banking" system?***
- d) Other mitigation options?***

Related code sections: KZC 95.34

Q9. Should the revenue generated from fees-in-lieu of planting on development sites be used to fund city-wide tree planting programs?

Related code sections: KZC 95.34

Q10. Should onsite planting standards for new development use tree credits, % of trees required, type of trees, and/or planting objectives (reduce heat island, mitigate storm water run-off, provide habitat)?

Related code sections: KZC 95.34

Q11. Should we reduce tree mitigation requirements for residential development projects that meet a minimum standard of affordable housing (e.g., projects that include units that are affordable to households with incomes at or below 60% of Area Median Income)?

Related code sections: KZC 95.34

IV. REVIEW OF PART 1 DRAFT AMENDMENTS

Based on the direction provided by Council, staff has continued to prepare a draft code for Council adoption. We are proposing to review the draft code in sections, beginning with all code sections where amendments have either *no impact* or *minor impact*, including those areas where we believe that Council has previously provided clear direction (Attachment 1).

The goal of the November 16 Council meeting is to determine if all proposed no impact/minor impact amendments are acceptable to Council and meet their desired outcome. We will review each section, providing an additional explanation for each amendment and why the amendment fits into the minor amendment category, as well as how each amendment meets Council's anticipated outcome. At this time Council can ask clarifying questions or request to elevate the amendment to either the moderate or major category to then be discussed in more detail at the next City Council meeting.

Attachment 1 includes a list of each proposed minor amendment accompanied by a description of how the revision impacts the intent of the code and aligns with the direction given by the Council.

Amendments that were determined to have *no impact* are those which address typos and redundancies; clarify, simplify or further define something already in the code; or simplify formatting or remove outdated references.

Amendments that were determined to have a *minor impact* include those which update Best Available Science, Best Management Practices, industry standards, etc. without an increase in requirements or changes to the intent of the code. These amendments also include updates that staff has previously received clear direction from City Council.

In total, there are six code sections that include only minor amendments and twelve sections in the code where amendments have resulted in no impacts.

V. NEXT STEPS

Depending on the outcomes of the November 16 meeting staff proposed the following schedule for Council review and adoption of the amendments:

- **January 4:** Review first round of moderate/major amendments
- **January 18:** Review second round of moderate/major amendments and consolidated draft code
- **February 1:** Adopt final regulations

KZC code changes 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 no impact or minor impact amendments

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

DRAFT KZC 95

KEY:

Plain text not highlighted = current code *without changes*

Bold text not highlighted = indicates a change to the existing code, resulting in *no impact*

No Impact – amendments that address typos and redundancies; clarify, simplify or further define something already in the code; or simplify formatting or remove outdated references. These amendments have no substantive regulatory impacts

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

Blue highlighted text = minor amendments

Minor Amendments – amendments that reflect Best Available Science, Best Management Practices, industry standards, etc. without an increase in requirements or changes to code intent. Includes amendments where staff has received clear prior Council direction

Yellow highlighted text = section titles for review at future meetings

REVIEW OF PART 1 DRAFT AMENDMENTS

Overall there are twelve code sections that staff believe result in *no impact* and six code sections that result in *minor amendments*. Staff intends to focus most of the discussion at the meeting on the sections that include *minor amendments*.

For each minor 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)

As we work through each section of the Code, Council will have the opportunity to ask clarifying questions about the amendments and is invited to move things off this Part 1 list for future discussion at subsequent Council meetings if they believe that the nature of the amendments is moderate to high impact. We ask that Councilmembers provide staff with clear direction on these Part 1 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
- 95.20 Exempt Tree Removal Activities
- 95.21 Public Tree - Maintenance and Removal
- 95.23 Private Property - Tree Pruning
- 95.25 PLACEHOLDER - Private Property - Tree Removal, Not Associated with Development Activity
- 95.30 PLACEHOLDER - Tree Retention Associated with Development Activity
- 95.32 Tree and Soil Protection during Development Activity
- 95.34 PLACEHOLDER - 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 PLACEHOLDER - 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 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 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.

Revisions to 95.05 Purpose and Intent - No Impact.

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.

