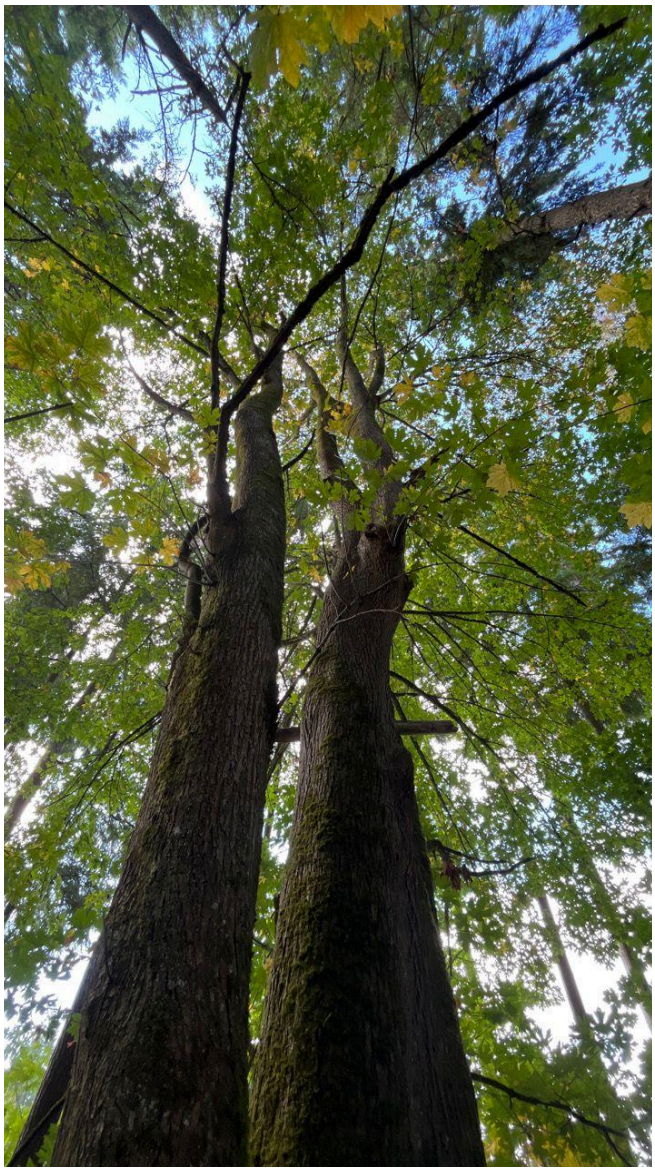
Arborist Report

Tree Risk Assessments - Chestnut Trails



Prepared For: **Chestnut Trails HOA**

% Erin Kraft
Navigate Community Management
600 1st Ave
Ste 330 PMB 44137
Seattle, WA 98104-2246.
erin.kraft@navigatecm.com
360-512-3820

Prepared By: **Davey Resource Group Inc.**

18809 10th Ave NE
Shoreline, WA, 98155
Contact: Todd Beals
todd.beals@davey.com
Local Office: 253.656.1650
Corporate Office: 800.828.8312

DAVEY Resource Group

Notice of Disclaimer

Assessment data provided by Davey Resource Group is based on visual recording at the time of inspection. Visual records do not include testing or analysis and do not include aerial or subterranean inspection unless indicated. Davey Resource Group is not responsible for discovery or identification of hidden or otherwise non-observable risks. Records may not remain accurate after inspection due to variable deterioration of surveyed material. Risk ratings are based on observable defects and mitigation recommendations do not reduce potential liability to the Owner. Davey Resource Group provides no warranty with respect to the fitness of the trees for any use or purpose whatsoever.

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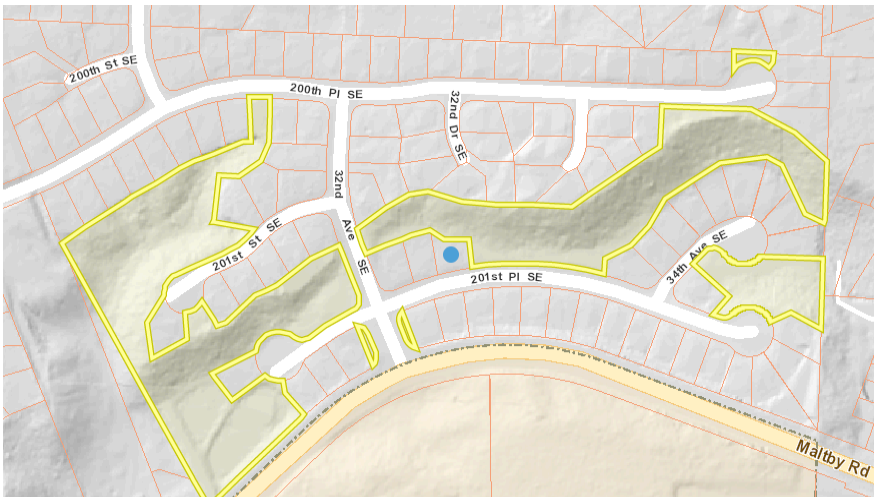
Introduction

Background

Davey Resource Group Inc. (DRG) was contracted to perform a Level 1 Tree Risk Assessment of the trees that exist in the Native Growth Protection Area (NGPA) within the Chestnut Trails residential community of Bothell. An initial Level 1 Tree Risk Assessment was performed by DRG in November 2021, December 2022, and December 2023.

