Appendix A

Biological Resources

Appendix A2 Tree Survey Report

ARBOR RESOURCES
professional consulting arborists and tree care

TREE SURVEY REPORT

1005 O'BRIEN DRIVE
MENLO PARK, CA
(PLN2021-00028)

Submitted to:

DES Architects + Engineers, Inc.
399 Bradford Street
Redwood City, CA 94063

Prepared by:

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Prior: March 30, 2021
Current: June 29, 2022

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EXECUTIVE SUMMARY

Plans are being prepared to redevelop 1005 O'Brien Drive, Menlo Park, and this preliminary report discloses the following information regarding 34 trees situated within or immediately adjacent to the project area: tree size, condition and suitability for preservation; heritage, street and/or offsite tree status; appraised values of heritage trees; and general design guidelines and protection measures. Specific details regarding each inventoried tree is presented within Exhibit A. An aerial map showing their locations and assigned numbers is provided in Exhibit B, and photographs are presented in Exhibit C.

Of the 34 inventoried trees, a summary of their heritage, non-heritage, street and/or offsite status is as follows:

- Heritage (15 in total): #5, 6, 8, 9, 21, 24-32 and 34.
- Non-heritage (19 in total): #1-4, 7, 10-20, 22, 23 and 33.
- Street (15 in total): #5-12 and 24-30. Three additional trees, #32 thru 34, may or may not be within the public right-of-way, and can be determined following production of the future site survey.
- Offsite. Tree #21 is located offsite, and originates on the north neighboring property.

A report prepared closer towards permit issuance can be anticipated for purposes of identifying the proposed tree disposition, as well as providing project-specific guidelines and protection measures respective to the plans.

My analysis reveals six trees are in such poor condition that they should be removed immediately (or as soon as possible) due to presenting unreasonable risks; they include #10, 12, 21, 26, 29 and 30. Of these, #21 is a nearly dead Monterey pine located on the neighboring northern property, and all others are Modesto ash street trees aligning O'Brien Drive. Four of the six are defined as heritage trees; they include #21, 26, 29 and 30.

The combined appraised value of heritage trees equals $20,000. The value of replacements to mitigate removing heritage trees must equal or exceed the their combined value. Refer to Section 4.0 for additional information.

Section 5.0 provides general design guidelines and protection measures to help mitigate potential impacts and conform with the City of Menlo Park requirements.

1.0 INTRODUCTION

Plans are being prepared to redevelop 1005 O'Brien Drive, Menlo Park, and include demolishing three existing buildings, constructing two new buildings and one parking garage, and installing new landscaping; the project area is comprised of various parcels located immediately northeast of O'Brien Drive and Willow Road, and include 985, 1001, 1015, 1005 and 1035 O'Brien Drive, and 1320 Willow Road. As part of the site analysis, DES Architects + Engineers has retained me to prepare this *Tree Survey Report*, and specific tasks executed are as follows (my prior report assigns an appraised value of $0 to four specific trees, and this report represents an update to specifically adjust those values):

- Visit the site, performed on 3/22/21 and 3/26/21, to document information and obtain photos of 34 trees located within or immediately adjacent to the project area. The inventory considers all those located onsite, regardless of size; each street tree, regardless of size, including those within 30 feet from the property boundary; and heritage trees overhanging the site from neighboring properties or within a linear distance from a trunk of 10 times its diameter.
- Measure each tree's trunk diameter in accordance with Section 13.24.020(5) of the Menlo Park Municipal Code; diameters are rounded to the nearest tenth-of-an-inch, and trees listed with more than one are formed by multiple trunks.
- Estimate tree heights and average canopy spreads (most are rounded to the nearest fifth).
- Identify "heritage trees"[1] and appraise their monetary value (.
- Evaluate each tree's health, structure and form, and assign an overall condition rating.
- Determine each tree's suitability for preservation (e.g. high, moderate or low).
- Document observed health, structural and adjacent hardscape issues.
- Plot the trees' numbers onto canopies of trees shown on the aerial map in Exhibit B (derived from *Google Earth*, imagery date of 9/26/20).
- Nail round metal tags with engraved corresponding numbers onto each tree (in the case of #23, it was nailed onto a wooden support stake).
- Provide general design guidelines and protection measures to help mitigate or avoid potential impacts to trees being retained, as well as conform to Menlo Park requirements.
- Prepare a written report presenting the above information, and submit via email as a PDF document.

[1] Section 13.24.020 of the Menlo Park Municipal Code defines a "heritage tree" relative to this project as follows: [1] any oak native to California, ≥12' tall, and with a trunk diameter of ≥10" at 54" above grade; [2] any other tree ≥12' tall and having a trunk diameter ≥15" at 54" above grade; and [3] any multi-trunk tree ≥12' tall and with a trunk diameter ≥15" at the point below the main union of trunks, except in the instance where the union of trunks occurs below grade, in which case each trunk is a stand-alone tree.

2.0 TREE DESCRIPTION

Thirty-four (34) trees of eight various species were inventoried for this report. They are sequentially numbered as 1 thru 34, and Table 1 below identifies their common names, assigned numbers, counts and overall percentages.

Table 1 - Tree Count and Composition

NAME	TREE NUMBER(S)	COUNT	% OF TOTAL
Chinese pistache	13, 15, 16	3	9%
Columbia London plane	1-4, 14, 17-20, 22	10	29%
Forest Pansy redbud	23	1	3%
Italian stone pine	31	1	3%
Marina madrone	33	1	3%
Modesto ash	5-12, 24-30	15	44%
Monterey pine	21	1	3%
Silver dollar gum	32, 34	2	6%
	Total	**34**	**100%**

As illustrated above, Modesto ash accounts for the most frequently encountered tree (at 44%), followed by London planes (at 29%). All trees were planted, and none are regarded as being native to the geographical area.

