



Arborist Report

Inventory and Assessment of Trees Associated to Development
at 19476 Hammond Road, Pitt Meadows

August 30, 2021

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Assignment and Methodology

Woodridge Tree has been retained to undertake an inventory and assessment of trees associated with development at 19476 Hammond Road. The objective is to make tree preservation and protection recommendations in the context of municipal permits, rules and regulations for development.

Associated trees were visually assessed to determine species, diameter at breast height (dbh) and characteristic description. Tree diameters were measured at 1.4 meters height with a diameter tape. Protection areas were calculated for all trees within range of the property. Tree hazards were assessed according to International Society of Arboriculture standards using the TRAQ (Tree Risk Assessment Qualification) method. Recommendations for removal or retention are based on assessment outcome and proximity of trees to structure and infrastructure. Soil testing, root exploration and internal probing of tissue have not been incorporated in the findings.

The observations recorded are based on inspections performed on August 27, 2021.



aerial image of property before redevelopment

Findings

The property at 19476 Hammond Road is located on the south side of Hammond Road near the intersection of Blakely Road. At the time of observation a detached house stood on the lot. Associated trees were comprised of native conifers and one ornamental deciduous species. Trees located on the subject property and neighbours' trees close to the property lines are considered in the findings of this report.



image of property from street at time of field data collection

Tree Inventory and Assessment

- **dbh** - Diameter at 1.4m height measured in centimeters
 - on trees with multiple stems the 3 largest sections measured at 1.4m are combined to make up the total.
- **critical root zone** = dbh x 6 unless otherwise specified
- **ci** - City owned tree
- **LCR** = live crown ratio, percentage of live crown remaining
- **os** - off site tree

ID#	Common Name	Botanical Name	DBH (cm)	Condition & Comments	Action	TPZ (m)
1-6510	Western Red Cedar	<i>Thuja plicata</i>	41	Straight, single stem. Good trunk taper. Healthy crown. 60% LCR. 2.0m crown radius. Good condition. Tree location conflicts with proposed lot 4.	Remove	2.46
2-6514	Western Red Cedar	<i>Thuja plicata</i>	57	Straight, single stem. Good trunk taper. Healthy crown. 60% LCR. 2.0m crown radius. Good condition. Tree location conflicts with proposed lot 4.	Remove	3.42
3-6518	Western Red Cedar	<i>Thuja plicata</i>	38	Straight, single stem. Leaning west. Good trunk taper. Healthy crown. 60% LCR. 2.0m crown radius. Good condition. Tree location conflicts with proposed lot 4.	Remove	2.28
4-225	Western Red Cedar	<i>Thuja plicata</i>	24	Straight, single stem. Good trunk taper. Healthy crown. 60% LCR. 2.0m crown radius. Good condition. Tree was not on survey, location is approximate. Tree location conflicts with proposed lot 4.	Remove	1.44
5-6511	Western Red Cedar	<i>Thuja plicata</i>	77	Straight, single stem. Good trunk taper. Healthy crown. 60% LCR. 2.0m crown radius. Good condition. Tree location conflicts with proposed lot 4.	Remove	4.62
6-6520	Western Red Cedar	<i>Thuja plicata</i>	68	Straight, single stem. Good trunk taper. Healthy crown. 60% LCR. 2.0m crown radius. Good condition. Tree location conflicts with proposed lot 3.	Remove	4.08
7-6512	Western Red Cedar	<i>Thuja plicata</i>	32	Straight, single stem. Leaning north east. Good trunk taper. Healthy crown. 60% LCR. 2.0m crown radius.	Remove	1.92

