Tree Solutions Inc
Consulting Arborists

Project No. TS - 8348

Memorandum

To:	JMK Homes LLC c/o Todd O'Dell
Site:	6610 E Mercer Way, Mercer Island, WA 98040
Re:	Remote Assessment of tree 576
Date:	April 8, 2025
Project Arborist:	George White, ISA Certified Arborist #PN-8908A ISA Qualified Tree Risk Assessor
Referenced Documents:	Arborist Report (Tree Solutions Inc., 2.17.2024) Arborist Memo – Assessment of Tree 576 (Tree Solutions Inc., 9.13.2024)

Assignment and Scope of Work

This memorandum documents the assessment by George White of Tree Solutions Inc. of provided photographs taken at the above-addressed site which were delivered by Todd O'Doll of JMK homes on March 31, 2025. I was asked to review the provided photographs and provide an updated assessment of one exceptional western redcedar (*Thuja plicata*) that is currently being protected in an ongoing development project. I was asked to provide a memo containing my observations and updated prognosis for the retained tree. Todd O'Dell, of JMK Homes LLC, requested these services for project planning purposes.

Observations and Discussion

Observed Decline

Tree 576 is an exceptional, 37-inch western redcedar tree that is currently being protected during construction. This tree has declined noticeably in health since my initial assessment in 2022, despite documented tree protection efforts.

I initially assessed tree 576 during a pre-development tree inventory on March 2, 2022. During this inventory I rated the tree's health as "fair" and included the note "Thin canopy, drought stress" to describe the rational for my health rating.

I conducted two additional site visits on February 14 and March 7 of 2023. The purpose of the first visit was to inspect the tree protection fencing throughout the site. During that visit I found all the tree protection fencing to have been installed in the correct locations consistent with permitted plans (Photo 1).

The purpose of the second site visit was to monitor a stump removal within the recommended limits of disturbance (RLOD) of tree 576. A combination of Air-excavation and hand digging was used to expose

the roots of the removed stump (Photo 2). The exposed roots were then cut cleanly, and the stump was removed with an excavator operating from outside of the tree protection fencing. Photographs taken during this site visit show thinning foliage in the tree's upper crown (Photo 3).

I returned to the site on August 26, 2024, at the request of Todd O'dell, to assess the health of tree 576 after he observed worsening crown symptoms. In a memo dated September 13, 2024, I rated the tree to be in "fair-to-poor" health. I also noted "limited dieback" and "abnormally thin foliage" throughout the tree's crown (Photo 4). During this site visit, and in my subsequent memo, I recommended retaining the tree and making cultural improvements to restore its vigor. Recommendations included adjusting the drip irrigation to be more evenly distributed throughout the root zone, adding additional woodchip mulch to the surrounding tree protection area, and adjustments to the irrigation schedule (Photo 5). These improvements were implemented following my site visit (photo 6) and, to my knowledge, have been continued.

While reviewing recently provided photos of tree 576, it is apparent that the tree has continued to decline in health despite growing condition improvements. The apical dieback has clearly progressed since my August 2024 site visit, and crown-thinning appears to be more widespread and extends lower into the crown (Photo 7).

Removal Recommended
Based on the worsening symptoms of stress and marked loss in vigor, it is my opinion that tree 576 is likely to continue to decline in health despite all reasonable efforts to improve its condition. Western redcedar trees (especially mature specimens) are very sensitive to construction impacts and are also subject to climate-related drought stress. The combination of pre-existing stress was compounded by the impacts of adjacent construction resulting in the observed decline.

While I consider tree 576 to be structurally stable at the time of this memo, its safe and useful lifespan is limited. In anticipation of this tree's continued decline it would be prudent to remove the tree (or reduce it to a wildlife snag) and plant required replacement trees. In my opinion, this option will result in a better outcome for the site and provide greater net canopy coverage in the long-term than continuing to retain a tree that is unlikely to survive 5 years following construction.

Replacement Requirements
The removal of tree 576 must only be completed with permission of the city of Mercer Island and will be subject to the remediation requirements outlined in MICC 19.10.160.B.2 and the replacement requirements outlined in 19.10.070.

A total of six replacement trees will be required to remediate the proposed removal. Per MICC 19.10.070, replacement trees must primarily be species native to the Pacific Northwest. To replace the lost evergreen canopy, I recommend that at least one of the proposed replacement trees be a large native conifer such as Douglas-fir (*Pseudotsuga menziesii*) or ponderosa pine (*Pinus ponderosa*). Other recommended replacement species include Garry oak (*Quercus garryana*), Pacific dogwood (*Cornus nuttallii*), shore pine (*Pinus contorta var. contorta*), incense cedar (*Calocedrus decurrens*), and river birch (*Betula nigra*).

