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**CITY OF DUVALL  
Planning Department  
Determination of Non-Significance  
2018 Sensitive Tree Protection Code Amendment  
December 28, 2017**

**PROJECT NAME / DESCRIPTION OF PROPOSAL**

**City of Duvall Code Amendments (Tree Protection Code Update)** The City of Duvall is in the process of updating its Tree Protection Code (DMC14.40) in accordance with the requirements of the Growth Management Act (GMA) (RCW36.70.A). The City adopted a Watershed Management Plan (2015) and a Comprehensive Plan (2016) that set the framework for the update of the tree protection polices into the zoning code (Title 14). The Tree Protection Code regulates the removal of trees on developed lots and new development sites. The purpose of the updated regulations is to provide increased protection and enhancement of the City's tree canopy while streamlining permitting and allowing some flexibility for tree removals. The updated Tree Protection Code is a non-project action that affects activities and developments within City limits. Proposed updates to the Code include modifications to the size threshold of protected ("significant") trees; a change in approach from requiring retention of a percentage of significant trees to requiring a certain number of tree density credits, varying by lot size and zoning; and greater protections for larger trees.

**APPLICANT/CONTACT**

Lara Thomas, Planning Director  
City of Duvall, P.O. Box 1300, Duvall, WA 98019 / 425-939-8079

**PROPERTY OWNER/CONTACT**

Not Applicable as this is a Non-Project Action.

**LEAD AGENCY**

**Lead Agency: City of Duvall, PO Box 1300, Duvall, WA 98019**

The responsible official hereby makes the following determination based upon impacts identified in the environmental checklist and evaluated by staff, the policies set out in the 2015 City of Duvall Comprehensive Plan, and other municipal policies, plans, rules, and regulations designated as a basis for the exercise of substantive authority of the Washington State Environmental Policy Act Rules pursuant to RCW 43.21C. It is hereby determined that this proposal does not have a probable significant adverse impact on the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.031(1). This DNS is issued under WAC 197-11-340; the lead agency will not act on this proposal for at least 14 days from December 28, 2017.

**DESCRIPTION OF ACTION AND IMPACTS**

**Action:** This is a non-project action. Individual evaluations and permits will be completed prior to any construction activity.

**COMMENT PERIOD**

Comments regarding the DNS must be submitted no later than **4:30 p.m. on Friday, January 11, 2018**. Appeals shall be filed in accordance with DMC 14.08.060.C.

**RESPONSIBLE OFFICIAL**

Lara Thomas, Planning Director  
PO Box 1300, Duvall, WA 98019, (425) 788-1156

  
\_\_\_\_\_  
Lara Thomas, Planning Director

December 28, 2017

\_\_\_\_\_  
Date



**City of Duvall**

Small Town. Real Life.

**CITY OF DUVALL  
TREE PROTECTION CODE UPDATE  
SEPA ENVIRONMENTAL CHECKLIST  
DECEMBER 2017**



No pending applications or approvals would be affected by the updated Tree Protection Code. Once adopted, the updated Code would apply to any tree removal associated with existing or new development within the City of Duvall. Permit applications for tree removal would be processed according to the Tree Protection regulations and procedures in effect at the time the application was determined to be complete.

**10. List of governmental approvals or permits that will be needed for the proposal:**

The updated Tree Protection Code will need the following approvals:

- Review and threshold determination under the State Environmental Policy Act (SEPA) for non-project actions; and
- Adoption by the City of Duvall City Council.

**11. Brief, complete description of the proposal, including the proposed uses and the size of the project and site:**

The City of Duvall last conducted a review and update of its Tree Protection regulations in 2007. The proposal is an update to chapter 14.40 of the Duvall Municipal Code. The Tree Protection Code regulates the removal of trees on developed lots and new development sites. The purpose of the updated regulations is to provide increased protection and enhancement of the City's tree canopy while streamlining permitting and allowing some flexibility for tree removals. The updated Tree Protection Code is a non-project action that affects activities and developments within City limits. Proposed updates to the Code include modifications to the size threshold of protected ("significant") trees; a change in approach from requiring retention of a percentage of significant trees to requiring a certain number of tree density credits, varying by lot size and zoning; and greater protections for larger trees.

