MEMORANDUM

To: Planning Commission

From: Janice Coogan, Senior Planner
      Deb Powers, Urban Forester
      Jeremy McMahan, Planning Manager
      Adam Weinstein, AICP, Deputy Planning Director

Date: May 17, 2018

Subject: Code Amendments for Kirkland Zoning Codes Chapter 70, Holmes Point Overlay Zone, Chapter 95, Tree Management and Required Landscaping
      File CAM18-00080- Public Hearing Continued For Written Comments Only

Staff Recommendation

- Continue the public hearing to receive written comments only. At the April 26, 2018 meeting Planning Commission closed the hearing for oral comments.
- Receive a staff presentation on additional information in this memo requested by the Planning Commission.
- Close public hearing.
- Planning Commission make a recommendation to the City Council on the Code amendments. The City Council’s consideration of the amendments is tentatively scheduled for June 19, 2018.

Please bring your April 26, 2018 meeting packet materials to the May 24, 2018 meeting.

Background

On April 26, 2018 a public hearing was held on proposed draft code amendments to the Kirkland Zoning Code (KZC) Holmes Point Overlay regulations in Chapter 70 and Tree Management and Required Landscaping Chapter 95 (related to HPO zone only). The April 26, 2018 Planning Commission packet provides detailed background information on the existing regulations in KZC Chapter 70 and key issues discussed during the Finn Hill Neighborhood Plan process and over the last year with the Finn Hill Neighborhood Alliance (FHNA) group.

The public hearing was continued until May 24, 2018 to allow for written comments to be submitted. The Planning Commission requested additional information from staff and suggested staff continue to consider the recommendations of the FHNA on the draft code amendments. The additional information requested is described below under ‘Information Requested by the Planning Commission’.
Revisions have been made to the draft code amendments in response to the April 24, 2018 letter from FHNA, a meeting held with FHNA, and a follow-up email to staff from the FHNA. Revisions are discussed elsewhere in this memo (See Attachments 1 and 2 yellow highlighted text). See also one alternative text revision for Planning Commission consideration regarding tree removal on larger lots discussed below.

**Project Description**

The purpose of the Holmes Point Overlay code amendment project is to implement the policy direction established in the new Finn Hill Neighborhood Plan (Plan), address issues and challenges that have arisen since HPO adoption primarily related to tree retention, and design the code so that it is more effective and usable. Because residents value the community’s woodland character, a distinct canopy cover goal was established as a specific Neighborhood Plan policy, which is unique among other neighborhoods in Kirkland.

**Analysis**

During this code amendment process, staff referred to data in the 2011 canopy assessment report, Geographic Information Systems (GIS) data, and the City’s [Urban Forestry Strategic Management Plan](#) for guidance. It should be noted that the City’s canopy cover data is based on eight year-old aerial imagery, making it difficult to address current trends (canopy gain or loss). However, the City is undertaking an updated tree canopy analysis in 2018. If the results of this analysis suggest new options for tree canopy protection and enhancement that weren’t considered as part of the current amendments to KMZ Chapters 70 and 95, targeted amendments to these chapters could be undertaken at a later date.

**Follow Up Meeting with FHNA**

On May 8, 2018, staff met with the FHNA to discuss questions and comments the group had regarding proposed HPO amendments (see April 24, 2018 letter to the Planning Commission from Scott Morris). A majority of the revisions made since the April 26, 2018 packet are based on suggestions FHNA made regarding clarifications or codifying procedural changes, and applications and form changes staff planned on implementing after adoption of the code amendments (See Attachments 1 and 2 for revisions). Not all FHNA suggestions are supported by staff. The remaining issues of importance to the FHNA are briefly outlined, along with the City’s position on each.

**Protect exceptional trees located anywhere on a site**

There are many reasons to protect mature, stately trees. Other cities in the region do so using a variety of exceptional, landmark, or heritage tree definitions with ranging protection levels. Kirkland Zoning Code (KZC) Chapter 95 designates trees of merit located in required yards or required landscape areas as a priority for retention. Code defines these ‘High Retention Value’ trees as healthy, viable trees that lack structural defects with 6-inch or greater trunk diameter. The FHNA requests a new definition distinguished by tree location *anywhere on a development site*. Trees under this definition, if located within a proposed building footprint, would prohibit development unless the property owner proves their retention denies all reasonable use of the property.
Staff discussed the FHNA’s recommendation related to protecting exceptional trees with the City Attorney. Denying property owners’ rights to that extent exposes the City to legal takings related lawsuits (which may not be covered by the City’s municipal insurance). Staff conveyed this position to the FHNA.

Staff looked at other ways to enable greater tree retention in the HPO. The recent rezoning in the HPO, from RSA 6 and 8 to RSA 4, was based on the premise that lower zoning densities, resulting in larger lots, allows greater tree retention, particularly with mature native conifers. The HPO’s lot coverage requirements, lower than in other areas of the City, also work to facilitate tree retention.

As an alternative, staff proposes requiring the protection of High Retention Value trees and giving the City authority to require plan changes to retain High Retention Value trees on properties within the HPO (see Attachments 1 and 2). In contrast, regulations in the rest of the City require High Retention Value trees to be preserved only to the maximum extent possible.

To further protect trees of merit, the City developed a template voluntary Tree Conservation Easement, a legal mechanism for a property owner to protect trees on their property in perpetuity, regardless of development activity.

**Canopy cover system instead of tree density credits**
The Finn Hill Neighborhood Alliance would like the City to use a canopy cover-based system for tree code requirements. The Commission gave direction to staff to retain the existing tree credit system as a primary means of assessing conformance with canopy goals rather than initiate using a new requirement methodology unique to the HPO. Any further discussion of transitioning to a canopy cover approach will be postponed until changes to the current system are examined on a City-wide basis with KZC 95 code amendments and with updated canopy cover analysis, scheduled to be completed by the end of 2018. However, the currently-proposed Code amendments require (for new development projects) a Landscape Architect to verify that the proposed landscape plan would result in a minimum canopy coverage threshold of 50% after 20 years of growth, discussed in further detail below.

**Require additional minimum canopy cover**
The FHNA asked the City to establish a new code standard requiring an additional minimum 30% existing canopy cover on properties undergoing development. The original HPO code requires a property owner to set aside 25% of a property’s native woodland in Protected Natural Areas (PNA), in perpetuity. With annexation, the application of citywide tree codes (KZC 95) in areas outside the PNA further require developing properties to:
- Identify and retain trees of merit (High Retention Value trees)
- Retain a minimum amount of tree canopy based on lot size (tree density credits)

In addition to the tree retention requirements of KZC 95, a prior HPO code update addresses insufficient or degraded forest conditions with restoration requirements. Until
current canopy data is available, staff believes a 30% minimum canopy cover retention requirement is not warranted, particularly with Planning Commission direction to not use canopy cover as a metric at this time.

In the meantime, staff recommends raising the current 30 tree credits per acre requirement to 50 tree credits in the non-PNA area as a preemptive measure, anticipating future tree canopy data will guide a more specific and strategic approach to establishing code requirements. The extent of correlating tree credits with canopy cover at this time is requiring a Landscape Architect to develop a Landscape Plan, selecting tree species that, from professional judgment, will attain a 50% tree canopy cover in 20 years. The Landscape Plan is subject to approval by the City’s Development Review Arborist, with verification from the Landscape Architect in the form of an As-Built Landscape Plan.

Increasing future tree protection on properties not currently under development, on a more widespread scale, may be done through a voluntary Tree Conservation Easement. Members of the community interested in protecting trees on their properties, in perpetuity, are encouraged to consider this legal mechanism that was developed with this code revision process.

Additional Information Requested by the Planning Commission
At the April 26, 2018 meeting, Planning Commission members asked staff to provide the following additional information at the next meeting. Many of these issues were raised previously by the FHNA.

Are our tree retention plan requirements adequate to ensure protection of existing trees and critical root zones during development?
When originally adopted, Kirkland’s tree retention standards aligned with the highest of industry standards for tree protection. Some standards have changed more recently as a result of research and updated Best Management Practices triggering updates to the citywide tree retention standards. In the meantime, staff incorporated a definition and requirements for tree protection applicable in the HPO only. Outside of this, staff believes proposed amendments and procedural changes described elsewhere in this memo have addressed gaps in tree protection. The April 26, 2018 meeting packet provides more detail about proposed amendments to each code section and how those amendments respond to certain issues.

What are the City’s tree inspection and enforcement steps with development? What additional enforcement steps can staff take?
The Planning Commission asked staff to respond to the following questions related to tree protection fencing inspection and enforcement procedures during the development review and construction process:

- What steps does the City currently take during the construction process in regard to tree inspections and how can the City improve its inspection and code enforcement procedures? Attachment 3 describes the existing plan review and tree inspections at various stages of development.
What are other cities doing in regard to tree protection inspections?

What triggers code enforcement procedures when there’s been encroachment into the tree protection fencing?

What are staff’s recommendations to address gaps in tree protection?

