



February 14<sup>th</sup>, 2020

Mr. Jeff Brauns  
Public Works Director  
City of Newcastle  
12835 Newcastle Way, Suite 200  
Newcastle, WA 98056

RE: Hazelwood Park Trees

Dear Mr. Brauns:

We have completed the tree risk mitigation assessment for the phase 1, 2, and 3 trees at Hazelwood Park. Trees were observed in January 2020 and located in the areas defined on the Hazelwood Park Tree Removal Phasing Plan provided by The Watershed Company. The City of Newcastle requested these services to determine measures to abate the current risk potential presented by the subject trees. American Forest Management did not perform a tree risk assessment on the subject trees.

During the assessment, 101 trees of concern were visited and added to the *Tree Summary Table*. Of these 101 trees, 58 have recommended mitigation actions. These recommendations take a proactive approach to address tree issues that are likely to become a problem in the future. Recommended actions include removal, habitat snagging and remedial pruning. The remaining 43 trees warranted no mitigation actions at this time. If a tree had no target and was likely to fail into the forested area, we did not provide risk mitigation measures.

The majority of recommended mitigation actions are removal or reduction to a wildlife habitat snag for dead or declining trees that were located near the trail.

## **METHODS**

The Watershed Company identified the subject trees in the field with a numbered aluminum tag attached to the lower trunk. These numbers correspond with the attached *table*. Their approximate locations are also shown on the attached aerial image provided by The Watershed Company.

Phase 1, 2, & 3 trees identified on the attached map were visited and a determination was made on appropriate mitigation action to abate risk potential. No action was recommended if there was no target.

## **OBSERVATIONS / DISCUSSION**

In general, the trees in the Hazelwood Park are in fair health condition. In many areas throughout the park, we observed dead or declining red alders (*Alnus rubra*), bigleaf maples (*Acer macrophyllum*), and black cottonwoods (*Populus trichocarpa*). Many of these declining or dead trees have been recommended to be reduced to wildlife habitat snags or removed.

In the east portion of the phase 1 area we observed black cottonwoods located in wetlands. These trees are not problematic at this time but will likely become management issues in the future.

The trees of concern in the phase 2 and 3 areas were primarily red alder that were dead or in a steady state of decline near the trail. Red alder is a fast growing pioneer species. Typical life spans are 60 – 80 years before they begin to decline. Red alders tend to die back from the tip of the canopy typically shedding large lateral limbs. As a pioneer species, red alders play an important ecological role in forest ecosystems. Dead trees that remain standing provide habitat for birds and insects while fallen trees provide habitat for small mammals. As the trees decline, they shed dead wood on the forest floor, which will contribute to nutrient cycling and moisture retention in the forested areas and will benefit the long-term health of the forested areas.

We observed moderate amounts of invasive Himalayan blackberry and English ivy in the phase 2 and 3 areas. Invasive blackberry can outcompete native more desirable native vegetation and prevent long lived coniferous tree species from regenerating. English ivy is listed as a class C weed on the Washington State Noxious Weed List and as a weed of concern in King County. Invasive ivy outcompetes desirable vegetation; it grows into tree canopies where it adds load that can contribute to failure; kill leaves and diminish a tree's ability to photosynthesize. Invasive ivy typically forms fruit when it is allowed to climb trees contributing to the spread of this weed.

As the red alders and bigleaf maples continue to decline gaps will develop in the forest canopy. Planting long lived coniferous species and improving the forest floor conditions to promote natural regeneration will improve the long term health of the forested areas of the park.

## **RECOMMENDATIONS**

Implement the recommended mitigation actions for the trees on the *Tree Summary Table*.

Consider having the trees re-assessed in approximately two years or sooner if changes in health or structural condition are observed.

All pruning work should be carried out by a qualified arborist and adhere to ANSI A300 Pruning Standards.

We have recommended reducing many of the trees to wildlife habitat snags. Not all of these trees need to be partially left as habitat snags but when feasible their presence would benefit wildlife and the long-term health of the forested areas. Most wildlife prefer foraging, perching, or nesting on snags close to the cover of other trees. Isolated snags directly next to open backyards may not have much value for wildlife, nor be appreciated by the homeowner.

Tree slash can be cut, lopped and scattered in the forested areas to naturally decompose, so long as accumulations do not pose a fire risk. The decaying organic matter will contribute to nutrient cycling and benefit the long term health of the forested areas. When feasible, large woody debris such as logs should be left to decompose naturally on the forest floor.

