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November 9, 2020

Justin Younker
Cascadia Senior Living & Development

Messenger House Tree Appraisal
Bainbridge Island, WA 98110

Dear Mr. Younker:

Thank you for asking me to provide the values for 21 trees to be retained through the Messenger House redevelopment. To assess and provide values for the trees addressed in this letter I combined my field experience and education with current accepted practices as defined by the American National Standards Institute (ANSI), the International Society of Arboriculture (ISA) and the methods dictated by the Guide for Plant Appraisal, 10th edition.

The tools I used to make the tree assessment were limited to a rubber mallet, binoculars, compass, laser pointer, diameter tape and hand trowel unless otherwise noted. A visual tree assessment and other methods are only conclusive for the day of inspection and do not guarantee that conditions will remain the same in the future.

Summary

Using the Trunk Formula method, the individual reproduction costs (value) of the 21 individual trees to be retained are shown in the table below.

Reproduction Method/Trunk Formula Technique Appraisal - Summary					
Client: Younker/Messenger House					
Date: 11/9/2020					
Tree #	Species	Value			
Tree 401	Douglas-fir	\$3,313.00			
Tree 402	Douglas-fir	\$5,982.00			
Tree 403	Douglas-fir	\$1,049.00			
Tree 404	American elm	\$2,506.00			
Tree 408	Copper beech	\$41,274.00			
Tree 409	Western red cedar	\$10,455.00			
Tree 410	American elm	\$39,816.00			
Tree 411	Cryptomeria	\$14,700.00			
Tree 412	Sycamore	\$11,311.00			
Tree 413	American elm	\$12,099.00			
Tree 416	Scarlet oak	\$9,809.00			
Tree 418	Sugar maple	\$4,317.00			
Tree 419	Douglas-fir	\$10,748.00			
Tree 420	Douglas-fir	\$10,748.00			
Tree 421	Douglas-fir	\$14,629.00			
Tree 424	Lawson cypress	\$14,875.00			
Tree 425	Lawson cypress	\$5,759.00			
Tree 428	Liquidambar	\$2,109.00			
Tree 429	Cypress	\$5,068.00			
Tree 430	Chamaecyparis	\$4,255.00			
Tree 435	Threadbranch cypress	\$6,667.00			

Background

In July 2020 I was asked by Mr. Younker to assess a number of trees growing close to the redevelopment area at the Messenger House on Bainbridge Island. I completed a Level 2 tree assessment to provide this information. All levels of tree assessment are explained in an attachment to this report.

The development team then determined which trees would be retained relevant to their plan and identified 21 trees to retain. This report provides the data to comply with the BIMC requiring valuation of trees to be retained in this type and size of development site. The Site Map shows the location of trees that will be retained and subsequently, those that were valued.

Appraisal Methodology

To determine the value of the 21 trees I utilized the protocol of the Council of Tree and Landscape Appraisers in *The Guide for Plant Appraisal*, 10th edition, by the Council of Tree and Landscape Appraisers. The 10th Edition of the Guide for Plant Appraisal was published and released for the public in August of 2018.

The appraisal process includes factors that contribute to the value of plants such as size, species, condition, and location. Three approaches and three techniques can be used to develop a basic cost. Methods include:

Cost approach

Within this approach, three techniques can be used:

Repair Cost – primarily used when there is damage to a plant or other landscape feature and the assignment focuses on correcting damage(s) or mitigating further losses,

- This was not the assignment in this case.

Reproduction Cost – Commonly used where a landscape item has been destroyed, removed or significantly damaged. This is widely used for tree inventories, preconstruction bonding and some insurance claims.

- As this assignment was virtually a tree inventory I chose to use this method.

Functional Replacement Cost – This is the cost of substitute items that provide equivalent utility, benefits or functions rather than the cost to produce an exact replica.

- Although this method could have been used for some of the trees due to tree functions or limitations being significant factors, I chose to use one method to find value as these trees are not likely to be significantly impacted by development and, unlikely to need replacement.

In this case the income and market approaches were rejected because,

- It would be very difficult to find comparable properties with similar value influenced solely by the presence or absence of the subject trees
- ecological benefits as represented by a calculator such as iTree Eco do not fully illustrate the benefits provided by the intended function(s) of the trees,
- in my opinion the value of diminution of this property's real estate market value is not relevant to this case.

This appraisal does not include removal, cleanup or other associated replacements costs if they become applicable in the future as the assignment was to find a value for the trees whether they needed to be replaced or not.