Specific information regarding each tree is presented within the table in Exhibit A. The trees' numbers and locations can be viewed on the aerial map in Exhibit B, and photographs are presented in Exhibit C.

Locations respective to the various property addresses are as follows:

- 1035 O'Brien Drive: #1 thru 23.
- 1001, 1005 and 1015 O'Brien Drive: #24 thru 27.
- 985 O'Brien Drive: #28 thru 30.
- 1320 Willow Road: #31 thru 34.

My site assessment reveals the following six trees should be removed immediately (or asap) due to being in such poor condition that failure in part or whole onto high-value targets is imminent: #10, 12, 21, 26, 29 and 30. Of these, #21, 26, 29 and 30 are defined as heritage trees; #21 is a nearly dead Monterey pine located on the neighboring northern property; and all others are Modesto ash street trees aligning O'Brien Drive. Photos of each are presented in Exhibit C, and areas of greatest concern are broadly outlined in red.

Heritage Trees

Fifteen (15) are defined by City Code as heritage trees and include #5, 6, 8, 9, 21, 24-32 and 34. The other 19 inventoried trees are regarded as non-heritage and include #1-4, 7, 10-20, 22, 23 and 33.

Street Trees

Fifteen (15) trees have trunks situated on, either entirely or partly, within the public right-of-way along O'Brien Drive and are defined as street trees; they include #5-12 and 24-30. Each is a Modesto ash situated beneath high-voltage wires, and except for #29, has been severely pruned to achieve clearance from the wires and street. Trees #5 thru 12 occupy a continuous planter strip between the sidewalk and street curb (and concrete of the sidewalk, curb and gutter is new). Trees #24 thru 30 occupy individual square or rectangular planters bordered by hardscape along three sides, which consists of concrete for #24-27 and asphalt for #28-30; the street curb along the fourth side; and ground covered by landscape fabric and river rock.

Three additional trees, #32 thru 34, are located within a raised planter along Willow Road, and may or may not be within the public right-of-way. This information can be clarified once the future site survey showing tree locations is produced.

Offsite Trees

One tree, #21, is located on the northern neighboring property of 10 Kelly Court. It is a Monterey pine, and due to it being mostly dead, removal should occur immediately as failure of large limbs or the entire tree is imminent onto the parking lots below.

3.0 SUITABILITY FOR TREE PRESERVATION

Each tree has been assigned either a "high," "moderate" or "low" suitability for preservation rating as a means to cumulatively measure its existing health, structural integrity, anticipated life span, remaining life expectancy, prognosis, location, size, particular species, tolerance to construction impacts, growing space, frequency of care needed, and safety to property and persons within striking distance. Descriptions of these ratings are presented below, and the high category comprises 7 trees (or 21%), the moderate category 10 trees (or 29%), and the low category 17 trees (or 50%).

High: Applies to #13, 14, 17-20 and 22.

These trees appear relatively healthy and structurally stable; have no apparent, significant health issues or structural defects; present a reasonably good potential for contributing long-term to the site; and seemingly require only periodic or regular care and monitoring to maintain their longevity and structural integrity. They are typically the most suitable for retaining and incorporating into the future landscape.

Moderate: Applies to #1-4, 15, 16, 23, 31, 33 and 34.

These trees contribute to the site, but at levels less than those assigned a high suitability; might have health and/or structural issues which may or may not be reasonably addressed and properly mitigated; and frequent care is typically required for their remaining lifespan. They may be worth retaining if provided proper care, but not seemingly at significant expense or major design revisions.

Low: Applies to #5-12, 21, 24-30 and 32.

These trees have significant health and/or structural issues expected to worsen regardless of tree care measures employed (i.e. beyond likely recovery). As a general guideline, they are not suitable to incorporate into the future landscape, and removal is the appropriate action regardless of future redevelopment. Any which are retained require highly frequent pruning, monitoring, and care throughout their remaining lifespans to minimize any safety threat they present to persons and property within striking distance. In the case of #10, 12, 21, 26, 29 and 30, I recommend they are removed immediately due to presenting an imminent threat of failing, in part or whole, onto targets below.

4.0 APPRAISED TREE VALUES AND REPLACEMENTS

The monetary value of each heritage tree was appraised, and those individual values are listed within the last column in Exhibit A. Combined, their value equals $20,000. Values are calculated using the *Trunk Formula Technique* derived from the 2019 *Guide for Plant Appraisal, 10th Edition*, and in conjunction with the *Species Classification and Group Assignment*, 2004 (published by the Western Chapter of the ISA). This method considers the cost of the largest commonly tree available from a nursery, plus the increase in value due to the larger size of the tree being appraised. The amount is then adjusted or depreciated by numerous factors, such as the particular tree's condition, functional and external limitations.

Pursuant to Section 13.24.090(b)[2] of the Menlo Park Municipal Code, replacements to mitigate the removal of heritage trees shall be of a size and amount equal to or in excess of the trees' appraised values. For reference, the City's *Heritage Tree Ordinance Administrative Guidelines* establishes the following replacement values to determine the amount and size of new trees to mitigate heritage tree removal: 5-gallon container = $100; 15-gallon container = $200; 24-inch box = $400; 36-inch box = $1,200; 48-inch box = $5,000; and 60-inch box = $7,000.