**12. Location of the proposal, including street address, if any, and section, township, and range; legal description; site plan; vicinity map; and topographical map, if reasonably available:**

The City of Duvall (1,594 acres in area) is located in King County, and situated on the east side of the lower Snoqualmie River valley approximately 7 miles northeast of central Redmond and 8.5 miles south of Monroe. Duvall is bordered on the west by the mainstem Snoqualmie River, and State Route 203 (Main Street within Duvall, and the primary corridor into and out of the City) runs from north to south along the eastern edge of the river's floodplain. Duvall lies primarily within Section 13 and Section 24, Township 26N, and Range 6E, as well as Sections 18 and 19, Township 26N, and Range 7E.

tree removal and generally limit grading more than does the current Tree Protection Code.

**f. Could erosion occur as a result of clearing, construction, or use?**

Erosion control would be addressed on a project-level basis through the City's surface water design requirements, clearing and grading code, and other provisions of the updated Tree Protection Code.

**g. About what percent of the site will be covered with impervious surfaces after project construction (for example buildings or asphalt)?**

The updated Tree Protection Code would not increase impervious surfaces. It may decrease impervious surfaces by requiring increased tree retention in existing and new development, however, the updated regulations do not directly limit impervious surfaces.

**h. Describe the proposed measures to reduce or control erosion, or other impacts to the earth, if any.**

The updated Tree Protection Code includes provisions to retain existing trees that meet the definitions of significant and exceptional trees. Compared to the existing Tree Protection Code the updated tree protections include additional development standards and revised reporting requirements, designed to further limit clearing of trees on developed lots and new development sites. These provisions are implemented on a project-by-project basis. In general, the updated Tree Protection Code would increase the retention of trees in the City, which provide land stability and decrease erosion.

## Air

**a. What types of emissions to the air would result from the proposal (e.g. dust, automobile, odors, industrial, wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities, if known.**

The proposed updates to the Tree Protection Code do not involve emissions and no emissions to the air would result from the proposed updates.

**b. Are there any off-site sources of emissions or odors that may affect your proposal? If so, generally describe.**

The updated Tree Protection Code is a non-project action and there are no off-site sources of emissions or odors that could affect the proposal.

- 5. Does the proposal lie within a 100-year flood plain? If so, note location on the site plan.**

Yes, a portion of the City lies within the 100-year floodplain. The floodplain for Duvall is mapped on Federal Emergency Management Agency (FEMA) flood insurance rate maps (FIRMs).

- 6. Does the proposal involve discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

No discharges of waste materials are proposed.

**b. Ground**

- 1. Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.**

No groundwater withdrawals or discharges are proposed.

- 2. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any. Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) is expected to serve.**

No material will be discharged into the ground.

**c. Water Runoff (including storm water)**

- 1. Describe the source of runoff (including storm water) and method of collection and disposal, if any (including quantities if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

The proposal will not result in water runoff. In general, increased tree protections would be expected to decrease storm water runoff.

- 2. Could waste materials enter ground or surface waters? If so, generally describe.**

The updated Tree Protection Code would not cause waste material to enter ground or surface waters.

The purpose of the updated Tree Protection Code is to better preserve and enhance vegetation (primarily trees) in the City while simplifying requirements and allowing some flexibility for landowners. For existing and new development, the updated protections will reduce the size threshold of regulated trees so that smaller trees are afforded protections (current standard 16 inches, proposed standard is being considered between six and 12 inches). For new development, the update would strengthen tree protections by requiring a percentage of the tree density credit requirement be met with retained trees (for sites with existing tree canopy), whereas the existing code allows complete tree removal with replacement tree planting. The new regulations also require control of non-native invasive plant species in the vicinity of any tree that the City has required to be planted or protected.

- e. **List all noxious weeds and invasive species known to be on or near the site.**

Reed canarygrass, Himalayan blackberry, Japanese knotweed, morning glory, tansy ragwort, Robert's geranium, bittersweet nightshade, evergreen blackberry, English ivy, and English holly are known to occur in the City.