*There is no warranty suggested for any of the trees subject to this report. Weather, latent tree conditions, and future man-caused activities could cause physiologic changes and deteriorating tree condition. Over time, deteriorating tree conditions may appear and there may be conditions, which are not now visible which, could cause tree failure. This report or the verbal comments made at the site in no way warrant the structural stability or long term condition of any tree, but represent my opinion based on the observations made.*

*Nearly all trees in any condition standing within reach of improvements or human use areas represent hazards that could lead to damage or injury.*

Please call if you have any questions or concerns or if we can be of further assistance.

Sincerely,



Michael Tomco  
ISA Certified Arborist #PN-8432A  
ISA Tree Risk Assessment Qualified (TRAQ)

Attachments:

Tree Summary Table  
Hazelwood Park Tree Removal Phasing Plan (The Watershed Company)

Tree Summary Table			American Forest Management Inc.
Hazelwood Park Trees			Date: 2/6/2020
			Inspector: Michael Tomco, Ben Mark
Tree/			
Tag #	Common Name	Scientific Name	Management Recommendation
Phase 2			
1505	Black cottonwood	<i>Populus trichocarpa</i>	Habitat snag at approximately 15 feet.
1506	Black cottonwood	<i>Populus trichocarpa</i>	Leans north away from house. No action recommended
1510	Black cottonwood	<i>Populus trichocarpa</i>	Retain and monitor. No active management at this time.
1511	Red alder	<i>Alnus rubra</i>	Habitat snag at approximately 15 feet.
1516	Black cottonwood	<i>Populus trichocarpa</i>	Previously snagged at approximately 20 feet with epicormic regrowth at the cut. Not a concern at this time but the epicormic growth will be problematic in the future. Consider girdling the trunk near the base to prevent epicormic growth higher on the trunk.
1517	Black cottonwood	<i>Populus trichocarpa</i>	Previously snagged at approximately 20 feet with epicormic regrowth at the cut. Not a concern at this time but the epicormic growth will be problematic in the future. Consider girdling the trunk near the base to prevent epicormic growth higher on the trunk.
1518	Black cottonwood	<i>Populus trichocarpa</i>	Previously snagged at approximately 20 feet with epicormic regrowth at the cut. Not a concern at this time but the epicormic growth will be problematic in the future. Consider girdling the trunk near the base to prevent epicormic growth higher on the trunk.
1520	Red alder	<i>Alnus rubra</i>	Low priority. Habitat snag in the next 5 years.
1521	Western hemlock	<i>Tsuga heterophylla</i>	Habitat snag at approximately 15 feet.
1526	Red alder	<i>Alnus rubra</i>	Remove
1528	Black cottonwood	<i>Populus trichocarpa</i>	Previously snagged at approximately 20 feet with epicormic regrowth at the cut. Not a concern at this time but the epicormic growth will be problematic in the future. Consider girdling the trunk near the base to prevent epicormic growth higher on the trunk.
1529	Black cottonwood	<i>Populus trichocarpa</i>	Previously snagged at approximately 20 feet with epicormic regrowth at the cut. Not a concern at this time but the epicormic growth will be problematic in the future. Consider girdling the trunk near the base to prevent epicormic growth higher on the trunk.
1530	Black cottonwood	<i>Populus trichocarpa</i>	Previously snagged at approximately 20 feet with epicormic regrowth at the cut. Not a concern at this time but the epicormic growth will be problematic in the future. Consider girdling the trunk near the base to prevent epicormic growth higher on the trunk.
1533	Black cottonwood	<i>Populus trichocarpa</i>	Habitat snag at approximately 20 feet.
1534	Big leaf maple	<i>Acer macrophyllum</i>	No action recommended at this time.
1536	Big leaf maple	<i>Acer macrophyllum</i>	Located approximately 10 feet from fence. Remove.
1537	Western red cedar	<i>Thuja plicata</i>	No action recommended at this time.
1541	Big leaf maple	<i>Acer macrophyllum</i>	On ground. No action recommended at this time.
1542	Big leaf maple	<i>Acer macrophyllum</i>	Remove
1544	Red alder	<i>Alnus rubra</i>	Remove
1546	Big leaf maple	<i>Acer macrophyllum</i>	Remove dead trunk on north side and dead wood over the trail. Remove the large hanging dead branch over trail.
1547	Big leaf maple	<i>Acer macrophyllum</i>	Remove dead hanging branches from canopy. One trunk previously tore out at the base. <i>K. deusta</i> observed at the base near ground level and in the wound from the tearout. Visible internal decay at the wound from the tearout. Not a good long term tree, targets the trail. If concerned about the risk reduce to a habitat snag.
1548	Red alder	<i>Alnus rubra</i>	No action recommended at this time.
1549	Red alder	<i>Alnus rubra</i>	Extensive decay. Remove.
1550	Big leaf maple	<i>Acer macrophyllum</i>	Main target is trail. Could possibly reach private property. If concerned about the risk snag at 30 feet.
1553	Big leaf maple	<i>Acer macrophyllum</i>	Remove
Phase 1			
1554	Big leaf maple	<i>Acer macrophyllum</i>	Remove south trunk
1562	Willow	<i>Salix scouleriana</i>	Target is fence on private property. Limbs could hit the fence. If concerned about damage to the fence the tree could be removed. Not a long lived species and will likely continue to shed limbs.
1563	Willow	<i>Salix scouleriana</i>	Target is fence on private property. Limbs could hit the fence. If concerned about damage to the fence the tree could be removed. Not a long lived species and will likely continue to shed limbs.
1564	Willow	<i>Salix scouleriana</i>	No action recommended at this time.