[2] Specific language from Section 13.24.090(b) is as follows: "For development-related removals, the applicant shall provide replacement heritage trees on site in an amount equivalent to the appraised value of the removed heritage tree. The city arborist shall approve the location, size, species and number of replacement heritage trees. If the appraised value of the removed heritage tree exceeds the value of the replacement heritage trees that can be accommodated on the property, the applicant shall pay the difference in value to the heritage tree fund."

5.0 TREE PROTECTION MEASURES

Recommendations presented within this section should be carefully followed and incorporated into project plans, and serve as general design guidelines and protection measures to help mitigate or avoid impacts to trees being retained while conforming with City requirements. They are subject to revision upon reviewing project plans, and I (hereinafter "project arborist") should be consulted in the event any cannot be feasibly implemented. Please note that all referenced distances from trunks are intended to be from their outermost perimeter near soil grade.

5.1 Design Guidelines

1. The Tree Protection Zone (TPZ) for retained trees should be the entire section of unpaved ground within their entire planter areas, and for Modesto ash along O'Brien Drive, also include a linear distance of 10 feet beyond the trunks in all directions away from the back of street curb. A TPZ is intended to restrict or highly limit the following activities within the specified distances: overexcavation, subexcavation, trenching, compaction, mass and finish-grading, soil scraping, tilling, ripping, swales, bioswales, storm drains, dissipaters, equipment cleaning, stockpiling and dumping of materials, and equipment and vehicle operation. In the event an impact encroaches slightly within a setback, it can be reviewed on a case-by-case basis by the project arborist to determine whether measures can be sufficiently mitigated.

2. On all site-related plans, show each tree's surveyed trunk location and assigned number; represent the circle identifying trunk diameters as being a circle to scale; and delineate the TPZs mentioned above. Also on a tree disposition plan, reflect the proposed removal of all trees by placing an "X" across their trunks.

3. On the planting plan, reflect the container sizes and amounts of new trees to be equal or exceed the appraised value of heritage trees proposed for removal. Refer to Section 4.0 of this report for additional information.

4. On the demolition plan, specify that all existing, unused lines or pipes within a TPZ shall be abandoned and cut off at existing soil grade (rather than being dug up and causing subsequent root damage).

5. For the electrical site plan, its design must consider and show the following notes: "Routes and digging method(s) - whether by pneumatic air device, manually performed, tunneling or directional boring - shall be reviewed and approved by the landscape architect and project arborist before commencing any trenching or digging within 5 feet from a TPZ. Any authorized open trench within TPZs shall retain, protect, and not damage roots with diameters ≥2 inches (can tunnel beneath), and be performed under project arborist supervision."

6. For the irrigation plan, its design must consider and show the following notes: "Establish irrigation and lighting features (e.g. main line, lateral lines, valve boxes, wiring, controllers and meters) to avoid any trenching within a TPZ. Where this is not feasible, route them in a radial direction to a tree's trunk, and terminate a specific distance from a trunk (versus crossing past it). The routes and overall layout should be reviewed with the project arborist prior to any trenching or excavation occurring. Irrigation inside TPZs should consist of Netafim soaker hoses, or equivalent, laid on grade and covered by mulch. Additionally, header lines connecting the hoses should terminate beyond a TPZ."

7. Lateral excavation inside existing back of curbs where within TPZs must be avoided, including for overexcavation to form and pour future hardscape, subexcavation, trenching, soil compaction, etc. To avoid this impact, ensure all future curb, gutter, foundations, etc. are designed 1 to 2 feet beyond existing curbs (i.e. away from trees).

8. Route all underground utilities beyond TPZs. Where this is not feasible, consider the following alternative trenching or installation methods (listed in order of least to most impactful): directionally bore by at least 3.5 feet below grade (and establish access pits beyond TPZs), tunnel using a pneumatic air device (e.g. an AirSpade®), or manually dig with a shovel (i.e. no jackhammer); these assume pipe bursting, an optimal method, does not apply to this project. For boring, establish access pits and above-ground infrastructure (e.g. splice boxes, meters and vaults) beyond TPZs.

9. Ensure the grading design does not require elevation changes, nor alters the existing water/drainage flows within a TPZ. Also, setback all drainage features, such as bioretention areas, swales, and storm drains by at least 10 feet from TPZs.

10. Erosion control measures, such as silt fencing or straw rolls, should not be installed within a TPZ. If needed inside, show along the outside of tree fencing, and require a maximum vertical soil cut of 2 inches for their embedment. Notes pertaining to this item should be added to the erosion control plan.

11. Overexcavation, subexcavation, compaction, trenching, grading, fill, etc. (i.e. all ground disturbance) shall be confined 6 to 12 inches from an approved feature's edge where within 5 feet from a TPZ.

12. Design any new walkway proposed within a TPZ to be entirely above existing soil grade (i.e. a no-dig design) to avoid severe root loss, including for base material, gravel, edging and forms. Additionally, avoid direct compaction of soil (foot-tamping levels are acceptable), and fill used to bevel the walkway to natural grade should be confined to 12 inches from the walk. Tensar® BX Geogrid can be utilized to help achieve these limited excavation and compaction requirements.

13. Show the future staging area and route(s) of access on the final site plan, striving to avoid unpaved areas beneath or near canopies.

14. Adhere to the following additional landscape guidelines:
    a. Design any new site fencing or fence posts to be at least 2 to 5 feet from a tree's trunk (depends on trunk size, growth pattern and prior impacts).
    b. Avoid tilling, ripping and compaction within TPZs.
    c. Establish any bender board or other edging material within TPZs to be on top of existing soil grade (such as by using vertical stakes).
    d. Utilize a 3- to 4-inch layer of coarse wood chips or other high-quality mulch for new ground cover beneath canopies (avoid using gorilla hair, bark or rock, stone, gravel, black plastic or other synthetic ground cover). Do not pile mulch against trunk, rather taper the depth to 1/2- or 1/4-inch at the trunk.

