

Memo

To: The Atherton Planning Commission
From: Sally D Bentz-Dalton, Town Arborist
CC: Sung Kwon, Principal Planner
Date: 2/15/23
Re: Tree Protection Zone (TPZ) Exception 244 Park

I have reviewed the application at 244 Park and offer the following observations and recommendation for your review:

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

Tree #1 – Redwood – 16.9” dbh
Tree #12 – Redwood – 30.3” dbh
Tree #13 – Redwood – 43.7” dbh
Tree #15 – Valley Oak – 32.7” dbh
Tree #16 – Redwood – 91.6” dbh

Formal Application Request:

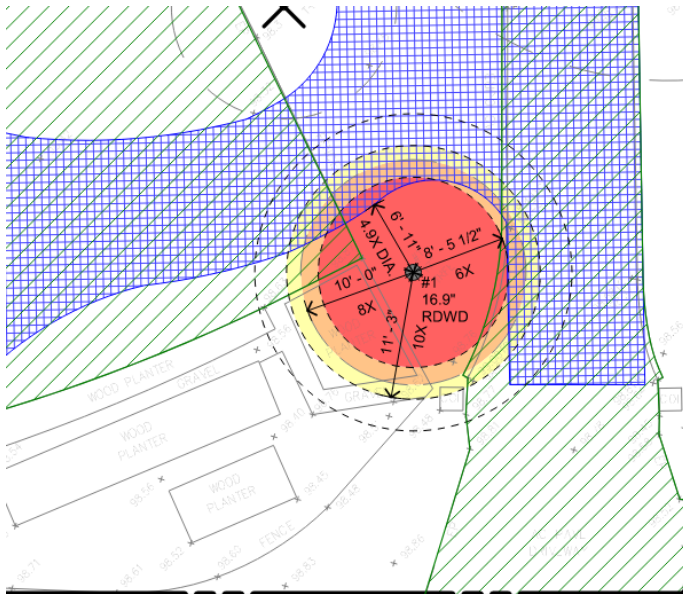
Request #1: 4.9x for driveway – tree #1
Request #2: 6x for an ADU, 8x for new residence, hardscape & bbq— Tree #12
Request #3: 6.5x shallow foundation – full basement 7.8x – tree #13
Request #4: 7.6x for a new ADU for tree #15
Request #5: 5.43x for a new residence for tree #16

On August 3rd, 2022, an Arborist report inventory was conducted for the site by Urban Tree Management Inc.

TAG NO.	COMMON NAME	DIAMETER AT BREAST HEIGHT"	H'/W'	HEALTH	STRUCTURE	PROTECTED (X)	TREE DISPOSITION	NOTES, RECOMMENDATIONS
1	Coast redwood	16.9	47'/12'	fg	fg	x	B	DWR, EWR
12	Coast redwood	30.3	72'/28'	fg	fg	x	B	DWR, EWR
13	Coast redwood	43.7	70'/25'	fg	fg	x	B	DWR, EWR, dominating adjacent small redwood
15	Valley oak	32.7	45'/45'	fp	fp	x	C	CD at 5.5', RCE, cable, DWR, EWR
16	Coast redwood	91.6	100'/45'	f	fp	x	B	CD at 7', Cable, some girdling roots, DWR, EWR

Request #1: 4.9x for driveway – tree #1 – 16.9” dbh Redwood

“This is a small, borderline heritage tree that sits between two areas of very close existing paving. We are requesting an exception to reduce the TPZ from 8X for driveways down to 4.9X or 7ft. Part of the existing driveway already encroaches to this same dimension. The area of new encroachment is necessary in order to provide for our curved driveway to access the garage/ parking back-up on site and tie-in with existing driveway area. We are trying to soften the curve of the driveway enough to make it maneuverable for everyday parking. - The encroachment will only consist of asphalt paving in this zone.”



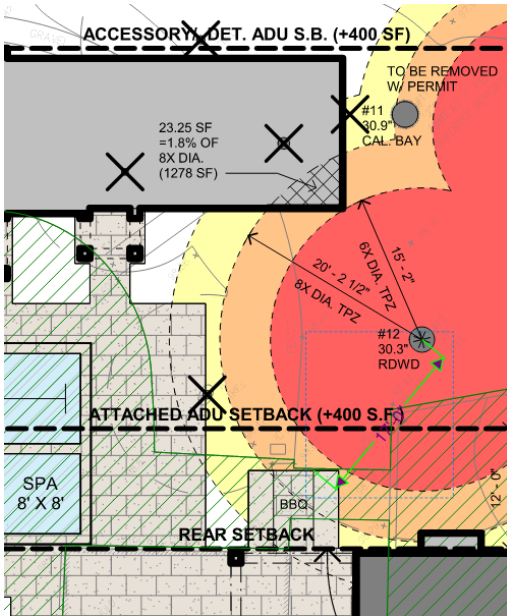
6'11" is close for new paving. Per the current code any new driveway needs to be 8x and hardscape is 6x. This could be considered hardscape and I can recommend the new paving part at 6x to the driveway which would be 8.45' away.