- ✓ **Update:** add definition for "Arborist Report"
- ✓ **Explanation:** previously undefined; provides clarity
- ✓ **Result:** ensures submitted reports adhere to Qualified Professional Arborist requirements in 95.30

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 + (stem2)² + (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.**

- ✓ **Update:** add equation for calculating diameter of multi-stem trees and clarifies size estimation for removed trees to assist with KMC enforcement regulations
- ✓ **Explanation:** industry-standard; improves consistency
- ✓ **Result:** ensures tree sizes are accurately and consistently measured

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).**

- ✓ **Update:** clarify how to measure dripline for asymmetric canopies
- ✓ **Explanation:** industry-standard; improves consistency
- ✓ **Result:** ensures accurate protection standards for trees, especially for Landmark trees, when dripline is the metric used for the TPZ

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.**

- ✓ **Update:** add definition for "Inner Critical Root Zone"
- ✓ **Explanation:** industry-standard; improves tree protection
- ✓ **Result:** provides developers with additional guidance on protecting trees; ensures better protection of trees

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. Significantly Wooded Site – **for a Forest Sustainability 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.

12. 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.

13. **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.**

- ✓ **Update:** add definition for "Topping"
- ✓ **Explanation:** previously undefined; adopts industry-standard
- ✓ **Result:** helps to educate property owners, resulting in better protection of trees and reduced violations and civil penalties

14. **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.**

- ✓ **Update:** add definition for "Tree Protection Zone (TPZ)"
- ✓ **Explanation:** replaces previous "Limits of Disturbance (LOD)", improves clarity, and eliminates confusion between the use of LOD for both trees and as a general development term
- ✓ **Result:** increases clarity of code and reduces confusion during development review

15. 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.

- ✓ **Update:** revise definition of "Tree Removal": reduce topping from 50% canopy removal to 25% canopy removal
- ✓ **Explanation:** new definition corresponds to Council-adopted code enforcement definition and better aligns with industry-standards
- ✓ **Result:** ensures consistency across the City's tree regulations

16. **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 95.25.10 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.

- ✓ **Update:** revise "Hazard Tree" definition to clarify that hazard trees must meet a high or extreme tree risk rating
- ✓ **Explanation:** improves predictability of the code for private property owners; aligns with industry-standards; consistent with current City practices
- ✓ **Result:** reduces unnecessary tree removals that are detrimental to canopy cover goals

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.**

- ✓ **Update:** add definition for "Hedge Trees"
- ✓ **Explanation:** allows for private property owners to remove over-grown and expensive to maintain hedges without requiring them to qualify as hazard or nuisances
- ✓ **Result:** greater tree/canopy removal than current code – however, encourages planting of better long-term replacement trees

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

- ✓ **Update:** add definition for "Landmark Tree"
- ✓ **Explanation:** increases protection for large trees on private properties and trees on development sites not in required yards/setbacks
- ✓ **Result:** slows canopy loss by limiting property owner landmark tree removals; possibly a slight increase in canopy on development sites depending on the size and type of project

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 a tree that is either (1) in poor condition or (2) is in an area where removal is unavoidable due to the anticipated development activity after having applied the provisions in this Chapter.**

- ✓ **Update:** updates existing definition and adds tables for determining Viability Status
- ✓ **Explanation:** clearly defines tree condition and viability using industry standards in simple terms, organized with a chart format (the supporting charts are excerpted and included below)
- ✓ **Result:** more predictable code outcomes and increased clarity

Exhibit 1. Tables from 95.30 - Tree Retention Associated with Development Activity

Table 95.30.1 Tree Condition Ratings

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

Based on the condition ratings for health and structure in Table 95.30.1, the tree's overall viability shall be assessed as follows in Table 95.30.2:

Table 95.30.2 Tree Viability

Tree Structure

↓

| | Tree Health → | | | |
|-----------|---------------|------------|------------|------------|
| | Excellent | Good | Fair | Poor |
| Excellent | Viable | Viable | Viable | Not viable |
| Good | Viable | Viable | Viable | Not viable |
| Fair | Viable | Viable | Not viable | Not viable |
| Poor | Not viable | Not viable | Not viable | Not viable |

For example: a tree on a proposed development site fits the 'Fair' tree structure criteria, while its health falls under 'Excellent' criteria. Its overall viability status based on the tree condition ratings is 'Viable.'