The details of this current report are intended to support the additional trees that have been identified as hazardous. On September 25, 2025, an International Society of Arboriculture (ISA) Certified Arborist (NE-6913A) and Qualified Tree Risk Assessor from DRG conducted an assessment of the trees. The trees were assessed by their location, size, current condition, and overall health. The data was then used to determine a risk rating. The current edition of the Tree Risk Assessment Manual (ISA, 2013) was used to guide the risk rating of the tree as well as the potential strategies for care and risk abatement



Map illustrating the locations of the inspected trees.

Limits of the Assignment

There are many factors that can limit specific and accurate data when performing evaluations of trees, their conditions, and values. The determinations and recommendations presented here are based on current data and conditions that existed at the time of the evaluation and cannot be a predictor of the ultimate outcomes for the trees. A visual inspection was used to develop the findings, conclusions, and recommendations found in this report. Values were assigned to grade the attributes of the trees, including structure and canopy health, and to obtain an overall condition rating. No physical inspection of the upper canopy, sounding, root crown excavation, and resistograph or other technologies were used in the evaluation of the trees.

Methods

Data was collected by an ISA Certified Arborist & Qualified Tree Risk Assessor, Todd Beals (ISA Certification NE-6913A), on September 25, 2025. A limited visual inspection was used to develop the findings, conclusions, and recommendations found in this report. This level 1 assessment method is intended as a rapid assessment to identify trees with obvious defects or conditions of concern that could impact HOA properties. Only trees with imminent and/or probable likelihood of failure in a **2-year timeframe** had data collected. A Level Two Risk Assessment was then conducted on the selected trees from the Level 1 Risk Assessment, and a corresponding risk rating was developed.

> **Level One:** A cursory review typically performed along one plane, as in a drive-through or walk-by assessment of tree health and condition.
> **Level Two:** A non-invasive 360-degree assessment of the above-ground parts of the tree.
> **Level Three**: A more thorough investigation of tree health and condition that may include trunk/root excavation.

Data Collection

Tree Number: A Tree ID number was assigned, and an aluminum tag affixed to the tree.

Stems: The number of stems was recorded.

Species: Trees were identified by genus and species, cultivar if evident, and by common name.

Diameter at Standard Height (DSH): Trunk diameter was recorded to the nearest inch at 4.5 feet (standard height) above grade except where noted. When limbs or deformities occurred at standard height, measurement was taken below 4.5 ft.

Height: Tree Height estimated to the nearest <5ft.

Condition: Condition ratings were based on but not limited to:(1) the condition and environment of the tree's root crown; (2) the condition of the trunk, including decay, injury, callusing, or presence of fungus sporophore; (3) the condition of the limbs, including the strength of crotches, amount of deadwood, hollow areas, and whether there was excessive weight borne by them; (4) the condition and growth rate history of the twigs, including pest damage and diseases; (5) the leaf appearance, including abnormal size and density as well as pest and disease damage.

Using an average of the above factors together with the arborist's best judgment, the general condition of each tree was recorded in one of the following categories adapted from the rating system established by the International Society of Arboriculture and 10th Edition of the Council of Tree & Landscape Appraisers (CTLA) *Guide for Plant Appraisal*[1] :

[1] Council of Tree and Landscape Appraisers. (2019). *Guide for Plant Appraisal, 10th Edition, Second Printing.* Atlanta, GA: International Society of Arboriculture.

- **Excellent:** High vigor and near-perfect health with little or no twig dieback, discoloration, or defoliation. Nearly ideal and free of structural defects. Nearly ideal form for the species and generally symmetrical.
- **Good:** Vigor is normal for the species and has no significant damage due to disease or pests. Twig dieback, discoloration, or defoliation is minor. Well-developed structure with minor defects that can be corrected easily. Minor asymmetries/deviations from species norm. Function and aesthetics are not compromised.
- **Fair:** Reduced vigor. Damage due to insects or diseases may be significant and associated with defoliation but is not likely to be fatal. Twig dieback, defoliation, discoloration, and/or dead branches may comprise up to 50% of the canopy. A single structural defect of a significant nature or multiple moderate defects. Structural defects are not practical to correct or would require multiple treatments over several years. Major asymmetries/deviations from species norm. Function and aesthetics are compromised.
- **Poor:** Unhealthy and declining in appearance. Poor vigor and low foliage density and poor foliage color are present. Potentially fatal pest infestation. Extensive twig or branch dieback. A single serious structural defect or multiple significant defects. Observed structural problems cannot be corrected. Failure may occur at any time. Largely asymmetrical or abnormal form. Form detracts from aesthetics or intended use to a significant degree.
- **Very Poor:** Poor vigor and appears to be dying. Little live foliage. Single or multiple severe structural defects. Visually unappealing and provides little or no function in the landscape.
- **Dead**

Maintenance Task: The highest-priority maintenance need was identified to ensure a sustained return on investment. Additional tasks may be identified by the arborist completing the work.