**Permit application and review stage**

The KZC details the submittal requirements for tree retention plans and arborist reports associated with development permit applications. During the permit review process, these applicant-provided materials are reviewed by the staff Planner and the City’s Development Review Arborist (DRA). Site visits are conducted to verify the existing trees on site. The DRA assigns High, Moderate and Low tree retention values, makes changes to the proposed tree retention plan and provides conditions of the development permit, which may include specifying different tree protection fence locations that what were proposed by the applicant’s arborist. The DRA may ask for plan revisions or “redline” the plan. When the proposed plan is approved by all Development Services divisions, it becomes part of an approved permit. Site disturbance cannot occur until the permit is issued, which is contingent on the staff Planner’s site inspection, verifying tree protection fencing has been installed as approved.

In addition, the HPO regulations require proposed PNA areas (including trees within) to be shown on the plan, staked on site, and inspected by the Planner early in the design process per the Integrated Development Plan process. The trees and required fencing are then inspected again prior to site disturbance for permit issuance by the Planner or Public Works staff, depending on the type of permit.

**Existing tree inspection steps associated with development**

The chart in Attachment 4 summarizes current site inspection procedures for different permits and the staff responsible for inspections at various stages of development. Staff has indicated where there are gaps in tree protection inspection.

**Inspections and enforcement in other cities**

Planning staff contacted four cities regarding tree inspections and enforcement, receiving detailed information from Lake Forest Park and Woodinville. Lake Forest Park tree codes are regarded as a model tree protection ordinance by the Neighborhood Alliance; the City of Woodinville has similar rules as Kirkland’s with regard to inspection and enforcement.

In Lake Forest Park, the initial tree protection fence inspections are conducted by an Assistant Planner prior to site disturbance. Little to no fence inspections follow during development unless a building inspector notices an egregious tree violation or onlookers or neighbors notify the Planning Department. The Lake Forest Park Urban Forester attributes what is perceived as seemingly low tree protection fence violations to the difference in development activity levels compared to Kirkland; Lake Forest Park has very few if any short plats and subdivisions and the primarily single family residential permit intake volume is significantly lower than in Kirkland. Lake Forest Park has no dedicated code enforcement staff.
In Woodinville, initial tree fence inspections are to be conducted prior to site disturbance; however they don’t always get scheduled by the contractor or installed. Staff typically notices a lack of or incorrect fence placement when footing inspections occur; the contractor is denied additional inspection until the fencing is installed and approved. Unfortunately, tree damage likely occurs by then. Planners try to stop by the site periodically thereafter, but it’s not consistent enough to be a deterrent or catch “fence-creep” in a timely manner. Building inspectors may not notice tree fence violations. Tree fencing is required with clearing and grading permits and is inspected by Public Works staff. Woodinville has no dedicated code enforcement staff; any violations that are reported are handled by the planner.

In contrast to relatively smaller cities’ capacity for tree code enforcement, staff looked to a 2017 report delivered to the City of Seattle Urban Forest Commission on the effectiveness of their tree codes. Even with greater staffing resources, the report indicates similar issues with gaps in inspections. Other cities agree that increased enforcement staffing and frequent inspections will not deter a determined offender that will move fencing to conduct potentially injurious activities at night and on weekends. Staff recommends the measures below to address gaps in tree protection fence violations and enforcement.

**Could tree protection sign improvements help to avoid tree damage and unauthorized tree removal?**

This is also an issue of concern with the FHNA. Recently, staff met with Building and Public Works inspectors to discuss the proposed code amendments and additional ways to improve tree protection inspections, code enforcement procedures and other issues during construction.

In response, contractor acknowledgement of the City’s tree codes is required at pre-construction meetings. In addition to the more stringent code enforcement language and implications for civil penalties for illegal tree removal or damage (see draft KMC code amendments in April 26, 2018 packet), staff will revise the tree protection fencing/sign Pre-Approved Plans and procedures to include the following changes:

- Require a laminated tree retention plan on the fence showing which trees must be retained and tree protective fence location in relation to tree trunk
- Add phone number of responsible permit applicant or contractor

**How do Forest Management Plans work?**

City wide, a Forest Management Plan applies to properties of at least 35,000 square feet in size that contain significantly wooded sites (more than 40% canopy) where the property owner is requesting removal of more than 2 trees (not exempt under KZC 95.20). Attachment 2, KZC 95 amendments Section 95.23.5.e, describes the minimum submittal requirements including a reforestation plan. The HPO amendments to Chapter 70 would require a property owner to submit a Forest Management Plan if the property owner wanted to remove more than 2 trees and contained larger stands of trees. See alternative option in the next section below.
Explore equitable options for tree removal not associated with development in non-PNA areas (Proposed Amendment KZC 70.15.2)

Variations in Tree Removal for Larger Size Lots- The concept of correlating tree removal allowances to lot size was brought up by Alice Blanchard and other residents. In her email to the Planning Commission dated April 26, 2018, Ms. Blanchard makes some suggestions to address the following questions:

- Could home owners with large properties be allowed to remove more than 2 trees every 5 years? Ms. Blanchard supports allowing the removal of 2 trees per year per lot, similar to the same requirement that applies to smaller lots elsewhere in the City.
- Property owners with high tree canopy and larger lots should not be required to replant replacement trees.

In response to these comments the Planning Commission could consider integrating the following options into the code amendments in KZC 70.15.2:

- Properties ½ acre (21,780 sq. ft.) or less may remove up to two trees every five years with a 1:1 replacement tree requirement.
- Properties between ½ acre (21,780 sq. ft.) and 1 acre may remove up to four trees every five years with a 1:1 replacement tree requirement.
- Properties larger than 1 acre (43,560 sq. ft.) where the owners propose to remove more than four trees every five years must submit a Forest Management Plan (including a reforestation plan; a permit application and fee would be required).

Replacement Tree Requirements- FHNA asked for additional requirements ensuring home owners replant replacement trees within 6 months, but considering current code enforcement resources, agreed with planting requirements based on an honor system. In response, staff will revise the Tree Notification Form for the HPO to not only require the property owner to show the replacement trees species, size and location on a site plan, but state that the trees will be planted within 6 months.

Will the amendments and tree retention requirements conflict with solar panels? Depending on lot size, the requirements for PNA designation, tree retention, and tree replacement planting will likely result in increased tree canopy shading and fewer opportunities for solar energy generation, potential view obstruction, limited edible garden area, and reduced potential for turf and other plant selection. The desired high canopy goals are prioritizing tree retention and replanting over these other possible desires of home owners.

What else can the City do to protect trees on development sites? As discussed in more detail in the April 26, 2018 staff memo and summarized below, the City has taken a number of steps over the last few years to meet the intent and significantly improve the HPO regulations.
Earlier in 2018, zoning density was lowered from RSA 6 and 8 to RSA 4 to further maximize tree retention in the HPO and Integrated Development Plan requirements were adopted to promote enhanced tree retention.

In summary, the City is proposing a menu of actions including incentives, amendments and procedural changes to protect existing trees and meet the 60% tree canopy goal in the Finn Hill Neighborhood Plan:

- Increased tree density credit requirements for retaining and planting trees on development sites are in addition to the original HPO code requirements under King County. Data from Kirkland’s last tree canopy analysis shows the tree density credit system may be effective in increasing tree canopy, particularly in comparison to other cities.
- Firm requirements for permit applicants to modify proposed site plans to retain healthy viable trees.
- More restrictive requirements.
- Retention of all High Retention Value trees, unless a variance process is pursued.
- Increase the minimum tree density requirement outside the PNA areas to require planting more trees.
- Impose more stringent enforcement of tree retention requirements.
- Allow consolidation of PNAs to allow for superior tree retention.
- Allow more flexibility for home owners to remove trees for tree maintenance purposes.
- Changes to procedures and increased code enforcement for tree protection.
- Tree Conservation Easements will be provided for property owners to legally protect tree(s) in perpetuity.