- 17. 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**.
- 18. Windfirm – A condition of a tree in which it withstands average peak local wind speeds and gusts.

95.20 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.

Revisions to 95.20 Exempt Tree Removal Activities – No Impact.

95.21 Public Tree - Maintenance and Removal

1. **Public Tree Maintenance, 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 95.20 or falls within the maintenance exceptions set forth in subsection (b) of this section.
- b. **Maintenance.** 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 one and a half (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 one and a half (1.5) inches in diameter. The City reserves the right to have City or utility crews perform routine pruning and maintenance of Street Trees.

- ✓ **Update:** add clear allowance for "minor pruning"; create separate code sections for public vs. private tree pruning
- ✓ **Explanation:** update allows property owners to prune "minor" branches without being required to submit a tree permit; separation of sections improves clarity and ease of use
- ✓ **Result:** increases property owner permissions and reduces workload on City staff

- 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.

- ✓ **Update:** add pruning limit of 25% to align with BMPs and ANSI A300 standards
- ✓ **Explanation:** industry-standard, improves clarity where residents may not have access to ANSI standards
- ✓ **Result:** results in better protection of trees and tree retention

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

95.23 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.

- ✓ **Update:** restructured to separate public vs. private tree restrictions to different sections
- ✓ **Explanation:** easier for private property owners to find and navigate tree code, improves clarity
- ✓ **Result:** improves overall effectiveness of tree code by making it more readable to property owners

A permit is not required to prune trees on private property. **Prior written approval is required to prune trees on private property if trees are:**

- 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.

- ✓ **Update:** add requirement to obtain City approval prior to pruning trees in NGPEs, environmentally critical areas, and recorded Grove Covenants
- ✓ **Explanation:** consistent with current practices and KZC 90.135; improves clarity
- ✓ **Result:** better protection of trees in critical or protected areas; supports canopy cover goals

PLACEHOLDER FOR FUTURE REVIEW - 95.25 Private Property - Tree Removal, Not Associated with Development Activity

PLACEHOLDER FOR FUTURE REVIEW- 95.30 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.**

- ✓ **Update:** add requirement that site plans be displayed on development sites
- ✓ **Explanation:** tree plans are often on a separate permit sheet and not easily accessible to workers on development sites
- ✓ **Result:** improves tree retention and supports canopy goals

- 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.**

- ✓ **Update:** add requirement that impacts to ICRZ of neighboring trees require applicant to notify neighbors of potential impacts
- ✓ **Explanation:** neighboring tree impacts are often overlooked or ignored, which can create hazardous tree situations
- ✓ **Result:** additional documentation required for developers; reduces neighbor conflicts and workload on City staff; improves tree protection/retention

- 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.**

- ✓ **Update:** add requirement that grades changes with the CRZ shall comply with ANSI A300 standards
- ✓ **Explanation:** allows Planning Official to better enforce and require tree protection
- ✓ **Result:** supports long-term canopy goals and tree retention

- 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.**

PLACEHOLDER - 95.34 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. Landscape 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 at least 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.

Revisions to 95.40 Required Landscaping Based on Zoning Code. No Impact.

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.

Revisions to 95.41 Supplemental Plantings. No Impact.

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.

| LANDSCAPING CATEGORY | 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.

Revisions to 95.42 Land Use Buffer Requirement. No Impact.

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.

Revisions to 95.43 Outdoor Use, Activity, and Storage. No Impact.

95.44 Internal Parking Lot Landscaping Requirements

The following internal parking lot landscape standards apply to each parking lot or portion thereof containing more than eight (8) parking stalls.