1567	Bitter cherry	<i>Prunus emarginata</i>	Dead. Leans toward trail. Remove
1568	Bitter cherry	<i>Prunus emarginata</i>	Dead. Leans toward trail. Remove
1569	Red alder.	<i>Alnus rubra</i>	Dead. Fell into adjacent tree no target. No action recommended at this time.
1570	Red alder	<i>Alnus rubra</i>	Dead. Leans south. Remove.
1571	Madrone	<i>Arbutus menziesii</i>	Dead. Leans over trail. Remove.
1572	Red alder	<i>Alnus rubra</i>	Leans over trail. Remove.
1573	Red alder	<i>Alnus rubra</i>	Added to map. South of 1572. Remove.
1574	Red alder	<i>Alnus rubra</i>	Remove.
1576	Red alder	<i>Alnus rubra</i>	Dead leans west will likely fail into open area. No action recommended at this time.
1577	Red alder	<i>Alnus rubra</i>	Dead. Leans north away from main trail. Will likely fail into open area. No action recommended at this time.
1578	Red alder	<i>Alnus rubra</i>	Dead. Remove
1579	Red alder	<i>Alnus rubra</i>	Leans north away from main trail. Will likely fail into open area. No action recommended at this time.
1582	Douglas-fir	<i>Pseudotsuga menziesii</i>	No action recommended at this time.
1583	Red alder	<i>Alnus rubra</i>	Dead, no target. No action recommended at this time.
1584	Red alder	<i>Alnus rubra</i>	Dead, no target. No action recommended at this time.
1585	Red alder	<i>Alnus rubra</i>	Dead, no target. No action recommended at this time.
1591	Black cottonwood	<i>Populus trichocarpa</i>	Added to map. Dead leans toward fence line. Fence is target. If concerned about risk remove or snag.
1592	Black cottonwood	<i>Populus trichocarpa</i>	Away from main trail. Will fall into open area. No action recommended at this time.
1602	Black cottonwood	<i>Populus trichocarpa</i>	Leans north. No action recommended at this time.
1603	Black cottonwood	<i>Populus trichocarpa</i>	Codominant trunks at base. Leans over turf grass area of private property. Not a concern at this time but will be problematic in the future. Remove if concerned about risk of tree falling into backyard area of the private property.
1606	Black cottonwood	<i>Populus trichocarpa</i>	Remove ivy. Not a concern at this time.
1629	Red alder	<i>Alnus rubra</i>	Dead. Leans east, unlikely to reach main trail. No action recommended at this time.
1630	Red alder	<i>Alnus rubra</i>	Dead. No target. No action recommended at this time.
1631	Red alder	<i>Alnus rubra</i>	Leans west. No target. No action recommended at this time.
1633	Red alder	<i>Alnus rubra</i>	Dead. Leans toward trail. Habitat snag.
1634	Red alder	<i>Alnus rubra</i>	Dead top. No action recommended at this time.
1635	Red alder	<i>Alnus rubra</i>	No target. No action recommended at this time.
1636	Red alder	<i>Alnus rubra</i>	Leans toward trail. Habitat snag.
1639	Bitter cherry	<i>Prunus emarginata</i>	Top half broken. No action recommended at this time.
Phase 3			
1640	Red alder	<i>Alnus rubra</i>	No target. No action recommended at this time.
1642	Red alder	<i>Alnus rubra</i>	Tree failed over the trail. Recommend removing from the trail.
1643	Red alder	<i>Alnus rubra</i>	Dead. Habitat snag.
1644	Red alder	<i>Alnus rubra</i>	Codominant trunks. Declining. No action recommended at this time.
1646	Red alder	<i>Alnus rubra</i>	No target. No action recommended at this time.
1647	Red alder	<i>Alnus rubra</i>	No target. No action recommended at this time.
1648	Red alder	<i>Alnus rubra</i>	Leans toward trail. Remove.
1650	Red alder	<i>Alnus rubra</i>	No action recommended at this time.
1651	Red alder	<i>Alnus rubra</i>	Added to table. Falling apart over trail. Remove or snag.
1652	Red alder	<i>Alnus rubra</i>	No target. No action recommended at this time.
1653	Red alder	<i>Alnus rubra</i>	Dead. Remove or habitat snag.
1654	Red alder	<i>Alnus rubra</i>	Leans over open area, will likely fail into open area. No action recommended at this time.
1655	Red alder	<i>Alnus rubra</i>	Leans away from trail. No action recommended at this time.
1656	Red alder	<i>Alnus rubra</i>	Habitat snag.
1657	Red alder	<i>Alnus rubra</i>	Dead. Habitat snag.
1658	Red alder	<i>Alnus rubra</i>	In decline could reach trail. Remove or snag.
1659	Red alder	<i>Alnus rubra</i>	In decline could reach trail. Remove or snag.
1661	Red alder	<i>Alnus rubra</i>	Broken at approximately 20 feet. No action recommended at this time.
1662	Red alder	<i>Alnus rubra</i>	Dead. Hangs over trail. Habitat snag.
1663	Red alder	<i>Alnus rubra</i>	No target. No action recommended at this time.
1664	Red alder	<i>Alnus rubra</i>	Unlikely to reach trail. No action recommended at this time.