- **Priority 1 Removal**: These trees have defects that cannot be cost-effectively or practically treated, have a high amount of deadwood, or pose an immediate hazard to property or person. Davey recommends that these trees be removed immediately.
- **Priority 2 Removal**: These trees are not as great of liability as Priority 1 Removals, being smaller and/or less hazardous, although they are also recommended for removal. Davey recommends that they be removed as soon as feasible.
- **Priority 1 Pruning**: Trees in this category need pruning to remove hazardous deadwood limbs greater than 3 inches in diameter and/or have broken, hanging, or diseased limbs.
- **Priority 2 Pruning**: These trees need pruning to remove hazardous deadwood limbs greater than two but less than 3 inches in diameter.
- **No Priority**: No priority maintenance required.

Maintenance Detail

- **Crown Clean**: Maintenance needed to remove dead, dying, broken or diseased wood.
- **End Weight/Thin**: Reduce the overall weight of tree canopy, most often removing water sprouts.
- **Remove**: Remove the tree.
- **Clearance**: Tree requires pruning to remove or reduce branches that may interfere or cause obstructions with vehicles or pedestrians. Typical standards for clearance are 8’

over sidewalks and 14’ over roads. Building clearance will be determined on a case by case basis.
- **Fertilize**: Tree would benefit from fertilization
- I**nstall/Inspect Cables**: Tree needs cabling to reduce risk of branch failure, or tree has cables that require routine inspection
- **Remove Stakes**: Identifies where a new planting has stakes that should be removed
- **Structural Prune**: Identifies a tree that would benefit from pruning to improve structure and health.
- **Treat Pest/Disease**: Tree exhibiting pest or disease symptoms.
- **None**: No (specific) maintenance required (Adding the word specific in there is very important, most trees we inventory don't need specific maintenance other than a routine trim schedule.

Observations: The primary observation impacting the health and condition assessment of the tree. Examples include:

- **Cavity/Decay**: The tree has a cavity and suspected structural decay.
- **Large/Small Deadwood:** Dead or dying branches visible in the canopy.
- **Mechanical Damage**: The tree has mechanical damage.
- **Poor Location**: The tree is in an unsuitable location for its size.
- **Poor Root System**: The root system of the tree appears to be compromised.
- **Poor Structure**: The overall tree structure is poorly developed.
- **Serious Decline**: The tree is in serious decline.
- **Signs of Stress**: The tree is exhibiting signs of stress.

Risk Assessment Methodology

This evaluation follows the tree risk assessment methods developed by the International Society of Arboriculture (ISA). It consists of an inspection of the visible tree parts including surface roots, trunk, scaffold limbs, and canopy. The hazard and risk assessment results in a risk rating for the tree to help quantify the level of risk accepted by the tree’s owner. To summarize the information about the trees that received a hazard evaluation, an overall hazard rating is obtained by assessing and assigning a value to the failure potential, identifying the size of the tree part most likely to fail (e.g., branch, one stem, or whole tree) and determining site use around the affected tree. Each of these three characteristics is assessed as follows:

Condition of Concern – Describes the part most likely to fail. The larger the tree part, the greater the potential for damage; therefore, the size of the failure part affects the overall hazard potential, and is described according to:

- Part Size - Typically the diameter of the limb or tree part
- Fall Distance - The distance of the part from the ground
- Target - The presence of any target(s) that could be impacted by failure

Likelihood of Failure – Identifies the most likely point of failure and rates the likelihood that the observed defect(s) will result in part failure **within the next 2 years.** Failure potential is rated as:

- Improbable (defects are minor and unlikely to result in failure)

- Possible (defects are present and of concern)
- Probable (compounding and/or significant defects present)
- Imminent (defects are serious and imminent failure is likely)

Likelihood of Impact – Identifies the most likely point of failure and rates the likelihood that the structural defect(s) will impact the potential targets. Likelihood of impact is rated as:

- Very Low (Occasional use, as in a forest landscape)
- Low (e.g., tree lawn, sidewalk, park path)
- Medium (buildings or people within striking range more than 50% of the time)
- High (Constant and frequent use of the area within striking distance)

Consequences of Failure – Rates the level of damage caused by the defective part in the event of failure. The consequences of failure are rated as:

- Negligible (typically small branches <1" diameter, unlikely to cause damage)
- Minor (branches 1-2" diameter, may cause damage)
- Significant (damage would occur)
- Severe (failure would result in major damage)