1. The parking lot must contain 25 square feet of landscaped area per parking stall planted as follows:
 - a. The applicant shall arrange the required landscaping throughout the parking lot to provide landscape islands or peninsulas to separate groups of parking spaces (generally every eight (8) stalls) from one another and each row of spaces from any adjacent driveway that runs perpendicular to the row. This island or peninsula must be surrounded by a 6-inch-high vertical curb and be of similar dimensions as the adjacent parking stalls. Gaps in curbs are allowed for stormwater runoff to enter landscape island.
 - b. Landscaping shall be installed pursuant to the following standards:
 - 1) At least one (1) deciduous tree, two (2) inches in caliper, or a coniferous tree five (5) feet in height.
 - 2) Groundcover shall be selected and planted to achieve 60 percent coverage within two (2) years.
 - 3) Natural drainage landscapes (such as rain gardens, bio-infiltration swales and bioretention planters) are allowed when designed in compliance with the stormwater design manual adopted in KMC 15.52.060. Internal parking lot landscaping requirements for trees still apply. Refer to Public Works Pre-Approved Plans.
 - c. Exception. The requirements of this subsection do not apply to any area that is fully enclosed within or under a building.
2. Rooftop Parking Landscaping. For a driving or parking area on the top level of a structure that is not within the CBD zone or within any zone that requires design regulation compliance, one (1) planter that is 30 inches deep and five (5) feet square must be provided for every eight (8) stalls on the top level of the structure. Each planter must contain a small tree or large shrub suited to the size of the container and the specific site conditions, including desiccating winds, and is clustered with other planters near driving ramps or stairways to maximize visual effect.
3. If development is subject to Design Review as described in Chapter 142 KZC, the City will review the parking area design, plant choice and specific plant location as part of the Design Review approval. The City may also require or permit modification to the required landscaping and design of the parking area as part of Design Review approval.

Revisions to 95.44 Internal Parking Lot Landscaping Requirements. No Impact.

95.45 Perimeter Landscape Buffering for Driving and Parking Areas

1. Perimeter Buffering – General. Except as specified in subsection (2) of this section, the applicant shall buffer all parking areas and driveways from abutting rights-of-way and from adjacent property with a 5-foot-wide strip along the perimeter of the parking areas and driveways planted as follows (see Figure 95.45.A):
 - a. One (1) row of trees, two (2) inches in caliper and planted 30 feet on center along the entire length of the strip.
 - b. Living groundcover planted to attain coverage of at least 60 percent of the strip area within two (2) years.
 - c. Natural drainage landscapes (such as rain gardens, bio-infiltration swales and bioretention planters) are allowed when designed in compliance with the stormwater design manual adopted in KMC 15.52.060. Perimeter landscape buffering requirements for trees in driving and parking areas still apply. Refer to Public Works Pre-Approved Plans.
2. Exception. The requirements of this section do not apply to any parking area that:
 - a. Is fully enclosed within or under a building; or
 - b. Is on top of a building and is at least one (1) story above finished grade; or
 - c. Serves single-family dwellings exclusively; or
 - d. Is within any zone that requires design regulation compliance. See below for Design District requirements.
3. Design Districts. If subject to Design Review, each side of a parking lot that abuts a street, through-block pathway or public park must be screened from that street, through-block pathway or public park by using one (1) or a combination of the following methods (see Figures 95.45.A, B, and C):
 - a. By providing a landscape strip at least five (5) feet wide planted consistent with subsection (1) of this section, or in combination with the following. In the RHBD Regional Center (see KZC Figure 92.05.A) a 10-foot perimeter landscape strip along NE 85th Street is required to be planted consistent with subsection (1) of this section.
 - b. The hedge or wall must extend at least two (2) feet, six (6) inches, and not more than three (3) feet above the ground directly below it.

- c. The wall may be constructed of masonry or concrete, if consistent with the provisions of KZC 92.35(1)(g), in building material, color and detail, or of wood if the design and materials match the building on the subject property.
 - d. In JBD zones:
 - 1) If the street is a pedestrian-oriented street, the wall may also include a continuous trellis or grillwork, at least five (5) feet in height above the ground, placed on top of or in front of the wall and planted with climbing vines. The trellis or grillwork may be constructed of masonry, steel, cast iron and/or wood.
 - 2) If the wall abuts a pedestrian-oriented street, the requirements of this subsection may be fulfilled by providing pedestrian weather protection along at least 80 percent of the frontage of the subject property.
 - 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.
4. Overlapping Requirements. If buffering is required in KZC 95.42, Land Use Buffering Standards, and by this subsection, the applicant shall utilize the more stringent buffering requirement.