The chart on the following page shows a list of changes to code requirements, procedures and the additional administrative staff time or cost for the property owner or permit applicant that would result from the changes.
## Memo to Planning Commission
### HPO Code Amendments
May 24, 2018

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<thead>
<tr>
<th>New or Enhanced Requirement</th>
<th>Additional cost</th>
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<td>Administrative Time</td>
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<td>1. Tree removal notification</td>
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<td>2. Replacements for tree removals</td>
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<td>3. Forest Management Plan (option)</td>
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<td>4. Soil amendments per surface water requirements of Public Works Pre-approved Plans CK-E.12</td>
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<td>5. Repercussions of “shall retain” High Retention Value tree requirement (modifications)</td>
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<td>6. Protected Natural Areas w/ remolds, additions</td>
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<td>7. Maintenance bonds, signage for large PNAs</td>
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<td>8. Landscape plan by licensed Landscape Architect</td>
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<td>9. As-built, final inspection by Landscape Architect</td>
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<td>10. Incentives/variants to development plans</td>
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<td>11. Root excavations/testing if warranted</td>
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<td>12. Aftercare for Critical Root Zone encroachments</td>
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<td>13. Notify/authorize adjacent property owners of potential impact</td>
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<td>14. Increased civil penalty fines</td>
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<td>15. Suspend/revoke business licenses</td>
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<td>16. Update forms, Official City Documents, web content</td>
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<tr>
<td>17. “Cap” tree credits</td>
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**Additional Future Actions:**
- Staff will recommend in June that City Council increase fines and other penalties for unauthorized tree removal
- Staff will revisit the tree canopy vs. tree credit methodology when the tree canopy analysis is completed in 2018
- Staff will update tree retention industry standards and Best Management Practices with the citywide tree code (KZC 95) revision in 2018
- Staff will undertake future community education and outreach to encourage tree retention in the HPO zone

**Questions and Next Steps for Planning Commission**
- *Discuss concurrence with the staff recommendations in this report.*
- *Formulate a recommendation to City Council.*
Memo to Planning Commission
HPO Code Amendments
May 24, 2018

Attachments:
1. Revised Draft KZC 70 amendments
2. Revised Draft KZC 95 amendments
3. Draft KZC 10.30 amendment changing Overlay Zoning Category from HP to HPO
4. Chart describing existing tree inspections steps

cc: File Number CAM18-00080
Kirkland Zoning Code
Chapter 70 – HOLMES POINT OVERLAY ZONE

KZC Chapter 70 – [DRAFT CLEAN COPY] HOLMES POINT OVERLAY ZONE AMENDMENTS 4/19/18

Revised 5-17-2018- Highlighted text are revisions since April 26, 2018

Sections:
70.05 Purpose and Intent
70.10 Applicability
70.15 Tree Removal – Not Associated with Development Activity
70.20 Tree Retention Associated with Development Activity

70.05 Purpose and Intent
The purpose of the Holmes Point Overlay (HPO) development standards is to allow infill at urban densities while providing an increased level of environmental protection for the Holmes Point area, an urban residential area characterized by a predominance of critical areas, fewer roads and other impervious surfaces, dense tree and vegetation cover and wildlife habitat. To further the Finn Hill Neighborhood Plan policies, the standards in this Chapter limit allowable site disturbance; reduce visual impacts of development; maintain community character; protect native trees, vegetation and soils; reduce surface water runoff; protect wildlife habitat; slow the loss of tree canopy resulting from tree removal, and establish requirements to maintain a 60 percent tree canopy goal in the HPO.

(Ord. 4437 § 1, 2014; Ord. 4196 § 1, 2009)

70.10 Applicability
This Chapter applies to properties within the HPO Zone on the Kirkland Zoning Map. These regulations add to and in some cases supersede the other regulations of this code, including but not limited to regulations in KZC Chapters 15 (Low Density Residential Zones), 95 (Tree Management and Required Landscaping) and KMC Title 22 (Subdivisions).

Terms and requirements not defined in this section shall be defined as set forth in Chapter 95 KZC

70.15 Tree Removal – Not Associated with Development Activity

Tree removal in the HPO that is not associated with development activity is subject to all standards for tree removal, replacements and tree removal permits as described in Chapter 95.23 KZC, subsections (5)(b) through (d) and the following standards:

1. Permit Required – Protected Natural Area (PNA). No trees shall be removed from a designated PNA unless they are hazard or nuisance trees, or are approved for removal as part of a Forest Management Plan. Any tree removal in a PNA shall be authorized through a tree removal permit as provided in this chapter, unless the activity is exempted in KZC 95.20. Permit application, procedures and appeal requirements shall be in accordance to KZC 95.23.2-4. For every significant tree that is removed from a PNA, the applicant shall plant a native tree species of the same deciduous or coniferous type as the removed tree. Replacement trees shall meet the standards of subsection 70.20.1(f) 2.

*Note: See additional alternative code text in Planning Commission memo for May 24, 2018:

2. Tree Removal Allowances – Non-PNA Areas. Any private property owner of developed property may remove up to two significant trees from their property, within a five year period without applying for a tree removal permit, provided that the homeowner submits a tree notification request form to the City that includes the location of the tree(s) to be removed and replanted and affirms that:

a. There is no active application for development activity for the site;

b. The trees to be removed were not required to be retained or planted as a condition of previous development activity, and

c. For every significant tree that is removed, the planting of one replacement tree is required to be planted within 6 months. Conifer species are the preferred replacement trees in Non-PNA areas in the HPO. Replacement trees shall meet the standards of subsection 70.20.1(f) 2.

The Kirkland Zoning Code is current through Ordinance 4619, passed November 21, 2017.
3. **Forest Management Plan.** Private property owners seeking to remove more than two trees for the purpose of long-term stand management that are not exempt under KZC 95.20 may submit a Forest Management Plan per Chapter 95.23 subsection 5(e) KZC.

### 70.20 Tree Retention Associated with Development Activity

The following standards shall be applied to all residential development:

1. **Protected Natural Area (PNA) Designation.**
   
   a. **Applicability -** The requirement for designating and restoring a PNA with vegetation set forth in subsection (4)(a) and (b) applies to:
      
      1) New development or redevelopment, in which the total square footage of the proposed improvements is more than 50 percent of the total square footage of the existing improvements on the subject property.
      
      2) Short Plats and Subdivisions.
      
      3) Land Surface Modification (LSM) permits associated with the development of more than one lot.

   b. **Size -** At least 25 percent of the total lot area shall be designated as a Protected Natural Area (PNA), in a location and configuration that requires the least alteration of existing native soil, native understory, vegetation and trees.

   c. **Location –** PNA designation, including subdivisions, short subdivisions and Land Surface Modifications associated with the development of more than one lot shall be consolidated in one larger contiguous area on the subject property unless the City determines that designation of more than one area results in superior protection of existing trees and vegetation. The PNA shall be designated to encompass any critical areas on the lot and, to the maximum extent possible, consist of existing viable trees and native vegetation of varying size, age and species that meet the minimum vegetation condition standards set forth in subsection (1)(e) of this section.

   d. **Incentives and Variations to Development Standards -** Applicants shall pursue Incentives and Variations to Development Standards per Chapter 95.32 KZC to facilitate consolidation of PNAs.

   e. **Minimum Tree and Vegetation Conditions in the PNA -** Priority is given to designate contiguous areas containing native vegetation meeting the following standards:
      
      1) **Trees –** Viable trees at a tree density of 150 tree credits per acre within the PNA, calculated as described in KZC 95.33.

         Example: A 10,000-square-foot lot requires a 2,500 sq. ft. PNA (10,000 x 25% = 2,500 sq. ft.). Within the 2,500 sq. ft. PNA, nine (9) tree credits are required (2,500 sq. ft./43,560 sq. ft. = 0.057 acres x 150 tree credits = 8.6, rounded up to nine (9) tree credits). Note: the tree density for the remaining lot area is 50 tree credits per acre.

      2) **Shrubs –** Predominately 36 inches high, covering at least 60 percent of the PNA.

      3) **Living Groundcovers –** Covering at least 60 percent of the PNA.

   f. **Minimum Supplemental Tree and Vegetation Standards -** If the subject property contains insufficient existing vegetation pursuant to subsection (4)(e) of this section, or if the Planning Official determines it is not feasible to retain an existing vegetation area, a PNA shall be restored or established in a location approved by the Planning Official. The applicant shall provide a landscape plan per subsection 70.20.6(b) showing at a minimum:
      
      1) **Native Plants - Trees, shrubs and groundcovers selected from the Kirkland Native Plant List, or other native species approved by the Planning Official shall be used to supplement vegetation in the PNA.**

      2) **Trees –** The minimum size for a supplemental tree worth one tree credit in the PNA shall be at least six (6) feet in height for a conifer and at least two inches in caliper (DBH) for deciduous or broad-leaf evergreen trees, measured from existing grade. Native conifer tree species are preferred over deciduous trees in the PNA.

The Kirkland Zoning Code is current through Ordinance 4619, passed November 21, 2017.
3) Shrubs – Planted to attain coverage of at least 80 percent of the area within two years, and at the time of planting be between 2- and 5-gallon pots or balled and burlapped equivalents.

4) Living Groundcovers – Planted from either 4-inch pot with 12-inch spacing or 1-gallon pot with 18-inch spacing to cover within two years 80 percent of the naturalized area.

5) Soil Specifications – Soils in supplemental vegetation areas shall be amended to comply with soil amendment standards in the City of Kirkland Public Works Pre-Approved Plans and Policies.

6) Mulch – Mulch in supplemental vegetation areas shall comply with KZC 95.50.

7) Prohibited Plants – Invasive weeds, noxious plants and trees listed on the Kirkland Prohibited Plant List shall be removed within the PNA in a manner that will not harm trees and vegetation that are to be retained.