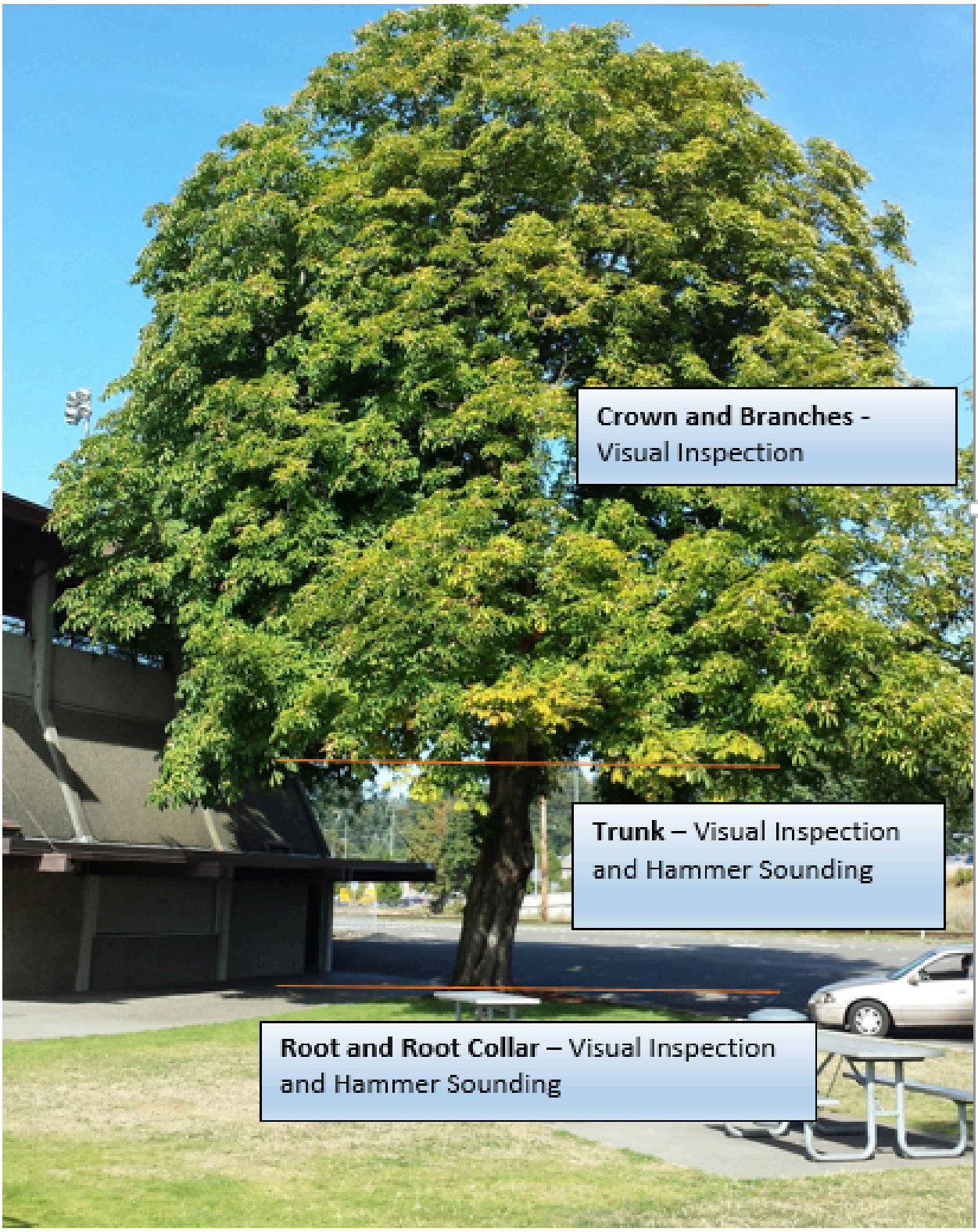
Overall Risk Rating - The values assigned to condition, likelihood and consequences are summarized into an overall risk rating of Low to Extreme for each tree:

- Low (risk is present, mitigation measures may not be required)
- Moderate (mitigation advised within normal maintenance cycle)
- High (mitigation advised within the year)
- Extreme (mitigation necessary as soon as practical)

In addition to a risk rating, the tree(s) were also prescribed maintenance recommendations based on general tree health and visual observations. A high-risk rating alone does not necessarily result in a recommendation for removal. Conversely, trees with a lower rating may be prescribed for removal based on other factors such as location and species compatibility and/or the severity of specific defects. Whenever recommended tree maintenance would mitigate risk, the residual risk was also noted.

A visual inspection and mallet soundings from groundline to 8 feet on the trunk were the primary methods used to develop the findings, conclusions, and recommendations found in this report. Data collection included measuring the diameter of the tree at 4.5 feet above grade, height estimation, canopy radius estimation, a visual assessment of tree condition, structure and health, and a photographic record. Mallet sounding was used to determine the soundness of accessible roots, trunk and branches. Qualitative value assessments grade the attributes of the tree, including structure and canopy health, and to obtain an overall condition rating. No physical inspection of the upper canopy, root crown excavation, and resistograph or other technologies were used in the evaluation of the tree.

Example Illustration: Tree defects and conditions affecting the likelihood of failure were assessed around the Root Collar, the Trunk and the Crown.