Request #2: 6x for an ADU, 8x for new residence, hardscape & bbq- too close – Tree #12 - 30.3” dbh Redwood

“We are requesting an exception to reduce the TPZ from 10X to 6X in one 23 SF area. The area of encroachment represents 1.8% of the 8x diameter TPZ for this tree, which could have otherwise been approved at staff level.”

It looks like the applicant is asking for a 6x TPZ for a proposed ADU and 8x TPZ for the new residence. There is also pool hardscape and a BBQ. More than 1 side of this tree has proposed development. The applicant must apply for the 8x TPZ staff exception for the new residence. The BBQ needs to 10x away or they need to apply for the 8x TPZ staff exception. I would recommend the hardscape be pulled back to allow more room for the tree.

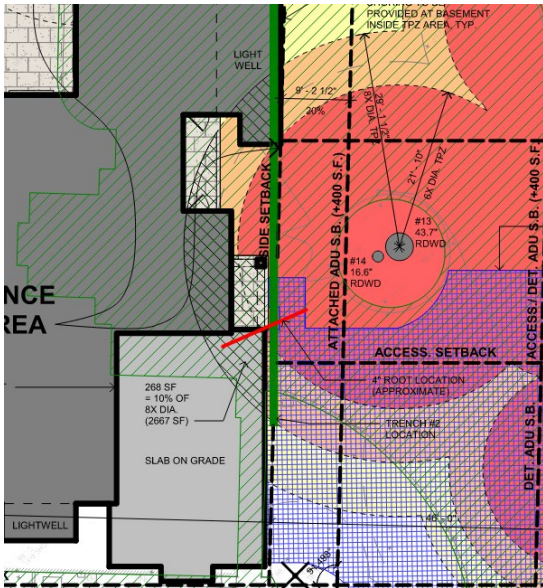
I cannot recommend 6x for tree #12. There was no development in this area and the pool, bbq and new residence are encroaching on the tree as well. I can recommend 7x.



Request #3: 6.5x shallow foundation – full basement 7.8x – tree #13

"We are requesting an exception to reduce the TPZ from 10X to 6.5X or 23' – 9 1/2" in one area of shallow foundation. The areas of full basement encroachment are further from the tree – 7.8X diameter minimum and will have stitch pier shoring to decrease construction impact on surrounding trees. - We are encroaching into the 8X TPZ of this tree a total of 82.4 SF which represents 3.1% of 8X diameter TPZ of the tree. - We did an exploratory trench along the edge of this tree and found only (1) 4" root (shown in bold red line on TPZ-2) which will be impacted by our planned construction. Our project Arborist confirms that there is minimal concern with cutting a 4" root on a redwood at the distance required. In our case, the root would need to be cut at 7.5X tree diameter or 27' – 1 1/2". - We have moved the structure 5.5ft further away from this tree given the root finding - We are eliminating most of the existing hardscape surrounding the tree (green diagonal striping) and only providing new driveway to the extent shown in blue cross hatch on diagram TPZ-2 - No other roots were found in our trench which continues at 24"-30" depth all the way to the extent of the lightwell shown in our diagram TPZ-2."

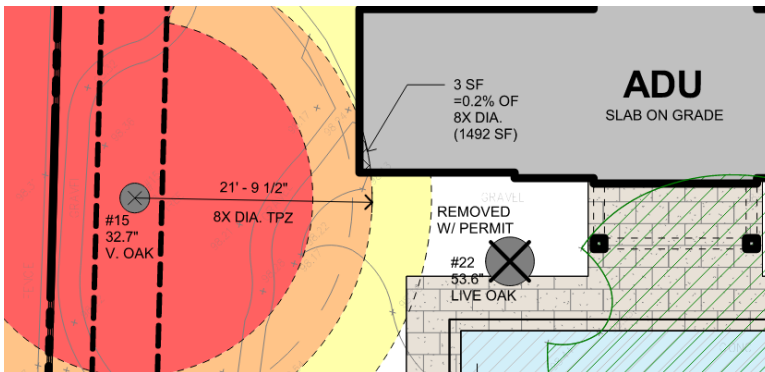
The applicant is requesting the stitch piers will be at 7.8x away from tree #13. The closest is 28'-3". They found 1 root at 7.5x away that will need to be cut. One root at that distance should be fine to cut. Because the tree has good tolerance and the piers are just under the 8x by 82.4 SF I can recommend the 7.8x away.



Request #4: 7.6x for a new ADU for tree #15

#15 Valley Oak – 32.7" diameter - We are requesting an exception to reduce the TPZ from 10X to 7.6X or 20'-9" in one small, 3 SF area. This encroachment is slightly smaller than the staff level approval of 8X diameter so we are requesting the planning commission to approve the encroachment. The area of encroachment represents 0.2% of the 8X diameter TPZ for this tree, which could have otherwise been approved at staff level.