Perimeter Parking Lot Landscaping

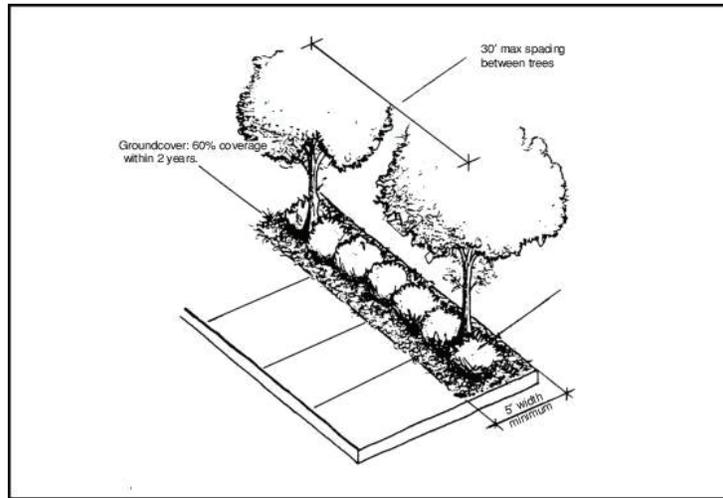


FIGURE 95.45.A

Perimeter Parking – Examples of Various Screen Wall Designs

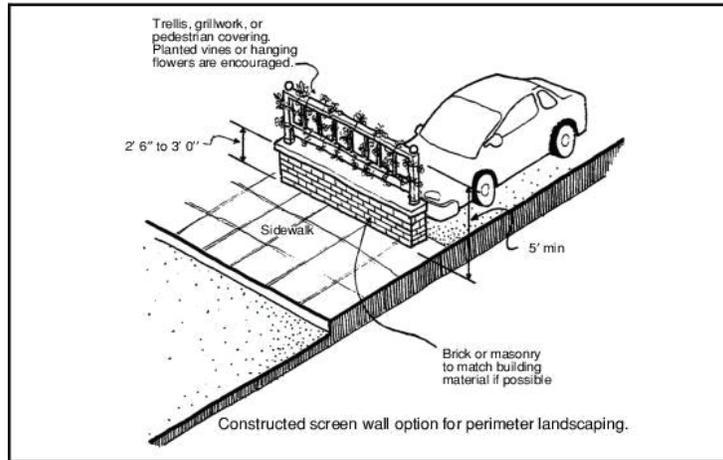


FIGURE 95.45.B

Perimeter Parking – Examples of Various Screen Wall Designs

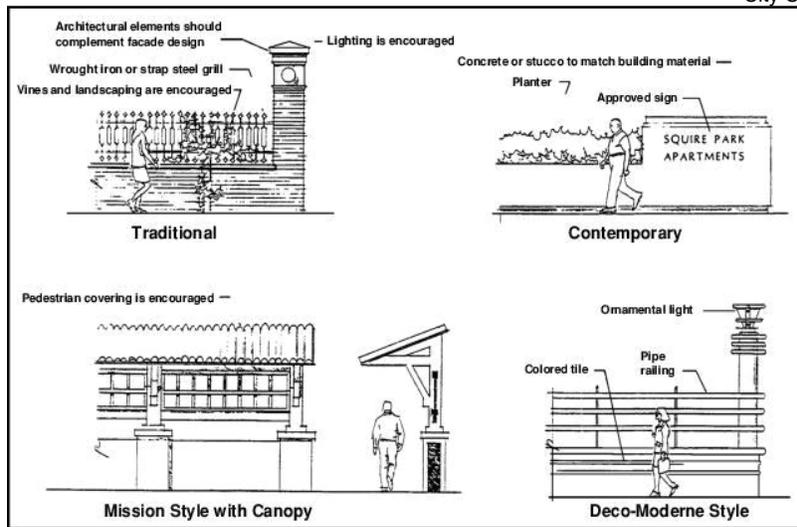


FIGURE 95.45.C

Revisions to 95.45 Perimeter Landscape Buffering for Driving and Parking Areas. No Impact.

