



Memo

To: The Atherton Planning Commission
From: Sally D Bentz-Dalton, Town Arborist
CC: Sung Kwon, Principal Planner
Date: 1/25/23
Re: Tree Protection Zone (TPZ) Exception 82 Linda Vista

I have reviewed the application at 82 Linda Vista and offer the following observations and recommendation for your review:

The applicant is applying for TPZ exceptions for the following trees:

Tree #2 – Redwood – 48” dbh
Tree #4 – Redwood – 18” dbh

Formal Application Request:

Request #1: To build an ADU 7.48x away from neighbor’s tree #2
Request #2: To build an ADU 6.22x away from tree #4

On December 13th, 2022, an Arborist report inventory was conducted for the site by Urban Tree Management Inc.

Tree # 2- Redwood 48” dbh 70 rating 5’ from property line and thin canopy.
(*Sequoia sempervirens*)

Tree #4 - Redwood 18” dbh - Good health
(*Sequoia sempervirens*)

It is the Project Arborists’ understanding that no additional excavation will be necessary for the installation of the proposed ADU. Per the Project Architect, Tommy Frost, the ADU’s foundation will be supported by slabs on piers, with one (1) new structural pile located within eight times (8x) the trunk diameter at breast height (DBH) of two (2) protected Coast redwood (*Sequoia sempervirens*) trees #2 and #4. The foundation of the ADU encroaching within the Tree Protection Zones will be laid on the same footprint as an existing playground. The current condition of this area is 6-8” of rubber and 6-8” of base rock to be removed for the placement of a 12” structural slab. This location will further limit the impact to the roots of protected trees #2 and #4.

The one (1) structural pile located within eight times (8x) the DBH of the Tree Protection Zones will be hand excavated. Hand excavation within the Tree Protection Zones of protected trees #2 and #4 will limit root impact to less than 10% per tree. No roots larger than 2” shall be cut or removed without notifying the Project

Arborists. If roots larger than 2” need to be cut for the pile installation, the Project Arborists shall make a site visit to assess and make recommendations to preserve the health of the trees. We feel that Tree #2 and Tree #4 will be adequately protected and approve of the plans as designed. Construction may proceed.

Table 1. Guidelines for determining tree protection zones of healthy, structurally sound trees (adapted from Matheny and Clark, 1998 and the British Standards Institute).

Species Tolerance to Construction Damage	Relative Tree Age	Distance from Trunk to TPZ Boundary		
		in multiples of Trunk Dia.	in feet per inch of Trunk Dia.	in meters per cm of Trunk Dia.
High	Young	6	0.50	0.06
	Mature	8	0.75	0.09
	Overmature	12	1.00	0.12
Medium	Young	8	0.75	0.09
	Mature	12	1.00	0.12
	Overmature	15	1.25	0.15
Low	Young	12	1.00	0.12
	Mature	15	1.25	0.15
	Overmature	18	1.50	0.18

Redwood Tree are rated as high/good tolerance to construction impacts (See below the chart for Relative Tolerance of Selected Species to Development Impacts (Adopted from Matheny and Clark, 1998).

For the purposes of this chart a young tree means that it is less than 20% of life expectancy, mature means 20-80% life expectancy and over mature is 80% or more.

I would consider this tree to be mature so following the Best Management Practices: Managing Tree During Construction which is a companion publication to ANSI A300 Part 5, I used the Guidelines for determining tree protection zones of healthy, structurally sound trees this tree species has a good/high tolerance and I would consider this tree mature or a median tree size for this species. Following the chart, the recommendation is 8x away. Tree # 4 would be considered young at 6x.

Since the ADU is being placed where the playground is located, no additional excavation is necessary, that the trees have a high tolerance I can recommend the 7.48x TPZ for tree #2 and 6.22x TPZ for tree #4 with the following requirements only:

- No additional excavation
- No roots over 2” to be cut.
- Hand excavation only within 8x TPZ
- Foundation to be supported by slabs on piers, with one (1) new structural pile located within eight times (8x) the trunk diameter. The foundation of the ADU encroaching within the Tree Protection Zones will be laid on the same footprint as an existing playground.
- The area under the drip line of trees should be thoroughly irrigated to a soil depth of 18” every 3-4 weeks during the dry months.
- Mulch should cover all bare soils within the tree protection fencing. This material must be 6-8 inches in depth after spreading, which must be done by hand. Coarse wood chips are preferred because they are organic and degrade naturally over time.

I can recommend the exceptions based on the criteria below from Section 2.2 B. 2.

The probability of failure which is a function of heritage tree and site conditions such as, but not limited to, structural defects, presence of disease, species history, age or remaining life span, and varying weather conditions.

The information included in this memo is believed to be true and based on sound arboricultural principles and practices.

Sincerely,

Sally Bentz
Town Arborist
Certified Arborist WE#9238AM