				Good condition. Tree location conflicts with proposed lot 4.		
8-6519	Douglas Fir	<i>Pseudotsuga menziesii</i>	47	Tree is dead and should be removed.	Remove	2.82
9-226	Western Red Cedar	<i>Thuja plicata</i>	26	Straight, single stem. Wound at base with rot and excessive sloughing bark. 60% LCR. 2.0m crown radius. Moderate condition. Tree was not on survey, location is approximate. Tree location conflicts with proposed lot 4.	Remove	1.56
10-6521	Western Red Cedar	<i>Thuja plicata</i>	43	Straight, single stem. Good trunk taper. Healthy crown. 60% LCR. 2.0m crown radius. Good condition. Tree location conflicts with proposed lot 4.	Remove	2.58
11-6522	Western Red Cedar	<i>Thuja plicata</i>	25	Straight, single stem. Crack at base to 0.5m. Some dieback in the lower crown. 40% LCR. 2.0m crown radius. Moderate condition. Tree location conflicts with proposed lot 4.	Remove	1.50
12-6524	Western Red Cedar	<i>Thuja plicata</i>	70	Small epicormic leader at 3.0m. Good trunk taper. Healthy crown. 60% LCR. 2.0m crown radius. Good condition. Tree location conflicts with proposed lot 4.	Remove	4.20
13-6523	Western Red Cedar	<i>Thuja plicata</i>	108	Topped long ago with many regenerative leaders. Dead branches in the lower canopy hanging over the house. Decay on the south side of the trunk. Branches only on the east side. Leaning over the existing house. 50% LCR. 4.0m crown radius. Moderate condition. Tree location conflicts with proposed lot 4.	Remove	6.48
14-6525	Japanese Maple	<i>Acer palmatum</i>	16+18 +25	Multiple stems at 0.5m. Some small dead branches throughout crown. Many exposed roots. 60% LCR. 3.0m crown radius. Moderate condition. Tree location conflicts with proposed lot 2.	Remove	3.54
15-6526	Western Red Cedar	<i>Thuja plicata</i>	88	Straight, single stem. Good trunk taper. Some dead branches in the lower crown. Approximately 1.0m from the existing driveway. Exposed roots. Moderate condition.	Remove	5.28

				Tree location conflicts with proposed lot 2.		
16-6527	Western Red Cedar	<i>Thuja plicata</i>	81	Straight, single stem. Good trunk taper. Clearance pruned on the north side for power lines. Some chlorosis in the crown on the south side. 60% LCR. 3.0m crown radius. Moderate condition. Tree location conflicts with proposed lot 1.	Remove	4.86
17-6530	Douglas Fir	<i>Pseudotsuga menziesii</i>	66	Straight, single stem. Good trunk taper. Clearance pruned on the northside for power lines. Approximately 1.5m from the street lamp. 50% LCR. 2.0m crown radius. Good condition. Tree location conflicts with proposed lot 1.	Remove	3.96
18-6531	Western Hemlock	<i>Tsuga heterophylla</i>	55	Straight, single stem. Good trunk taper. Clearance pruned on the northside for power lines. Approximately 1.5m from the street lamp. 50% LCR. 2.0m crown radius. Good condition. Tree location conflicts with proposed lot 1.	Remove	3.30
19-6532	Douglas Fir	<i>Pseudotsuga menziesii</i>	55	Straight, single stem. Good trunk taper. Pruned on the northside. 50% LCR. 2.0m crown radius. Good condition. Tree location conflicts with proposed lot 1.	Remove	3.30
20-6533	Western Red Cedar	<i>Thuja plicata</i>	86	Straight, single stem. Good trunk taper. Clearance pruned on the west side for driveway. Adjacent to driveway. 60% LCR. 4.0m crown radius. Good condition. Tree location conflicts with proposed lot 2.	Remove	5.16
21-6535	Western Red Cedar	<i>Thuja plicata</i>	47	Straight, single stem. Good trunk taper. Healthy crown. Crown extends just over the roof of the existing house. 60% LCR. 2.0m crown radius. Good condition. Tree location conflicts with proposed lot 1.	Remove	2.82
22-6536	Western Red Cedar	<i>Thuja plicata</i>	79	Straight, single stem. Good trunk taper. Healthy crown. Adjacent to driveway. 60% LCR. 4.0m crown radius. Good condition. Tree location conflicts with proposed lot 1.	Remove	4.74