Tree Risk Assessments

Observations

A Level 1 Tree Risk Assessment (TRA) was conducted across designated areas of the Chestnut Trails HOA community. This preliminary evaluation focused specifically on identifying trees that pose potential failure risks and could threaten property, inhabitants, and community infrastructure.

The assessment encompassed a total of 14 trees throughout the designated areas. This assessment examined trees in proximity to key community features, including walking trails, pedestrian walkways, and residential structures.

Of the 14 trees assessed, 12 were classified as dead or dying and positioned within striking distance of potential targets—meaning they have a reasonable likelihood of impacting trails, homes, pavement, or other infrastructure if they fail. This represents a significant concentration of hazardous trees requiring attention.

The dead or dying trees were predominantly red alder (8 trees), which accounted for the majority of the inventory. Red alder is prone to decay and structural failure, making this species concentration particularly notable for the community.

The remaining trees in the assessment showed more favorable conditions:

- One tree was rated in fair condition, with some structural concerns, but greater stability than the dead or dying category
- One tree was rated in very poor condition, indicating advanced decline, though not yet classified as dead or dying

Table 1. Tree Condition

Species		Condition			
		Dead or Dying	Fair	Very Poor	TOTAL
Red Alder	*Alnus rubra*	8			8
Western Hemlock	*Tsuga heterophylla*	2			2
Bigleaf Maple	*Acer macrophyllum*		1	1	2
Cherry	*Prunus spp.*	1			1
Black Willow	*Salix spp.*	1			1
TOTAL		12	1	1	14

Analysis & Recommendations

The inspecting arborist identified the most likely point of failure and rated the likelihood that the observed defect(s) will result in part failure **within the next 2 years.** The following tables identify the trees of concern that require mitigation. In addition to the detailed recommendations outlined in the following table, it is also recommended that the areas receive a Level 1 TRA assessment annually, or following extreme weather events, to identify and mitigate any changes to tree conditions or to identify new conditions of concern. The arborist evaluated trees using a structured risk rating framework that categorizes severity into distinct levels:

- **Extreme Risk (1 tree):** This tree poses the most significant threat. It has one or more critical defects that are very likely to fail within the next 2 years, potentially causing serious harm or damage.
- **High Risk (10 trees):** These trees have notable defects with a substantial likelihood of failure within 2 years. While not as immediately critical as extreme risk trees, they still require prompt attention and mitigation.
- **Moderate Risk (3 trees):** These trees exhibit observable defects; however, the likelihood of impact is lower. They still warrant monitoring and potential treatment, but are less urgent than high-risk trees.

Table 2. The following table details the tree risk matrix for the inspected trees.

Tree ID	Common Name	Condition	Target(s)	Like. of Failure	Like. of Impact	Like. of Fail. & Impact	Consq. of Failure	Risk Rating
3007	Red Alder	Dead or Dying	Road	Imminent	Medium	Likely	Significant	High
3008	Red Alder	Dead or Dying	Road	Imminent	Medium	Likely	Significant	High
3009	Western Hemlock	Dead or Dying	Trail Pedestrians	Imminent	Low	Somewhat Likely	Severe	Moderate
3010	Red Alder	Dead or Dying	Trail Pedestrians	Imminent	Low	Somewhat Likely	Severe	Moderate
3011	Red Alder	Dead or Dying	Trail Pedestrians	Imminent	Low	Somewhat Likely	Severe	Moderate
3012	Red Alder	Dead or Dying	Property	Imminent	Medium	Likely	Significant	High
3013	Red Alder	Dead or Dying	Property	Imminent	Medium	Likely	Significant	High
3014	Red Alder	Dead or Dying	Property	Imminent	Medium	Likely	Significant	High

Tree ID	Common Name	Condition	Target(s)	Like. of Failure	Like. of Impact	Like. of Fail. & Impact	Consq. of Failure	Risk Rating
3015	Black Willow	Dead or Dying	Property	Imminent	Medium	Likely	Significant	High
3016	Red Alder	Dead or Dying	Property	Imminent	Medium	Likely	Significant	High
3017	Cherry	Dead or Dying	Property	Imminent	Medium	Likely	Significant	High
3018	Bigleaf Maple	Very Poor	Property	Probable	High	Very Likely	Severe	Extreme
3019	Bigleaf Maple	Fair	Property	Probable	High	Very Likely	Significant	High
3020	Western Hemlock	Dead or Dying	Property	Probable	High	Very Likely	Significant	High