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.

Revisions to 95.46 Modifications to Required Landscaping and Buffer Standards. No Impact.

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.

Revisions to 95.47 Nonconforming Landscaping and Buffers. No Impact.

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 in any required landscape areas.** 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. Planting large trees under/within proximity to overhead utilities shall be avoided. 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

- ✓ **Update:** detailed planting specification added for supplemental trees referencing planting locations and BMPs
- ✓ **Explanation:** trees are often planted in inappropriate locations which require the Planning Official to issue comments and additional rounds of review; adding this requirement gives developers information they need to submit an approvable and satisfactory replanting plan
- ✓ **Result:** supports canopy goals; reduces future conflicts with trees and infrastructure/utilities and burden on new property owners

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.

- ✓ **Update:** add new requirement that installation standards for required plantings shall be completed prior to final inspection
- ✓ **Explanation:** consistent with current practices; reduces delays with permit finals
- ✓ **Result:** makes the code more predictable for developers

95.51 Tree and Landscape Maintenance Requirements

The following maintenance requirements apply to all trees, including street trees, and other vegetation required to be planted or preserved by the City:

1. Responsibility for Regular Maintenance. Required trees and vegetation, fences, walls, and other landscape elements shall be considered as elements of the project in the same manner as parking, building materials, and other site details. The applicant, landowner, or successors in interest shall be responsible for the regular maintenance of required landscaping elements. It is also the responsibility of the property owner to maintain street trees abutting their property pursuant to KZC 95.21.
2. Maintenance Duration. Maintenance shall be ensured in the following manner except as set forth in subsections (3), (4) and (5) of this section:
 - a. **Commercial, Industrial and Multifamily Development.** All required landscaping shall be maintained throughout the life of the development. Plants that die must be replaced in kind.
 - b. **Single-Family Dwelling Development.** Any existing tree or other existing vegetation designated for preservation in a tree retention plan shall be maintained for a period of five (5) years following issuance of the certificate of occupancy for the individual lot or development. After five (5) years, all trees on the property are subject to KZC 95.23 unless:

- ✓ **Update:** add distinction between landscape maintenance requirements for Commercial, Industrial and Multi-Family versus Single-Family
- ✓ **Explanation:** consistent with current practices
- ✓ **Result:** improves predictability and readability of code

- 1) Trees are in a grove that is protected pursuant to subsection (3) of this section; or
 - 2) The tree or vegetation is considered to be a public benefit related to approval of a Planned Unit Development; or
 - 3) The tree or vegetation was retained to partially or fully meet requirements of KZC 95.40 through 95.45, Required Landscaping and Zoning.
3. Maintenance of Preserved Grove. Any applicant who has a grove of trees identified for preservation on an approved Tree Retention Plan pursuant to KZC 95.30(2) shall provide prior to occupancy the legal instrument acceptable to the City to ensure preservation of the grove in perpetuity, except that the agreement may be extinguished if the Planning Official determines that preservation is no longer appropriate.
 4. Maintenance in Holmes Point Overlay Zone. Vegetation in designated Protected Natural Areas in the Holmes Point Overlay Zone is to be protected in perpetuity pursuant to KZC 70.15(8)(a). **Regulated** trees in the remainder of the lot shall be protected in perpetuity pursuant to KZC 70.15(8)(b).
 5. Nonnative Invasive and Noxious Plants. It is the responsibility of the property owner to remove nonnative invasive plants and noxious plants from the vicinity of any tree or other vegetation that the City has required to be planted or protected **per the City's Prohibited Plant List, King County and Washington Weed Agencies.** Removal must be performed in a manner that **is not injurious** to required trees and vegetation.
 6. Landscape Plans and Utility Plans. Landscape plans and utility plans shall be coordinated. In general, the placement of trees and large shrubs should adjust to the location of required utility routes both above and below ground. Location of plants shall be based on the plant's mature size both above and below ground. See the Kirkland Plant List for additional standards.

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.

Revisions to 95.52 Prohibited Vegetation. No Impact.

PLACEHOLDER - 95.55 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.

Revisions to 95.55 City Forestry Account. No Impact.