- The adjacent structure is a slab on grade ADU, so the structural slab will have a very shallow depth as compared to a full basement excavation at areas of the Main House.



Valley Oaks have moderate tolerance to construction impacts, which would be 8x. Since the ADU is on slab and is only .2% down from 8x I can recommend the 7.6X TPZ.

Request #5: 5.43x for a new residence for tree #16

We are requesting an exception to reduce the TPZ from 10X to 5.43X or 40'-9 1/2". We are encroaching into the 6X TPZ a total of 111 SF which represents 1.7% of 6X diameter TPZ of the tree. We are asking for this encroachment because we did not find any substantial sized roots in trench #1. The tree is 91.6" in diameter which results in an excessively large TPZ based on the Town's standard 10X diameter calculation.

- We are removing the existing in-ground pool shown in green hatch adjacent to this tree. The planned bocce court shown will be surface level, low impact and sit further from the tree than the current pool which we think will

help the overall continued health of the tree. - Take note that the area of house encroachment will not be full depth basement, only crawlspace as shown in light grey on our TPZ-2 diagram

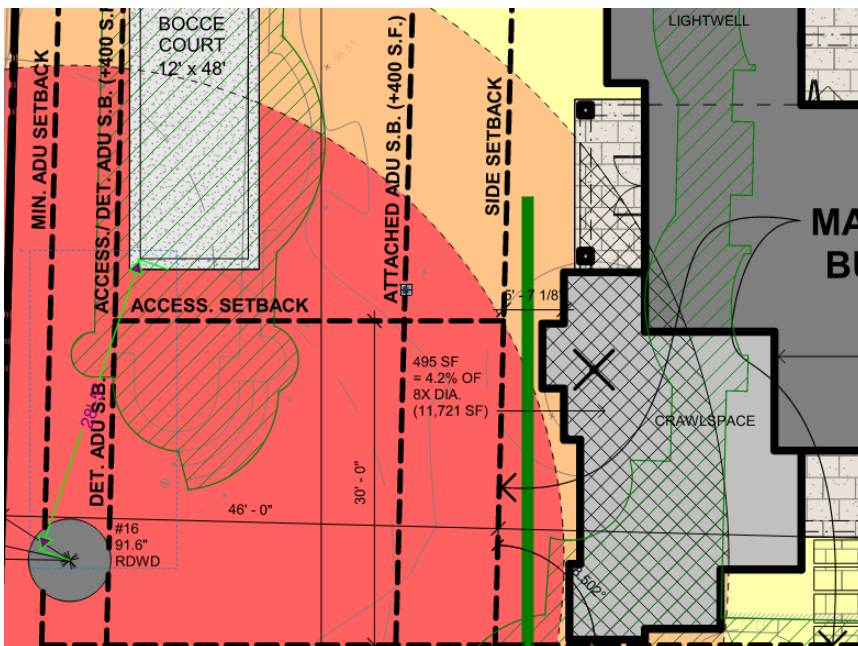
The applicant is asking for 3x TPZ for the bocce court.

The applicant is asking for 5.43x TPZ for the new residence with a crawl space and no basement in that area.

The applicant trenched the area at the green line below and no roots were found.

There is an existing pool where the bocce court will be placed. The applicant moved the bocce court back. Because they are improving the area for the tree with filling in the pool and moving the court back, I can recommend the 3x for the bocce court.

The current house is 60' away or approximately 8x away. The applicant is asking to place the house 40' 9.5" away. This tree is very large. The applicant is proposing only a crawl space and they moved the house further away from tree #13.



In conclusion:

Request #1: 4.9x for driveway – tree #1 – I cannot recommend this. I can recommend 6x away.

Request #2: 6x for an ADU, 8x for new residence, hardscape & bbq— Tree #12 – I cannot recommend 6x away. I can recommend 7x. Applicant must apply for staff exceptions for proposed residence and bbq. It is recommended that hardscape be pulled back too.

Request #3: 6.5x shallow foundation – full basement 7.8x – tree #13 – I can recommend the 7.8x.

Request #4: 7.6x for a new ADU for tree #15 – I can recommend 7.6x.

Request #5: 5.43x for a new residence for tree #16 – I can recommend bocce at 3x. I can recommend proposed house at 5.43x because they moved the house away from tree #13, they are only constructing a crawl space underneath and the tree is 92” diameter so it really hinders the buildable area.

The following are requirements:

- Hand excavation only within 8x TPZ
- 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.

UPDATE: As February 9th, 2023, the applicant has updated their site plan to the below requests.

Request #1 – Driveway is now shown 6X from tree #1

Request #2 – BBQ and hardscape are now relocated further from tree #12, ADU is also now 7X from tree #12

Request #3 – No changes needed at tree #13 – 7.8x

Request #4 – No changes needed at tree #15 – 7.6x

Request #5 – No changes needed at tree #16- 5.43x

I can recommend the updated requests as changed with the following requirements:

- Hand excavation only within 8x TPZ
- 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