## **Animals**

- a. **Underline any birds and animals which have been observed on or near the site or are known to be on or near the site:**

**Fish:** Steelhead, bull trout, Chinook, chum, coho, pink, sockeye, sucker species, dace species, Redside shiner, stickleback, sculpin species.

**Amphibians:** American bullfrog has been observed within the City; common species such as Pacific treefrog likely present.

**Reptiles:** None specifically identified; common species such as northwestern garter snake likely present.

**Birds:** Bald eagle, waterfowl, great blue heron, and pileated woodpecker, as well as numerous other bird species.

**Mammals:** Black-tailed deer, coyote, raccoon, Virginia opossum, eastern gray squirrel, beaver, mountain beaver, rabbit, skunk, occasional use by black bear, as well as numerous other common small mammal species.

- b. **List any threatened or endangered species or critical habitat near the site.**

The Snoqualmie River in the vicinity of the City provides habitat for Chinook salmon (federally listed as threatened), bull trout/Dolly

## Environmental Health

- a. **Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spills, or hazardous waste that could occur as a result of this proposal? If so, describe.**

The updated code would not affect environmental health.

1. **Describe special emergency services that might be required.**

No special emergency services will be required.

2. **Describe proposed measures to reduce or control environmental health hazards.**

The updated Tree Protection Code would not pose any environmental health hazards, so no measures are proposed.

- b. **Noise**

1. **What types of noise exist in the area which may affect your project (for example: traffic, equipment operation, other)?**

The updated code would not be affected by noise.

2. **What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)?**

The updated Tree Protection Code does not affect noise or noise regulations.

3. **Describe proposed measures to reduce or control noise impacts, if any.**

No noise impacts will result from the project, so no measures are proposed.

## Land and Shoreline Use

- a. **What is the current use of the site and adjacent properties?**

Residential use is the most prevalent form of development within the City, followed by vacant lands and publicly owned open space and park lands. Other significant uses within the City include commercial, office, institutional, and industrial. All land uses in the City would be regulated by the updated Tree Protection Code.

- b. **Has the site been used for agriculture? If so, describe.**

- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.**

Environmentally sensitive or critical areas regulated by the City of Duvall include geologically hazardous areas (landslide hazards, erosion hazards, and seismic hazards), wetlands, fish and wildlife habitat conservation areas (primarily streams within the City, as well as Lake Rasmussen), and critical aquifer recharge areas. These sensitive areas are present throughout the City.

- i. Approximately how many people would reside or work in the completed project?**

The updated Tree Protection Code does not include any project where people would reside or work.

- j. Approximately how many people would the completed project displace?**

The updated Tree Protection Code will not displace any people.

- k. Describe proposed measures to avoid or reduce displacement impacts, if any.**

No displacement would occur, so no measures are proposed.

- l. Describe proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.**

The updated Tree Protection Code has been developed consistent with the City's Comprehensive Plan (2015) and Watershed Plan (2015). There is a greater tree retention requirement in subbasins that are a high priority for protection and restoration, as evaluated in the Watershed Plan. Additionally, regulations will vary based on intensities of land use, as determined by zoning classifications. The updated Tree Protection Code maintains protections of trees in sensitive areas and their buffers.

## **Housing**

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.**

The updated Tree Protection Code would not provide new housing units or modify existing housing stock. Future residential development would be subject to the updated Code.

Light and glare will not be produced as a result of the non-project proposal, so no measures are required.

## Recreation

- a. **What designated and informal recreational opportunities are in the immediate vicinity?**

A variety of parks and open spaces provide recreational opportunities throughout the City of Duvall.

- b. **Would the proposed project displace any existing recreational uses? If so, describe.**

The updated Tree Protection Code would not displace recreational uses.

- c. **Describe proposed measures to reduce or control impacts on recreation, including recreational opportunities to be provided by the project or applicant.**

The updated Tree Protection Code would not affect recreation, so no measures are required.