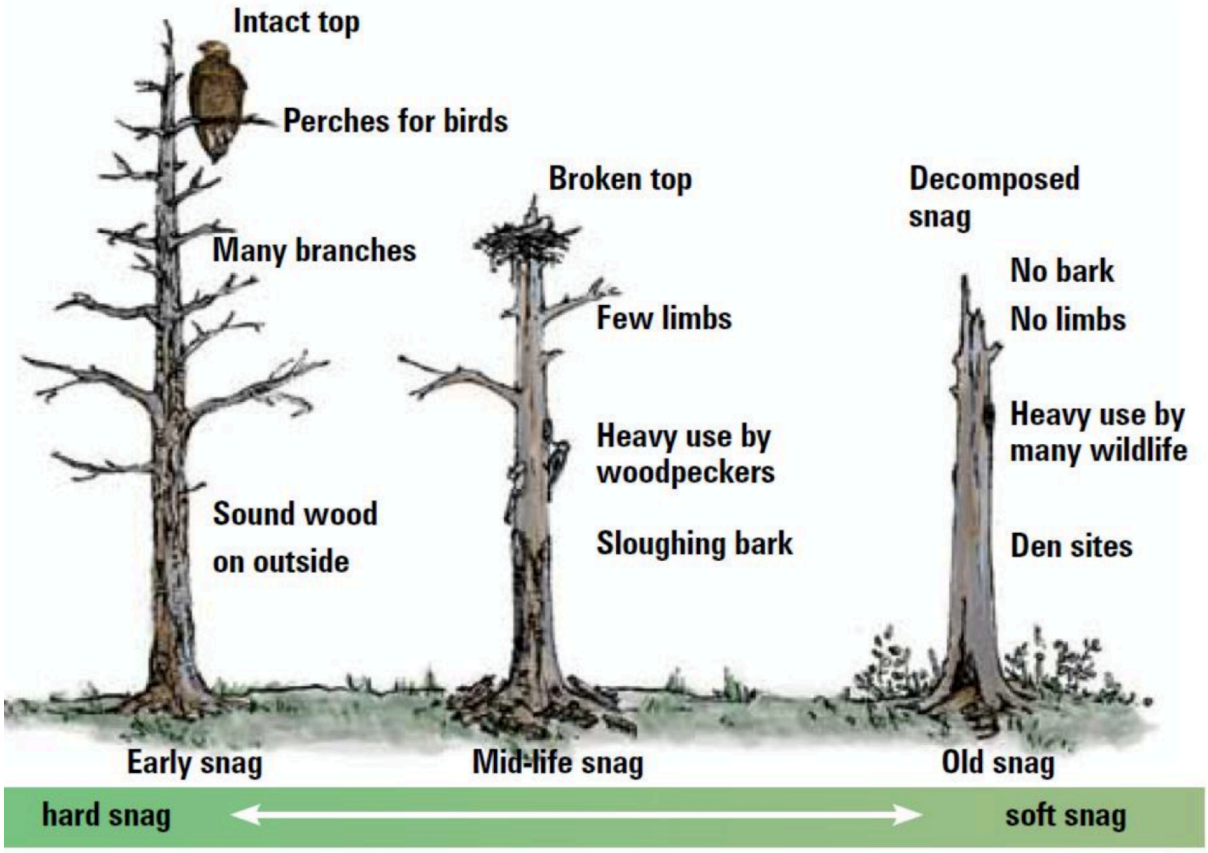
Table 3. Risk Rating and Priority Maintenance along with Tree Identification Number for the inspected trees.

Priority Maintenance	Tree ID	Removal	Crown Clean	Total
Priority 1 Prune	3019		1	1
Priority 1 Removal	3007, 3008, 3012, 3013, 3014, 3015, 3016, 3017, 3018, 3020	10		10
Priority 3 Removal	3009, 3010, 3011	3		3
Total		13	1	14

There are two options to mitigate the risk of the trees determined to be dead:

- **Option #1** - Remove the tree and all the above tree parts.
- **Option #2** - Trees to be removed at the project site may be topped at a safe height and left as habitat snags for wildlife food, nesting, or shelter. Standing or downed deadwood plays an important role in the landscape. Tree removals at the site present an opportunity to promote and increase wildlife activity and diversity at the site. The arborist performing the removals will be consulted to decide the potential for a habitat snag designation on a tree-by-tree basis. In some cases, guy wires may be attached to the tree and anchored in the ground to create a safe snag out of a taller tree. **This option is only recommended if the client is willing to accept the level of risk from the failing snag.**

Image 1. An example image of a habitat snag life stages and wildlife potential.



Concluding Remarks

If not managed properly, snags can pose a risk to people and structures. If a dead or dying tree threatens something that can be moved, such as a swing set or patio furniture, consider moving those items before cutting the tree down. An alternative to eliminating the entire tree is to remove only the dangerous section(s). Consulting with a certified arborist with experience in wildlife snags is the first step in managing potential habitat snag trees. **This option is only recommended if the client is willing to accept the level of risk from the failing snag.**

When a tree must be cut down, maximize its habitat value by placing as much of the debris as possible near the area where the tree was removed. In hot, dry areas, move the material into the shade of nearby trees or large shrubs. Bringing branches in contact with the ground will cause them to rot faster.
Large conifers such as cedar and fir make excellent habitat snags. These species tend to rot more slowly than deciduous trees. Large deciduous trees such as cottonwoods and bigleaf maples can last many years as snags. While alive, they tend to develop cavities in their live and dead branches and trunks.