23-6537	Douglas Fir	<i>Pseudotsuga menziesii</i>	72	Straight, single stem. Good trunk taper. Healthy crown. Shares a root ball with tree #6538. 50% LCR. 3.0m crown radius. Good condition. Tree location conflicts with proposed lot 1.	Remove	4.32
24-6538	Western Red Cedar	<i>Thuja plicata</i>	53	Straight, single stem. Good trunk taper. Healthy crown. Shares a root ball with tree #6538. 50% LCR. 3.0m crown radius. Good condition. Tree location conflicts with proposed lot 1.	Remove	3.18
25-6539	Western Red Cedar	<i>Thuja plicata</i>	49	Straight, single stem. Good trunk taper. Healthy crown.. 60% LCR. 2.0m crown radius. Good condition. Tree location conflicts with proposed lot 1.	Remove	2.94
26-6540	Douglas Fir	<i>Pseudotsuga menziesii</i>	64	Straight, single stem. Good trunk taper. Healthy crown. 50% LCR. 2.0m crown radius. Good condition. Tree location conflicts with proposed lot 1.	Remove	3.84
27-6542	Western Red Cedar	<i>Thuja plicata</i>	39	Straight, single stem. Good trunk taper. Healthy crown. 50% LCR. 1.5m crown radius. Good condition. Tree location conflicts with proposed lot 1.	Remove	2.34
28-6541	Western Red Cedar	<i>Thuja plicata</i>	66	Straight, single stem. Good trunk taper. Healthy crown. Crown hangs over the neighbor's house. 60% LCR. 2.0m crown radius. Good condition. Tree location conflicts with proposed lot 1.	Remove	3.96
29-6543	Western Red Cedar	<i>Thuja plicata</i>	74	Straight, single stem. Leaning south. Good trunk taper. Healthy crown. 50% LCR. 2.0m crown radius. Good condition. Tree location conflicts with proposed lot 1.	Remove	4.44
30-6544	Western Red Cedar	<i>Thuja plicata</i>	29	Growing adjacent to a hollow retaining wall. Straight, single stem. Good trunk taper. Healthy crown. 50% LCR. 2.0m crown radius. Good condition.	Retain Install barrier 1.74m from tree.	1.74
31-6545	Western Red Cedar	<i>Thuja plicata</i>	54	Growing in a hollow retaining wall. Straight, single stem. Good trunk taper. Healthy crown. 50% LCR. 2.0m crown radius. Good condition.	Retain Install barrier 3.24m from tree.	3.24
32-6546	Western Red Cedar	<i>Thuja plicata</i>	55	Growing adjacent to a hollow retaining wall. Straight, single stem. Good trunk taper. Healthy crown. 50% LCR. 2.0m crown radius. Good condition.	Retain Install barrier 3.30m from tree.	3.30

33-6547	Western Red Cedar	<i>Thuja plicata</i>	113	Tree was not on survey, location is approximate. Mature. Topped long ago with many regenerative leaders with included bark in the unions. 80% LCR. 6.0m crown radius. Moderate condition. Tree location conflicts with proposed lot 3.	Remove	6.78
34-6548	Western Red Cedar	<i>Thuja plicata</i>	74	Topped long ago with many regenerative leaders with included bark in the unions. 50% LCR. 4.0m crown radius. Moderate condition.	Retain Install barrier 4.44m from tree.	4.44
35-6549	Western Red Cedar	<i>Thuja plicata</i>	81	Fused at the base with #227. Topped long ago with many regenerative leaders with included bark in the unions. 40% LCR. 4.0m crown radius. Moderate condition.	Retain Install barrier 4.86m from tree.	4.86
36-227	Douglas Fir	<i>Pseudotsuga menziesii</i>	63	Fused at the base with #6549. Topped long ago with one regenerated leader. Chlorosis in the lower crown. 40% LCR. 2.0m crown radius. Moderate condition. Tree was not on survey, location is approximate.	Retain Install barrier 3.78m from tree.	3.78
37-228	Western Red Cedar	<i>Thuja plicata</i>	29	Topped long ago with many regenerative leaders with included bark in the unions. Bulge on trunk on the west side. 40% LCR. 2.0m crown radius. Moderate condition. Tree was not on survey, location is approximate.	Retain Install barrier 1.74m from tree.	1.74
38-6550	Douglas Fir	<i>Pseudotsuga menziesii</i>	69	Topped long ago with many regenerative leaders with included bark in the unions. 30% LCR. 2.0m crown radius. Moderate condition.	Retain Install barrier 4.14m from tree.	4.14
39-6551	Western Red Cedar	<i>Thuja plicata</i>	62	Topped long ago with many regenerative leaders with included bark in the unions. Many dead lower branches. 30% LCR. 2.0m crown radius. Moderate condition.	Retain Install barrier 3.72m from tree.	3.72
40-6552	Western Red Cedar	<i>Thuja plicata</i>	69	Topped long ago with many regenerative leaders with included bark in the unions. 30% LCR. 2.0m crown radius. Moderate condition. Tree location conflicts with proposed lot 4.	Remove	4.14
41-6553	Western Red Cedar	<i>Thuja plicata</i>	91	Topped long ago with many regenerative leaders with included bark in the unions. Crack from base to 8.0m. Leaning east. 30% LCR. 2.0m crown radius. Moderate condition.	Remove	5.46