## Historic and Cultural Preservation

- a. **Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.**

Yes. While Duvall does not have its own local registry for identifying historic buildings, in 1997 a Cultural Resources Survey and Inventory was prepared (Sivinski and Drager, 1997) that identified 100 buildings constructed in Duvall before 1956. Of those 100 buildings, 50 were deemed to be historically or architecturally significant. Included in Duvall's documented historic structures is the Duvall Train Depot, east of the Snoqualmie River. Additionally, the Dougherty Farmstead is documented as a historic property, with the Duvall Historical Society providing guided public tours. The Cherry Valley/Duvall Cemetery (circa 1885) is a recorded historic cemetery about 200 feet from the southwest corner of Dougherty Farmstead, at 26524 NE Cherry Valley Rd.

- b. **Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any**

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe.**

The updated Tree Protection Code does not require new transportation infrastructure improvements.

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

The updated Tree Protection Code would not use, nor occur within the vicinity of, these alternative forms of transportation.

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

The updated Tree Protection Code will not affect the number of vehicular trips generated.

- g. Describe proposed measures to reduce or control transportation impacts, if any.**

The updated Tree Protection Code will not affect transportation, so no measures to reduce impacts are proposed.

### Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally explain.**

The updated Tree Protection Code will not increase the need for public services.

- b. Describe proposed measures to reduce or control direct impacts on public services.**

The Updated Tree Protection Code will not affect public services, so no measures are proposed.

### Utilities

- a. Underline utilities currently available at the site:**

Electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.**

No new utilities are proposed.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Lara Thomas  
Name (print): Lara Thomas  
Title: Planning Director  
Date Submitted: 12/18/17

sensitive areas buffers, and large trees. Although the enhanced tree protections do not directly reference fish or other wildlife, they are expected to benefit wildlife by requiring retention of trees (wildlife habitat), encouraging retention of trees adjacent to other trees or protected areas, and decreasing erosion and sedimentation, which can impair water quality.

**3. How would the proposal be likely to deplete energy or natural resources?**

The updated Tree Protection Code is not expected to result in any probable significant adverse environmental impacts related to the depletion of energy or natural resources.

**Proposed measures to protect or conserve energy and natural resources are:**

The updated Tree Protection code will not adversely affect energy or natural resources, so no measures are required.

**4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?**

The updated Tree Protection Code maintains protections of trees in sensitive areas and their buffers. It also prioritizes retaining trees adjacent to sensitive area buffers, parks, and other preserved groups of trees. Overall, the regulations are expected to either not affect or benefit these areas by increasing tree retention across the City, with tree density credit requirements varying by lot size and zoning.

**Proposed measures to protect such resources or to avoid or reduce impacts are:**

As stated above, the updated Tree Protection Code consists of regulations to protect and reduce impacts to trees and forested areas in the City. Compared to the existing Code, the updated Tree Protection regulations maintain and strengthen protection standards for sensitive areas and encourage retention of trees adjacent to sensitive area buffers, parks, and other forested areas.

Once adopted, the updated Tree Protection Code will increase protections for trees within the City. The updated Tree Protection Code contains provisions that follow the recommendations of the Watershed Plan, such as removing the allowance to clear-cut all onsite significant trees in Management Groups 1 and 2 and requiring tree replacement monitoring reports for 5 years after planting. Under the new regulations, clear-cutting all onsite significant trees is not allowed in any management group, however, in Management Group 3, which is designated as suitable for urban development, tree retention requirements are lower.

