| | A SHINGTON | City of Develop 9611 Mercer Inspection Req General Infor | Mercer Island oment Services SE 36th Street Island, WA 98040 uest Line (206) 275-773 rmation (206) 275-7605 | 0 | TREE Main Pern | PERM Project No Permit No nit No. | IT 2401-161 | |
|--|---|---|--|--|--|---|-----------------------|--|
| Site Address: | 7058 82ND AVE SI | 3 | Valuation: | 0.00 | Parcel No. | 873230 | 0120 | |
| Owner: Tenant: Mailing Address: Phone: | SARA JORDAN 7058 82ND AVE SE MERCER ISLAND 3015256073 | WA 98040 | Description of Work: Remove 3 HAZARD TREES rpl w 2 trees WA 98040 | | | | | |
| | 5010200075 | | l agal Description | ngoni chang denominang nganasi j | | | | |
| Lot: | | Block | Description | | | | | |
| Contractor: Address: | A-1 TREE SERVICE 17706 157TH PL SE MONROE | CONSERVATION LLC WA 98272 | Phot State MI F | hone: 4258833446 ate Contractor Lic#: 1TREETS811BB II Business Lic#: 190448 | | | | |
| TOTAL FE | ES: | 164.00 DATE PAID : | | RI | CEIPT#: | | | |
| SPECIAL CO All work is t All work dor Internationa Standard saft The work is Traffic contr The City ass Please call (2 All traffic land | NDITIONS: o be done at the applicant's ne on the City right-of-way i al Society of Arboriculture of ety precautions of the tree ca to be performed in such a w ol is the responsibility of the umes no liability in connect 206) 275-7730 24 hours price ne restrictions and closures of | expense, including clean up and r s to be done by a licensed and ins f the National Arborist Associatio are industry are to be adhered to a ay as not to do damage to any roa e applicant. It is the applicant's re for with this action. r to needing a completion inspect require a 24 hour notice to Police | emoval of all debris sured professional contra n. It all times. Id surface, overhead, or to sponsibility to ensure th cion. Dispatch at (206) 587-3 | actor with proof of underground utilitie e contractor is info 400. | professional affil es. rmed of this. | iation to the | 2 | |
| OTHER: | | | | | | | | |
| NOTICE TO APP In accepting this p kind and description character of mater out of or by reasor or their own sole ce The City Arborist willful or unreasor all. I hereby certify that examined this appl The granting of a p construction. | LICANT ermit the permittee, his successors on which may accrue to or suffere ials used or manner of installation of any of the above causes, the g xpense and will fully satisfy any j may revoke, annul or terminate th table neglect, fails to heed or com at I am the owner of the subject pr lication and know the same to be to permit does not presume to give at | s, heirs, and assignees agree to protect an d by any persons, corporations or proper , maintenance, and operation, and in case rantee, his successors, heirs or assigns, w udgement after the said suit or action sha is permit if grantee fails to comply with a ply with notices given him or if the utilit operty or I have been authorized by the c rue and correct. All provisions of laws a thority to violate or cancel the provision | Id hold harmless the City of N ty by reason of the performar e any such suit or action is br vill upon notice to him or then all have finally been determin any or all of its provisions, re y herein granted, is not instal powner(s) of the subject proper and ordinances governing this as of any other state or local 1 | Mercer Island from all d use of the above describ- ought against said City n of commencement o ed if adversely to the 0 quirements or regulation led or operated and mather ty to represent this app type of work will be r aw regulating construct | claims, action or dam bed work, cost of ma of Mercer Island or f such action, defend City of Mercer Island ons as herein set fortl intained in conformi plication, and that I h net whether specified tion or the performan | ages of every terials and lab damage arisin the same at h n or through ty herewith or ave read and l herein or not ace of | oor, g is at | |
| Sarah Signature of Ov | when Contractor/Authorized | 2/15/24 Agent Date | Printed N | A Jord Name of Owner/Co | lan ntractor/Authoriz | zed Agent | 01-161 | |

Project No. Main Permit No.