				Tree location conflicts with proposed lot 4.		
42-6554	Western Red Cedar	<i>Thuja plicata</i>	63	Topped long ago with many regenerative leaders with included bark in the unions. Ivy overwhelming base and lower crown. 30% LCR. 2.0m crown radius. Moderate condition. Tree location conflicts with proposed lot 4.	Remove	3.78
43-6557	Douglas Fir	<i>Pseudotsuga menziesii</i>	70	Topped long ago with many regenerative leaders with included bark in the unions. Emergence holes and tunnels under the bark indicate pests. Chlorosis in the crown. 30% LCR. 2.0m crown radius. Moderate condition. Tree location conflicts with proposed lot 4.	Remove	4.20
44-6558	Western Red Cedar	<i>Thuja plicata</i>	67	Topped long ago with many regenerative leaders with included bark in the unions. 30% LCR. 2.0m crown radius. Moderate condition. Tree location conflicts with proposed lot 4.	Remove	4.02
os1	Western Red Cedar	<i>Thuja plicata</i>	51	Straight, single stem. Good trunk taper. Clearance pruned on the north side for power lines. 60% LCR. 3.0m crown radius.	Retain Install barrier 3.06m from tree.	3.06
os2	Western Red Cedar	<i>Thuja plicata</i>	60	Topped long ago with many regenerative leaders with included bark in the unions. 30% LCR. 2.0m crown radius.	Retain	3.60
os3	Douglas Fir	<i>Pseudotsuga menziesii</i>	40	Straight, single stem. Healthy crown. 30% LCR. 2.0m crown radius.	Retain	2.40
os4	Douglas Fir	<i>Pseudotsuga menziesii</i>	53	Straight, single stem. Healthy crown. 30% LCR. 2.0m crown radius.	Retain	3.18
os5	Douglas Fir	<i>Pseudotsuga menziesii</i>	38	Straight, single stem. Low live crown ratio, 15% LCR. 2.0m crown radius.	Retain	2.28

Summary Table

	subject property	off-site	City property
# of trees in total	43 (not including dead tree)	5	0
# to be removed	31	0	-
# to be protected	12	5	-

Images



IMAGE 1- Trees on the north-west corner of the property.



IMAGE 2- Trees on the north-east corner of the property.



IMAGE 3- Trees on the west side of the property.



IMAGE 4- Trees on the south west side of the property.

Conclusion

Property, plans and trees have been assessed by the arborist to determine tree management recommendations for construction. Those recommendations follow:

Recommended Tree Removals:

- Tree #6519 is dead and recommended for removal.
- Trees #6510 - #6543, #6547, #6552, #6553, #6554, #6557 and #6558 conflict with the proposed development and are recommended for removal.

Recommended Tree Protection:

- Tree barriers shown on the "Tree Plan for Construction" are to be installed and kept in place during the entire duration of construction.
 - Trees #6544, #6545, #6546, #6548-#6551 and os1-os5 shall be retained.