**5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?**

## REFERENCES

- City of Duvall. 2015. *City of Duvall 2015 Comprehensive Plan*. Adopted by City Council June 7, 2016, Resolution No. 16-09. Available at URL = <http://www.duvallwa.gov/DocumentCenter/Home/View/2974>.
- DNR (Washington State Department of Natural Resources). 2017. *Washington Natural Heritage Program Township, Range and Section Lists*. Updated February 6, 2017. Available: [https://www.dnr.wa.gov/publications/amp\\_nh\\_trs.pdf](https://www.dnr.wa.gov/publications/amp_nh_trs.pdf). Accessed December 20, 2017.
- ESA (Environmental Science Associates). 2015. *City of Duvall Watershed Plan*. Prepared for the City of Duvall. Final plan dated August 12, 2015; adopted September 15, 2015. Available at URL = <http://www.duvallwa.gov/DocumentCenter/View/2440>.
- Sivinski, V., and B. Drager. 1997. *Cultural Resources Survey and Inventory for the City of Duvall*. Prepared by Artifacts Consulting and Drager Associates, Tacoma, WA, for the City of Duvall, WA. November 1997.
- DAHP (Washington Department of Archeology and Historic Preservation). 2017. *Washington Information System for Architectural and Archaeological Records Data System*. Available: <https://dahp.wa.gov/project-review/wisaard-system>. Accessed December 20, 2017.

## **City of Duvall Chapter 14.40 - TREE PROTECTION**

### **Proposed Updates, Initial Draft – December 6, 2017**

### **Provided for Advisory Committee Review**

#### **14.40.010 - Purpose.**

The purposes of this chapter are to: avoid the removal of stands of trees and significant trees in order to maintain the quality of Duvall's urban environment; encourage the protection of stands of trees and significant trees to the maximum extent possible in the design of new developments, buildings, roadways and utilities; protect exceptional trees that, because of their unique species, age, size, location, and health are an important community resource; mitigate the environmental and aesthetic consequences of tree removal in land development through on- and off-site supplemental tree planting to achieve a goal of protecting significant trees and increasing tree canopy cover throughout the city of Duvall; provide measures to protect trees that may be impacted during construction; maintain and protect the public health, safety and general welfare.

The many benefits of healthy trees and vegetation contribute to Duvall'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.

(Ord. 1056 § 1 Exh. A (part), 2007)

#### **14.40.020 - Applicability.**

- A. DMC Section 14.40.030 applies to the removal of significant trees on developed lots, that is, a lot that is part of a subdivision or site plan approval or a lot that was built out under previous regulations.
- B. DMC Sections 14.40.040 through 14.40.110 apply to applications for new developments, including but not limited to: short or long subdivisions, site plans, building permits, conditional use permits, and development agreements. Removal of significant trees on redevelopable or undeveloped lots are subject to the same provisions as applications for new developments.
- C. For the purposes of this chapter, a significant tree is any tree, other than red alder and cottonwood trees, that measures a minimum of six (6) inches in diameter at breast height (four and one-half feet above the ground).

- a. the tree(s) is not in a native growth protection area, sensitive area, or sensitive area buffer;
  - b. the tree is not shown on an approved tree plan as to be retained;
  - c. the tree is not the last one or two trees on the lot. A property owner is required to submit a letter of request prior to removal in this case.
  - d. The property owner shall plant one tree for each tree removed.
- B. Significant trees which are a nuisance, hazard, dead, or dying, may be removed after a letter of request documenting the situation is submitted to the City by a property owner and/or homeowner's association, and a tree removal permit is granted. In the event that a tree is not obviously dead, dying or a hazard, a tree risk assessment prepared by a qualified professional arborist describing how the tree(s) meet the definition of a hazard tree shall be submitted with the letter of request. Nuisance trees must be documented as such in the letter of request consistent with the nuisance tree definition in DMC 14.06. Nuisance, hazard, dead, or dying trees do not count toward the annual removal allowance set out in DMC Section 14.40.030(A). Tree replacement for such trees shall be at a one (1) tree to one (10) tree ratio.
1. A hazard tree is one that has a disease and/or defect which makes it have a high probability of failure. This can include root rot, a significantly decayed trunk, two stems with poorly connected tissue and a pronounced inclusion, previous failure in the crown, or other defect as identified by a certified arborist.

[NEW DEFINITION FOR NUISANCE TREE TO ADD TO DMC 14.06: 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, utilities 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.]