Sara Jordan 7058 82nd Ave SE, Mercer Island 98040 Parcel 8732300120 Lot size 13,024



20" Pine tree

Re

Replacement Trees: 1- Kousa Dogwood 1.75" 1- Silberlocke Fir 7-8'



11/22/2023

Project: Assessment of three trees at 7058 82nd Avenue SE, Mercer Island, WA. Parcel number 8732300120.

Contact: Stephan and Sara Jordan 7058 82nd Avenue SE, WA 98040 Phone – 301 525 6073 Email - syjordan03@gmail.com

Objectives: Evaluate health of trees, their suitability of placement, and recommend solutions.

Description: The 7058 home was built in 1962 on a 13,000 square foot residential lot at the south end of Mercer Island. The subject trees were likely planted at that time. The property has passed through several owners over the last two decades. Most noticeably the house was flipped in 2006 and as part of the upgrading the carport at the south end of the house was permitted to be enclosed and what was supposed to be a small deck (153 sq ft) was added (Figures 1 and 2). The party that purchased the house after the flip sold it to the current owners in May of 2023.

The new owner discovered with the fall rains that water was pooling in the garage. They spoke to several contractors who documented that the slab was compromised and had been twisted out of true. Wet rot was exposed at the base of the walls and they were told that the sills had to be replaced. Each of the contractors said that the trees at the south side were the issue and had to be removed. The clients had the area between the garage and the base of the trees hand excavated to expose the roots.

When the home owners asked the City of Mercer Island about removing the trees they were told that they needed a formal report speaking to the trees' situation. They reached out to Superior NW and asked for assistance with the situation. A site visit was made at the end of October.

The two primary trees in question were Pin Oaks (*Quercus palustris*) standing in close proximity to the south side of the home (Figure 3). The first oak, at the SW corner of the garage/house measured 38" at the standard height of 54" above grade (DSH). It was roughly 70' tall with a 28' fairly even radial spread. The tree had extensive deadwood present that had been cleaned out within the last four months. The stub of a large lateral limb on the south side that was excised shows evidence of advanced decay close to the main union (Figure 4). The oak is in weak condition with limited new growth and twig died back throughout.

The root crown of the tree is pushing against and under the pillar pad (Figures 5 and 6). The post supported by the pad holds the SW corner of the 12'x 28' deck above the garage and forms the corner for the south and west garage walls. The siding is bowing out from the pressure of the tree uplifting the column.

The second oak measured 23.5" DSH, (it was measured twice to make sure) was close to 55' tall, and spreads mainly to the southeast on a handful of scaffolds. It is in slightly better health than its larger neighbor. The tree stands 24" S of the corner of the garage wall footing where it jogs back to the north and 39" S of the main foundation (Figure 7). There are roots visible going under the footings in both directions.

The third tree was a Black Pine (*Pinus nigra*) standing off the NW corner of the house. A previous arborist had already recommended its removal and applied for a permit. The pine had a noticeable lean and was weighted slightly toward the house. It measured 20" DSH, was 45' tall, and separated into multiple spars above the 9' level (Figure 8). The pine has an atypical basal formation that is often associated with trees growing over a stump or recovering around an atrophied area (Figure 9). The swelling is twice the diameter of the trunk up to 24" above grade. Fungal bodies are present in the SW quadrant of the base, where an atrophied structural root is seen on the base's east face, and at the main separation point of the trunk (Figures 10-12).

Core tests taken at 14" above grade revealed a localized decay column. On the north face there was a 3" sidewall and then 10" of decay. The one taken on the east face revealed no decay to 15" depth. On the west face the test the decay column was seen after a 6" side wall.