15. Avoid specifying the use of herbicides use within a TPZ; where used on site, they should be labeled for safe use near trees. Also, liming shall not occur within 50 feet from a tree's canopy.

5.2 Before Demolition, Grading and Construction

16. Continue or begin supplying water to the root zones of all trees being retained. The methodology, frequency and amounts can be reviewed with the project arborist, and will require a dramatic increase in frequency and/or volume to help offset root loss to occur during site work (possible methodologies includes flooding the ground inside a berm, soaker hoses, or deep-root injection). Note that any dewatering of the site will likely require a more intensive watering program than otherwise needed.

17. Conduct a site meeting between the general contractor and project arborist at least several weeks prior to demolition for the purpose of reviewing tree fencing, routes of access, watering, mulching, trenching, staging and other protection measures. Regular visits, such as every two weeks or month (minimum) may also be needed.

18. At this immediate time frame, remove wood support stakes and ties from trees #13, 15 and 16, and the nursery stake from #23's trunk. Additionally, manually pull river rock 6 inches away from the bases of all Modesto ash trunks.

19. Spread, and replenish as needed, a 3- to 4-inch layer of coarse wood chips (¼- to ¾-inch in size) over unpaved soil beneath canopies of retained onsite trees not on the 1035 O'Brien Drive property. These chips may also be needed following the removal of existing hardscape beneath street trees. Do not pile against trunks, and consider obtaining from a tree service company.

20. Prior to demolition, install tree protection fencing to enclose entire sections of TPZs occupying unpaved areas for any of the following trees being retained: #1-9, 11, 13-20, 22, 23 and 31-34. This shall consist of 6-foot tall chain link mounted on 2-inch diameter steel posts driven into the ground, spaced by no more than 10 feet apart, kept in place and upright throughout construction, and removed or modified only under the knowledge and direct consent of the project arborist. Any reconfiguration must be authorized by the project arborist beforehand. Note that prior to the City issuing permits, they require the project arborist inspects fencing and provides a letter confirming fencing, including trunk wrap protection as specified on the next page, has been installed per this report.

21. Also prior to demolition, install trunk wrap protection around the trunks of Modesto ash #24, 25, 27 and 28 (should any or all be retained). This protection involves wrapping straw wattle horizontally around the trunk, one section at the base and another at 10 feet high; placing boards (2x4") vertically around the outside, from the ground to 10 or 12 feet high; then wrapping orange-plastic fencing around the boards two to three times and tying or taping together. Keep in place throughout demolition, and if instructed by the project arborist, remove and install chain link fencing.

22. Signs shall be affixed and maintained on each long side of fencing, two per tree, and onto any trunk wrap protection. It must be 8.5- by 11-inch (minimum), and contain the following language: "TREE PROTECTION FENCE - DO NOT MOVE OR REMOVE WITH APPROVAL BY CITY ARBORIST."

23. Prior to grading, excavation and utility installation, stake the limits of grading, building footprint, utilities, any retaining walls, sidewalk and pathway routes for review by the project arborist (can be done in phases).

24. Pruning shall be highly selective, targeted, and performed under direction of the project arborist. The work shall be conducted in accordance with the most recent ANSI A300 standards, and by a California licensed tree-service contractor (D-49) that has an ISA certified arborist in a supervisory role, carries General Liability and Worker's Compensation insurance, and abides by ANSI Safety Operations.

25. Fertilization may benefit a tree's health, vigor and appearance. If applied, however, soil samples should first be obtained to identify the pH levels and nutrient levels so a proper fertilization program can be established.

5.3 During Demolition, Grading and Construction

26. Follow all instructions and notes presented in Sections 5.1 and 5.2 of this report.

27. Unless otherwise specifically authorized by the project arborist, any open trenches needed for storm drains, utilities, irrigation, lighting, etc. within TPZs shall occur through utilizing an AirSpade®, and all roots (all sizes) exposed during the process retained, not damaged, and kept continually moist and covered in burlap until the trench is backfilled (plywood should also cover trenches with exposed roots).

28. Any authorized access, digging or trenching within designated-fenced areas shall be by foot-traffic only, manually performed under supervision by the project arborist, and without the use of heavy equipment or tractors.

29. Take great care during demolition of existing hardscape (e.g. sidewalks, parking lot, curbs, gutters, etc.) and other equipment/features to avoid damaging a tree's trunk, canopy, soil and roots within a TPZ, including ground underlying existing features.

30. Digging needed to construct an approved feature within 5 feet from a TPZ must first involve manually digging a 1-foot wide trench along the cut edge, including for overexcavation, down to the require subgrade depth or 2 feet down, whichever is deeper. Advise the project arborist when this work is scheduled so observations of cut roots can be made. Exposed roots shall be cleanly severed and their surfaces kept continually moist, perhaps by draping burlap over the cut face and applying water daily or twice daily.

31. Great care must be taken by equipment operators, including shoring, crane operations and concrete pumping, to position their equipment to avoid trunks and branches, including the scorching of foliage. Any tree damage or injury should be reported immediately to the project arborist.

32. Avoid using tree trunks as winch supports for moving or lifting heavy loads, or for tying rope, cables, chains or other items around.