1668	Red alder	<i>Alnus rubra</i>	Dead. Located south of trail. Habitat snag.
1669	Red alder	<i>Alnus rubra</i>	Dead. Located south of trail. Habitat snag.
1673	Red alder	<i>Alnus rubra</i>	Trunk snapped at 50 feet.. Decay visible at base. Leans toward trail. Remove
1674	Red alder	<i>Alnus rubra</i>	Leans toward trail. Broken top. Unlikely to hit trail. No action recommended at this time.
1676	Red alder	<i>Alnus rubra</i>	No action recommended at this time.
1683	Red alder	<i>Alnus rubra</i>	Leans west. Located 70 feet from house. Not a good long term tree. The tree is declining, Remove within the next several years or sooner if changes are observed.
1689	Red alder	<i>Alnus rubra</i>	No target. No action recommended at this time.
1690	Red alder	<i>Alnus rubra</i>	Broken top. No target. No action recommended at this time.
1691	Red alder	<i>Alnus rubra</i>	Added to table. Declining. Dead branches. Located near private property. Consider removal or snagging to remove risk to private property.
1692	Red alder	<i>Alnus rubra</i>	No target. No action recommended at this time.
1693	Red alder	<i>Alnus rubra</i>	Dead top. No action recommended at this time.
1694	Red alder	<i>Alnus rubra</i>	No target. No action recommended at this time.
1697	Red alder	<i>Alnus rubra</i>	Dead. Leans toward trail. Habitat snag.
1698	Red alder	<i>Alnus rubra</i>	Dead top. Leans toward trail. Habitat snag.
1699	Douglas-fir	<i>Pseudotsuga menziesii</i>	Remove ivy and yard waste from near the base.
1702	Red alder	<i>Alnus rubra</i>	Leans away from trail. Dead. Habitat snag.
1704	Red alder	<i>Alnus rubra</i>	Declining. Hangs over trail with dead branches. Remove or snag.
1707	Red alder	<i>Alnus rubra</i>	Dead or declining. Visible decay. Habitat snag.
1708	Red alder.	<i>Alnus rubra</i>	Codominant trunks, north trunk leans toward trail. Habitat snag.
1711	Red alder	<i>Alnus rubra</i>	Dead top, declining. Dead wood in canopy. Habitat snag.
1715	Red alder	<i>Alnus rubra</i>	No action recommended at this time.