Large snags more than 12 inches in diameter and 15 feet tall offer ideal hunting perches for hawks, eagles, and owls. They function as resting perches for swallows, band-tailed pigeons, mourning doves and other birds; food storage for mice, squirrels, woodpeckers, and jays; and song perches for tanagers and flycatchers. In addition to nesting, woodpeckers use large dead tree trunks as a way to announce their presence during courtship, hammering their bills against the tree's resonating surface.

Small snags may be used as song posts by bluebirds, hummingbirds, and other songbirds to attract mates and proclaim nesting territories. Black-capped chickadees nest in small tree snags as little as six feet tall and four inches in diameter. Small trees rot rapidly, creating wildlife habitat. Black-capped chickadees nest in snags as small as six feet tall and four inches in diameter.

Because individual snags may have only one wildlife habitat feature (perch, cavity, etc.), retaining and promoting small clumps of snags throughout a larger property is more likely to provide all of these features. Small dead ornamental and fruit trees can be left in the landscape where they are not a safety hazard because they will be used as perches for preening, resting, foraging, and singing[2].

[2] https://wdfw.wa.gov/species-habitats/living/snags#hazards

Appendix A: Maps

Map A1.

Map A2.

Tree Inventory

Chestnut Trails
Bothell, WA
October 2025

Priority Maintenance
- Priority 1 Prune
- Priority 1 Removal
- Priority 3 Removal
- Current Parcels

N 20 Feet

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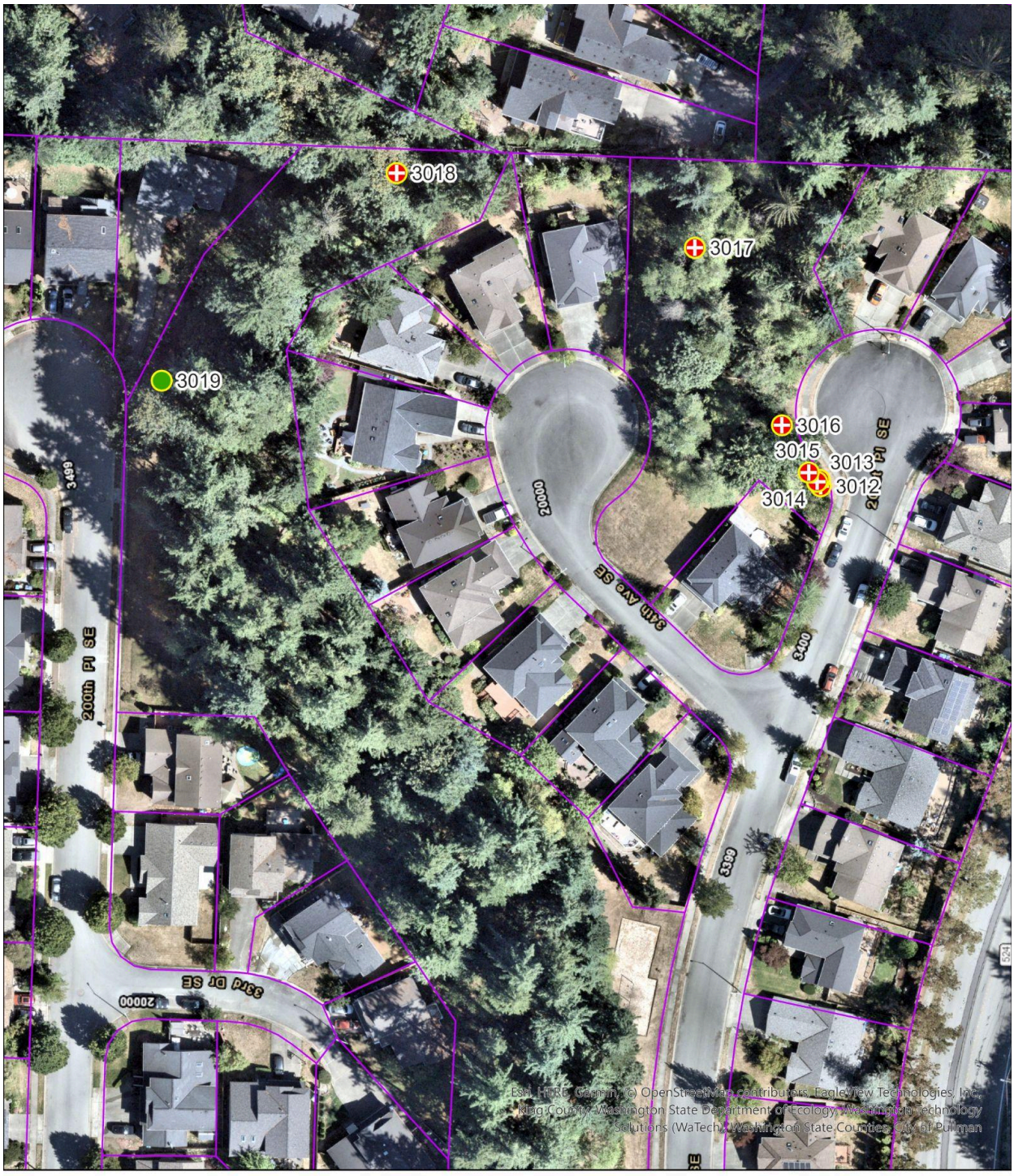
Map A3.