33. Avoid damaging or cutting roots with diameters of ≥2 inches without prior assessment by the project arborist. Should roots of this size be encountered, within one hour of exposure, they should either be covered by burlap that remains continually moist until the root is covered by soil. If they are approved for cutting, cleanly severe at 90° to the angle of root growth against the cut line (using loppers or a sharp hand saw), and then immediately after, the cut end either buried with soil or covered by a plastic sandwich bag (and secured using a rubber band, and removed just before backfilling). Roots encountered with diameters <2 inches and requiring removal can be cleanly severed at right angles to the direction of root growth.

34. Spoils created during digging shall not be piled or spread on unpaved ground within a TPZ. If essential, spoils can be temporarily piled on plywood or a tarp.

35. Digging holes for fence posts within a TPZ should be manually performed using a post-hole digger or shovel, and in the event a root ≥2 inches in diameter is encountered during the process, the hole should be shifted over by 12 inches and the process repeated.

36. Dust accumulating on trunks and canopies during dry weather periods may need to be periodically washed away if directed by the project arborist (e.g. every 3 to 4 months).

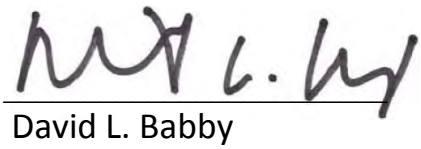
37. For any heritage or street tree sustaining irreparable damage during construction, install replacement tree(s) equal to or greater their appraised value.

38. A final inspection shall be performed by the City Arborist at the end of construction, before tree protection fencing is removed and after replacement trees are installed.

39. Avoid disposing harmful products (such as cement, paint, solvents, chemicals, oil and gasoline) beneath canopies or anywhere on site that allows drainage within or near TPZs. Herbicides should not be used with a TPZ; where used on site, they should be labeled for safe use near trees. Also, liming should not occur within 50 feet of a tree's canopy.

6.0 ASSUMPTIONS AND LIMITING CONDITIONS

- Information presented herein covers only inventoried trees, and reflects their size, condition, and areas viewed from the ground, project site, streets and sidewalks on 3/22/21 and 3/26/21.
- The documented condition and suitability ratings of dormant trees are subject to change once they can be observed following their annual regrowth of leaves.
- Observations were performed visually without probing, coring, dissecting or excavating.
- The assignment pertains solely to trees listed in Exhibit A. I hold no opinion towards other trees on or surrounding the project area.
- I cannot provide a guarantee or warranty, expressed or implied, that deficiencies or problems of any trees or property in question may not arise in the future.
- No assurance can be offered that if all my recommendations and precautionary measures (verbal or in writing) are accepted and followed that the desired results may be achieved.
- I cannot guarantee or be responsible for the accuracy of information provided by others.
- I assume no responsibility for the means and methods used by any person or company implementing the recommendations presented in this report.
- The information provided herein represents my opinion. Accordingly, my fee is in no way contingent upon the reporting of a specified finding, conclusion or value.
- Numbers shown on the aerial map in Exhibit B are solely intended to represent a tree's general location and shall not be construed as surveyed points.
- This report is proprietary to me and may not be copied or reproduced in whole or part without prior written consent. It has been prepared for the sole and exclusive use of the parties to who submitted for the purpose of contracting services provided by David L. Babby.
- If any part of this report or copy thereof be lost or altered, the entire evaluation shall be invalid.

Prepared By:  Date: June 29, 2022

David L. Babby

Registered Consulting Arborist® #399

Board-Certified Master Arborist® #WE-4001B

CA Licensed Tree Service Contractor #796763 (C61/D49)

EXHIBIT A:

TREE INVENTORY TABLE

(six sheets)

TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE			CONDITION				Suitability for Preservation (High/Moderate/Low)	REGULATED		Removal (tbd)	Appraised Value (Heritage Tree)
		Trunk Diameter (in.)	Height (ft.)	Canopy Spread (ft.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Form (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)		Heritage Tree	Street Tree		
1	Columbia London plane (*Platanus* × *h*. 'Columbia')	11.7	25	35	70%	50%	50%	Fair	Moderate	-	-	-	-
	Comments: Beneath high-voltage wires and has been reduced in height. Broad canopy. Within a narrow, confined planter area with large surface roots throughout. Limb emerges along trunk at 5' high. As with all the London planes inventoried for this report, it is currently dormant.												
2	Columbia London plane (*Platanus* × *h*. 'Columbia')	8.3	35	20	70%	40%	80%	Fair	Moderate	-	-	-	-
	Comments: At security light and within a small planter area. Large surface roots. Limbs emerge along trunk at 4.5' high. Leans NW towards existing building.												
3	Columbia London plane (*Platanus* × *h*. 'Columbia')	6.0	25	15	70%	40%	50%	Fair	Moderate	-	-	-	-
	Comments: Beneath high-voltage wires and has been reduced in height. Asymmetrical canopy. Limbs emerge along trunk at 4.5' high.												
4	Columbia London plane (*Platanus* × *h*. 'Columbia')	7.8	25	20	70%	40%	70%	Fair	Moderate	-	-	-	-
	Comments: Beneath high-voltage wires and has been reduced in height. Limbs emerge at 4' high.												
5	Modesto ash (*Fraxinus v*. 'Modesto')	20.1	30	30	40%	30%	40%	Poor	Low	X	X	-	$900
	Comments: Within a narrow planter strip. Beneath high-voltage wires and has been reduced in height. Has a very sparse canopy. Multiple leaders emerge at 8' high. Has a large decaying wound along street side. As with all inventoried ash, it is currently dormant, and phone and cable wires are routed through its crown. Also, growth ensued from reduction cuts consists of sprouts (as for most all the inventoried ash).												
6	Modesto ash (*Fraxinus v*. 'Modesto')	21.4	35	35	50%	40%	50%	Poor	Low	X	X	-	$1,300
	Comments: Within a narrow planter strip. Beneath high-voltage wires and has been reduced in height. Multiple leaders emerge at 10' high. Root decay/damage along sidewalk side.												
7	Modesto ash (*Fraxinus v*. 'Modesto')	9.7	25	20	50%	30%	30%	Poor	Low	-	X	-	-
	Comments: Within a narrow planter strip. Beneath high-voltage wires and has been reduced in height. Has very poor form and a lanky trunk. Old decayed stump at trunk's base.												

TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE			CONDITION				Suitability for Preservation (High/Moderate/Low)	REGULATED		Removal (tbd)	Appraised Value (Heritage Tree)
		Trunk Diameter (in.)	Height (ft.)	Canopy Spread (ft.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Form (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)		Heritage Tree	Street Tree		
8	Modesto ash (*Fraxinus v* . 'Modesto')	18.8	25	25	50%	40%	50%	Poor	Low	X	X	-	$1,000
	Comments: Within a narrow planter strip. Beneath high-voltage wires and has been reduced in height. Has a large decaying wound along street side near union where multiple leaders emerge at 9' high.												
9	Modesto ash (*Fraxinus v* . 'Modesto')	19.5	30	30	40%	40%	30%	Poor	Low	X	X	-	$800
	Comments: Within a narrow planter strip. Beneath high-voltage wires and has been reduced in height. Has a large old cut at union where leaders emerge at 9' high. Also has old basal wounds.												
10	Modesto ash (*Fraxinus v* . 'Modesto')	14.9	25	25	40%	10%	40%	Poor	Low	-	X	X	-
	Comments: I recommend removing asap. It has a pronounced NW lean, seemingly into phone cable which appears to be supporting the tree's weight, in part or whole (keeping it from falling over onto the sidewalk and parking lot). Has a pronounced root crown opposite the lean, but no obvious mounding. There is also a large stem wound and decaying old cut and union just below where the trunk bifurcates at 7' high, and a decaying 7" diameter wound along the north leader several feet above. A basal decaying wound is found at side of lean, and a sizeable 2" diameter girdling root at base near opposite side of lean. Beneath high-voltage wires and has been reduced in height. Within a narrow planter strip.												
11	Modesto ash (*Fraxinus v* . 'Modesto')	12.8	25	10	40%	30%	20%	Poor	Low	-	X	-	-
	Comments: Within a narrow planter strip. Beneath high-voltage wires and has been reduced in height. Has a buried root collar and very sparse canopy. Poor form and weak attachment of leaders at 9' high.												
12	Modesto ash (*Fraxinus v* . 'Modesto')	11.0	25	20	30%	10%	30%	Poor	Low	-	X	X	-
	Comments: I recommend removing asap. Along the street side is a massive decayed area extending below union where leaders emerge. Also has a 12" tall basal wound. Leans SW towards street. Very sparse canopy. Within a narrow planter strip. Adjacent sidewalk has a sizeable crack. Beneath high-voltage wires, and has been reduced in height.												
13	Chinese pistache (*Pistacia chinensis*)	13	13	12	70%	60%	80%	Good	High	-	-	-	-
	Comments: Dormant. Single-staked (and staked should be removed, including the one without the tie).												

TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE			CONDITION				Suitability for Preservation (High/Moderate/Low)	REGULATED		Removal (tbd)	Appraised Value (Heritage Tree)
		Trunk Diameter (in.)	Height (ft.)	Canopy Spread (ft.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Form (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)		Heritage Tree	Street Tree		
14	Columbia London plane (*Platanus* × *h*. 'Columbia')	6.4	35	25	70%	80%	80%	Good	High	-	-	-	-
	Comments: Limb emerges at 4' high.												
15	Chinese pistache (*Pistacia chinensis*)	3.5	15	10	70%	60%	40%	Fair	Moderate	-	-	-	-
	Comments: Dormant. Double-staked (and both should be removed). Asymmetrical canopy. Has a slight SW lean.												
16	Chinese pistache (*Pistacia chinensis*)	3.1	15	10	70%	60%	50%	Fair	Moderate	-	-	-	-
	Comments: Dormant. Double-staked (and both should be removed). Low branch encroaches into drive aisle.												
17	Columbia London plane (*Platanus* × *h*. 'Columbia')	7.1	35	20	70%	80%	80%	Good	High	-	-	-	-
	Comments: Limbs emerge at 7' high.												
18	Columbia London plane (*Platanus* × *h*. 'Columbia')	8.4	30	30	70%	40%	60%	Fair	High	-	-	-	-
	Comments: Low branches over parking space. At security light. Limbs emerge at 5' high. Formed by multiple leaders, and has excessive branch weight over neighboring northern property.												
19	Columbia London plane (*Platanus* × *h*. 'Columbia')	6.6	30	25	70%	60%	80%	Good	High	-	-	-	-
	Comments: Limb emerges at 7' high. Has a slight NW lean.												
20	Columbia London plane (*Platanus* × *h*. 'Columbia')	10.3	35	35	70%	70%	80%	Good	High	-	-	-	-
	Comments: Limbs emerge at 5.5' high. Low branches over parking space. At security light.												
21	Monterey pine (*Pinus radiata*)	~36	40	40	10%	10%	10%	Poor	Low	X	-	X	$700
	Comments: Trunk originates entirely offsite on northern neighboring property (10 Kelly Court). It is nearly dead, and its full demise is imminent. Within striking distance of parking lot and neighboring property. Lower section is not visible due to shared chain link fence (only from afar on sidewalk), but is likely infested by red turpentine bark beetles. Formed by multiple leaders emerging at 2-3' above grade. Two scaffold limbs overhang site and grow through cutouts in fence. Should be removed immediately.												

TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE			CONDITION				Suitability for Preservation (High/Moderate/Low)	REGULATED		Removal (tbd)	Appraised Value (Heritage Tree)
		Trunk Diameter (in.)	Height (ft.)	Canopy Spread (ft.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Form (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)		Heritage Tree	Street Tree		
22	Columbia London plane (*Platanus* × *h* . 'Columbia')	10.5	35	30	70%	70%	80%	Good	High	-	-	-	-
	Comments: Slight easterly lean. Limb emerges at 4' high. Adjacent curb is cracked.												
23	Forest Pansy redbud (*Cercis c* . 'Forest Pansy')	~1	8	10	70%	40%	80%	Fair	Moderate	-	-	-	-
	Comments: Recently installed and double-staked. Nursery stake also remains unfavorably attached (and should be removed). Low branching structure. Excessive moisture at base and over rootball.												
24	Modesto ash (*Fraxinus v* . 'Modesto')	15.8	20	20	40%	30%	50%	Poor	Low	X	X	-	$500
	Comments: Beneath high-voltage wires and reduced in height. Within a square planter covered by landscape fabric and river rock. Driveway apron, curb and gutter are cracked and/or buckled. Multiple leaders emerge at 15' high.												
25	Modesto ash (*Fraxinus v* . 'Modesto')	15.3	20	25	40%	30%	30%	Poor	Low	X	X	-	$500
	Comments: Beneath high-voltage wires and has been reduced in height. Within square planter covered by landscape fabric and river rock. Has a large, old decaying cut where trunk bifurcates at 6' high.												
26	Modesto ash (*Fraxinus v* . 'Modesto')	20.7	35	30	40%	20%	50%	Poor	Low	X	X	X	$300
	Comments: I recommend removing asap. Has a massive and hollowed decay column along its entire trunk (street side), and at the wound's top is a fruiting body informing of advanced internal decay. Beneath high-voltage wires and has been reduced in height. Within a square planter covered by landscape fabric and river rock. Adjacent curb and gutter are buckled, and sidewalk is cracked and slightly raised. Multiple leaders emerge 9' high.												
27	Modesto ash (*Fraxinus v* . 'Modesto')	24.0	30	35	70%	30%	50%	Poor	Low	X	X	-	$1,200
	Comments: Beneath high-voltage wires and has been reduced in height. Within a rectangular-shaped planter covered by landscape fabric and river rock. Near fire hydrant. Adjacent sidewalk is cracked and raised. Multiple leaders emerge at 7' high. At utility pole, and a pronounced buttress root surfaces towards pole. Has a large decayed section along street side limb.												

TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE			CONDITION				Suitability for Preservation (High/Moderate/Low)	REGULATED		Removal (tbd)	Appraised Value (Heritage Tree)
		Trunk Diameter (in.)	Height (ft.)	Canopy Spread (ft.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Form (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)		Heritage Tree	Street Tree		
28	Modesto ash (*Fraxinus v* . 'Modesto')	28.3	40	45	60%	40%	50%	Poor	Low	X	X	-	$2,300
	Comments: Beneath high-voltage wires and has been reduced in height. Within a rectangular-shaped planter covered by landscape fabric and river rock (and surrounded by asphalt parking lot along three sides). Canopy is slightly asymmetrical. At utility pole. Adjacent asphalt is raised by roots.												
29	Modesto ash (*Fraxinus v* . 'Modesto')	15.8	35	25	40%	10%	30%	Poor	Low	X	X	X	$200
	Comments: I recommend removing asap. It has a decay column along the entire trunk, with one large hollow and several other small ones above and below. Beneath high-voltage wires, but not yet reduced in height. Within a square planter covered by landscape fabric and river rock (and surrounded by asphalt parking lot along three sides). Asphalt is raised by roots, and adjacent curb is buckled. Has several old basal wounds. Narrow, asymmetrical canopy and high crown.												
30	Modesto ash (*Fraxinus v* . 'Modesto')	21.4	35	35	40%	10%	30%	Poor	Low	X	X	X	$300
	Comments: I recommend removing asap. Along the trunk's west side, at 5' high, is a small wound with advanced internal decay, as evidenced by the large, deteriorating fruiting body (likely Ganoderma) emerging from the hollow. Directly above, along the street side, is an old 8" diameter wound with decay extending above and below. Beneath high-voltage wires and has been reduced in height. Within a square planter planter covered by landscape fabric and river rock (and surrounded by asphalt along three sides). Roots have cracked and raised surrounding asphalt and adjacent curb/gutter. Asymmetrical canopy.												
31	Italian stone pine (*Pinus pinea*)	24.4	35	35	80%	50%	60%	Fair	Moderate	X	-	-	$3,400
	Comments: Irregular trunk formation, sweeping SW around 7' high. Adjacent to pole with security camera. Many recent cuts along south section of lower crown.												
32	Silver dollar gum (*Eucalyptus polyanthemos*)	31.8, 19.8	50	35	60%	30%	40%	Poor	Low	X	?	-	$3,000
	Comments: Possibly a street tree (tbd with survey). Adjacent to building, within a raised planter aligning sidewalk, and adjacent to an FDC hydrant and fire sprinkler vault. Formed by two trunks. The smaller southern one has a large basal wound with extensive decay, and an 11" diameter decaying wound 18" above. The larger, northern trunk bifurcates into codominant leaders 3' above grade. Excessively thin canopy with interior watersprouts.												