Limitations and Assumptions

- This report was prepared for and on behalf of the client and it is intended solely for their use. Woodridge Tree Consulting Arborists Ltd. shall not accept any liability derived from the partial, unintended, unauthorized or improper use of this report.
- This report is restricted to the subject trees as detailed in the report. No other trees were inspected or assessed as part of the work related to the preparation of this report.
- The accuracy and ownership of the locations of trees, property lines and other site features were not verified by Woodridge Tree. Third party information to the consultant may have been relied upon in the formation of the opinion of the consultant in the preparation of this report, and that information is assumed to be true and correct.
- The use of maps, sketches, photographs and diagrams are intended only as a reference for the readers use in understanding the contents and findings of this report, and are not intended as a representation of fact.
- Approvals from a municipal or senior government agency may be required in relation to certain recommendations and treatments provided in this report. The owner is responsible to make application for, pay related fees and meet all requirements and conditions for the issuance of such permits, approvals or authorizations.

I certify to the best of my knowledge or belief that:

- staff from this firm have performed site inspections on the dates as stated herein.
- the findings are based on information known to the consultant at that time.
- the statements of fact determined by the consultant are true and correct.

If there are questions regarding the contents of this report please contact our office.

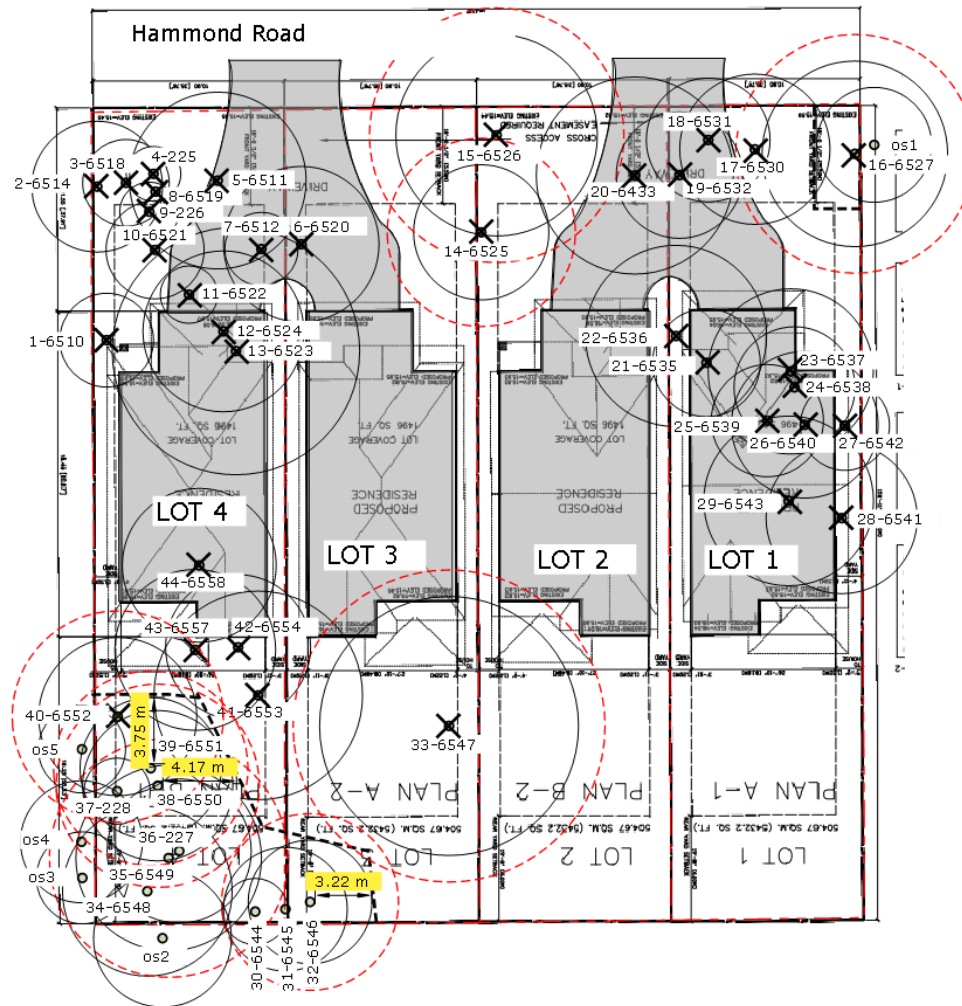


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Tree Plan for Development at 19476 Hammond Road, Pitt Meadows

Date: August 30, 2021



Notes

Legend