Tree Inventory

Priority Maintenance

- Priority 1 Prune
- Priority 1 Removal
- Priority 3 Removal
- Current Parcels

Chestnut Trails
Bothell, WA
October 2025

N

20 Feet

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Appendix B: Risk Rating & Likelihood

The technique used to define the risk of failure and the likelihood of failure involves a determination within two matrices. These matrices are reproduced here from the International Society of Arboriculture datasheets for Tree Risk Assessment, 2013. Appendix 1 Using the ISA Basic Tree Risk Assessment Form

Matrix I. Likelihood Matrix

Likelihood Of Failure	**Likelihood of Impacting Target**			
	Very Low	**Low**	**Medium**	**High**
Imminent	Unlikely	Somewhat likely	Likely	Very likely
Probable	Unlikely	Unlikely	Somewhat likely	Likely
Possible	Unlikely	Unlikely	Unlikely	Somewhat likely
Improbable	Unlikely	Unlikely	Unlikely	Unlikely

Matrix II. Risk Rating Matrix

Likelihood Of Failure & Impact	**Consequences of Failure**			
	Negligible	**Minor**	**Significant**	**Severe**
Very likely	Low	Moderate	High	Extreme
Likely	Low	Moderate	High	High
Somewhat likely	Low	Low	Moderate	Moderate
Unlikely	Low	Low	Low	Low

Appendix C. Tree Data Table

Tree ID	Common Name	Species	DSH (in)	Height (ft)	Avg. Dripline Radius (ft)	Comments	Condition	Target(s)	Like. of Failure	Like. of Impact	Like. of Fail. & Impact	Consq. of Failure	Risk Rating	Priority Maintenance	Maintenance Detail
3007	Red Alder	*Alnus rubra*	6	40	4		Dead or Dying	Road	Imminent	Medium	Likely	Significant	High	Priority 1 Removal	Removal
3008	Red Alder	*Alnus rubra*	8	40	12		Dead or Dying	Road	Imminent	Medium	Likely	Significant	High	Priority 1 Removal	Removal
3009	Western Hemlock	*Tsuga heterophylla*	12	60	12		Dead or Dying	Trail/Pedestrians	Imminent	Low	Somewhat Likely	Severe	Moderate	Priority 3 Removal	Removal
3010	Red Alder	*Alnus rubra*	8	45	2		Dead or Dying	Trail/Pedestrians	Imminent	Low	Somewhat Likely	Severe	Moderate	Priority 3 Removal	Removal
3011	Red Alder	*Alnus rubra*	4	45	2		Dead or Dying	Trail/Pedestrians	Imminent	Low	Somewhat Likely	Severe	Moderate	Priority 3 Removal	Removal
3012	Red Alder	*Alnus rubra*	6	40	4		Dead or Dying	Property	Imminent	Medium	Likely	Significant	High	Priority 1 Removal	Removal
3013	Red Alder	*Alnus rubra*	6	40	4		Dead or Dying	Property	Imminent	Medium	Likely	Significant	High	Priority 1 Removal	Removal
3014	Red Alder	*Alnus rubra*	6	40	4		Dead or Dying	Property	Imminent	Medium	Likely	Significant	High	Priority 1 Removal	Removal
3015	Black Willow	*Salix spp.*	6	40	7		Dead or Dying	Property	Imminent	Medium	Likely	Significant	High	Priority 1 Removal	Removal
3016	Red Alder	*Alnus rubra*	6	40	7		Dead or Dying	Property	Imminent	Medium	Likely	Significant	High	Priority 1 Removal	Removal

Tree ID	Common Name	Species	DSH (in)	Height (ft)	Avg. Dripline Radius (ft)	Comments	Condition	Target(s)	Like. of Failure	Like. of Impact	Like. of Fail. & Impact	Consq. of Failure	Risk Rating	Priority Maintenance	Maintenance Detail
3017	Cherry	*Prunus spp.*	6	40	7		Dead or Dying	Property	Imminent	Medium	Likely	Significant	High	Priority 1 Removal	Removal
3018	Bigleaf Maple	*Acer macrophyllum*	37	90	20	#4975 from previous inventory,. Basal fruiting bodies; failed branches, K. deusta	Very Poor	Property	Probable	High	Very Likely	Severe	Extreme	Priority 1 Removal	Removal
3019	Bigleaf Maple	*Acer macrophyllum*	35	90	20	Large Deadwood	Fair	Property	Probable	High	Very Likely	Significant	High	Priority 1 Prune	Crown Clean
3020	Western Hemlock	*Tsuga heterophylla*	21	75	10		Dead or Dying	Property	Probable	High	Very Likely	Significant	High	Priority 1 Removal	Removal