TREE INVENTORY TABLE

TREE/ TAG NO.	TREE NAME	SIZE			CONDITION				Suitability for Preservation (High/Moderate/Low)	REGULATED		Removal (tbd)	Appraised Value (Heritage Tree)
		Trunk Diameter (in.)	Height (ft.)	Canopy Spread (ft.)	Health Condition (100%=Best, 0%=Worst)	Structural Integrity (100%=Best, 0%=Worst)	Form (100%=Best, 0%=Worst)	Overall Condition (Good/Fair/Poor/Dead)		Heritage Tree	Street Tree		
33	Marina madrone (*Arbutus* 'Marina')	2.9	12	10	80%	40%	40%	Fair	Moderate	-	?	-	-

Comments: Possibly a street tree (tbd with survey). Suppressed, crowded-growing conditions within several feet from #32's nearest trunk. Asymmetrical canopy and buried root collar. Adjacent to building.

34	Silver dollar gum (*Eucalyptus polyanthemos*)	27.2	50	30	40%	60%	40%	Poor	Moderate	X	?	-	$3,600

Comments: Possibly a street tree (tbd with survey). Adjacent to building, and within a raised and narrow planter aligning sidewalk. Extremely thin and sparse canopy with interior watersprouts.

EXHIBIT B:

AERIAL MAP

(one sheet)

1005 O'BRIEN DRIVE

Menlo Park, CA

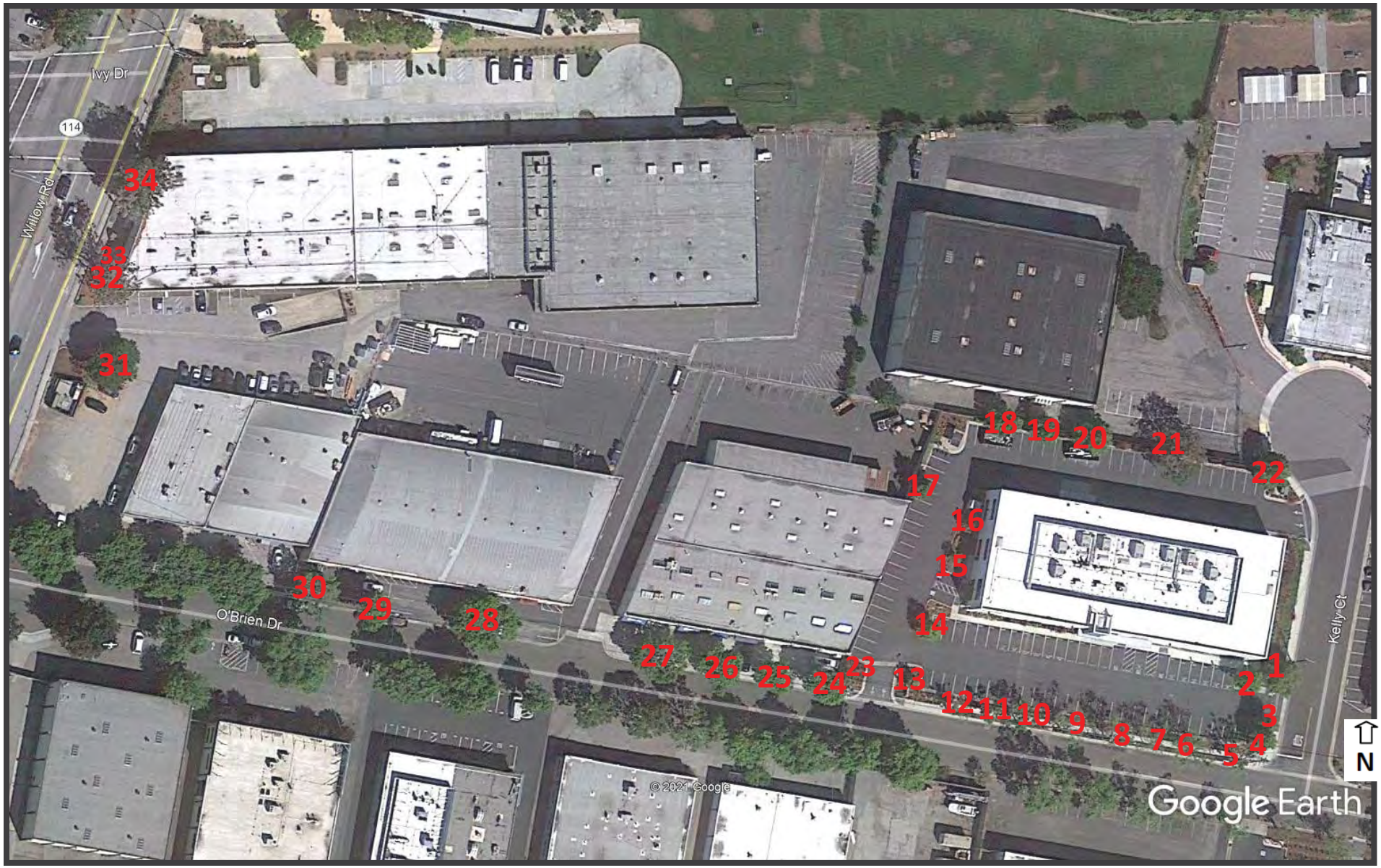


EXHIBIT C:

PHOTOGRAPHS

(six sheets)

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Page C-5: Trees #28 thru 30

Page C-6: Trees #31 thru 34


#1
#2


#3
#4
STOP


#5


#6


#7


#8


#9


#10


#10


#11


#12


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SPEED LIMIT 40
RADAR ENFORCED