2. Non-PNA Portion of Property. Total site alteration, including impervious surfaces and other alterations, shall not exceed 75 percent of the total lot area. In addition to the PNA and the area allowed for buildings and other impervious surfaces under section (4), up to 50 percent of the total lot area may be used for garden, lawn or landscaping, provided:

a. All High Retention Value Trees, as defined in Chapter 95 KZC, shall be retained in the garden, lawn or landscaping portion of property. Supplemental and existing viable trees combined at a minimum tree density of 50 tree credits per acre are required in the Non-PNA portion of property, calculated as described in KZC 95.33. Example: A 10,000-square-foot lot requires a 2,500 sq. ft. PNA (10,000 x 25% = 2,500 sq. ft.), leaving a 7,500-square-foot Non-PNA area. Within the Non-PNA, nine (9) tree credits are required (7,500 sq. ft./43,560 sq. ft. = 0.172 acres) x 50 tree credits = 8.6, rounded to nine (9) tree credits.

The area limits set forth in this subsection are to be measured at grade level; the area of allowable garden, lawn or landscaping may intrude into the drip line of a significant tree required to be retained under this subsection if it is demonstrated not to cause root damage or otherwise imperil the tree’s health; and

b. If development on the lot is to be served by an on-site sewage disposal system, any areas required by the Department of Public Health to be set aside for on-site sewage disposal systems shall be contained as much as possible within the portion of the lot altered for garden, lawn or landscaping as provided by this subsection. If elements of the on-site sewage disposal system must be installed outside the landscaped area, the elements must be installed so as not to damage any significant trees required to be retained under subsection (3)(a) of this section, and any plants that are damaged must be replaced with similar native plants.

c. Soils on all proposed projects that are subject to clearing and grading that have not been covered by impervious surface, incorporated into a drainage facility or engineered as structural fill or slope shall, at project completion, meet soil amendment requirements per Pre-Approved Plan CK-E.12 within the clearing limits, i.e. in all disturbed areas. In the HPO, this will include all areas where alteration of soil characteristics has occurred.

3. Critical Areas, Surface Water Development Review. When review under Chapter 85 KZC (Critical Areas: Geologically Hazardous Areas) or Chapter 90 KZC (Critical Areas: Wetlands, Streams, Minor Lakes, Fish and Wildlife Habitat Conservation Areas and Frequently Flooded Areas) or the City of Kirkland’s Surface Water Design Manual is required, the review shall assume the maximum development permitted by this Chapter will occur on the subject property, and the threshold of approval shall require a demonstration of no significant adverse impact on properties located downhill or downstream from the proposed development.

4. Maximum Lot Coverage. Total lot coverage shall be limited within every building lot as follows:

a. On lots up to 6,500 square feet in size, 2,600 square feet;

b. On lots 6,501 to 9,000 square feet in size, 2,600 square feet plus 28 percent of the lot area over 6,500 square feet;

c. On lots over 9,000 square feet in size, 3,300 square feet plus 10 percent of the lot area over 9,000 square feet;

d. On a lot already developed, cleared or otherwise altered up to or in excess of the limits set forth above prior to July 6, 1999, new impervious surfaces shall be limited to five (5) percent of the area of the lot, not to exceed 750 square feet; and

The Kirkland Zoning Code is current through Ordinance 4619, passed November 21, 2017.
e. For purposes of computing the allowable lot coverage within each lot, private streets, joint-use driveways or other impervious-surfaced access facilities required for vehicular access to a lot in easements or within flag lots shall be excluded from calculations.

**Maximum Lot Coverage Summary Table:**

<table>
<thead>
<tr>
<th>Lot Size</th>
<th>Maximum Lot Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 6,500 sq. ft.</td>
<td>2,600 sq. ft.</td>
</tr>
<tr>
<td>6,501 sq. ft. to 9,000 sq. ft.</td>
<td>2,600 sq. ft. plus 28% of the lot area over 6,500 sq. ft.</td>
</tr>
<tr>
<td>9,001 sq. ft. or greater</td>
<td>3,300 sq. ft. plus 10% of the lot area over 9,000 sq. ft.</td>
</tr>
<tr>
<td>Developed, cleared or altered lots</td>
<td>New impervious limited to 5% of the total lot area, but not to exceed 750 sq. ft.</td>
</tr>
</tbody>
</table>

f. For development activity occurring after July 6, 1999, upon written request from the applicant, the Planning Director may allow up to a 10 percent increase in impervious surface on individual lots over the limits set forth above, provided such increase is the minimum necessary to allow reasonable use of the property and meets all other applicable decision criteria for a variance as provided in Chapter 120 KZC, and one or more of the following circumstances applies:

1) Development of a lot will require a driveway 60 feet or longer from the lot boundary to the proposed dwelling unit;

2) On-site flow control facilities are required by the Public Works Department;

3) The requested increase will allow placement of new development on the site in such a way as to allow preservation of one or more additional significant trees, as defined in Chapter 95 KZC, that would otherwise be cleared; or

4) The requested increase is necessary to provide additional parking, access ramp or other facilities needed to make a dwelling accessible for a mobility-impaired resident.

(Ord. 4437 § 1, 2014; Ord. 4196 § 1, 2009)

5. **Subdivisions, Short Subdivisions and Land Surface Modifications.** Subdivisions, short subdivisions, and land surface modification permits associated with the development of more than one lot shall be subject to the following requirements:

a. Applications shall include a comprehensive review of Tree Retention Plan as outlined in KZC 95.30, including the location of the required PNA. Phased review of Tree Retention Plans as described in KZC 95.30(6)(a) is not permitted within the HPO zone;

b. The applicant may propose or the City may require alterations to the proposed subdivision, short subdivision, or LSM in order to ensure the best tree retention and location for the PNA. Such alterations include adjustments to the location of building footprints, adjustments to the location of driveways and access ways, or adjustment to the location of walkways, easements or utilities per Chapter 95.32;

c. New public or private road improvements shall be the minimum necessary to serve the development on the site in accordance with Chapter 110 KZC. The City shall consider granting modifications to the road standards to further minimize tree removal, site disturbance, and consistent with pedestrian and traffic safety considerations, and the other purposes of the road standards;

d. Impervious surfaces and other alterations within each lot shall be limited as provided in subsections (2), (3) and (4) of this Section;

The Kirkland Zoning Code is current through Ordinance 4619, passed November 21, 2017.
e. For larger PNAs, the City may require permanent signage to be installed along the perimeter of the PNA designating the area as a PNA prior to recording. Signage shall meet the administrative standards of the Planning and Building Department in regard to design, number and location. The signs must be maintained and remain in perpetuity; and

f. The proposed PNA shall generally be established within a separate tract. The approved PNA shall be shown on the face of the plat prior to recording and designate who is responsible for maintaining the PNA.

6. Tree Retention and Landscape Plan Required.

a. The applicant shall submit a Tree Retention Plan required under KZC 95.30. In addition, it shall include the existing conditions and general locations of all shrubs and groundcover on the subject property.

b. In addition to the Tree Retention Plan required pursuant to KZC 95.30, permit application materials shall include a landscape plan prepared by a landscape architect licensed in Washington State that clearly depicts the quantity, location, species, and size of existing and supplemental plant materials and trees proposed to comply with the tree density and vegetation requirements of this section for the PNA and Non-PNA portions of the subject property. The landscape architect shall indicate on the plan that based on the size, quantity, spacing and species of the existing and supplemental trees, a minimum 50% tree canopy cover in the Non-PNA area and 100% tree canopy cover in the PNA area portions of the lot will be achieved in twenty years' time. Plants installed in the PNA shall be integrated with existing native vegetation and planted in a naturalistic pattern per the standards in Chapter 83.400 KZC. The landscape plan shall be reviewed by the Planning Official for approval.

7. Site Inspections. The Planning and Building Department shall conduct site inspections prior to approving any site alteration or development activity as follows:

a. Prior to altering the site, the applicant shall clearly delineate the proposed PNA and the area of the lot proposed to be altered and built on with 4-foot high stakes and high-visibility tape or other conspicuous and durable means, and shall depict this area on all site plans included in the permit application;

b. Prior to approving any short subdivision, subdivision, building or land surface modification permit on any parcel, the Planning Official shall inspect the subject property to verify the existing conditions, tree and vegetation cover, and any previous site alteration or building on the site;

c. Prior to permit issuance, the applicant shall install tree and soil protective fencing per KZC 95.34, subject to Planning Official inspection. In addition to requirements of KZC 95.34, the protective fence posts shall be driven into the ground, remain in the approved location for the duration of development activities, including required soil amendments and include signage per Public Works Pre-Approved Plans for Tree Protection Fence Standards; and

d. Prior to any development activity related to a land surface modification permit the applicant shall notify the City of the scheduled dates for such activity; and

d. Prior to Planning Official final inspection of any land surface modification or building permit, or recording of any short plat or subdivision, a landscape architect licensed by the State of Washington shall inspect the landscaping and submit an as-built plan and photo documentation verifying to the Planning Official that all vegetation required to be planted or preserved as indicated on the approved landscape plan was installed.