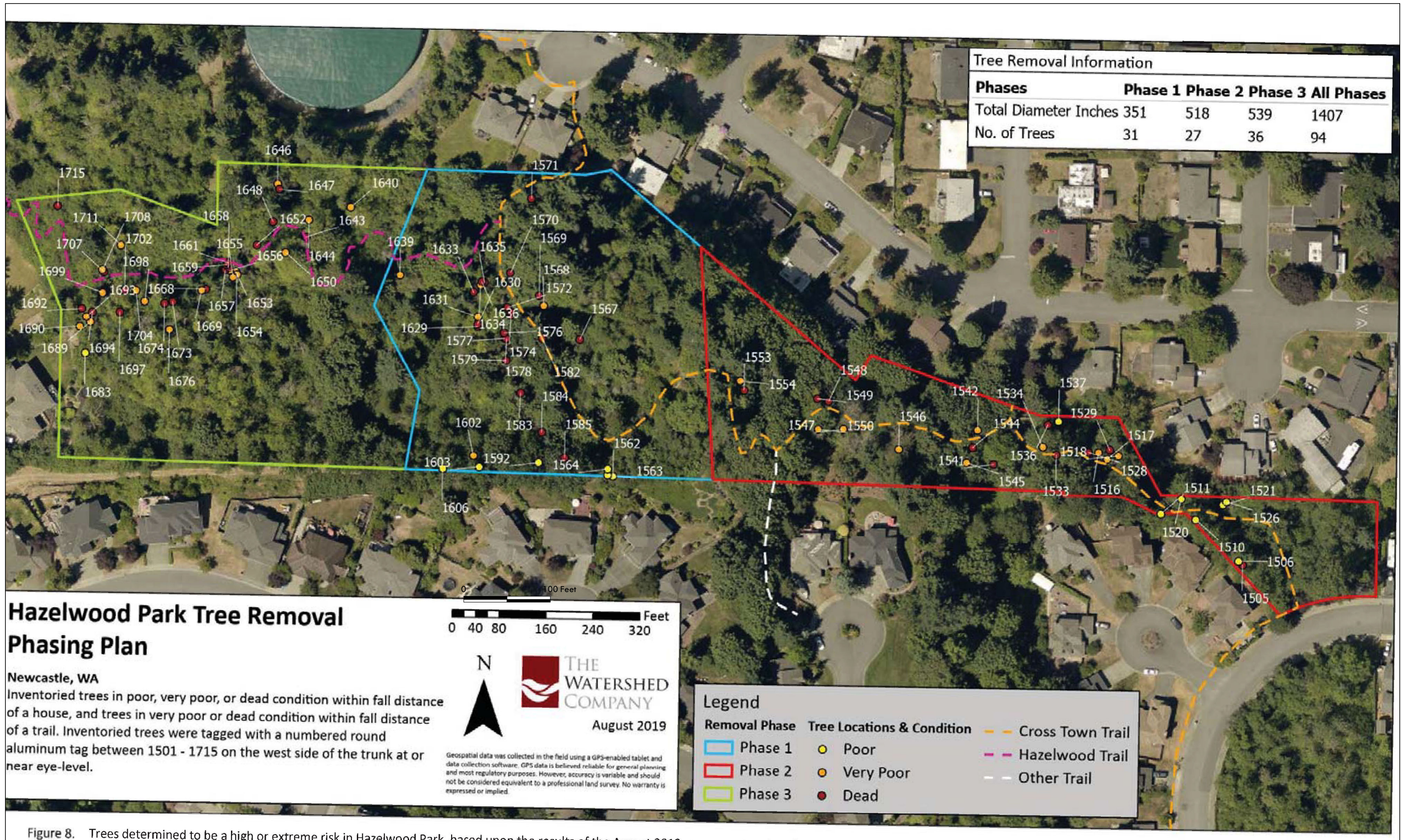


Figure 8. Trees determined to be a high or extreme risk in Hazelwood Park, based upon the results of the August 2019 assessment.