Methods: Tree assessment is both an art and a science. To properly perform, an arborist must have an extensive background in biology, tree mechanics, and tree structure that is equal parts academic and field knowledge. It takes years of study to recognize and correctly diagnose the subtle signs trees exhibit before their failure, whether it be partial or total. The process begins with a visual inspection (visual tree assessment, VTA) which is followed up as necessary with soundings, core testing, and/or other detection means. Each tree is examined and evaluated according to several factors including species type, size, vigor, injuries present, root and grade disturbance, deadwood, location and extent of decay, stem taper, exposure, and targets that are at risk.

Discussion: There is literally no way to prune the roots of the larger oak because of its extremely close proximity to the home. Both trees are large enough to have full 10' radial structural root plates and any cutting within this area would critically compromise their holding power. It is highly likely that their roots are cross bound and any damage to one oak would affect the other.

It is obvious that the original contractor who did the work in 2006 both neglected to address the impact the work would have on the trees and built a significantly larger edifice than was permitted. The combination created the current fiasco which has no remedy short of removing the two oaks.

The oaks essentially fall into the category covered by MICC 19.10.06(3)(a); they meet the criteria for removal because attempting to retain them creates an unavoidable hazardous situation. Namely the trees are currently damaging the home and are preventing its repair.

The other arborist's recommendation to remove the pine makes sense because of the tree's abnormal basal structure, the decay present, the presence of the fungal bodies, and the lean of the tree toward the home.

In the normal course of events trees in these size categories call for replacements of six, two, and two trees respectively. However, because removal in this case is not selective and rather is due to condemnation outside of the control of the home owner, it is asked that the city arborist reduce the requirements under the prevue of MICC 19.10.07.B(4)(a). Removing the trees is not something that the homeowners had ever thought that they would have had to do and it seems punitive to force the replanting of so many trees on them.

Replacing the pine and smaller oak at one-for-one and the larger oak at two-for-one seems fair.

Waiver of Liability Because the science of tree assessment is constantly broadening its understanding, it cannot be said to be an exact science. Every tree is different and performing tree risk assessment is a continual learning process. Many variables beyond the control, or immediate knowledge, of the arborist involved may adversely affect a tree and cause its premature failure. Internal cracks and faults, undetectable root rot, unexposed construction damage, interior decay, and even nutrient deficiencies can be debilitating factors. Changes in circumstance and condition can also lead to a tree's rapid deterioration and resulting instability. All trees have a risk of failure. As they increase in stature and mass their risk of breakdown also increases, eventual failure is inevitable.

While every effort has been taken to provide the most thorough and accurate snapshot of the trees' health, it is just that, a snapshot, a frozen moment in time. These findings do not guarantee future safety nor are they predictions of imminent events. It is the responsibility of the property owner to adequately care for the tree(s) in question by utilizing the proper professionals and to schedule future assessments in a timely fashion.

This report and all attachments, enclosures, and references, are confidential and are for the use of the Jordan family and their representatives only. It may not be reproduced, used in any way, or disseminated in any form without the prior consent of the clients concerned.

Anthony Moran, BS ISA Certified Arborist #PN-5847A



Figure 1. Aerial from 2005.



Figure 2. Aerial from 2007 showing the upper deck just peeking out on the east side of the trees.



Figure 3. Aerial from 2021 showing the locations of the subject trees. Note the large deck over the garage more clearly seen in this image.



Figure 4. Looking at the point of the excised scaffold on the south side of the larger oak.



Figure 5. Looking east at the base of the larger (#1) oak.



Figure 6. Looking NW at the base of the large oak pressing into the side of the garage. Note where the soil was removed to expose the roots in this area.



Figure 7. Looking NE at the exposed roots of the smaller (#2) oak. The root crown is just visible at the right side of the image.



Figure 8. Showing the separation point of the #3 pine (looking NW).



Figure 9. Showing the basal formation of the pine. The atrophied structural root is circled.



Figure 10. Showing the fungal fruiting body at the base of the tree.



Figure 11. Fungal body where atrophied structural root should have been.



Figure 12. Fungal body near the separation point