8. Tree and Landscape Maintenance Requirements

In general, forested hydrological conditions, soil stability and the duff layer shall be maintained on properties in the HPO as follows:

a. Protected Natural Area(s) – PNA(s) shall be retained in perpetuity.

1) For subdivisions, short subdivisions and LSMs associated with more than one lot, PNAs shall be set aside in a tract. In other developments, a recorded protected easement is required. The approved PNA shall be shown in a form approved by the City Attorney or other legal document recorded with and on the face of the plat with a designation of who is responsible for maintaining the PNA. Land survey information shall be provided for this purpose in a format approved by the Planning Official.

The Kirkland Zoning Code is current through Ordinance 4619, passed November 21, 2017.
2) The applicant, landowner, or successors in interest shall be responsible for the ongoing maintenance of vegetation required under Section 70.20 of this Chapter and KZC 95. For short plats and subdivisions containing larger consolidated PNAs where extensive supplemental planting is required, the City may require a financial security under Chapter 175 KZC to ensure compliance with the monitoring and maintenance of trees and vegetation planted in the PNA.

3) Plants that die must be replaced in kind or with similar plants contained on the Native Plant List, or other native species approved by the Planning Official.

4) Construction of primitive pedestrian-only trails may occur if they can be designed with minimal environmental impact. In no case shall trails be constructed of concrete, asphalt, or other impervious surfaces.

b. Non-PNA Portions of the lot which are not geologically hazardous areas or do not contain wetlands, streams, minor lakes, fish and wildlife habitat conservation areas and frequently flooded areas, or critical areas governed by Chapter 85 or 90 KZC, shall be maintained per Chapter 70.15.2 KZC.

9. Conformance with Other Provisions. Conformance with this Chapter shall not relieve an applicant from conforming to any other applicable provisions of the Zoning Code, Subdivision Ordinance, or Shoreline Master Program.

(Ord. 4619 § 1, 2017; Ord. 4551 § 4, 2017; Ord. 4491 §§ 3, 11, 2015; Ord. 4437 § 1, 2014; Ord. 4196 § 1, 2009)
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 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 significant 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 their functions as 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. Implement the goals and objectives of the City’s Comprehensive Plan;
   g. Implement the goals and objectives of the State Environmental Policy Act (SEPA); and
   h. Manage trees and other vegetation in a manner consistent with the City’s Natural Resource Management Plan.
   i. Preserve and protect street trees, trees in public parks and trees on other City property.

(Ord. 4238 § 2, 2010; Ord. 4010 § 2, 2005)

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. Caliper – The American Association of Nurserymen standard for trunk measurement of nursery stock. Caliper of the trunk shall be the trunk diameter measured six (6) inches above the ground for up to and including 4-inch caliper size and 12 inches above the ground for larger sizes.

2. Critical Root Zone – The area surrounding a tree at a distance from the trunk, which is equal to one (1) foot for every inch of trunk diameter measured at 4.5 feet from grade or otherwise determined by a qualified professional (example: one (1) foot radius per one (1) inch DBH).

The Kirkland Zoning Code is current through Ordinance 4628, passed December 12, 2017.
3. Crown – The area of a tree containing leaf- or needle-bearing branches.
4. Diameter at Breast Height (DBH) – The diameter or thickness of a tree trunk measured at 4.5 feet from the ground. DBH is also known as Diameter at Standard Height (DSH).
5. Dripline – The distance from the tree trunk, that is equal to the furthest extent of the tree’s crown.
6. Grove – A group of three (3) or more significant trees with overlapping or touching crowns.
7. Hazard Tree – A tree that meets all the following criteria:
   a. A tree with a combination of structural defects and/or disease which makes it subject to a high probability of failure;
   b. Is in proximity to moderate to high frequency targets (persons or property that can be damaged by tree failure); and
   c. The hazard condition of the tree cannot be lessened with reasonable and proper arboricultural practices nor can the target be removed.
8. Impact – A condition or activity that affects a part of a tree including the trunk, branches, and critical root zone.

x. Inner Critical Root Zone (ICRZ) – An area encircling a tree that is half the distance of the Critical Root Zone, or the inner half of the Critical Root Zone radius. Applicable only in the HPO only.
9. Limit of Disturbance – The boundary between the protected area around a tree and the allowable site disturbance as determined by a qualified professional measured in feet from the trunk.
10. Nuisance Tree – A tree that meets either of the following criteria:
    a. Is causing obvious physical damage to private or public structures, including but not limited to: sidewalk, curb, road, driveway, parking lot, building foundation, or roof; or
    b. Has sustained damage from past maintenance practices.

The problems associated with the 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, and/or cabling to reconstruct a healthy crown.
12. Qualified Professional – 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 Certification (TRACE) as established by the Pacific Northwest Chapter of ISA (or equivalent);
    • American Society of Consulting Arborists (ASCA) registered Consulting Arborist;
    • Society of American Foresters (SAF) Certified Forester for Forest Management Plans;

For tree retention associated with a development permit, a qualified professional 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 the likelihood of tree survival after construction. A qualified professional must also be able to prescribe appropriate measures for the preservation of trees during land development.
13. 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:
    a. High, a viable tree, located within required yards and/or required landscape areas. Tree retention efforts shall be directed to the following trees if they are determined to be healthy and windfirm by a qualified professional, and provided the trees can be safely retained when pursuing alternatives to development standards pursuant to KZC 95.32:
       1) Specimen trees;
       2) Tree groves and associated vegetation that are to be set aside as preserved groves pursuant to KZC 95.51(3);
       3) Trees on slopes of at least 10 percent; or
       4) Trees that are a part of a grove that extends into adjacent property, such as in a public park, open space, critical area buffer or otherwise preserved group of trees on adjacent private property. If significant trees must be removed in these situations, an adequate buffer of trees may be required to be retained or planted on the edge of the remaining grove to help stabilize;
    b. Moderate, a viable tree that is to be retained if feasible; or
    c. Low, a tree that is either (1) not viable or (2) is in an area where removal is unavoidable due to the anticipated development activity.
14. Significant Tree – A tree that is at least six (6) inches in diameter at breast height (DBH) as measured at 4.5 feet from the ground.
15. Significantly Wooded Site – A subject property that has a number of significant trees with crowns that cover at least 40 percent of the property.
16. 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.
17. Specimen Tree – A viable tree that is considered in very good to excellent health and free of major defects, as determined by the City’s Urban Forester.
18. Street Tree – A 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 considered to be on the abutting property and subject to the provisions of this chapter.
19. Tree Removal – The removal of a tree, through either direct or indirect actions, including but not limited to: (1) clearing, damaging or poisoning resulting in an unhealthy or dead tree; (2) removal of at least half of the live crown; or (3) damage to roots or trunk that is likely to destroy the tree’s structural integrity.
20. Viable Tree – A significant tree that a qualified professional has determined to be in good health, with a low risk of failure due to structural defects, is windfirm if isolated or remains as part of a grove, and is a species that is suitable for its location.
21. Wildlife Snag – The remaining trunk of a tree that is intentionally reduced in height and usually stripped of its live branches.
22. Windfirm – A condition of a tree in which it withstands average peak local wind speeds and gusts.

(Ord. 4551 § 4, 2017; Ord. 4238 § 2, 2010; Ord. 4193 § 1, 2009; Ord. 4010 § 2, 2005)

95.23 Tree Removal – Not Associated with Development Activity
1. Introduction. 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, contributing towards the City’s canopy goals and a more sustainable urban forest.
2. Permit Required for Removal of Trees on Private Property or City Right-of-Way. It is unlawful for any person (other than City crews) to remove, prune, trim, modify, alter or damage a tree in a public park or on any other City property.

No person, directly or indirectly, shall remove any significant tree on any property within the City, or any tree in the public right-of-way, without first obtaining a tree removal permit as provided in this chapter, unless the activity is exempted in KZC 95.20 and subsection (5) of this section.
3. Tree Removal Permit Application Form. The Planning and Building Department and Public Works Department shall establish and maintain a tree removal permit application form to allow property owners to request City review of tree removal for compliance with applicable City regulations. The tree removal application form shall include at a minimum the following:
   a. A site plan showing the approximate location of significant trees, their size (DBH) and their species, along with the location of structures, driveways, access ways and easements.
   b. For required replacement trees, a planting plan showing location, size and species of the new trees in accordance to standards set forth in KZC 95.33(3).
4. Tree Removal Permit Application Procedure and Appeals.
   a. Applicants requesting to remove trees must submit a completed permit application on a form provided by the City. The City shall review the application within 21 calendar days and either approve, approve with conditions or modifications, deny the application or request additional information. Any decision to deny the application shall be in writing along with the reasons for the denial and the appeal process.
   b. The decision of the Planning Official is appealable using the applicable appeal provisions of Chapter 145 KZC.
   c. Time Limit. The removal shall be completed within one (1) year from the date of permit approval.
5. Tree Removal Allowances.
   a. Except in the Holmes Point Overlay zone, any private property owner of developed property may remove up to two (2) significant trees from their property within a 12-month period without having to apply for a tree removal permit; provided, that:
      1) There is no active application for development activity for the site;
2) The trees were not required to be retained or planted as a condition of previous development activity; and
3) All of the additional standards for tree removal and tree removal permits as described in subsections (5)(b) through (e) of this section are met.