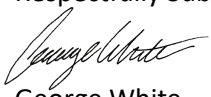
The species, size, and proposed location of replacement trees must be included in a prepared replanting plan. Replacement trees must also be maintained for a 5-year period following installation.

The tree protection fencing surrounding tree 576 should remain in place for the remainder of site construction following removal to preserve the area as an ideal planting site for one or more of the proposed replacement trees.

Management Recommendations

- Obtain permission from the city of Mercer Island to remove and replace tree 576.
- Consider reducing tree 576 to a 20-foot wildlife snag in lieu of complete removal.
- Prepare a replanting plan per MICC 19.10.160, that includes a minimum of six replacement trees consistent with the replacement tree requirements outlined in MICC 19.10.070.
- Continue to maintain the tree protection area surrounding tree 576 following removal to preserve it as a planting site for proposed replacement trees.
- Plan to maintain all replacement trees for a minimum of 5-years following installation.

Respectfully Submitted,



George White
Consulting Arborist.

Appendix A **Photographs**

Photograph 1. The tree protection area around tree 576 as it appeared on my February 14 site visit. Tree protection fencing was installed in the correct location and woodchip mulch was added per specifications. Supplemental irrigation had yet to be installed but was in-place for the following summer.

Photograph 2. The stump of "Dead tree 1" with roots partially exposed on March 7, 2023. A mix of hand excavation and pneumatic excavation was used to expose this tree's roots so that they could be cut cleanly as to avoid collateral root damage to tree 576 when this stump was removed.

Photograph 3. Tree 576 (red arrow) as it appeared during my site visit on March 7, 2023. Thinning foliage is visible in the upper crown

Photograph 4. The crown of tree 576 as it appeared during my site visit on August 26, 2024. Note the thinning foliage and limited dieback in the upper crown. These are typical indications of stress in western redcedar.

Photograph 5. Drip irrigation installed at the base of tree 576 as it appeared during my August 2024 site visit. I recommend adding additional mulch and augmenting the drip irrigation to cover more of the root zone during this site visit.

Photograph 6. Provided photograph of the additional mulch and requested adjustments to the drip irrigation following my 2024 site assessment.

Photograph 7. A provided photograph showing dieback in the upper crown of tree 576 as it appeared on March 31, 2024.

Appendix B **Assumptions & Limiting Conditions**

1 Consultant assumes that the site and its use do not violate, and is in compliance with, all applicable codes, ordinances, statutes or regulations.

2 The consultant may provide a report or recommendation based on published municipal regulations. The consultant assumes that the municipal regulations published on the date of the report are current municipal regulations and assumes no obligation related to unpublished city regulation information.

3 Any report by the consultant and any values expressed therein represent the opinion of the consultant, and the consultant's fee is in no way contingent upon the reporting of a specific value, a stipulated result, the occurrence of a subsequent event, or upon any finding to be reported.

4 All photographs included in this report were taken by Tree Solutions, Inc. during the documented site visit, unless otherwise noted. Sketches, drawings and photographs (included in, and attached to, this report) are intended as visual aids and are not necessarily to scale. They should not be construed as engineering drawings, architectural reports or surveys. The reproduction of any information generated by architects, engineers or other consultants and any sketches, drawings or photographs is for the express purpose of coordination and ease of reference only. Inclusion of such information on any drawings or other documents does not constitute a representation by the consultant as to the sufficiency or accuracy of the information.

5 Unless otherwise agreed, (1) information contained in any report by consultant covers only the items examined and reflects the condition of those items at the time of inspection; and (2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, climbing, or coring.

6 These findings are based on the observations and opinions of the authoring arborist, and do not provide guarantees regarding the future performance, health, vigor, structural stability or safety of the plants described and assessed.

7 Measurements are subject to typical margins of error, considering the oval or asymmetrical cross-section of most trunks and canopies.

8 Tree Solutions did not review any reports or perform any tests related to the soil located on the subject property unless outlined in the scope of services. Tree Solutions staff are not and do not claim to be soils experts. An independent inventory and evaluation of the site's soil should be obtained by a qualified professional if an additional understanding of the site's characteristics is needed to make an informed decision.

9 Our assessments are made in conformity with acceptable evaluation/diagnostic reporting techniques and procedures, as recommended by the International Society of Arboriculture.