- C. Protection of exceptional trees.
- D. Any tree on private property that poses an imminent threat to life or property may be removed without first obtaining a permit/city approval. The property owner shall contact the city within seven days of removal to provide photographic evidence of threat for approval of exemption. The city retains the right to dispute the emergency and require that replacement trees/vegetation be replanted as mitigation.
1. Imminent danger means that the conditions of the situation make it an immediate threat of failing. An imminent danger includes, but is not limited to, a tree leaning from a storm event, breaking roots, obvious decay or defect in a trunk or branch, a new crack at branch or stem attachments, and hanging broken branches.
- D. A property owner and/or homeowner's association requesting to take out trees that are in a native growth protection area (NGPA), sensitive area, or sensitive area buffer shall only be permitted to remove such trees if an arborist determines they are dead, dying or hazard trees. The woody debris from the trees may be required to be retained in the NGPA or sensitive area after cutting down for habitat purposes. Debris from cut trees shall be cut in small enough sizes to distribute over a wide area and not smother desirable vegetation. A minimum of three replacement trees shall be planted in the NGPA or sensitive area for each tree removed, and shall be native coniferous species appropriate to NGPA / sensitive area conditions unless otherwise permitted by the director. A larger number of smaller trees may be permitted by the

Assessment Matrix with the description of each tree's health and viability. Evaluation should include identification of significant trees that are not viable for retention, based on health, high risk of failure due to structure, defects, unavoidable isolation (wind firmness), or suitability of species, that are in areas that are not to be cleared by the proposed development.

- b) Location of limits of disturbance based on the CRZ around all trees proposed for retention and any special instructions for work within that protection area (hand-digging, tunneling, root pruning, maximum grade change). Adjusting fence locations to allow site work within the CRZ must be approved by the applicant's arborist and the planning director, and must be consistent with all requirements of DMC 14.40.080.
  - c) Discussion and approval of timing and installation of tree protection measures that must include fencing and be in accordance DMC Section 14.40.080. Measures may include trenching, mulching, pruning, tree care during construction, and post-construction requirements (long-term management).
  - d) 4. Suggested location and species of supplemental trees to be used when required and including planting and maintenance specifications.
  - e) Provide a list of General Tree Protection Guidelines that covers all potential impacts to retained trees, and methods and procedures for working around retained trees properly. Guidelines shall be consistent with all requirements of DMC 14.40.080.
  - f) Plan shall include requirement and schedule for:
    - i. Pre-con meeting with project and city arborist to confirm retained trees approve tree protection fence location, and agree on monitoring schedule for contract compliance based on work near retained trees.
    - ii. Requirement and method of reporting to city when significant work is required within the Inner Critical Root Zone (ICRZ) of any retained tree.
    - iii. Confirmation that the tree protection fences remain in place throughout the project
    - iv. Post construction meeting to confirm all trees have been retained, protected and planted per plan.
- C. The applicant shall be responsible for all costs associated with city review of such tree plans and for the costs related to arborist field visits, plan development, and plan review.
- D. The applicant's tree retention plan shall be consistent with DMC Section 14.40.060, Priorities for tree retention. The applicant shall identify how their proposal meets DMC Section 14.40.060, including for trees on adjacent properties as described in subsection (A)(1) of this section.
- E. Significant trees proposed for retention shall be tagged and numbered for field verification at time of application submittal.

(Ord. 1056 § 1 Exh. A (part), 2007)

**Table 14.40.050.1  
 Required Minimum Tree Credits**

<b>Zoning designation</b>	<b>Intensity</b>	<b>Required Minimum Tree Credits per Acre</b>
PO	Low	50
PF R4, R4.5	Low/Moderate	40
R6 R8 R12	Moderate	35
MU Zones Commercial R20	High	20

1. Tree Density Calculation. 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 within an improved plat shall be excluded from the area used for calculation of tree density. Sensitive areas and associated buffers to be maintained by the development proposal shall be excluded from the area used for calculation of tree density.