The Planning and Building Department shall establish and maintain a tree removal request form. The form may be used by property owners to request Department review of tree removal for compliance with applicable City regulations.

b. Tree Retention and Replacement Requirements.
   1) Tree Retention. For single-family homes, cottages, carriage units, two/three-unit homes, two (2) trees shall be required to remain on the subject property.
   2) Tree Replacement.
      a) For every significant tree that is removed and is not required to remain based on subsection (5)(b)(1) of this section, the City encourages the planting of a tree that is appropriate to the site.
      b) If a tree removal request is for one (1) or both of the trees required to remain, a tree removal permit and one-for-one replacement is required. The replacement tree shall be six (6) feet tall for a conifer and 2-inch caliper for deciduous or broad-leaf evergreen tree.
      c) For all other uses not listed in subsection (5)(b)(1) of this section, a tree removal permit is required and the required tree replacement will be based on the required landscaping standards in KZC 95.40 through 95.45.

c. Shoreline Jurisdiction. Properties located within the City’s shoreline jurisdiction are subject to additional tree removal and replacement standards if the tree(s) to be removed are located within the required shoreline setback. See Chapter 83 KZC for additional standards.

(x) Holmes Point Overlay zone. Properties located within the Holmes Point Overlay area are subject to additional tree removal and replacement standards. See Chapter 70 KZC for additional standards.

d. Removal of Hazard or Nuisance Trees. Any private property owner seeking to remove any number of significant trees which are a hazard or nuisance from developed or undeveloped property or the public right-of-way shall first obtain approval of a tree removal permit and meet the requirements of this subsection.
   1) Tree Risk Assessment. If the nuisance or hazard condition is not obvious, a tree risk assessment prepared by a qualified professional explaining how the tree(s) meet the definition of a nuisance or hazard tree is required. Removal of nuisance or hazard trees does not count toward the tree removal limit if the nuisance or hazard is supported by a report prepared by a qualified professional and approved by the City.
   2) Trees in Critical Areas or Critical Areas Buffers. See Chapter 90 KZC.
   3) Street Trees. Street trees may only be removed if determined to be a hazard or nuisance. If the removal request is for street trees, the Public Works Official may consider whether the tree(s) are now, or may be in the future, part of the City’s plans for the right-of-way. The City shall require a one-for-one tree replacement in a suitable location.

e. Forest Management Plan.
   1) A Forest Management Plan must be submitted for developed, significantly wooded sites (over 40 percent canopy coverage) of at least 35,000 square feet in size in which removal of more than two (2) trees is requested and is not exempt under KZC 95.20. A Forest Management Plan must be developed by a qualified professional and shall include the following:
      a) A site plan depicting the location of all significant trees (a survey identifying tree locations is not required) with a numbering system of the trees (with corresponding tags on trees in the field). The site plan shall include size (DBH), species, and condition of each tree;
      b) Identification of trees to be removed, including reasons for their removal and a description of low impact removal techniques pursuant to subsection (5)(e)(2) of this section;
      c) A reforestation plan that includes location, size, species, and timing of installation;
   2) The following Forest Management Plan standards shall apply:
      a) Trees to remain should be dominant or co-dominant in the stand, healthy and windfirm.
      b) No removal of trees from critical areas and their buffers, unless otherwise permitted by this chapter.
      c) No removal of specimen trees, unless otherwise permitted by this chapter.
      d) No removal of healthy trees that would cause trees on adjacent properties to become hazardous.
      e) The reforestation plan ensures perpetuity of the wooded areas. The size of planted trees for reforestation shall be a minimum of three (3) feet tall.
f) Logging operations shall be conducted so as 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.

g) Removal of tree debris shall be done pursuant to Kirkland Fire Department standards.

h) Recommended maintenance prescription for retained trees with a specific timeline for such management.

(Ord. 4551 § 4, 2017; Ord. 4491 § 3, 2015; Ord. 4437 § 1, 2014; Ord. 4408 § 1, 2013; Ord. 4372 § 1, 2012; Ord. 4238 § 2, 2010)

95.30 Tree Retention Associated with Development Activity

1. Introduction. The City’s objective is to retain as many viable trees as possible on a developing site while still allowing the development proposal to move forward in a timely manner. To that end, the City requires approval of a tree retention plan in conjunction with all development permits resulting in site disturbance and for any tree removal on developed sites not exempted by KZC 95.20. This section includes provisions that allow development standards to be modified in order to retain viable significant trees.

In order to make better decisions about tree retention, particularly during all stages of development, tree retention plans will require specific information about the existing trees before removal is allowed. Specific tree retention plan review standards provided in this section establish tree retention priorities, incentives, and variations to development standards in order to facilitate preservation of viable trees. A minimum tree density approach is being used to retain as many viable trees as possible with new development activity. The requirement to meet a minimum tree density applies to new single-family homes, cottages, carriage units, two/three-unit homes, and new residential subdivisions and short subdivisions. If such a site falls below the minimum density with existing trees, supplemental planting is required. A tree density for existing trees to be retained is calculated to see if new trees are required in order to meet the minimum density for the entire site. Supplemental tree location priority is set as well as minimum size of supplemental trees to meet the required tree density.

The importance of effective protection of retained trees during construction is emphasized with specific protection standards in the last part of this section. These standards must be adhered to and included on demolition, grading and building plans as necessary.

Properties within jurisdiction of the Shoreline Management Act are subject to additional tree retention and protection regulations as set forth in Chapter 83 KZC.

Properties within the Holmes Point Overlay zone are subject to additional tree retention and protection regulations as set forth in Chapter 70 KZC, including tree removal allowances, development review, requirements, Protected Natural Area designation, soil amendment requirements and the use of Incentives and Variations to development standards to retain High Retention Value trees.

2. Tree Retention Plan Required. An applicant for a development permit must submit a tree retention plan that complies with this section. A qualified professional may be required to prepare certain components of a tree retention plan at the applicant’s expense. If proposed development activities call for more than one (1) tree retention plan component, the more stringent tree retention plan component shall apply; provided, that the Planning Official may require a combination of tree plan components based on the nature of the proposed development activities. If the proposed activity is not clearly identified in this chapter, the Planning Official shall determine the appropriate tree retention plan requirements.

The chart in subsection (5) of this section sets forth the tree retention plan requirements for development activities and associated tree removal. Applicants for development are encouraged to confer with City staff as early in the design process as possible so that the applicable tree planting and retention concepts can be incorporated into the design of the subject property. The Planning Official may waive a component of the tree retention plan if the Planning Official determines that the information is not necessary.

3. Tree Retention Plan Review. Any proposed development of the subject property requiring approval through a building permit, land surface modification permit, and/or demolition permit, or Design Review, Process I, IIA or IIB, described in Chapters 142, 145, 150 and 152 KZC respectively, shall include a tree retention plan to be considered as part of that process.

Based on the tree retention plan information submitted by the applicant and the Planning Official’s evaluation of the trees relative to the proposed development on the subject property, the Planning Official shall designate
each tree as having a high, moderate, or low retention value as defined in KZC 95.10, Definitions, for application towards the regulations in this chapter.

4. Tree Retention Plan Components. The tree retention plan shall contain the following information as specified in the chart in subsection (5) of this section, unless waived by the Planning Official:

a. A tree inventory containing the following:
   1) A numbering system of all existing significant trees on the subject property (with corresponding tags on trees); the inventory must also include significant trees on adjacent property with driplines extending over the subject property line;
   2) Limits of Disturbance (LOD) of all existing significant trees (including approximate LOD of off-site trees with overhanging driplines);
   3) Size (DBH);
   4) Proposed tree status (trees to be removed or retained);
   5) Brief general health or condition rating of these trees (i.e.: poor, fair, good, excellent, etc.);
   6) Tree type or species.

b. A site plan depicting the following:
   1) Location of all proposed improvements, including building footprint, access, utilities, applicable setbacks, buffers, and required landscaped areas clearly identified. If a short plat or subdivision is being proposed and the location of all proposed improvements cannot be established, a phased tree retention plan review is required as described in subsection (6)(a) of this section;
   2) Accurate location of significant trees on the subject property (surveyed locations may be required). The site plan must also include the approximate trunk location and critical root zone of significant trees that are on adjacent property with driplines extending over the subject property line;
   3) Trees labeled corresponding to the tree inventory numbering system;
   4) Location of tree protection measures;
   5) Indicate limits of disturbance drawn to scale around all trees potentially impacted by site disturbances resulting from grading, demolition, or construction activities (including approximate LOD of off-site trees with overhanging driplines). For properties located in the HPO, Inner Critical Root Zones, and Inner Critical Root Zones of significant trees must be shown on the site plan. If any disturbance is proposed within the Critical Root Zone of significant 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. If any disturbance is proposed within the Inner Critical Root Zone of significant trees on a neighboring property, the applicant shall provide written authorization from the property owner of the impacted tree(s) for the encroachment. The Planning Official may waive this requirement if the applicant can demonstrate, through non-injurious methods such as air root excavations, that there are no roots within the Critical Root Zone;
   6) Proposed tree status (trees to be removed or retained) noted by an ‘X’ or by ghosting out;
   7) Proposed locations of any supplemental trees and any required trees in order to meet tree density or minimum number of trees as outlined in KZC 95.33.