Discussion

Direct Replacement Technique calculates the cost to reproduce an identical copy of the subject tree and install it in the same site as the former tree at the present time. If this method is used, there would be no delay in the benefits provided by the tree because, in theory, it will match those benefits provided by the subject of the appraisal. No time would be necessary to allow the replacement tree to grow to parity if an identical reproduction is installed.

When an identical size is not available, the largest actually available size is used. Two methods can be used:

The Direct Replacement without depreciation - Direct replacement is the cost of procuring a tree of identical species and size or the next largest available (not necessarily commonly available) if

one of an identical size is not available. It includes cost of procuring the tree, transporting it to site, installing it, and any incidentals that may be incurred in the installation process.

- I did not use this method as the trees are too large to be identically or approximately replaced (potential costs for tree replacement however, are detailed below).

Direct Replacement with depreciation: This method combines the aforementioned direct replacement method with depreciation attributes.

- I used this method and in this case found the initial cost of the tree by Tree Acquisition: I obtaining tree acquisition quotes from three nurseries. I took the average of the cost of these trees to use for the valuations of the 21 trees (or in some cases where a specific species was only available at one of the nurseries, used the single cost as it was the most local source).

Depreciation Factors

The basic cost of a tree calculated in each of the techniques above represents the cost to procure a notionally ideal replacement that is free of any defects. Since some of the subject trees had sub-optimal attributes, depreciating factors were introduced to account for this reduction in value.

There are three depreciation ratings: Condition, Functional Limitations, and External Limitations. The appraised cost of the tree is the product of the basic cost and these three depreciation ratings.

The Condition rating reflects defects in health, structure, and form. The Condition rating is a subjective rating between 0% and 100% as determined by the appraising arborist. Functional Limitations reflect the features of the tree/site interaction that restrict or constrain growth or function due to poor placement or size. External Limitations reflect restrictions to the tree involving legal, biological, or environmental conditions external to the property (CTLA 2018, p. 9). Functional Limitations and External Limitations are also subjective ratings ranging between 0% and 100% as determined by the appraising arborist, with similar guidance provided.

Condition Rating

Condition has three subcomponents: health, structure, and form. The health subcomponent encompasses the attributes that limit the ability of the tree to undergo the processes of photosynthesis, including attributes of the vascular system, leaf density, wound closure, insect infestation, and abiotic disorders. Structure is the ability of the tree to support itself from falling or breaking apart. Form describes the tree's habit, shape, or silhouette as it develops from the interaction between the tree's genetics, site, and management. Health, Structure, and Form are subjectively rated on a total scale of 0% to 100% by the appraising arborist according to Table 4.1 in the Guide for Plant Appraisal (CTLA, p. 44).

Functional Limitations and External Limitations

Functional Limitations reflect the restriction on tree growth or intended use in the landscape based on the interaction of site and species. From a functional benefits

perspective, the placement of the trees varied and this is reflected in the limitations for each tree valued.

External Limitations are the restrictions on tree growth or intended use with respect to attributes outside the control of the property owner. Known fatal pests, drought restrictions, invasive species status, and utility easement conflict are all examples of external limitations. The external limitations are again different for each tree and that is reflected in each tree's valuation.

All of the following costs would be necessary to return the site to its pre-loss condition. None of these costs were included in my appraisal as the assignment was to provide only a valuation of the tree itself though, they should be noted as extra costs for the project if tree replacement is necessary.

- **Delivery Cost:** Transporting larger trees would require special equipment. The three nurseries in our area normally have a set delivery fee based on the location of where trees are needed.
- **Site Preparation Cost:** Several tasks may have to be performed prior to the installation of the replacement tree:
 - The remaining portion of the existing tree (if it exists or needs to be removed) and stump must be removed to prep the site for replanting.
 - Excavation and site preparation potentially performed with large machinery or by several tree or landscape crew members.
 - Stump(s) ground.
 - New soil added.
- **Tree Installation:** Installation should be specified or supervised by a certified arborist to increase the likelihood of establishment after planting. After the tree is placed in the hole and its container is removed, the rest of the hole will be backfilled with new soil and topped with mulch to assist in establishment.
- **Cleanup Cost:** Debris from the remainder of the removed tree(s) and planting ball and burlap etc. will need to be removed from site.
- **Post-Installation Maintenance:** Maintenance beyond the regular maintenance required of an established tree is included because these are additional costs that must be borne over the course of the establishment period.
- **Irrigation:** Supplemental irrigation is necessary during the establishment phase to assist plant establishment in the new soil. Such irrigation will require additional water that would not have been necessary if the tree was already established.
- **Monitoring:** Installation of a mature tree may require periodic reinspection to ensure that the tree's needs are met through the sensitive establishment period. Monitoring efforts

may include visual inspection for pests and pathogens and evaluation of available water.
Appropriate actions may be taken to mitigate any discovered problems.