Tree density calculation for existing trees:

- g) Diameter at breast height (DBH) of the tree shall be measured in inches.
- h) The tree credit value that corresponds with DBH values shall be found in Table 14.40.050.2. These credits shall be multiplied by 1.5 for existing native conifers (or other conifer species as approved by the director).
- i) Retained red alder and cottonwood trees shall each count as 0.5 credits toward the tree density requirement for the site, except where occurring as a hazard or nuisance tree.
- j) Trees located in Sensitive Areas and those protected within the Native Growth Protection Area tract or easement to be established by the proposal shall not count toward the tree density requirement.

only reasonable alternative that will accomplish the applicant's objectives, and only when supplemental trees are provided to meet tree density credit requirements.

[OLD STANDARDS OF THIS SECTION DELETED]

(Ord. 1056 § 1 Exh. A (part), 2007)

**14.40.060 - New development sites—Priorities for tree retention.**

[NOTE: THIS SECTION IS A COMPLETE REPLACEMENT OF CURRENT CODE – NO REDLINE CHANGES INCLUDED, HOWEVER ALL PROVISIONS ARE NEW]

- A. Tree Priority for Retention/Site Design. The site plan shall take into account significant trees and be designed in accordance with the following guidelines:
1. The incorporation of trees as a site amenity with a strong emphasis on tree protection. Forested sites should retain their forested look, value, and function after development, to the extent possible.
  2. Trees should be protected within vegetated islands and stands rather than as individual, isolated trees scattered throughout the site. The city may refuse to consider individual, isolated trees as candidates for retention.
  3. Trees to be retained must be healthy and wind-firm as identified by an arborist. In designing a development project, the applicant shall prepare the required tree retention plan with consideration of the following retention priorities:
    - a. Tree groves and associated vegetation that are adjacent to areas that are proposed to be set aside as native growth protection areas (sensitive areas and protected buffers), such that retained trees provide additional habitat, hydrologic, water quality, and land stability functions;
    - b. Trees that will be located within a fish and wildlife habitat corridor, as established by the development proposal consistent with DMC Chapter 14.42;
    - c. Trees that are a part of grove that extends into adjacent property, such as in a public park, open space, sensitive 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 smaller trees may be required to be retained or planted on the edge of the remaining grove to help stabilize the grove;
    - d. Trees located in the site perimeter, especially when they provide a screening function between different land uses;
    - e. Contiguous with exceptional trees that must be retained on the development property or on immediately adjacent properties.
  4. Building footprints, parking areas, roadways, utility corridors and other structures should be designed and located with consideration of tree protection opportunities.
  5. The grading plan should be developed to accommodate existing trees and avoid alteration to grades around existing trees to be retained as part of a tree retention plan.
  6. Required open space and recreational space is located and designed to protect existing stands of trees.

[DELETED EXISTING CODE] (Ord. 1056 § 1 Exh. A (part), 2007)

**14.40.080 - Tree protection—Construction of new developments.**

A. To ensure long-term viability of trees and tree stands identified for protection permit plans and construction activities shall comply with the following tree retention requirements:

1. All minimum required tree protection measures shall be shown on the tree retention plan and the site grading plan. Project site plans shall include a summary of the project-specific tree protection measures.
2. Tree protection barriers shall be installed along the outer edge and completely surround the critical root zone of trees to be protected prior to any land disturbance and shall remain until the director authorizes tree protection barrier removal.
3. Tree protection barriers shall be a minimum of six (6) feet high [range from other jurisdictions is 4.5 – 6' ; six feet recommended by consultant team], constructed of chain link or similar material, subject to approval by the Director. "Tree protection area" signs shall be posted visibly on all sides of the fenced areas. On large project sites, the director may also require that signs requesting subcontractor cooperation and compliance with tree protection standards be posted at site entrances.
4. Where tree protection areas are remote from areas of land disturbance, and where approved by the director, alternative forms of tree protection may be used in lieu of tree protection barriers, provided that protected trees are completely surrounded with continuous flagging and are accompanied by "Tree protection area" signs.
5. Native understory trees, shrubs and other vegetation shall be protected within the designated tree protection area.
6. Construction planning and activities within the critical root zone of retained significant trees:
  - a) 5. To ensure that structures, utilities, and roadways are located an adequate distance from a protected tree and to allow adequate room for construction activities, the limits of construction clearing and grading shall generally be located no closer than the critical root zone of all protected trees. Work within that area shall be reviewed and approved by the project and city arborist
  - b) Except for structures proposed as a raised deck, bay window, or cantilevered or otherwise raised above the ground's surface so as not to disrupt the tree's roots, no structures shall be allowed within the Interior critical root zone (ICRZ) [NEED TO DEFINE].
  - c) Sidewalks and utilities may be located within the critical root zone of a protected tree, provided that construction methods and materials used will result in minimal disruption of the tree's roots, and that additional measures for tree protection are proposed and approved which will ensure the long-term viability of the tree.
  - d) Grade within critical root zone: the grade shall not be elevated or reduced within the critical root zone of trees to be preserved without the director's authorization based on recommendations from a professional arborist.
  - e) In limited instances based on site constraints, the director may allow construction limits or an alteration of grades within the critical root zone, provided that the applicant submits an evaluation by an arborist which demonstrates that the proposed construction will not reduce the long-term viability of the tree.
  - f) All construction activities, including, but not limited to, staging any materials, operating or parking equipment, or dumping concrete washout or other chemicals, shall be prohibited within the critical root zone of protected trees. During construction, no person shall attach any object to any tree designated for protection.
7. In addition to the subsection 6 of this section, the director may require the following:

**14.40.090 - Maintenance.**

- A. Any existing retained tree or supplemental tree shown on an approved tree retention plan, and any other tree required by the City to be planted, shall be maintained in healthy condition by the property owner 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 DMC 14.40.030.
1. Trees shall be monitored for a period of five (5) years to ensure that retained trees were not compromised by adjacent development and that supplemental, replacement, and transplanted trees are surviving.
  2. During years 1, 3, and 5 of the monitoring period, trees shall be monitored by a qualified arborist and reports submitted to the City that verify the health of all trees on the approved tree retention plan.
  3. Any tree found to be dead or dying shall be replaced by tree(s) that, at minimum, replace the tree's density credit.
  4. Any tree found to be unhealthy shall be assessed for opportunity for preventative measures to improve tree health, and shall be identified for additional review in future years of the monitoring period. For trees found to be unhealthy in year 5 of the monitoring period, the director may require additional supplemental planting based on review of monitoring information submitted by the property owner / home owner's association.
- B. [ENTIRELY NEW SECTION] A maintenance bond, cash deposit, or other security in a form acceptable to the City attorney covering ten (10) percent of the cost of the performance assurance bond amount established for all site landscaping per DMC Chapter 14.38, shall be in place prior to the release of a performance bond and shall be required to be held by the City for five years following issuance of building occupancy permit for the development site.
1. The director is authorized to notify the owner of any property upon which trees were retained or supplemental trees were planted as a condition of approval under this chapter that trees are not being adequately maintained, and the specific nature of such failure to maintain. The notice shall specify a date by which the property owner shall be expected to comply.
  2. Upon the failure to perform the required maintenance within the date specified by the notice, the director is authorized to collect funds under the maintenance bond or other security, and cause the required maintenance to be completed.
  3. When funds have not been set aside or the performance assurance has expired, the director is authorized to request the city attorney to institute legal action to recover the cost of the required maintenance, and upon receipt of the funds to cause the maintenance to be done.
  4. Maintenance as used in this section includes replacement of dead, diseased or damaged trees, preventative measures to improve health of unhealthy trees, and repair of irrigation systems.
  5. In subdivisions or site plans where the right-of-way contains retained or supplemental trees, the adjacent property owner, homeowner's association or like mechanism, is required to maintain that landscaping. Such requirement shall be noted on the face of the plat or site plan. If there are such requirements that are maintained by an organization other than the adjacent homeowner, or if there are common areas on a property, a homeowner's association is required.
- C. Cutting and Pruning.
1. Protected trees shall not be topped; any tree topping shall result in requirements for replacement tree(s) and fines, as determined consistent with 14.40.100 and review of the tree topping activity by the director.
  2. Street trees, on all public streets, shall be cut or pruned only under the supervision of, or with the approval of, the city of Duvall public works department.