c. An arborist report containing the following:
   1) A complete description of each tree’s health, condition, and viability. In the HPO, include off-site trees that may be potentially impacted by site disturbances;
   2) A description of the method(s) used to determine the limits of disturbance (i.e., critical root zone, root plate diameter, or a case-by-case basis description for individual trees);
   3) Any special instructions specifically outlining any work proposed within the limits of the disturbance protection area (i.e., hand-digging, tunneling, root pruning, any grade changes, clearing, monitoring, and aftercare);
   4) For trees not viable for retention, a description of the reason(s) for removal based on poor health, high risk of failure due to structure, defects, unavoidable isolation (windfirmness), or unsuitability of species, etc., and for which no reasonable alternative action is possible must be given (pruning, cabling, etc.);
   5) Describe the impact of necessary tree removal to the remaining trees, including those in a grove or on adjacent properties;
   6) For development applications, a discussion of timing and installation of tree protection measures that must include fencing and be in accordance with the tree protection standards as outlined in KZC 95.34; and
7) The suggested location and species of supplemental trees to be used when required. The report shall include planting and maintenance specifications pursuant to KZC 95.50 and 95.51.

5. Tree Retention Plan. The applicant shall submit a Tree Retention Plan that includes the components identified in the following chart based on the proposed development activity.

**TREE RETENTION PLAN**

<table>
<thead>
<tr>
<th>Development Activity Required Components</th>
<th>Minor (1)(3) – Single-Family, or two attached, detached, or stacked dwelling units, and related demolition and land surface modification applications</th>
<th>Major (2)(3) Single-Family, or two attached, detached, or stacked dwelling units, and related demolition and land surface modification applications</th>
<th>Multifamily, Commercial, any other use other than residential, and related demolition and land surface modification applications</th>
<th>Short Plat, Subdivisions, cottages, carriage units, two/three-unit homes, and related demolition and land surface modification applications (see KZC 95.30(6)(a), Phased Review, for additional standards)</th>
</tr>
</thead>
</table>

**TREE INVENTORY AS DESCRIBED IN KZC 95.30(4)(a) FOR:**

<table>
<thead>
<tr>
<th>All significant trees on the subject property</th>
<th>X</th>
<th>X</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant trees potentially impacted by proposed development activity</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SITE PLAN AS DESCRIBED IN KZC 95.30(4)(b) TO INCLUDE:**

<table>
<thead>
<tr>
<th>Surveyed tree locations if required by the Planning Official</th>
<th>X</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surveyed tree locations</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>A final landscape plan showing retained trees</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Indicate Inner Critical Root Zones of significant trees on properties in the HPO per 95.10.xx</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**REQUIREMENTS IN KZC 95.30(4)(c) SHALL BE PREPARED BY A QUALIFIED PROFESSIONAL AND APPLY TO:**

| Significant trees within required yards or within 10 feet of any side property line | X | | |
Significant trees potentially impacted by proposed development activity as determined by the Planning Official &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&n
toward required landscaping requirements

Notes:

(1) Applicable when new development, redevelopment, or development in which the total square footage of the proposed improvements is less than 50 percent of the total square footage of the existing improvements on the subject property.

(2) Applicable when new development, redevelopment, or development in which the total square footage of the proposed improvements is more than 50 percent of the total square footage of the existing improvements on the subject property.

(3) For lots created through a short subdivision, subdivision, or planned unit development with an approved Tree Retention Plan, the applicant must comply with the Tree Retention Plan approved with the short subdivision, subdivision, or planned unit development unless subsection (6)(a) of this section, Phased Review, applies.

(4) To retain trees with a high retention value, the applicant shall pursue, where feasible, applicable variations in the development standards of this code as outlined in KZC 95.32.

(5) Prior to short plat or subdivision recording.

(6) Preservation and maintenance agreements in the Holmes Point Overlay zone apply per KZC 70. Public infrastructure projects constructed by a public agency are exempt from this retention standard, but subject to all other applicable retention standards.

6. Additional Tree Retention Plan Standards for Short Plats and Subdivisions.

a. Phased Review.
   1) If during the short plat or subdivision review process the location of all proposed improvements, including the building footprint, utilities, and access, was not able to be established, the applicant may submit a Tree Retention Plan that addresses trees only affected by the known improvements at the time of application. Tree removal shall be limited to those affected areas.
   2) A new Tree Retention Plan shall be required at each subsequent phase of the project as more information about the location of the proposed improvements is known subject to all of the requirements in this section.
   3) Phased review of Tree Retention Plans is not permitted in the Holmes Point Overlay zone. In the HPO zone, tree retention for subdivision or short plat applications and land surface modification applications associated with the development of more than one lot shall provide a comprehensive review of Tree Retention Plans through an integrated process as outlined in subsections (2) through (5) of this section.

b. Modifications to Tree Retention Plan for Short Plats and Subdivisions. A Tree Retention Plan modification request shall contain information as determined by the Planning Official based on the requirements in subsection (5) of this section, Tree Retention Plan. The fee for processing a modification request shall be established by City ordinance.

For Tree Retention Plans approved during the short plat or subdivision review process that established the location of all proposed improvements, including the building footprint, utilities, and access, a modification to the Tree Retention Plan may be approved as follows:

1) Modification – General. The Planning Official may approve minor modifications to the approved Tree Retention Plan in which the minimum tree density credits associated with trees identified for retention are not decreased.

2) Modification Prior to Tree Removal. The Planning Official may approve a modification request to decrease the minimum number of tree density credits associated with trees previously identified for retention if:
   a) Trees inventoried in the original Tree Retention Plan have not yet been removed; and
   b) The Planning Official shall not approve or deny a modification pursuant to this section without first providing notice of the modification request consistent with the noticing requirements for the short plat.
3) Modification after Tree Removal. A modification request is required to decrease the minimum number of tree density credits associated with trees previously identified for retention after which trees inventoried in the original Tree Retention Plan have already been removed. Such a request may be approved by the Hearing Examiner only if the following are met:
   a) The need for the modification was not known and could not reasonably have been known before the tree retention plan was approved;
   b) The modification is necessary because of special circumstances which are not the result of actions by the applicant regarding the size, shape, topography, or other physical limitations of the subject property relative to the location of proposed and/or existing improvements on or adjacent to the subject property;
   c) There is no practicable or feasible alternative development proposal that results in fewer additional tree removals;
   d) The Hearing Examiner shall not approve or deny a modification pursuant to this section without the Planning Official first providing notice of the modification request consistent with the noticing requirements for the short plat and providing opportunity for comments for consideration by the Hearing Examiner; and
   e) Said comment period shall not be less than 14 calendar days.

(Ord. 4619 § 1, 2017; Ord. 4437 § 1, 2014; Ord. 4252 § 1, 2010; Ord. 4238 § 2, 2010; Ord. 4010 § 2, 2005)

95.32 Incentives and Variations to Development Standards

In order to retain trees, the applicant should pursue provisions in Kirkland’s codes that allow development standards to be modified. Examples include but are not limited to number of parking stalls, right-of-way improvements, lot size reduction under Chapter 22.28 KMC, lot line placement when subdividing property under KMC Title 22, Planned Unit Developments, and required landscaping, including buffers for lands use and parking/driving areas.

Requirements of the Kirkland Zoning Code may be modified by the Planning Official as outlined below when such modifications would further the purpose and intent of this chapter as set forth in KZC 95.05 and would involve trees with a high or moderate retention value.

1. Common Recreational Open Space. Reductions or variations of the area, width, or composition of required common recreational open space may be granted.
2. Parking Areas and Access. Variations in parking lot design and/or access driveway requirements may be granted when the Public Works and Planning Officials both determine the variations to be consistent with the intent of City policies and codes.
3. Required Yards. Initially, the applicant shall pursue options for placement of required yards as permitted by other sections of this code, such as selecting one (1) front required yard in the RSX zone and adjusting side yards in any zone to meet the 15-foot total as needed for each structure on the site. The Planning Official may also reduce the front, side or rear required yards; provided, that:
   a. No required side yard shall be less than five (5) feet; and
   b. The required front yard shall not be reduced by more than five (5) feet in residential zones. There shall not be an additional five (5) feet of reduction beyond the allowance provided for covered entry porches;
   c. Rear yards that are not directly adjacent to another parcel’s rear yard but that are adjacent to an access easement or tract may be reduced by five (5) feet;
   d. No required yard shall be reduced by more than five (5) feet in residential zones.
4. Storm Water. Requirements pertaining to stormwater may be varied if approved by the Public Works Official under KMC 15.52.060.
5. Additional Variations. In addition to the variations described above, the Planning Official is authorized to require site plan alterations to retain trees with a high retention value. Such alterations include minor adjustments to the location of building footprints, adjustments to the location of driveways and access ways, or adjustment to the location of walkways, easements or utilities. The Planning Official and the applicant shall work in good faith to find reasonable solutions.