Reconciliation

Since my assignment was only to provide a cost for replacing the damaged trees, I did not perform reconciliation as part of this assignment. I was instructed to simply provide my results for the technique of the reproduction cost method and an explanation of how I arrived at this result. It was not within the scope of this assignment to aggregate the results of each method and to conclude a final value.

Conclusion

All data forms, photos or further information can be produced upon request but are not included with this report.

Works Cited

Council of Tree and Landscape Appraisers. Guide for Plant Appraisal, 10th Edition. ©2018 CTLA.



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Levels of Tree Assessment

LEVEL 1: The Level 1 assessment is a visual assessment from a specified perspective of an individual tree or a population of trees near specified targets to identify obvious defects or specified conditions. A limited visual assessment typically focuses on identifying trees with an imminent and/or probable likelihood of failure.

Limited visual assessments are the fastest but least thorough means of assessment and are intended primarily for large populations of trees.

LEVEL 2: This is a basic assessment completing a detailed visual inspection of a tree and surrounding site, and a synthesis of the information collected. This assessment requires that a tree risk assessor walk completely around the tree—looking at the site, buttress roots, trunk, and branches.

A basic assessment may include the use of simple tools to gain additional information about the tree or defects. Basic is the standard assessment that is performed by arborists in response to a client's request for tree risk assessment. Simple tools may be used for measuring the tree and acquiring more information about the tree or defects. However, the use of these tools is not mandatory unless specified in the Scope of Work.

LEVEL 3: Advanced assessments are performed to provide detailed information about specific tree parts, defects, targets, or site conditions. They are usually conducted in conjunction with or after a basic assessment if the tree risk assessor needs additional information and the client approves the additional service. Specialized equipment, data collection and analysis, and/or expertise are usually required for advanced assessments. These assessments are therefore generally more time intensive and more expensive.

11/9/20
Messenger House – Younker
Tree Appraisal - Valuation



Site Map

Assumptions, Limiting Conditions and General Waiver

I, Katy Bigelow, certify that:

I have personally inspected the tree(s) and or the property referred to in this report;

I have no current or prospective financial or other interest in the vegetation or the property which is the subject of this report and have no personal interest or bias in favor of or against any of the involved parties or their respective position(s), if any;

The analysis, opinions and conclusions stated herein are the product of my independent professional judgment and based on current scientific procedures and facts, and the foregoing report was prepared according to commercially reasonable and generally accepted arboricultural standards and practices for the Pacific Northwest and Puget Sound areas;

The information included in this report covers only those trees that were examined and reflects the condition of the trees as of the time and date of inspection;

This report and the opinions expressed herein are not intended, nor should they be construed, as any type of warranty or guarantee regarding the condition of the subject trees in the future;

Covenants, Conditions, and Restrictions (“CC&Rs”) may restrict the number, type and height of vegetation on the subject property, and I have made no investigation regarding whether the property is subject to such CC&Rs; and

To the best of my knowledge and belief, all statements and information in this report are true and correct and information provided by others is assumed to be true and correct.

I am not an attorney or engineer. This report does not cover these areas of expertise and represents advice only of arboricultural nature. Without limiting the generality of the preceding sentence, it is specifically understood that nothing contained in this report is intended as legal advice, or advice or opinions regarding soil stability or zoning laws, and this report should not be relied upon to take the place of such advice.

My investigation was limited to above-ground observations of the subject tree and the surrounding site – no excavation was performed. My investigation was based solely upon my site inspection.

All of the information provided to me regarding the history of the site and the subject tree was assumed to be true. If any information is found to be false, the conclusions in this report may be invalidated.

My expertise in this matter is limited to arboriculture, and this report is not intended to be legal advice. I do not guarantee the safety, health, or condition of the subject tree.

There is no warranty or guarantee, expressed or implied, that problems or deficiencies in the subject tree may not arise in the future. Arborists are tree specialists who use their knowledge, education, training, and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed. Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.



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