6. Additional variations in the Holmes Point Overlay zone for short plats, subdivisions, and land surface modification applications associated with the development of more than one lot. The Planning Director may approve variations to maximum Floor Area Ratio and Lot Coverage requirements in order to facilitate consolidation of the PNA within a separate tract pursuant to KZC 70. If the PNA is placed in a tract and the creation of the tract results in lot sizes reduced below 10,890 square feet in the RSA 4 zone or 7,260 square feet in the RSA 6 zone, then the...
maximum Floor Area Ratio and Lot Coverage requirements may be adjusted proportionate to the lot size reduction(s). Variations shall be included in a recorded agreement.

(Ord. 4547 § 1, 2016; Ord. 4350 § 1, 2012; Ord. 4238 § 2, 2010)

95.33 Tree Density Requirement
The required minimum tree density is 30 tree credits per acre for single-family homes, cottages, carriage units, two/three-unit homes, short plats, and/or subdivisions and associated demolition and land surface modification. For individual lots in a short subdivision or subdivision with an approved Tree Retention Plan, the tree density shall be calculated for each lot within the short plat or subdivision. The tree density may consist of existing trees pursuant to the tree’s retention value, supplemental trees or a combination of existing and supplemental trees pursuant to subsection (2) of this section. Existing trees transplanted to an area on the same site shall not count toward the required density unless approved by the Urban Forester based on transplant specifications provided by a qualified professional that will ensure a good probability for survival. Protected Natural Areas (PNA) located on properties within the HPO zone are subject to tree density credits set forth in Chapter 70 KZC.

1. Tree Density Calculation. In calculating tree density credits, tree credits may be rounded up to the next whole number from a 0.5 or greater value. For the purpose of calculating required minimum tree density, public right-of-way, areas to be dedicated as public right-of-way, and vehicular access easements not included as lot area with the approved short plat shall be excluded from the area used for calculation of tree density.

   a. Diameter breast height (DBH) of the tree shall be measured in inches.

   b. The tree credit value that corresponds with DBH shall be found in Table 95.33.1. Existing native conifers (or other conifer species as approved by the Urban Forester) shall count 1.5 times credits for retention.

   c. In the HPO, no tree shall receive more than 11 tree credits regardless of DBH.

Table 95.33.1

Tree Density for Existing Significant Trees

(Credits per minimum diameter – DBH)

<table>
<thead>
<tr>
<th>DBH</th>
<th>Tree Credits</th>
<th>DBH</th>
<th>Tree Credits</th>
<th>DBH</th>
<th>Tree Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 – 5&quot;</td>
<td>0.5</td>
<td>6 – 10&quot;</td>
<td>1</td>
<td>24&quot;</td>
<td>8</td>
</tr>
<tr>
<td>12&quot;</td>
<td>2</td>
<td>14&quot;</td>
<td>3</td>
<td>28&quot;</td>
<td>10</td>
</tr>
<tr>
<td>16&quot;</td>
<td>4</td>
<td>18&quot;</td>
<td>5</td>
<td>32&quot;</td>
<td>11</td>
</tr>
<tr>
<td>20&quot;</td>
<td>6</td>
<td>22&quot;</td>
<td>7</td>
<td>36&quot;</td>
<td>14</td>
</tr>
</tbody>
</table>

Example: a 7,200-square-foot lot would need five (5) tree credits (7,200/43,560 = 0.165 X 30 = (4.9) or five (5)). The tree density for the lot could be met by retaining one (1) existing 16-inch deciduous tree and one (1) existing 6-inch deciduous tree on site. The same 7,200-square-foot lot would meet the required five (5) tree credits by retaining one (1) existing 14-inch conifer.

2. Supplemental Trees Planted to Meet Minimum Density Requirement. For sites and activities requiring a minimum tree density and where the existing trees to be retained do not meet the minimum tree density requirement, supplemental trees shall be planted to achieve the required minimum tree density.

3. Tree Location. In designing a development and in meeting the required minimum tree density, the trees shall be planted in the following order of priority:
a. On-Site. The preferred locations for new trees are:
   1) In preserved groves, critical areas or their buffers.
   2) Adjacent to storm water facilities as approved by Public Works under KMC 15.52.060.
   3) Entrance landscaping, traffic islands and other common areas in residential subdivisions.
   4) Site perimeter – The area of the subject property that is within 10 feet from the property line.
   5) On individual residential building lots.

b. Off-Site. When room is unavailable for planting the required trees on site, then they may be planted at another approved location in the City.

c. City Forestry Account. When the Planning Official determines on-site and off-site locations are unavailable, then the applicant shall pay an amount of money approximating the current market value of the supplemental trees into the City forestry account.

4. Minimum Size and Tree Density Value for Supplemental Trees. The required minimum size of the supplemental tree worth one (1) tree credit shall be six (6) feet tall for Thuja/Arborvitae or four (4) feet tall for native or other conifers and 2-inch caliper for deciduous or broad-leaf evergreen tree. Additional credits may be awarded for larger supplemental trees. The installation and maintenance shall be pursuant to KZC 95.50 and 95.51 respectively.

   (Ord. 4547 § 1, 2016; Ord. 4238 § 2, 2010)

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. Plants that die must be replaced in kind. 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. All required landscaping shall be maintained throughout the life of the development. Prior to issuance of a certificate of occupancy, the proponent shall provide a final as-built landscape plan and an agreement to maintain and replace all landscaping that is required by the City.

   b. 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:

      1) The tree and associated vegetation 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.

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 and associated vegetation 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. Trees and other vegetation in designated Protected Natural Areas in the Holmes Point Overlay Zone are to be protected in perpetuity pursuant to KZC 70.20.8(a). Significant trees in the remainder of the lot shall be protected in perpetuity maintained pursuant to KZC 70.20.8(b) and KZC 95.23.

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. Removal must be performed in a manner that will not harm the tree or other vegetation that the City has required to be planted or protected.

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.
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.

(Ord. 4551 § 4, 2017; Ord. 4437 § 1, 2014; Ord. 4238 § 2, 2010)
Draft Zoning Code Amendment

**KZC 10.30 Overlay Designations Adopted**

The following overlay zones apply in various areas:

<table>
<thead>
<tr>
<th>Overlay Zoning Category</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Holmes Point Overlay Zone</td>
<td>“HPO”</td>
</tr>
<tr>
<td>2. Adult Activities Overlay Zone</td>
<td>“AE”</td>
</tr>
<tr>
<td>3. Historic Landmark Overlay Zone</td>
<td>“HL”</td>
</tr>
<tr>
<td>4. Equestrian Overlay Zone</td>
<td>“EQ”</td>
</tr>
<tr>
<td>5. Secure Community Transition Facility</td>
<td>“SCTF”</td>
</tr>
</tbody>
</table>

(Ord. 4196 § 1, 2009; Ord. 3954 § 1, 2004)
<table>
<thead>
<tr>
<th>Development Type</th>
<th>Staff Responsible for Inspection</th>
<th>Timing</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Residential, demolition, remodels/additions, multifamily, commercial</td>
<td>Planner</td>
<td>Installed fence is inspected prior to permit issuance</td>
<td>No site disturbance is allowed prior to permit issuance. “Fence-creep” occurs occasionally after initial inspection.</td>
</tr>
<tr>
<td>Stand-alone clearing and grading, or clearing and grading associated with short plats/subdivisions</td>
<td>Public Works Inspectors</td>
<td>Prior to permit issuance, then randomly throughout project.</td>
<td>Tree protection violations seldom occur during this phase; most changes to tree protection occur through City approved revisions that may be necessary not previously known.</td>
</tr>
<tr>
<td>All building-related permits</td>
<td>Building Inspectors</td>
<td>Throughout building construction</td>
<td>Tree protection fencing is typically not the focus of these inspections.</td>
</tr>
<tr>
<td>Single Family Residential, demolition, remodels/additions, multifamily, commercial</td>
<td>Planner</td>
<td>Final Inspection (for Certificate of Occupancy)</td>
<td>Checking for general tree retention compliance. Concealed damage is often difficult to identify.</td>
</tr>
<tr>
<td>Any</td>
<td>Code Enforcement Officers</td>
<td>Upon complaint</td>
<td>Code enforcement is usually triggered by a complaint.</td>
</tr>
</tbody>
</table>

The chart above summarizes current site inspection procedures for different permits and the staff responsible for inspections at various stages of development. Staff has indicated where there are gaps in tree protection inspection.